

Joe N. Robles
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Water Resources Data
for
California

Water Year 1975

Volume 3. Southern Central Valley Basins
and The Great Basin from
Walker River to Truckee River



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-75-3

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

CALENDAR FOR WATER YEAR 1975

1974

OCTOBER

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1975

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PREFACE

This report was prepared by the U.S. Geological Survey, in cooperation with the California Department of Water Resources and with other agencies, by personnel of the California District of the Water Resources Division under the supervision of Lee R. Peterson, District Chief, and W. H. Robinson, Regional Hydrologist, Western Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwell, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for California are in four volumes as follows:

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

UNITED STATES DEPARTMENT OF THE INTERIOR

THOMAS S. KLEPPE, Secretary

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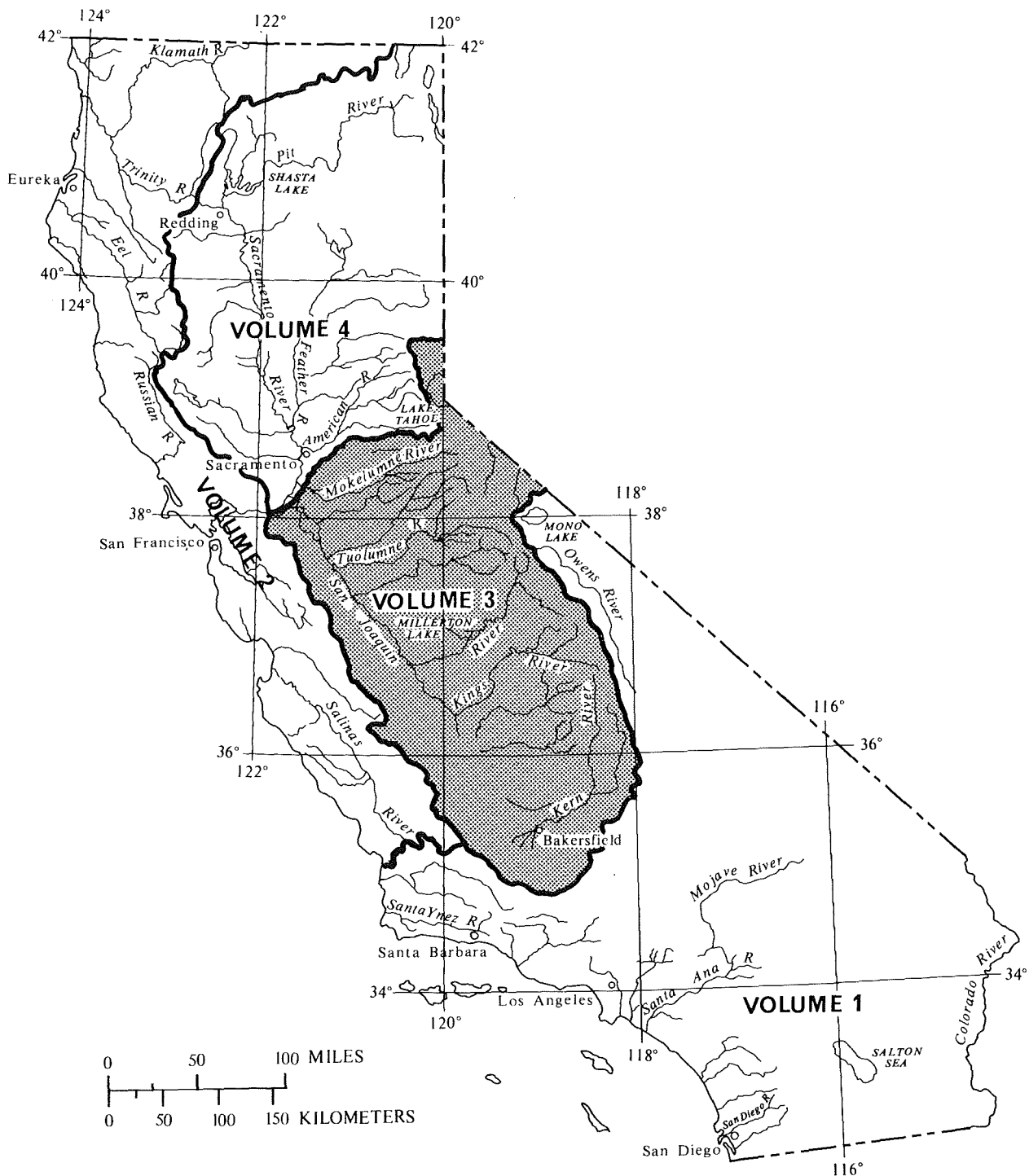
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Area covered by volumes in the annual series on water-resources data for California. Area covered by this volume is shaded.

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

IX

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

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IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

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IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

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WATER RESOURCES DATA FOR CALIFORNIA, 1975

Volume 3

INTRODUCTION

Water-resources data for the 1975 water year for California consist of records of streamflow and contents of reservoirs at gaging stations, partial-record stations, and miscellaneous sites; records of water quality including the physical, chemical, and biological characteristics of surface and ground water; 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. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of Lee R. Peterson, district chief; Winchell Smith, assistant district chief for hydrologic data; and Leonard N. Jorgensen, chief of the basic data section. These data represent that part of the National Water Data System 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 water year 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."

Beginning with the 1961 water year and continued through water year 1974, streamflow data have been released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records beginning with the 1964 water year, and ground-water data since the 1971 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will 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-75-3." These reports are for sale to the public for a nominal fee from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22151. For more information on publications available, see "Publications" on subsequent pages.

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:

California Department of Water Resources, R. B. Robie, director.
California Department of Transportation, Leo J. Trombatore, district director.
East Bay Municipal Utility District, J. S. Harnett, general manager.
Kern County Water Agency, S. T. Pyle, engineer-manager.
Madera Irrigation District, Bob Standfield, secretary-manager.
Merced Irrigation District, Reuben E. Schmidt, chief engineer and manager.
San Francisco, City and County, Hetch-Hetchy Water and Power, O. L. Moore, general manager.
Terra Bella Irrigation District, J. E. Boudreau, engineer-manager.
Tulare County Flood Control District, J. L. Carlsen, flood-control engineer.
Turlock Irrigation District, Leroy J. Louchart, secretary-general manager.
University of California (Berkeley), A. S. Leopold, professor of zoology.
University of California (Davis), Division of Environmental Studies,
Dr. Robert Leonard, department of zoology.
Woodbridge Irrigation District, Mabel Hall, secretary.

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

The following organizations aided in collecting records: Pacific Gas and Electric Co.; Southern California Edison Co.; Merced, Modesto, and Oakdale-South San Joaquin Districts.

DIVISION OF WORK

Responsibility for collection of data and preparation of data reports is delegated to the three subdistrict offices in the California District of the Water Resources Division. This volume was prepared by personnel of the Sacramento subdistrict office under the direction of Robert C. Averett and E. Jerre McClelland, successive subdistrict chiefs. Special acknowledgment is made of the contributions of J. C. Blodgett, John Duensing, and V. F. Pearce who direct the work in the hydrologic data section. Report data were provided by the Visalia, Merced, and Tahoe City field offices, and the Sacramento field unit supervised by G. W. Hill, T. C. Hunter, J. R. Mullen, and J. R. Foulk. Records for many of the streamflow stations required under Federal Power Commission licenses were processed under the supervision of J. N. Robles in the Menlo Park subdistrict office. Laboratory analysis of sediment samples was under the direction of V. L. Gamble. Ground-water and chemical-quality data were assembled under the direction of G. L. Bertoldi. Manuscript typing and assembly of the report was done by the records processing unit under the supervision of A. L. Davis.

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 table 5 for converting English units to International System of units (SI).

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

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

Artesian is synonymous with confined. Artesian water and artesian water body are equivalent respectively to confined ground water and confined water body.

Artesian well is a well deriving its water from an artesian or confined water body. The water level in an artesian well stands above the top of the artesian water body it taps.

Bacteria are the microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are described as aerobic, and facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C (degrees Celsius).

Fecal coliform bacteria are the coliform bacteria group that are present in the intestine or feces of warmblooded animals. They are often used as an indicator of the sanitary quality of the water.

Fecal streptococcal bacteria are a group of bacteria found in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are defined as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth.

Benthic organisms (invertebrates) are the group of animals inhabiting 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, used in the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time.

Ash weight is the weight or amount of residue present after the material from the dry weight determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour.

Dry weight refers to the weight or amount of material present after drying in an oven at a particular temperature, for example 60°C for zooplankton and 105°C for periphyton, until a constant weight is obtained.

Organic weight or volatile weight of the living substance is the difference between the dry weight and the ash weight, and represents the actual weight of the living matter.

Wet weight is the weight of living matter, plus its contained water.

Carotene refers to any of several yellow to red pigments occurring in plants and in the fatty tissues of plant-eating animals.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

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

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

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

Cubic foot per second (FT³/S, ft³/s), is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

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

Mean discharge is the arithmetic average of discharge during a specific period.

Instantaneous discharge is the discharge at a given time.

Dissolved refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometer membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Diversity index (Shannon and Weaver, 1949) is a numerical rating of the variety of the 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. Diversity index values range from 0 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.

Ft³/s-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.

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

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

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 and carbonate (CaCO_3).

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 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. 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 liter (UG/L, ug/l) is a unit expressing the concentration of chemical constituents in solution as weight of solute per unit volume (liter) of water and as the concentration of plant pigments, such as chlorophyll, as weight of pigment per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution and the weight of suspended matter. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1. Concentration of suspended sediment also is expressed in milligrams per liter, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using factors in table 2. Dry weight, ash weight, and organic weight values of suspended matter (seston) are expressed in milligrams per liter.

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

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

Cells/volume (cells/ml, cells/l) refers to the number of phytoplankton that are counted by using a microscope and grid or counting cell. Multi-celled phytoplankton are counted by enumerating all the individual contained cells in the filament or colony.

Organism count/area (organisms/m², organisms/acre, or organisms/ha) refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area of the habitat. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Table 1.--Factors for conversion of chemical constituents
in milligrams or micrograms per liter to milliequivalents
per liter

[Constituents followed by an asterisk(*) are reported in micrograms per liter;
multiply by factor and divide results by 1,000]

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as NH_4	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-1})	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-6})	.02821	Nitrate (NO_3^{-1})	.01613
Chromium (Cr^{+6})*	.11539	Nitrite (NO_2^{-1})	.02174
Cobalt (Co^{+2})*	.03394	Phosphate (PO_4^{-3})	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

Table 2.--Factors for conversion of sediment concentration in
milligrams per liter to parts per million¹

[All values calculated to three significant figures]

Range of concentration in 1,000 mg/l	Divide by	Range of concentration in 1,000 mg/l	Divide by	Range of concentration in 1,000 mg/l	Divide by	Range of concentration in 1,000 mg/l	Divide by
0-8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05-24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2-40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5-56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5-72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5-88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5-104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105-120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121-136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137-152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153-169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170-185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186-200	1.12	395-409	1.25	604-617	1.38		

¹ Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Organism count/unit volume (organisms/ml, organisms/l) refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume. Numbers of planktonic organisms are 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 particular 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 ($24-4\mu m$)	Sedimentation
Silt.....	0.004-0.062 ($4-62\mu m$)	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 portion of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periphyton are the assemblage of 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.

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

Phytoplankton are 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 elements. Phytoplankton are expressed as the number of cells per unit volume of water or types and number of organisms per unit volume of water.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll.

Diatoms are the unicellular or colonial algae having a siliceous shell.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes.

Zooplankton are the animal part of the plankton. They are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye.

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.

Milligrams of carbon per unit area or volume per unit time [$\text{mg}(\text{C}/\text{m}^2)/\text{time}$ for periphyton and macrophytes and $\text{mg}(\text{C}/\text{m}^2)/\text{time}$ or $\text{mg}(\text{C}/\text{m}^3)/\text{time}$ for phytoplankton] are units for expressing primary productivity. They define the amount of carbon fixed in the organic matter of the phytoplankton as measured by radioactive carbon (carbon-14).

Milligrams of oxygen per unit area or volume per unit time [$\text{mg}(\text{O}/\text{m}^2)/\text{time}$ for periphyton and macrophytes and $\text{mg}(\text{O}_2/\text{m}^2)/\text{time}$ or $\text{mg}(\text{O}_2/\text{m}^3)/\text{time}$ for phytoplankton] are units for expressing primary productivity. They estimate productivity and respiration rates as determined from changes in the measured dissolved oxygen concentration. Unit time may be expressed per hour or per day depending on the incubation period.

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

Bedload is the quantity of sediment transported in a stream by rolling, sliding, or skipping along the bed and very close to it; that is, within the bed layer.

Bed material is the sediment mixture of which the moving streambed is composed.

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

Suspended-sediment discharge 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 by volume, that is discharged in a given time. It is computed by multiplying discharge times milligrams per liter times 0.0027.

Total-sediment discharge or total-sediment load is the sum of suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time.

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

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

Seston is the total suspended particulate matter in water. The concentration (weight) of seston is expressed in milligrams per liter.

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 a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos per centimeter at 25°C). 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 and the volume of water per unit of time, flowing in a channel.

Substrate is the physical surface upon which an organism lives.

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

Artificial substrate is a device which is placed in a stream or lake for colonization of organisms.

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*. The higher the classification level, the fewer features the organisms have in common.

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 digital format on punched paper tape.

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

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 is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

Turbidity of a sample is the reduction of transparency due to the presence of particulate matter. In this report it is expressed in Jackson turbidity units (JTU).

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

Weight-percent-organic-matter is the approximate percentage of organic matter, by weight, in the sample. Values were determined by a method modified from one described by Anderson (1963).

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

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

SPECIAL NETWORKS AND PROGRAMS

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 bench-mark basin.

Irrigation network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage or irrigated lands. Prior to water year 1966, the data for these stations were published in the annual water-supply paper series, "Quality of Surface Water for Irrigation, Western States."

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 stream quality.

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

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year (at high and low flow) to be analyzed for radiosotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966, p. 257). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in micrograms per liter (ug/l), radium as radium-226 in picocuries per liter (PC/L, pCi/l), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in picocuries per liter (PC/L) and gross alpha radiation as micrograms of uranium equivalent per liter (ug/l). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay sized) sediments in the samples are also determined.

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

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each surface-water station, water-quality station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left between the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 11264500 which appears just to left of the station name includes the 2-digit number "11" plus the 6-digit downstream order number "264500." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records for California are in Part 9 (Colorado River Basin), Part 10 (The Great Basin), and Part 11 (Pacific slope basins in California). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

Downstream order station numbers are not assigned to sites where only random water-quality samples are taken. These sites are classified as water-quality miscellaneous sites, and as a means of location and identification a 15-digit number consisting of the latitude and longitude coordinates to the nearest second for each site plus a 2-digit sequential number are assigned. For example, the station number for a water-quality miscellaneous site with a lat $33^{\circ}29'27''$, long $117^{\circ}39'42''$ would be 332927117394201.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. 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 is a sequential number for wells within a 1-second grid. The system provides the geographic location of the well and a unique number for each well. In the event that the latitude-longitude coordinates are the same for two or more wells or for a surface-water miscellaneous sampling site and a well site, the sequential numbers "01", "02", etc. are used for differentiation within the same sequence. See figure 1.

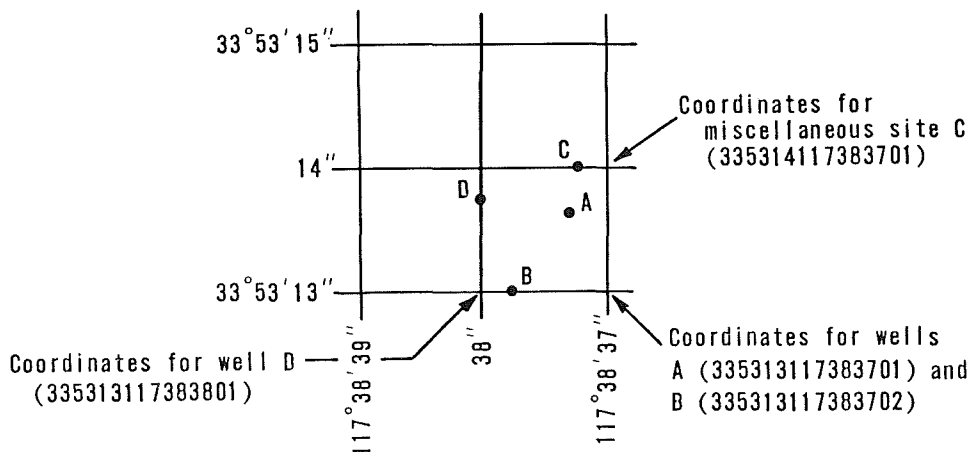


Figure 1.--System for numbering wells and miscellaneous sites (latitude and longitude).

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 11S/17E-22A1 M, assigned to a well about a mile west of Madera, the part of the number preceding the slash indicates the township (T.11 S.) and the number between the slash and hyphen indicates the range (R.17 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, as shown in figure 2. 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.

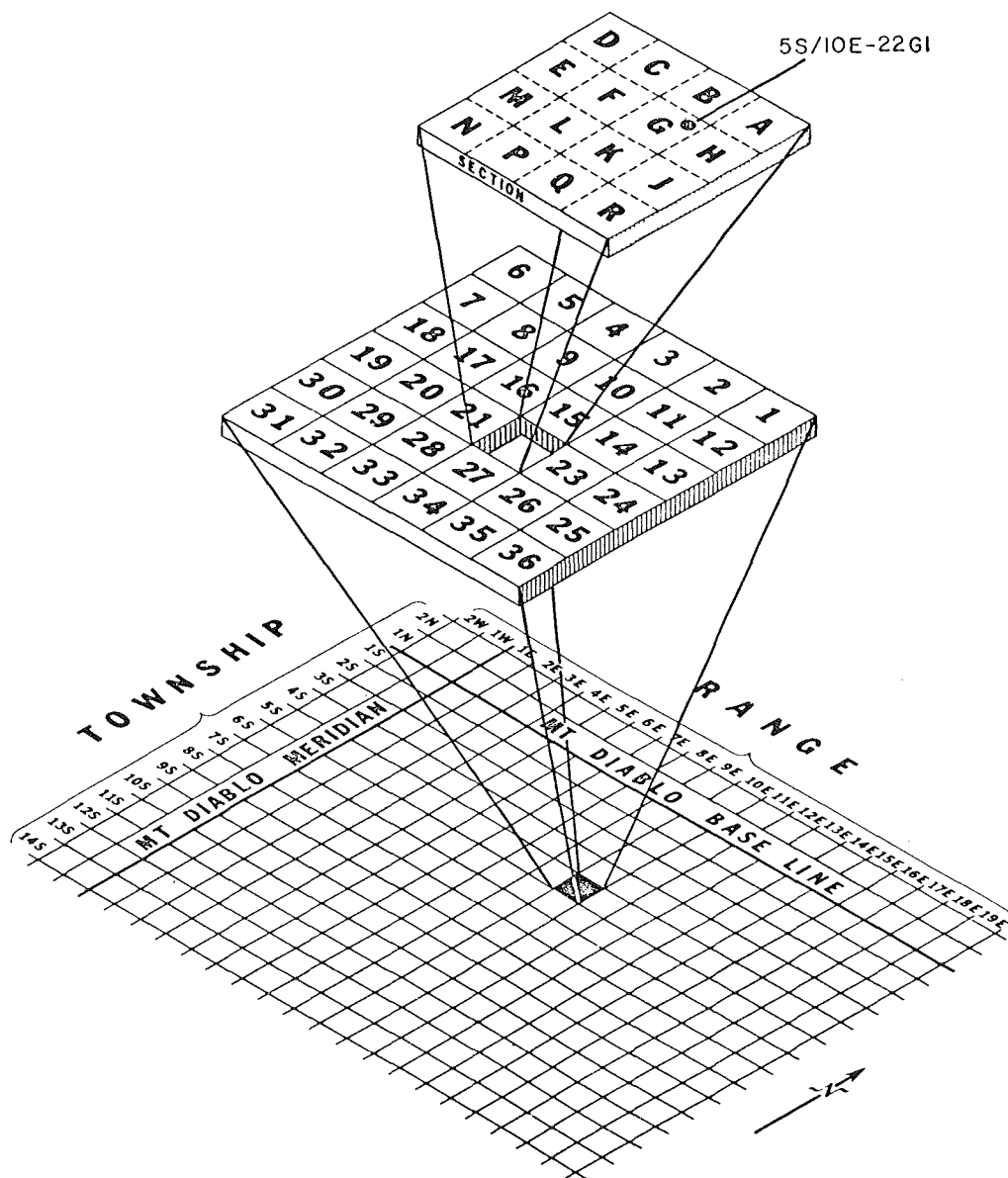


Figure 2.--Local well-numbering system.

EXPLANATION OF SURFACE-WATER RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous graph of the fluctuations or a tape punched at 15-, 30-, or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in the U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

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

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

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

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

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

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

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

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

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the

description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

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

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

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

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

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

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

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

Accuracy of data

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

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

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

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

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in California for the period October 1960 to September 1965, are in Water-Supply Papers 1926, 1927, 1928, 1929, 1930, and 1931; and for the period October 1965 to September 1970, are in Water-Supply Papers 2126, 2127, 2128, 2129, 2130, and 2131.

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

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

Other data available

Occasionally, discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also at the end of this report.

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

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material. These data are given immediately following the gaging station record, or if mentioned in the "REMARKS" paragraph, in the water-quality partial-record section of this report.

Records of discharge collected by agencies other than the Geological Survey

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and the sediment loads.

Ground-water well samples included in this report are only a few of the total water-quality samples taken, and are for special baseline monitoring programs.

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations. Location descriptions and the drainage area are given for stations where no stream-gaging records are published. For ground-water sampling stations, no descriptive statements are given. However, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical quality, biological, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain

properties or characteristics such as hardness, sodium-adsorption-ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder (thermograph) furnishes information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/l) and water temperatures in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," p. 3.).

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)

[Temperature reported to nearest 0.5°C]

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

Biological and microbiological variables

Water samples for bacteria analyses are collected in sterile water-sampling bottles (Van Dorn or Kemmerer-type) or sterile milk dilution bottles. There are individual methods of analyses for the various types of bacteria. Basically, each sample is filtered, preferably within 1 hour but not more than 6 hours after collection, through sterile membrane filters using dilutions determined by the estimated bacterial quality of the water. Fecal streptococcal bacteria are present in fewer numbers than coliform bacteria, so the filtered volume of sample must be larger than that used for other bacterial determinations.

In the determination of total coliform bacteria, the samples are incubated in an enriched nutrient medium at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ for 18-24 hours. For fecal coliform bacteria, the samples are incubated at $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ for 22 hours ± 2 hours. For fecal streptococcal bacteria, the samples are incubated at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ for 48 hours ± 2 hours.

After incubation, the number of colonies of each type of bacteria are counted under a lighted dissecting-type microscope. The counts are reported as colonies per 100 milliliters of sample. A complete description of the methods for analysis of each type of bacteria is given in Slack and others (1973).

Benthic organisms are collected with a variety of devices. Usually a clamshell-type grab, which closes upon contact with the bottom substrate, is used in deep water. In soft mud or detritus, a spring-loaded messenger-tripped Ekman grab can be used. In hard substrates a weighted grab may be required. In shallower water and riffle areas of streams, a Surber sampler is a useful sampling device. Artificial substrates may also be used for collection. After collection the benthic organisms are removed from the sample and placed in collection bottles and preserved with ethyl or isopropyl alcohol, or a similar preservative.

In the laboratory, the organisms are identified with the use of a stereoscopic microscope, and the number of individuals of each taxa are enumerated. The number of benthic organisms per area sampled and the percentage composition of each taxon in the sample may be calculated. The diversity of the benthic organism community may also be calculated. Biomass measurements, in grams per square meter can be used to express the quantity of the organic material in a sample of benthic organisms.

Fish are collected with a seine, gill net, electrofishing gear, or by hand. Length-weight relations can be used to compare fish growth from several streams, and comparisons in species composition with time may reveal water-quality trends.

Macrophytes are collected with hooks, rakes, dredges, or by hand. The entire plant is collected, preserved, and analyzed for types and distribution. The density of macrophytes per unit area is expressed in square meters, or as the percentage of water surface covered.

Periphyton are collected with artificial substrates made of plastic or fiberboard materials, or from natural substrates. Artificial substrates are placed in the water, and after a sufficient time for colonization (usually 4 to 6 weeks), the substrates are removed from the water. The periphyton are scraped from a measured area of each substrate and preserved in a dilute formaldehyde solution or Logol's solution for identification. Samples for biomass measurements should be air dried or frozen.

In the laboratory, the samples are examined for types and numbers using a Sedgwick-Rafter counting cell or an inverted microscope. Periphyton concentrations are reported as the number of cells or organisms per area of scraped surface. Biomass determinations of periphyton, expressed as grams per square meter, include measurements of dry weight, ash weight, and the calculation of organic weight.

Phytoplankton are collected with a water-sampling bottle (Van Dorn or Kemmerer-type), depth-integrated sampler, or net. In most studies concerned with phytoplankton types and abundance, the samples are collected at various depths in the euphotic (lighted) zone with a water bottle.

After collection, the samples are preserved in a dilute formaldehyde solution, along with a detergent, or Logol's solution, or if analysis will begin within 2 or 3 hours, the samples may be chilled at 3-4°C. In the laboratory the samples are examined for types and numbers, using either the Sedgwick-Rafter, inverted microscope, or membrane filter methods. Phytoplankton concentrations are reported as the number of cells or organisms per unit volume. Phytoplankton biomass can be estimated by spectrographically measuring the amount of cellular chlorophyll extract. Primary production measurements can also be made on phytoplankton samples using the carbon-14 method or the oxygen light- and dark-bottle method.

Seston can be collected at any depth using a water-sampling bottle, or at depths representative of the entire flow of a stream using a depth-integrating sampler. The sample volume should be adjusted to the amount of suspended material present.

After collection, water samples for seston should be chilled or preserved if filtration is not begun immediately. The sample is filtered through a tared glass-fiber filter to remove the particulate matter. The increase in weight of the filter after drying at 75°C is the measure of the dry weight of particulate matter in the sample. The residue then may be ashed at 500°C, and the organic weight of particulate matter in the sample determined as the difference between the dry weight and ash weight. All biomass determinations of seston are expressed in milligrams per liter.

Zooplankton vary widely in size and are motile, thus they require a variety of sampling techniques. Many zooplankton, such as the copepods and cladocerans, migrate vertically, approaching the surface at night and moving to lower depths at dawn. Vertical movement, and the ability of zooplankton to avoid sampling devices, must be considered in their collection.

Zooplankton are collected with a water-sampling bottle (Van Dorn or Kemmerer-type), sampling tube, water pump, plankton trap, Clarke-Bumpus plankton sampler, or plankton net. The type of sampler to be used depends upon the abundance of zooplankton present and the objectives of the study. There is no single method that can qualitatively and quantitatively sample an entire zooplankton community.

The water sample and contained zooplankton are transferred to sample containers. Samples for species identification and cell counts are preserved in a dilute formaldehyde solution, and those for biomass determinations are preserved by freezing with dry ice.

In the laboratory, the zooplankton are identified and the total number of cells or organisms enumerated using the counting chamber or the Sedgwick-Rafter method. Zooplankton concentrations are reported as the number of cells or organisms per unit volume of water sampled. Zooplankton biomass is reported as the dry weight, ash weight, and weight of organic matter per unit volume of water sample, usually expressed in grams per cubic meter.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory (1971). Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar (1967), and Goerlitz and Brown (1972). The collection and analysis of aquatic, biological, and microbiological samples are described by Slack and others (1973).

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 measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with noncontinuous-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 U.S. Geological Survey district office at the address given on page IV.

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.

Temperature

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

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and month.

Sediment

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

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

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

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

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 Jackson turbidity units (JTU), is shown in relation to the concentration of sediment in the simultaneously collected sample.

Measured values of turbidity are significantly influenced by the type of instrument used. Turbidity values published in California reports prior to July 1966 were determined by means of a Hellige Turbidimeter and are not directly comparable with those published subsequently. Data published in parts per million as silica from July 1966 to September 1968, and in milligrams per liter as silica from October 1968 to September 1970, were measured with a model 1860 Hack Turbidimeter which is optically similar to the model 2100 Hack Turbidimeter used from October 1970 to September 1974, and the model 2100A Hack Turbidimeter used since October 1974. Scales are available for those instruments providing a readout in either milligrams per liter or in Jackson turbidity units. Hence, conversion of data for the period July 1966 through September 1970 from parts per million or milligrams per liter of silica to Jackson turbidity units can be made by use of table 4.

Table 4.--Conversion of turbidity values, measured by Hach Turbidimeters Model 1860 or 2100 from parts per million or milligrams per liter of silica to Jackson turbidity units.

Turbidity, in ppm or mg/l	Turbidity, in JTU
5	3
10	6
50	30
100	55
200	110
500	240
1,000	440

Publications

The following are the numbers of the annual series of Geological Survey water-supply papers that give information on quality of surface waters in California. Data for the Colorado River Basin are given in Part 9, The Great Basin in Part 10, and Pacific slope basins in California in Part 11.

Water year	Water-supply paper	Water year	Water-supply paper	Water year	Water-supply paper
1941	942	1951	1200	1961	1885
1942	950	1952	1253	1962	1945
1943	970	1953	1293	1963	1951
1944	1022	1954	1353	1964	1958
1945	1030	1955	1403	1965	1965
1946	1050	1956	1453	1966	1995
1947	1102	1957	1523	1967	2015
1948	1133	1958	1574	1968	2098, 2099
1949	1163	1959	1645	1969	2148, 2149
1950	1189	1960	1745	1970	2158, 2159
				1971	A2168, A2169

A In preparation.

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 1, and (2) a local number that is provided for continuity with older reports and for other use as dictated by local needs (fig. 2).

Measurements are made in many types of wells under varying 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 each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level 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 above mean sea level is given in the well description.

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.

Publications

Publication of ground-water level data for the United States in water-supply papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single water-supply paper for each year covering the entire nation was issued (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate water-supply papers were issued for 6 sections of the United States. Water-level data for California are in the water-supply papers listed below, each report containing one or more calendar years (January-December) of data. Data in this report are for the 12-month water year ending September 30.

Calendar year	Water-supply paper	Calendar year	Water-supply paper	Calendar year	Water-supply paper
1940	911	1946	1076	1963	1270
1941	941	1947	1101	1954	1326
1942	949	1948	1131	1955	1409
1943	991	1949	1161	1956-60	1770
1944	1021	1950	1170	1961-65	1855
1945	1028	1951	1196	1966-70	2010
		1952	1226	1971-74	A2162

A In preparation.

HYDROLOGIC CONDITIONS

Runoff during the 1975 water year was about 110 percent of the 1941-70 median on the area covered by this volume. Runoff, at selected sites, as shown in figure 3, was below normal from November through January. Precipitation during this period was about 50 percent of normal, resulting in a very light snowpack. In early February, a series of storms brought precipitation that increased the snowpack to about normal. Warm weather during the latter part of the storm period melted much of the snowpack at lower elevations causing increased runoff. Above-normal precipitation and low temperatures continued through March, increasing the snowpack to above normal, and continuing low temperatures during April and May caused a late snowmelt resulting in above or near normal runoff for the rest of the water year. Five major reservoirs in the area contained 125 percent of their average annual volume at the end of the 1975 water year. The quality of the surface water did not change appreciably.

Ground-water levels remained stable, except in a few areas receiving irrigation water from the California Aqueduct. In parts of western Fresno and Kings Counties, where water from the California Aqueduct has been available since the late 1960's, water levels in the confined aquifer system have risen as much as 200 ft (60 m) in the 5-year period 1971-75. Conversely, in the same 5-year period, water levels in the unconfined zone have declined as much as 60 ft (18 m) in Tulare and Kern Counties where surface water has not yet been made available. Water from the California Aqueduct is now being imported into the Bakersfield area, and should reduce water-level decline, which has been occurring each year.

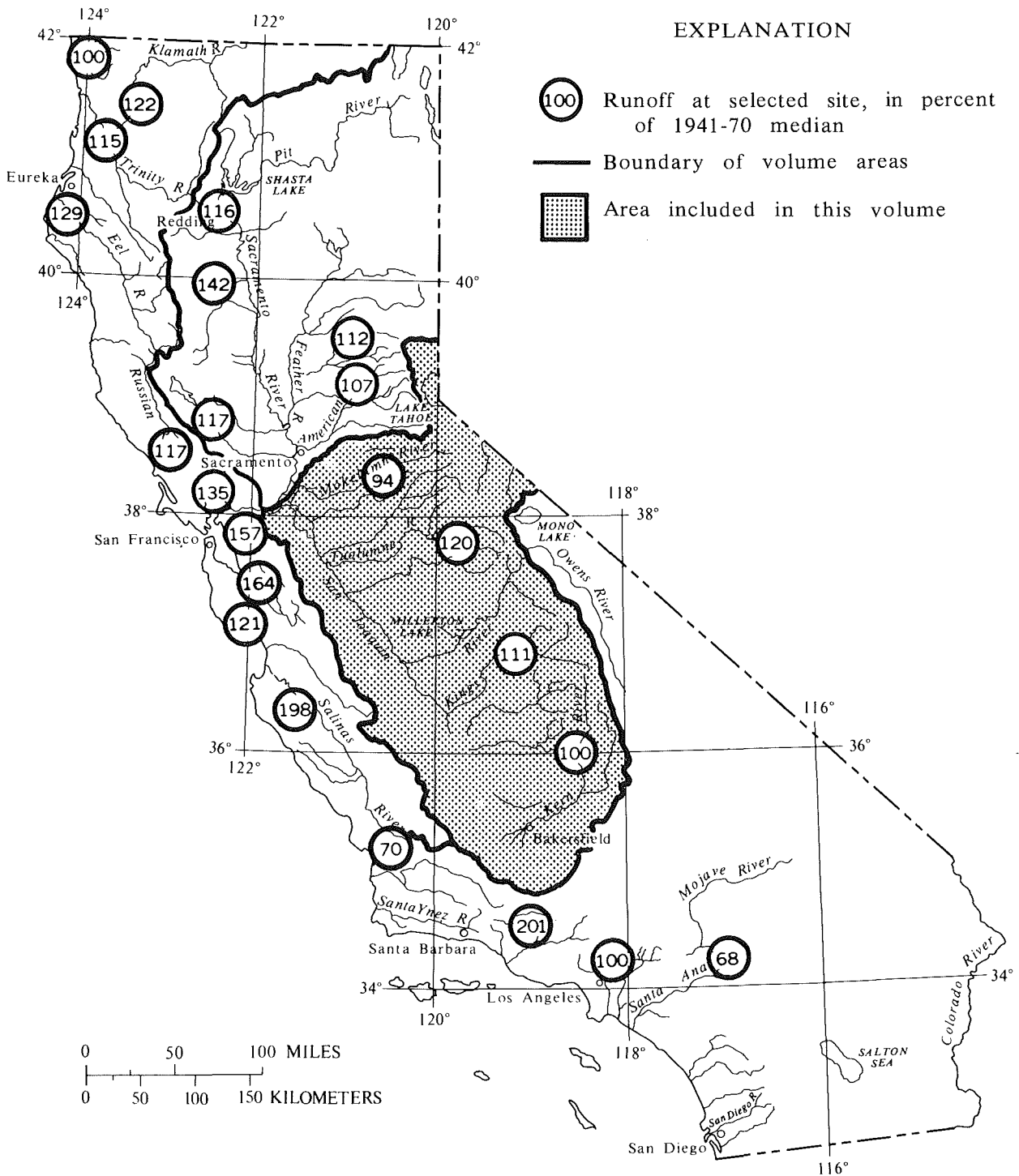


FIGURE 3.--Runoff for the current water year.

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Table 5.--Factors for converting English units to
International System (SI) units

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

Multiply English units	By	To obtain SI units
<i>Length</i>		
inches (in)	25.4	millimeters (mm)
	.0254	meters (m)
feet (ft)	.3048	meters (m)
yards (yd)	.9144	meters (m)
rods	5.0292	meters (m)
miles (mi)	1.609	kilometers (km)
<i>Area</i>		
acres	4047	square meters (m ²)
	.4047	*hectares (ha)
	.4047	square hectometer (hm ²)
	.004047	square kilometers (km ²)
square miles (mi ²)	2.590	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785	**liters (l)
	3.785	cubic decimeters (dm ³)
	3.785x10 ⁻³	cubic meters (m ³)
million gallons (10 ⁶ gal)	3785	cubic meters (m ³)
	3.785x10 ⁻³	cubic hectometers (hm ³)
cubic feet (ft ³)	28.32	cubic decimeters (dm ³)
	.02832	cubic meters (m ³)
cfs-days [(ft ³ /s)·d]	2447	cubic meters (m ³)
	2.447x10 ⁻³	cubic hectometers (hm ³)
acre-feet (acre-ft)	1233	cubic meters (m ³)
	1.233x10 ⁻³	cubic hectometers (hm ³)
	1.233x10 ⁻⁶	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	28.32	liters per second (l/s)
	28.32	cubic decimeters per second (dm ³ /s)
	.02832	cubic meters per second (m ³ /s)
gallons per minute (gpm)	.06309	liters per second (l/s)
	.06309	cubic decimeters per second (dm ³ /s)
	6.309x10 ⁻⁵	cubic meters per second (m ³ /s)
million gallons per day (mgd)	43.81	cubic decimeters per second (dm ³ /s)
	.04381	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	.9072	tonne (t)

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

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

WALKER LAKE BASIN

10289000 VIRGINIA CREEK NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°11'30", long 119°12'30", near center of W½ sec.22, T.4 N., R.25 E., Mono County, on right bank 1.2 mi (1.9 km) downstream from Clearwater Creek, 3 mi (5 km) upstream from mouth, and 4.2 mi (6.8 km) south-east of Bridgeport.

DRAINAGE AREA.--63.6 mi² (164.7 km²).

PERIOD OF RECORD.--October 1953 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (2,042 m), from topographic map.

AVERAGE DISCHARGE.--22 years, 16.7 ft³/s (0.473 m³/s), 12,100 acre-ft/yr (14.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 146 ft³/s (4.13 m³/s) May 14 (gage height, 4.23 ft or 1.289 m); minimum, 3.2 ft³/s (0.091 m³/s) Dec. 18.

Period of record: Maximum discharge, 1,300 ft³/s (36.8 m³/s) Dec. 23, 1955 (gage height, 8.40 ft or 2.560 m), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.0 ft³/s (0.028 m³/s) Aug. 18, 1960, July 28, 1961.

REMARKS.--Records good. Flow partly regulated by Virginia Lakes and other lakes near headwaters. Diversions for irrigation of about 3,000 acres (12.1 km²) above station.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	16	13	9.5	11	17	18	31	63	23	11	8.6
2	8.5	16	14	11	11	16	16	38	68	23	11	8.5
3	8.8	16	14	12	12	16	16	41	67	21	9.4	8.3
4	10	15	12	13	13	16	16	34	63	19	8.5	8.0
5	11	14	12	13	11	16	16	27	61	20	8.6	7.9
6	10	14	15	13	14	15	17	27	67	24	7.9	7.9
7	11	16	16	13	14	14	16	33	70	25	7.9	7.9
8	12	15	14	13	14	15	15	45	65	26	7.6	7.9
9	11	15	13	13	12	14	15	55	59	27	7.0	10
10	11	14	14	13	13	14	16	58	54	28	6.6	16
11	12	15	16	13	11	14	16	68	55	27	7.2	15
12	12	15	15	12	13	14	17	81	56	27	8.9	13
13	12	15	13	12	15	14	19	83	58	25	9.2	12
14	12	15	14	12	12	14	21	99	59	22	7.3	12
15	11	15	14	12	12	14	18	87	59	19	6.9	11
16	11	14	13	12	11	14	17	76	57	19	6.8	11
17	12	14	13	12	12	14	16	70	54	17	6.4	11
18	12	13	11	12	11	15	16	66	51	16	6.3	11
19	12	13	12	12	13	16	18	66	45	16	7.7	11
20	12	14	13	12	12	17	23	63	38	16	10	10
21	12	14	12	12	12	17	30	57	32	15	14	10
22	12	13	10	12	11	16	30	49	29	14	12	10
23	12	12	10	12	11	14	30	45	30	13	11	9.9
24	12	14	9.5	13	12	20	33	47	33	13	11	10
25	13	14	10	13	13	26	30	50	30	11	11	9.9
26	13	13	10	13	13	19	23	53	26	11	10	9.8
27	13	14	13	11	14	21	23	53	21	11	9.9	9.8
28	15	12	13	11	15	20	26	54	21	12	9.5	9.5
29	15	11	10	11	---	21	28	53	19	11	9.4	9.6
30	15	13	10	11	---	19	29	54	22	11	8.9	9.4
31	16	---	11	11	---	21	---	56	---	11	8.7	---
TOTAL	368.3	424	389.5	374.5	348	513	624	1719	1432	573	277.6	305.9
MEAN	11.9	14.1	12.6	12.1	12.4	16.5	20.8	55.5	47.7	18.5	8.95	10.2
MAX	16	16	16	13	15	26	33	99	70	28	14	16
MIN	8.5	11	9.5	9.5	11	14	15	27	19	11	6.3	7.9
AC-FT	731	841	773	743	690	1020	1240	3410	2840	1140	551	607
CAL YR 1974	TOTAL	6819.7	MEAN 18.7	MAX 52	MIN 7.7	AC-FT	13530					
WTR YR 1975	TOTAL	7348.8	MEAN 20.1	MAX 99	MIN 6.3	AC-FT	14580					

Peak discharge (base, 50 ft³/s).--May 14 (2200) 146 ft³/s (4.23 ft); June 7 (0500) 73 ft³/s (3.65 ft).

LOCATION.--Lat 38°10'25", long 119°14'00", in NE¼SE¼ sec.29, T.4 N., R.25 E., Mono County, on right bank 130 ft (40 m) downstream from county road bridge, 0.1 mi (0.2 km) upstream from diversion to Summers Creek, and 5.5 mi (8.8 km) south of Bridgeport.

PERIOD OF RECORD.--October 1953 to September 1975 (discontinued).

AVERAGE DISCHARGE.--22 years, 29.0 ft³/s (0.821 m³/s), 21,010 acre-ft/yr (25.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 202 ft³/s (5.72 m³/s) June 7 (gage height, 2.85 ft or 0.869 m); maximum gage height, 3.32 ft (1.012 m) Jan. 31 (backwater from ice); minimum discharge, 4.3 ft³/s (0.12 m³/s) Dec. 22.

Period of record: Maximum discharge, 351 ft³/s (9.94 m³/s) July 4, 1967 (gage height, 3.26 ft or 0.994 m); maximum gage height, 4.09 ft (1.247 m) Feb. 25, 1962 (backwater from ice); minimum discharge, 1.4 ft³/s (0.040 m³/s) Apr. 4, 1964.

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

REVISIONS. --WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	9.8	7.2	6.5	9.0	9.1	15	18	132	86	36	32
2	10	9.8	6.5	8.1	10	8.8	14	23	147	86	33	31
3	12	9.0	7.5	7.4	9.0	8.5	11	26	141	84	32	30
4	12	8.7	7.2	7.1	9.5	9.0	11	24	135	82	30	29
5	12	8.5	7.0	7.0	9.5	9.0	10	21	130	82	30	27
6	11	8.0	7.0	7.2	9.8	9.0	12	20	144	92	29	28
7	10	8.7	7.5	7.3	9.6	9.0	15	23	178	94	25	26
8	10	8.3	7.5	7.5	9.8	9.4	12	29	178	94	23	24
9	9.5	8.0	7.5	7.0	9.9	9.0	11	35	158	94	21	26
10	9.2	8.0	7.5	7.4	9.5	9.4	10	40	144	96	21	29
11	9.0	8.0	8.5	8.0	9.0	9.4	11	46	138	101	21	28
12	8.8	8.0	9.0	8.4	9.8	9.0	11	50	147	99	21	24
13	8.7	8.0	8.1	8.4	9.2	10	11	55	147	101	20	23
14	8.4	8.0	8.0	8.4	9.0	11	11	68	151	90	20	21
15	8.3	8.0	8.1	8.3	9.0	10	11	78	161	78	20	15
16	8.2	7.7	7.8	8.1	9.0	10	11	73	161	68	21	13
17	8.0	7.7	7.7	8.1	9.0	10	11	77	154	58	20	12
18	8.0	7.5	7.5	7.8	9.0	11	11	87	132	57	18	12
19	7.7	7.2	6.5	7.8	9.8	11	11	104	106	58	20	12
20	7.7	7.2	7.0	7.8	9.4	11	12	109	88	58	26	12
21	7.5	7.5	7.2	7.6	8.5	11	13	81	76	58	28	12
22	7.5	6.9	7.0	7.5	8.5	10	14	60	76	57	24	11
23	7.5	6.8	6.5	7.5	8.7	10	15	56	92	57	21	11
24	7.6	8.7	6.5	7.5	9.0	12	16	67	99	57	19	11
25	7.5	7.5	6.5	7.6	9.0	13	15	83	90	54	18	11
26	7.5	7.3	7.0	7.6	9.0	16	14	92	76	52	17	11
27	7.5	7.5	7.5	7.5	9.0	19	14	98	72	49	16	11
28	9.2	6.6	7.5	7.0	9.0	18	16	101	74	46	18	11
29	9.4	7.2	7.5	7.0	---	19	17	101	78	46	37	11
30	9.0	7.5	7.0	7.5	---	13	18	104	84	43	36	11
31	9.1	---	7.5	7.5	---	13	---	111	---	40	35	---
TOTAL	277.8	237.6	228.3	235.4	258.5	346.6	384	1960	3689	2217	756	565
MEAN	8.96	7.92	7.36	7.59	9.23	11.2	12.8	63.2	123	71.5	24.4	18.8
MAX	12	9.8	9.0	8.4	10	19	18	111	178	101	37	32
MIN	7.5	6.6	6.5	6.5	8.5	8.5	10	18	72	40	16	11
AC-FT	551	471	453	467	513	687	762	3890	7320	4400	1500	1120
CAL YR 1974	TOTAL	12211.9	MEAN	33.5	MAX	171	MIN	6.5	AC-FT	24220		
WTR YR 1975	TOTAL	11155.2	MEAN	30.6	MAX	178	MIN	6.5	AC-FT	22130		

WALKER LAKE BASIN

10290300 UPPER TWIN LAKE NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°09'15", long 119°20'58", in NW¼NE¼ sec.5, T.3 N., R.24 E., Mono County, at outlet of upper lake dam on Robinson Creek, and 10 mi (16 km) southwest of Bridgeport.

DRAINAGE AREA.--29.5 mi² (76.4 km²).

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

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

EXTREMES.--Current year: Maximum contents, 2,710 acre-ft (3.34 hm³) June 7 (elevation, 7,208.99 ft or 2,197.300 m); minimum, 193 acre-ft (238,000 m³) Nov. 1-10 (elevation, 7,200.69 ft or 2,194.770 m).
Period of record: Maximum contents observed, 2,900 acre-ft (3.58 hm³) June 22, July 5, 6, 1967 (elevation, 7,209.58 ft or 2,197.480 m); minimum observed, 62 acre-ft (76,400 m³) Oct. 31, Nov. 1, 1964 (elevation, 7,200.22 ft or 2,194.627 m).
No contents Oct. 17, 1961.

REMARKS.--Contents regulated by dam at outlet. Figures given herein represent usable contents. Usable contents, 2,070 acre-ft (2.55 hm³) between elevations 7,200 ft (2,194.6 m), natural rim and 7,207 ft (2,196.7 m), spillway crest.

ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	7,201.11	311	--
Oct. 31.....	7,200.70	196	-115
Nov. 30.....	7,201.94	543	+347
Dec. 31.....	7,204.53	1,290	+747
CAL YR 1974.....	--	--	-860
Jan. 31.....	--	a 2,030	+740
Feb. 28.....	7,207.07	2,090	+60
Mar. 31.....	7,207.14	2,110	+20
Apr. 30.....	7,207.16	2,120	+10
May 31.....	7,208.52	2,560	+440
June 30.....	7,208.18	2,450	-110
July 31.....	7,207.76	2,310	-140
Aug. 31.....	7,207.35	2,180	-130
Sept. 30.....	7,202.51	703	-1,477
WTR YR 1975.....	--	--	+392

10290400 LOWER TWIN LAKE NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°10'05", long 119°19'33", in NE¼NE¼ sec.33, T.4 N., R.24 E., Mono County, at outlet of lower lake dam on Robinson Creek, and 8 mi (13 km) southwest of Bridgeport.

DRAINAGE AREA.--38.9 mi² (100.8 km²).

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

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

EXTREMES.--Current year: Maximum contents, 5,350 acre-ft (6.60 hm³) June 16 (elevation, 7,203.11 ft or 2,195.508 m); minimum, 1,000 acre-ft (1.23 hm³) Oct. 10 (elevation, 7,192.51 ft or 2,192.272 m).
Period of record: Maximum contents, 5,490 acre-ft (6.77 hm³) June 6, 1969 (elevation, 7,203.51 ft or 2,195.630 m); no contents Nov. 17, 1966.

REMARKS.--Contents regulated by dam at outlet and by Upper Twin Lake. Figures given herein represent usable contents. Usable contents, 4,010 acre-ft (4.94 hm³) between elevations 7,190 ft (2,192 m), natural rim and 7,200 ft (2,195 m), spillway crest. One transarea diversion out of Tamarack Creek into Summers Creek.

ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	7,193.96	1,580	--
Oct. 31.....	7,193.50	1,400	-180
Nov. 30.....	7,194.68	1,870	+470
Dec. 31.....	7,195.24	2,100	+230
CAL YR 1974.....	--	--	-1,320
Jan. 31.....	--	a 2,440	+340
Feb. 28.....	7,198.61	3,440	+1,000
Mar. 31.....	7,200.61	4,270	+830
Apr. 30.....	7,200.15	4,070	-200
May 31.....	7,201.15	4,500	+430
June 30.....	7,202.10	4,900	+400
July 31.....	7,201.68	4,720	-180
Aug. 31.....	7,195.98	2,390	-2,330
Sept. 30.....	7,193.36	1,340	-1,050
WTR YR 1975.....	--	--	-240

a Interpolated.

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

LOCATION.--Lat 38°10'20", long 119°19'25", in SE¼SE¼ sec.28, T.4 N., R.24 E., Mono County, on left bank 0.2 mi (0.3 km) downstream from Twin Lakes, and 8 mi (13 km) southwest of Bridgeport.

DRAINAGE AREA.--39.1 mi² (101.3 km²).

PERIOD OF RECORD.--October 1953 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,050 ft (2,149 m), from topographic map.

AVERAGE DISCHARGE (unadjusted).--22 years, 60.0 ft³/s (1.699 m³/s), 43,470 acre-ft/yr (53.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 334 ft³/s (9.46 m³/s) June 8, 9 (gage height, 3.92 ft or 1.195 m); minimum daily, 0.38 ft³/s (0.011 m³/s) Jan. 28.
 Period of record: Maximum discharge, 492 ft³/s (13.9 m³/s) June 20, 1963; maximum gage height, 4.62 ft (1.408 m) June 6, 1969; no flow many days in some years.
 Maximum discharge known, 660 ft³/s (18.7 m³/s) June 21, 1911 (gage height, 5.2 ft or 1.58 m), at site 2.5 mi (4.0 km) downstream.

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

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	6.5	1.1	.50	.76	.48	22	90	191	171	103	104
2	70	6.5	1.1	.50	1.2	.40	20	89	229	175	95	99
3	67	6.5	1.2	.50	1.2	.40	20	87	262	177	89	95
4	64	6.5	1.1	.60	1.3	.49	18	84	278	175	84	90
5	61	6.8	1.1	.60	1.1	.49	20	83	278	175	78	87
6	58	6.8	1.1	.56	1.0	.49	21	82	283	184	76	89
7	55	6.8	1.1	.49	1.0	.75	21	79	303	198	73	87
8	52	6.8	1.1	.50	1.1	.67	19	77	330	210	107	84
9	49	6.8	1.1	.50	1.5	.60	19	75	328	219	121	84
10	37	6.8	1.1	.50	2.0	.60	18	74	314	228	111	84
11	20	7.1	1.1	.49	1.0	.60	18	73	302	238	99	83
12	20	7.1	1.1	.50	.66	.60	18	82	299	243	92	83
13	20	7.1	.84	.50	.60	.60	18	94	242	243	97	82
14	20	7.1	.94	.45	.60	.62	18	93	242	233	105	82
15	20	7.1	.94	.45	.60	.80	19	94	281	219	101	81
16	20	7.1	.90	.45	.55	.90	18	94	308	200	101	80
17	20	7.1	.82	.41	.55	2.0	18	96	314	186	98	79
18	20	5.9	.82	.47	.55	3.5	17	98	296	174	97	78
19	20	5.9	.82	.49	.60	4.5	17	100	262	172	106	77
20	20	5.9	.82	.49	.51	5.3	16	101	229	169	120	76
21	20	4.1	.81	.49	.50	6.0	16	102	202	167	118	75
22	16	1.7	.72	.49	.50	8.0	17	103	186	162	116	74
23	8.0	1.7	.72	.49	.50	13	16	104	192	156	114	73
24	7.4	1.7	.71	.49	.49	13	17	105	211	152	112	72
25	6.8	1.4	.71	.49	.49	19	18	107	198	147	120	71
26	6.8	1.2	.71	.45	.53	20	18	108	185	142	116	69
27	6.8	1.2	.58	.41	.49	20	18	111	170	138	110	68
28	6.5	1.1	.65	.38	.49	19	18	120	161	133	107	66
29	6.5	1.1	.50	.40	---	19	59	137	160	127	108	64
30	6.5	1.1	.55	.40	---	18	97	153	165	120	113	62
31	6.2	---	.65	.45	---	20	---	168	---	110	108	---
TOTAL	882.5	150.5	27.51	14.89	22.37	199.79	669	3063	7401	5543	3195	2398
MEAN	28.5	5.02	.89	.48	.80	6.44	22.3	98.8	247	179	103	79.9
MAX	72	7.1	1.2	.60	2.0	20	97	168	330	243	121	104
MIN	6.2	1.1	.50	.38	.49	.40	16	73	160	110	73	62
AC-FT	1750	299	55	30	44	396	1330	6080	14680	10990	6340	4760
CAL YR 1974 TOTAL	27081.01			MEAN 74.2	MAX 317	MIN .50	AC-FT 53720					
WTR YR 1975 TOTAL	23566.56			MEAN 64.6	MAX 330	MIN .38	AC-FT 46740					

WALKER LAKE BASIN

10291500 BUCKEYE CREEK NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°14'20", long 119°19'30", in NE¼NE¼ sec.4, T.4 N., R.24 E., Mono County, on right bank at Buckeye Hot Springs, 0.6 mi (1.0 km) downstream from Eagle Creek, and 5.5 mi (8.8 km) southwest of Bridgeport.

DRAINAGE AREA.--44.1 mi² (114.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,900 ft (2,103 m), from topographic map. November 1910 to September 1914, nonrecording gage at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE.--23 years (1911-12, 1953-75), 60.1 ft³/s (1.702 m³/s), 43,540 acre-ft/yr (53.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 392 ft³/s (11.1 m³/s) June 6, 7 (gage height, 3.39 ft or 1.033 m); minimum, 8.4 ft³/s (0.24 m³/s) Dec. 13, Mar. 22.

Period of record (1953 to current year): Maximum discharge, 947 ft³/s (26.8 m³/s) Feb. 1, 1963 (gage height, 4.41 ft or 1.344 m), from rating curve extended above 360 ft³/s (10.2 m³/s) on basis of slope-area measurement at gage height 4.00 ft (1.219 m) and logarithmic plotting; minimum, 3.3 ft³/s (0.094 m³/s) Dec. 12, 1959, result of freezeup.

Flood of June 21, 1911, reached an observed stage of 4.8 ft (1.46 m), discharge not determined, site and datum then in use.

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

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	26	19	17	20	23	23	33	308	181	70	38
2	28	24	20	19	21	22	22	39	327	179	67	37
3	29	24	21	20	19	21	21	46	312	175	66	36
4	28	23	22	21	20	22	21	40	314	175	64	36
5	28	22	20	20	20	22	20	35	307	195	62	35
6	27	22	21	20	21	21	20	35	350	204	60	34
7	27	23	20	19	21	21	19	41	339	202	57	34
8	27	23	20	18	21	22	19	53	317	197	55	35
9	26	22	20	17	20	21	20	66	298	197	54	41
10	25	22	21	18	18	21	19	83	290	207	53	42
11	25	22	23	19	15	21	20	104	305	199	52	43
12	25	23	22	18	16	20	19	117	308	194	54	37
13	24	23	21	18	17	20	20	140	295	177	53	36
14	24	23	21	18	19	20	21	179	310	161	49	34
15	24	22	21	18	18	20	20	198	306	149	50	33
16	24	22	21	17	21	20	20	183	302	135	49	32
17	23	22	20	17	20	20	19	213	275	141	46	32
18	23	21	18	17	19	20	20	233	218	138	47	33
19	23	21	19	17	19	20	21	235	191	132	57	32
20	23	21	20	17	18	21	23	194	175	127	58	32
21	23	21	20	17	17	19	26	135	175	121	57	31
22	23	19	19	17	16	19	28	115	208	115	49	30
23	23	18	18	18	17	20	29	127	221	115	45	29
24	23	20	17	18	18	23	30	171	202	110	44	29
25	23	21	18	18	19	27	28	208	159	102	43	29
26	23	20	19	18	19	25	25	221	155	99	42	28
27	23	21	20	19	20	23	25	227	163	95	44	28
28	27	22	19	17	21	21	28	236	167	94	43	28
29	25	20	18	18	---	20	30	235	178	88	41	27
30	25	21	19	19	---	22	32	241	185	82	40	27
31	26	---	20	19	---	23	---	269	---	74	38	---
TOTAL	773	654	617	563	530	660	688	4452	7660	4560	1609	998
MEAN	24.9	21.8	19.9	18.2	18.9	21.3	22.9	144	255	147	51.9	33.3
MAX	29	26	23	21	21	27	32	269	350	207	70	43
MIN	23	18	17	17	15	19	19	33	155	74	38	27
AC-FT	1530	1300	1220	1120	1050	1310	1360	8830	15190	9040	3190	1980
CAL YR 1974	TOTAL	26830	MEAN 73.5	MAX 339	MIN 17	AC-FT	53220					
WTR YR 1975	TOTAL	23764	MEAN 65.1	MAX 350	MIN 15	AC-FT	47140					

Date	Time	G.H.	Peak discharge (base, 100 ft ³ /s) Discharge	Date	Time	G.H.	Discharge
5-19	0130	3.15	302	6-23	0100	3.07	266
6-6	0100	3.38	392	7-9	2400	2.99	237

10292000 SWAUGER CREEK NEAR BRIDGEPORT, CALIF.

LOCATION (revised).--Lat 38°17'05", long 119°17'50", in NE¼NW¼ sec.23, T.5 N., R.24 E., Mono County, on right bank 0.8 mi (1.3 km) downstream from Yaney Canyon, and 4 mi (6 km) northwest of Bridgeport.

DRAINAGE AREA.--52.8 mi² (136.8 km²).

PERIOD OF RECORD.--June 1911 to September 1915 (fragmentary), October 1953 to September 1975 (discontinued). Prior to October 1971, published as Swager Creek near Bridgeport.

GAGE.--Water-stage recorder. Altitude of gage is 6,620 ft (2,018 m), from topographic map. June 1911 to September 1915 nonrecording gages at approximately same site at different datums.

AVERAGE DISCHARGE.--23 years (1911-12, 1953-75), 12.8 ft³/s (0.363 m³/s), 9,270 acre-ft/yr (11.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 169 ft³/s (4.79 m³/s) May 14 (gage height, 3.51 ft or 1.070 m); minimum, 3.6 ft³/s (0.10 m³/s) Nov. 23.

Period of record: Maximum discharge, 585 ft³/s (16.6 m³/s) Dec. 23, 1955 (gage height, 6.24 ft or 1.902 m), from rating curve extended above 175 ft³/s (4.96 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 0.50 ft³/s (0.014 m³/s) Apr. 20, 1912, Feb. 28, 1969.

REMARKS.--Records excellent except those for winter periods, which are fair. Diversions for irrigation of about 1,000 acres (4.0 km²) above station.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	9.7	7.9	6.5	7.0	12	13	34	88	20	9.4	6.6
2	7.4	9.4	8.4	7.0	7.0	12	12	41	90	21	9.0	9.9
3	7.9	9.4	8.9	7.5	7.5	11	12	45	85	22	7.8	11
4	8.1	9.2	7.0	8.6	8.2	12	13	40	80	23	7.8	10
5	8.5	8.8	6.5	8.3	8.6	12	13	33	77	22	8.7	10
6	8.1	8.7	7.0	8.9	9.0	11	13	33	76	22	7.5	9.9
7	8.0	9.2	7.5	8.6	9.2	10	12	39	72	21	7.1	9.8
8	8.3	9.3	7.0	7.9	9.4	10	12	51	69	21	7.9	10
9	8.2	9.0	7.0	8.0	9.4	10	12	60	67	21	8.7	12
10	8.0	8.7	7.5	8.2	9.0	10	12	66	65	21	8.8	16
11	8.0	8.8	9.2	8.8	8.0	10	13	70	63	19	8.2	13
12	8.0	8.8	9.7	8.6	9.5	10	14	79	61	19	6.8	11
13	8.0	8.8	7.9	8.6	9.5	10	17	95	55	22	6.2	11
14	8.0	8.8	8.6	8.2	9.0	10	20	104	49	20	6.5	11
15	8.0	8.7	9.2	8.0	9.0	10	18	98	50	20	6.1	11
16	7.9	8.7	8.8	8.6	9.0	9.5	16	90	48	15	6.0	10
17	7.9	8.7	8.5	8.7	8.5	10	15	99	48	12	6.6	10
18	8.0	8.5	8.0	8.8	8.0	11	18	100	49	12	7.0	10
19	8.0	8.3	8.4	8.9	9.5	11	24	110	48	12	9.0	10
20	8.0	8.5	8.4	9.2	9.4	12	32	82	47	13	13	9.8
21	8.0	8.9	8.1	9.1	9.0	12	40	64	42	15	11	9.5
22	8.1	7.7	6.9	9.2	8.5	10	41	59	39	14	9.0	9.4
23	8.1	7.2	6.8	9.4	9.0	9.5	41	67	38	13	7.0	9.2
24	8.2	9.0	5.5	9.4	9.7	14	46	70	38	13	6.0	9.1
25	8.4	8.5	5.8	10	9.7	19	33	67	32	13	6.0	9.2
26	8.3	8.3	7.0	9.6	10	13	25	63	26	11	7.5	9.2
27	8.4	8.4	7.6	8.3	11	12	29	63	21	11	11	9.0
28	9.2	7.2	8.5	7.0	11	13	31	74	20	10	7.9	8.9
29	9.3	7.0	7.5	7.5	---	15	32	79	21	10	4.5	9.0
30	9.7	7.8	7.5	7.0	---	13	31	79	20	10	4.4	8.8
31	9.6	---	8.0	6.5	---	14	---	84	---	9.4	4.7	---
TOTAL	254.8	258.0	240.6	258.9	251.6	358.0	660	2138	1584	507.4	237.1	303.3
MEAN	8.22	8.60	7.76	8.35	8.99	11.5	22.0	69.0	52.8	16.4	7.65	10.1
MAX	9.7	9.7	9.7	10	11	19	46	110	90	23	13	16
MIN	7.2	7.0	5.5	6.5	7.0	9.5	12	33	20	9.4	4.4	6.6
AC-FT	505	512	477	514	499	710	1310	4240	3140	1010	470	602
CAL YR 1974 TOTAL	4663.5											
WTR YR 1975 TOTAL	7051.7											
MEAN 12.8												
MAX 36												
MIN 3.8												
AC-FT 9250												
MEAN 19.3												
MAX 110												
MIN 4.4												
AC-FT 13990												

Peak discharge (base, 25 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
4-24	1800	2.89	81	6-1	2400	2.95	97
5-3	2000	2.65	60	7-13	1200	2.03	26
5-14	2000	3.51	169				

10292500 BRIDGEPORT RESERVOIR NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°19'30", long 119°12'40", in SE¼NE¼ sec.34, T.6 N., R.25 E., Mono County, at Bridgeport Dam on East Walker River, 4.5 mi (7.2 km) north of Bridgeport.

DRAINAGE AREA.--358 mi² (927 km²).

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

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

EXTREMES.--Current year: Maximum contents, 43,370 acre-ft (53.5 hm³) Mar. 25 (elevation, 6,460.31 ft or 1,969.102 m); minimum, 17,580 acre-ft (21.2 hm³) Sept. 25 (elevation, 6,449.30 ft or 1,965.747 m).
Period of record: Maximum contents, 44,880 acre-ft (55.3 hm³) June 16, 1974 (elevation, 6,460.78 ft or 1,969.246 m); no contents during fall of 1929-30, 1960.

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1923. Dam completed in November 1924. Capacity, 42,460 acre-ft (52.4 hm³) between elevations 6,415 ft (1,955.3 m), approximate elevation of bottom of reservoir and 6,461 ft (1,969.3 m), crest of spillway is at elevation 6,460.75 ft (1,969.237 m), however, there are four siphons that become operative prior to reaching the spillway. Elevation of sill of outlet gate, 6,412 ft (1,954.4 m). No dead storage. Figures given herein represent total contents. Water is used for irrigation by Walker River Irrigation District.

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

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

6,449	17,060	6,456	31,570
6,451	20,620	6,461	45,490
6,453	24,660		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18520	22480	26530	29760	33730	37870	42170	38570	28470	41290	36360	24140
2	18520	22580	26640	30000	33860	38150	42020	38150	28930	41290	35960	23620
3	18520	22790	26860	30240	33980	38430	41730	37730	29520	41440	35570	23100
4	18520	23000	27090	30240	34110	38840	41440	37320	30000	41440	35300	24480
5	18610	23100	27200	30490	34240	39120	41440	36900	30490	41440	34900	21990
6	18690	23310	27440	30610	34380	39400	41290	36500	31090	41440	34510	21400
7	18870	23410	27550	30730	34510	39690	41290	36230	31820	41290	34110	20820
8	19060	23520	27660	30850	34640	39980	41290	35830	32330	41290	33730	20250
9	19240	23720	27660	30970	35040	40120	41440	35440	32920	41290	33350	19880
10	19420	23830	27780	31090	35040	40270	41290	35040	33600	41440	32970	19610
11	19520	24040	28010	31210	35300	40560	41440	34510	34110	41580	32460	19520
12	19700	24140	28120	31330	35440	40850	41440	34240	34770	41580	31950	19330
13	19800	24240	28120	31450	35570	41000	41580	33980	35440	41730	31450	19060
14	19980	24450	28360	31570	35700	41290	41580	33600	36230	41880	30970	18780
15	20070	24560	28470	31700	35700	41440	41580	33220	36900	41730	30490	18520
16	20250	24770	28580	31820	35830	41580	41440	32970	37730	41730	30120	18350
17	20340	24880	28700	31950	35960	41880	41580	32590	38290	41580	29640	18260
18	20440	24990	28820	32080	36230	42170	41580	32330	38980	41290	29160	18090
19	20530	25100	28930	32200	36360	42460	41580	31820	39540	41150	28700	18010
20	20720	25320	29040	32330	36360	42760	41730	31570	39980	40850	28360	17830
21	20820	25430	29040	32460	36500	43070	41730	31210	40270	40710	28240	17750
22	20820	25540	29040	32590	36630	42920	41730	30730	40560	40420	27900	17660
23	21010	25650	29160	32710	36760	42920	41440	30120	40710	40120	27660	17660
24	21110	25980	29160	32840	36900	43070	41290	29520	40710	39830	27440	17580
25	21310	25870	29280	32970	37040	43070	41000	29280	41000	39400	27200	17580
26	21400	25980	29400	32970	37180	42610	40560	29040	41150	38980	26750	17660
27	21600	26090	29520	33090	37460	42020	40120	28820	41150	38710	26310	17660
28	21700	26090	29520	33090	37590	41880	39690	28580	41150	38150	25870	17660
29	21890	26200	29640	33220	---	41730	39260	28360	41150	37590	25430	17750
30	22090	26420	29760	33350	---	41880	38840	28240	41150	37040	24990	17750
31	22290	---	29640	33480	---	42020	---	28360	---	36630	24560	---
MAX	22290	26420	29760	33480	37590	43070	42170	38570	41150	41880	36360	24480
MIN	18520	22480	26530	29760	33730	37870	38840	28240	28470	36630	24560	17580
(a)	6,451.85	6,453.79	6,455.22	6,456.76	6,458.30	6,459.84	6,458.76	6,454.64	6,459.56	6,457.96	6,452.96	6,449.38
(b)	+3,680	+4,130	+3,220	+3,840	+4,110	+4,430	-3,180	-10,480	+12,790	-4,520	-12,070	-6,810
CAL YR 1974	b +1,740											
WTR YR 1975	b -860											

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°19'40", long 119°12'50", in SW¼NE¼ sec.34, T.6 N., R.25 E., Mono County, on right bank 1,500 ft (457 m) downstream from Bridgeport Reservoir, 5 mi (8 km) north of Bridgeport, and 10 mi (16 km) upstream from Sweetwater Creek.

DRAINAGE AREA.--359 mi² (930 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft (1,951 m), from topographic map. Prior to Oct. 1, 1921, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. Oct. 1, 1921, to Feb. 21, 1924, water-stage recorder at site 1 mi (2 km) downstream at different datum. Feb. 22, 1924, to Sept. 30, 1931, water-stage recorder and Oct. 1, 1931, to May 25, 1939, nonrecording gage at present site at datum 2.34 ft (0.713 m) lower.

AVERAGE DISCHARGE (unadjusted).--52 years (1922-24, 1925-75), 139 ft³/s (3.936 m³/s), 100,700 acre-ft/yr (124 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 590 ft³/s (16.7 m³/s) Mar. 25 (gage height, 2.94 ft or 0.896 m); minimum daily, 12 ft³/s (0.34 m³/s) Jan. 24 to Feb. 14, Feb. 18-27.

Period of record (1921 to current year): Maximum discharge, 1,390 ft³/s (39.4 m³/s) June 19, 1963 (gage height, 4.64 ft or 1.414 m); maximum gage height, 4.95 ft (1.509 m) Jan. 22, 1943 (top of surge); minimum daily discharge, 0.2 ft³/s (0.006 m³/s) Nov. 2-29, Dec. 1-22, 25-28, 1955, Jan. 17-25, 1956.

REMARKS.--Records good. Diversions for irrigation of meadow pasture lands near Bridgeport. Flow regulated by Bridgeport Reservoir. Chemical-quality data for this station are published in the partial-record section of this report.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	17	19	18	12	13	106	304	415	296	311	332
2	90	17	19	18	12	13	192	303	417	297	300	346
3	82	17	19	18	12	13	250	303	417	306	280	350
4	82	17	19	18	12	13	206	303	419	327	276	361
5	68	17	19	18	12	14	166	303	419	343	272	360
6	59	17	19	18	12	14	166	302	421	371	256	368
7	53	17	19	18	12	14	152	301	423	371	255	381
8	38	17	19	18	12	14	108	319	425	371	255	379
9	35	17	19	18	12	14	108	359	426	363	258	366
10	28	18	19	18	12	14	108	375	427	345	299	326
11	28	18	19	18	12	14	108	407	430	345	310	290
12	28	18	19	18	12	14	108	407	432	342	339	270
13	28	18	19	18	12	14	102	422	400	331	347	260
14	28	18	19	18	12	14	103	490	338	332	350	250
15	28	18	19	18	13	14	103	545	339	333	320	235
16	28	18	19	18	13	14	103	544	327	334	319	206
17	28	18	19	18	13	14	103	543	293	334	318	184
18	28	18	19	18	12	14	103	541	294	334	323	173
19	28	18	19	18	12	14	103	539	295	339	326	167
20	25	18	19	18	12	42	103	540	296	361	291	149
21	18	18	19	18	12	81	116	540	296	361	278	130
22	17	19	19	18	12	137	172	538	297	360	265	125
23	17	19	19	16	12	167	208	535	294	359	267	109
24	17	19	19	12	12	169	236	535	295	362	267	98
25	17	19	19	12	12	334	269	533	295	361	275	93
26	16	19	19	12	12	436	305	532	295	364	296	79
27	17	19	19	12	12	328	304	533	295	371	301	79
28	17	19	19	12	13	225	304	531	295	371	305	79
29	17	19	19	12	---	176	303	494	295	366	303	79
30	17	19	18	12	---	112	304	415	296	344	302	86
31	17	---	18	12	---	54	---	415	---	331	313	---
TOTAL	1098	540	587	508	340	2523	5122	13751	10606	10725	9177	6710
MEAN	35.4	18.0	18.9	16.4	12.1	81.4	171	444	354	346	296	224
MAX	99	19	19	18	13	436	305	545	432	371	350	381
MIN	16	17	18	12	12	13	102	301	293	296	255	79
AC-FT	2180	1070	1160	1010	674	5000	10160	27280	21040	21270	18200	13310
CAL YR 1974	TOTAL	61172	MEAN 168	MAX 600	MIN 16	AC-FT	121300					
WTR YR 1975	TOTAL	61687	MEAN 169	MAX 545	MIN 12	AC-FT	122400					

WALKER LAKE BASIN

10293050 EAST WALKER RIVER BELOW SWEETWATER CREEK, NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°26'27", long 119°06'18", in NW¼NW¼ sec.29, T.7 N., R.26 E., Lyon County, on left bank 10 ft (3 m) downstream from bridge, 1.8 mi (2.9 km) downstream from Sweetwater Creek, and about 16 mi (26 km) north-northeast of Bridgeport.

DRAINAGE AREA.--467 mi² (1,210 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,760 ft (1,760 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 644 ft³/s (18.2 m³/s) May 23 (gage height, 6.64 ft or 2.024 m); minimum daily, 16 ft³/s (0.45 m³/s) Jan. 28, 30, Feb. 18.
Period of record: Maximum discharge, 1,040 ft³/s (29.5 m³/s) Aug. 5, 1974 (gage height, 7.43 ft or 2.265 m); minimum daily, 16 ft³/s (0.45 m³/s) Jan. 28, 30, Feb. 18, 1975.

REMARKS.--Records good. Diversions for irrigation above station. Flow regulated by Bridgeport Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	29	26	23	18	35	97	315	488	331	341	328
2	108	26	28	24	19	31	180	315	504	328	335	344
3	96	25	27	25	17	28	259	321	504	331	305	344
4	96	26	32	27	18	27	225	321	488	355	296	358
5	84	26	27	25	17	26	173	321	488	369	286	351
6	66	25	25	28	19	27	170	315	492	409	262	351
7	65	25	27	30	20	26	168	318	504	405	256	369
8	50	24	25	30	19	26	120	328	504	409	259	369
9	45	24	25	28	23	24	118	372	504	409	262	362
10	36	23	25	29	21	24	118	386	500	394	305	334
11	35	23	29	27	17	24	120	424	496	401	318	292
12	35	23	28	25	19	24	120	424	512	398	355	265
13	35	24	27	25	21	24	112	427	492	379	358	250
14	34	23	26	26	19	25	118	492	412	372	372	247
15	33	23	27	25	18	26	117	563	416	365	331	236
16	33	23	27	28	18	26	115	580	405	369	335	209
17	34	23	27	26	17	24	113	598	355	365	331	187
18	37	23	25	26	16	26	113	607	358	362	335	175
19	38	23	25	26	19	25	112	602	351	369	344	173
20	34	23	26	27	19	28	113	611	344	398	308	162
21	28	24	27	27	17	71	117	616	341	394	292	137
22	26	24	26	27	17	122	164	616	338	386	271	137
23	28	24	24	27	18	168	204	625	334	386	268	124
24	28	25	24	21	19	180	242	620	334	379	271	113
25	27	26	25	19	20	293	268	611	341	379	271	112
26	26	26	26	19	21	484	308	611	334	376	302	94
27	27	26	28	18	23	348	315	616	331	386	305	91
28	29	25	27	16	28	253	315	616	331	398	305	91
29	27	25	25	17	---	197	315	598	331	393	305	87
30	27	25	24	16	---	149	315	508	331	369	305	89
31	27	---	25	17	---	71	---	484	---	358	308	---
TOTAL	1412	734	815	754	537	2862	5344	15161	12463	11722	9497	6781
MEAN	45.5	24.5	26.3	24.3	19.2	92.3	178	489	415	378	306	226
MAX	118	29	32	30	28	484	315	625	512	409	372	369
MIN	26	23	24	16	16	24	97	315	331	328	256	87
AC-FT	2800	1460	1620	1500	1070	5680	10600	30070	24720	23250	18840	13450

CAL YR 1974 TOTAL -- MEAN -- MAX -- MIN -- AC-FT --
WTR YR 1975 TOTAL 68,082 MEAN 187 MAX 625 MIN 16 AC-FT 135,000

WALKER LAKE BASIN

39

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

LOCATION.--Lat 38°48'45", long 119°02'50", in NW¼SW¼ sec.14, T.11 N., R.26 E., Lyon County, on right bank 0.9 mi (1.4 km) upstream from head of Strosnider ditch, 12 mi (19 km) southeast of Mason, and 13.5 mi (21.7 km) southeast of Yerington.

DRAINAGE AREA.--1,100 mi² (2,849 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 4,574.10 ft (1,394.186 m) above mean sea level. Prior to Oct. 24, 1957, at site 400 ft (120 m) upstream at datum 0.56 ft (0.171 m) higher. Oct. 24, 1957, to Apr. 3, 1974, at site about 400 ft (120 m) downstream at present datum.

AVERAGE DISCHARGE.--28 years, 147 ft³/s (4.163 m³/s), 106,500 acre-ft/yr (131 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 622 ft³/s (17.6 m³/s) Sept. 11 (gage height, 4.40 ft or 1.341 m); minimum daily, 23 ft³/s (0.65 m³/s) Jan. 31.
Period of record: Maximum discharge, 2,380 ft³/s (67.4 m³/s) Feb. 1, 1963 (gage height, 7.60 ft or 2.316 m); minimum, 3.1 ft³/s (0.088 m³/s) Mar. 21, 1948; minimum daily, 3.4 ft³/s (0.096 m³/s) Mar. 21-24, 1948, Apr. 5, 1961.

REMARKS.--Records good. Diversions for irrigation above station. Flow regulated by Bridgeport Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	61	43	38	30	32	100	280	449	297	287	283
2	114	62	43	35	29	35	114	282	468	289	278	290
3	110	55	44	34	32	37	183	293	456	275	269	300
4	105	54	45	36	32	36	232	307	454	273	256	299
5	108	51	49	40	33	37	198	309	478	288	250	312
6	100	50	44	44	32	37	171	299	466	314	236	320
7	89	48	42	47	33	37	167	287	466	331	215	329
8	86	47	41	50	32	36	159	295	481	322	212	339
9	77	46	41	48	32	36	128	327	483	326	213	340
10	71	45	40	45	33	36	124	350	468	320	221	432
11	65	44	46	41	33	36	122	386	461	330	253	433
12	60	44	48	38	29	36	123	423	460	342	270	334
13	57	45	44	38	30	35	121	425	457	339	289	295
14	56	46	42	38	31	38	117	449	418	321	301	277
15	56	46	42	38	30	39	120	516	374	305	298	270
16	55	45	43	38	30	37	120	568	361	313	279	255
17	54	46	42	39	29	38	119	565	322	310	273	229
18	54	45	41	38	29	36	117	575	311	307	270	207
19	54	45	38	37	31	37	114	574	305	299	281	200
20	52	44	41	38	32	36	114	584	312	311	284	190
21	52	44	43	38	28	36	111	604	294	325	274	172
22	49	44	41	39	27	56	114	593	287	314	252	157
23	47	44	37	39	29	98	157	592	279	310	241	152
24	46	43	40	40	30	135	189	581	276	304	237	141
25	45	44	40	37	31	155	216	575	294	304	243	131
26	46	44	41	34	31	330	253	574	297	305	245	118
27	45	43	42	33	30	359	277	575	292	310	263	102
28	46	43	40	30	30	298	280	565	287	318	263	99
29	51	43	37	30	---	220	280	558	289	316	270	98
30	54	42	38	28	---	184	278	513	290	309	276	97
31	49	---	40	27	---	146	---	451	---	297	278	---
TOTAL	2084	1403	1298	1175	858	2744	4918	14275	11335	9624	8077	7201
MEAN	67.2	46.8	41.9	37.9	30.6	88.5	164	460	378	310	261	240
MAX	131	62	49	50	33	359	280	604	483	342	301	433
MIN	45	42	37	27	27	32	100	280	276	273	212	97
AC-FT	4130	2780	2570	2330	1700	5440	9750	28310	22480	19090	16020	14280
CAL YR 1974	TOTAL	59275	MEAN 162	MAX 543	MIN 25	AC-FT	117600					
WTR YR 1975	TOTAL	64992	MEAN 178	MAX 604	MIN 27	AC-FT	128900					

WALKER LAKE BASIN

10295500 LITTLE WALKER RIVER NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°21'30", long 119°26'30", in NW¼NW¼ sec.22, T.6 N., R.23 E., Mono County, on right bank 0.8 mi (1.3 km) north of Sonora Junction, 1.5 mi (2.4 km) upstream from mouth, and 14 mi (23 km) northwest of Bridgeport.

DRAINAGE AREA.--63.0 mi² (163.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,790 ft (2,070 m), from topographic map. April to August 1910, nonrecording gage at site 1 mi (2 km) upstream at different datum.

AVERAGE DISCHARGE.--31 years (1944-75), 51.7 ft³/s (1.464 m³/s), 37,460 acre-ft/yr (46.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 489 ft³/s (13.8 m³/s) June 6 (gage height, 2.37 ft or 0.722 m); minimum, 13 ft³/s (0.37 m³/s) Nov. 9, 20, Mar. 22.
Period of record: Maximum discharge, 1,510 ft³/s (42.8 m³/s) Jan. 31, 1963 (gage height, 3.22 ft or 0.982 m), from rating curve extended above 350 ft³/s (9.91 m³/s) on basis of slope-area measurement at gage height 2.80 ft (0.853 m) and logarithmic plotting; maximum gage height recorded, 3.63 ft (1.106 m) Jan. 3, 1945 (backwater from ice); minimum discharge recorded, 4.9 ft³/s (0.14 m³/s) Nov. 17, 1948, but may have been less during periods of ice effect.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	22	17	15	18	23	23	61	332	168	66	26
2	22	21	18	16	18	23	21	74	347	165	63	26
3	23	21	19	17	16	22	19	79	329	163	60	25
4	23	19	19	19	17	22	19	62	310	165	59	26
5	23	19	17	20	16	22	19	51	330	187	56	25
6	22	20	17	21	16	21	19	53	384	202	54	25
7	22	20	18	22	16	20	19	67	388	199	51	25
8	24	20	17	17	17	20	19	84	349	195	48	25
9	23	18	16	16	18	20	19	105	302	200	47	30
10	22	19	16	17	19	18	19	120	278	209	47	37
11	21	19	18	16	16	18	19	130	288	199	47	34
12	21	18	18	16	21	18	19	138	301	192	48	31
13	20	18	17	16	17	18	20	154	305	170	45	30
14	20	18	17	15	16	19	23	183	346	153	44	28
15	20	18	17	15	15	18	23	180	368	138	44	28
16	20	18	18	15	16	18	22	171	343	128	43	27
17	20	17	17	15	15	18	22	183	300	123	39	26
18	19	17	16	15	14	19	22	203	239	120	40	27
19	19	17	17	15	16	20	22	217	198	115	49	26
20	19	17	18	15	18	21	29	180	179	112	52	26
21	19	18	19	15	17	23	32	143	172	108	51	25
22	18	17	17	15	14	21	35	125	190	104	42	24
23	18	16	15	16	15	21	37	138	203	102	38	25
24	18	17	16	16	16	27	38	171	194	97	36	25
25	18	18	17	16	16	30	45	193	164	91	34	25
26	18	17	19	17	16	27	36	200	151	87	34	24
27	18	18	18	16	17	25	38	207	151	85	33	24
28	22	19	17	15	19	24	46	211	154	83	32	24
29	21	16	16	16	---	21	51	214	163	78	30	25
30	22	17	17	17	---	24	53	224	167	74	28	24
31	23	---	18	17	---	24	---	261	---	71	27	---
TOTAL	638	549	536	509	465	665	828	4582	7925	4283	1387	798
MEAN	20.6	18.3	17.3	16.4	16.6	21.5	27.6	148	264	138	44.7	26.6
MAX	24	22	19	22	21	30	53	261	388	209	66	37
MIN	18	16	15	15	14	18	19	51	151	71	27	24
AC-FT	1270	1090	1060	1010	922	1320	1640	9090	15720	8500	2750	1580

CAL YR 1974 TOTAL 22330 MEAN 61.2 MAX 300 MIN 15 AC-FT 44290
WTR YR 1975 TOTAL 23165 MEAN 63.5 MAX 388 MIN 14 AC-FT 45950

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-18	2000	1.97	272	6-22	2200	1.85	231
6-6	2200	2.37	489	7-9	2200	1.86	238
6-14	2300	2.26	432				

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

LOCATION.--Lat 38°22'47", long 119°26'57", in NE¼SE¼ sec.9, T.6 N., R.23 E., Mono County, on right bank 150 ft (46 m) downstream from Little Walker River, 60 ft (18 m) upstream from bridge on U.S. Highway 395, and 13 mi (21 km) southeast of Coleville.

DRAINAGE AREA.--180 mi² (466 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 6,591.39 ft (2,009.056 m) above mean sea level, supplementary adjustment of 1958. Oct. 1, 1939, to Sept. 30, 1969, at site 100 ft (30 m) upstream at same datum. Prior to Oct. 1, 1939, at site 25 ft (8 m) downstream at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--37 years, 261 ft³/s (7.392 m³/s), 189,100 acre-ft/yr (233 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,590 ft³/s (73.3 m³/s) June 1 (gage height, 5.42 ft or 1.652 m); minimum, 24 ft³/s (0.68 m³/s) Nov. 22.

Period of record: Maximum discharge, 6,220 ft³/s (176 m³/s) Nov. 20, 1950 (gage height, 8.10 ft or 2.469 m), from rating curve extended above 1,900 ft³/s (53.8 m³/s) on basis of slope-area measurement of peak flow; minimum, 4.0 ft³/s (0.11 m³/s) Nov. 18, 1948, result of freezeup.

Maximum discharge observed prior to 1938, 5,800 ft³/s (164 m³/s) Dec. 11, 1937, by slope-area measurement.

REMARKS.--Records good except those for winter periods, which are fair. Station is above diversions except for a few small ranch ditches. Flow slightly regulated by Poor Lake Reservoir (capacity unknown) 7 mi (11 km) upstream. Chemical-quality data for this station are published in the partial-record section of this report.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	59	38	37	60	85	75	221	2000	897	226	94
2	54	54	42	41	62	86	72	266	2080	878	213	93
3	60	53	46	44	60	82	68	299	1940	852	204	91
4	59	52	47	46	62	81	68	252	1840	869	199	88
5	59	49	44	49	57	79	65	222	1850	986	191	86
6	57	48	42	52	60	76	70	229	2150	1070	183	87
7	54	53	44	54	58	73	75	266	2100	1040	170	84
8	58	52	42	51	62	70	76	329	1830	994	159	84
9	54	50	40	49	61	68	74	401	1610	1020	156	93
10	54	50	39	53	60	70	75	483	1550	1030	150	121
11	53	50	43	52	56	69	79	592	1660	1010	146	126
12	53	50	45	51	57	65	76	679	1720	913	148	106
13	52	51	42	50	57	65	82	789	1640	775	143	103
14	51	51	41	49	54	66	92	982	1860	725	139	95
15	50	50	41	50	52	63	87	1060	1910	608	142	94
16	50	50	44	51	54	62	83	981	1750	589	137	90
17	49	48	43	52	52	62	82	1090	1500	607	124	88
18	48	47	39	52	50	67	83	1260	1090	602	122	90
19	47	45	41	52	54	71	90	1380	879	565	172	89
20	47	46	43	52	60	72	104	1200	806	565	183	88
21	46	52	45	50	57	67	129	800	825	516	178	74
22	44	42	42	52	50	48	150	649	1030	490	147	75
23	44	43	36	56	52	70	163	721	1140	463	128	85
24	44	47	38	57	54	87	186	1010	1040	435	116	71
25	44	42	41	62	57	128	169	1220	752	402	107	66
26	44	42	45	60	60	80	145	1310	696	379	106	61
27	45	43	45	57	62	78	148	1340	758	362	102	59
28	53	46	42	53	70	74	174	1340	797	340	98	58
29	53	40	39	58	---	67	192	1320	882	317	103	59
30	57	39	41	61	---	76	207	1380	918	285	99	57
31	59	---	44	61	---	92	---	1590	---	250	95	---
TOTAL	1603	1444	1304	1614	1610	2299	3239	25661	42603	20834	4586	2555
MEAN	51.7	48.1	42.1	52.1	57.5	74.2	108	828	1420	672	148	85.2
MAX	61	59	47	62	70	128	207	1590	2150	1070	226	126
MIN	44	39	36	37	50	48	65	221	696	250	95	57
AC-FT	3180	2860	2590	3200	3190	4560	6420	50900	84500	41320	9100	5070

CAL YR 1974	TOTAL	112550	MEAN 308	MAX 1770	MIN 36	AC-FT 223200
WTR YR 1975	TOTAL	109352	MEAN 300	MAX 2150	MIN 36	AC-FT 216900

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-18	2400	4.37	1,560	6-15	0100	5.09	2,210
6-1	2400	5.42	2,590	6-23	0100	4.04	1,270

WALKER LAKE BASIN

10296500 WEST WALKER RIVER NEAR COLEVILLE, CALIF.

LOCATION.--Lat 38°30'55", long 119°27'15", in NW¼NE¼ sec.28, T.8 N., R.23 E., Mono County, on left bank 0.2 mi (0.3 km) downstream from Rock Creek, and 5 mi (8 km) southeast of Coleville.

DRAINAGE AREA.--271 mi² (702 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,520 ft (1,682 m), from topographic map. Prior to July 31, 1908, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. Mar. 1, 1909, to Aug. 31, 1910, nonrecording gage, and June 18, 1915, to Aug. 15, 1919, water-stage recorder near present site at different datums. Aug. 16, 1919, to Mar. 31, 1938, water-stage recorder at site 1,000 ft (300 m) upstream at different datum. May 26, 1957, to Sept. 10, 1963, water-stage recorder at site 10 ft (3 m) downstream at datum 0.38 ft (0.116 m) lower.

AVERAGE DISCHARGE.--46 years (1902-7, 1909-10, 1915-37, 1957-75), 276 ft³/s (7.816 m³/s), 200,000 acre-ft/yr (247 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,450 ft³/s (69.4 m³/s) June 2 (gage height, 4.03 ft or 1.228 m); minimum, 30 ft³/s (0.85 m³/s) Dec. 22.

Period of record (1915-38, 1957 to current year): Maximum discharge, 6,500 ft³/s (184 m³/s) Dec. 11, 1937, from slope-area measurement of peak flow; minimum, 5 ft³/s (0.14 m³/s) Dec. 3, 1924, Aug. 27, 1931.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Station is above diversions except for a few small ranch ditches. Flow slightly regulated by Poor Lake Reservoir (capacity unknown) 17 mi (27 km) upstream.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	66	53	48	59	76	82	240	2040	1030	255	109
2	68	62	56	50	61	82	78	290	1910	996	242	105
3	69	60	58	52	59	76	78	310	1820	944	232	103
4	70	60	68	54	61	80	76	270	1770	941	226	98
5	70	57	54	56	56	80	74	240	1690	1060	220	95
6	68	57	54	58	58	76	78	250	1990	1170	212	93
7	67	61	56	59	57	76	82	290	2020	1160	201	93
8	69	59	53	56	61	72	82	360	1910	1080	190	91
9	70	58	51	52	61	72	80	430	1720	1090	187	90
10	66	57	50	56	55	70	80	540	1670	1090	180	120
11	65	57	54	54	56	70	81	640	1670	1050	176	151
12	63	58	57	53	55	66	84	720	1810	1010	179	131
13	62	58	53	52	54	66	90	880	1710	884	174	118
14	61	59	52	51	53	64	95	1050	1850	749	169	108
15	61	58	54	52	51	63	102	1100	1940	692	170	100
16	57	57	57	53	53	64	102	980	1830	569	172	95
17	56	57	56	54	50	63	102	1040	1630	578	155	95
18	55	56	51	54	48	68	102	1270	1240	581	150	95
19	54	54	54	54	55	68	102	1400	976	544	191	95
20	54	54	57	53	59	72	115	1200	872	514	214	90
21	55	57	55	51	54	68	145	800	866	497	213	82
22	55	51	45	56	50	57	160	650	1140	468	184	90
23	55	48	44	58	52	63	175	720	1280	445	161	95
24	53	58	47	58	54	84	190	1000	1210	421	150	90
25	52	53	52	59	57	124	174	1100	843	396	141	85
26	52	53	60	61	60	97	160	1150	753	377	139	80
27	52	58	58	59	66	89	165	1150	818	366	132	75
28	57	52	54	55	64	82	185	1360	864	359	123	72
29	61	52	52	59	---	76	205	1390	984	338	117	72
30	61	52	53	60	---	80	220	1450	1050	312	117	72
31	64	---	55	60	---	93	---	1670	---	278	113	---
TOTAL	1892	1699	1673	1707	1579	2337	3544	25940	43876	21989	5485	2888
MEAN	61.0	56.6	54.0	55.1	56.4	75.4	118	837	1463	709	177	96.3
MAX	70	66	68	61	66	124	220	1670	2040	1170	255	151
MIN	52	48	44	48	48	57	74	240	753	278	113	72
AC-FT	3750	3370	3320	3390	3130	4640	7030	51450	87030	43620	10880	5730

CAL YR 1974 TOTAL 117725 MEAN 323 MAX 1700 MIN 44 AC-FT 233500
WTR YR 1975 TOTAL 114609 MEAN 314 MAX 2040 MIN 44 AC-FT 227300

Date	Time	Peak discharge (base, 1,120 ft ³ /s)	G.H.	Discharge	Date	Time	G.H.	Discharge
5-19	unknown	---	---	about 1,500	6-23	0300	2.96	1,390
6-2	0100	4.03	---	2,450	7-7	0200	2.97	1,360

NOTE.--No gage-height record Apr. 7 to May 27.

10297000 TOPAZ LAKE NEAR TOPAZ, CALIF.

LOCATION.--Lat 38°41'35", long 119°31'10", in NW¼NE¼ sec.33, T.10 N., R.22 E., Douglas County, Nevada, at outlet works of Topaz Lake on West Walker River, 5.5 mi (8.8 km) north of Topaz.

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

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

EXTREMES.--Current year: Maximum contents, 59,970 acre-ft (73.9 hm³) July 11 (elevation, 5,005.23 ft or 1,525.594 m); minimum, 20,730 acre-ft (25.6 hm³) Oct. 28, 29 (elevation, 4,985.20 ft or 1,519.489 m).
Period of record: Maximum contents, 60,310 acre-ft (74.4 hm³) June 23, 1974 (elevation, 5,005.38 ft or 1,525.640 m); no contents Oct. 31, 1924, Sept. 22, 24-30, Oct. 1-15, 1960.

REMARKS.--Topaz Lake, formerly known as Alkali Lake and Topaz Reservoir, was formed by the diversion of water from West Walker River through a feeder canal and the construction of an outlet tunnel through a low saddle in rim of lake. Storage began about December 1921. Usable capacity, 59,440 acre-ft (73.3 hm³) between elevations 4,972.3 ft (1,515.56 m), lowest practical elevation for diversion through tunnel, bottom of outlet tunnel at elevation, 4,970 ft (1,515 m) and 5,005 ft (1,526 m), 3 ft (0.9 m) below top of levee. Usable capacity of reservoir was increased from about 45,000 to 59,440 acre-ft (55.5 to 73.3 hm³) in October 1937 by an earthfill, rock-faced levee at south end. Figures given herein represent usable contents. There is 65,000 acre-ft (80.1 hm³) of lake volume below the point of controllable storage. Water is used for irrigation in Walker River Irrigation District.

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

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

4,985	20,390	5,000	48,350
4,990	28,970	5,006	61,750
4,995	38,100		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23050	21170	26090	30590	35210	40400	47750	50590	47980	56840	50670	31240
2	22850	21390	26240	30680	35320	40530	47980	50310	49250	57270	50650	30820
3	22700	21590	26360	30770	35410	40750	48240	49980	50520	57750	51330	29090
4	22490	21790	26740	30890	35560	40930	48560	49700	51310	58140	50670	29390
5	22340	21980	26930	31000	35710	41110	48770	49330	51900	58500	47810	28550
6	22170	22180	27120	31170	35860	41330	48950	49080	52400	58840	47200	27800
7	22050	22390	27280	31330	36050	41530	49160	48300	53220	59050	46310	27120
8	21930	22560	27440	31510	36230	41820	49380	47750	53930	59160	45300	26480
9	21900	22710	27580	31670	36560	42020	49640	47240	54200	59370	44320	25840
10	21860	22880	27720	31890	36940	42220	49850	46750	54150	59670	43350	25260
11	21860	23050	27870	32030	37190	42410	50070	46370	54040	59970	42390	24920
12	21810	23220	28050	32170	37380	42590	50280	46160	54000	59830	41230	24570
13	21790	23390	28200	32330	37570	42760	50480	46080	54020	59740	40510	24370
14	21710	23580	28410	32460	37770	43060	50670	45890	54020	59810	39370	24250
15	21630	23730	28520	32590	37980	43290	50870	45870	55000	59720	38290	24040
16	21540	23920	28640	32750	38190	43540	51090	45800	55380	59620	37420	23940
17	21460	24060	28800	32870	38310	43700	51280	45620	55830	59390	36600	23750
18	21390	24250	28940	33020	38480	43930	51480	45660	56210	59370	35580	23620
19	21360	24330	29060	33140	38740	44090	51660	45950	56140	59190	35350	23510
20	21320	24490	29200	33360	38880	44240	51830	46480	56140	58750	35100	23380
21	21290	24610	29360	33420	39010	44470	51960	46730	56190	58250	34950	23320
22	21190	24830	29460	33560	39130	44720	51990	46440	56500	57700	34730	23240
23	21120	24970	29580	33740	39290	44930	51960	45760	56730	57110	34600	23200
24	21020	25120	29650	33910	39450	45130	51940	45240	57110	56440	34420	23150
25	20920	25280	29780	34070	39610	45700	51830	45160	57090	55650	34230	23050
26	20810	25380	29870	34210	39810	46180	51700	45490	56910	54640	33910	22920
27	20750	25520	30110	34360	39970	46540	51590	45950	56570	54130	33470	22800
28	20730	25640	30180	34470	40160	46730	51460	46370	56570	53460	33020	22700
29	20730	25780	30290	34580	---	46940	51460	46890	56300	52780	32600	22590
30	20800	25910	30390	34710	---	47200	51000	47110	56550	52070	32070	22510
31	20920	---	30500	34870	---	47410	---	47410	---	51420	31690	---
MAX	23050	25910	30500	34870	40160	47410	51990	50590	57110	59970	51330	31240
MIN	20730	21170	26090	30590	35210	40400	47750	45160	47980	51420	31690	22510
(a)	4,985.31	4,988.24	4,990.87	4,993.30	4,996.05	4,999.56	4,901.23	4,999.56	4,903.73	4,901.42	4,991.54	4,986.25
(b)	-2,340	+4,990	+4,590	+4,370	+5,290	+7,250	+3,590	-3,590	+9,140	-5,130	-19,730	-9,180

CAL YR 1974 b -4,230

WTR YR 1975 b -750

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

WALKER LAKE BASIN

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

LOCATION.--Lat 38°43'40", long 119°25'40", in NE¼SE¼ sec.17, T.10 N., R.23 E., Douglas County, on left bank 20 ft (6 m) upstream from Hoyer bridge, 2 mi (3 km) upstream from head of Saroni Canal, and 4 mi (6 km) southwest of Wellington.

DRAINAGE AREA.--533 mi² (1,380 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,980 ft (1,518 m), from topographic map. May to August 1910, nonrecording gage at same site at different datum. July 1, 1920, to Sept. 30, 1923, water-stage recorder at site 5 mi (5 km) downstream, 1 mi (2 km) downstream from Saroni Canal, at different datum, and supplemental nonrecording gage on Saroni Canal 1 mi (2 km) downstream from head. Mar. 1, 1924, to Sept. 30, 1932, water-stage recorder at same site at different datum.

AVERAGE DISCHARGE (unadjusted).--28 years (1920-23, 1925-32, 1957-75), 238 ft³/s (6.740 m³/s), 172,400 acre-ft/yr (213 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,760 ft³/s (49.8 m³/s) June 7 (gage height, 7.88 ft or 2.401 m); minimum, 20 ft³/s (0.57 m³/s) Jan. 1.
Period of record: Maximum discharge, 2,180 ft³/s (61.7 m³/s) June 6, 1922; minimum observed, 4.8 ft³/s (0.14 m³/s) Jan. 5, 1961.

REMARKS.--Records good. Flow regulated by off-channel storage in Topaz Lake since Jan. 30, 1922. Diversions for irrigation of about 10,500 acres (42.5 km²) above station. Records include releases from Topaz Lake and all return flow from Antelope Valley.

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	55	29	30	24	26	34	328	1270	622	532	273
2	139	39	29	30	25	26	34	329	1410	550	488	285
3	139	37	29	30	24	26	33	333	1460	544	455	441
4	144	34	33	30	25	26	31	363	1520	541	451	444
5	138	32	34	30	25	27	33	404	1560	622	425	438
6	127	30	31	30	25	27	32	437	1600	743	424	372
7	114	30	30	30	24	27	32	439	1680	811	478	365
8	108	30	30	31	25	27	32	470	1710	787	475	359
9	101	30	30	31	30	28	32	527	1650	721	489	348
10	86	29	30	30	33	28	31	562	1610	711	485	373
11	85	29	30	31	32	28	32	569	1590	827	496	292
12	84	29	30	31	29	28	31	647	1620	870	499	221
13	91	28	30	30	29	28	31	721	1560	713	536	199
14	110	28	30	30	29	30	30	810	1400	643	558	191
15	110	28	30	30	27	28	30	919	1470	655	521	169
16	110	28	30	31	27	30	31	947	1570	634	454	167
17	108	28	30	31	27	32	30	957	1330	631	441	167
18	83	28	30	31	27	34	30	997	1050	555	381	163
19	78	28	30	31	26	33	30	1060	877	654	291	135
20	78	28	30	30	26	31	58	1100	831	685	220	122
21	78	28	29	25	26	31	77	1030	802	685	227	120
22	100	28	30	24	26	33	144	978	813	696	195	116
23	104	28	30	23	26	33	190	963	846	691	195	98
24	104	28	30	23	26	37	229	958	860	677	218	118
25	105	28	30	24	26	59	265	994	822	670	213	128
26	101	28	30	23	26	53	220	1040	791	645	254	135
27	100	28	29	25	26	42	222	1060	785	601	280	119
28	102	28	30	25	26	37	233	1080	716	575	279	119
29	102	28	31	25	---	35	283	1100	639	524	279	95
30	58	29	31	25	---	34	305	1140	642	511	272	109
31	55	---	30	25	---	34	---	1180	---	513	252	---
TOTAL	3193	909	935	875	747	998	2825	24442	36484	20307	11763	6681
MEAN	103	30.3	30.2	28.2	26.7	32.2	94.2	788	1216	655	379	223
MAX	151	55	34	31	33	59	305	1180	1710	870	558	444
MIN	55	28	29	23	24	26	30	328	639	511	195	95
AC-FT	6330	1800	1850	1740	1480	1980	5600	48480	72370	40280	23330	13250
CAL YR 1974 TOTAL	113765		MEAN 312	MAX 1550	MIN 25	AC-FT 225700						
WTR YR 1975 TOTAL	110159		MEAN 302	MAX 1710	MIN 23	AC-FT 218500						

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

LOCATION.--Lat 38°42'50", long 119°45'50", in SW¼NE¼ sec.15, T.10 N., R.20 E., Alpine County, on right bank 0.5 mi (0.8 km) downstream from Markleeville Creek, and 1.5 mi (2.4 km) north-northeast of Markleeville.

DRAINAGE AREA.--276 mi² (715 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,400 ft (1,646 m), from topographic map. Prior to Oct. 1, 1967, at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--15 years, 371 ft³/s (10.51 m³/s), 268,800 acre-ft/yr (331 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,380 ft³/s (95.7 m³/s) June 1 (gage height, 6.4 ft or 1.95 m, from peak-stage indicator); minimum, 49 ft³/s (1.39 m³/s) Nov. 23, 29, but may have been less during periods of backwater from ice.

Period of record: Maximum discharge, 15,100 ft³/s (428 m³/s) Jan. 31, 1963 (gage height, 10.21 ft or 3.112 m, present datum); minimum, 16 ft³/s (0.45 m³/s) Nov. 17, 1961.

REMARKS.--Records good. A few small diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft (6.16 hm³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	90	84	70	78	221	199	427	2660	837	191	167
2	66	87	77	65	82	210	191	530	2540	807	185	164
3	72	82	105	75	86	184	188	618	2450	770	177	160
4	70	80	160	90	80	188	181	483	2300	770	167	151
5	71	79	94	110	74	195	181	422	2340	800	157	149
6	68	76	92	130	76	177	174	427	2620	829	147	144
7	67	86	89	140	80	174	167	500	2520	822	138	151
8	72	81	84	100	90	164	164	658	2190	778	129	147
9	73	78	85	90	132	160	167	800	1950	763	129	156
10	70	75	109	98	106	147	184	943	1840	741	129	169
11	67	78	89	94	104	144	191	1130	1940	712	132	175
12	67	78	88	90	102	138	188	1210	1990	685	154	143
13	66	80	81	92	133	138	225	1380	1870	625	154	134
14	65	78	81	90	123	138	257	1740	2020	567	154	131
15	65	77	81	88	116	138	229	1760	1970	530	164	122
16	65	76	79	90	113	141	206	1600	1920	483	157	115
17	64	74	79	91	114	132	191	1780	1670	460	141	110
18	64	72	78	91	105	157	199	2000	1330	449	151	103
19	64	68	75	91	103	184	217	2210	1110	422	199	99
20	64	70	82	92	103	191	240	1870	1010	395	188	96
21	64	93	77	93	94	167	308	1220	1010	375	213	92
22	63	70	74	94	97	138	355	1030	1090	350	191	87
23	64	74	55	95	106	144	360	1210	1140	326	170	84
24	64	84	60	98	105	229	416	1650	1080	303	147	80
25	65	83	65	103	109	618	395	1830	875	290	141	78
26	65	76	70	106	122	295	308	1860	814	277	132	76
27	66	80	75	95	144	221	308	1980	822	265	123	76
28	91	76	80	75	176	191	370	1970	829	248	123	80
29	84	76	75	67	---	174	395	1970	875	236	123	79
30	83	86	70	66	---	191	416	2020	875	229	126	76
31	88	---	72	72	---	236	---	2300	---	213	170	---
TOTAL	2140	2363	2565	2841	2953	5925	7570	41528	49650	16357	4802	3594
MEAN	69.0	78.8	82.7	91.6	105	191	252	1340	1655	528	155	120
MAX	91	93	160	140	176	618	416	2300	2660	837	213	175
MIN	63	68	55	65	74	132	164	422	814	213	123	76
AC-FT	4240	4690	5090	5640	5860	11750	15020	82370	98480	32440	9520	7130
CAL YR 1974	TOTAL	154361	MEAN 423	MAX 2400	MIN 55	AC-FT 306200						
WTR YR 1975	TOTAL	142288	MEAN 390	MAX 2660	MIN 55	AC-FT 282200						

Peak discharge (base, 1,300 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-14	2200	5.67	2,410	6-1	2330	6.4	3,380
5-19	2100	5.90	2,700	6-6	2200	6.33	3,280

CARSON RIVER BASIN

10309000 EAST FORK CARSON RIVER NEAR GARDNERVILLE, NEV.

LOCATION.--Lat 38°50'50", long 119°42'10", in SW¼NE¼ sec.2, T.11 N., R.20 E., Douglas County, on left bank 0.1 mi (0.2 km) downstream from Horseshoe Bend, 2 mi (3 km) east of Mud Lake Reservoir, 4.5 mi (7.2 km) downstream from Bryant Creek, and 7 mi (11 km) southeast of Gardnerville.

DRAINAGE AREA.--341 mi² (883 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 4,985.11 ft (1,519.462 m) above mean sea level (levels by Bureau of Reclamation). Prior to May 19, 1939, nonrecording gages at several sites within 2 mi (3 km) of present site at various datums.

AVERAGE DISCHARGE.--49 years (1890-93, 1900-1903, 1908-10, 1925-28, 1935-37, 1939-75), 392 ft³/s (11.10 m³/s), 284,000 acre-ft/yr (350 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,260 ft³/s (92.3 m³/s) June 12 (gage height, 5.01 ft or 1.527 m); minimum, 46 ft³/s (1.30 m³/s) Dec. 3.

Period of record: Maximum discharge, 17,600 ft³/s (498 m³/s) Dec. 23, 1955 (gage height, 11.88 ft or 3.621 m), from rating curve extended above 6,000 ft³/s (170 m³/s), on basis of slope-area measurements at gage heights 9.66 ft (2.944 m) and 11.88 ft (3.621 m); minimum observed, 8 ft³/s (0.23 m³/s) Dec. 4-10, 19-23, 1904.

REMARKS.--Records good. Station is above all diversions in Carson Valley. Diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft (6.16 hm³).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	107	85	70	75	235	229	440	2660	895	210	167
2	73	102	88	65	90	240	216	542	2620	856	199	165
3	84	95	97	75	97	203	214	681	2500	820	193	160
4	81	93	188	90	93	198	201	554	2380	808	185	154
5	83	89	105	110	88	207	205	444	2340	835	171	150
6	80	85	98	130	96	191	191	433	2640	876	164	143
7	78	92	102	140	101	192	185	503	2600	871	158	148
8	80	93	94	120	107	183	181	670	2310	825	147	148
9	87	91	84	95	149	184	182	874	2050	809	146	145
10	82	84	92	98	129	164	200	1020	1940	792	146	170
11	79	90	104	93	109	157	225	1280	2000	752	149	187
12	77	89	100	90	117	146	204	1380	2110	723	166	148
13	76	90	95	92	142	148	242	1510	1950	661	161	143
14	74	89	91	88	147	149	294	1840	2070	589	158	141
15	74	89	95	87	121	146	261	1960	2060	551	166	132
16	73	88	91	90	114	156	232	1710	1990	507	168	124
17	72	87	91	86	116	140	209	1860	1800	483	151	118
18	71	83	79	89	105	159	208	2080	1460	470	148	112
19	72	80	88	89	117	194	235	2310	1220	444	202	106
20	72	80	91	91	117	215	244	2160	1100	418	192	104
21	71	96	89	91	101	191	313	1400	1070	394	220	99
22	71	102	80	90	93	154	390	1150	1160	363	204	92
23	72	75	60	94	108	152	386	1280	1220	339	181	87
24	72	88	65	97	112	258	427	1720	1190	314	154	84
25	73	99	70	101	119	875	490	1970	947	301	147	82
26	74	87	75	106	129	370	351	1960	870	287	138	79
27	74	90	85	98	152	272	312	2070	867	280	123	78
28	97	84	90	76	188	222	386	2080	881	248	122	83
29	99	80	80	73	---	197	417	2060	927	242	124	83
30	96	81	75	72	---	211	452	2090	921	242	121	80
31	101	---	75	73	---	276	---	2340	---	227	165	---
TOTAL	2440	2678	2802	2859	3232	6785	8282	44371	51853	17222	5079	3712
MEAN	78.7	89.3	90.4	92.2	115	219	276	1431	1728	556	164	124
MAX	101	107	188	140	188	875	490	2340	2660	895	220	187
MIN	71	75	60	65	75	140	181	433	867	227	121	78
AC-FT	4840	5310	5560	5670	6410	13460	16430	88010	102900	34160	10070	7360

CAL YR 1974 TOTAL 160553 MEAN 440 MAX 2320 MIN 60 AC-FT 318500
WTR YR 1975 TOTAL 151315 MEAN 415 MAX 2660 MIN 60 AC-FT 300100

Peak discharge (base, 1,300 ft³/s)
Date Time G.H. Discharge Date Time G.H. Discharge
3-25 0530 3.57 1,620 6-2 0130 5.01 3,260
5-19 2400 4.61 2,760

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CALIF.

LOCATION.--Lat 38°46'10", long 119°49'55", in NW¼SE¼ sec.34, T.11 N., R.19 E., Alpine County, on left bank 0.3 mi (0.5 km) downstream from bridge on State Highway 88-89, 0.6 mi (1.0 km) southwest of Woodfords, and 3.8 mi (6.1 km) downstream from Willow Creek.

DRAINAGE AREA.--65.6 mi² (169.9 km²).

PERIOD OF RECORD.--October 1900 to May 1907, 1910-11 (fragmentary), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1314. January 1890 to March 1892, June 1907 to September 1920 (except portions of 1910-11), at site 0.7 mi (1.1 km) downstream; records not equivalent owing to diversions for irrigation.

GAGE.--Water-stage recorder. Altitude of gage is 5,760 ft (1,756 m), from river-profile map. Prior to Oct. 1, 1938, nonrecording gage at same site at different datum. Oct. 1, 1938, to Nov. 11, 1958, water-stage recorder at same site at datum 1.02 ft (0.311 m) lower. Nov. 13, 1958, to Jan. 30, 1963, water-stage recorder at site 150 ft (46 m) downstream at datum 3.06 ft (0.933 m) lower.

AVERAGE DISCHARGE.--44 years (1900-1907, 1938-75), 115 ft³/s (3.257 m³/s), 83,320 acre-ft/yr (103 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,290 ft³/s (36.5 m³/s) May 19 (gage height, 4.33 ft or 1.320 m); minimum, 15 ft³/s (0.42 m³/s) Dec. 18, 29.
Period of record: Maximum discharge, 4,890 ft³/s (138 m³/s) Feb. 1, 1963 (gage height, 9.0 ft or 2.74 m), on basis of slope-area measurement of peak flow; minimum, about 5 ft³/s (0.14 m³/s) Dec. 23, 1961.
Flood of Dec. 11, 1937, reached a stage of 8.0 ft (2.44 m), present datum, from floodmarks (discharge, 3,500 ft³/s or 99.1 m³/s by slope-area measurement).

REMARKS.--Records fair. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs, total capacity, about 1,500 acre-ft (1.85 hm³). Chemical-quality data for this station are published in the partial-record section of this report.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	29	24	21	20	39	44	84	894	200	91	30
2	20	27	24	20	20	38	42	104	755	195	76	26
3	21	27	28	24	22	38	41	121	730	190	62	25
4	21	27	27	24	22	39	42	111	690	190	45	23
5	21	26	25	25	24	39	41	94	675	190	45	23
6	20	26	26	34	25	39	41	96	725	195	43	23
7	20	27	26	32	25	38	41	118	675	192	43	24
8	23	27	24	28	28	37	39	152	570	184	42	39
9	23	26	22	26	29	36	39	220	510	177	36	65
10	22	25	22	28	25	35	39	271	478	180	36	75
11	21	25	26	28	28	36	39	331	486	160	48	64
12	20	25	27	29	26	34	38	390	498	158	75	50
13	20	25	26	29	28	34	40	478	498	143	88	39
14	20	25	26	28	28	35	43	598	490	152	91	29
15	23	26	26	28	28	33	41	594	470	145	88	26
16	22	26	26	28	27	32	41	574	450	141	54	25
17	22	25	25	28	27	34	40	620	390	125	33	24
18	21	25	22	28	27	34	39	715	338	127	29	25
19	21	24	24	28	28	34	40	771	277	121	27	24
20	22	24	24	28	28	36	42	660	259	118	28	24
21	22	25	24	28	28	34	47	418	250	112	27	23
22	22	25	22	28	27	26	54	432	259	97	29	22
23	22	25	19	28	29	35	54	594	265	90	29	22
24	22	26	20	29	29	38	58	751	265	75	28	22
25	22	26	21	29	30	50	53	755	229	75	30	24
26	22	26	20	28	31	43	54	740	209	70	40	46
27	22	26	22	26	33	42	57	776	203	65	70	45
28	28	24	21	25	36	43	63	782	203	71	90	29
29	28	22	21	26	---	40	70	755	212	99	80	23
30	28	24	21	25	---	41	77	782	209	101	50	22
31	30	---	22	23	---	46	---	859	---	105	40	---
TOTAL	691	766	733	839	758	1158	1399	14746	13162	4243	1593	961
MEAN	22.3	25.5	23.6	27.1	27.1	37.4	46.6	476	439	137	51.4	32.0
MAX	30	29	28	34	36	50	77	859	894	200	91	75
MIN	20	22	19	20	20	26	38	84	203	65	27	22
AC-FT	1370	1520	1450	1660	1500	2300	2770	29250	26110	8420	3160	1910
CAL YR 1974 TOTAL	46426							92090				
WTR YR 1975 TOTAL	41049							81420				
MEAN 127												
MAX 700												
MIN 19												
AC-FT 92090												
MIN 19												
AC-FT 81420												

Peak discharge (base, 500 ft³/s).--May 19 (2100) 1,290 ft³/s (4.33 ft); May 31 (2030) 1,220 ft³/s (4.19 ft).

PYRAMID AND WINNEMUCCA LAKES BASIN

10336500 PYRAMID LAKE NEAR NIXON, NEV.

LOCATION.--Lat 39°59'05", long 119°30'00", in NE¼NW¼ sec.3, T.24 N., R.22 E., Washoe County, 0.25 mi (0.40 km) north of the Pyramid, 1.6 mi (2.6 km) northeast of Anaho Island, and 13 mi (21 km) northwest of Nixon.

DRAINAGE AREA.--2,720 mi² (7,040 km²).

PERIOD OF RECORD.--1867-1925 (occasional elevations in some years), June 1926 to current year (occasional elevations in each year).

GAGE.--Nonrecording gage. Datum of gage is at mean sea level, U.S. Coast and Geodetic Survey bench mark N-21, elevation, 3,940.29 ft (1,201.000 m), datum of 1929, supplementary adjustment of 1956. Prior to January 1934, elevations were determined from bench mark No. 1 of General Land Office using elevation of 3,882.26 ft (1,183.313 m), adjustment of 1912; to convert these records to present datum, add 0.81 ft (0.247 m). January 1934 to September 1955, elevations were determined from bench mark N-21 using elevation of 3,940.04 ft (1,200.924 m); to convert these records to present datum, add 0.25 ft (0.076 m). October 1955 to August 1968, nonrecording gages along southwest lake shore at present datum.

EXTREMES.--Period of record: Maximum elevation observed, 3,884.9 ft (1,184.12 m) in 1871 (see REMARKS); minimum observed, 3,783.9 ft (1,153.33 m) Feb. 6, Mar. 6, 1967.

REMARKS.--Truckee Canal diverts water out of the basin to Lahontan Reservoir. Elevations are given to the nearest 0.1 ft (0.03 m) and contents to four significant figures in order to reflect trends of change. Any single observation, however, may be affected by wind and seiche movements on the lake surface. Elevations published for 1867 and 1871 may have been 9 ft (2.7 m) lower because of uncertainty of date of photograph on which they were based.

REVISIONS (WATER YEARS).--WSP 880: 1934-38 (bench mark). WSP 1090: 1926(M). WRD Nev. 1967: 1966.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	3,796.3	21,310,000	--
Oct. 31.....	3,795.7	21,250,000	-60,000
Nov. 30.....	3,795.5	21,220,000	-30,000
Dec. 31.....	3,795.3	21,200,000	-20,000
CAL YR 1974.....	--	--	+230,000
Jan. 31.....	3,795.4	21,210,000	+10,000
Feb. 28.....	3,795.4	21,210,000	0
Mar. 31.....	3,795.6	21,240,000	+30,000
Apr. 30.....	3,795.8	21,260,000	+20,000
May 31.....	3,797.0	21,390,000	+130,000
June 30.....	3,797.5	21,440,000	+50,000
July 31.....	3,797.5	21,440,000	0
Aug. 31.....	3,797.4	21,430,000	-10,000
Sept. 30.....	3,797.3	21,420,000	-10,000
WTR YR 1975.....	--	--	+140,000

NOTE.--Monthend elevations are interpolated from readings made during the month.

10336600 UPPER TRUCKEE RIVER NEAR MEYERS, CALIF.

LOCATION.--Lat 38°50'35", long 120°01'25", in NE¼SE¼ sec.31, T.12 N., R.18 E., El Dorado County, on left bank 0.4 mi (0.6 km) upstream from mouth of Echo Lake outlet, 1.1 mi (1.8 km) southwest of Meyers, and 2.5 mi (4.0 km) upstream from Angora Creek.

DRAINAGE AREA.--33.1 mi² (85.7 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 6,325 ft (1,928 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 67.7 ft³/s (1.917 m³/s), 49,050 acre-ft/yr (60.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 735 ft³/s (20.8 m³/s) June 6 (gage height, 8.69 ft or 2.649 m); minimum daily, 5.0 ft³/s (0.142 m³/s) Dec. 24.

Period of record: Maximum discharge, 2,550 ft³/s (72.2 m³/s) Feb. 1, 1963 (gage height, 12.41 ft or 3.783 m); minimum, 2.0 ft³/s (0.057 m³/s) Jan. 13, 1961.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	10	7.4	5.5	8.4	15	20	33	558	193	27	14
2	7.8	9.5	7.5	5.7	8.5	15	18	42	522	182	26	14
3	7.1	8.4	10	6.9	8.6	15	18	52	508	176	26	13
4	6.1	7.2	14	6.6	8.8	15	17	43	497	178	25	12
5	6.4	6.8	10	6.5	8.9	15	13	37	517	185	23	12
6	6.9	7.0	9.1	11	8.9	15	12	38	557	189	22	12
7	7.1	9.0	8.6	9.5	8.9	15	15	48	535	177	20	12
8	7.3	12	8.1	8.9	9.5	15	15	67	481	163	19	12
9	7.0	11	7.9	9.5	12	14	14	93	443	154	18	12
10	6.6	10	7.7	9.3	13	14	15	126	434	141	17	14
11	6.7	9.3	7.9	8.5	12	13	15	162	460	136	16	13
12	6.2	8.8	9.4	7.7	12	12	15	180	472	128	18	12
13	6.0	9.1	9.4	7.8	13	13	16	213	473	113	17	13
14	6.4	9.2	8.6	7.6	12	13	18	280	471	102	17	14
15	5.9	9.8	8.3	7.3	11	12	17	275	459	94	16	11
16	6.3	9.7	7.9	7.2	11	13	16	270	445	88	15	10
17	6.1	9.2	7.8	8.5	11	13	15	309	381	84	14	9.9
18	5.8	9.3	7.2	8.5	11	12	15	351	309	80	25	10
19	6.3	8.6	7.3	8.9	10	13	16	375	256	75	33	10
20	5.4	8.6	7.3	8.1	10	13	16	294	253	71	26	9.7
21	5.2	12	7.4	8.8	9.8	13	20	188	274	66	24	8.5
22	5.5	9.7	6.1	8.5	9.6	13	25	178	281	60	26	8.1
23	5.8	8.8	5.1	8.1	9.6	14	26	248	288	54	22	7.8
24	5.6	9.2	5.0	8.4	9.6	14	27	344	255	50	20	7.6
25	6.1	9.2	6.4	8.8	9.6	33	27	390	199	48	19	7.2
26	6.2	8.7	5.9	9.0	10	25	23	401	194	44	18	7.0
27	6.6	8.6	5.9	8.6	11	21	22	423	200	41	18	6.5
28	9.6	8.2	5.7	8.5	13	20	27	424	207	38	17	6.4
29	8.8	7.8	5.6	8.4	---	17	31	435	213	35	17	6.4
30	8.7	7.5	5.5	8.3	---	18	33	449	206	32	16	6.0
31	10	---	5.4	8.3	---	22	---	521	---	30	15	---
TOTAL	208.7	272.2	235.4	253.2	290.7	485	577	7289	11348	3207	632	311.1
MEAN	6.73	9.07	7.59	8.17	10.4	15.6	19.2	235	378	103	20.4	10.4
MAX	10	12	14	11	13	33	33	521	558	193	33	14
MIN	5.2	6.8	5.0	5.5	8.4	12	12	33	194	30	14	6.0
AC-FT	414	540	467	502	577	962	1140	14460	22510	6360	1250	617
CAL YR 1974 TOTAL	28197.7											
WTR YR 1975 TOTAL	25109.3											
MEAN 77.3												
MAX 473												
MIN 5.0												
AC-FT 55930												
MAX 558												
MIN 5.0												
AC-FT 49800												

Peak discharge (base, 200 ft³/s).--May 18 (2215) 478 ft³/s (7.66 ft); June 6 (2130) 735 ft³/s (8.69 ft).

PYRAMID AND WINNEMUCCA LAKES BASIN

10336625 FALLEN LEAF LAKE NEAR CAMP RICHARDSON, CALIF.

LOCATION.--Lat 38°54'00", long 120°04'14", in NE¼SW¼ sec.11, T.12 N., R.17 E., El Dorado County, Eldorado National Forest, on left bank near center of lake, on Taylor Creek 200 ft (61 m) north of Cathedral Creek, 1.5 mi (2.4 km) south of Fallen Leaf Dam, 2.9 mi (4.7 km) southwest of Camp Richardson, and 3.7 mi (6.0 km) west of South Lake Tahoe Post Office.

DRAINAGE AREA.--16.7 mi² (43.3 km²).

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1973, published as "near Tahoe Valley."

GAGE.--Water-stage recorder. Datum of gage is 6,372.30 ft (1,942.277 m) above mean sea level.

EXTREMES.--Current year: Maximum gage height, 4.39 ft (1.338 m) July 12; minimum, 1.98 ft (0.604 m) Nov. 20.
Period of record: Maximum gage height, 5.51 ft (1.679 m) Jan. 22, 1970; minimum, 1.84 ft (0.561 m) Nov. 10, 1971.

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

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.94	2.16	2.03	2.09	2.37	2.41	2.62	2.55	3.72	3.59	3.58	3.42
2	2.90	2.15	2.02	2.08	2.46	2.40	2.57	2.57	3.73	3.67	3.58	3.40
3	2.87	2.14	2.14	2.08	2.46	2.40	2.57	2.65	3.72	3.75	3.58	3.39
4	2.82	2.12	2.16	2.12	2.52	2.40	2.59	2.65	3.70	3.83	3.58	3.38
5	2.77	2.11	2.16	2.12	2.51	2.42	2.63	2.64	3.72	3.92	3.57	3.37
6	2.73	2.11	2.15	2.27	2.49	2.42	2.62	2.63	3.75	4.03	3.53	3.36
7	2.69	2.10	2.15	2.32	2.49	2.50	2.59	2.64	3.74	4.12	3.53	3.35
8	2.66	2.10	2.13	2.45	2.52	2.48	2.57	2.67	3.68	4.21	3.52	3.34
9	2.63	2.09	2.13	2.44	2.70	2.48	2.55	2.76	3.61	4.28	3.52	3.33
10	2.59	2.08	2.13	2.42	2.69	2.48	2.52	2.84	3.54	4.34	3.51	3.39
11	2.54	2.08	2.12	2.42	2.66	2.47	2.52	2.95	3.53	4.37	3.50	3.38
12	2.50	2.08	2.15	2.40	2.61	2.45	2.50	3.05	3.56	4.39	3.50	3.37
13	2.47	2.07	2.15	2.39	2.70	2.47	2.48	3.15	3.57	4.33	3.48	3.37
14	2.43	2.05	2.15	2.38	2.67	2.47	2.50	3.29	3.57	4.15	3.48	3.35
15	2.41	2.05	2.14	2.37	2.63	2.49	2.50	3.37	3.57	3.99	3.47	3.34
16	2.38	2.04	2.12	2.37	2.60	2.51	2.49	3.39	3.55	3.87	3.45	3.33
17	2.35	2.02	2.12	2.36	2.57	2.49	2.47	3.41	3.48	3.76	3.42	3.32
18	2.33	2.02	2.13	2.35	2.54	2.46	2.46	3.48	3.37	3.66	3.59	3.31
19	2.30	2.01	2.13	2.33	2.59	2.47	2.45	3.57	3.27	3.61	3.62	3.30
20	2.26	1.98	2.13	2.33	2.57	2.45	2.45	3.53	3.21	3.59	3.62	3.28
21	2.23	2.11	2.12	2.32	2.53	2.63	2.44	3.40	3.17	3.56	3.62	3.28
22	2.22	2.10	2.10	2.32	2.50	2.65	2.44	3.30	3.18	3.55	3.62	3.27
23	2.17	2.09	2.09	2.31	2.48	2.64	2.46	3.28	3.25	3.55	3.60	3.25
24	2.16	2.07	2.08	2.32	2.47	2.74	2.56	3.37	3.37	3.55	3.60	3.24
25	2.15	2.08	2.07	2.30	2.45	2.81	2.56	3.42	3.38	3.57	3.58	3.23
26	2.13	2.07	2.06	2.30	2.43	2.77	2.55	3.47	3.40	3.58	3.57	3.22
27	2.13	2.06	2.11	2.29	2.43	2.71	2.53	3.51	3.41	3.60	3.53	3.20
28	2.18	2.06	2.12	2.28	2.42	2.67	2.53	3.52	3.44	3.60	3.51	3.18
29	2.16	2.05	2.11	2.27	---	2.63	2.53	3.54	3.48	3.59	3.49	3.16
30	2.15	2.04	2.11	2.27	---	2.61	2.53	3.55	3.53	3.58	3.47	3.13
31	2.14	---	2.09	2.27	---	2.64	---	3.63	---	3.57	3.43	---
MEAN	2.43	2.08	2.12	2.30	2.54	2.54	2.53	3.15	3.51	3.83	3.54	3.31
MAX	2.94	2.16	2.16	2.45	2.70	2.81	2.63	3.63	3.75	4.39	3.62	3.42
MIN	2.13	1.98	2.02	2.08	2.37	2.40	2.44	2.55	3.17	3.55	3.42	3.13

WTR YR 1975 MEAN 2.82 MAX 4.39 MIN 1.98

10336626 TAYLOR CREEK NEAR CAMP RICHARDSON, CALIF.

LOCATION.--Lat 38°55'18", long 120°03'37", in NE¼NW¼ sec.2, T.12 N., R.17 E., El Dorado County, Eldorado National Forest, on left bank 0.1 mi (0.2 km) downstream from Fallen Leaf Lake outlet, and 1.4 mi (2.3 km) southwest of Camp Richardson.

DRAINAGE AREA.--16.7 mi² (43.3 km²).

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1973, published as "near Tahoe Valley."

GAGE.--Water-stage recorder. Datum of gage is 6,361.08 ft (1,938.857 m) above mean sea level.

AVERAGE DISCHARGE (unadjusted).--7 years, 51.2 ft³/s (1.450 m³/s), 37,090 acre-ft/yr (45.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 300 ft³/s (8.50 m³/s) June 6 (gage height, 4.74 ft or 1.445 m); minimum daily, 2.8 ft³/s (0.079 m³/s) Nov. 19.
Period of record: Maximum discharge, 1,180 ft³/s (33.4 m³/s) Nov. 12, 1973 (gage height, 5.72 ft or 1.743 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Oct. 4-7, 1970.

REMARKS.--Records good. Flow regulated by Fallen Leaf Lake Dam (see sta 10336625).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	7.7	3.5	4.1	13	18	30	21	276	39	5.4	6.1
2	20	7.7	3.7	4.0	18	18	29	22	289	29	5.2	6.1
3	20	7.1	5.5	4.2	19	16	28	28	290	29	5.1	6.2
4	20	6.7	7.9	5.6	22	16	29	31	285	29	4.9	6.5
5	20	6.2	7.8	5.6	22	17	30	30	280	29	4.7	6.3
6	20	5.9	7.3	8.2	21	18	29	30	292	29	4.7	6.4
7	20	6.7	7.1	11	20	19	28	29	278	29	4.5	6.6
8	20	5.3	6.8	15	20	22	26	31	268	29	4.4	6.5
9	20	5.2	6.6	17	26	22	25	35	248	29	4.4	6.5
10	20	5.0	6.5	17	33	21	24	47	227	34	4.7	6.7
11	20	4.7	6.4	16	30	21	23	58	215	40	4.8	6.6
12	20	4.5	7.0	15	31	21	22	75	219	53	4.9	6.4
13	20	4.4	7.4	14	32	21	20	93	221	99	5.0	6.1
14	20	4.4	7.2	14	31	21	21	121	228	147	4.8	6.1
15	19	4.0	6.8	13	28	22	21	164	232	131	4.7	6.1
16	18	3.8	6.8	12	26	24	20	174	231	116	4.7	6.0
17	17	4.0	6.6	12	24	24	20	180	218	104	4.6	5.6
18	15	4.0	5.8	12	23	25	19	199	188	91	8.8	5.7
19	14	2.8	5.5	12	23	24	18	231	152	66	9.4	5.6
20	13	3.4	5.4	12	24	24	17	250	129	48	6.8	5.7
21	11	5.3	6.5	11	23	25	17	210	119	39	7.4	5.8
22	9.2	5.5	5.2	11	22	33	17	164	111	27	9.4	5.9
23	9.3	5.0	4.4	10	20	34	17	142	77	28	9.1	5.8
24	8.1	5.5	4.0	11	19	35	19	154	70	16	8.8	6.2
25	7.0	5.3	3.6	12	18	48	23	179	66	7.5	7.8	6.4
26	6.4	4.6	3.9	12	17	46	22	194	65	5.6	6.9	6.1
27	6.4	4.7	5.2	11	17	42	21	213	65	5.4	6.6	6.1
28	8.3	3.6	5.0	11	17	37	21	220	64	5.4	6.3	10
29	8.1	3.5	4.7	10	---	34	21	224	65	5.4	6.1	14
30	7.6	3.5	4.8	9.9	---	31	21	229	64	5.4	6.1	13
31	7.7	---	4.4	10	---	31	---	243	---	5.4	6.1	---
TOTAL	465.1	150.0	179.3	342.6	639	810	678	4021	5532	1350.1	187.1	203.1
MEAN	15.0	5.00	5.78	11.1	22.8	26.1	22.6	130	184	43.6	6.04	6.77
MAX	20	7.7	7.9	17	33	48	30	250	292	147	9.4	14
MIN	6.4	2.8	3.5	4.0	13	16	17	21	64	5.4	4.4	5.6
AC-FT	923	298	356	680	1270	1610	1340	7980	10970	2680	371	403

CAL YR 1974 TOTAL 19047.3 MEAN 52.2 MAX 375 MIN 2.8 AC-FT 37780

WTR YR 1975 TOTAL 14557.3 MEAN 39.9 MAX 292 MIN 2.8 AC-FT 28870

PYRAMID AND WINNEMUCCA LAKES BASIN

10336640 MEEKS CREEK AT MEEKS BAY, CALIF.

LOCATION.--Lat 39°02'09", long 120°07'23", in NE¼NW¼ sec.29, T.14 N., R.17 E., El Dorado County, Eldorado National Forest, on left bank on upstream side of State Highway 89 culvert, 0.1 mi (0.2 km) north of Meeks Bay Fire Department.

DRAINAGE AREA.--8.08 mi² (20.93 km²).

PERIOD OF RECORD.--October 1971 to September 1974, April to July 1975 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,230 ft (1,899 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 229 ft³/s (6.48 m³/s) June 1 (gage height, 3.13 ft or 0.954 m).
Period of record: Maximum discharge, 526 ft³/s (14.9 m³/s) Nov. 12, 1973 (gage height, 4.09 ft or 1.247 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Sept. 27-30, Oct. 1-7, 1973.

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

DISCHARGE, IN CUBIC FEET PER SECOND, APRIL TO JULY 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							12	18	179	32		
2							12	23	157	29		
3							11	26	147	28		
4							11	24	142	28		
5							11	20	147	29		
6							10	18	168	30		
7							9.2	24	153	29		
8							8.5	32	122	26		
9							8.5	42	104	25		
10							8.5	55	99	23		
11							8.5	69	101	21		
12							8.5	79	110	21		
13							8.5	87	117	18		
14							9.2	117	115	15		
15							10	123	107	14		
16							10	98	99	13		
17							9.2	112	84	11		
18							8.5	138	61	11		
19							8.5	159	47	11		
20							9.2	129	41	9.6		
21							12	69	43	8.5		
22							14	56	48	7.1		
23							15	72	49	6.6		
24							17	112	53	5.6		
25							18	127	40	4.8		
26							15	115	35	4.1		
27							14	127	32	4.0		
28							15	125	33	3.4		
29					-----		16	129	34	2.8		
30					-----		17	128	33	2.7		
31		-----			-----		-----	157	-----	2.6		-----
TOTAL							344.8	2,610	2,700	475.8		
MEAN							11.5	84.2	90.0	15.3		
MAX							18	159	179	32		
MIN							8.5	18	32	2.6		
AC-FT							684	5,180	5,360	944		

Peak discharge (base, 80 ft³/s).--May 19 (0100) 190 ft³/s (2.95 ft); June 1 (0100) 229 ft³/s (3.13 ft).

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CALIF.

LOCATION.--Lat 39°06'26", long 120°09'40", in NE¼NW¼ sec.36, T.15 N., R.16 E., Placer County, on right bank 300 ft (91 m) upstream from bridge on State Highway 89, 1,000 ft (305 m) upstream from Lake Tahoe, and 4.6 mi (7.4 km) south of Tahoe City.

DRAINAGE AREA.--11.2 mi² (29.0 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (1,902 m), from topographic map. Oct. 1, 1964, to Aug. 27, 1970, at site 400 ft (122 m) downstream at datum 12 ft (3.658 m) lower. Prior to Oct. 1, 1964, at site 400 ft (122 m) downstream at datum 10.25 ft (3.124 m) lower.

AVERAGE DISCHARGE.--15 years, 38.8 ft³/s (1.099 m³/s), 28,110 acre-ft/yr (34.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 449 ft³/s (12.7 m³/s) June 6 (gage height, 2.87 ft or 0.875 m); minimum daily, 2.1 ft³/s (0.059 m³/s) Oct. 16, 17.
Period of record: Maximum discharge, 2,100 ft³/s (59.5 m³/s) Dec. 22 or 24, 1964, from indirect measurement of peak flow; maximum gage height, 9.90 ft (3.018 m) Dec. 22, 1964; minimum discharge, 0.30 ft³/s (0.008 m³/s) Sept. 19, 1968.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.2	3.2	3.1	3.6	7.3	12	27	336	91	11	4.6
2	2.6	3.0	3.3	3.1	3.6	8.0	12	35	303	84	10	4.4
3	2.7	3.0	4.8	3.2	3.6	7.9	12	43	286	80	9.5	4.3
4	2.6	3.0	5.8	3.3	3.7	8.0	10	35	282	82	9.2	4.2
5	2.6	3.0	4.2	3.7	3.8	8.9	9.4	30	297	86	8.4	4.0
6	2.3	3.0	4.2	5.8	4.4	8.4	9.2	30	328	87	7.7	3.6
7	2.3	3.3	4.0	5.2	4.5	8.0	9.6	40	289	81	7.0	3.4
8	2.6	3.5	3.9	4.8	4.7	8.4	9.7	52	244	75	6.6	3.3
9	2.6	3.3	3.7	4.7	4.8	7.4	9.4	72	218	72	6.5	3.4
10	2.5	3.3	4.1	4.6	4.8	7.3	9.7	95	211	68	6.2	4.5
11	2.3	3.3	3.7	4.4	4.8	7.4	9.7	115	227	68	5.9	4.5
12	2.3	3.3	4.3	4.1	4.9	7.0	9.6	123	234	64	5.7	4.1
13	2.3	3.3	4.7	4.1	4.9	7.0	11	142	244	57	5.4	3.9
14	2.3	3.5	4.6	4.1	4.9	7.0	12	181	246	52	5.3	3.7
15	2.3	3.1	4.3	4.1	4.9	6.9	11	165	239	48	5.4	3.7
16	2.1	3.2	4.3	4.1	4.9	7.1	11	163	225	43	5.2	3.7
17	2.1	3.2	4.1	4.1	4.9	6.9	10	180	180	42	5.0	3.5
18	2.2	3.7	3.9	4.1	5.0	7.1	10	217	144	41	7.6	3.5
19	2.3	3.2	3.8	4.1	5.0	7.4	11	251	123	40	9.6	3.5
20	2.3	3.2	3.7	4.1	4.9	7.3	11	191	115	36	7.7	3.3
21	2.4	4.1	3.6	4.4	4.3	7.1	13	117	121	35	11	3.2
22	2.4	3.8	3.6	4.4	4.2	7.1	19	120	127	31	8.1	3.1
23	2.5	3.4	3.5	4.6	4.3	7.2	22	163	130	27	6.6	3.0
24	2.6	3.5	3.5	4.9	4.7	7.3	22	217	113	24	6.0	3.0
25	2.5	3.6	3.5	5.1	5.0	7.8	21	219	93	23	5.8	3.0
26	2.4	3.5	3.5	5.4	5.2	11	18	222	91	21	5.6	2.9
27	2.5	3.5	3.3	4.5	5.6	13	17	236	93	19	5.3	2.9
28	4.3	3.4	3.2	4.2	6.4	14	20	235	96	17	5.2	2.9
29	3.2	3.3	3.1	3.9	---	14	22	244	99	16	5.1	2.8
30	2.8	3.3	3.1	3.8	---	13	24	251	98	14	4.8	2.8
31	3.0	---	3.1	3.7	---	12	---	310	---	12	4.5	---
TOTAL	78.5	100.0	119.6	131.7	130.3	264.2	407.3	4521	5832	1536	212.9	106.7
MEAN	2.53	3.33	3.86	4.25	4.65	8.52	13.6	146	194	49.5	6.87	3.56
MAX	4.3	4.1	5.8	5.8	6.4	14	24	310	336	91	11	4.6
MIN	2.1	3.0	3.1	3.1	3.6	6.9	9.2	27	91	12	4.5	2.8
AC-FT	156	198	237	261	258	524	808	8970	11570	3050	422	212
CAL YR 1974	TOTAL	16636.9	MEAN	45.6	MAX	302	MIN	2.1	AC-FT	33000		
WTR YR 1975	TOTAL	13440.2	MEAN	36.8	MAX	336	MIN	2.1	AC-FT	26660		

Peak discharge (base, 200 ft³/s).--May 19 (1915) 318 ft³/s (2.44 ft); June 6 (1900) 449 ft³/s (2.87 ft).

PYRAMID AND WINNEMUCCA LAKES BASIN

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1974 to September 1975.

Sediment records: October 1974 to September 1975.

EXTREMES.--Current year:

Sediment concentrations: Maximum daily, 176 mg/l May 31; minimum daily, 0 mg/l on many days during October and November.

Sediment discharge: Maximum daily, 172 tons (156 tonnes) May 31; minimum daily, 0 tons (0 tonnes) on many days during October and November.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	5.5	---	---	---	---	---	---	6.0	---	---	---
2	---	---	---	---	---	---	0.5	---	2.5	---	---	---
3	13.0	---	3.0	---	---	---	---	---	5.0	---	---	---
4	---	---	---	---	---	---	---	---	4.5	12.0	---	---
5	---	5.0	---	---	---	---	---	6.0	7.0	---	---	---
6	---	---	3.5	---	---	---	---	---	7.0	---	---	---
7	---	---	---	1.5	0.5	---	---	---	5.0	13.5	---	---
8	8.0	---	---	---	---	---	---	---	5.0	---	---	---
9	---	---	---	0.0	---	---	---	6.0	6.0	---	---	12.0
10	---	---	---	---	---	2.0	4.0	---	7.0	7.0	---	---
11	---	---	4.0	---	---	---	---	4.5	---	---	---	---
12	---	---	---	---	0.5	---	---	3.5	6.5	---	17.0	---
13	---	---	---	---	---	---	---	6.0	7.0	---	---	---
14	---	---	---	---	---	---	---	1.5	6.0	---	---	---
15	---	---	---	---	---	---	---	3.5	---	10.5	---	---
16	---	---	---	---	---	---	4.0	4.5	---	---	---	---
17	---	4.0	---	---	---	---	---	6.0	5.0	---	---	---
18	---	---	---	---	---	---	---	2.0	---	15.0	10.0	---
19	---	---	---	1.0	0.0	---	---	2.0	7.5	---	---	---
20	8.5	---	---	---	---	1.0	---	2.0	4.0	---	---	---
21	---	---	---	---	---	---	---	5.0	9.0	---	11.0	11.5
22	---	---	---	---	---	---	4.5	2.0	---	---	---	---
23	---	---	---	---	---	---	---	3.0	9.5	---	---	---
24	---	---	---	---	---	---	---	2.5	---	---	---	---
25	---	---	---	---	---	---	---	4.5	8.5	---	---	---
26	---	---	---	---	2.5	---	---	2.5	---	---	---	---
27	6.0	---	---	---	3.5	0.5	---	2.0	11.0	---	---	---
28	4.0	---	---	0.0	---	0.5	---	4.0	---	---	14.5	---
29	---	---	---	---	---	---	---	4.0	---	15.0	---	---
30	---	---	---	---	---	---	---	4.0	11.5	---	---	---
31	6.5	---	0.0	---	---	---	---	4.0	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PEN- DED SEDIM- ENT (MG/L)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM
MAY											
13...	1910	1.0	195	364	192	7	11	18	28	39	--
19...	1950	2.0	318	170	146	--	--	--	--	--	--
28...	1815	4.0	302	158	129	--	--	--	--	--	--
JUNE											
12...	1825	6.5	296	104	83	--	--	--	--	--	29

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
MAY										
13...	51	--	62	--	76	--	86	--	87	100
19...	40	--	56	--	74	--	88	--	94	100
28...	32	--	49	--	73	--	91	--	98	100
JUNE										
12...	--	44	--	69	--	98	--	100	--	--

PYRAMID AND WINNEMUCCA LAKES BASIN

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10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	2.6	1	.01	3.2	0	0	3.2	1	.01
2	2.6	1	.01	3.0	0	0	3.3	1	.01
3	2.7	1	.01	3.0	1	.01	4.8	7	.09
4	2.6	1	.01	3.0	2	.02	5.8	1	.02
5	2.6	1	.01	3.0	1	.01	4.2	1	.01
6	2.3	1	.01	3.0	0	0	4.2	1	.01
7	2.3	2	.01	3.3	0	0	4.0	1	.01
8	2.6	4	.03	3.5	0	0	3.9	1	.01
9	2.6	1	.01	3.3	0	0	3.7	1	.01
10	2.5	1	.01	3.3	0	0	4.1	1	.01
11	2.3	1	.01	3.3	0	0	3.7	1	.01
12	2.3	1	.01	3.3	0	0	4.3	1	.01
13	2.3	1	.01	3.3	0	0	4.7	1	.01
14	2.3	1	.01	3.5	0	0	4.6	1	.01
15	2.3	1	.01	3.1	0	0	4.3	1	.01
16	2.1	1	.01	3.2	0	0	4.3	1	.01
17	2.1	1	.01	3.2	0	0	4.1	1	.01
18	2.2	1	.01	3.7	0	0	3.9	1	.01
19	2.3	1	.01	3.2	0	0	3.8	1	.01
20	2.3	1	.01	3.2	0	0	3.7	1	.01
21	2.4	1	.01	4.1	0	0	3.6	1	.01
22	2.4	1	.01	3.8	1	.01	3.6	2	.02
23	2.5	0	0	3.4	1	.01	3.5	2	.02
24	2.6	0	0	3.5	1	.01	3.5	2	.02
25	2.5	0	0	3.6	1	.01	3.5	2	.02
26	2.4	0	0	3.5	1	.01	3.5	2	.02
27	2.5	1	.01	3.5	1	.01	3.3	2	.02
28	4.3	4	.05	3.4	1	.01	3.2	2	.02
29	3.2	2	.02	3.3	1	.01	3.1	2	.02
30	2.8	2	.02	3.3	1	.01	3.1	2	.02
31	3.0	2	.02	---	---	---	3.1	2	.02
MONTH	78.5	---	.36	100.0	---	.13	119.6	---	.50
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.1	2	.02	3.6	2	.02	7.3	2	.04
2	3.1	2	.02	3.6	2	.02	8.0	2	.04
3	3.2	2	.02	3.6	2	.02	7.9	2	.04
4	3.3	1	.01	3.7	2	.02	8.0	2	.04
5	3.7	1	.01	3.8	3	.03	8.9	1	.02
6	5.8	1	.02	4.4	3	.04	8.4	1	.02
7	5.2	1	.01	4.5	2	.02	8.0	1	.02
8	4.8	1	.01	4.7	2	.03	8.4	1	.02
9	4.7	2	.03	4.8	2	.03	7.4	1	.02
10	4.6	2	.02	4.8	2	.03	7.3	1	.02
11	4.4	2	.02	4.8	2	.03	7.4	1	.02
12	4.1	2	.02	4.9	2	.03	7.0	1	.02
13	4.1	2	.02	4.9	2	.03	7.0	1	.02
14	4.1	1	.01	4.9	2	.03	7.0	1	.02
15	4.1	1	.01	4.9	2	.03	6.9	1	.02
16	4.1	1	.01	4.9	2	.03	7.1	2	.04
17	4.1	1	.01	4.9	2	.03	6.9	2	.04
18	4.1	1	.01	5.0	4	.05	7.1	2	.04
19	4.1	1	.01	5.0	5	.07	7.4	2	.04
20	4.1	1	.01	4.9	4	.05	7.3	2	.04
21	4.4	1	.01	4.3	2	.02	7.1	2	.04
22	4.4	1	.01	4.2	2	.02	7.1	2	.04
23	4.6	1	.01	4.3	2	.02	7.2	2	.04
24	4.9	2	.03	4.7	2	.03	7.3	3	.06
25	5.1	2	.03	5.0	2	.03	7.8	3	.06
26	5.4	2	.03	5.2	2	.03	11	3	.09
27	4.5	2	.02	5.6	2	.03	13	4	.14
28	4.2	2	.02	6.4	2	.03	14	4	.15
29	3.9	2	.02	---	---	---	14	5	.19
30	3.8	2	.02	---	---	---	13	5	.18
31	3.7	2	.02	---	---	---	12	6	.19
MONTH	131.7	---	.52	130.3	---	.85	264.2	---	1.76

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

APRIL				MAY				JUNE			
DAY	MEAN DISCHARGE (CFS)	MEAN CCNCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TCNS/DAY)	MEAN DISCHARGE (CFS)	MEAN CCNCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CCNCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)		
1	12	6	.19	27	3	.22	336	145	132		
2	12	7	.23	35	3	.28	303	120	98		
3	12	6	.19	43	3	.35	286	130	100		
4	10	6	.16	35	3	.28	282	110	84		
5	9.4	5	.13	30	3	.24	297	124	111		
6	9.2	5	.12	30	3	.24	328	136	133		
7	9.6	4	.10	40	5	.54	289	90	70		
8	9.7	4	.10	52	7	.98	244	75	49		
9	9.4	3	.08	72	15	2.9	218	65	38		
10	9.7	3	.08	95	25	7.2	211	65	37		
11	9.7	3	.08	115	50	16	227	70	46		
12	9.6	2	.05	123	73	26	234	70	44		
13	11	2	.06	142	64	30	244	70	46		
14	12	1	.03	181	122	72	246	60	40		
15	11	1	.03	165	80	36	239	65	42		
16	11	1	.03	163	42	18	225	65	39		
17	10	1	.03	180	49	28	180	45	22		
18	10	1	.03	217	84	56	144	37	14		
19	11	2	.06	251	88	60	123	30	10		
20	11	2	.06	191	75	39	115	22	6.8		
21	13	3	.11	117	38	12	121	21	6.9		
22	19	3	.15	120	46	16	127	22	7.5		
23	22	3	.18	163	70	36	130	25	8.8		
24	22	3	.18	217	122	83	113	18	5.5		
25	21	3	.17	219	143	88	93	14	3.5		
26	18	3	.15	222	104	69	91	14	3.4		
27	17	3	.14	236	92	62	93	16	4.0		
28	20	3	.16	235	104	69	96	17	4.4		
29	22	3	.18	244	105	76	99	16	4.3		
30	24	3	.19	251	105	79	98	12	3.2		
31	---	---	---	310	176	172	---	---	---		
MONTH	407.3	---	3.45	4521	---	1156.23	5832	---	1213.3		
JULY				AUGUST				SEPTEMBER			
DAY	MEAN DISCHARGE (CFS)	MEAN CCNCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CCNCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CCNCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)		
1	91	12	2.9	11	2	.06	4.6	2	.02		
2	84	10	2.3	10	3	.08	4.4	2	.02		
3	80	8	1.7	9.5	3	.08	4.3	1	.01		
4	82	7	1.5	9.2	3	.07	4.2	1	.01		
5	86	7	1.6	8.4	3	.07	4.0	1	.01		
6	87	7	1.6	7.7	3	.06	3.6	1	.01		
7	81	7	1.5	7.0	3	.06	3.4	1	.01		
8	75	8	1.6	6.6	2	.04	3.3	1	.01		
9	72	7	1.4	6.5	2	.04	3.4	2	.02		
10	68	7	1.3	6.2	2	.03	4.5	2	.02		
11	68	9	1.7	5.9	2	.03	4.5	2	.02		
12	64	9	1.6	5.7	2	.03	4.1	2	.02		
13	57	8	1.2	5.4	2	.03	3.9	2	.02		
14	52	6	.84	5.3	2	.03	3.7	2	.02		
15	48	5	.65	5.4	2	.03	3.7	2	.02		
16	43	4	.46	5.2	3	.04	3.7	1	.01		
17	42	3	.34	5.0	3	.04	3.5	1	.01		
18	41	2	.22	7.6	3	.06	3.5	1	.01		
19	40	2	.22	9.6	4	.10	3.5	1	.01		
20	36	2	.19	7.7	2	.04	3.3	1	.01		
21	35	2	.19	11	4	.12	3.2	1	.01		
22	31	2	.17	8.1	3	.07	3.1	1	.01		
23	27	2	.15	6.6	2	.04	3.0	1	.01		
24	24	2	.13	6.0	2	.03	3.0	1	.01		
25	23	2	.12	5.8	2	.03	3.0	1	.01		
26	21	1	.06	5.6	2	.03	2.9	1	.01		
27	19	1	.05	5.3	2	.03	2.9	1	.01		
28	17	1	.05	5.2	2	.03	2.9	1	.01		
29	16	1	.04	5.1	2	.03	2.8	1	.01		
30	14	1	.04	4.8	2	.03	2.8	1	.01		
31	12	1	.03	4.5	2	.02	---	---	---		
MONTH	1536	---	25.85	212.9	---	1.48	106.7	---	.39		
YEAR	13440.2		2404.82								

10336670 WARD CREEK NEAR TAHOE PINES, CALIF.

LOCATION.--Lat 39°08'09", long 120°13'11", in SE¼NW¼ sec.21, T.15 N., R.16 E., Placer County, Tahoe National Forest, on right bank 0.5 mi (0.8 km) upstream from confluence with tributary, 3.9 mi (6.3 km) northwest of Tahoe Pines, and 4.8 mi (7.7 km) southwest of Tahoe City.

DRAINAGE AREA.--2.03 mi² (5.26 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,740 ft (2,054 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 100 ft³/s (2.83 m³/s) June 6 (gage height, 2.87 ft or 0.875 m); maximum gage height, 6.01 ft (1.832 m) Mar. 25 (backwater from ice); minimum daily discharge, 0.49 ft³/s (0.014 m³/s) Oct. 1.

Period of record: Maximum discharge, 199 ft³/s (5.63 m³/s) Nov. 12, 1973 (gage height, 3.12 ft or 0.951 m); maximum gage height, 6.01 ft (1.832 m) Mar. 25, 1975 (backwater from ice); minimum daily discharge, 0.34 ft³/s (0.010 m³/s) Sept. 7-19, 27-30, Oct. 1-4, 1973.

REMARKS.--Records good except those for the winter period, which are fair. No regulation or diversion above station.

COOPERATION.--Selected sediment samples and temperature observations furnished by University of California at Davis.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.49	.71	.92	.54	1.1	1.5	1.3	2.3	58	28	4.5	1.1
2	.54	.65	.85	.54	1.1	1.4	1.1	2.9	53	26	4.2	1.1
3	.54	.65	1.4	.54	1.1	1.3	1.1	3.5	53	26	4.0	1.0
4	.54	.78	1.4	.54	1.1	1.3	1.1	2.6	54	27	3.8	1.0
5	.54	.85	.92	.54	1.1	1.4	1.1	2.0	63	30	3.5	.92
6	.54	1.0	.92	.71	1.0	1.3	1.1	2.0	75	30	3.3	.92
7	.54	1.0	.92	.85	1.0	1.2	1.1	2.6	71	29	3.1	.92
8	.78	1.5	.92	.65	1.2	1.2	1.1	5.4	59	28	2.9	.92
9	.65	1.4	.92	.65	1.3	1.2	1.0	8.4	55	27	2.8	.92
10	.59	.92	1.0	.65	1.1	1.1	1.0	11	54	26	2.6	1.2
11	.59	.92	.92	.65	1.0	1.1	1.0	14	60	27	2.3	1.0
12	.59	.65	2.9	.65	.92	1.1	1.0	15	66	25	2.3	1.0
13	.59	.59	1.2	.65	.85	1.1	1.2	18	71	22	2.2	.92
14	.54	.59	.92	.65	.85	1.1	1.3	23	71	20	2.2	.92
15	.54	.65	.92	.65	.85	1.1	1.2	20	73	18	2.0	.85
16	.54	.65	.92	.71	.85	1.1	1.1	22	67	17	1.7	.85
17	.54	.65	.92	.92	.85	1.1	1.1	26	50	16	1.6	.85
18	.54	.71	.85	.92	.85	1.0	1.1	33	37	15	3.1	.85
19	.54	.85	.78	1.1	.85	1.0	1.1	39	32	14	2.9	.85
20	.54	.65	.71	1.1	.85	1.0	1.1	27	30	14	2.4	.78
21	.54	2.2	.71	1.1	.85	1.0	1.4	15	34	12	3.0	.78
22	.54	3.8	.71	1.1	.78	1.0	1.6	16	37	11	2.0	.78
23	.54	1.4	.71	1.2	.78	1.0	1.6	25	39	10	1.9	.71
24	.54	1.4	.78	1.4	.78	1.0	1.5	32	30	9.4	1.7	.71
25	.59	.85	.92	1.3	.78	1.0	1.4	33	25	9.0	1.6	.71
26	.59	.78	.92	1.2	1.0	1.0	1.4	33	25	8.2	1.6	.71
27	.71	.85	.71	1.0	1.1	1.0	1.4	34	27	7.4	1.5	.71
28	1.1	.71	.65	1.0	1.4	1.0	1.6	35	28	7.0	1.4	.71
29	.65	.85	.59	1.0	---	1.1	1.9	37	28	6.3	1.3	.71
30	.71	.78	.59	1.0	---	1.3	2.0	41	28	5.7	1.2	.71
31	.78	---	.54	1.0	---	1.4	---	53	---	5.1	1.2	---
TOTAL	18.59	29.99	29.04	26.51	27.29	35.4	38.0	633.7	1453	556.1	75.8	26.11
MEAN	.60	1.00	.94	.86	.97	1.14	1.27	20.4	48.4	17.9	2.45	.87
MAX	1.1	3.8	2.9	1.4	1.4	1.5	2.0	53	75	30	4.5	1.2
MIN	.49	.59	.54	.54	.78	1.0	1.0	2.0	25	5.1	1.2	.71
AC-FT	37	59	58	53	54	70	75	1260	2880	1100	150	52
CAL YR 1974	TOTAL	3465.26	MEAN	9.49	MAX	89	MIN	.49	AC-FT	6870		
WTR YR 1975	TOTAL	2949.53	MEAN	8.08	MAX	75	MIN	.49	AC-FT	5850		

Peak discharge (base, 20 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-18	1900	2.47	47	6-15	1600	2.87	97
6-6	1600	2.87	100				

PYRAMID AND WINNEMUCCA LAKES BASIN

10336670 WARD CREEK NEAR TAHOE PINES, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1972 to current year.

Sediment records: October 1972 to current year.

EXTREMES.--Current year:

Sediment concentrations: Maximum daily, 87 mg/l May 30; minimum daily, 0 mg/l on many days.

Sediment discharge: Maximum daily, 17 tons (15 tonnes) June 6; minimum daily, 0 tons (0 tonnes) on many days.

Period of record:

Sediment concentrations: Maximum daily, 815 mg/l July 9, 1974; minimum daily, 0 mg/l on many days each year.

Sediment discharge: Maximum daily, 219 tons (199 tonnes) July 9, 1974; minimum daily, 0 tons (0 tonnes) on many days each year.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	1.0	---	1.0	---	---	---
3	---	---	0.0	---	---	---	---	---	1.0	---	---	---
4	---	---	---	---	---	---	---	---	1.0	---	---	---
5	---	---	0.0	---	---	---	---	1.5	2.0	---	---	---
6	---	---	---	---	---	---	---	---	1.5	---	---	---
7	---	---	---	---	1.0	---	---	---	2.0	---	---	---
8	6.0	---	---	---	---	---	---	---	1.5	---	---	---
9	---	---	---	0.0	---	---	---	---	1.5	---	---	---
10	---	---	---	---	---	1.0	1.0	---	2.5	6.0	---	---
11	---	1.0	0.5	---	1.0	---	---	---	3.0	---	---	---
12	---	---	---	---	---	---	---	1.5	2.0	---	14.0	---
13	---	---	---	---	---	---	---	---	2.0	---	---	---
14	---	---	---	---	---	---	1.5	0.0	2.5	---	---	---
15	---	2.5	---	---	---	---	---	1.0	---	7.0	---	---
16	---	---	0.5	---	---	---	---	1.0	2.5	---	---	---
17	---	---	---	---	---	---	---	1.5	2.5	---	---	15.0
18	---	---	---	---	---	---	---	1.0	---	8.5	---	---
19	---	---	---	---	---	---	---	1.0	---	---	---	---
20	8.0	---	---	---	1.0	0.5	---	1.5	---	---	---	---
21	---	---	---	1.0	---	---	---	1.5	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	1.0	---	---	---	---
24	---	---	---	---	---	---	---	0.5	---	---	---	---
25	---	0.0	---	---	---	---	---	1.0	4.0	---	8.0	---
26	---	---	---	---	---	---	---	1.0	---	---	---	---
27	---	---	---	---	1.5	1.0	---	1.0	---	---	---	---
28	1.0	---	---	0.0	---	---	---	2.0	---	---	13.5	---
29	---	---	---	---	---	---	---	1.0	---	10.0	---	---
30	---	---	---	---	---	---	---	1.5	4.5	---	---	---
31	---	---	0.0	---	---	1.5	---	1.5	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT CHARGE (T/DAY)	SUS- SED. SIEVE DIAM. % FINER THAN .062 MM
MAY 19...	1615	1.0	48	72	9.3	41

PYRAMID AND WINNEMUCCA LAKES BASIN

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10336670 WARD CREEK NEAR TAHOE PINES, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	.49	0	0	.71	1	0	.92	2	0
2	.54	1	0	.65	1	0	.85	2	0
3	.54	1	0	.65	1	0	1.4	2	.01
4	.54	1	0	.78	3	.01	1.4	2	.01
5	.54	1	0	.85	2	0	.92	2	0
6	.54	1	0	1.0	1	0	.92	2	0
7	.54	1	0	1.0	2	.01	.92	2	0
8	.78	7	.01	1.5	2	.01	.92	2	0
9	.65	1	0	1.4	2	.01	.92	1	0
10	.59	1	0	.92	2	0	1.0	1	0
11	.59	1	0	.92	2	0	.92	1	0
12	.59	1	0	.65	2	0	2.9	1	.01
13	.59	1	0	.59	1	0	1.2	1	0
14	.54	1	0	.59	1	0	.92	1	0
15	.54	1	0	.65	1	0	.92	1	0
16	.54	1	0	.65	1	0	.92	1	0
17	.54	1	0	.65	1	0	.92	1	0
18	.54	1	0	.71	1	0	.85	1	0
19	.54	1	0	.85	1	0	.78	1	0
20	.54	1	0	.65	1	0	.71	1	0
21	.54	1	0	2.2	8	.05	.71	1	0
22	.54	1	0	3.8	5	.05	.71	1	0
23	.54	1	0	1.4	1	0	.71	1	0
24	.54	1	0	1.4	4	.02	.78	1	0
25	.59	1	0	.85	2	0	.92	1	0
26	.59	1	0	.78	2	0	.92	2	0
27	.71	3	.01	.65	2	0	.71	2	0
28	1.1	7	.02	.71	2	0	.65	2	0
29	.65	1	0	.85	2	0	.59	2	0
30	.71	2	0	.78	2	0	.59	2	0
31	.78	1	0	---	---	---	.54	2	0
MONTH	18.59	---	.04	29.99	---	.16	29.04	---	.03
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	.54	2	0	1.1	3	.01	1.5	1	0
2	.54	2	0	1.1	4	.01	1.4	2	.01
3	.54	2	0	1.1	4	.01	1.3	2	.01
4	.54	2	0	1.1	4	.01	1.3	2	.01
5	.54	1	0	1.1	4	.01	1.4	3	.01
6	.71	1	0	1.0	5	.01	1.3	3	.01
7	.85	1	0	1.0	5	.01	1.2	3	.01
8	.65	1	0	1.2	4	.01	1.2	3	.01
9	.65	1	0	1.3	4	.01	1.2	4	.01
10	.65	1	0	1.1	3	.01	1.1	4	.01
11	.65	1	0	1.0	3	.01	1.1	4	.01
12	.65	2	0	.92	3	.01	1.1	3	.01
13	.65	2	0	.85	3	.01	1.1	3	.01
14	.65	2	0	.85	3	.01	1.1	3	.01
15	.65	2	0	.85	3	.01	1.1	2	.01
16	.71	3	.01	.85	2	0	1.1	2	.01
17	.92	3	.01	.85	2	0	1.1	2	.01
18	.92	3	.01	.85	2	0	1.0	1	0
19	1.1	3	.01	.85	2	0	1.0	1	0
20	1.1	3	.01	.85	2	0	1.0	1	0
21	1.1	4	.01	.85	2	0	1.0	1	0
22	1.1	3	.01	.78	1	0	1.0	1	0
23	1.2	3	.01	.78	1	0	1.0	1	0
24	1.4	3	.01	.78	1	0	1.0	1	0
25	1.3	2	.01	.78	1	0	1.0	1	0
26	1.2	2	.01	1.0	1	0	1.0	1	0
27	1.0	2	.01	1.1	1	0	1.0	1	0
28	1.0	2	.01	1.4	1	0	1.0	1	0
29	1.0	2	.01	---	---	---	1.1	1	0
30	1.0	3	.01	---	---	---	1.3	1	0
31	1.0	3	.01	---	---	---	1.4	0	0
MONTH	26.51	---	.16	27.29	---	.15	35.4	---	.16

PYRAMID AND WINNEMUCCA LAKES BASIN

10336670 WARD CREEK NEAR TAHOE PINES, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	1.3	1	0	2.3	1	.01	58	68	12
2	1.1	1	0	2.9	1	.01	53	52	8.1
3	1.1	1	0	3.5	1	.01	53	54	9.0
4	1.1	1	0	2.6	1	.01	54	58	10
5	1.1	1	0	2.0	1	.01	63	62	13
6	1.1	1	0	2.0	2	.01	75	71	17
7	1.1	1	0	2.6	6	.04	71	35	7.6
8	1.1	1	0	5.4	9	.18	59	19	3.4
9	1.0	1	0	8.4	13	.36	55	16	2.8
10	1.0	1	0	11	18	.67	54	28	4.8
11	1.0	0	0	14	24	1.0	60	30	6.0
12	1.0	0	0	15	26	1.2	66	22	4.6
13	1.2	0	0	18	32	2.0	71	42	9.4
14	1.3	0	0	23	53	3.9	71	48	10
15	1.2	0	0	20	25	1.5	73	39	8.8
16	1.1	0	0	22	28	1.8	67	33	6.8
17	1.1	0	0	26	32	2.6	50	15	2.0
18	1.1	1	0	33	39	3.9	37	9	.90
19	1.1	1	0	39	37	3.9	32	12	1.0
20	1.1	1	0	27	18	1.3	30	14	1.1
21	1.4	1	0	15	7	.28	34	22	2.0
22	1.6	1	0	16	22	1.1	37	30	3.0
23	1.6	1	0	25	34	2.6	39	35	3.7
24	1.5	1	0	32	71	7.7	30	14	1.1
25	1.4	1	0	33	39	3.7	25	7	.47
26	1.4	1	0	33	55	5.7	25	7	.47
27	1.4	1	0	34	60	6.1	27	10	.73
28	1.6	1	0	35	61	6.4	28	14	1.1
29	1.9	1	.01	37	64	7.3	28	18	1.4
30	2.0	1	.01	41	87	12	28	15	1.1
31	---	---	---	53	85	14	---	---	---
MONTH	38.0	---	.02	633.7	---	91.29	1453	---	153.37
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	28	8	.60	4.5	1	.01	1.1	2	.01
2	26	7	.49	4.2	1	.01	1.1	2	.01
3	26	5	.35	4.0	1	.01	1.0	2	.01
4	27	6	.44	3.8	1	.01	1.0	3	.01
5	30	8	.65	3.5	1	.01	.92	3	.01
6	30	7	.57	3.3	1	.01	.92	3	.01
7	29	8	.63	3.1	1	.01	.92	3	.01
8	28	6	.45	2.9	1	.01	.92	3	.01
9	27	6	.44	2.8	2	.02	.92	3	.01
10	26	5	.35	2.6	2	.01	1.2	2	.01
11	27	4	.29	2.3	2	.01	1.0	2	.01
12	25	3	.20	2.3	2	.01	1.0	2	.01
13	22	3	.18	2.2	2	.01	.92	2	0
14	20	2	.11	2.2	2	.01	.92	2	0
15	18	2	.10	2.0	2	.01	.85	2	0
16	17	2	.09	1.7	2	.01	.85	2	0
17	16	2	.09	1.6	2	.01	.85	2	0
18	15	2	.08	3.1	6	.05	.85	2	0
19	14	2	.08	2.9	5	.04	.85	2	0
20	14	2	.08	2.4	4	.03	.78	2	0
21	12	1	.03	3.0	7	.06	.78	2	0
22	11	1	.03	2.0	6	.03	.78	2	0
23	10	1	.03	1.9	6	.03	.71	2	0
24	9.4	1	.03	1.7	6	.03	.71	2	0
25	9.0	1	.02	1.6	6	.03	.71	2	0
26	8.2	1	.02	1.6	6	.03	.71	2	0
27	7.4	1	.02	1.5	4	.02	.71	2	0
28	7.0	1	.02	1.4	2	.01	.71	2	0
29	6.3	1	.02	1.3	2	.01	.71	2	0
30	5.7	1	.02	1.2	2	.01	.71	2	0
31	5.1	1	.01	1.2	2	.01	---	---	---
MONTH	556.1	---	6.52	75.8	---	.57	26.11	---	.12
YEAR	2949.53		252.59						

PYRAMID AND WINNEMUCCA LAKES BASIN

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10336672 WARD CREEK TRIBUTARY NEAR TAHOE PINES, CALIF.

LOCATION.--Lat 39°08'29", long 120°13'06", in SE¼SW¼ sec.16, T.15 N., R.16 E., Placer County, on left bank
0.3 mi (0.5 km) upstream from confluence with Ward Creek, 4.0 mi (6.4 km) northwest of Tahoe Pines, and
4.5 mi (7.2 km) southwest of Tahoe City.

DRAINAGE AREA.--0.91 mi² (2.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,710 ft (2,045 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 53 ft³/s (1.50 m³/s) June 6 (gage height, 2.81 ft or 0.856 m);
no flow many days in October, November, and September.

Period of record: Maximum discharge, 116 ft³/s (3.29 m³/s) Nov. 12, 1973 (gage height, 3.30 ft or
1.006 m), from rating curve extended above 50 ft³/s (1.416 m³/s); no flow at times each year.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.01	.05	.11	.44	.44	.70	1.2	35	13	1.2	.07
2	0	0	.05	.11	.44	.44	.56	1.8	31	12	1.1	.07
3	0	0	.23	.11	.44	.44	.50	2.2	31	12	.93	.06
4	0	0	.38	.11	.44	.44	.50	1.9	29	13	.79	.05
5	0	0	.11	.11	.44	.44	.44	1.7	32	15	.72	.04
6	0	0	.08	.28	.44	.50	.44	1.7	37	14	.59	.03
7	0	0	.08	.28	.44	.50	.44	2.0	31	13	.54	.03
8	0	0	.08	.23	.44	.50	.44	3.0	27	12	.44	.03
9	0	0	.08	.19	.44	.50	.44	4.9	25	12	.36	.03
10	0	0	.11	.15	.44	.50	.44	8.2	24	11	.36	.05
11	0	0	.08	.15	.44	.50	.44	11	27	11	.30	.03
12	0	0	.23	.15	.38	.50	.44	11	29	10	.27	.03
13	0	0	.23	.15	.38	.50	.56	13	31	8.8	.24	.03
14	0	0	.19	.15	.38	.50	.77	16	31	8.2	.22	.02
15	0	0	.15	.15	.38	.50	.56	15	31	7.3	.20	.02
16	0	0	.15	.15	.38	.50	.50	14	29	7.0	.20	.02
17	0	0	.19	.15	.33	.50	.50	16	22	6.7	.18	.02
18	0	.01	.19	.15	.33	.50	.44	19	16	6.4	.36	.02
19	0	.01	.15	.19	.33	.50	.44	23	14	5.8	.54	.02
20	0	.01	.15	.23	.33	.50	.56	17	14	5.1	.36	.01
21	0	.01	.15	.23	.33	.50	.77	11	15	4.7	.65	.01
22	0	.01	.15	.23	.33	.50	1.0	10	17	4.3	.33	.01
23	0	.01	.15	.28	.33	.50	1.0	15	18	3.4	.24	0
24	0	.01	.17	.33	.33	.50	1.0	20	13	3.3	.20	0
25	0	.02	.20	.38	.33	.50	.98	21	11	3.1	.18	0
26	0	.02	.21	.44	.38	.50	.91	20	11	3.0	.14	0
27	0	.03	.19	.44	.38	.51	.91	22	12	2.5	.14	0
28	.03	.02	.15	.44	.38	.52	.98	22	13	2.2	.12	0
29	.01	.02	.11	.44	---	.56	1.0	23	13	1.9	.10	0
30	.01	.03	.11	.44	---	.63	1.1	25	13	1.7	.09	0
31	.01	---	.11	.44	---	.84	---	33	---	1.4	.08	---
TOTAL	.06	.22	4.66	7.39	10.85	15.76	19.76	405.6	682	234.8	12.17	.70
MEAN	.002	.007	.15	.24	.39	.51	.66	13.1	22.7	7.57	.39	.023
MAX	.03	.03	.38	.44	.44	.84	1.1	33	37	15	1.2	.07
MIN	0	0	.05	.11	.33	.44	.44	1.2	11	1.4	.08	0
AC-FT	.1	.4	9.2	15	22	31	39	805	1350	466	24	1.4

CAL YR 1974 TOTAL 1515.32 MEAN 4.15 MAX 38 MIN 0 AC-FT 3010
WTR YR 1975 TOTAL 1393.97 MEAN 3.82 MAX 37 MIN 0 AC-FT 2760

Peak discharge (base, 10 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-19	1900	2.49	28	7-5	1700	2.27	18
6-6	1800	2.81	53				

PYRAMID AND WINNEMUCCA LAKES BASIN

10336672 WARD CREEK TRIBUTARY NEAR TAHOE PINES, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1972 to current year.

Sediment records: October 1972 to current year.

EXTREMES.--Current year:

Sediment concentrations: Maximum daily, 27 mg/l June 1; minimum daily, 0 mg/l on many days.

Sediment discharge: Maximum daily, 2.9 tons (2.6 tonnes) June 6; minimum daily, 0 tons (0 tonnes) on many days.

Period of record:

Sediment concentrations: Maximum daily, 411 mg/l Nov. 11, 1973; minimum daily, 0 mg/l on many days each year.

Sediment discharge: Maximum daily, 74 tons (64 tonnes) Nov. 11, 1973; minimum daily, 0 tons (0 tonnes) on many days each year.

REMARKS.--Seventy-three sediment samples and 65 water temperature readings furnished by University of California at Davis.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	1.5	---	1.5	---	---	---
3	---	---	0.0	---	---	---	---	---	2.0	5.0	---	---
4	---	---	---	---	---	---	---	---	2.0	---	---	---
5	---	---	0.5	---	---	---	---	2.0	2.5	---	---	---
6	---	---	---	---	---	---	---	---	2.5	---	---	---
7	---	---	---	---	2.0	---	---	---	2.5	8.0	---	---
8	---	---	---	---	---	---	---	---	2.5	---	---	---
9	---	---	---	0.0	---	---	---	---	2.0	---	---	---
10	---	---	---	---	---	1.5	1.5	---	3.0	7.0	---	---
11	---	---	0.0	---	1.5	---	---	---	3.0	---	---	---
12	---	---	---	---	---	---	---	2.0	3.0	---	15.5	---
13	---	---	---	---	---	---	---	---	3.0	---	---	---
14	---	---	---	---	---	---	2.0	1.5	4.0	---	---	---
15	---	---	---	---	---	---	---	1.5	---	8.0	---	---
16	---	---	0.5	---	---	---	---	1.5	4.0	---	---	---
17	---	---	---	---	---	---	---	2.5	3.0	---	---	---
18	---	---	---	---	---	---	---	1.5	---	12.0	---	---
19	---	---	---	---	---	---	---	1.5	---	---	---	---
20	---	---	---	---	1.0	1.0	---	3.0	---	---	---	---
21	---	---	---	1.0	---	---	---	2.0	---	---	---	---
22	---	---	---	---	---	---	2.0	1.0	---	---	---	---
23	---	---	---	---	---	---	---	1.5	---	---	---	---
24	---	---	---	---	---	---	---	1.5	---	---	---	---
25	---	0.0	---	---	---	---	---	1.5	5.0	---	11.0	---
26	---	---	---	---	---	---	---	1.5	---	---	---	---
27	---	---	---	---	2.0	1.0	---	1.0	---	---	---	---
28	3.0	---	---	0.0	---	---	---	3.0	---	---	14.0	---
29	---	---	---	---	---	---	---	1.5	---	12.5	---	---
30	---	---	---	---	---	---	---	2.0	4.5	---	---	---
31	---	---	0.0	---	---	2.0	---	2.0	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
MAY 19...	1650	1.5	28	38	2.9	51
JUNE 13...	1655	3.0	41	48	5.3	34

10336672 WARD CREEK TRIBUTARY NEAR TAHOE PINES, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	0	0		.01	1		.05	1			
2	0	0		0	0		.05	1			
3	0	0		0	0		.23	2			
4	0	0		0	0		.38	2			
5	0	0		0	0		.11	2			
6	0	0		0	0		.08	1			
7	0	0		0	0		.08	1			
8	0	0		0	0		.08	1			
9	0	0		0	0		.08	1			
10	0	0		0	0		.11	1			
11	0	0		0	0		.08	1			
12	0	0		0	0		.23	3			
13	0	0		0	0		.23	2			
14	0	0		0	0		.19	2			
15	0	0		0	0		.15	2			
16	0	0		0	0		.15	2			
17	0	0		0	0		.19	2			
18	0	0		.01	1		.19	2			
19	0	0		.01	1		.15	2			
20	0	0		.01	1		.15	2			
21	0	0		.01	1		.15	2			
22	0	0		.01	1		.15	2			
23	0	0		.01	1		.15	2			
24	0	0		.01	1		.17	1			
25	0	0		.02	1		.20	1			
26	0	0		.02	1		.21	1			
27	0	0		.03	1		.19	1			
28	.03	2		.02	1		.15	1			
29	.01	1		.02	1		.11	1			
30	.01	1		.03	1		.11	1			
31	.01	1		---	---		.11	1			
MONTH	.06	---	0	.22	---	0	4.66	---	0		

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	.11	1		.44	2		.44	1			
2	.11	1		.44	3		.44	1			
3	.11	1		.44	3		.44	1			
4	.11	1		.44	3		.44	1			
5	.11	1		.44	4		.44	1			
6	.28	1		.44	4		.50	1			
7	.28	1		.44	4		.50	1			
8	.23	1		.44	3		.50	1			
9	.19	1		.44	2		.50	1			
10	.15	1		.44	1		.50	1			
11	.15	1		.44	1		.50	1			
12	.15	1		.38	1		.50	1			
13	.15	1		.38	1		.50	1			
14	.15	1		.38	1		.50	1			
15	.15	1		.38	1		.50	1			
16	.15	1		.38	1		.50	1			
17	.15	1		.33	1		.50	1			
18	.15	1		.33	1		.50	1			
19	.19	1		.33	1		.50	1			
20	.23	1		.33	1		.50	1			
21	.23	1		.33	1		.50	1			
22	.23	1		.33	1		.50	1			
23	.28	1		.33	1		.50	1			
24	.33	1		.33	1		.50	1			
25	.38	2		.33	1		.50	1			
26	.44	2		.38	1		.50	1			
27	.44	2		.38	1		.51	1			
28	.44	2		.38	1		.52	1			
29	.44	2		---	---		.56	1			
30	.44	2		---	---		.63	1			
31	.44	2		---	---		.84	2			
MONTH	7.39	---	0	10.85	---	0	15.76	---	0		

PYRAMID AND WINNEMUCCA LAKES BASIN

10336672 WARD CREEK TRIBUTARY NEAR TAHOE PINES, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	.70	1		1.2	1	0	35	27	2.7
2	.56	1		1.8	1	0	31	18	1.7
3	.50	1		2.2	1	.01	31	19	1.8
4	.50	1		1.9	1	.01	29	17	1.5
5	.44	1		1.7	1	0	32	15	1.7
6	.44	1		1.7	1	0	37	25	2.9
7	.44	1		2.0	1	.01	31	15	1.4
8	.44	1		3.0	2	.02	27	10	.84
9	.44	1		4.9	4	.05	25	9	.69
10	.44	1		8.2	5	.11	24	9	.61
11	.44	1		11	8	.24	27	13	1.1
12	.44	1		11	10	.32	29	14	1.2
13	.56	1		13	12	.45	31	19	1.7
14	.77	1		16	14	.72	31	19	1.9
15	.56	1		15	10	.41	31	15	1.4
16	.50	1		14	12	.45	29	8	.70
17	.50	1		16	13	.62	22	4	.24
18	.44	1		19	18	1.1	16	4	.17
19	.44	1		23	22	1.4	14	4	.15
20	.56	1		17	11	.50	14	4	.15
21	.77	1		11	8	.24	15	5	.20
22	1.0	1		10	7	.19	17	7	.35
23	1.0	1		15	9	.42	18	7	.34
24	1.0	1		20	22	1.4	13	3	.11
25	.98	1		21	22	1.3	11	3	.09
26	.91	1		20	15	.91	11	2	.06
27	.91	1		22	10	.59	12	3	.10
28	.98	1		22	12	.71	13	3	.11
29	1.0	1		23	16	1.1	13	4	.14
30	1.1	1		25	19	1.5	13	3	.11
31	---	---		33	26	2.6	---	---	---
MONTH	19.76	---	0	405.6	---	17.38	682	---	26.16
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	13	2	.07	1.2	1	0	.07	1	
2	12	2	.06	1.1	1	0	.07	1	
3	12	3	.10	.93	1	0	.06	1	
4	13	3	.11	.79	1	0	.05	2	
5	15	3	.12	.72	1	0	.04	2	
6	14	4	.15	.59	2	0	.03	2	
7	13	4	.14	.54	2	0	.03	3	
8	12	3	.10	.44	3	0	.03	3	
9	12	2	.06	.36	3	0	.03	3	
10	11	2	.06	.36	4	0	.05	2	
11	11	2	.06	.30	4	0	.03	2	
12	10	3	.08	.27	5	0	.03	1	
13	8.8	2	.05	.24	4	0	.03	1	
14	8.2	2	.04	.22	3	0	.02	1	
15	7.3	2	.04	.20	3	0	.02	1	
16	7.0	2	.04	.20	2	0	.02	1	
17	6.7	3	.05	.18	4	0	.02	1	
18	6.4	3	.05	.36	7	.01	.02	1	
19	5.8	3	.05	.54	8	.01	.02	1	
20	5.1	2	.03	.36	4	0	.01	1	
21	4.7	2	.03	.65	10	.02	.01	1	
22	4.3	2	.02	.33	4	0	.01	1	
23	3.4	2	.02	.24	1	0	0	0	
24	3.3	2	.02	.20	1	0	0	0	
25	3.1	2	.02	.18	1	0	0	0	
26	3.0	2	.02	.14	1	0	0	0	
27	2.5	2	.01	.14	1	0	0	0	
28	2.2	2	.01	.12	1	0	0	0	
29	1.9	2	.01	.10	1	0	0	0	
30	1.7	2	.01	.09	1	0	0	0	
31	1.4	2	.01	.08	1	0	---	---	
MONTH	234.8	---	1.64	12.17	---	.04	.70	---	
YEAR	1393.97			45					

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

LOCATION.--Lat 39°07'56", long 120°09'24", in NW¼SE¼ sec.24, T.15 N., R.16 E., Placer County, Tahoe National Forest, on right bank 165 ft (50 m) downstream from State Highway 89 bridge, 2.1 mi (3.4 km) north of Tahoe Pines, and 2.6 mi (4.2 km) southwest of Tahoe City.

DRAINAGE AREA.--9.70 mi² (25.1 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,230 ft (1,899 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 492 ft³/s (13.9 m³/s) June 6 (gage height, 6.22 ft or 1.896 m), from rating extended above 310 ft³/s (8.78 m³/s); maximum gage height, 7.05 ft (2.149 m) Mar. 22 (backwater from ice); minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Sept. 30.
Period of record: Maximum discharge, 800 ft³/s (22.7 m³/s) Nov. 12, 1973 (gage height, 6.65 ft or 2.027 m), from rating extended above 310 ft³/s (8.78 m³/s); maximum gage height, 7.18 ft (2.188 m) Dec. 17, 1972 (backwater from ice); minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Aug. 19-21, Sept. 4-19, 1973.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.4	2.8	2.4	2.6	5.8	7.6	15	254	71	10	3.2
2	1.7	2.9	2.9	2.5	2.6	5.8	7.3	19	235	66	8.8	2.9
3	1.7	2.6	3.5	2.6	2.6	5.2	7.0	20	233	64	8.2	2.9
4	1.7	2.6	3.8	2.7	2.6	5.5	6.7	17	230	66	7.9	2.6
5	1.7	2.4	3.7	2.9	2.8	5.8	6.7	15	267	71	7.3	2.4
6	1.7	2.4	3.5	5.7	3.0	5.2	6.4	15	303	69	7.0	2.4
7	1.7	2.9	3.4	4.5	3.2	4.6	6.1	18	265	66	6.4	2.4
8	2.2	2.9	3.3	3.8	3.3	5.2	5.8	26	224	62	6.1	2.4
9	1.9	2.4	3.2	3.5	3.3	4.6	5.8	35	204	61	5.8	2.2
10	1.7	2.9	3.3	3.4	3.4	4.6	5.8	43	195	57	5.5	3.2
11	1.7	2.9	3.3	3.3	3.4	4.4	5.8	58	211	57	5.5	2.9
12	1.7	2.6	3.5	3.2	3.4	4.4	6.1	63	223	52	5.2	2.4
13	1.7	2.6	3.8	3.2	3.4	4.4	6.7	74	240	45	4.9	2.2
14	1.7	2.6	3.7	3.2	3.4	4.4	7.9	95	243	40	4.6	1.9
15	1.7	2.6	3.4	3.2	3.4	4.2	7.3	84	243	36	4.4	1.9
16	1.7	2.6	3.4	2.9	3.4	4.6	6.6	86	222	34	4.2	1.9
17	1.7	2.6	3.4	2.9	3.4	4.2	6.1	102	172	32	4.2	1.9
18	1.6	3.1	3.4	2.9	3.4	4.4	6.0	128	134	30	7.0	1.9
19	1.6	2.7	3.3	2.9	3.4	4.4	6.0	150	110	28	8.2	1.9
20	1.6	2.8	3.2	3.2	3.4	4.2	6.2	109	102	27	6.1	1.7
21	1.6	3.1	3.2	3.2	3.2	4.0	7.0	63	104	24	8.5	1.6
22	1.6	3.1	3.1	3.2	2.9	4.0	10	62	110	22	6.1	1.6
23	2.2	3.0	3.1	3.4	2.9	4.0	12	94	114	20	4.9	1.6
24	2.4	3.0	3.0	3.6	3.2	4.1	12	136	98	17	4.6	1.6
25	2.4	3.0	2.9	3.9	3.4	4.5	12	139	82	17	4.2	1.4
26	2.4	3.0	2.8	3.9	3.6	5.4	10	141	74	16	3.9	1.4
27	3.2	2.9	2.7	3.3	4.4	8.0	10	155	73	15	3.9	1.4
28	5.8	2.8	2.5	3.0	4.9	8.7	12	158	74	14	3.6	1.4
29	3.4	2.8	2.4	2.8	---	8.5	13	166	76	13	3.4	1.4
30	3.2	2.7	2.4	2.8	---	8.2	14	180	74	12	3.2	1.2
31	3.4	---	2.4	2.7	---	8.8	---	240	---	11	3.2	---
TOTAL	66.0	83.9	98.3	100.7	91.9	164.1	241.9	2706	5189	1215	176.8	61.8
MEAN	2.13	2.80	3.17	3.25	3.28	5.29	8.06	87.3	173	39.2	5.70	2.06
MAX	5.8	3.4	3.8	5.7	4.9	8.8	14	240	303	71	10	3.2
MIN	1.6	2.4	2.4	2.4	2.6	4.0	5.8	15	73	11	3.2	1.2
AC-FT	131	166	195	200	182	325	480	5370	10290	2410	351	123
CAL YR 1974 TOTAL	12252.6			MEAN 33.6	MAX 281	MIN 1.6	AC-FT 24300					
WTR YR 1975 TOTAL	10195.4			MEAN 27.9	MAX 303	MIN 1.2	AC-FT 20220					

Peak discharge (base, 100 ft³/s).--May 18 (1930) 205 ft³/s (5.63 ft); June 6 (1730) 492 ft³/s (6.22 ft).

PYRAMID AND WINNEMUCCA LAKES BASIN

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

PERIOD OF RECORD.--Water temperatures: October 1972 to current year.

Sediment records: October 1972 to current year.

EXTREMES.--Current year:

Sediment concentrations: Maximum daily, 112 mg/l June 6; minimum daily, 0 mg/l on many days.

Sediment discharge: Maximum daily, 115 tons (104 tonnes) June 6; minimum daily, 0 tons (0 tonnes) on many days.

Period of record:

Sediment concentrations: Maximum daily, 481 mg/l Nov. 12, 1973; minimum, 0 mg/l on many days each year.

Sediment discharge: Maximum daily, 646 tons (586 tonnes) Nov. 12, 1973; minimum daily, 0 tons (0 tonnes) on many days each year.

REMARKS.--One hundred and five sediment samples and temperature observations furnished by University of California at Davis.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	2.5	---	---	---
2	---	---	---	---	---	---	0.5	---	2.0	---	---	---
3	9.5	---	0.0	---	---	---	---	---	4.5	---	---	---
4	---	---	---	---	0.0	---	---	---	4.0	12.5	---	---
5	---	2.0	0.5	---	---	---	---	3.0	6.5	---	---	---
6	---	---	---	---	---	---	---	---	4.5	---	---	---
7	---	---	---	---	0.5	---	---	---	5.0	14.0	---	---
8	7.5	---	---	---	---	---	---	---	5.0	---	---	---
9	---	3.5	---	0.0	---	---	---	3.5	5.0	---	---	15.5
10	---	---	---	---	---	0.0	1.0	---	5.0	8.5	---	---
11	---	---	0.0	---	0.0	---	---	4.0	---	---	---	---
12	---	---	---	---	---	---	---	3.0	9.0	---	17.0	---
13	---	---	---	---	---	---	---	5.5	9.0	---	---	---
14	---	---	---	---	---	---	---	1.0	5.0	---	---	---
15	---	---	---	---	---	---	---	3.5	---	10.0	---	15.0
16	---	---	1.0	---	---	---	0.5	2.5	4.5	---	---	---
17	---	1.5	---	0.5	---	---	---	6.0	6.0	---	---	---
18	---	---	---	---	---	---	---	3.0	---	15.0	10.0	---
19	---	---	---	0.0	0.0	---	---	1.0	6.5	---	---	---
20	7.0	---	---	---	---	0.0	---	1.5	4.5	---	---	---
21	---	---	---	---	---	---	---	4.5	8.5	---	10.5	11.0
22	---	---	---	---	---	---	2.0	1.5	---	---	---	---
23	---	---	---	---	---	---	---	2.5	9.0	---	---	---
24	---	---	---	---	---	---	---	2.0	---	---	---	---
25	---	---	---	---	---	---	---	3.0	8.0	---	---	---
26	---	---	---	---	---	---	---	0.5	---	---	---	---
27	5.0	---	---	---	1.0	0.0	---	1.0	11.0	---	---	---
28	2.5	---	---	0.0	---	0.5	---	3.0	---	---	15.5	---
29	---	---	---	---	---	---	---	2.5	---	16.0	---	---
30	---	---	---	---	---	---	---	6.0	11.5	---	---	---
31	5.0	---	0.0	---	---	---	---	6.0	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
MAY										
13...	1820	1.0	98	110	29	65	78	90	97	100
JUNE										
12...	1850	8.0	294	92	73	25	--	--	--	--

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

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	1.7	10	.05	3.4	2	.02	2.8	2	.02
2	1.7	10	.05	2.9	1	.01	2.9	2	.02
3	1.7	14	.06	2.6	1	.01	3.5	2	.02
4	1.7	10	.05	2.6	1	.01	3.8	3	.03
5	1.7	8	.04	2.4	0	0	3.7	3	.03
6	1.7	5	.02	2.4	0	0	3.5	3	.03
7	1.7	3	.01	2.9	0	0	3.4	3	.03
8	2.2	1	.01	2.9	0	0	3.3	4	.04
9	1.9	1	.01	2.4	0	0	3.2	4	.03
10	1.7	2	.01	2.9	0	0	3.3	2	.02
11	1.7	4	.02	2.9	0	0	3.3	1	.01
12	1.7	6	.03	2.6	0	0	3.5	1	.01
13	1.7	8	.04	2.6	0	0	3.8	1	.01
14	1.7	7	.03	2.6	0	0	3.7	1	.01
15	1.7	6	.03	2.6	0	0	3.4	1	.01
16	1.7	5	.02	2.6	0	0	3.4	1	.01
17	1.7	4	.02	2.6	0	0	3.4	2	.02
18	1.6	3	.01	3.1	0	0	3.4	3	.03
19	1.6	1	0	2.7	0	0	3.3	3	.03
20	1.6	0	0	2.8	0	0	3.2	3	.03
21	1.6	0	0	3.1	1	.01	3.2	3	.03
22	1.6	0	0	3.1	1	.01	3.1	3	.03
23	2.2	0	0	3.0	1	.01	3.1	3	.03
24	2.4	0	0	3.0	1	.01	3.0	2	.02
25	2.4	0	0	3.0	1	.01	2.9	2	.02
26	2.4	0	0	3.0	1	.01	2.8	2	.02
27	3.2	1	.01	2.9	1	.01	2.7	2	.01
28	5.8	4	.06	2.8	1	.01	2.5	2	.01
29	3.4	1	.01	2.8	1	.01	2.4	2	.01
30	3.2	1	.01	2.7	1	.01	2.4	2	.01
31	3.4	2	.02	---	---	---	2.4	2	.01
MONTH	66.0	---	.62	83.9	---	.15	98.3	---	.64
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.4	2	.01	2.6	4	.03	5.8	2	.03
2	2.5	2	.01	2.6	4	.03	5.8	2	.03
3	2.6	2	.01	2.6	4	.03	5.2	2	.03
4	2.7	2	.01	2.6	4	.03	5.5	2	.03
5	2.9	2	.02	2.8	5	.04	5.8	1	.02
6	5.7	2	.03	3.0	5	.04	5.2	1	.01
7	4.5	2	.02	3.2	5	.04	4.6	1	.01
8	3.8	2	.02	3.3	5	.04	5.2	1	.01
9	3.5	2	.02	3.3	5	.04	4.6	1	.01
10	3.4	2	.02	3.4	4	.04	4.6	1	.01
11	3.3	2	.02	3.4	4	.04	4.4	1	.01
12	3.2	2	.02	3.4	4	.04	4.4	1	.01
13	3.2	2	.02	3.4	4	.04	4.4	1	.01
14	3.2	2	.02	3.4	4	.04	4.4	1	.01
15	3.2	2	.02	3.4	4	.04	4.2	1	.01
16	2.9	2	.02	3.4	3	.03	4.6	2	.02
17	2.9	2	.02	3.4	3	.03	4.2	2	.02
18	2.9	2	.02	3.4	3	.03	4.4	2	.02
19	2.9	2	.02	3.4	3	.03	4.4	2	.02
20	3.2	2	.02	3.4	3	.03	4.2	2	.02
21	3.2	2	.02	3.2	3	.03	4.0	2	.02
22	3.2	3	.03	2.9	3	.02	4.0	2	.02
23	3.4	3	.03	2.9	2	.02	4.0	2	.02
24	3.6	3	.03	3.2	2	.02	4.1	2	.02
25	3.9	3	.03	3.4	2	.02	4.5	2	.02
26	3.9	3	.03	3.6	2	.02	5.4	2	.03
27	3.3	3	.03	4.4	2	.02	8.0	2	.04
28	3.0	3	.02	4.9	2	.03	8.7	4	.09
29	2.8	4	.03	---	---	---	8.5	4	.09
30	2.8	4	.03	---	---	---	8.2	3	.07
31	2.7	4	.03	---	---	---	8.8	3	.07
MONTH	100.7	---	.68	91.9	---	.89	164.1	---	.83

PYRAMID AND WINNEMUCCA LAKES BASIN

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

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	7.6	3	.06	15	5	.20	254	71	56
2	7.3	3	.06	19	6	.31	235	71	52
3	7.0	3	.06	20	5	.27	233	63	49
4	6.7	3	.05	17	5	.23	230	70	53
5	6.7	3	.05	15	5	.20	267	81	77
6	6.4	3	.05	15	5	.20	303	112	115
7	6.1	3	.05	18	8	.39	265	42	33
8	5.8	3	.05	26	14	1.1	224	42	27
9	5.8	3	.05	35	21	2.2	204	32	19
10	5.8	3	.05	43	25	3.6	195	29	17
11	5.8	3	.05	58	28	4.9	211	34	23
12	6.1	2	.03	63	28	5.3	223	35	24
13	6.7	2	.04	74	57	15	240	44	32
14	7.9	2	.04	95	75	24	243	61	43
15	7.3	1	.02	84	22	5.0	243	50	35
16	6.6	1	.02	86	25	6.7	222	32	21
17	6.1	1	.02	102	29	9.6	172	15	7.0
18	6.0	1	.02	128	39	16	134	12	4.3
19	6.0	2	.03	150	44	20	110	13	3.9
20	6.2	2	.03	109	41	13	102	12	3.3
21	7.0	2	.04	63	13	2.2	104	9	2.5
22	10	2	.05	62	20	3.3	110	10	3.0
23	12	2	.06	94	37	12	114	11	3.4
24	12	2	.06	136	81	39	98	8	2.1
25	12	2	.06	139	50	20	82	5	1.1
26	10	2	.05	141	63	29	74	3	.60
27	10	2	.05	155	42	20	73	3	.59
28	12	3	.10	158	38	19	74	3	.60
29	13	4	.14	166	56	30	76	3	.62
30	14	4	.15	180	61	37	74	3	.60
31	---	---	---	240	99	84	---	---	---
MONTH	241.9	---	1.59	2706	---	423.70	5189	---	709.61
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	71	3	.58	10	2	.05	3.2	2	.02
2	66	3	.53	8.8	2	.05	2.9	2	.02
3	64	3	.52	8.2	2	.04	2.9	2	.02
4	66	3	.53	7.9	2	.04	2.6	2	.01
5	71	3	.58	7.3	2	.04	2.4	2	.01
6	69	3	.56	7.0	2	.04	2.4	2	.01
7	66	4	.71	6.4	2	.03	2.4	2	.01
8	62	3	.50	6.1	1	.02	2.4	2	.01
9	61	3	.49	5.8	1	.02	2.2	2	.01
10	57	3	.46	5.5	1	.01	3.2	2	.02
11	57	3	.46	5.5	1	.01	2.9	2	.02
12	52	3	.42	5.2	1	.01	2.4	2	.01
13	45	2	.24	4.9	1	.01	2.2	2	.01
14	40	2	.22	4.6	1	.01	1.9	2	.01
15	36	2	.19	4.4	1	.01	1.9	2	.01
16	34	2	.18	4.2	1	.01	1.9	2	.01
17	32	3	.26	4.2	1	.01	1.9	2	.01
18	30	4	.32	7.0	5	.09	1.9	2	.01
19	28	3	.23	8.2	5	.11	1.9	1	.01
20	27	2	.15	6.1	3	.05	1.7	1	0
21	24	2	.13	8.5	6	.14	1.6	1	0
22	22	2	.12	6.1	2	.03	1.6	1	0
23	20	2	.11	4.9	2	.03	1.6	1	0
24	17	2	.09	4.6	2	.02	1.6	1	0
25	17	2	.09	4.2	2	.02	1.4	1	0
26	16	1	.04	3.9	2	.02	1.4	1	0
27	15	1	.04	3.9	2	.02	1.4	1	0
28	14	1	.04	3.6	2	.02	1.4	1	0
29	13	1	.04	3.4	2	.02	1.4	1	0
30	12	1	.03	3.2	2	.02	1.2	1	0
31	11	1	.03	3.2	2	.02	---	---	---
MONTH	1215	---	8.89	176.8	---	1.02	61.8	---	.24
YEAR	10195.4		1148.86						

PYRAMID AND WINNEMUCCA LAKES BASIN

69

10336698 THIRD CREEK NEAR CRYSTAL BAY, NEV.

LOCATION.--Lat 39°14'26", long 119°56'41", in SW¼ NE¼ sec.22, T.16 N., R.18 E., Washoe County, on right bank 50 ft (15 m) upstream from culvert on Lakeshore Boulevard, 600 ft (180 m) upstream from mouth, and 3 mi (5 km) east of Crystal Bay.

DRAINAGE AREA.--5.81 mi² (15.0 km²), revised.

PERIOD OF RECORD.--October 1969 to September 1973. February to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 6,234.03 ft (1,900.132 m) above mean sea level, datum of 1929.

EXTREMES.--Maximum discharge during period February to September 1975, 80 ft³/s (2.27 m³/s) June 16 (gage height, 3.04 ft or 0.927 m); maximum gage height, 3.29 ft (1.00 m) Feb. 22 (backwater from ice); minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Mar. 22.
Period of record: Maximum discharge, 110 ft³/s (3.12 m³/s) June 26, 1971 (gage height, 3.17 ft or 0.966 m); maximum gage height, 3.77 ft (1.149 m) Jan. 23, 1973 (backwater from ice); minimum discharge, 0.65 ft³/s (0.018 m³/s) Sept. 18, 1972.

REMARKS.--Records good. One transmountain diversion to Washoe Valley.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					4.0	4.6	5.8	11	44	31	5.1	2.9
2					4.0	4.4	5.1	11	47	31	5.1	2.5
3					4.2	4.2	4.9	11	47	28	5.1	2.2
4					3.5	4.2	5.2	9.3	44	21	4.9	2.0
5					3.3	4.0	5.5	7.9	47	27	4.6	2.0
6					3.3	4.0	5.0	9.3	60	24	4.6	2.2
7					3.3	4.0	5.2	11	48	21	4.4	2.3
8					3.5	4.9	5.3	15	41	20	4.2	2.3
9					4.0	3.8	5.1	16	39	19	4.2	2.5
10					3.7	3.5	4.9	17	37	18	4.2	4.6
11					3.5	3.5	4.9	18	39	17	4.2	3.5
12					3.3	3.5	4.9	20	44	16	4.0	3.1
13					3.6	3.5	5.8	22	45	14	4.0	2.9
14					3.4	4.0	5.3	23	48	13	4.0	2.9
15					3.2	3.5	5.3	21	58	12	4.0	2.9
16					3.1	3.5	5.3	20	62	11	4.0	2.7
17					2.9	3.5	5.4	24	53	9.6	4.0	2.5
18					2.8	3.8	5.6	27	40	9.0	5.8	2.3
19					2.9	3.8	5.6	37	33	7.6	6.1	2.3
20					3.1	3.5	6.6	24	31	7.1	6.1	2.2
21					3.5	4.0	8.6	18	33	6.9	6.1	2.2
22					2.8	5.0	9.3	17	34	6.6	5.8	2.2
23					2.7	5.5	8.2	21	36	6.1	4.9	2.2
24					2.9	5.1	7.6	26	34	6.1	4.9	2.2
25					3.3	6.3	7.4	27	28	6.3	4.9	2.2
26					3.3	5.5	6.9	28	24	6.1	4.6	2.2
27					4.0	5.0	7.1	28	25	5.6	4.4	2.3
28					4.4	5.0	8.6	28	28	5.3	4.2	2.7
29					---	5.8	10	28	33	5.3	3.5	2.7
30					---	6.1	10	32	32	5.3	3.3	2.9
31					---	5.8	---	36	---	5.3	2.9	---
TOTAL					95.5	136.8	190.4	643.5	1214	421.2	142.1	76.6
MEAN					3.41	4.41	6.35	20.8	40.5	13.6	4.58	2.55
MAX					4.4	6.3	10	37	62	31	6.1	4.6
MIN					2.7	3.5	4.9	7.9	24	5.3	2.9	2.0
AC-FT					189	271	378	1280	2410	835	282	152

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-19	0300	2.68	37	6-16	2130	3.04	80
6-6	1830	2.99	69				

PYRAMID AND WINNEMUCCA LAKES BASIN

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NEV.

LOCATION.--Lat 39°14'25", long 119°56'38", in SW¼NE¼ sec.22, T.16 N., R.18 E., Washoe County, on right bank 500 ft (150 m) upstream from culvert on Lakeshore Boulevard, 1,000 ft (300 m) upstream from mouth, just below confluence with major tributary, and 3 mi (5 km) east of Crystal Bay.

DRAINAGE AREA.--7.0 mi² (18.1 km²).

PERIOD OF RECORD.--October 1966 to September 1975 (discontinued), low-flow partial-record site only, October 1966 to September 1969, October 1973 to February 1975.

GAGE.--Water-stage recorder. Datum of gage is 6,246.90 ft (1,904.055 m) above mean sea level.

EXTREMES.--Maximum discharge during period March to September 1975, 64 ft³/s (1.81 m³/s) May 14 (gage height, 2.49 ft or 0.759 m); maximum gage height, 3.18 ft (0.969 m) Dec. 7 (backwater from ice); minimum discharge, 2.1 ft³/s (0.059 m³/s) Sept. 21.

Period of continuous record: Maximum discharge, 87 ft³/s (2.46 m³/s) Jan. 21, 1970 (gage height, 2.60 ft or 0.792 m); maximum gage height, 3.42 ft (1.042 m) Dec. 7, 1972 (backwater from ice); minimum discharge, 1.5 ft³/s (0.042 m³/s) Aug. 11-13, 1972.

REMARKS.--Records good. No diversion above station. Possibly some light pumping or manipulation of water for construction.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						5.0	5.2	14	34	14	6.2	5.6
2						4.9	5.2	18	35	13	6.2	4.9
3						4.8	5.2	16	33	13	6.2	5.2
4						4.6	5.2	11	33	12	5.9	5.2
5						4.5	4.9	9.0	34	12	5.6	4.9
6						4.5	4.6	9.4	35	11	5.9	5.2
7						4.7	4.3	14	33	11	5.9	5.2
8						5.2	4.0	18	32	11	5.6	5.2
9						4.7	4.6	22	29	10	5.6	5.2
10						4.2	4.3	25	28	10	5.2	8.7
11						4.0	3.7	26	27	9.4	5.6	5.6
12						4.0	4.9	27	27	9.0	5.2	4.9
13						4.0	6.6	30	26	8.7	5.6	5.2
14						4.5	6.6	36	26	8.7	5.9	4.9
15						4.1	5.6	28	26	9.0	5.6	4.9
16						4.4	5.9	28	25	8.7	5.2	4.9
17						4.0	5.9	32	23	8.7	5.2	4.9
18						4.9	6.6	35	22	8.4	12	5.2
19						5.2	6.6	33	20	8.0	11	4.9
20						4.3	7.0	25	19	7.6	8.4	4.9
21						4.2	9.8	20	18	7.6	11	4.6
22						4.5	12	23	18	7.6	7.6	4.6
23						4.2	9.8	26	17	7.6	7.0	4.6
24						4.5	9.0	29	18	7.3	6.6	4.6
25						6.2	7.6	29	18	7.0	6.2	4.3
26						6.2	7.0	29	16	7.0	6.2	4.3
27						6.2	8.0	30	16	6.6	5.9	4.3
28						4.9	10	30	15	6.6	5.9	4.3
29						5.2	12	30	14	6.6	5.6	4.0
30						4.9	12	30	14	7.0	5.6	4.0
31						5.2	---	33	---	6.6	4.9	---
TOTAL						146.7	204.1	765.4	731	280.7	200.5	149.2
MEAN						4.73	6.80	24.7	24.4	9.05	6.47	4.97
MAX						6.2	12	36	35	14	12	8.7
MIN						4.0	3.7	9.0	14	6.6	4.9	4.0
AC-FT						291	405	1520	1450	557	398	296

Peak discharge (base, 30 ft³/s).--May 14 (1830) 64 ft³/s (2.49 ft); Aug. 18 (1845) 34 ft³/s (2.21 ft).

Discharge measurements, in ft³/s, made during period of operation as low-flow partial-record site, not previously published:

Oct. 10, 1973..... 4.02
Dec. 29..... 14.7
July 2, 1974..... 7.27

PYRAMID AND WINNEMUCCA LAKES BASIN

71

10336710 MARLETTE LAKE NEAR CARSON CITY, NEV.

LOCATION.--Lat 39°10'22", long 119°54'15", in SW¼SE¼ sec.12, T.15 N., R.18 E., Washoe County, on west shore about 1,000 ft (305 m) upstream from left side of dam, and 7.5 mi (12.1 km) west of Carson City.

DRAINAGE AREA.--2.91 mi² (7.54 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (spillway elevation furnished in written communication from Walter Reid, 1971).

EXTREMES.--Current year: Maximum contents, 11,670 acre-ft (14.4 hm³) Aug. 24-29, Sept. 11-30 (elevation, 7,837.7 ft or 2,388.93 m); minimum, 11,300 acre-ft (13.9 hm³) Jan. 28-31 (elevation, 7,836.7 ft or 2,388.63 m).

Period of record: Maximum contents, 11,710 acre-ft (14.4 hm³) on many days May to August 1974 (elevation, 7,837.8 ft or 2,388.96 m); minimum, 11,180 acre-ft (13.8 hm³) Nov. 11, 1973 (elevation, 7,836.4 ft or 2,388.53 m).

REMARKS.--Lake is formed by earthfill dam across the outlet of a small natural lake (at one time called Goodwin Lake) on Marlette Creek, built in 1873 to provide water for fluming lumber from Spooner Summit to Carson City. The dam was built higher in 1876 and used to divert water by flume and siphon to Virginia City, until the flume was abandoned prior to 1963. The dam was raised to its present elevation in 1959. Present capacity, 11,780 acre-ft (14.5 hm³) at spillway elevation 7,838.0 ft (2,389.02 m). Figures given herein represent total contents. Stored water is used for spawning fish for Pyramid and Walker Lakes and in dry years is pumped over the mountain to the Hobart system for municipal and domestic use outside the basin in Virginia City and Carson City. Lake freezes over in winter.

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

7,836	11,030	7,838	11,780
7,837	11,410		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	11410	11370	11330	11370	11410	11330	11520	11590	11590	11630
2	---	---	11450	11370	11330	11370	11370	11330	11520	11590	11590	11630
3	---	---	11480	11330	11330	11330	11370	11330	11550	11590	11590	11630
4	---	---	11480	11370	11370	11330	11410	11330	11550	11590	11590	11630
5	---	---	11480	11370	11370	11330	11410	11330	11550	11590	11590	11630
6	---	11550	11480	11370	11370	11330	11410	11330	11590	11590	11590	11630
7	---	11550	11520	11370	11370	11370	11410	11330	11590	11550	11550	11630
8	---	11550	11520	11450	11370	11330	11410	11330	11590	11550	11550	11630
9	---	11520	11520	11410	11450	11330	11410	11330	11630	11590	11590	11630
10	---	11520	11520	11410	11450	11330	11410	11330	11630	11590	11590	11630
11	---	11520	11520	11410	11450	11330	11410	11330	11630	11590	11590	11670
12	---	11520	11520	11410	11450	11330	11410	11330	11630	11590	11590	11670
13	---	11520	11520	11410	11480	11370	11410	11330	11630	11590	11590	11670
14	---	11480	11520	11410	11450	11370	11410	11330	11630	11590	11590	11670
15	---	11480	11520	11410	11450	11370	11370	11330	11630	11590	11590	11670
16	---	11480	11480	11410	11450	11370	11370	11330	11630	11590	11590	11670
17	---	11480	11520	11370	11450	11370	11370	11370	11630	11590	11590	11670
18	---	11480	11480	11370	11450	11370	11370	11370	11630	11590	11590	11670
19	---	11480	11480	11370	11450	11370	11370	11370	11630	11590	11630	11670
20	---	11450	11480	11370	11450	11330	11370	11410	11630	11590	11630	11670
21	---	11480	11480	11370	11410	11410	11370	11410	11630	11590	11630	11670
22	---	11480	11450	11330	11410	11410	11330	11410	11630	11630	11630	11670
23	---	11480	11410	11330	11410	11410	11330	11410	11630	11630	11630	11670
24	---	11450	11410	11330	11410	11410	11370	11410	11630	11630	11670	11670
25	---	11450	11410	11330	11410	11450	11370	11410	11630	11630	11670	11670
26	---	11450	11410	11330	11370	11410	11370	11410	11630	11630	11670	11670
27	---	11450	11410	11330	11370	11410	11370	11410	11630	11630	11670	11670
28	---	11450	11410	11300	11370	11410	11370	11450	11590	11630	11670	11670
29	---	11450	11370	11300	---	11410	11370	11450	11590	11630	11670	11670
30	---	11410	11370	11300	---	11410	11370	11480	11590	11590	11630	11670
31	11550	---	11370	11300	---	11410	---	11480	---	11590	11630	---
MAX	---	---	11520	11450	11480	11450	11410	11480	11630	11630	11670	11670
MIN	---	---	11370	11300	11330	11330	11330	11330	11520	11550	11550	11630
(a)	--	7,837.0	7,836.9	7,836.7	7,836.9	7,837.0	7,836.9	7,837.2	7,837.5	7,837.5	7,837.6	7,837.7
(b)	0	-140	-40	-70	+70	+40	-40	+110	+110	0	+40	+40

CAL YR 1974 b +40

WTR YR 1975 b +120

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

PYRAMID AND WINNEMUCCA LAKES BASIN

10336715 MARLETTE CREEK NEAR CARSON CITY, NEV.

LOCATION.--Lat 39°10'20", long 119°54'25", in SE¼SW¼ sec.12, T.15 N., R.18 E., Washoe County, on left bank about 300 ft (90 m) below dam on Marlette Lake, 0.7 mi (1.1 km) upstream from Marlette Reservoir, and 7 mi (11 km) west of Carson City.

DRAINAGE AREA.--2.91 mi² (7.54 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,760 ft (2,365 m), from topographic map.

EXTREMES.--Current year: Maximum daily discharge, 8.5 ft³/s (0.24 m³/s) June 8-10; no flow July 12-15.

Period of record: Maximum daily discharge, 8.5 ft³/s (0.24 m³/s) June 8-10, 1975; no flow July 12-15, 1975.

REMARKS.--Records good. Flow regulated by Marlette Lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	4.2	.04	4.3	4.9	5.7	5.3	5.1	5.0	5.0	.03	.02
2	.06	4.2	.03	4.2	4.9	5.7	5.3	5.1	5.0	5.0	.03	.02
3	.06	4.2	.03	4.2	4.9	5.7	5.3	5.1	5.0	4.9	.03	.02
4	.06	4.2	.03	4.2	4.9	5.7	5.3	5.1	5.0	4.9	.03	.02
5	.07	4.1	.03	4.2	4.8	5.7	5.3	5.1	5.0	5.0	.03	.02
6	.07	4.1	.03	4.2	4.9	5.7	5.3	5.1	5.0	4.9	.03	.02
7	.07	4.1	.03	4.3	4.9	5.7	5.3	5.1	7.1	3.7	.03	.02
8	.07	4.1	.03	4.3	4.9	5.7	5.3	5.1	8.5	.02	.03	.02
9	.07	4.2	.03	4.3	5.0	5.7	5.3	5.1	8.5	.01	.03	.02
10	.06	4.2	.03	4.3	5.0	5.7	5.3	5.1	8.5	.01	.03	.02
11	.06	4.1	.03	4.3	5.2	5.7	5.3	5.1	6.9	.01	.03	.02
12	.06	4.0	.03	4.3	5.2	5.7	5.3	5.1	4.9	0	.03	.02
13	.06	4.0	2.3	4.3	5.2	5.7	5.3	5.0	4.9	0	.03	.02
14	.06	4.0	4.5	4.3	5.2	5.7	5.3	5.0	4.9	0	.03	.02
15	.06	4.0	4.5	4.3	5.2	5.7	5.3	5.0	4.9	0	.03	.02
16	.06	4.0	4.5	4.2	5.4	5.7	5.3	5.0	4.9	.01	.03	.02
17	.06	4.0	4.5	4.2	5.4	5.7	5.3	5.0	4.9	.01	.02	.02
18	.06	4.0	4.5	4.2	5.4	5.7	5.3	5.0	4.9	.02	.02	.02
19	.06	4.0	4.4	4.3	5.4	5.7	5.3	5.0	4.9	.02	.02	.02
20	.07	4.0	4.5	4.4	5.5	5.7	5.3	5.0	4.9	.03	.02	.02
21	.07	4.0	4.5	4.4	5.6	5.6	5.3	5.0	4.9	.03	.02	.02
22	.07	4.0	4.5	4.5	5.6	5.5	5.3	5.0	4.9	.03	.02	.02
23	.07	4.0	4.5	4.6	5.6	5.5	5.3	5.0	4.9	.03	.02	.02
24	.08	4.0	4.5	4.6	5.5	5.5	5.3	5.0	4.9	.03	.02	.02
25	.08	4.0	4.5	4.6	5.5	5.5	5.3	5.0	4.9	.04	.02	.02
26	.08	4.0	4.4	4.6	5.5	5.5	5.3	5.0	4.9	.04	.02	.02
27	.09	4.0	4.4	4.7	5.6	5.5	5.3	5.0	4.9	.04	.02	.02
28	.09	4.0	4.4	4.7	5.7	5.5	5.3	5.0	4.9	.04	.02	.02
29	.09	4.0	4.5	4.7	---	5.5	5.3	5.0	4.9	.03	.02	.02
30	2.5	2.4	4.5	4.7	---	5.5	5.3	5.0	5.0	.03	.02	.02
31	4.2	---	4.3	4.7	---	5.5	---	5.0	---	.03	.02	---
TOTAL	8.68	120.1	83.07	136.1	146.8	174.6	159.0	156.2	162.7	33.91	.78	.60
MEAN	.28	4.00	2.68	4.39	5.24	5.63	5.30	5.04	5.42	1.09	.025	.020
MAX	4.2	4.2	4.5	4.7	5.7	5.7	5.3	5.1	8.5	5.0	.03	.02
MIN	.06	2.4	.03	4.2	4.8	5.5	5.3	5.0	4.9	0	.02	.02
AC-FT	17	238	165	270	291	346	315	310	323	67	1.5	1.2

CAL YR 1974 TOTAL 886.27 MEAN 2.43 MAX 7.0 MIN .03 AC-FT 1760
WTR YR 1975 TOTAL 1182.54 MEAN 3.24 MAX 8.5 MIN 0 AC-FT 2350

NOTE.--No gage-height record May 22 to July 2.

10336730 GLENBROOK CREEK AT GLENBROOK, NEV.

LOCATION.--Lat 39°05'15", long 119°56'20", in SW¼NE¼SE¼ sec.10, T.14 N., R.18 E., Douglas County, on left bank 50 ft (15 m) upstream from culvert at gas station, 100 ft (30 m) upstream from mouth at Glenbrook.

DRAINAGE AREA.--4.07 mi² (10.54 km²).

PERIOD OF RECORD.--October 1971 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (1,902 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 25 ft³/s (0.71 m³/s) May 14 (gage height, 2.32 ft or 0.707 m); minimum, 0.36 ft³/s (0.010 m³/s) Oct. 1.

Period of record: Maximum discharge, 25 ft³/s (0.71 m³/s) May 14, 1975 (gage height, 2.32 ft or 0.707 m); minimum, 0.09 ft³/s (0.003 m³/s) July 18, 1972, Aug. 16, 17, 1973.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	1.5	1.2	1.0	.84	2.2	2.0	4.6	13	2.2	1.0	.75
2	.58	1.1	1.1	1.0	.94	2.0	1.6	5.6	11	2.1	1.0	.75
3	.51	1.1	1.3	1.0	.75	2.0	1.8	5.8	9.8	2.0	.94	.66
4	.51	1.1	1.4	1.0	.75	2.0	1.6	4.1	8.9	1.8	.94	.66
5	.51	1.0	1.1	1.0	1.0	1.8	1.5	3.7	8.7	1.8	.84	.66
6	.58	1.0	1.1	1.6	1.0	1.6	1.4	4.2	8.3	1.6	.84	.66
7	.58	1.1	1.1	1.2	1.0	1.5	1.2	4.2	7.6	1.6	.84	.66
8	.84	1.2	1.1	1.1	1.2	1.4	1.4	4.8	6.8	1.6	.84	.66
9	.84	1.2	1.1	1.0	1.2	1.4	1.4	6.2	5.8	1.5	.84	.66
10	.75	1.1	.94	1.0	1.4	1.5	1.6	8.1	5.4	1.6	.84	1.4
11	.66	1.1	.84	1.0	1.2	1.5	1.6	10	5.0	1.6	.84	.94
12	.66	1.1	.94	.84	1.2	1.5	1.6	12	4.8	1.5	.84	.75
13	.66	1.1	.94	.84	1.4	1.6	2.1	13	4.4	1.4	.84	.75
14	.66	1.1	.94	.84	1.4	1.4	2.2	18	4.1	1.4	.84	.84
15	.66	1.1	.94	.84	1.2	1.1	2.0	16	3.9	1.5	.84	.84
16	.66	1.1	.94	.94	1.2	1.1	1.6	14	3.5	1.6	.84	.84
17	.66	1.0	.94	.94	1.1	1.0	1.6	16	3.3	1.5	.84	.75
18	.75	.94	.94	.94	1.0	1.2	2.0	18	3.3	1.5	1.4	.75
19	.84	.94	1.0	.94	.94	1.5	2.1	18	3.2	1.2	2.0	.75
20	.84	.94	1.0	.94	1.0	1.5	2.2	14	3.0	1.2	1.5	.66
21	.84	1.5	.84	.94	1.0	1.4	3.5	9.8	3.0	1.2	2.1	.58
22	.94	1.2	.66	.84	1.1	1.4	3.5	9.8	3.0	1.1	1.2	.58
23	1.0	1.0	.58	.75	1.0	1.4	3.3	11	2.8	1.1	1.1	.58
24	1.0	1.0	.66	.75	1.1	1.4	4.1	13	3.2	1.0	1.0	.58
25	1.0	1.2	.84	.75	1.4	3.7	4.4	13	3.2	1.0	.94	.58
26	1.0	1.2	.84	.75	1.5	2.1	2.6	13	3.0	.94	.94	.58
27	1.1	1.2	.94	.66	1.8	1.8	3.0	13	2.6	.94	.84	.58
28	1.8	1.2	.94	.75	2.2	1.5	3.7	12	2.4	.84	.84	.58
29	.94	1.2	.94	.84	---	1.5	4.2	12	2.2	.84	.84	.58
30	1.0	1.2	1.0	.75	---	2.0	4.2	12	2.1	.94	.84	.58
31	1.2	---	1.0	.75	---	2.4	---	13	---	1.0	.75	---
TOTAL	25.02	33.72	30.10	28.49	32.82	51.4	71.0	331.9	151.3	43.10	31.09	21.19
MEAN	.81	1.12	.97	.92	1.17	1.66	2.37	10.7	5.04	1.39	1.00	.71
MAX	1.8	1.5	1.4	1.6	2.2	3.7	4.4	18	13	2.2	2.1	1.4
MIN	.45	.94	.58	.66	.75	1.0	1.2	3.7	2.1	.84	.75	.58
AC-FT	50	67	60	57	65	102	141	658	300	85	62	42
CAL YR 1974	TOTAL 581.52	MEAN 1.59	MAX 7.6	MIN .21	AC-FT 1150							
WTR YR 1975	TOTAL 851.13	MEAN 2.33	MAX 18	MIN .45	AC-FT 1690							

Peak discharge (base, 5.0 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
3-25	0600	1.47	5.2	5-2	1730	1.59	7.4
4-24	1730	1.47	5.2	5-14	2000	2.32	25

PYRAMID AND WINNEMUCCA LAKES BASIN

10336780 TROUT CREEK NEAR TAHOE VALLEY, CALIF.

LOCATION.--Lat 38°55'12", long 119°58'17", in NW¼SE¼ sec.3, T.12 N., R.18 E., El Dorado County, on left bank 5 ft (1.52 m) upstream from Martin Avenue Bridge, 500 ft (152 m) upstream from Heavenly Valley Creek, and 1.8 mi (2.9 km) east of Tahoe Valley.

DRAINAGE AREA.--36.7 mi² (95.05 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,250 ft (1,905 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 38.1 ft³/s (1.079 m³/s), 27,600 acre-ft/yr (34.0 hm³/s).

EXTREMES.--Current year: Maximum discharge, 202 ft³/s (5.72 m³/s) June 7 (gage height, 8.88 ft or 2.707 m); minimum daily, 14 ft³/s (0.396 m³/s) on several days during December to March.

Period of record: Maximum discharge, 535 ft³/s (15.2 m³/s) Feb. 1, 1963 (gage height, 11.14 ft or 3.395 m), from rating curve extended above 250 ft³/s (7.08 m³/s) on basis of computation of peak flow (weir formula); no flow for part of Sept. 11, 1966.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	24	18	14	14	21	27	34	164	88	35	24
2	16	22	19	14	16	20	25	42	164	85	34	23
3	16	21	21	14	18	19	20	46	163	82	33	24
4	16	19	23	16	17	20	20	37	165	81	32	28
5	16	18	18	16	18	20	16	34	169	80	31	22
6	16	18	19	20	18	19	27	36	178	79	30	21
7	16	19	18	22	18	19	23	42	182	77	29	21
8	18	19	17	18	18	19	21	52	176	76	28	21
9	18	17	18	18	18	18	29	59	172	74	28	24
10	17	17	19	18	17	18	23	71	166	72	28	27
11	16	17	20	17	17	18	19	81	167	70	28	26
12	16	17	19	17	17	18	19	84	172	71	27	24
13	16	18	17	17	17	18	21	91	172	75	27	24
14	15	18	18	16	17	18	22	105	175	62	27	25
15	15	18	17	17	17	17	21	110	178	60	26	23
16	15	17	17	16	17	16	21	97	176	59	31	22
17	15	16	16	16	17	18	24	106	169	57	26	21
18	15	17	15	16	17	17	20	116	156	54	43	21
19	15	16	16	17	17	18	21	128	143	52	39	21
20	16	16	17	17	17	18	22	125	133	52	32	21
21	19	18	16	17	17	14	26	91	130	51	34	20
22	20	17	14	17	17	22	27	82	126	47	32	20
23	20	18	14	17	17	27	27	94	123	45	29	19
24	20	20	14	17	17	21	30	110	124	43	28	18
25	20	19	17	17	18	30	29	123	116	42	28	18
26	19	18	16	16	19	29	27	122	107	40	26	19
27	19	18	16	15	19	35	26	132	102	38	28	18
28	23	16	15	15	19	34	30	131	97	38	33	18
29	24	16	15	15	-----	34	32	134	100	37	34	19
30	23	18	14	15	-----	22	33	137	97	37	24	18
31	25	-----	14	15	-----	23	-----	150	-----	36	23	-----
TOTAL	551	542	527	512	485	660	728	2,802	4,462	1,860	933	650
MEAN	17.8	18.1	17.0	16.5	17.3	21.3	24.3	90.4	149	60.0	30.1	21.7
MAX	25	24	23	22	19	35	33	150	182	88	43	28
MIN	15	16	14	14	14	14	16	34	97	36	23	18
AC-FT	1,090	1,080	1,050	1,020	962	1,310	1,440	5,560	8,850	3,690	1,850	1,290

CAL YR 1974 TOTAL 16,109 MEAN 44.1 MAX 155 MIN 14 AC-FT 31,950
WTR YR 1975 TOTAL 14,712 MEAN 40.3 MAX 182 MIN 14 AC-FT 29,180

Peak discharge (base, 100 ft³/s).--May 19 (0300) 152 ft³/s (8.21 ft); June 7 (0215) 202 ft³/s (8.88 ft).

10337000 LAKE TAHOE AT TAHOE CITY, CALIF.

LOCATION (revised).--Lat 39°10'51", long 120°07'06", in NE¼SE¼ sec.5, T.15 N., R.17 E., Placer County, on U.S. Coast Guard pier at Lake Forest, and 1.8 mi (2.9 km) northeast of Lake Tahoe outlet dam on Truckee River at Tahoe City.

DRAINAGE AREA.--505 mi² (1,308 km²), at lake outlet.

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

GAGE.--Water-stage recorder. Datum of gage is 6,220.00 ft (1,895.856 m) above mean sea level, datum of Bureau of Reclamation, 6,218.86 ft (1,895.508 m), supplementary adjustment of 1959. Prior to Oct. 1, 1957, non-recording gages at several sites near outlet of lake at same datum. Oct. 1, 1957, to May 8, 1958, water-stage recorder on left wingwall of dam at outlet of lake at same datum. May 9, 1958, to Sept. 30, 1968, water-stage recorder on pier, 1,000 ft (300 m) east of dam at lake outlet.

EXTREMES.--Current year: Maximum elevation, 6,228.60 ft (1,898.477 m) July 11, 15-17; minimum, 6,226.77 ft (1,897.919 m) Jan. 30.

Period of record: Maximum elevation, 6,231.26 ft (1,899.288 m) July 14, 15, 17, 18, 1907; minimum, 6,221.74 ft (1,896.386 m) Dec. 26, 1934.

REMARKS.--Lake levels regulated by a 17-gate concrete dam at outlet of lake; storage began about 1874. Monthly figures given herein represent usable contents. Usable capacity, 744,600 acre-ft (918 hm³) between elevations 6,223 ft (1,896.8 m), natural rim of lake and 6,229.1 ft (1,898.63 m), maximum permissible elevation by Federal Court decree. Water is used for domestic and recreational purposes in Lake Tahoe area and for irrigation and power in downstream areas. Lake elevations are referred to Bureau of Reclamation datum because that datum is used as the official reference point by all local, State, and Federal agencies. Some flow is diverted from Third Creek into Ophir Creek, stored in Price Lakes and used for irrigation. There are two intermittent transmountain diversions, one from Echo Lake to South Fork American River for power and irrigation and the other (by pumping, in dry years) from Marlette Lake to Hobart Creek for municipal supply to Virginia City and Carson City. Intermittent pumping of effluent from Lake Tahoe basin by Douglas County Sewer Improvement District No. 1 occurred February 1969 to November 1971.

REVISIONS.--WRD 1967: Drainage area.

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

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

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.73	7.33	7.03	6.80	6.86	7.19	7.58	7.53	7.95	8.54	8.46	8.11
2	7.72	7.32	7.03	6.78	6.90	7.18	7.53	7.50	7.97	8.53	8.45	8.02
3	7.69	7.29	7.09	6.78	6.90	7.18	7.53	7.52	8.00	8.52	8.44	8.03
4	7.68	7.27	7.13	6.78	6.93	7.17	7.56	7.54	8.03	8.55	8.44	8.00
5	7.66	7.27	7.09	6.80	6.94	7.18	7.62	7.53	8.07	8.56	8.40	8.01
6	7.62	7.26	7.09	6.85	6.94	7.18	7.62	7.52	8.09	8.56	8.42	7.99
7	7.62	7.27	7.09	6.88	6.95	7.27	7.62	7.51	8.12	8.56	8.36	7.98
8	7.58	7.23	7.06	6.94	6.97	7.27	7.61	7.50	8.14	8.57	---	7.98
9	7.58	7.23	7.04	6.93	7.13	7.26	7.61	7.52	8.17	8.59	---	7.99
10	7.56	7.22	7.05	6.93	7.14	7.27	7.61	7.50	8.20	8.59	---	8.02
11	7.55	7.21	7.03	6.92	7.13	7.26	7.60	7.50	8.22	8.60	8.32	8.03
12	7.51	7.21	7.03	6.91	7.13	7.23	7.59	7.51	8.26	8.59	8.30	8.00
13	7.49	7.19	7.02	6.91	7.23	7.32	7.54	7.52	8.31	8.59	8.29	8.01
14	7.49	7.18	7.02	6.90	7.23	7.31	7.57	7.54	8.33	8.59	8.29	8.01
15	7.47	7.18	7.01	6.89	7.21	7.27	7.58	7.56	8.34	8.60	8.27	8.00
16	7.47	7.16	7.00	6.88	7.21	7.35	7.58	7.57	8.38	8.60	8.28	7.98
17	7.45	7.14	6.97	6.89	7.20	7.31	7.57	7.58	8.37	8.60	8.22	7.98
18	7.45	7.14	6.97	6.88	7.20	7.31	7.56	7.58	8.40	8.59	8.26	7.97
19	7.44	7.12	6.96	6.88	7.22	7.34	7.55	7.61	8.42	8.58	8.26	7.97
20	7.44	7.10	6.95	6.88	7.22	7.31	7.55	7.64	8.42	8.59	8.33	7.96
21	7.42	7.19	6.92	6.86	7.20	7.48	7.53	7.66	8.44	8.58	8.27	7.95
22	7.40	7.16	6.92	6.87	7.20	7.49	7.49	7.67	8.49	8.58	8.27	7.92
23	7.39	7.14	6.90	6.87	7.20	7.49	7.51	7.68	8.51	8.58	8.25	7.91
24	7.37	7.14	6.87	6.87	7.19	7.56	7.56	7.70	8.52	8.58	8.23	7.90
25	7.37	7.13	6.86	6.85	7.20	7.61	7.57	7.72	8.50	8.58	8.23	7.89
26	7.35	7.11	6.84	6.83	7.20	7.60	7.57	7.75	8.50	8.58	8.19	7.88
27	7.34	7.09	6.87	6.82	7.19	7.59	7.56	7.78	8.49	8.57	8.21	7.87
28	7.38	7.08	6.89	6.80	7.19	7.56	7.55	7.83	8.50	8.58	8.14	7.86
29	7.34	7.06	6.86	6.79	---	7.56	7.55	7.85	8.53	8.58	8.13	7.84
30	7.35	7.05	6.84	6.77	---	7.57	7.54	7.88	8.54	8.53	8.12	7.84
31	7.34	---	6.81	6.82	---	7.58	---	7.92	---	8.51	8.09	---
MEAN	7.49	7.18	6.98	6.86	7.11	7.36	7.57	7.62	8.31	8.57	---	7.96
MAX	7.73	7.33	7.13	6.94	7.23	7.61	7.62	7.92	8.54	8.60	---	8.11
MIN	7.34	7.05	6.81	6.77	6.86	7.17	7.49	7.50	7.95	8.51	---	7.84
(a)	6,227.34	6,227.05	6,226.81	6,226.82	6,227.19	6,227.58	6,227.54	6,227.92	6,228.54	6,228.51	6,228.09	6,227.84
(b)	-49,000	-35,600	-29,300	+1,200	+45,300	+47,700	-4,900	+46,600	+76,200	-3,700	-51,600	-30,700

CAL YR 1974 b -101,600

WTR YR 1975 b +12,200

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

NOTE.--Add 6,220 ft to obtain elevation above mean sea level, Bureau of Reclamation datum, at 2400 hours.

LOCATION (revised).--Lat 39°09'59", long 120°08'36", in NE¼NW¼ sec.7, T.15 N., R.17 E., Placer County, on left bank 510 ft (155 m) downstream from dam at outlet of Lake Tahoe at Tahoe City.

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

AVERAGE DISCHARGE (unadjusted).--75 years (1900-75), 249 ft³/s (7.052 m³/s), 180,400 acre-ft/yr (222 hm³/yr).

REMARKS.--Records excellent. Flow regulated by Lake Tahoe, operating capacity, 744,600 acre-ft (918 hm³).

REVISIONS.--WSP 2127: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	284	276	338	309	187	201	601	625	144	307	435
2	188	298	278	290	314	183	202	604	625	144	307	430
3	140	296	280	138	309	213	204	604	625	144	307	433
4	112	294	278	138	312	250	234	601	628	144	307	428
5	70	294	276	137	312	248	260	745	628	141	307	428
6	34	329	276	138	312	248	258	882	631	144	307	428
7	22	357	276	142	167	252	278	906	631	144	323	428
8	20	357	276	143	62	254	292	930	622	144	369	425
9	19	357	274	142	63	252	334	930	448	144	364	425
10	18	355	276	215	63	252	376	934	301	144	364	399
11	97	355	288	276	63	252	446	934	298	144	428	362
12	160	355	301	276	64	252	495	934	298	144	430	323
13	161	355	314	274	64	252	538	938	298	144	430	323
14	160	357	325	274	63	254	592	938	296	146	430	323
15	160	355	325	274	63	256	607	938	296	146	428	323
16	160	355	325	274	63	256	607	938	251	146	428	323
17	160	355	325	276	64	256	607	942	137	146	428	266
18	160	355	325	276	64	256	607	942	148	146	428	221
19	160	355	323	276	65	256	607	946	149	148	428	221
20	160	352	323	276	65	254	604	946	148	148	428	221
21	160	355	323	278	65	256	604	946	148	164	428	215
22	202	343	320	278	65	258	604	766	148	197	428	213
23	268	329	334	278	65	258	604	607	148	197	428	213
24	266	329	343	296	66	260	604	616	148	197	428	215
25	266	327	343	312	66	202	607	613	146	199	428	215
26	266	309	340	312	97	120	604	613	146	199	428	215
27	266	288	343	314	124	120	601	616	146	199	428	215
28	268	278	345	312	170	135	601	616	144	199	428	213
29	266	278	343	309	---	150	601	619	144	187	430	213
30	266	278	340	309	---	150	601	622	144	208	435	143
31	266	---	340	307	---	180	---	622	---	272	435	---
TOTAL	5151	9884	9654	7878	3579	6972	14380	24389	9545	5116	12272	9235
MEAN	166	329	311	254	128	225	479	787	318	165	396	308
MAX	268	357	345	338	314	260	607	946	631	272	435	435
MIN	18	278	274	137	62	120	201	601	137	144	307	143
AC-FT	10220	19600	19150	15630	7100	13830	28520	48380	18930	10150	24340	18320
WAL YR 1974	TOTAL	152106	MEAN	417	MAX	1190	MIN	18	AC-FT	301700		
CTR YR 1975	TOTAL	118055	MEAN	323	MAX	946	MIN	18	AC-FT	234200		

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

LOCATION.--Lat 39°19'25", long 120°14'00", in SW¼NW¼ sec.17, T.17 N., R.16 E., Nevada County, on left bank 10 ft (3 m) downstream from bridge on Donner Memorial State Park road, 0.2 mi (0.3 km) downstream from outlet of Donner Lake, 0.7 mi (1.1 km) upstream from Cold Creek, and 2.5 mi (4.0 km) west of Truckee.

DRAINAGE AREA.--14.6 mi² (37.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,930 ft (1,807 m), from topographic map. Nov. 1, 1909, to Aug. 31, 1910, nonrecording gage at different datum. January 1929 to December 1957, water-stage recorder at same site at unknown datum.

AVERAGE DISCHARGE (unadjusted).--38 years (1929-35, 1936-37, 1939-42, 1943-52, 1955-57, 1958-75), 34.2 ft³/s (0.969 m³/s), 24,780 acre-ft/yr (30.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 314 ft³/s (8.89 m³/s) June 3 (gage height, 3.76 ft or 1.146 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Oct. 6, Sept. 12.

Period of record: Maximum daily discharge, 700 ft³/s (19.8 m³/s), estimated, Nov. 21, 1950; maximum gage height observed, 4.55 ft (1.387 m) Dec. 25, 1964; no flow at times in most years.

REMARKS.--Records good. Flow regulated by dam at outlet of Donner Lake, usable capacity, 9,500 acre-ft (11.7 hm³).

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	12	4.8	5.4	7.9	17	34	42	218	24	3.3	3.1
2	106	11	4.6	5.4	22	16	33	45	270	11	3.1	2.2
3	87	9.7	6.1	5.1	26	19	33	53	274	10	3.1	1.9
4	34	9.2	8.8	5.1	43	20	34	57	246	8.0	3.1	1.5
5	1.3	8.3	8.3	6.1	70	21	37	29	246	7.0	4.0	1.4
6	1.1	8.3	8.3	7.9	44	23	36	7.9	248	5.4	4.6	1.2
7	1.8	7.9	7.9	8.8	28	25	34	8.1	250	21	4.5	1.2
8	2.1	7.9	6.8	13	26	30	32	8.4	247	36	4.8	1.8
9	1.6	7.5	6.4	14	33	29	30	8.9	210	36	4.7	2.0
10	1.4	7.1	6.1	13	38	28	28	9.7	170	27	4.6	1.7
11	1.3	7.1	5.8	12	34	26	27	10	133	24	4.0	1.4
12	1.2	6.8	5.8	12	33	24	26	11	113	24	3.4	1.1
13	1.2	6.4	7.1	11	36	24	25	12	129	24	3.2	1.3
14	38	6.1	7.1	11	34	25	27	47	140	24	3.0	1.3
15	61	5.8	7.1	12	30	24	28	87	140	24	2.6	1.2
16	52	5.8	7.1	11	27	27	27	97	155	20	2.5	2.3
17	45	5.4	6.8	11	24	25	26	102	155	20	2.4	4.2
18	40	5.8	6.4	10	23	25	25	108	126	13	2.9	4.1
19	34	5.4	6.4	10	21	25	25	134	98	8.3	3.8	4.4
20	28	5.4	6.4	10	22	24	24	154	69	8.3	4.5	2.9
21	24	6.4	6.1	9.7	21	24	26	153	58	8.3	7.4	2.4
22	21	7.5	5.1	9.7	19	38	28	153	58	8.3	11	2.7
23	19	7.1	4.8	9.7	18	37	31	154	49	7.5	11	2.7
24	17	7.1	4.8	9.7	17	36	38	158	51	5.8	9.7	27
25	15	7.5	4.0	9.2	17	50	47	173	59	5.9	9.5	65
26	14	7.1	3.6	9.7	16	49	46	202	59	5.8	9.2	91
27	13	7.1	4.8	10	16	45	45	204	58	5.8	8.8	120
28	15	6.8	6.4	9.7	17	42	45	204	57	5.7	7.5	118
29	14	5.8	6.1	9.7	---	38	45	204	44	4.7	5.4	118
30	13	4.8	6.1	9.2	---	37	43	206	38	4.3	5.1	119
31	12	---	5.8	8.8	---	36	---	211	---	3.7	4.4	---
TOTAL	842.0	216.1	191.7	298.9	762.9	909	985	3053.0	4168	440.8	161.1	708.0
MEAN	27.2	7.20	6.18	9.64	27.2	29.3	32.8	98.5	139	14.2	5.20	23.6
MAX	127	12	8.8	14	70	50	47	211	274	36	11	120
MIN	1.1	4.8	3.6	5.1	7.9	16	24	7.9	38	3.7	2.4	1.1
AC-FT	1670	429	380	593	1510	1800	1950	6060	8270	874	320	1400
CAL YR 1974	TOTAL	18109.1	MEAN 49.6	MAX 255	MIN 1.1	AC-FT 35920						
WTR YR 1975	TOTAL	12736.5	MEAN 34.9	MAX 274	MIN 1.1	AC-FT 25260						

PYRAMID AND WINNEMUCCA LAKES BASIN

10339380 MARTIS CREEK LAKE NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°19'38", long 120°06'48", in NE¼NW¼ sec.17, T.17 N., R.17 E., Nevada County, in control house at Martis Creek Dam, 2.0 mi (3.2 km) upstream from mouth, and 3.5 mi (5.6 km) east of Truckee.

DRAINAGE AREA.--40.0 mi² (103.6 km²).

PERIOD OF RECORD.--March to May 1972 (occasional readings only), June 1972 to current year.

GAGE.--Water-stage recorder and a precipitation recorder. Datum of gage is at mean sea level (Corps of Engineers project datum).

EXTREMES.--Current year: Maximum contents, 3,150 acre-ft (3.88 hm³) May 28 (elevation, 5,799.62 ft or 1,767.724 m); minimum, 830 acre-ft (1.02 hm³) Aug. 6 (elevation, 5,780.19 ft or 1,761.802 m).
Period of record: Maximum contents, 4,450 acre-ft (5.49 hm³) Apr. 2, 1974 (elevation, 5,805.14 ft or 1,769.407 m); minimum, 823 acre-ft (1.01 hm³) July 19, Aug. 1, 1972 (elevation, 5,780.09 ft or 1,761.771 m).

REMARKS.--Lake is formed by rolled-earthfill dam. Storage began Oct. 7, 1971. Total capacity, 20,400 acre-ft (25.2 hm³) between elevations 5,745 ft (1,751.1 m), streambed elevation at dam and 5,838 ft (1,779.4 m), elevation of spillway crest. Figures given herein represent total contents, which include 817 acre-ft (1.01 hm³) of inactive storage below elevation, 5,780 ft (1,761.7 m), intake crest. Reservoir is used for flood control, enhancement of fishery, and recreation. Chemical-quality data for this station are published in the partial-record section of this report.

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	838	835	835	834	855	858	1020	---	---	833	833
2	---	837	836	834	834	860	857	1150	3120	841	833	833
3	---	836	863	835	835	862	853	1280	---	---	833	833
4	---	835	853	835	835	864	855	1290	3060	840	832	833
5	---	836	843	836	836	862	853	1250	---	---	832	833
6	---	835	840	845	837	863	851	1250	2910	---	830	832
7	832	837	838	846	837	868	849	1310	---	845	832	834
8	832	837	836	845	840	861	848	1440	---	---	832	833
9	832	837	836	841	846	855	848	1580	2620	837	832	834
10	832	836	837	840	843	850	848	1750	---	---	832	846
11	832	836	837	837	843	848	848	1910	2380	838	832	832
12	832	835	839	837	840	846	853	2050	---	---	832	837
13	832	835	837	836	851	848	862	2210	2130	---	832	837
14	832	835	837	836	849	846	867	2390	---	836	833	836
15	832	835	837	837	845	845	865	2540	---	---	833	835
16	832	836	837	836	843	845	860	2640	1730	837	833	834
17	832	835	836	836	842	842	859	2760	---	---	832	833
18	832	836	835	836	840	845	866	2890	1430	837	838	834
19	832	835	836	836	843	853	870	3030	---	---	840	834
20	832	835	836	836	842	853	884	3110	1130	---	840	833
21	833	848	836	836	840	846	908	3100	---	836	842	832
22	833	841	833	836	839	847	900	3070	---	---	839	832
23	832	837	831	837	840	853	906	3070	852	835	835	832
24	833	838	831	837	839	864	978	3090	---	---	835	833
25	834	837	832	837	840	890	1010	3120	855	834	835	834
26	835	837	835	837	840	879	946	3130	---	---	835	833
27	835	836	831	833	843	869	906	3140	848	---	834	833
28	843	835	834	835	848	865	918	3150	---	834	833	836
29	838	835	833	834	---	861	941	---	---	---	834	836
30	837	835	835	834	---	862	962	3120	843	834	832	835
31	837	---	834	833	---	861	---	3120	---	834	833	---
MAX	---	848	863	846	851	890	1010	---	---	---	842	846
MIN	---	835	831	833	834	842	848	---	---	---	830	832
(a)	5,780.29	5,780.26	5,780.24	5,780.23	5,780.43	5,780.61	5,781.95	5,799.51	5,780.37	5,780.24	5,780.23	5,780.26
(b)	+5	-2	-1	-1	+15	+13	+101	+2,158	-2,277	-9	-1	+2

CAL YR 1974 b -40
WTR YR 1975 b +3

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

10339400 MARTIS CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°19'44", long 120°07'00", in NE¼NW¼ sec.17, T.17 N., R.17 E., Nevada County, on left bank 0.2 mi (0.3 km) downstream from Martis Creek Lake Dam, 1.8 mi (2.9 km) upstream from mouth, and 3.5 mi (5.6 km) east of Truckee.

DRAINAGE AREA.--40.0 mi² (103.6 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,730 ft (1,747 m), from topographic map. Prior to July 10, 1972, at site 1.0 mi (1.6 km) downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--17 years, 24.8 ft³/s (0.702 m³/s), 17,970 acre-ft/yr (22.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 128 ft³/s (3.62 m³/s) June 2, 3 (gage height, 3.47 ft or 1.058 m); minimum, 7.2 ft³/s (0.20 m³/s) Dec. 24.
Period of record: Maximum discharge, 1,880 ft³/s (53.2 m³/s) Feb. 1, 1963 (gage height, 6.16 ft or 1.878 m); minimum, 0.46 ft³/s (0.013 m³/s) Oct. 21, 22, 1971, result of regulation at Martis Creek Lake Dam.

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

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	14	22	9.1	9.7	20	29	90	127	20	10	8.8
2	9.1	13	22	9.1	11	24	27	91	127	19	10	8.8
3	9.7	12	23	9.7	11	26	26	96	127	18	10	8.8
4	9.7	12	27	10	12	28	24	96	127	18	9.7	9.1
5	9.4	12	18	10	12	29	25	95	127	17	9.4	9.4
6	9.7	12	14	14	12	28	22	96	127	16	9.4	9.1
7	9.7	12	12	17	12	30	20	95	126	15	8.8	9.1
8	9.7	14	11	20	12	30	20	97	126	15	8.8	9.1
9	10	13	10	15	17	26	18	99	126	14	8.8	9.1
10	10	12	10	14	16	22	20	104	124	14	8.8	12
11	10	12	12	13	16	20	19	106	122	14	9.1	15
12	9.7	12	12	12	14	18	20	108	114	14	9.1	12
13	9.7	12	12	12	16	18	25	112	120	14	9.1	10
14	9.7	12	12	12	21	18	31	113	119	14	9.4	10
15	9.4	12	12	12	18	17	33	116	115	13	9.4	10
16	9.7	12	12	12	16	17	30	116	113	14	9.7	9.7
17	9.4	12	11	12	15	16	30	116	109	14	9.7	9.7
18	9.4	12	10	12	14	15	28	118	108	14	11	9.4
19	9.7	12	10	12	14	19	35	119	105	13	14	9.4
20	9.7	12	10	12	15	24	40	120	102	12	14	9.4
21	10	12	10	12	13	22	62	120	96	12	15	9.1
22	10	18	9.4	12	12	18	78	120	40	12	14	9.1
23	10	22	8.5	12	12	21	71	121	28	12	12	9.1
24	10	22	8.2	12	12	25	83	122	28	12	11	9.1
25	11	22	8.8	12	12	54	93	124	30	12	11	8.8
26	12	22	9.1	13	12	55	92	125	27	11	10	8.8
27	12	22	11	12	13	45	83	125	24	11	9.7	8.8
28	16	22	11	9.4	16	37	79	126	24	11	9.4	8.8
29	15	22	9.1	10	---	31	88	126	22	11	9.1	8.8
30	13	22	9.7	10	---	29	90	127	21	10	9.1	9.1
31	13	---	9.1	10	---	32	---	127	---	10	8.8	---
TOTAL	324.5	452	385.9	373.3	385.7	814	1341	3466	2731	426	317.3	287.4
MEAN	10.5	15.1	12.4	12.0	13.8	26.3	44.7	112	91.0	13.7	10.2	9.58
MAX	16	22	27	20	21	55	93	127	127	20	15	15
MIN	9.1	12	8.2	9.1	9.7	15	18	90	21	10	8.8	8.8
AC-FT	644	897	765	740	765	1610	2660	6870	5420	845	629	570
CAL YR 1974	TOTAL	10893.8	MEAN 29.8	MAX 379	MIN 7.0	AC-FT 21610						
WTR YR 1975	TOTAL	11304.1	MEAN 31.0	MAX 127	MIN 8.2	AC-FT 22420						

PYRAMID AND WINNEMUCCA LAKES BASIN

10339400 MARTIS CREEK NEAR TRUCKEE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1975 (partial-record station).

Water temperatures: June 1973 to current year.

Sediment records: Water year 1975 (partial-record station).

EXTREMES.--Current year:

Water temperatures: Maximum, 20.0°C Aug. 6; minimum, 1.0°C on several days during February but may have been lower during period of missing record Dec. 30 to Feb. 5.

Period of record:

Water temperatures: Maximum, 20.5°C on several days in 1973 and 1974; minimum, 0.5°C on several days in 1974.

REMARKS.--Unpublished chemical-quality and sediment data prior to October 1974, and water temperatures prior to June 1973, available at district office in Carson City, Nevada.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCTI- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
MAY 28...	1025	120	.01	.00	.02	.29	.32	.07	.02	68	8.0
JUNE 10...	1505	125	--	--	--	--	--	--	--	72	15.0

DATE	TUR- BID- ITY (JTU)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
MAY 28...	10	10	0	620	140	<100	7	10	10	20	10
JUNE 10...	--	--	--	--	--	--	--	--	--	--	--

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
MAY 28...	1025	120	9	2.9
JUNE 10...	1505	125	7	2.4

10339400 MARTIS CREEK NEAR TRUCKEE, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	8.5	7.5	6.5	5.0	3.0			---	---	3.5	1.5
2	13.0	11.0	7.5	6.0	4.5	3.5			---	---	3.0	1.5
3	13.0	11.0	7.5	6.0	4.5	3.5			---	---	3.0	2.0
4	13.0	11.0	7.5	6.0	4.5	4.0			---	---	3.0	2.0
5	12.5	10.0	7.0	5.5	4.5	3.0			---	---	3.0	2.0
6	12.0	8.0	6.5	5.0	4.0	3.0			---	---	3.0	2.0
7	12.0	9.5	6.0	5.5	4.0	3.0			3.0	2.0	2.5	2.0
8	11.0	10.5	6.0	5.0	4.0	3.0			3.5	2.0	3.0	2.0
9	11.5	10.0	6.0	5.0	4.5	3.0			2.5	1.0	2.5	2.0
10	12.0	9.5	6.5	5.0	4.5	3.0			2.5	1.0	3.0	2.0
11	11.5	9.5	6.5	4.5	4.5	3.5			3.0	1.5	3.5	2.0
12	11.5	9.5	6.0	4.5	4.5	3.5			2.0	1.5	3.5	2.0
13	11.0	9.0	6.5	5.0	4.0	3.0			2.5	1.5	3.5	2.0
14	11.0	8.5	6.5	5.0	4.5	3.0			2.5	1.0	4.0	2.0
15	11.0	8.5	6.5	5.0	4.5	3.5			2.5	1.0	4.0	2.0
16	11.5	9.0	6.0	5.0	4.5	3.5			2.5	1.0	4.0	2.0
17	10.5	8.5	6.0	5.0	4.5	3.0			3.0	1.0	4.0	2.5
18	11.0	8.5	6.0	5.0	4.0	3.0			3.0	1.0	4.0	2.5
19	10.5	8.5	5.5	4.5	4.0	3.0			2.5	1.5	4.0	2.5
20	10.5	8.5	6.0	4.5	4.0	3.0			3.5	1.5	4.0	2.5
21	10.5	8.5	5.0	4.0	4.0	2.5			3.0	1.0	3.0	1.5
22	10.0	8.0	5.0	4.0	3.5	2.5			3.0	1.0	3.5	2.0
23	9.5	7.5	5.0	4.0	4.0	2.5			3.5	1.5	3.5	2.5
24	9.5	7.5	5.0	3.5	4.0	2.5			3.5	1.5	3.5	2.5
25	9.5	7.5	5.0	3.5	4.5	3.0			3.5	1.5	3.0	2.0
26	9.5	7.5	4.5	3.5	4.5	3.0			3.5	1.5	2.5	2.0
27	9.0	7.5	4.5	3.5	4.0	2.5			2.5	2.0	2.5	2.0
28	9.0	7.5	4.0	3.0	3.5	2.5			3.5	2.0	2.5	2.0
29	8.0	7.0	4.5	3.0	---	---			---	---	2.5	2.0
30	8.5	7.0	4.5	3.0	---	---			---	---	2.5	2.0
31	8.0	7.0	---	---	---	---			---	---	---	2.0
MONTH	13.5	7.0	7.5	3.0	180.0	2.5			3.5	1.0	4.0	1.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.0	2.0	---	---	11.0	8.5	16.0	15.0	---	---	17.0	14.0
2	3.0	2.5	---	---	11.0	9.0	16.5	15.0	---	---	17.0	13.5
3	3.0	2.5	4.0	3.5	11.0	9.5	16.5	15.0	---	---	17.0	13.0
4	3.5	2.5	3.5	3.0	12.5	9.5	17.0	15.5	---	---	17.0	13.5
5	3.5	2.5	3.5	3.0	11.5	10.0	17.0	15.5	---	---	17.0	13.5
6	---	---	4.0	3.0	14.0	10.5	17.5	16.0	---	---	17.5	14.0
7	---	---	4.0	3.5	13.0	11.5	18.0	16.5	19.0	15.0	17.5	14.0
8	---	---	4.5	3.5	15.0	12.0	18.0	16.5	19.0	15.0	17.0	14.0
9	---	---	5.0	4.0	15.0	12.5	18.0	16.5	19.0	15.0	17.0	14.0
10	---	---	5.0	4.0	16.0	13.5	17.5	17.5	18.0	15.0	16.5	14.5
11	---	---	5.5	4.0	16.0	14.0	18.0	17.0	19.0	15.0	17.0	15.0
12	---	---	7.5	5.0	16.0	14.5	18.5	17.0	19.0	15.0	17.0	14.5
13	---	---	8.5	6.5	16.0	14.5	18.0	17.0	18.5	15.5	16.5	14.0
14	---	---	9.0	7.0	16.5	15.0	18.0	17.0	18.0	15.5	16.5	14.0
15	---	---	9.0	8.0	19.0	15.5	18.0	17.0	18.0	15.0	17.0	14.0
16	---	---	9.0	8.0	19.5	17.0	17.5	17.0	18.5	14.5	17.0	14.0
17	---	---	8.0	7.0	18.5	17.0	18.0	17.0	18.0	15.0	17.0	14.5
18	---	---	8.0	6.5	17.0	15.5	18.0	17.0	16.5	15.0	16.5	14.0
19	---	---	9.0	6.5	16.0	15.0	18.0	17.5	16.0	14.5	17.0	14.5
20	---	---	8.5	7.0	16.0	14.5	18.5	17.5	16.5	14.0	17.5	14.0
21	---	---	8.0	7.5	16.5	15.0	18.5	17.0	15.5	14.0	17.0	14.0
22	---	---	9.0	7.5	16.0	15.0	---	---	17.0	14.0	17.0	14.0
23	---	---	9.0	8.0	15.5	14.5	---	---	17.5	14.0	17.0	13.5
24	---	---	10.0	8.0	15.5	14.0	---	---	17.5	13.5	17.0	13.5
25	---	---	9.5	8.5	15.0	13.5	---	---	17.5	14.5	17.0	13.5
26	---	---	10.5	8.5	15.0	13.5	---	---	18.5	14.5	16.5	13.0
27	---	---	9.5	8.5	15.0	14.0	---	---	17.5	14.5	16.5	13.0
28	---	---	9.5	8.0	15.5	14.5	---	---	17.5	14.0	16.0	13.0
29	---	---	11.5	9.0	15.5	14.5	---	---	17.5	13.5	16.0	12.5
30	---	---	10.0	9.0	16.0	14.5	---	---	17.0	13.5	15.5	12.5
31	---	---	10.0	8.5	---	---	---	---	17.5	13.5	---	---
MONTH	---	---	11.5	3.0	19.5	8.5	---	---	20.0	13.5	17.5	12.5

PYRAMID AND WINNEMUCCA LAKES BASIN

10340300 PROSSER CREEK RESERVOIR NEAR BOCA, CALIF.

LOCATION.--Lat 39°22'25", long 120°08'25", in NW¼SW¼ sec.30, T.18 N., R.17 E., Nevada County, in control house at Prosser Creek Dam on Prosser Creek, 1.5 mi (2.4 km) upstream from mouth, and 3 mi (5 km) west of Boca.

DRAINAGE AREA.--50.5 mi² (130.8 km²).

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

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

EXTREMES.--Current year: Maximum contents observed, 26,440 acre-ft (32.6 hm³) July 7-9 (elevation, 5,736.5 ft or 1,748.49 m); minimum observed, 5,150 acre-ft (6.35 hm³) Apr. 18 (elevation, 5,686.8 ft or 1,733.34 m).
Period of record: Maximum contents observed, 31,070 acre-ft (38.3 hm³) June 1, 1973 (elevation, 5,744.33 ft or 1,750.872 m); minimum observed, 1,350 acre-ft (1.66 hm³) Apr. 9, 1969 (elevation, 5,672.30 ft or 1,728.917 m).

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Jan. 30, 1963. Usable capacity, 28,640 acre-ft (35.3 hm³) between elevations, 5,660.6 ft (1,725.35 m), top of inactive storage and 5,741.2 ft (1,749.92 m), spillway crest. Inactive storage, 1,200 acre-ft (1.48 hm³), includes 83 acre-ft (102,000 m³) dead storage, below elevation 5,660.6 ft (1,725.35 m). Elevation of streambed at dam axis, 5,622 ft (1,713.6 m). Figures given herein represent usable contents. Reservoir is used for flood control, enhancement of fishery, and recreation.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	5,718.2	14,560	--
Oct. 31.....	5,704.0	9,920	-4,640
Nov. 30.....	5,702.1	9,310	-610
Dec. 31.....	5,703.0	9,600	+290
CAL YR 1974.....	--	--	+1,400
Jan. 31.....	5,700.8	8,890	-710
Feb. 28.....	5,701.4	9,060	+170
Mar. 31.....	5,703.0	9,600	+540
Apr. 30.....	5,697.1	7,780	-1,820
May 31.....	5,711.1	12,600	+4,820
June 30.....	5,733.6	24,540	+11,940
July 31.....	5,730.6	22,570	-1,970
Aug. 31.....	5,727.0	20,410	-2,160
Sept. 30.....	5,707.9	11,340	-9,070
CAL YR 1975.....	--	--	-3,220

10340500 PROSSER CREEK NEAR BOCA, CALIF.

LOCATION.--Lat 39°22'10", long 120°07'10", in SW¼NW¼ sec.32, T.18 N., R.17 E., Nevada County, on left bank 0.2 mi (0.3 km) upstream from mouth, 1.0 mi (1.6 km) downstream from Prosser Creek Dam, and 2 mi (3 km) southwest of Boca.

DRAINAGE AREA.--53.6 mi² (138.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 5,572.62 ft (1,698.535 m) above mean sea level (levels by Bureau of Reclamation). April 1889 to November 1890 and October 1902 to June 1903, nonrecording gages at same site at different datums. October 1942 to December 1950, water-stage recorder at approximately same site at different datum. June 1951 to September 1956, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE (adjusted for storage).--32 years (1942-50, 1951-75), 88.6 ft³/s (2,509 m³/s), 64,190 acre-ft/yr (79.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 730 ft³/s (20.7 m³/s) May 13, 14 (gage height, 4.80 ft or 1.463 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Jan. 2, result of temporary closing of Prosser Creek Dam for spillway maintenance by Bureau of Reclamation, in cooperation with California Department of Fish and Game. Period of record (1942 to current year): Maximum discharge, 4,560 ft³/s (129 m³/s) Dec. 23, 1955 (gage height, 10.13 ft or 3.088 m, present datum), from rating curve extended above 910 ft³/s (25.8 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 11.0 ft (3.35 m), from floodmarks, present datum, Nov. 20, 1950 (discharge, 4,320 ft³/s or 122 m³/s, by slope-area measurement); minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Jan. 2, result of temporary closing of Prosser Creek Dam for spillway maintenance by Bureau of Reclamation, in cooperation with California Department of Fish and Game.

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

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	59	30	.20	15	36	119	32	337	13	107	184
2	154	59	30	.02	12	37	132	38	339	13	107	176
3	154	59	31	.20	11	37	140	36	340	13	106	175
4	154	58	31	.60	16	36	167	26	342	13	53	173
5	50	58	30	1.0	38	36	183	168	342	13	13	187
6	6.0	42	30	27	58	36	181	250	400	13	69	198
7	6.0	31	30	42	43	36	206	227	502	90	105	198
8	6.0	31	30	39	33	35	222	217	549	143	52	215
9	6.0	30	30	59	34	34	219	285	249	143	12	224
10	6.0	30	30	59	34	34	217	326	113	143	12	224
11	6.0	30	30	59	33	34	189	348	55	143	12	222
12	6.0	30	30	59	48	55	172	513	15	143	12	161
13	120	30	30	59	61	69	172	668	15	143	12	120
14	174	30	30	58	45	47	130	720	15	191	12	119
15	174	20	30	58	32	33	105	642	15	225	12	121
16	175	11	30	58	32	33	92	635	155	225	12	120
17	174	11	30	58	32	33	84	626	250	222	12	84
18	174	11	30	58	32	33	66	501	108	223	12	59
19	172	11	30	58	32	33	56	495	15	223	12	95
20	172	11	14	58	33	34	57	504	14	223	12	121
21	171	12	1.5	58	32	55	46	464	14	173	12	121
22	170	22	1.4	41	33	69	37	439	14	138	12	136
23	139	30	1.2	30	33	68	26	345	14	138	12	145
24	120	30	1.2	30	33	47	23	289	15	138	12	130
25	105	30	1.1	30	33	39	21	293	14	138	12	121
26	95	30	1.2	30	33	58	18	285	13	138	11	135
27	95	30	1.7	30	34	71	17	281	13	138	116	145
28	76	30	1.6	30	34	86	19	394	13	138	180	145
29	60	30	1.3	30	---	95	23	463	13	137	214	146
30	59	30	.80	30	---	95	28	382	13	120	232	145
31	59	---	.60	19	---	111	---	333	---	107	212	---
TOTAL	3192.0	926	599.60	1169.02	939	1555	3167	11225	4306	4061	1781	4545
MEAN	103	30.9	19.3	37.7	33.5	50.2	106	362	144	131	57.5	152
MAX	175	59	31	59	61	111	222	720	549	225	232	224
MIN	6.0	11	.60	.02	11	33	17	26	13	13	11	59
AC-FT	6330	1840	1190	2320	1860	3080	6280	22260	8540	8050	3530	9020
CAL YR 1974	TOTAL	42717.60	MEAN 117	MAX 722	MIN .60	AC-FT 84730	MEAN a 119	AC-FT a 86,130				
WTR YR 1975	TOTAL	37465.62	MEAN 103	MAX 720	MIN .02	AC-FT 74310	MEAN a 98.2	AC-FT a 71,090				

a Adjusted for change in contents in Prosser Creek Reservoir.

10343000 INDEPENDENCE CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°27'20", long 120°17'15", in NW¼SW¼ sec.35, T.19 N., R.15 E., Sierra County, on left bank 0.3 mi (0.5 km) downstream from Independence Lake outlet, 6.5 mi (10.5 km) northwest of Hobart Mills, and 10 mi (16 km) north-northwest of Truckee.

DRAINAGE AREA.--7.63 mi² (19.76 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,940 ft (2,115 m), from topographic map. July 1, 1904, to June 30, 1910, water-stage recorder 75 ft (25 m) downstream from Independence Lake outlet; prior to July 1, 1904, water-stage recorder 600 ft (180 m) downstream at approximately same datum.

AVERAGE DISCHARGE (unadjusted).--12 years (1902-7, 1968-75), 32.1 ft³/s (0.909 m³/s), 23,260 acre-ft/yr (28.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 175 ft³/s (4.96 m³/s) June 11 (gage height, 4.96 ft or 1.512 m); minimum daily, 5.2 ft³/s (0.147 m³/s) Feb. 23-25.

Period of record: Maximum discharge observed, 286 ft³/s (8.10 m³/s) June 23, 1907 (gage height, 3.9 ft or 1.19 m, site and datum then in use); no flow Sept. 28 to Nov. 10, 1905, June 1, 1906.

REMARKS.--Records good. Flow regulated by Independence Lake, usable capacity, 17,500 acre-ft (21.6 hm³).

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	9.5	9.8	9.0	8.0	5.5	6.1	6.2	26	20	19	16
2	78	9.5	9.8	9.0	8.5	5.5	6.4	6.2	53	19	19	16
3	77	9.5	9.8	9.0	6.2	5.4	6.4	6.2	96	19	19	16
4	77	9.5	9.8	9.0	6.5	5.6	6.5	6.1	129	20	19	16
5	76	9.5	9.8	9.0	5.9	5.7	6.4	5.8	150	20	19	36
6	76	9.5	9.5	9.0	5.9	5.7	6.1	5.7	164	23	19	47
7	76	9.5	9.5	9.0	6.1	5.6	6.3	5.8	167	41	18	47
8	75	9.5	9.5	9.0	6.1	6.1	6.4	6.1	157	50	18	47
9	74	9.5	9.5	9.0	6.4	6.0	6.4	6.2	146	50	18	47
10	39	9.5	9.5	9.0	6.1	6.1	6.4	6.6	137	56	18	47
11	10	9.5	9.5	9.0	5.9	6.1	6.5	7.2	154	64	18	47
12	9.8	9.5	9.2	9.0	6.2	6.1	6.4	7.6	162	61	18	45
13	9.5	9.5	9.2	9.0	5.9	6.1	6.1	7.9	153	57	18	44
14	9.5	9.5	9.2	9.0	5.9	6.1	6.1	8.4	151	56	17	45
15	9.5	9.5	9.2	9.0	5.9	6.2	6.1	9.2	150	54	17	45
16	9.5	9.8	9.2	9.0	5.8	6.2	6.1	10	146	54	17	45
17	9.5	9.8	9.2	9.0	5.8	6.5	6.1	12	137	36	17	45
18	9.5	9.8	9.2	9.0	5.8	6.3	6.3	12	120	22	16	45
19	9.5	9.8	9.2	9.0	5.8	7.0	6.3	13	110	21	16	45
20	9.5	10	9.0	9.0	5.8	6.0	6.1	12	96	21	16	44
21	9.5	10	9.0	8.7	5.3	6.1	6.3	9.6	91	20	17	44
22	9.5	10	9.0	8.7	5.4	6.1	6.2	10	88	20	17	44
23	9.5	10	9.0	8.7	5.2	6.1	6.1	12	86	20	16	44
24	9.5	10	9.0	8.5	5.2	6.1	6.1	13	87	20	16	43
25	9.5	10	9.0	8.4	5.2	6.1	6.1	13	81	20	17	43
26	9.5	9.8	9.0	8.4	5.4	6.1	6.1	14	61	20	17	43
27	9.5	9.8	9.0	8.4	5.4	6.1	6.1	15	31	20	17	43
28	9.5	9.8	9.2	8.5	5.4	6.1	6.3	15	24	20	16	43
29	9.5	9.8	9.0	8.7	---	6.1	6.2	16	22	20	16	43
30	9.5	9.8	9.0	8.5	---	6.1	6.2	16	21	19	16	43
31	9.5	---	9.0	7.7	---	6.1	---	18	---	19	16	---
TOTAL	927.3	290.7	287.8	273.2	167.0	187.1	187.2	311.8	3196	982	537	1218
MEAN	29.9	9.69	9.28	8.81	5.96	6.04	6.24	10.1	107	31.7	17.3	40.6
MAX	79	10	9.8	9.0	8.5	7.0	6.5	18	167	64	19	47
MIN	9.5	9.5	9.0	7.7	5.2	5.4	6.1	5.7	21	19	16	16
AC-FT	1840	577	571	542	331	371	371	618	6340	1950	1070	2420
CAL YR 1974	TOTAL	10141.01	MEAN 27.8	MAX 194	MIN .53	AC-FT 20110						
WTR YR 1975	TOTAL	8565.10	MEAN 23.5	MAX 167	MIN 5.2	AC-FT 16990						

10343500 SAGEHEN CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°25'54", long 120°14'07", in NE¼NE¼ sec.7, T.18 N., R.16 E., Nevada County, on left bank 2.2 mi (3.5 km) upstream from bridge on State Highway 89, and 7.5 mi (12.1 km) north of Truckee.

DRAINAGE AREA.--10.8 mi² (28.0 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,320 ft (1,926 m), from topographic map. Prior to Dec. 2, 1953, nonrecording gage at site 100 ft (30 m) upstream at different datum.

AVERAGE DISCHARGE.--22 years, 12.8 ft³/s (0.362 m³/s), 9,270 acre-ft/yr (11.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 144 ft³/s (4.08 m³/s) May 24 (gage height, 3.30 ft or 1.006 m); minimum daily, 2.8 ft³/s (0.079 m³/s) Sept. 25-30.

Period of record: Maximum discharge, 765 ft³/s (21.7 m³/s) Feb. 1, 1963 (gage height, 4.64 ft or 1.414 m, from floodmarks), from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of slope-area measurement at gage height 4.28 ft (1.305 m); minimum, 0.6 ft³/s (0.017 m³/s) Aug. 8, 1960, Aug. 7, 1961, result of temporary regulation.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.3	3.9	3.7	3.9	5.6	5.2	12	105	18	5.0	3.3
2	3.5	4.1	3.9	3.7	3.9	5.5	5.0	15	98	17	4.8	3.3
3	3.6	4.0	6.9	3.9	3.9	5.1	5.0	16	94	16	4.6	3.3
4	3.6	3.9	7.4	3.9	3.8	5.1	4.8	13	91	16	4.5	3.2
5	3.5	3.8	5.4	3.9	3.8	5.3	4.7	10	94	15	4.3	3.1
6	3.6	3.8	4.8	4.6	3.9	5.0	4.6	10	95	15	4.2	3.1
7	3.6	4.1	4.6	4.8	4.0	5.0	4.4	14	87	14	4.1	3.2
8	3.9	4.2	4.4	4.4	4.3	4.8	4.4	21	78	13	4.1	3.2
9	3.9	4.0	4.3	4.2	6.3	4.6	4.4	27	72	13	4.0	3.2
10	3.8	3.9	4.3	4.1	4.8	4.4	4.4	33	67	12	3.9	4.8
11	3.7	3.8	4.5	4.1	4.4	4.4	4.4	40	66	12	3.8	4.1
12	3.6	3.8	5.1	4.1	4.3	4.3	4.4	43	64	11	3.8	3.7
13	3.6	3.8	4.8	4.1	4.5	4.2	5.1	51	63	10	3.8	5.3
14	3.6	3.8	4.6	4.1	4.3	4.3	5.5	68	61	9.8	4.0	4.1
15	3.5	3.7	4.8	4.1	4.2	4.2	4.9	63	59	10	3.9	3.7
16	3.5	3.7	4.7	4.0	4.1	4.3	4.8	64	55	10	3.8	3.5
17	3.3	3.6	4.5	4.0	4.1	4.1	4.7	73	51	9.6	3.8	3.4
18	3.3	4.2	4.2	4.0	4.1	4.2	5.0	83	45	8.9	5.1	3.4
19	3.3	3.6	4.2	4.1	4.1	4.5	5.4	95	41	8.3	6.2	3.4
20	3.3	3.6	4.1	4.1	4.1	4.4	5.5	69	37	7.8	4.8	3.2
21	3.4	5.3	4.1	4.1	4.1	3.7	7.5	55	35	7.4	6.0	3.0
22	3.5	4.5	3.8	4.1	4.1	4.9	8.3	64	32	7.0	4.7	2.9
23	3.5	4.0	3.6	4.1	4.0	4.2	8.6	79	29	6.9	4.1	2.9
24	3.5	4.1	3.6	4.2	4.1	5.3	10	94	35	6.5	3.9	2.9
25	3.6	4.2	3.6	4.2	4.2	11	9.2	93	33	6.3	3.8	2.8
26	3.6	4.0	3.6	4.2	4.3	7.6	7.6	90	28	5.9	3.7	2.8
27	3.8	4.0	3.7	4.0	4.5	5.9	7.4	96	24	5.7	3.6	2.8
28	7.4	3.9	3.7	4.0	5.2	5.3	8.7	97	22	5.4	3.5	2.8
29	4.5	3.8	3.7	4.0	---	5.0	9.9	97	21	5.4	3.5	2.8
30	4.6	3.9	3.7	4.0	---	5.4	10	98	20	5.3	3.4	2.8
31	4.5	---	3.7	4.0	---	5.9	---	105	---	5.2	3.4	---
TOTAL	117.0	119.4	136.2	126.8	119.3	157.5	183.8	1788	1702	313.4	130.1	100.0
MEAN	3.77	3.98	4.39	4.09	4.26	5.08	6.13	57.7	56.7	10.1	4.20	3.33
MAX	7.4	5.3	7.4	4.8	6.3	11	10	105	105	18	6.2	5.3
MIN	3.3	3.6	3.6	3.7	3.8	3.7	4.4	10	20	5.2	3.4	2.8
AC-FT	232	237	270	252	237	312	365	3550	3380	622	258	198
CAL YR 1974 TOTAL	6605.2											
WTR YR 1975 TOTAL	4993.5											
MEAN 18.1												
MAX 101												
MIN 3.3												
AC-FT 13100												
MEAN 13.7												
MAX 105												
MIN 2.8												
AC-FT 9900												

Peak discharge (base, 50 ft³/s).--May 19 (1800) 140 ft³/s (3.28 ft); May 24 (1800) 144 ft³/s (3.30 ft).

PYRAMID AND WINNEMUCCA LAKES BASIN

10343500 SAGEHEN CREEK NEAR TRUCKEE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: May 1968 to September 1972.

Water temperatures: October 1969 to September 1974.

Sediment records: Water years 1968 to current year (partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
OCT.					
03...	1325	9.5	3.6	3	.03
14...	1045	6.0	3.8	2	.02
23...	1305	6.0	3.6	2	.02
29...	1400	4.5	4.4	3	.04
NOV.					
04...	0910	1.5	3.8	2	.02
11...	0900	2.0	3.4	2	.02
19...	0920	2.0	3.3	2	.02
22...	1050	.5	4.4	2	.02
26...	0835	1.0	3.9	3	.03
DEC.					
02...	1530	3.5	3.9	3	.03
10...	0955	1.0	4.6	3	.04
12...	1015	2.5	5.0	2	.03
16...	0920	1.5	4.4	3	.04
24...	1100	1.0	3.6	3	.03
30...	0950	1.0	3.7	3	.03
JAN.					
06...	0830	2.0	4.2	2	.02
11...	1530	2.0	4.1	1	.01
14...	0855	1.0	4.1	3	.03
21...	1030	1.5	4.1	2	.02
27...	0945	1.5	4.1	2	.02
FEB.					
15...	1420	1.0	4.2	2	.02
17...	0920	.0	4.4	2	.02
25...	1320	4.0	4.1	2	.02
MAR.					
03...	1205	1.0	5.0	2	.03
10...	1405	2.0	4.4	4	.05
17...	1255	3.5	4.2	1	.01
APR.					
01...	0810	1.0	5.2	2	.03
02...	1300	3.5	5.0	4	.05
07...	0750	.5	4.6	3	.04
14...	1415	4.0	5.2	2	.03
21...	1340	5.0	6.8	3	.06
28...	0845	2.0	8.1	1	.02
MAY					
05...	1330	3.5	10	3	.08
06...	1515	5.0	11	6	.18
12...	1100	4.0	32	5	.43
19...	0935	4.0	68	5	.92
26...	0730	3.5	72	3	.58
30...	1800	8.5	127	14	4.8
JUNE					
16...	1040	7.0	50	5	.67
23...	0820	5.5	29	4	.31
JULY					
02...	1620	14.5	16	3	.13
07...	1045	8.0	14	3	.11
14...	0820	7.0	11	3	.09
29...	0835	6.5	5.7	2	.03
AUG.					
05...	0805	--	4.6	3	.04
11...	0820	6.5	4.2	2	.02
12...	0845	8.0	4.2	2	.02
20...	0855	5.5	4.8	2	.03
25...	1045	8.0	4.1	2	.02
SEP.					
01...	1030	7.0	3.4	3	.03
08...	1020	7.0	3.4	3	.03
11...	1205	11.0	4.1	1	.01
15...	0850	6.5	3.6	3	.03
29...	1015	6.0	3.0	2	.02

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	
MAY	30...	1800	8.5	127	14	4.8	58	78	86	100

10344300 STAMPEDE RESERVOIR NEAR BOCA, CALIF.

LOCATION.--Lat 39°28'24", long 120°06'06", in SW¼NW¼NW¼ sec.28, T.19 N., R.17 E., Sierra County, in control house on Stampede Dam on Little Truckee River, just downstream from mouth of Davies Creek, and 6.2 mi (10.0 km) north of Boca.

DRAINAGE AREA.--136 mi² (352 km²).

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

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

EXTREMES.--Current year: Maximum contents, 217,600 acre-ft (268 hm³) June 25 (elevation, 5,946.1 ft or 1,812.37 m); minimum, 148,800 acre-ft (183 hm³) Sept. 30 (elevation, 5,923.3 ft or 1,805.42 m).
Period of record: Maximum contents, 226,500 acre-ft (279 hm³) June 19, 21, 1974 (elevation, 5,948.7 ft or 1,813.16 m); minimum (since July 1971), 115,400 acre-ft (142 hm³) Sept. 20-27, 1972 (elevation, 5,909.8 ft or 1,801.31 m).

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Aug. 1, 1969. Total capacity, 226,500 acre-ft (279 hm³) at elevation, 5,948.7 ft (1,813.16 m), spillway crest. Inactive storage, 5,010 acre-ft (6.18 hm³), includes 660 acre-ft (814,000 m³) dead storage below elevation 5,798.3 ft (1,767.32 m). Elevation of streambed at dam axis, 5,737.0 ft (1,748.64 m). Figures given herein represent total contents. Reservoir is used for flood control, municipal water supply, enhancement of fishery, and recreation.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	5,938.5	192,900	--
Oct. 31.....	5,937.9	190,900	-2,000
Nov. 30.....	5,936.0	185,100	-5,800
Dec. 31.....	5,934.2	179,600	-5,500
CAL YR 1974.....	--	--	+7,000
Jan. 31.....	5,931.7	172,200	-7,400
Feb. 28.....	5,930.3	168,200	-4,000
Mar. 31.....	5,929.9	167,000	-1,200
Apr. 30.....	5,929.6	166,200	-800
May 31.....	5,939.5	196,200	+30,000
June 30.....	5,945.2	214,600	+18,400
July 31.....	5,936.7	187,400	-27,200
Aug. 31.....	5,924.5	152,000	-35,400
Sept. 30.....	5,923.3	148,800	-3,200
WTR YR 1975.....	--	--	-44,100

PYRAMID AND WINNEMUCCA LAKES BASIN

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

LOCATION.--Lat 39°26'10", long 120°05'00", in SW¼SW¼ sec.3, T.18 N., R.17 E., Nevada County, on left bank 1 mi (1.6 km) upstream from Boca Reservoir, 1.5 mi (2.4 km) upstream from Dry Creek, 3.0 mi (4.8 km) downstream from Stampede Dam on Little Truckee River, and 3.5 mi (5.6 km) north of Boca.

DRAINAGE AREA.--146 mi² (378 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,618.67 ft (1,712.571 m) above mean sea level (Bureau of Reclamation bench mark). June 1903 to October 1910, nonrecording gages at different sites and datums.

AVERAGE DISCHARGE (adjusted for storage).--43 years (1903-10, 1939-75), 195 ft³/s (5.522 m³/s), 141,300 acre-ft/yr (174 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,000 ft³/s (28.3 m³/s) June 16-18 (gage height, 2.65 ft or 0.808 m); minimum, 23 ft³/s (0.65 m³/s) July 14.
Period of record: Maximum discharge, 13,300 ft³/s (377 m³/s) Feb. 1, 1963 (gage height, 9.00 ft or 2.743 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.30 ft³/s (0.008 m³/s) Sept. 16-21, 1969.

REMARKS.--Records excellent. Flow regulated by Independence Lake, capacity, 17,500 acre-ft (21.6 hm³) and one transmountain diversion to Sierra Valley and Stampede Reservoir, capacity, 226,500 acre-ft (279 hm³).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	147	36	172	145	148	226	78	308	186	817	203
2	36	147	36	172	146	149	291	87	350	286	816	203
3	93	147	38	172	145	111	218	86	404	458	817	197
4	144	147	39	172	146	39	148	72	407	458	768	161
5	144	147	66	172	145	39	149	65	472	485	775	137
6	144	147	98	172	115	59	148	67	606	573	817	111
7	144	144	98	172	81	84	148	77	751	573	817	99
8	144	140	98	173	81	82	148	86	747	573	816	40
9	144	139	98	158	84	81	148	91	590	573	817	37
10	87	139	98	145	83	81	148	96	300	573	778	37
11	38	145	98	145	82	81	148	97	298	572	755	36
12	37	153	120	145	81	81	149	207	345	573	755	36
13	37	153	142	145	108	82	151	337	490	608	754	36
14	37	153	144	145	148	82	154	340	645	402	729	36
15	37	153	161	145	148	81	153	413	711	688	667	35
16	37	153	172	145	148	82	152	533	905	400	625	35
17	37	153	172	145	148	81	152	533	996	703	625	35
18	37	153	172	145	148	81	155	533	762	442	569	35
19	37	153	172	145	147	81	157	574	302	698	499	64
20	37	153	172	145	148	115	161	650	119	703	497	110
21	37	156	172	145	148	145	170	642	118	701	306	110
22	37	153	172	145	145	145	173	693	117	696	402	110
23	37	153	172	161	145	145	172	730	200	696	289	110
24	70	153	172	176	145	146	157	732	302	696	288	110
25	98	154	172	176	145	154	92	734	318	696	321	137
26	100	87	172	176	146	148	53	639	642	696	380	159
27	101	37	173	176	405	147	53	522	648	696	378	159
28	102	37	172	176	407	145	60	523	645	710	276	160
29	101	37	172	176	---	145	67	523	642	738	207	160
30	101	36	172	176	---	147	71	523	433	738	205	160
31	125	---	172	156	---	148	---	392	---	785	203	---
TOTAL	2396	3969	4123	4969	4163	3335	4372	11675	14573	18375	17768	3058
MEAN	77.3	132	133	160	149	108	146	377	486	593	573	102
MAX	144	156	173	176	407	154	291	734	996	785	817	203
MIN	36	36	36	145	81	39	53	65	117	186	203	35
AC-FT	4750	7870	8180	9860	8260	6610	8670	23160	28910	36450	35240	6070

CAL YR 1974 TOTAL 79433 MEAN 218 MAX 985 MIN 31 AC-FT 157600 MEAN a 227 AC-FT a 164,600
WTR YR 1975 TOTAL 92776 MEAN 254 MAX 996 MIN 35 AC-FT 184000 MEAN a 193 AC-FT a 139,900

a Adjusted for change in contents in Stampede Reservoir.

10344490 BOCA RESERVOIR AT BOCA, CALIF.

LOCATION.--Lat 39°23'20", long 120°05'40", in NE¼NW¼ sec.28, T.18 N., R.17 E., Nevada County, in control house at Boca Dam on Little Truckee River 1,800' ft (549 m) upstream from mouth, and 0.5 mi (0.8 km) northwest of Boca.

DRAINAGE AREA.--172 mi² (445 km²).

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

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

EXTREMES.--Current year: Maximum contents, 41,160 acre-ft (50.8 hm³) July 24 (elevation, 5,605.3 ft or 1,708.50 m); minimum, 24,340 acre-ft (30.0 hm³) Feb. 27 (elevation, 5,586.0 ft or 1,702.61 m).
Period of record: Maximum contents, 41,440 acre-ft (51.1 hm³) Dec. 23, 1955 (elevation, 5,605.55 ft or 1,708.572 m); minimum, 37 acre-ft (45,600 m³) Mar. 4-9, 1955 (elevation, 5,521.65 ft or 1,682.999 m).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1938. Usable capacity, 40,870 acre-ft (50.4 hm³) between elevations 5,521 ft (1,682.8 m), outlet sill and 5,605 ft (1,708.4 m), top of spillway gates. Elevation of spillway (gate open) is 5,589.01 ft (1,703.530 m). Dead storage, 241 acre-ft (297,000 m³) below outlet sill. Figures given herein represent usable contents. Water is used for irrigation in the State of Nevada and for power development.

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

REVISIONS.--WSP 1634: Drainage area.

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

5,580	20,000	5,605	40,870
5,590	27,510	5,605.3	41,160
5,600	36,150		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39320	30320	30060	30500	30570	24800	26360	37150	34040	40970	40670	40870
2	39320	30320	29980	30400	30570	24880	26360	37610	34130	40670	40870	40870
3	39130	30320	29890	---	30660	24960	26840	37800	34490	40670	40970	40870
4	39130	30150	29890	30150	30660	24800	26920	37710	34760	40480	41060	40870
5	38750	30150	29810	30060	30660	24730	27160	37520	35220	40290	40970	40970
6	38180	30150	29810	29980	30660	24650	27650	37050	35670	40290	40870	40970
7	37710	30150	29810	29980	30660	24730	27810	36680	36040	40290	40770	40970
8	37050	30150	29810	29980	30150	24730	28140	36220	36130	40480	40670	40970
9	36500	30150	29890	30060	29640	24800	28470	35850	36040	40580	40770	40870
10	35760	30150	29980	30230	29140	24800	28880	35220	36130	40670	40870	40870
11	35030	30060	29980	30230	28800	24800	29220	34670	36310	40870	40870	40870
12	34220	30060	29980	30230	28470	24730	29550	33960	36130	40870	40770	40870
13	33690	30150	29980	30320	28060	24730	29810	33250	36130	40870	40770	40870
14	33250	30150	29980	30320	27650	24730	30230	32370	36220	40870	40670	40870
15	33070	30150	30060	30320	27330	24730	30570	32110	36590	40480	40670	40870
16	32890	30150	30150	30400	27000	24730	30920	32110	37050	40480	40670	40870
17	32630	30150	30230	30400	26680	24730	31260	32370	37240	40090	40770	40870
18	32370	30150	30320	30400	26520	24650	31610	32540	37710	40280	40870	40770
19	32200	30150	30400	30400	26360	24650	32020	32720	37990	40190	40870	40670
20	32020	30150	30490	30400	26210	24650	32460	32890	38080	40380	40870	40380
21	31760	30150	30570	30490	26130	24730	32890	32980	38270	40670	40870	40090
22	31520	30320	30660	30570	25970	24800	33420	33070	38370	40870	40480	39900
23	31350	30320	30830	30570	25730	24960	33960	33250	38460	41060	40580	39510
24	31090	30320	30830	30570	25580	25730	34670	33420	38560	41160	40670	39320
25	30920	30320	30830	30570	25190	25270	35030	33420	38750	41060	40670	38940
26	30830	30320	30660	30570	25580	25500	35400	33420	39130	41060	40770	38650
27	30660	30320	30660	30570	24340	25890	35670	33420	39610	40970	40670	38460
28	30660	30230	30660	30570	24880	26210	35940	33420	40090	40970	40870	38080
29	30490	30230	30660	30570	---	26280	36310	33420	40670	40670	40870	37800
30	30400	30150	30660	30570	---	26360	36680	33420	40970	40670	40870	37430
31	30320	---	30660	30570	---	26360	---	33960	---	40570	40870	---
MAX	39320	30320	30830	---	30660	26360	36680	37800	40970	41160	41060	40970
MIN	30320	30060	29810	---	24340	24650	26360	32110	34040	40090	40480	37430
(a)	5,593.35	5,593.20	5,593.85	5,593.70	5,586.70	5,588.60	5,600.60	5,597.55	5,605.10	5,604.70	5,605.00	5,601.45
(b)	-9,000	-170	+510	-90	5,780	+1,480	+10,320	-2,720	+7,010	-400	+300	-3,440

CAL YR 1974 b -1,540

WTR YR 1975 b -1,890

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

PYRAMID AND WINNEMUCCA LAKES BASIN

10344500 LITTLE TRUCKEE RIVER AT BOCA, CALIF.

LOCATION.--Lat 39°23'10", long 120°05'40", in NE¼NW¼ sec.28, T.18 N., R.17 E., Nevada County, on right bank 800 ft (244 m) upstream from mouth, 1,000 ft (305 m) downstream from Boca Dam, and 0.3 mi (0.5 km) northwest of Boca.

DRAINAGE AREA.--172 mi² (445 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,500 ft (1,676 m), from topographic map. Jan. 1, 1911, to Sept. 30, 1915, nonrecording gage at site 650 ft (200 m) downstream at different datum. January 1939 to September 1957, records computed from daily log of rated settings of needle valve in dam, and from computed flow over spillway.

AVERAGE DISCHARGE (unadjusted).--40 years (1911-15, 1939-75), 188 ft³/s (5.324 m³/s), 136,200 acre-ft/yr (168 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 970 ft³/s (27.5 m³/s) May 12 (gage height, 4.43 ft or 1.350 m); minimum daily, 0.61 ft³/s (0.017 m³/s) Apr. 5, 6.
Period of record: Maximum discharge, 8,800 ft³/s (249 m³/s) Dec. 24, 1955, from records of Washoe County Water Conservation District; no flow many days in most years.

REMARKS.--Records excellent. Flow regulated by Boca Reservoir, capacity, 40,870 acre-ft (50.4 hm³), Independence Lake, capacity, 17,500 acre-ft (21.6 hm³), one transmountain diversion to Sierra Valley, and Stampede Reservoir, capacity, 226,500 acre-ft (279 hm³).

REVISIONS.--WSP 1564: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	160	77	249	178	220	232	3.5	253	307	802	201
2	83	160	78	249	178	164	199	140	254	362	803	201
3	132	160	78	249	170	127	101	311	254	512	807	177
4	265	160	78	249	150	116	60	305	255	527	799	155
5	376	160	77	249	136	95	.61	348	256	501	877	127
6	383	160	77	224	101	70	.61	381	406	532	901	104
7	417	154	77	204	199	83	.62	440	634	514	899	104
8	441	150	77	152	381	99	.66	494	764	492	851	82
9	434	150	77	101	381	99	.73	543	567	494	803	29
10	431	150	77	114	363	99	.82	593	245	497	802	38
11	431	150	104	129	202	99	.89	582	309	521	800	42
12	336	150	129	129	249	99	.95	753	387	581	800	40
13	249	150	129	129	338	99	1.1	877	459	623	798	38
14	204	150	129	129	331	99	1.2	710	504	656	761	38
15	147	150	129	129	298	99	1.4	594	493	658	674	38
16	147	150	129	129	296	99	1.5	550	677	627	597	38
17	147	150	129	129	271	98	1.5	505	796	595	591	65
18	147	150	129	129	249	100	1.6	509	579	598	545	75
19	147	150	129	129	229	100	1.8	556	235	600	493	161
20	147	150	129	129	206	100	2.0	616	61	604	491	247
21	147	150	129	129	220	106	2.3	623	7.0	609	488	247
22	147	150	129	143	247	127	2.5	693	98	612	384	246
23	164	150	139	178	244	127	2.6	733	157	715	278	246
24	180	150	180	178	300	98	3.1	759	206	754	278	266
25	172	150	258	178	336	59	3.3	770	226	766	277	286
26	160	113	238	178	333	.73	3.2	655	355	805	357	297
27	160	72	152	178	324	4.3	3.2	556	395	802	361	300
28	160	50	152	178	269	98	3.3	529	399	801	204	300
29	160	50	152	178	---	142	3.5	506	400	801	203	300
30	160	69	204	178	---	143	3.5	381	356	801	203	300
31	160	---	249	178	---	143	---	255	---	800	202	---
TOTAL	6879	4168	4020	5204	7179	3212.03	640.49	16270.5	10987.0	19067	18129	4788
MEAN	222	139	130	168	256	104	21.3	525	366	615	585	160
MAX	441	160	258	249	381	220	232	877	796	805	901	300
MIN	45	50	77	101	101	.73	.61	3.5	7.0	307	202	29
AC-FT	13640	8270	7970	10320	14240	6370	1270	32270	21790	37820	35960	9500
CAL YR 1974 TOTAL	84276.10			MEAN 231	MAX 1040	MIN .10	AC-FT 167200					
WTR YR 1975 TOTAL	100544.02			MEAN 275	MAX 901	MIN .61	AC-FT 199400					

10346000 TRUCKEE RIVER AT FARAD, CALIF.

LOCATION.--Lat 39°25'41", long 120°01'59", in NE¼ sec.12, T.18 N., R.17 E., Nevada County, on left bank 0.5 mi (0.8 km) upstream from Mystic Canyon, 0.7 mi (1.1 km) downstream from Farad powerplant, 2.5 mi (4.0 km) north of Floriston, 3.4 mi (5.5 km) downstream from Bronco Creek, and 3.5 mi (5.6 km) upstream from California-Nevada State line.

DRAINAGE AREA.--932 mi² (2,414 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 5,153.21 ft (1,570.698 m) above mean sea level (Bureau of Reclamation bench mark). March to October 1890, nonrecording gage at site 7 mi (11 km) upstream at different datum. Sept. 7, 1899, to May 31, 1909, nonrecording gage at approximately present location at different datum. June 1, 1909, to July 31, 1912, nonrecording gage at site 2.5 mi (4.0 km) downstream at different datum. Aug. 1, 1912, to Dec. 31, 1937, water-stage recorder at site 4.1 mi (6.6 km) upstream at different datum. Jan. 1, 1938, to Aug. 27, 1957, water-stage recorder at approximately present location at different datum.

AVERAGE DISCHARGE.--76 years (1899-1975), 802 ft³/s (22.71 m³/s), 581,000 acre-ft/yr (716 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,100 ft³/s (116 m³/s) May 14 (gage height, 6.85 ft or 2.088 m); minimum, 385 ft³/s (10.9 m³/s) Jan. 9.
Period of record (1899 to current year): Maximum discharge, 17,500 ft³/s (496 m³/s) Nov. 21, 1950 (gage height, 14.5 ft or 4.420 m, present datum, from floodmarks), from slope-area measurement of peak flow; minimum, 28 ft³/s (0.793 m³/s) Dec. 18, 1930.

REMARKS.--Records excellent. Flow regulated by Lake Tahoe, Martis Creek Lake, Prosser Creek, Stampede and Boca Reservoirs, Donner and Independence Lakes, and by several powerplants. No appreciable inflow between sampling point and gaging station.

REVISIONS.--WSP 1714: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	592	542	450	629	558	595	711	1080	3140	963	1260	869
2	598	560	451	600	560	563	724	1280	3060	971	1260	855
3	576	558	478	494	544	528	627	1540	3060	1110	1260	837
4	555	554	546	453	537	562	621	1450	2960	1140	1210	810
5	550	554	483	449	536	570	626	1560	3020	1130	1240	796
6	516	546	470	457	542	535	606	1900	3350	1150	1300	783
7	516	579	465	455	585	551	616	2010	3620	1200	1340	782
8	543	581	459	457	605	576	655	2230	3610	1230	1310	780
9	532	574	456	401	635	554	660	2480	2970	1210	1210	746
10	528	572	455	403	626	540	711	2740	2000	1190	1210	769
11	524	572	476	526	450	528	742	2860	1970	1190	1210	722
12	615	572	525	526	451	535	774	3180	2020	1230	1270	639
13	612	572	538	525	602	556	830	3500	2160	1240	1260	573
14	595	572	550	524	599	549	875	3690	2230	1270	1230	568
15	579	566	547	524	525	517	881	3680	2200	1300	1140	565
16	572	555	546	524	514	530	864	3480	2460	1260	1070	563
17	560	554	544	524	487	516	841	3500	2420	1220	1060	548
18	558	560	540	524	451	511	841	3660	1890	1200	1060	456
19	554	553	540	524	445	528	852	3730	1280	1180	1030	528
20	549	553	531	528	419	534	858	3560	1020	1170	1010	649
21	545	588	515	531	418	547	911	3160	932	1120	1040	646
22	541	582	509	525	446	573	967	3060	976	1110	927	640
23	599	561	514	548	447	587	957	2880	1000	1180	788	655
24	599	560	551	553	494	572	1020	3060	1050	1230	779	670
25	583	567	636	577	551	724	1050	3180	956	1220	774	714
26	560	532	627	581	555	507	983	3070	1060	1260	844	766
27	560	469	555	577	592	464	956	3030	1100	1250	954	811
28	584	429	556	568	578	518	981	3110	1110	1230	861	810
29	543	425	545	566	---	587	1020	3190	1120	1230	880	806
30	534	437	580	564	---	587	1060	3030	1060	1200	911	793
31	540	---	631	560	---	619	---	3000	---	1220	897	---
TOTAL	17412	16399	16269	16197	14752	17163	24820	86880	60804	36804	33595	21149
MEAN	562	547	525	522	527	554	827	2803	2027	1187	1084	705
MAX	615	588	636	629	635	724	1060	3730	3620	1300	1340	869
MIN	516	425	450	401	418	464	606	1080	932	963	774	456
AC-FT	34540	32530	32270	32130	29260	34040	49230	172300	120600	73000	66640	41950
CAL YR 1974 TOTAL	401928			1101	MAX 3040	MIN 386	AC-FT 797200					
WTR YR 1975 TOTAL	362244			992	MAX 3730	MIN 401	AC-FT 718500					

PYRAMID AND WINNEMUCCA LAKES BASIN

10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued
(National stream-quality accounting network station)

PERIOD OF RECORD.--Chemical analyses: Water year 1951-58 (partial-record station), October 1958 to September 1961, January 1964 to current year.
Water temperatures: January 1964 to current year.
Published as sta 10345900, Truckee River at Floriston, Calif., for period January 1964 to September 1971.

EXTREMES.--Current year:

Specific conductance: Maximum daily, 130 micromhos Mar. 26; minimum daily, 62 micromhos June 16, 17.
Water temperatures: Maximum observed, 18.0°C Sept. 17; minimum observed, freezing point Mar. 26, 28.

Period of record:

Specific conductance (1964-66, 1967 to current year): Maximum daily, 141 micromhos Feb. 3, 1964; minimum daily, 39 micromhos Dec. 23, 1964.

Water temperatures: Maximum, 21.0°C Aug. 2, 6, 1971; minimum, freezing point on several days during winter period of most years.

REMARKS.--Water-quality at this site is considered comparable with that of sta 10345900, Truckee River at Floriston, which was operated 2.5 mi (4.0 km) upstream. Daily specific conductance and temperature data are collected at Farad powerplant, 0.7 mi (1.1 km) upstream from gage. Samples through September 1961, collected by California Department of Water Resources. Bacteria determinations listed below made by Nevada Bureau of Laboratories and Research.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)
OCT.												
08...	1050	540	17	160	--	8.0	2.7	3.5	1.3	46	0	38
22...	1140	540	--	350	--	--	--	--	--	--	--	--
NOV.												
05...	1145	545	15	220	--	9.4	3.0	5.4	1.5	52	0	43
19...	1150	550	9.2	210	--	9.3	2.9	5.5	1.5	54	0	44
DEC.												
03...	1025	474	--	90	--	--	--	--	--	--	--	--
23...	1130	500	--	150	--	--	--	--	--	--	--	--
JAN.												
07...	1145	453	--	--	--	--	--	--	--	--	--	--
20...	1225	527	--	270	--	--	--	--	--	--	--	--
FEB.												
11...	1210	424	15	180	--	9.9	2.7	5.3	1.9	51	0	42
24...	1320	496	--	380	--	--	--	--	--	--	--	--
MAR.												
24...	1240	587	--	870	--	--	--	--	--	--	--	--
APR.												
08...	1015	655	--	210	--	--	--	--	--	--	--	--
08...	1230	887	--	--	--	--	--	--	--	--	--	--
21...	1230	887	--	370	--	--	--	--	--	--	--	--
MAY												
05...	1135	1500	15	480	10	8.6	2.4	5.4	1.5	49	0	40
21...	1230	3100	--	--	--	--	--	--	--	--	--	--
JUNE												
10...	1215	1900	--	820	--	--	--	--	--	--	--	--
25...	0945	922	--	200	--	--	--	--	--	--	--	--
JULY												
08...	1135	1210	--	310	--	--	--	--	--	--	--	--
21...	1235	1120	--	230	--	--	--	--	--	--	--	--
AUG.												
12...	1220	1260	14	210	0	7.8	2.3	4.2	1.4	45	0	37
25...	1105	780	--	230	--	--	--	--	--	--	--	--
SEP.												
09...	1115	742	--	150	--	--	--	--	--	--	--	--
22...	1200	640	--	180	--	--	--	--	--	--	--	--

PYRAMID AND WINNEMUCCA LAKES BASIN

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10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)
OCT.												
08...	2.0	1.5	--	.09	.01	.10	.01	--	.22	--	.23	.33
22...	--	--	--	.00	.00	--	.00	--	.40	--	.40	--
NOV.												
05...	2.0	2.0	--	.02	.01	.03	.10	--	--	--	--	--
19...	2.2	1.7	--	.03	.00	.03	.08	--	.12	--	.20	.23
DEC.												
03...	--	--	--	.04	.00	.04	.02	--	.13	--	.15	.19
23...	--	--	--	.06	.00	.06	.00	--	.15	--	.15	.21
JAN.												
07...	--	--	--	.09	.01	.10	.03	--	.13	--	.16	.26
20...	--	--	--	.07	.03	.10	.01	--	.18	--	.19	.29
FEB.												
11...	2.9	5.7	.1	.10	.01	.11	.03	--	.14	--	.17	.28
24...	--	--	--	.05	.00	.05	.02	--	.20	--	.22	.27
MAR.												
24...	--	--	--	.07	.00	.07	.01	--	.09	--	.10	.17
APR.												
08...	--	--	--	.06	.00	.06	.08	--	.03	--	.11	.17
08...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	.00	.02	.01	.02	--	.15	--	.17	.18
MAY												
05...	2.3	3.5	.0	.07	.00	.07	.02	.01	.20	.08	.22	.29
21...	--	--	--	.04	.00	.04	.05	--	.14	--	.19	.23
JUNE												
10...	--	--	--	.07	.00	.07	.04	--	.18	--	.22	.29
25...	--	--	--	.00	.01	.00	.01	--	.07	--	.08	.08
JULY												
08...	--	--	--	.00	.01	.01	.02	--	.32	--	.34	.35
21...	--	--	--	.02	.01	.03	.00	--	.30	--	.30	.33
AUG.												
12...	1.9	1.3	.0	.05	.01	.06	.00	.00	.11	.08	.11	.17
25...	--	--	--	.05	.01	.06	.00	--	.30	--	.30	.36
SEP.												
09...	--	--	--	.04	.01	.05	.00	--	.12	--	.12	.17
22...	--	--	--	.07	.01	.08	.00	--	.28	--	.28	.36

DATE	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	SUSPENDED SOLIDS (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO
OCT.											
08...	.00	--	--	59	.08	86.0	4	31	0	19	.3
22...	.01	--	--	--	--	--	8	--	--	--	--
NOV.											
05...	.01	.01	60	64	.08	88.3	5	36	0	24	.4
19...	.03	--	--	59	.08	87.6	6	35	0	24	.4
DEC.											
03...	.03	--	--	--	--	--	0	--	--	--	--
23...	.00	--	--	--	--	--	4	--	--	--	--
JAN.											
07...	.02	--	--	--	--	--	6	--	--	--	--
20...	.02	--	--	--	--	--	4	--	--	--	--
FEB.											
11...	.00	.00	67	68	.09	76.7	0	36	0	23	.4
24...	.01	--	--	--	--	--	0	--	--	--	--
MAR.											
24...	.01	--	--	--	--	--	0	--	--	--	--
APR.											
08...	--	--	--	--	--	--	24	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
21...	.00	--	--	--	--	--	12	--	--	--	--
MAY											
05...	.03	.03	64	63	.09	259	0	31	0	26	.4
21...	.03	--	--	--	--	--	--	--	--	--	--
JUNE											
10...	.00	--	--	--	--	--	4	--	--	--	--
25...	.00	--	--	--	--	--	12	--	--	--	--
JULY											
08...	.03	--	--	--	--	--	4	--	--	--	--
21...	.01	--	--	--	--	--	8	--	--	--	--
AUG.											
12...	.01	.02	61	55	.08	208	20	29	0	23	.3
25...	.00	--	--	--	--	--	52	--	--	--	--
SEP.											
09...	.02	--	--	--	--	--	20	--	--	--	--
22...	.02	--	--	--	--	--	16	--	--	--	--

PYRAMID AND WINNEMUCCA LAKES BASIN

10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	DIS- SOLVED OXYGEN (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCHI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
08...	80	--	12.5	1	--	--	2	--	--	--	2.2
22...	87	--	9.5	2	--	--	3	--	--	--	2.2
NOV.											
05...	94	--	8.0	2	--	10.2	4	--	--	--	2.0
19...	96	--	7.0	2	--	--	--	--	--	--	1.8
DEC.											
03...	100	--	6.0	3	--	--	1	--	--	--	1.6
23...	100	--	1.0	1	--	--	3	--	--	--	1.2
JAN.											
07...	106	7.2	4.0	4	--	--	7	8160	88	6	2.2
20...	99	7.6	3.5	1	--	--	--	840	80	0	1.9
FEB.											
11...	100	8.0	2.5	1	--	11.0	4	88	0	0	2.4
24...	102	--	4.0	1	--	--	6	88	0	0	2.8
MAR.											
24...	111	8.0	5.0	--	4	--	10	830	0	0	1.8
APR.											
08...	110	8.2	3.0	--	2	--	5	860	0	0	2.6
08...	--	--	--	--	--	--	--	823	0	2	--
21...	104	--	7.5	--	2	--	12	--	--	--	1.1
MAY											
05...	95	--	5.0	3	3	10.6	6	8120	0	0	1.1
21...	76	--	6.5	--	6	--	7	114	0	1	1.1
JUNE											
10...	67	7.7	10.0	3	3	--	5	--	--	--	3.0
25...	77	--	7.0	--	2	--	7	124	0	0	2.9
JULY											
08...	68	--	12.0	3	3	--	7	290	<10	1	1.4
21...	70	--	14.5	--	2	--	13	80	1	2	3.9
AUG.											
12...	82	8.1	14.0	3	3	8.1	2	7600	8	65	3.5
25...	90	--	14.0	--	3	--	32	98	3	57	1.8
SEP.											
09...	87	8.3	16.0	3	3	--	2	146	1	7	5.6
22...	85	--	14.0	--	3	--	11	66	5	16	2.7

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

DATE	PHYLUM ..CLASS ..ORDER ...FAMILY....GENUS.....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
JAN 7	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	...CENTRALES	CENTRIC		
	...COSCINODISCEAE			2
	...CYCLOTELLA			2
	...STEPHANODISCUS			
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			2
	...ACHNANTHES			
	...CYMBELLACEAE			
	...CYMBELLA			8
	...EPITHEMIA			2
	...DIATOMACEAE			
	...DIATOMA			2
	...FRAGILARIACEAE			5
	...ASTERIONELLA			12
	...FRAGILARIA			3
	...HANNAEA			8
	...SYNEDRA			
	...GOMPHONEMACEAE			
	...GOMPHONEMA			5
	...NAVICULACEAE	NAVICULOID		
	...NAVICULA			10
	...TABELLARIACEAE			
	...TABELLARIA			37
	TOTAL PHYTOPLANKTON		680	

10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHYTOPLANKTON			
	PHYLUM	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
	..CLASS			
	...ORDER			
	....FAMILY			
	....GENUS			
	.....SPECIES			
FEB 11	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	...CENTRALES	CENTRIC		
	....COSCIINODISCACEAE			
	....COSCIINODISCUS			2
	...PENNALES	PENNATE		
	....ACHNANTHACEAE			
	....ACHNANTHES			8
	....CYMBELLACEAE			
	....AMPHORA			3
	....CYMBELLA			3
	....EUNOTIACEAE			
	....EUNOTIA			6
	....FRAGILARIACEAE			
	....ASTERIONELLA			8
	....FRAGILARIA			32
	....SYNEDRA			12
	....NAVICULACEAE	NAVICULOID		
	....NAVICULA			2
	....STAURONETS			2
	....NITZSCHACEAE			
	....Hantzschia			3
	....NITZSCHIA			6
	....TARELLARIACEAE			
	....TABELLARIA			14
	TOTAL PHYTOPLANKTON		540	
MAR 24	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	...CENTRALES	CENTRIC		
	....COSCIINODISCACEAE			
	....COSCIINODISCUS			6
	....MELOSIRA			15
	...PENNALES	PENNATE		
	....ACHNANTHACEAE			
	....ACHNANTHES			6
	....CYMBELLACEAE			
	....CYMBELLA			22
	....FRAGILARIACEAE			
	....ASTERIONELLA			4
	....HANNAEA			9
	....GOMPHONEMACEAE			
	....GOMPHONEMA			9
	....NAVICULACEAE	NAVICULOID		
	....NAVICULA			20
	....NITZSCHACEAE			
	....NITZSCHIA			9
	TOTAL PHYTOPLANKTON		1500	
APR 8	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	...CENTRALES	CENTRIC		
	....COSCIINODISCACEAE			
	....COSCIINODISCUS			3
	....CYCLOTELLA			6
	...PENNALES	PENNATE		
	....ACHNANTHACEAE			
	....ACHNANTHES			6
	....CYMBELLACEAE			
	....CYMBELLA			24
	....DIATOMACEAE			
	....DIATOMA			6
	....FRAGILARIACEAE			
	....HANNAEA			27
	....GOMPHONEMACEAE			
	....GOMPHONEMA			3
	....NAVICULACEAE	NAVICULOID		
	....NAVICULA			15
	....NITZSCHACEAE			
	....NITZSCHIA			9
	TOTAL PHYTOPLANKTON		1100	

PYRAMID AND WINNEMUCCA LAKES BASIN

10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		PHYTOPLANKTON		
DATE	PHYLUM	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
	.CLASS .ORDER ...FAMILY....GENUS.....SPECIES			
MAY 5	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCEAE			
	....CYCLOTELLA			4
	..PENNALFS	PENNATE		
	...ACHNANTHACEAE			
	....RHOILOCOSPHEA			2
	...CYMBELLACEAE			
	....CYMBELLA			11
	...DIATOMACEAE			
	....DIATOMA			2
	...FRAGILARIACEAE			
	....ASTERIONELLA			4
	...FRAGILARIA			44
	....HANNAEA			2
	...SYNEDRA			4
	...GOMPHONEMACEAE			
	....GOMPHONEIS			2
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			4
	...NITZSCHIAEAE			
	....NITZSCHIA			7
	...TABELLARIACEAE			
	....TABELLARIA			2
TOTAL PHYTOPLANKTON			940	
JUNE 10	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCEAE			
	....CYCLOTELLA			8
	....MELOSIRA			3
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			5
	....RHOILOCOSPHEA			3
	...FRAGILARIACEAE			
	....FRAGILARIA			16
	....HANNAEA			3
	...SYNEDRA			5
	...GOMPHONEMACEAE			
	....GOMPHONEMA			29
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			11
	...NITZSCHIAEAE			
	....NITZSCHIA			16
TOTAL PHYTOPLANKTON			1300	
JULY 8	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		21	3
	...CYMBELLACEAE			
	....CYMBELLA		42	6
	...DIATOMACEAE			
	....DIATOMA		21	3
	...FRAGILARIACEAE			
	....ASTERIONELLA		0	1
	...FRAGILARIA		450	62
	....SYNEDRA		42	6
	...GOMPHONEMACEAE			
	....GOMPHONEMA		42	6
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		42	6
	...NITZSCHIAEAE			
	....NITZSCHIA		21	3
	...TABELLARIACEAE			
	....TABELLARIA		21	3
	...CHRYSOPHYCEAE			
	...CHRYSONOMADALES			
	...OCHROMONADACEAE			
	....DINOBRYON		21	3
TOTAL PHYTOPLANKTON			720	

10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHYTOPLANKTON			
	PHYLUM	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
	..CLASS			
	...ORDER			
	....FAMILY			
	....GENUS			
	....SPECIES			
AUG 12	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	..RACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCAEAE		42	12
	....CYCLOTELLA			
	..PENNALES	PENNATE		
	...ACHNANTHACEAE		10	3
	....COCCONEIS		21	6
	....RHOTOCOSPHENIA			
	...CYMBELLACEAE		31	9
	....CYMBELLA			1
	....EPITHEMIA			
	...DIATOMACEAE		10	3
	....DIATOMA			
	...FRAGILARIACEAE		10	3
	....HANNAEA		21	6
	...SYNEDRA			
	...GOMPHONEMACEAE		63	18
	....GOMPHONEMA			
	...MERIDIONACEAE		21	6
	....MERIDION			
	...NAVICULACEAE	NAVICULOID	100	29
	....NAVICULA		21	6
	...PINNULARIA			
	...TABELLARIACEAE			1
	....TABELLARIA			
	..CHLOROPHYCEAE			
	..VOLVOCALES			
	..VOLVOCAEAE			
	....EUDORINA			1
	PYRROPHYTA			
	..DINOPHYCEAE			
	...PERIDINIALES			
	...PERIDINIAEAE			
	....PERIDINIUM			1
	TOTAL PHYTOPLANKTON		360	
SEP 9	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	..RACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCAEAE		19	3
	....CYCLOTELLA			
	..PENNALES	PENNATE		
	...ACHNANTHACEAE		38	5
	....ACHNANTHES		110	16
	....COCCONEIS			
	...CYMBELLACEAE		95	14
	....CYMBELLA		38	5
	....EPITHEMIA			
	...DIATOMACEAE			
	....DIATOMA			1
	...FRAGILARIACEAE			
	....FRAGILARIA			1
	...SYNEDRA		19	3
	...GOMPHONEMACEAE		95	14
	....GOMPHONEMA			
	...NAVICULACEAE	NAVICULOID	130	19
	....NAVICULA		19	3
	...PINNULARIA			
	...NITZSCHIAEAE			
	....NITZSCHIA		38	5
	....NITZSCHIA		95	14
	TOTAL PHYTOPLANKTON		700	
		PERIPHYTON BIOMASS	PERIPHYTON BIOMASS	UNCORRECTED PERIPHYTON
		TOTAL DRY WEIGHT	ASH WEIGHT	CHLOROPHYLL
		(G/M ²)	(G/M ²)	A (MG/M ²)
				B (MG/M ²)
AUG. 12 - SEPT. 9		9.3	2.8	7.8
				0.5

PYRAMID AND WINNEMUCCA LAKES BASIN

10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ALDRIN (UG/L)	TOTAL CHLOR-DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL D1-ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	TOTAL HEPTA-CHLOR (UG/L)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)
NOV. 19...	1205	.00	.0	.00	.00	.00	.00	.00	--	.00	.00
FEB. 11...	1200	.00	.0	.00	.00	.00	.00	.00	--	.00	.00
MAY 05...	1020	.00	.0	.00	.00	.00	.00	.00	--	.00	.00
AUG. 12...	1125	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARA-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL PCB (UG/L)	TOTAL SILVEX (UG/L)	TOTAL TOX-APHENE (UG/L)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)
NOV. 19...	.00	.00	.00	.00	.0	.00	0	--	.00	.00
FEB. 11...	.00	.00	.00	.00	.0	.00	0	--	.00	.00
MAY 05...	.00	.00	.00	.00	.0	.00	0	--	.00	.00
AUG. 12...	.00	.00	.00	.00	.0	.00	0	.00	.00	.00

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUS-PENDED CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUS-PENDED CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)
NOV. 05...	1145	1	--	--	0	<10	--	--	0	--	--
FEB. 11...	1210	1	--	--	100	40	--	--	0	--	--
MAY 05...	1135	3	0	3	0	<10	<10	0	10	10	0
AUG. 12...	1220	1	1	0	0	10	10	0	10	10	0

DATE	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)
NOV. 05...	--	--	--	10	--	--	--	<100	--	--
FEB. 11...	--	--	--	--	--	--	--	<100	--	--
MAY 05...	<50	<46	4	10	10	0	30	<100	<100	0
AUG. 12...	<50	<50	0	20	20	0	10	<100	<100	0

PYRAMID AND WINNEMUCCA LAKES BASIN

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10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL MERCURY (HG) (UG/L)	SUS- PENDED MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDED ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 05...	.0	--	--	0	--	--	<10	40	--	--
FEB. 11...	.0	--	--	0	--	--	<10	20	--	--
MAY 05...	.0	.0	.0	0	0	0	10	0	0	20
AUG. 12...	1.0	.9	.1	0	0	0	<10	10	10	0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	93	100	97	95	104	110	100	66	72	76	82
2	90	93	100	94	90	108	---	100	67	72	76	83
3	88	93	100	---	93	109	108	97	68	77	78	83
4	86	91	106	94	93	111	109	97	66	73	79	84
5	---	91	102	95	---	108	113	93	66	71	78	84
6	84	91	101	96	98	---	113	93	64	70	78	84
7	81	91	101	106	98	111	113	91	64	70	76	84
8	79	94	101	102	85	110	110	91	65	68	76	85
9	79	93	101	---	91	114	111	88	68	68	79	87
10	81	93	100	104	89	112	---	86	69	71	79	87
11	79	94	100	100	97	110	110	85	70	71	79	87
12	91	93	97	98	98	---	108	80	69	70	79	87
13	84	93	97	98	91	---	108	---	---	71	82	93
14	81	94	99	98	91	---	112	76	66	71	82	93
15	84	94	99	98	95	113	109	76	70	71	82	93
16	85	93	96	98	94	---	108	76	62	71	82	92
17	84	94	96	98	92	111	107	76	62	---	83	93
18	88	---	97	98	94	112	107	75	65	---	83	94
19	89	94	97	97	94	---	110	72	71	71	84	94
20	87	94	96	98	102	---	110	74	73	71	83	84
21	88	95	98	98	102	---	110	77	76	70	84	84
22	91	98	97	98	96	---	---	80	75	73	85	84
23	90	97	97	96	96	---	108	77	68	74	---	82
24	90	95	97	96	98	110	107	75	68	75	90	82
25	92	95	92	97	93	87	---	78	76	74	89	84
26	92	96	93	96	94	130	108	74	75	73	89	---
27	96	100	96	96	95	---	107	73	76	---	83	81
28	95	100	96	96	100	121	107	71	76	73	83	81
29	95	100	---	96	---	---	107	70	73	73	83	81
30	95	100	96	96	---	---	105	73	70	74	80	80
31	96	---	92	96	---	---	---	72	---	75	80	---
MONTH	88	95	98	98	95	---	109	82	69	72	81	86

PYRAMID AND WINNEMUCCA LAKES BASIN

10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	8.5	4.5	0.5	1.0	6.5	2.0	8.0	7.0	10.0	13.0	13.0
2	15.0	8.5	6.0	0.5	0.5	6.5	---	5.5	9.0	10.0	14.0	12.0
3	15.0	8.0	7.0	---	2.0	5.0	5.0	5.5	9.5	10.0	14.5	16.0
4	10.0	9.5	6.0	4.0	2.0	4.5	2.0	5.5	8.0	13.0	14.5	16.5
5	---	8.0	5.0	3.0	1.5	5.0	1.5	5.0	9.0	11.0	15.0	13.0
6	11.0	9.5	5.0	4.5	4.5	4.0	2.0	5.0	7.0	13.5	15.5	16.0
7	11.0	8.5	5.0	4.0	4.0	3.0	3.0	5.0	8.5	12.0	15.0	16.0
8	13.5	8.0	5.0	3.0	5.0	4.0	2.0	5.0	8.5	13.0	14.0	14.5
9	13.0	8.5	4.0	4.0	4.0	4.5	3.5	6.0	9.0	12.0	13.5	16.0
10	11.0	7.5	3.5	4.0	2.0	3.5	---	5.5	9.5	11.5	14.0	15.5
11	12.0	7.5	5.5	2.0	1.0	3.5	5.5	6.0	9.5	11.0	14.0	14.5
12	11.0	8.0	6.0	1.0	3.0	3.0	3.5	8.0	10.0	13.0	14.0	15.0
13	10.0	8.0	5.0	2.0	3.5	---	4.0	---	---	12.0	14.0	15.0
14	13.0	9.0	4.5	3.5	3.0	---	5.0	7.0	10.5	13.5	14.5	14.5
15	11.5	9.0	4.5	2.5	0.5	---	3.5	7.0	9.0	13.0	14.0	14.5
16	10.0	9.0	7.0	4.0	1.5	---	4.0	6.0	9.0	13.0	14.5	16.5
17	10.5	9.0	6.0	4.0	3.0	3.0	3.0	6.5	9.0	---	14.5	18.0
18	13.0	---	3.5	4.0	0.5	4.0	3.0	8.0	9.0	---	14.5	17.0
19	11.0	7.0	4.0	4.0	3.5	---	5.0	6.5	8.0	12.0	12.5	17.0
20	10.0	7.0	5.0	3.0	4.5	---	6.5	5.0	9.0	12.0	12.0	14.0
21	10.0	7.0	4.5	3.0	2.0	---	5.0	5.5	9.0	12.0	13.5	12.5
22	9.0	5.5	3.0	3.0	2.0	---	---	6.5	8.0	15.0	13.5	13.0
23	8.5	5.0	2.0	4.0	1.5	---	5.0	9.0	8.0	13.0	---	16.5
24	8.5	6.0	1.5	5.0	2.5	4.0	5.0	8.5	8.0	16.0	13.0	15.5
25	10.0	6.0	2.0	5.0	3.0	3.5	---	7.5	10.0	15.0	16.5	12.0
26	10.5	5.5	1.5	5.0	3.0	0.0	5.0	8.5	9.0	16.0	14.5	---
27	10.0	5.5	4.5	2.0	4.5	---	5.5	9.0	10.5	---	12.5	12.0
28	10.0	4.5	3.5	3.5	4.5	0.0	4.5	7.0	10.0	15.5	13.0	13.0
29	9.5	4.0	1.0	1.5	---	---	5.0	7.0	10.0	13.0	13.5	12.0
30	9.5	3.0	0.5	3.0	---	---	5.0	7.0	9.0	12.5	12.0	14.0
31	9.0	---	---	1.0	---	---	---	7.0	---	13.5	13.0	---
MONTH	11.0	7.0	4.0	3.0	2.5	---	4.0	6.5	9.0	13.0	14.0	14.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
JAN.					
07...	1130	4.0	449	4	4.8
FEB.					
11...	1145	2.5	424	4	4.6
MAR.					
24...	1220	5.0	592	10	16
APR.					
08...	1000	3.0	665	10	18
MAY					
21...	1240	6.5	3090	42	350
JUNE					
10...	1215	10.0	1900	29	149
JULY					
08...	1120	12.0	1210	18	59
AUG.					
12...	1130	14.0	1260	11	37
SEP.					
09...	1100	16.0	742	6	12

PYRAMID AND WINNEMUCCA LAKES BASIN

101

10348000 TRUCKEE RIVER AT RENO, NEV.

LOCATION.--Lat 39°31'55", long 119°47'05", in NW¼ sec.7, T.19 N., R.20 E., Washoe County, on left bank 400 ft (122 m) downstream from Kietzke Lane bridge, 0.5 mi (0.8 km) downstream from Scott Island, 1.5 mi (2.4 km) east of Reno Post Office, and 5 mi (8 km) upstream from Steamboat Creek.

DRAINAGE AREA.--1,067 mi² (2,764 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 4,431.97 ft (1,350.864 m) above mean sea level (levels by Corps of Engineers). July 1906 to September 1946, nonrecording gage at site 1 mi (2 km) upstream at different datum.

AVERAGE DISCHARGE.--49 years (1906-21, 1925-26, 1930-34, 1946-75), 683 ft³/s (19.34 m³/s), 494,800 acre-ft/yr (610 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,750 ft³/s (106 m³/s) May 15 (gage height, 6.72 ft or 2.048 m); minimum, 159 ft³/s (4.50 m³/s) Oct. 1.

Period of record: Maximum discharge, 20,800 ft³/s (589 m³/s) Dec. 23, 1955; maximum gage height, 13.83 ft (4.215 m) Nov. 21, 1950; no flow Sept. 12, 14-24, 26-30, 1926.

REMARKS.--Records good. Flow regulated by Lake Tahoe, Martis Creek Lake, Prosser Creek, Stampede and Boca Reservoirs, Donner and Independence Lakes, and by several powerplants. Many diversions above station.

REVISIONS.--WSP 1714: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	537	433	617	555	638	685	957	2720	668	976	589
2	342	528	444	612	577	618	794	1100	2640	639	955	517
3	356	543	456	557	547	554	637	1480	2630	776	955	559
4	325	535	550	454	542	560	632	1370	2530	846	920	475
5	317	538	496	447	523	599	634	1330	2530	814	924	515
6	314	535	469	458	534	564	612	1720	2770	833	961	494
7	285	562	460	449	552	563	600	1800	3130	867	1030	494
8	317	572	454	511	625	673	646	2040	3130	943	1020	499
9	332	566	448	418	679	601	643	2210	2770	922	905	529
10	326	563	446	389	661	560	701	2490	1720	887	902	666
11	329	562	447	474	504	539	732	2650	1660	860	905	599
12	388	560	498	516	422	529	762	2840	1710	929	997	409
13	421	560	524	517	699	562	823	3190	1790	908	981	401
14	402	564	535	516	661	587	915	3340	1870	929	963	414
15	385	561	541	517	548	540	906	3390	1840	993	931	418
16	378	548	535	516	523	558	895	3120	2010	986	800	387
17	375	544	531	516	505	532	856	3070	2150	915	777	338
18	368	533	523	516	455	532	854	3220	1760	887	815	268
19	363	541	527	517	467	556	857	3360	1170	873	858	208
20	358	543	523	521	460	578	834	3260	840	880	816	375
21	371	564	496	525	409	574	939	2800	697	873	882	390
22	364	596	493	524	428	619	1010	2650	702	795	813	393
23	398	561	494	531	443	609	977	2450	702	840	607	426
24	429	555	520	541	455	664	1040	2590	820	892	573	421
25	430	563	602	560	549	1270	1120	2760	702	880	543	447
26	405	549	623	570	559	686	996	2640	757	920	540	498
27	397	491	562	569	599	546	941	2560	795	918	647	547
28	493	437	558	554	626	508	947	2630	801	908	598	529
29	454	424	535	564	---	612	969	2700	814	907	580	476
30	448	417	550	557	---	609	990	2650	769	889	611	557
31	489	---	637	559	---	638	---	2560	---	891	612	---
TOTAL	11649	16152	15910	16092	15107	18778	24947	76927	50929	27068	25397	13838
MEAN	376	538	513	519	540	606	832	2482	1698	873	819	461
MAX	493	596	637	617	699	1270	1120	3390	3130	993	1030	666
MIN	285	417	433	389	409	508	600	957	697	639	540	208
AC-FT	23110	32040	31560	31920	29960	37250	49480	152600	101000	53690	50370	27450
CAL YR 1974	TOTAL	353528	MEAN 969	MAX 3110	MIN 243	AC-FT 701200						
WTR YR 1975	TOTAL	312794	MEAN 857	MAX 3390	MIN 208	AC-FT 620400						

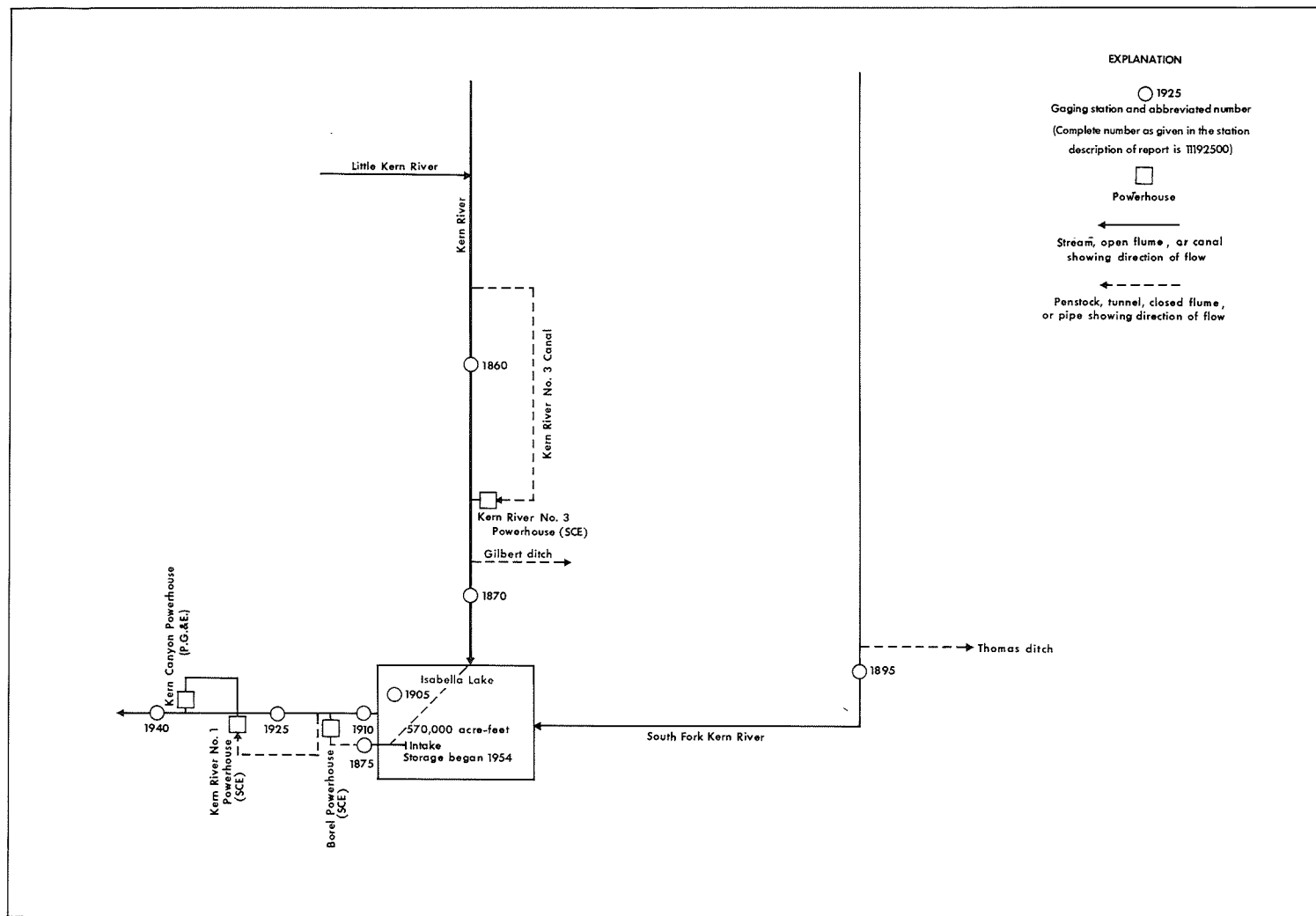


FIGURE 4.--Schematic diagram showing diversions and storage in Kern River basin.

LOCATION.--Lat 35°56'43", long 118°28'36", in SW¼ sec.12, T.23 S., R.32 E. (unsurveyed), Tulare County, on left bank at Packsaddle Canyon Creek, 30 ft (9 m) upstream from sand trap sluice gates, 100 ft (30 m) downstream from diversion dam, and 13.4 mi (21.6 km) north of Kernville.

DRAINAGE AREA.--846 mi² (2,191 km²).

PERIOD OF RECORD, --January 1912 to current year. Records for water year 1912 incomplete, yearly estimates published in WSP 1315-A. Prior to October 1953, records for river and canal published separately; combined flow only, October 1953 to September 1960.

GAGE.--Water-stage recorder on river; water-stage recorder and rectangular concrete-line flume for canal diversion. Altitude of gage is 3,620 ft (1,103 m), from topographic map. Prior to Apr. 1, 1913, at site 1.4 mi (2.3 km) downstream at different datum. Apr. 1 to Sept. 14, 1913, nonrecording gage and Sept. 15, 1913, to Sept. 30, 1967, water-stage recorder, at site 1.2 mi (1.9 km) downstream at different datum.

SEPT. 30, 1967, water-stage recorder, at site 1.2 mi (1.9 km) downstream at different datum.
 AVERAGE DISCHARGE (River only).--9 years (1911-20), 790 ft³/s (22.37 m³/s), 571,900 acre-ft/yr (705 hm³/yr);
 54 years (1921-75), 346 ft³/s (9.799 m³/s), 250,700 acre-ft/yr (309 hm³/yr).
 (Combined river and diversion).--64 years (1911-75), 722 ft³/s (20.45 m³/s), 523,100 acre-ft/yr
 (645 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 3,440 ft³/s (97.4 m³/s) June 1 (gage height, 7.83 ft or 2.387 m); minimum daily, 41 ft³/s (1.16 m³/s) Dec. 1, 2.

Period of record: Maximum discharge, 60,000 ft³/s (1,700 m³/s) Dec. 6, 1966 (gage height, 22.77 ft or 6.940 m, site and datum then in use, from floodmarks), from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of computed flow over dam at gage height 17.55 ft (5.349 m), basic data for computation furnished by Southern California Edison Co., and slope-area measurement of maximum flow; no flow July 31 to Nov. 7, Nov. 12 to Dec. 7, 1924, Jan. 16 to Feb. 7, 1925.

(Combined flow).--Current year: Maximum discharge, 4,030 ft³/s (114 m³/s) June 1; minimum daily, 183 ft³/s (5.18 m³/s) Dec. 3.

Period of record: Maximum discharge, 60,000 ft³/s (1,700 m³/s) Dec. 6, 1966; minimum daily, 78 ft³/s (2.21 m³/s) Aug. 30, 31, Sept. 17, 19, 1924.

REMARKS.--Records good. Since 1921 Kern River No. 3 Canal diverts up to 630 ft³/s (17.8 m³/s) 100 ft (30 m) upstream from station, from left bank of Kern River in sec.12, T.23 S., R.32 E. (unsurveyed), for power development; water is returned to river 15 mi (24 km) downstream from station. See schematic diagram of Kern River basin. For records of combined discharge of river and canal, see following page.

COOPERATION. --Gage-height records and 20 discharge measurements for Kern River and gage-height record and 14 discharge measurements for canal furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1912, 1916(M). WSP 1930: 1914(M), 1918(M).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	50	41	45	44	72	104	181	3140	414	87	74
2	54	45	41	48	43	73	102	204	3070	360	87	75
3	54	46	42	54	43	73	104	318	2880	340	91	76
4	55	45	43	50	43	73	104	397	2770	305	98	76
5	57	44	42	50	44	74	105	294	2920	321	98	75
6	57	45	43	47	43	74	104	244	3040	360	96	75
7	57	44	43	43	44	74	102	260	2950	369	94	76
8	57	44	42	43	44	75	102	360	2740	346	93	79
9	56	44	42	43	47	74	102	462	2540	323	91	79
10	57	43	42	42	42	74	102	583	2540	326	90	75
11	56	43	43	42	43	73	102	730	2440	337	89	75
12	55	43	43	43	45	73	102	936	2050	340	89	76
13	55	43	43	43	45	73	102	1170	1620	294	89	76
14	55	43	42	43	44	74	102	1380	1570	208	89	75
15	55	44	43	45	44	74	102	1560	1790	133	88	75
16	55	43	44	44	44	73	102	1640	1940	106	88	76
17	56	43	44	45	43	72	102	1540	1620	102	87	75
18	58	42	44	45	43	73	102	1660	1250	102	87	75
19	57	42	44	45	44	74	102	2180	947	101	86	76
20	55	42	44	44	44	74	104	2290	781	100	86	78
21	57	43	45	43	43	74	107	1500	720	100	87	80
22	57	42	44	42	43	78	110	1190	730	98	87	77
23	56	42	44	43	43	75	113	1100	807	95	87	75
24	56	42	44	42	43	77	117	1340	725	94	87	77
25	57	42	44	42	44	169	263	1800	562	93	88	79
26	57	42	45	42	44	95	121	2110	455	91	88	80
27	58	42	45	42	45	75	100	2300	466	91	89	81
28	60	42	45	42	60	74	100	2400	488	91	89	77
29	58	42	44	43	---	74	131	2520	488	88	90	81
30	58	42	44	43	---	74	198	2500	466	87	93	85
31	59	---	45	43	---	88	---	2840	---	88	94	---
TOTAL	1758	1299	1344	1371	1241	2422	3413	39989	50505	6303	2782	2309
MEAN	56.7	43.3	43.4	44.2	44.3	78.1	114	1290	1684	203	89.7	77.0
MAX	64	50	45	54	60	169	263	2840	3140	414	98	85
MIN	54	42	41	42	42	72	100	181	455	87	86	74
AC-FT	3490	2580	2670	2720	2460	4800	6770	79320	100200	12500	5520	4580
CAL YR 1974	TOTAL	175291	MEAN 480	MAX 3710	MIN 32	AC-FT 347700						
WTR YR 1975	TOTAL	114736	MEAN 314	MAX 3140	MIN 41	AC-FT 227600						

BUENA VISTA LAKE BASIN

11186000 KERN RIVER NEAR KERNVILLE, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF KERN RIVER AND KERN RIVER
NO. 3 CANAL NEAR KERNVILLE, CALIF., WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	285	217	215	242	411	521	755	3730	1000	401	206
2	221	272	222	218	260	416	485	778	3660	950	379	210
3	250	266	183	220	243	406	499	891	3470	928	364	209
4	248	258	342	230	259	395	512	970	3360	887	360	203
5	237	256	291	229	259	424	529	868	3520	906	353	202
6	232	255	265	255	287	468	519	818	3650	946	345	199
7	231	253	267	292	282	433	482	833	3560	960	331	197
8	288	261	266	293	283	491	468	933	3350	946	310	206
9	279	246	247	266	441	469	462	1040	3150	919	305	241
10	261	247	251	254	491	425	449	1160	3140	931	300	253
11	249	254	257	260	373	402	446	1300	3030	939	291	274
12	242	256	260	251	353	381	439	1520	2640	945	286	261
13	236	256	263	248	343	376	453	1760	2200	903	286	250
14	233	256	247	248	344	393	491	1970	2160	814	281	235
15	226	254	244	249	318	386	482	2150	2380	729	274	227
16	221	249	247	245	301	399	456	2230	2520	681	268	223
17	218	247	248	245	273	375	436	2130	2210	650	263	241
18	219	244	243	245	268	401	431	2250	1840	638	261	245
19	217	238	241	247	284	419	444	2770	1530	613	258	243
20	213	239	236	249	289	435	476	2890	1370	586	264	236
21	213	238	236	253	283	430	543	2100	1310	559	268	226
22	213	261	230	252	271	529	613	1800	1320	530	261	215
23	212	246	208	253	277	479	666	1710	1390	504	249	207
24	212	235	184	256	301	522	686	1930	1310	486	241	206
25	185	240	207	258	321	717	837	2390	1140	468	235	206
26	215	234	241	263	335	659	692	2700	1040	450	230	203
27	241	231	235	258	353	574	643	2890	1050	443	228	202
28	292	227	240	220	385	516	660	2990	1080	440	225	195
29	322	220	224	208	---	485	736	3100	1080	469	226	197
30	267	213	218	231	---	504	774	3090	1050	483	228	198
31	277	---	225	214	---	524	---	3430	---	434	225	---
TOTAL	7378	7437	7485	7625	8719	14244	16330	58146	68240	22137	8796	6616
MEAN	238	248	241	246	311	459	544	1876	2275	714	284	221
MAX	322	285	342	293	491	717	837	3430	3730	1000	401	274
MIN	185	213	183	208	242	375	431	755	1040	434	225	195
AC-FT	14630	14750	14850	15120	17290	28250	32390	115300	135400	43910	17450	13120
CAL YR 1974	TOTAL	318392	MEAN 872	MAX 4280	MIN 183	AC-FT 631500						
WTR YR 1975	TOTAL	233153	MEAN 639	MAX 3730	MIN 183	AC-FT 462500						

11186000 KERN RIVER NEAR KERNVILLE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1955 to July 1963, water years 1964-69, 1972 to current year (partial-record station).
 Water temperatures: June 1961 to September 1963, October 1964 to September 1965.

REMARKS.--Records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)
OCT. 02...	0630	54	10	2.2	12	52	0	43
MAR. 05...	0830	74	10	1.9	13	53	0	43
JULY 23...	0800	95	--	--	--	33	0	27

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)
OCT. 02...	8.7	5.6	.00	--	.00	.01	.01	89	.12
MAR. 05...	8.7	5.3	--	--	--	--	--	79	.11
JULY 23...	--	--	.00	.00	.20	.04	--	57	.08

DATE	DIS- SOLVED SOLIDS (TONS PER DAY)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	DIS- SOLVED BORON (B) (UG/L)
OCT. 02...	13.0	1	34	0	.9	--	.5	100
MAR. 05...	15.8	--	33	0	1.0	--	--	200
JULY 23...	14.6	--	--	--	--	0	.8	--

DATE	TIME	DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
OCT. 02...	0630	54	127	7.6	--	6.3
MAR. 05...	0830	74	85	7.3	7.0	10.6
JULY 23...	0800	95	65	7.4	16.5	8.1

BUENA VISTA LAKE BASIN

11187000 KERN RIVER AT KERNVILLE, CALIF.

LOCATION.--Lat 35°45'34", long 118°25'12", in NE&NW¼ sec.15, T.25 S., R.33 E., Kern County, on left bank 0.5 mi (0.8 km) upstream from highway bridge at Kernville, 1.7 mi (2.7 km) upstream from Caldwell Creek, 9.5 mi (15.3 km) upstream from Isabella Dam, and 42 mi (68 km) northeast of Bakersfield.

DRAINAGE AREA.--1,009 mi² (2,613 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,634.57 ft (803.017 m) above mean sea level. January 1905 to September 1912, nonrecording gage at two sites 3.5 mi (5.6 km) downstream at different datums. October 1953 to Feb. 20, 1967, water-stage recorder 0.6 mi (1.0 km) downstream at datum 2,621.57 ft (799.055 m) above mean sea level.

AVERAGE DISCHARGE.--29 years, 861 ft³/s (24.38 m³/s), 623,800 acre-ft/yr (769 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,190 ft³/s (119 m³/s) June 1 (gage height, 7.60 ft or 2.316 m); minimum daily, 181 ft³/s (5.13 m³/s) Sept. 30.

Period of record: Maximum discharge, 74,000 ft³/s (2,100 m³/s) Dec. 6, 1966 (gage height, 19.32 ft or 5.889 m, from floodmarks, present site), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of maximum flow; minimum, 74 ft³/s (2.10 m³/s) Oct. 27, 1954, Aug. 1, Oct. 4, 1961.

Maximum stage known from at least 1912 to December 1966, 18.4 ft (5.61 m), from floodmarks, Nov. 19, 1950, site and datum then in use (discharge, 38,700 ft³/s or 1,100 m³/s).

REMARKS.--Records good. Slight regulation at times by operation of Kern River No. 3 canal and powerplant. A few small diversions for irrigation above station. Gilbert irrigation ditch diverts up to 7 ft³/s (0.20 m³/s) around station during irrigation season.

COOPERATION.--Eight discharge measurements furnished by Southern California Edison Co.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NCV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	290	225	232	272	436	555	874	3,810	1,010	398	210
2	214	270	229	227	296	445	524	894	3,750	955	369	202
3	252	266	238	217	289	437	542	1,010	3,530	905	351	199
4	245	260	388	252	311	424	556	1,150	3,290	869	337	200
5	234	260	313	250	307	455	577	1,030	3,380	857	322	198
6	230	256	284	270	326	507	567	939	3,460	923	313	193
7	234	252	289	331	317	465	524	936	3,400	949	303	191
8	311	260	289	336	319	527	504	1,040	3,230	934	298	207
9	285	256	268	307	518	508	498	1,180	3,030	915	290	252
10	264	252	269	287	601	457	482	1,310	3,010	942	287	257
11	252	252	272	286	435	433	479	1,470	2,950	1,000	280	276
12	238	256	276	278	397	409	472	1,720	2,700	1,020	276	268
13	232	256	279	275	383	399	486	1,990	2,310	995	274	249
14	225	256	266	274	386	423	533	2,230	2,200	920	270	231
15	216	252	262	274	359	415	524	2,460	2,380	760	263	223
16	214	249	265	274	336	429	489	2,530	2,560	690	258	219
17	214	249	264	271	312	414	468	2,430	2,270	650	257	238
18	213	246	261	275	305	432	461	2,480	1,900	616	255	240
19	214	242	256	275	317	450	474	2,980	1,590	600	255	233
20	213	242	253	279	321	476	506	3,240	1,380	583	264	226
21	213	243	253	287	317	464	587	2,380	1,310	566	262	214
22	213	264	248	287	305	608	673	1,950	1,300	543	253	206
23	216	250	223	288	310	533	741	1,800	1,370	522	242	199
24	217	240	193	290	328	573	775	2,030	1,310	511	229	197
25	214	244	209	292	343	809	945	2,510	1,170	496	224	194
26	222	241	258	296	362	844	850	2,880	1,040	449	220	191
27	241	236	252	293	379	657	727	3,090	1,030	441	218	188
28	307	233	260	254	399	579	752	3,180	1,060	444	220	186
29	330	226	246	237	-----	538	804	3,280	1,070	481	219	183
30	266	221	237	263	-----	548	881	3,270	1,050	470	215	181
31	278	-----	244	244	-----	566	-----	3,510	-----	420	209	-----
TOTAL	7,432	7,520	8,069	8,501	9,850	15,660	17,956	63,773	67,840	22,436	8,431	6,451
MEAN	240	251	260	274	352	505	599	2,057	2,261	724	272	215
MAX	330	290	388	336	601	844	945	3,510	3,810	1,020	398	276
MIN	213	221	193	217	272	399	461	874	1,030	420	209	181
AC-FT	14,740	14,920	16,000	16,860	19,540	31,060	35,620	126,500	134,600	44,500	16,720	12,800
CAL YR 1974	TOTAL 342,008	MEAN 937	MAX 4,680	MIN 193	AC-FT 678,400							
WTR YR 1975	TOTAL 243,919	MEAN 668	MAX 3,810	MIN 181	AC-FT 483,800							

Peak discharge (base, 2,000 ft³/s).--May 20 (0830) 3,550 ft³/s (7.15 ft); June 1 (1045) 4,190 ft³/s (7.60 ft).

11187000 KERN RIVER AT KERNVILLE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1975 (partial-record station).

Water temperatures: June 1962 to current year.

Sediment records: Water years 1967 to September 1974 (partial-record station).

EXTREMES.--Current year:

Water temperatures: Maximum, 21.0°C Sept. 18; minimum, 1.5°C on several days during December to February.

Period of record:

Water temperatures: Maximum (1962-63, 1964 to current year), 28.5°C (recorded), Aug. 20, 1972; minimum, 0.5°C Dec. 24, 25, 1970.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)
OCT. 02...	0745	197	12	2.2	12	61	0	50
DEC. 17...	0815	270	13	--	15	66	0	54
MAR. 05...	0915	435	12	2.2	12	59	0	48
MAY 27...	1345	3230	3.6	.5	3.3	17	0	14
JULY 23...	0930	524	--	--	--	39	0	32

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (KESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)
OCT. 02...	9.2	5.0	.03	--	.20	.07	.01	91	.12
DEC. 17...	9.9	5.0	.11	--	--	--	--	95	.13
MAR. 05...	7.2	5.4	--	--	--	--	--	86	.12
MAY 27...	.0	1.9	--	--	--	--	--	44	.06
JULY 23...	--	--	.01	.00	.20	.02	--	72	.10

DATE	DIS- SOLVED SOLIDS (TONS PER DAY)	TOTAL NON- FIL- TRABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	DIS- SOLVED BORON (B) (UG/L)
OCT. 02...	48.4	12	39	0	.8	--	1.6	100
DEC. 17...	69.3	--	39	0	--	--	--	200
MAR. 05...	101	--	39	0	.8	--	--	200
MAY 27...	384	--	11	0	.4	--	--	0
JULY 23...	102	--	--	--	--	1	.6	--

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
OCT. 02...	0745	197	137	7.5	--	9.7
DEC. 17...	0815	270	90	7.9	3.5	12.4
MAR. 05...	0915	435	85	--	7.5	10.3
MAY 27...	1345	3230	35	7.2	15.0	10.0
JULY 23...	0930	524	75	7.6	19.0	8.6

BUENA VISTA LAKE BASIN

11187000 KERN RIVER AT KERNVILLE, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	14.5	9.5	8.5	4.5	4.0	3.5	2.5	2.5	1.5	8.0	7.0
2	15.5	15.5	9.0	8.5	5.0	4.0	3.5	2.5	2.5	1.5	7.5	6.5
3	15.5	15.0	9.0	8.0	5.0	4.5	3.0	2.5	3.0	1.5	7.0	6.5
4	15.5	14.5	8.5	8.0	5.0	4.0	3.0	2.0	3.5	1.5	7.0	6.0
5	14.5	14.0	9.0	8.0	4.5	4.0	3.0	2.0	3.5	2.0	7.0	7.0
6	14.0	13.5	8.5	8.0	4.0	3.5	3.5	2.5	4.0	2.5	7.0	6.5
7	13.5	13.0	8.5	7.5	4.0	3.0	4.5	3.0	4.5	3.5	6.5	6.0
8	13.0	12.5	9.0	8.0	4.0	3.5	4.5	4.0	5.0	4.0	7.0	6.5
9	13.5	13.0	8.5	8.0	3.5	3.0	4.0	3.5	5.0	4.5	7.0	6.5
10	13.0	12.5	8.5	7.5	3.5	2.5	3.5	3.0	4.5	4.0	6.5	6.0
11	13.0	12.0	8.5	7.5	3.5	3.0	3.5	3.0	4.5	3.5	6.5	6.0
12	13.0	12.5	8.0	8.0	4.0	3.0	4.0	3.0	5.0	3.5	7.5	6.0
13	13.0	12.5	8.0	7.5	4.5	3.5	4.5	3.0	5.0	4.5	8.0	7.0
14	13.5	12.5	8.5	7.5	4.0	3.5	4.5	3.5	5.5	5.0	7.0	6.0
15	13.5	13.0	8.0	7.5	4.0	3.5	4.0	3.5	5.5	4.0	7.5	6.0
16	13.5	12.5	8.0	7.5	4.0	3.0	4.5	3.5	4.5	3.0	7.0	6.0
17	13.0	12.5	8.5	7.5	4.0	3.0	4.5	3.5	4.0	2.5	7.0	5.5
18	13.0	12.5	8.0	7.5	4.0	3.0	5.0	3.5	4.0	2.5	8.0	6.0
19	13.0	12.5	7.5	7.0	4.0	3.0	5.0	4.0	4.5	3.5	8.5	7.0
20	13.5	12.5	8.0	7.0	4.0	3.5	5.0	4.0	6.0	4.5	8.5	7.5
21	13.5	13.0	7.5	7.0	4.5	3.5	5.5	4.0	6.0	4.5	8.5	7.0
22	13.0	12.5	8.0	7.0	4.5	3.5	5.0	4.5	5.5	4.0	8.5	6.5
23	13.0	12.5	7.5	6.5	3.5	2.5	5.0	4.0	5.5	4.0	7.0	5.5
24	12.5	12.0	6.5	6.0	3.0	2.0	5.5	4.0	6.0	4.5	8.5	6.5
25	13.0	12.0	6.0	5.5	3.0	1.5	5.5	4.5	6.5	5.5	8.5	7.0
26	12.0	11.5	6.0	5.0	3.0	1.5	5.5	4.5	7.0	5.5	7.0	6.0
27	12.0	11.5	5.5	5.0	2.5	2.0	5.0	3.5	7.5	6.5	6.5	5.5
28	11.5	11.0	5.5	4.5	2.5	2.0	3.5	2.5	8.0	6.5	6.5	5.5
29	11.0	10.0	5.0	4.0	3.0	2.0	3.0	2.0	---	---	7.0	5.5
30	10.0	9.0	5.0	4.0	3.0	2.0	3.0	2.0	---	---	8.0	6.0
31	9.5	9.0	---	---	3.0	2.0	3.0	1.5	---	---	8.0	7.0
MONTH	15.5	9.0	9.5	4.0	5.0	1.5	5.5	1.5	8.0	1.5	8.5	5.5
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	6.5	10.0	8.0	12.5	12.5	16.5	14.5	19.0	18.0	19.0	17.5
2	8.0	6.5	10.0	8.5	12.5	12.0	16.0	14.5	19.5	18.5	19.0	17.5
3	8.5	7.0	10.5	9.0	12.5	12.0	16.0	14.5	20.0	18.5	19.0	17.5
4	8.5	7.5	10.5	9.0	12.5	12.5	16.5	15.0	20.5	19.0	19.0	18.0
5	8.5	6.5	9.0	7.5	12.5	12.5	17.0	15.5	20.5	19.5	19.5	18.5
6	6.5	5.5	10.0	7.5	13.0	12.5	17.5	16.5	20.5	19.0	19.5	18.5
7	6.0	5.0	10.5	8.5	13.0	12.5	17.5	16.5	20.0	18.5	19.0	18.0
8	6.5	5.5	11.0	9.5	13.0	13.0	18.0	16.5	20.0	19.0	19.0	19.0
9	7.5	6.0	11.0	9.5	13.5	13.0	18.0	17.5	20.0	18.5	19.0	18.5
10	8.0	6.5	11.0	9.5	13.5	13.5	18.5	17.0	19.5	18.5	19.0	18.0
11	8.0	7.0	11.5	10.5	13.5	13.5	19.5	18.0	19.5	18.5	18.5	16.5
12	8.5	6.5	11.5	10.5	14.5	13.5	19.5	18.0	19.5	18.0	18.0	15.5
13	9.5	7.5	11.5	10.5	14.5	13.5	19.0	18.0	19.5	18.0	18.5	15.5
14	9.0	8.0	11.5	10.5	15.0	14.0	18.5	18.0	19.5	18.0	19.0	16.0
15	8.0	7.0	11.0	10.5	15.5	15.0	18.0	17.5	19.5	18.0	19.0	16.5
16	8.0	7.0	11.5	10.5	15.5	14.5	18.5	17.0	20.0	18.0	19.0	17.0
17	7.5	6.5	11.5	11.0	15.0	14.0	19.0	17.0	20.0	18.5	20.5	18.0
18	8.0	6.0	11.5	10.5	14.5	13.5	19.5	18.0	20.0	18.5	21.0	19.0
19	9.0	7.5	12.0	11.5	14.0	12.5	19.0	18.0	20.0	18.5	20.5	18.5
20	9.5	8.0	12.0	8.5	14.0	12.5	19.0	17.5	19.5	18.0	20.0	18.0
21	10.0	9.0	9.0	7.5	15.5	13.0	19.0	18.0	19.0	18.0	19.5	17.5
22	10.0	9.0	10.0	9.0	16.0	14.5	19.5	18.0	19.0	17.5	19.0	17.0
23	10.0	9.0	11.5	10.0	16.5	15.0	19.5	18.5	19.5	18.0	19.0	17.0
24	10.0	8.5	12.0	11.0	15.5	14.5	20.0	19.0	19.5	18.0	18.5	16.5
25	9.5	8.0	12.5	12.0	14.5	13.5	20.0	19.0	20.0	18.5	18.5	16.0
26	8.0	7.0	12.0	12.0	15.5	13.5	20.5	19.5	20.0	19.0	18.0	15.5
27	8.5	7.0	12.0	11.5	16.0	14.0	20.0	19.5	20.0	18.5	18.0	15.5
28	9.5	8.0	12.5	12.0	16.5	14.5	19.5	18.5	19.5	18.0	17.5	15.5
29	10.0	8.5	12.5	12.0	16.5	15.0	19.5	18.5	19.0	18.0	17.0	15.0
30	10.0	8.5	12.5	12.0	16.5	15.0	19.0	18.5	19.0	18.0	17.0	14.5
31	---	---	12.5	12.0	---	---	19.0	17.5	19.0	17.5	---	---
MONTH	10.0	5.0	12.5	7.5	16.5	12.0	20.5	14.5	20.5	17.5	21.0	14.5

11187500 BOREL CANAL BELOW ISABELLA DAM, CALIF.

LOCATION.--Lat 35°38'32", long 118°28'09", in SW¼NE¼ sec.30, T.26 S., R.33 E., Kern County, on right bank 500 ft (152 m) downstream from Isabella Dam, and 3 mi (5 km) upstream from point where canal crosses Erskine Creek.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,540 ft (774 m), from topographic map. Prior to Apr. 29, 1952, at site 4 mi (6 km) upstream at different datum.

AVERAGE DISCHARGE.--54 years, 374 ft³/s (10.59 m³/s), 271,000 acre-ft/yr (334 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 634 ft³/s (18.0 m³/s) Mar. 13, 14, 1952; no flow at times.

REMARKS.--Records excellent. Canal diverts from right bank of Kern River 5.5 mi (8.8 km) upstream from Isabella Dam, and above South Fork Kern River. When capacity of Isabella Reservoir is above 110,000 acre-ft (136 hm³), the diversion is at the dam. Canal is used to supply Borel powerplant of Southern California Edison Co., 6 mi (10 km) downstream from station, at which point water is returned to the Kern River.

COOPERATION.--Water-stage recorder graph and 17 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	569	569	243	275	338	582	582	559	564	527	541	547
2	569	569	251	260	336	580	583	559	555	527	538	546
3	569	568	258	260	337	580	573	558	559	527	535	547
4	571	567	355	260	338	584	573	558	562	523	537	549
5	570	507	451	260	338	586	568	558	563	523	535	551
6	569	467	474	260	338	585	570	558	563	523	537	552
7	569	456	474	260	338	585	576	556	566	526	541	551
8	569	443	471	260	338	585	536	483	566	535	538	552
9	569	431	403	277	338	586	532	338	565	543	539	550
10	569	433	339	310	392	585	544	422	564	549	538	550
11	569	469	281	310	435	485	518	422	563	546	537	552
12	569	450	260	340	435	511	483	421	563	544	539	552
13	569	450	260	362	435	586	471	421	561	543	539	551
14	569	489	293	359	435	583	471	421	556	540	539	551
15	569	539	317	359	435	569	471	421	556	538	538	537
16	569	549	317	347	435	549	488	467	554	535	539	525
17	569	551	317	341	435	539	483	551	546	534	536	523
18	569	551	317	341	489	542	467	551	542	539	538	502
19	569	549	317	341	533	565	467	552	546	540	539	503
20	569	549	317	341	566	571	467	554	548	537	542	502
21	569	549	317	341	585	554	470	554	544	542	542	528
22	569	550	315	341	581	534	471	556	542	542	544	541
23	569	549	315	341	583	538	542	556	536	544	541	509
24	570	549	292	341	581	551	578	558	535	545	543	476
25	572	549	275	340	581	566	578	556	534	545	540	434
26	570	549	275	338	582	586	577	559	534	547	539	428
27	569	549	293	338	584	577	561	551	530	546	540	392
28	568	549	306	338	483	586	578	561	530	545	540	383
29	568	507	306	338	---	586	578	563	527	543	544	390
30	568	311	306	338	---	587	578	563	527	542	545	397
31	571	---	306	338	---	586	---	564	---	543	550	---
TOTAL	17646	15367	10021	9855	12624	17599	15950	16081	16501	16683	16733	15271
MEAN	569	512	323	318	451	568	532	519	550	538	540	509
MAX	572	569	474	362	585	587	583	564	566	549	550	552
MIN	568	311	243	260	336	485	467	338	527	523	535	383
AC-FT	35000	30480	19880	19550	25040	34910	31640	31900	32730	33090	33190	30290
CAL YR 1974 TOTAL	193370.0			MEAN 530	MAX 589	MIN 3.0	AC-FT 383500					
WTR YR 1975 TOTAL	180331.0			MEAN 494	MAX 587	MIN 243	AC-FT 357700					

11187500 BOREL CANAL BELOW ISABELLA DAM, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1958 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 23.5°C on several days during August and September; minimum, 5.5°C Jan. 12.

Period of record:

Water temperatures: Maximum, 26.5°C July 31, Aug. 1, 1959; minimum, (1958-72, 1973 to current year), 0.5°C Jan. 17, 18, 1960.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	21.0	16.0	15.5	11.5	11.5	7.0	6.5	6.5	6.5	7.5	7.0
2	21.5	21.0	15.5	15.0	11.5	11.5	6.5	6.5	6.5	6.5	7.5	7.0
3	21.0	21.0	15.0	15.0	11.5	11.5	6.5	6.0	6.5	6.5	8.5	7.0
4	21.0	20.5	15.0	14.5	11.5	11.0	6.0	6.0	6.5	6.5	9.0	8.0
5	21.0	20.5	14.5	14.5	11.0	11.0	6.0	6.0	6.5	6.5	9.5	9.0
6	21.0	20.5	14.5	14.0	11.0	11.0	6.0	6.0	6.5	6.5	9.5	9.5
7	21.0	20.5	14.5	14.0	11.0	10.5	6.0	6.0	6.5	6.5	10.0	9.5
8	20.5	20.0	14.5	14.0	10.5	10.0	6.0	6.0	7.0	6.5	9.5	9.5
9	20.5	20.0	14.0	13.5	10.5	10.0	6.0	6.0	6.5	6.5	9.5	9.0
10	20.0	20.0	13.5	13.5	10.0	10.0	6.0	6.0	6.5	6.5	9.0	9.0
11	20.0	19.5	13.5	13.5	10.0	10.0	6.0	6.0	6.5	6.0	9.0	9.0
12	20.0	19.5	13.5	13.5	10.0	10.0	6.0	5.5	6.5	6.0	9.0	9.0
13	20.0	19.5	13.5	13.5	10.0	10.0	6.5	6.0	6.0	6.0	9.0	9.0
14	19.5	19.5	13.5	13.5	10.0	9.5	6.5	6.0	6.0	6.0	9.0	9.0
15	20.0	19.5	13.5	13.5	9.5	9.5	6.5	6.5	6.5	6.0	9.5	9.0
16	20.0	19.5	13.5	13.5	9.5	9.5	6.5	6.5	6.5	6.5	9.5	9.5
17	20.0	19.0	13.5	13.5	9.5	9.0	6.5	6.5	6.5	6.0	9.5	9.0
18	19.5	19.0	13.5	13.5	9.0	9.0	7.0	6.5	6.5	6.0	9.5	9.5
19	19.0	19.0	13.5	13.0	9.0	9.0	7.0	7.0	6.5	6.5	9.5	9.5
20	19.0	18.5	13.5	13.0	9.0	9.0	7.0	7.0	6.5	6.5	9.5	9.5
21	19.0	18.5	13.5	13.5	9.0	8.5	7.0	7.0	6.5	6.5	9.5	9.5
22	18.5	18.0	13.5	13.0	8.5	8.5	7.0	7.0	6.5	6.5	9.5	9.5
23	18.5	18.0	13.0	12.5	8.5	8.0	7.0	7.0	6.5	6.5	9.5	9.5
24	18.0	17.5	13.0	12.5	8.0	8.0	7.0	7.0	7.0	6.5	10.0	9.5
25	18.0	18.0	12.5	12.5	8.0	7.5	7.0	7.0	6.5	6.5	10.0	10.0
26	18.0	17.5	12.5	12.0	7.5	7.5	7.0	7.0	7.0	6.5	10.0	9.5
27	17.5	17.5	12.5	12.5	7.5	7.5	7.0	7.0	7.0	6.5	10.0	9.5
28	17.5	17.0	12.5	12.0	7.5	7.5	7.0	7.0	7.5	6.5	10.0	9.0
29	17.0	16.5	12.0	11.5	7.5	7.5	7.0	7.0	---	---	10.0	9.5
30	16.5	16.0	12.0	11.5	7.5	7.0	7.0	6.5	---	---	10.0	9.5
31	16.0	16.0	---	---	7.0	7.0	6.5	6.5	---	---	9.5	9.5
MONTH	21.5	16.0	16.0	11.5	11.5	7.0	7.0	5.5	7.5	6.0	10.0	7.0

APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.5	11.5	11.5	16.5	15.5	18.5	18.0	22.5	21.5	21.0	21.0
2	10.0	9.5	12.5	11.5	17.0	15.0	18.0	18.0	23.0	22.0	21.5	21.0
3	9.5	9.5	12.0	11.5	15.5	14.5	19.0	18.0	23.0	22.0	22.0	21.0
4	9.5	9.5	11.5	11.0	17.0	14.5	19.5	18.5	23.5	22.5	22.0	21.0
5	9.5	9.5	11.0	11.0	17.0	17.0	19.5	19.0	23.0	22.5	21.5	21.0
6	9.5	9.5	11.5	11.0	17.0	16.0	20.0	18.5	23.0	22.5	22.0	21.0
7	9.5	9.5	12.0	11.5	16.0	15.5	19.5	19.0	22.5	22.0	23.0	21.0
8	9.5	9.0	13.0	12.0	17.0	15.5	19.5	19.0	23.0	22.0	22.0	21.5
9	9.0	9.0	14.0	12.0	18.0	15.5	20.5	19.0	23.0	22.0	22.5	21.5
10	9.0	9.0	14.0	12.5	18.0	17.5	20.5	20.0	23.0	22.0	22.5	22.0
11	9.0	9.0	13.0	12.0	18.0	17.5	20.0	20.0	23.0	22.5	23.0	21.0
12	9.0	9.0	15.0	12.0	18.0	17.5	20.5	19.5	23.0	22.5	23.0	21.0
13	9.5	9.0	17.0	14.5	18.5	17.5	21.0	20.0	22.5	22.0	23.0	21.5
14	9.5	9.5	16.5	13.5	18.0	17.0	21.5	20.5	23.5	22.0	23.0	21.5
15	9.5	9.5	13.5	13.0	18.0	16.5	21.0	20.0	23.5	22.5	22.5	21.5
16	9.5	9.5	13.5	13.0	18.0	17.5	20.0	19.5	23.0	22.5	22.5	21.5
17	9.5	9.5	16.0	13.0	18.0	16.0	20.5	20.0	22.5	22.0	23.0	22.0
18	9.5	9.5	16.0	15.0	18.5	16.5	20.5	20.0	22.0	21.5	22.5	21.5
19	9.5	9.5	15.0	14.0	17.5	17.5	21.5	20.5	21.5	21.5	21.5	21.0
20	10.5	9.5	14.0	14.0	17.5	17.5	21.5	20.5	22.5	21.5	22.5	21.0
21	10.0	10.0	14.5	14.0	18.0	17.5	21.5	20.5	22.5	21.5	23.0	21.0
22	10.0	10.0	15.0	14.0	18.5	18.0	22.0	20.5	23.0	21.5	23.5	22.0
23	10.0	10.0	15.0	14.5	18.5	18.5	22.0	21.5	22.5	21.5	23.5	22.0
24	10.0	10.0	15.5	14.0	18.5	17.5	22.5	21.5	22.5	21.5	23.5	22.5
25	10.0	10.0	15.5	14.5	18.0	18.0	23.0	21.5	22.0	21.5	23.5	22.5
26	10.0	10.0	16.0	15.0	18.5	18.0	23.0	21.5	22.0	21.5	23.5	22.0
27	10.0	10.0	15.5	15.0	18.0	18.0	23.0	22.0	21.5	21.5	23.0	22.0
28	10.5	10.0	16.5	15.0	18.5	18.0	22.5	22.0	21.5	21.0	22.0	21.0
29	11.5	10.5	17.5	15.5	18.0	18.0	22.5	21.5	21.0	21.0	22.5	21.0
30	12.0	11.0	17.0	16.5	18.0	18.0	21.5	21.5	21.5	21.0	22.5	21.0
31	---	---	17.0	15.5	---	---	22.0	21.5	21.5	21.0	---	---
MONTH	12.0	9.0	17.5	11.0	18.5	14.5	23.0	18.0	23.5	21.0	23.5	21.0

11189500 SOUTH FORK KERN RIVER NEAR ONYX, CALIF.

LOCATION.--Lat 35°44'22", long 118°10'33", unsurveyed, T.25 S., R.35 E., Kern County, on left bank 0.8 mi (1.3 km) north of State Highway 178, 1.6 mi (2.6 km) upstream from Canebrake Creek, and 5 mi (8 km) northeast of Onyx.

DRAINAGE AREA.--530 mi² (1,370 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,900 ft (884 m), from topographic map. Sept. 12, 1911, to Aug. 31, 1914, nonrecording gage and Jan. 23, 1919, to Apr. 17, 1936, water-stage recorder, at site 140 ft (43 m) upstream at datum 2.88 ft (0.878 m) lower. Apr. 18, 1936, to September 1942, and October 1947 to Feb. 8, 1967, at datum 6.88 ft (2.097 m) higher. Feb. 9, 1967, to May 31, 1972, at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--51 years (1911-13, 1919-25, 1926-27, 1929-42, 1946-75), 114 ft³/s (3.228 m³/s), 82,590 acre-ft/yr (102 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 650 ft³/s (18.4 m³/s) May 13 (gage height, 5.95 ft or 1.814 m); minimum daily, 4.7 ft³/s (0.13 m³/s) Aug. 12, 13. Period of record: Maximum discharge, 28,700 ft³/s (813 m³/s) Dec. 6, 1966 (gage height, 18.9 ft or 5.76 m, from floodmarks, present datum), from rating curve extended above 3,300 ft³/s (93.5 m³/s) on basis of slope-area measurement of maximum flow; no flow for several days in 1929, 1934, 1960-61.

REMARKS.--Records good. Lowell and Thomas ditches divert above station for irrigation of 160 acres (648,000 m²) below station; combined capacity, 7 ft³/s (0.20 m³/s).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	40	26	26	35	58	99	290	272	55	19	5.7
2	17	42	25	23	39	59	96	280	263	53	17	5.7
3	18	41	28	25	38	59	99	320	250	49	16	5.8
4	19	39	55	31	41	59	105	418	237	46	15	5.8
5	21	38	49	35	38	64	110	395	218	44	13	5.9
6	20	38	35	38	50	76	111	338	206	43	11	6.2
7	22	38	32	47	44	75	104	332	202	41	11	5.8
8	34	38	34	43	46	77	102	374	198	39	9.2	7.4
9	36	38	31	34	69	76	98	434	177	39	8.1	20
10	36	38	34	35	78	71	97	462	166	40	8.3	23
11	31	37	38	34	58	66	92	490	157	39	5.9	25
12	29	37	38	32	51	66	94	535	146	37	4.7	26
13	30	38	38	32	51	62	94	560	139	35	4.7	23
14	28	38	35	34	52	65	97	545	127	33	4.9	19
15	27	38	36	34	49	61	106	525	117	30	5.3	16
16	26	37	38	35	47	62	105	490	110	28	5.5	16
17	24	37	37	31	42	60	102	458	104	26	5.4	23
18	23	37	34	33	43	58	96	422	98	26	5.6	22
19	24	36	35	33	48	67	100	430	97	25	6.1	20
20	24	34	35	34	48	71	114	434	99	23	7.7	18
21	21	35	35	35	46	74	135	398	107	22	8.1	16
22	22	36	34	35	41	92	181	383	104	23	8.9	15
23	21	34	29	36	46	79	226	347	92	23	7.7	15
24	21	34	20	36	48	72	250	335	83	22	7.8	15
25	25	32	28	36	49	102	302	332	76	21	7.7	14
26	29	31	37	37	52	110	252	323	72	19	6.5	14
27	32	28	33	37	54	96	218	315	68	23	5.7	14
28	38	28	36	32	55	86	210	310	64	24	5.6	14
29	43	26	26	30	---	85	250	305	60	20	5.6	14
30	39	24	24	34	---	90	288	290	58	21	5.8	13
31	38	---	34	32	---	95	---	282	---	22	5.9	---
TOTAL	834	1067	1049	1049	1358	2293	4333	12152	4167	991	258.7	443.3
MEAN	26.9	35.6	33.8	33.8	48.5	74.0	144	392	139	32.9	8.35	14.8
MAX	43	42	55	47	78	110	302	560	272	55	19	26
MIN	16	24	20	23	35	58	92	280	58	19	4.7	5.7
AC-FT	1650	2120	2080	2080	2690	4550	8590	24100	8270	1970	513	879

CAL YR 1974 TOTAL 46278.0 MEAN 127 MAX 632 MIN 12 AC-FT 91790
WTR YR 1975 TOTAL 29995.0 MEAN 82.2 MAX 560 MIN 4.7 AC-FT 59500

Peak discharge (base, 180 ft³/s)
Date Time G.H. Discharge Date Time G.H. Discharge
4-25 1230 5.16 347 5-13 1600 5.95 650
5-4 1500 5.66 486

11190500 ISABELLA LAKE NEAR LAKE ISABELLA, CALIF.

LOCATION.--Lat 35°38'46", long 118°28'41", in SE¼SW¼ sec.19, T.26 S., R.33 E., Kern County, in main control tower near left abutment of main dam on Kern River, 1.5 mi (2.4 km) north of town of Lake Isabella, and 2.8 mi (4.5 km) upstream from Erskine Creek.

DRAINAGE AREA.--2,074 mi² (5,372 km²).

PERIOD OF RECORD.--October 1953 to current year. Prior to October 1968, published as Isabella Reservoir near Isabella. October 1968 to September 1970 published as "Isabella Reservoir."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 348,695 acre-ft (430 hm³) June 17, 18 (elevation, 2,583.61 ft or 787.484 m); minimum, 175,866 acre-ft (217 hm³) Sept. 30 (elevation, 2,560.52 ft or 780.446 m).

Period of record: Maximum contents, 578,100 acre-ft (713 hm³) July 14, 1969 (elevation, 2,606.21 ft or 794.373 m); minimum since reservoir first filled, 50,030 acre-ft (61.7 hm³) Oct. 16, 1972 (elevation, 2,531.06 ft or 771.467 m).

REMARKS.--Reservoir is formed by earthfill dam with sidehill spillway and auxiliary earthfill dam completed in 1954. Regulation began Apr. 15, 1954. Usable capacity, 569,679 acre-ft (702 hm³) between elevations 2,470.0 ft (752.86 m), invert of main outlet and 2,605.5 ft (794.16 m), spillway crest, above mean sea level. Dead storage, 326 acre-ft (402,000 m³). Surge flood control storage, 271,800 acre-ft (335 hm³) between ungated spillway crest and elevation 2,627.0 ft (800.71 m), maximum design spillway flood pool. Records, including extremes, represent total contents at 2400 hours. Water is released to Kern River through tunnel in left abutment of main dam and to Borel Canal (see sta 11187500) through concrete conduit in auxiliary dam.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

REVISIONS.--WSP 1930: Drainage area.

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

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

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	277498	243252	224697	223930	222886	213341	210501	216543	306170	337282	270088	196675
2	275537	242596	224697	224000	222400	212595	210367	216817	310747	336064	267386	195443
3	273896	242014	224837	223930	221637	211851	210165	217228	315275	335022	264700	194280
4	272493	241577	225885	223930	221637	210838	210165	218051	319328	333461	261877	193184
5	271017	241069	225815	224000	221499	210030	210434	218876	323237	332077	258920	192285
6	269237	240706	225535	224139	221360	209089	210636	219633	327342	330696	255983	191324
7	268311	240199	225396	224278	221084	208352	210771	220323	331559	329404	253064	190493
8	266771	239909	224976	224627	220945	207816	210906	221568	334935	328029	250312	189727
9	265389	239547	224767	224837	221084	207482	211041	223303	337543	326571	247799	189154
10	263935	239330	224627	224837	221984	207081	211041	224976	340074	324859	245299	188709
11	262715	238969	224627	225116	222192	206681	211243	227077	342175	323152	242742	187884
12	261573	238464	224557	225116	222192	206614	211311	229612	344283	321195	240199	187188
13	260283	237959	224837	225116	222261	206614	211378	232447	345163	319582	237455	186556
14	259072	237167	224837	225046	222261	206614	211513	235516	346133	317383	234801	185862
15	257864	236090	224837	224906	222192	206614	211783	238897	347192	314434	232305	185169
16	256584	235230	224837	224906	222192	206614	211783	242669	348076	312420	229753	184541
17	255307	234372	224697	224906	221984	206347	211783	246253	348695	310162	226866	183851
18	253960	233373	224697	224906	221637	206214	211851	249942	348695	307830	223791	183225
19	252691	232874	224627	224906	220807	206147	211919	254259	348518	305507	221014	182538
20	251203	231879	224697	224906	220600	206014	212122	259223	347811	303028	218463	181852
21	250164	230956	224348	224906	220254	206081	212392	262715	347192	300560	216133	181292
22	249349	230319	224348	224906	219427	206547	212799	265466	346398	298102	213952	180485
23	248536	229612	224209	224767	218669	206881	213477	267925	345780	295575	211986	179804
24	247799	228765	224139	224767	217982	207081	214088	270940	345163	292815	210097	179185
25	246915	228061	224069	224488	217091	208017	215177	274676	344107	289939	208084	178568
26	246327	227288	224139	224488	216201	209224	215723	278678	343756	287098	206014	178013
27	245593	226376	224209	224418	215177	209896	215996	283030	342000	284223	203889	177460
28	245593	225745	224209	224348	214156	210030	216270	287339	340861	281364	201974	176907
29	245006	225046	224209	224139	---	210097	216270	291845	340161	278442	200527	176417
30	244494	224767	224209	223721	---	210299	216406	296307	338851	275537	199282	175866
31	243763	---	223930	223303	---	210434	---	301135	---	272805	198041	---
MAX	277498	243252	225885	225116	222886	213341	216406	301135	348695	337282	270088	196675
MIN	243763	224767	223930	223303	214156	206014	210165	216543	306170	272805	198041	175866
(a)	2,570.65	2,567.99	2,567.87	2,567.78	2,566.45	2,565.90	2,566.78	2,578.04	2,582.49	2,574.51	2,564.03	2,560.52
(b)	-35,861	-18,996	-837	-627	-9,147	-3,722	+5,972	+84,729	+37,716	-56,046	-74,764	-22,175
(c)	3,297	1,862	1,171	1,172	1,000	1,484	2,168	4,908	8,206	8,973	7,500	4,887

CAL YR 1974 b +17,983

WTR YR 1975 b -93,758

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

11191000 KERN RIVER BELOW ISABELLA DAM, CALIF.

LOCATION.--Lat 35°38'21", long 118°29'02", in SW¼NW¼ sec.30, T.26 S., R.33 E., Kern County, on right bank 200 ft (61 m) downstream from highway bridge, 0.6 mi (1.0 km) downstream from Isabella Dam, and 1.6 mi (2.6 km) south-west of town of Lake Isabella.

DRAINAGE AREA.--2,074 mi² (5,372 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,435.07 ft (742.209 m) above mean sea level (levels by Corps of Engineers). Prior to Mar. 12, 1952, water-stage recorder at site 0.6 mi (1.0 km) upstream at different datum. Mar. 12, 1952, to July 26, 1953, nonrecording gage at present site and datum.

AVERAGE DISCHARGE (adjusted for diversion to Borel Canal since 1945 and for change in contents in and evaporation from Isabella Lake since 1954).--30 years, 884 ft³/s (25.03 m³/s), 640,500 acre-ft/yr (790 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,380 ft³/s (39.1 m³/s) July 27 (gage height, 8.60 ft or 2.621 m); minimum daily, 3.6 ft³/s (0.10 m³/s) Feb. 11.

Period of record: Maximum discharge, 39,000 ft³/s (1,100 m³/s) Nov. 19, 1950 (gage height, 28.6 ft or 8.72 m, from floodmarks, present site and datum), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of slope-area measurement of maximum flow; minimum, 2.1 ft³/s (0.059 m³/s), regulated, Nov. 27, 1951. Maximum discharge since construction of Isabella Dam in 1954, 7,300 ft³/s (207 m³/s) May 3, 1969 (gage height, 17.67 ft or 5.386 m); no flow Oct. 29, 1954, Mar. 22, 1960, Dec. 2-4, 1970, Dec. 13, 1973.

REMARKS.--Records excellent. Flow regulated by Isabella Lake (see sta 11190500) beginning Apr. 15, 1954. Borel Canal (see sta 11187500) diverts above station. Diversion for irrigation of 3,500 acres (14.2 km²) between head of Isabella Lake and upstream stations. An additional 6,500 acres (26.3 km²) in lake can be irrigated when lake stage is low.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	648	27	5.3	5.3	170	328	79	454	606	1160	1150	285		
2	693	27	5.3	5.3	288	298	135	382	702	1100	1110	285		
3	533	22	5.3	5.3	358	351	122	392	735	997	1130	231		
4	307	8.0	5.4	5.3	248	393	55	407	692	972	1230	180		
5	407	5.1	4.4	5.3	180	436	35	366	732	1080	1280	104		
6	482	5.1	7.0	5.4	173	450	6.4	301	733	1090	1250	98		
7	405	5.2	9.4	5.5	162	341	6.0	286	744	1070	1190	58		
8	398	4.6	9.2	6.0	174	240	5.8	217	809	1150	1100	36		
9	427	4.2	9.1	6.2	183	240	6.2	164	998	1160	998	18		
10	357	4.2	8.9	6.2	103	163	7.1	188	1160	1120	982	46		
11	313	16	7.8	6.2	3.6	28	7.2	239	1230	1220	997	73		
12	298	70	6.3	6.2	4.7	58	7.3	301	1250	1310	961	44		
13	297	145	6.2	6.2	4.7	110	7.3	391	1220	1330	1040	8.2		
14	306	156	6.2	7.3	4.7	55	7.3	437	1170	1320	1060	14		
15	306	175	6.2	8.6	4.7	5.5	7.3	442	1170	1310	994	4.0		
16	313	158	5.6	8.6	4.7	5.3	7.3	433	1200	1220	958	6.4		
17	335	116	5.3	8.6	20	5.3	7.3	373	1200	1190	1150	6.4		
18	345	102	5.2	8.6	23	5.0	7.3	337	1160	1210	1160	6.4		
19	331	122	5.1	8.6	45	6.5	7.3	332	1130	1210	1150	6.5		
20	320	140	5.1	8.6	71	8.0	7.3	294	1130	1210	1010	6.6		
21	203	129	5.1	8.6	73	8.0	6.5	256	1120	1200	892	10		
22	47	98	5.1	8.6	105	8.4	6.2	265	1120	1210	826	15		
23	61	98	5.1	8.6	172	8.3	6.2	254	1130	1220	699	7.5		
24	54	98	5.1	8.6	219	8.2	6.2	218	1090	1290	671	6.0		
25	39	98	5.1	8.6	271	8.5	47	242	1010	1300	674	5.9		
26	34	98	5.1	8.6	345	8.6	124	327	990	1340	649	5.6		
27	26	98	5.1	8.6	393	8.5	177	403	1030	1360	647	5.5		
28	27	98	5.1	8.6	485	8.2	266	467	1010	1320	599	5.5		
29	27	37	5.1	30	---	8.2	425	474	1000	1280	390	5.5		
30	27	5.6	5.1	116	---	8.2	506	495	1080	1260	274	5.5		
31	27	---	5.3	141	---	25	---	533	---	1240	253	---		
TOTAL	8393	2170.0	184.6	489.1	4288.1	3634.7	2100.5	10670	30351	37449	28474	1588.5		
MEAN	271	72.3	5.95	15.8	153	117	70.0	344	1012	1208	919	53.0		
MAX	693	175	9.4	141	485	450	506	533	1250	1360	1280	285		
MIN	26	4.2	4.4	5.3	3.6	5.0	5.8	164	606	972	253	4.0		
AC-FT	16650	4300	366	970	8510	7210	4170	21160	60200	74280	56480	3150		
MEAN a	310	297	335	343	457	649	739	2,322	2,334	981	364	271		
AC-FT a	19,090	17,650	20,580	21,060	25,400	39,880	43,950	142,800	138,900	60,300	22,410	16,150		
CAL YR 1974	TOTAL	165327.3	MEAN	453	MAX	1450	MIN	2.1	AC-FT	327900	MEAN a	1,078	AC-FT a	780,500
WTR YR 1975	TOTAL	129792.5	MEAN	356	MAX	1360	MIN	3.6	AC-FT	257400	MEAN a	785	AC-FT a	568,200

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

11191000 KERN RIVER BELOW ISABELLA DAM, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1955 to September 1963, water years 1964-66 (partial-record station).

Water temperatures: November 1970 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 24.5°C Sept. 17.

Period of record:

Water temperatures: Maximum, 24.5°C Sept. 3, 1971, Sept. 17, 1975; minimum (1970-73), 4.0°C Jan. 4, 1972, Feb. 1, 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	21.5	16.0	15.5	13.0	10.5	8.0	5.5	---	---	---	---
2	21.5	21.0	16.5	15.5	12.0	10.0	8.0	5.5	---	---	---	---
3	21.5	21.0	16.0	14.5	11.0	10.0	---	---	---	---	---	---
4	21.0	21.0	16.5	14.0	11.0	9.5	---	---	---	---	---	---
5	21.0	21.0	16.5	13.0	12.0	9.0	---	---	---	---	---	---
6	21.0	21.0	16.0	13.0	11.5	9.0	---	---	---	---	---	---
7	21.0	20.5	16.0	13.0	11.5	9.5	---	---	---	---	---	---
8	21.0	20.5	16.0	13.5	11.5	8.0	---	---	---	---	---	---
9	20.5	20.5	16.0	12.5	11.5	8.5	---	---	---	---	---	---
10	20.5	18.5	15.5	12.5	11.5	8.0	---	---	---	---	---	---
11	20.5	20.0	16.0	12.5	11.0	9.0	---	---	---	---	---	---
12	20.5	19.5	14.5	13.5	11.0	8.5	---	---	---	---	---	---
13	20.0	19.5	14.5	13.5	10.5	7.0	---	---	---	---	---	---
14	20.5	19.5	14.0	13.5	10.5	8.0	---	---	---	---	---	---
15	20.0	18.5	14.0	13.5	10.5	7.5	---	---	---	---	---	---
16	20.0	19.5	14.0	13.5	11.0	8.0	---	---	---	---	---	---
17	19.5	19.5	14.0	13.5	10.5	8.0	---	---	---	---	---	---
18	19.5	19.5	14.0	12.5	10.5	8.0	---	---	---	---	---	---
19	19.5	18.0	13.5	13.0	10.5	7.5	---	---	---	---	---	---
20	19.5	19.0	13.5	13.0	10.0	7.5	---	---	---	---	11.5	8.5
21	19.5	18.5	13.5	13.0	10.5	7.5	---	---	---	---	11.5	8.0
22	19.5	18.5	13.0	13.0	9.0	7.5	---	---	---	---	9.5	8.5
23	19.5	18.5	13.0	12.5	9.5	7.0	---	---	---	---	12.0	8.0
24	19.5	18.5	13.0	12.5	9.0	6.5	---	---	---	---	12.0	8.5
25	19.5	18.5	12.5	12.0	9.5	6.5	---	---	---	---	10.5	8.5
26	18.5	18.0	12.5	12.0	9.0	6.5	---	---	---	---	11.0	8.0
27	19.0	18.0	12.5	12.0	8.5	6.5	---	---	---	---	10.0	8.0
28	18.0	17.5	12.0	11.5	7.5	6.5	---	---	---	---	11.5	7.5
29	18.0	17.0	13.0	10.5	8.5	6.0	---	---	---	---	12.0	8.0
30	18.0	16.5	12.5	10.5	7.5	6.0	---	---	---	---	12.5	8.0
31	16.5	15.5	---	---	8.5	6.0	---	---	---	---	10.0	8.5
MONTH	21.5	15.5	16.5	10.5	13.0	6.0	---	---	---	---	---	---

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.5	11.0	10.5	14.0	13.0	17.0	16.5	20.5	19.5	21.5	20.0
2	9.5	8.5	11.5	10.5	14.0	13.5	17.5	17.0	20.5	19.5	21.0	20.5
3	9.5	9.0	11.0	10.5	14.0	13.5	17.5	16.5	21.0	19.5	21.5	20.5
4	9.5	9.0	11.0	9.5	14.5	13.5	18.0	16.5	20.5	20.0	21.0	20.5
5	9.5	8.5	11.0	11.0	14.0	13.5	18.0	17.0	21.0	19.0	21.0	20.5
6	11.0	8.0	11.5	11.0	14.5	13.5	18.0	17.0	21.0	20.0	21.0	20.5
7	10.5	8.0	11.5	11.0	14.0	13.5	18.0	17.5	21.0	19.5	21.5	20.5
8	12.0	8.0	12.0	11.0	14.5	14.0	18.0	17.5	21.5	20.5	21.0	20.0
9	11.5	8.5	12.0	10.0	15.0	14.0	18.5	17.5	21.5	20.0	22.0	20.0
10	11.5	8.0	12.0	11.0	15.0	14.0	18.5	17.5	22.0	20.0	21.0	19.5
11	11.5	8.5	11.5	11.0	14.5	14.0	19.0	17.5	22.0	20.5	21.0	20.5
12	12.5	8.5	12.5	11.5	15.0	14.0	19.0	18.0	21.5	20.5	21.0	20.0
13	13.0	8.5	12.5	11.5	15.5	14.0	19.0	18.0	22.0	20.5	23.0	19.5
14	11.5	8.5	12.5	11.5	15.0	14.5	19.0	18.0	22.0	21.0	22.0	19.5
15	11.5	8.5	12.5	11.5	16.0	14.5	19.0	18.0	22.0	21.0	22.5	20.0
16	11.5	8.5	13.0	12.0	15.5	14.0	19.0	18.5	21.5	20.0	22.0	19.5
17	10.5	8.5	13.5	12.5	16.0	14.5	19.5	18.5	22.5	20.0	24.5	20.0
18	13.0	8.5	13.0	12.5	16.0	15.0	19.0	18.5	22.0	20.5	23.5	20.0
19	13.0	8.5	13.0	12.5	16.0	15.0	19.5	18.5	22.0	20.0	23.5	19.5
20	13.5	9.0	13.0	12.5	16.0	15.0	19.5	18.5	21.5	21.5	23.5	19.5
21	13.5	9.0	13.0	12.5	16.5	15.5	19.5	18.5	21.5	21.5	23.0	19.0
22	13.5	9.0	13.5	12.5	16.5	15.0	20.0	19.0	21.0	21.0	22.5	20.0
23	13.5	9.0	13.0	12.5	16.5	15.5	20.0	19.0	21.5	21.0	23.0	19.5
24	13.5	9.0	13.0	12.5	16.0	15.5	20.0	19.0	21.5	21.0	23.0	19.0
25	10.5	9.0	13.5	12.0	16.5	15.5	20.5	19.0	22.0	21.0	23.5	18.5
26	10.5	10.0	13.5	11.5	17.0	15.5	20.5	19.5	21.5	19.5	23.0	18.5
27	11.0	10.0	13.5	12.5	17.0	15.5	20.5	19.5	21.5	21.0	22.5	18.5
28	11.0	10.0	13.5	13.0	17.0	16.0	20.5	19.5	21.0	20.5	22.5	19.0
29	11.0	10.5	13.5	13.0	17.0	16.5	20.0	19.5	22.0	20.0	23.0	18.5
30	11.0	10.5	13.5	13.0	17.0	16.5	20.5	19.5	21.0	21.0	22.5	19.0
31	---	---	13.5	13.0	---	---	20.5	19.5	21.0	20.5	---	---
MONTH	13.5	8.0	13.5	9.5	17.0	13.0	20.5	16.5	22.5	19.0	24.5	18.5

11192500 KERN RIVER NEAR DEMOCRAT SPRINGS, CALIF.

LOCATION.--Lat 35°31'15", long 118°40'34", in NE¼SE¼ sec.6, T.28 S., R.31 E., Kern County, on left bank 1.0 mi (1.6 km) southwest of Democrat Springs, and 2.1 mi (3.4 km) upstream from Cow Creek.

DRAINAGE AREA.--2,258 mi² (5,848 km²).

PERIOD OF RECORD.--July 1950 to current year. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.

GAGE.--Water-stage recorder on river; water-stage recorder for conduit diversion. Datum of gage is 1,837.7 ft (560.13 m) above mean sea level.

AVERAGE DISCHARGE (River only, unadjusted).--25 years, 575 ft³/s (16.28 m³/s), 416,600 acre-ft/yr (514 hm³/yr). (Combined river and diversion, adjusted for storage).--25 years, 919 ft³/s (26.03 m³/s), 665,800 acre-ft/yr (821 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 1,640 ft³/s (46.4 m³/s) June 17 (gage height, 10.09 ft or 3.075 m); minimum daily, 0.09 ft³/s (0.002 m³/s) Dec. 12-16, Jan. 12.

Period of record (prior to regulation by Isabella Lake): Maximum discharge, 40,000 ft³/s (1,130 m³/s) Nov. 19, 1950 (gage height, 30.7 ft or 9.36 m), from rating curve extended above 8,700 ft³/s (246 m³/s) on basis of computation of maximum flow over dam (basic data for computation furnished by Southern California Edison Co.); minimum daily, 0.7 ft³/s (0.020 m³/s) Nov. 17-19, 1951.

1954 to current year: Maximum discharge, 10,100 ft³/s (286 m³/s) Dec. 6, 1966 (gage height, 18.55 ft or 5.654 m); minimum daily, 0.09 ft³/s (0.003 m³/s) on several days in 1970, 1972, 1974-75.

(Combined flow).--Current year: Maximum discharge, 2,040 ft³/s (57.8 m³/s) June 17; minimum daily, 264 ft³/s (7.48 m³/s) Dec. 1, 3, Jan. 4.

Period of record (prior to regulation by Isabella Lake): Maximum discharge, 40,000 ft³/s (1,130 m³/s) Nov. 19, 1950; minimum daily, 123 ft³/s (3.48 m³/s) Sept. 22, 1951.

1954 to current year: Maximum discharge, 10,100 ft³/s (286 m³/s) Dec. 6, 1966; minimum daily, 10 ft³/s (0.28 m³/s) Dec. 17, 1968.

REMARKS.--Records good. Kern River No. 1 conduit diverts up to about 420 ft³/s (11.9 m³/s) from left bank of Kern River 0.4 mi (0.6 km) upstream from station in sec.13, T.28 S., R.30 E., for power development; water is returned to river 10 mi (16 km) below station. Flow regulated by Isabella Lake 22 mi (35 km) upstream beginning in 1954 (see sta 11190500). Many diversions above station for irrigation. See schematic diagram of Kern River basin. For records of combined discharge of river and conduit, see following page.

COOPERATION.--Gage-height record and 11 discharge measurements for river and gage-height record and 12 discharge measurements for conduit furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	771	182	.63	.17	93	525	262	660	702	1290	1310	391
2	852	178	.33	.14	167	456	322	548	827	1260	1270	424
3	786	176	.22	.14	348	508	360	550	876	1120	1240	364
4	470	163	8.2	.14	248	540	264	573	824	1110	1350	350
5	474	138	51	.14	156	582	264	563	859	1150	1430	260
6	633	66	78	.14	140	618	212	468	859	1220	1400	257
7	576	62	84	.14	123	555	213	447	869	1190	1360	222
8	523	54	80	.27	124	422	192	445	901	1250	1290	203
9	594	52	50	.17	148	415	156	208	1070	1330	1170	182
10	523	26	.54	.11	170	400	178	354	1310	1250	1130	186
11	468	67	.14	.11	89	228	170	409	1370	1350	1180	230
12	447	94	.09	.09	75	104	131	445	1420	1470	1100	213
13	436	179	.09	.11	72	308	114	533	1390	1470	1180	176
14	447	222	.09	.11	80	300	113	597	1340	1480	1240	168
15	447	308	.09	.14	75	205	114	597	1310	1470	1190	172
16	452	310	.09	.17	71	178	120	603	1350	1390	1110	143
17	473	276	.11	.14	70	166	140	555	1350	1330	1190	162
18	495	249	.11	.11	113	154	111	483	1320	1350	1310	139
19	483	264	.11	.11	154	181	110	651	1280	1370	1320	136
20	458	278	.11	.11	239	192	109	480	1280	1380	1230	135
21	438	296	.14	.11	262	184	108	422	1280	1340	1070	139
22	200	251	.14	.11	288	197	106	406	1270	1370	1030	172
23	213	249	.14	.11	336	179	132	415	1280	1350	876	157
24	217	249	.11	.11	391	184	206	376	1260	1460	806	139
25	194	249	.11	.14	429	244	217	374	1170	1470	827	101
26	195	249	.11	.14	485	280	314	438	1120	1500	782	87
27	181	251	.11	.14	550	242	358	520	1170	1520	778	82
28	210	251	.17	.14	582	226	409	597	1150	1490	764	71
29	192	232	.17	.14	---	219	545	606	1110	1430	597	66
30	178	59	.17	64	---	217	675	615	1170	1410	433	65
31	181	---	.17	88	---	217	---	669	---	1410	393	---
TOTAL	13207	5680	355.49	155.90	6078	9426	6725	15607	34487	41980	33356	5592
MEAN	426	189	11.5	5.03	217	304	224	503	1150	1354	1076	186
MAX	852	310	84	88	582	618	675	669	1420	1520	1430	424
MIN	178	26	.09	.09	70	104	106	208	702	1110	393	65
AC-FT	26200	11270	705	309	12060	18700	13340	30980	68400	83270	66160	11090

CAL YR 1974 TOTAL 214018.49 MEAN 586 MAX 1610 MIN .09 AC-FT 424500
WTR YR 1975 TOTAL 172649.39 MEAN 473 MAX 1520 MIN .09 AC-FT 342400

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

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF KERN RIVER AND KERN RIVER
NO. 1 CONDUIT NEAR DEMOCRAT SPRINGS, CALIF., WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	584	264	299	489	919	657	1060	1110	1700	1710	799
2	1250	581	265	265	566	852	716	949	1230	1670	1670	832
3	1180	579	264	265	741	907	753	952	1280	1530	1640	772
4	869	566	331	264	646	941	657	974	1230	1520	1750	758
5	873	541	439	265	554	981	657	964	1260	1560	1830	667
6	1030	466	477	265	539	1020	607	871	1260	1630	1800	664
7	973	461	482	268	522	953	610	851	1280	1600	1760	628
8	920	452	479	281	523	820	589	849	1310	1660	1690	606
9	991	450	449	287	547	814	554	610	1470	1720	1570	582
10	920	420	373	314	568	801	577	755	1710	1650	1530	586
11	866	466	320	317	485	628	569	801	1770	1760	1580	633
12	845	496	270	324	469	500	528	838	1820	1860	1500	614
13	834	584	268	368	467	711	510	924	1800	1880	1580	574
14	845	626	274	370	476	701	509	990	1740	1890	1640	564
15	844	711	321	372	469	606	510	991	1710	1880	1590	568
16	848	713	321	368	465	578	517	996	1750	1800	1510	536
17	869	678	321	351	463	566	537	951	1750	1740	1600	555
18	891	651	320	351	510	553	507	879	1730	1760	1710	528
19	880	666	320	350	552	580	506	898	1690	1770	1720	525
20	856	680	320	349	638	590	506	846	1690	1770	1630	523
21	836	698	319	350	659	582	505	821	1690	1750	1470	527
22	594	653	320	349	685	594	503	816	1680	1780	1430	563
23	611	650	319	349	733	575	530	823	1680	1760	1280	544
24	614	650	314	349	788	581	606	782	1660	1870	1210	524
25	591	650	281	348	825	641	615	779	1570	1880	1240	481
26	591	650	281	348	879	675	711	843	1520	1900	1190	464
27	578	652	287	348	944	638	756	925	1570	1920	1180	454
28	607	651	312	348	976	622	807	1000	1560	1890	1170	417
29	589	633	310	347	---	615	942	1010	1520	1830	1010	422
30	579	441	310	446	---	613	1070	1020	1580	1810	842	425
31	583	---	310	484	---	612	---	1070	---	1810	801	---
TOTAL	25527	17699	10241	10359	17178	21769	18621	27838	46620	54550	45833	17335
MEAN	823	590	330	334	614	702	621	898	1554	1760	1478	578
MAX	1250	713	482	484	976	1020	1070	1070	1820	1920	1830	832
MIN	578	420	264	264	463	500	503	610	1110	1520	801	417
AC-FT	50630	35110	20310	20550	34070	43180	36930	55220	92470	108200	90910	34380
CAL YR 1974	TOTAL	358770	MEAN 983	MAX 2020	MIN 264	AC-FT 711600						
WTR YR 1975	TOTAL	313570	MEAN 859	MAX 1920	MIN 264	AC-FT 622000						

11194000 KERN RIVER NEAR BAKERSFIELD, CALIF.

LOCATION.--Lat 35°25'54", long 118°56'43", in NW¼SW¼ sec.2, T.29 S., R.28 E., Kern County, on left bank 0.8 mi (1.3 km) northeast of Oil City, 1.9 mi (3.1 km) upstream from Sacramento Gulch, and 5.8 mi (9.3 km) northeast of Bakersfield Post Office.

DRAINAGE AREA.--2,407 mi² (6,234 km²).

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

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

AVERAGE DISCHARGE.--82 years, 952 ft³/s (26.96 m³/s), 689,700 acre-ft/yr (850 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 1,920 ft³/s (54.4 m³/s) July 27; minimum daily, 260 ft³/s (7.36 m³/s) Dec. 3.

Period of record: Maximum discharge, 36,000 ft³/s (1,020 m³/s) Nov. 19, 1950 (elevation, 461.37 ft or 140.626 m); minimum daily, 74 ft³/s (2.1 m³/s) Sept. 19, 1948. Maximum discharge since construction of Isabella Dam in 1954, 9,290 ft³/s (263 m³/s) Dec. 6, 1966 (elevation, 454.94 ft or 138.666 m); minimum daily, 26 ft³/s (0.74 m³/s) Dec. 11, 1970.

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260	624	341	326	498	976	660	1090	1200	1690	1710	844
2	1300	622	284	307	553	928	719	989	1280	1660	1660	841
3	1190	620	260	273	718	933	771	1010	1330	1560	1770	788
4	967	619	338	270	668	970	678	1020	1300	1540	1850	739
5	1000	609	458	270	584	1020	683	1020	1300	1590	1820	675
6	1120	583	560	285	555	1020	649	917	1310	1630	1780	661
7	1050	509	569	279	535	1050	640	889	1340	1620	1670	626
8	1030	496	571	295	530	877	610	875	1470	1690	1580	600
9	1080	480	550	298	549	864	563	586	1740	1730	1520	574
10	1000	479	456	323	573	837	588	775	1830	1700	1560	598
11	932	455	403	331	521	705	605	808	1850	1770	1520	630
12	916	472	296	348	488	611	560	847	1860	1850	1580	601
13	901	515	296	388	499	706	536	959	1810	1890	1650	572
14	905	603	305	380	508	714	538	1020	1760	1890	1580	580
15	906	643	355	371	497	615	536	1040	1750	1910	1520	560
16	900	731	354	371	491	598	551	1050	1780	1900	1660	541
17	917	753	348	344	488	582	584	999	1760	1780	1700	542
18	945	742	352	375	499	560	546	919	1720	1770	1730	516
19	941	697	352	357	549	586	543	903	1740	1780	1590	510
20	923	708	393	349	641	596	544	873	1710	1780	1450	511
21	887	736	374	351	658	600	521	845	1700	1760	1400	538
22	646	697	378	345	680	613	521	835	1700	1770	1280	562
23	640	686	373	371	730	604	529	836	1690	1790	1220	539
24	640	672	362	367	797	595	614	807	1620	1840	1220	494
25	631	696	312	366	835	641	628	803	1560	1870	1190	470
26	628	705	311	372	902	718	713	868	1560	1900	1190	454
27	623	708	325	375	992	657	774	945	1590	1920	1190	408
28	645	700	360	371	1030	644	852	1040	1560	1870	1090	399
29	635	668	357	367	---	637	997	1070	1580	1830	887	416
30	622	469	343	405	---	622	1130	1060	1600	1820	831	423
31	619	---	329	469	---	627	---	1110	---	1820	832	---
TOTAL	27399	18697	11665	10699	17568	22706	19383	28808	48000	54920	45230	17212
MEAN	884	623	376	345	627	732	646	929	1600	1772	1459	574
MAX	1300	753	571	469	1030	1050	1130	1110	1860	1920	1850	844
MIN	619	455	260	270	488	560	521	586	1200	1540	831	399
AC-FT	54350	37090	23140	21220	34850	45040	38450	57140	95210	108900	89710	34140
CAL YR 1974	TOTAL	376047	MEAN	1030	MAX	2010	MIN	260	AC-FT	745900		
WTR YR 1975	TOTAL	322287	MEAN	883	MAX	1920	MIN	260	AC-FT	639300		

11195500 SAN EMIGDIO CREEK AT SAN EMIGDIO RANCHHOUSE, CALIF.

LOCATION.--Lat 34°58'54", long 119°11'03", in San Emigdio Grant, Kern County, on left bank 50 ft (15 m) downstream from unnamed tributary, 0.8 mi (1.3 km) upstream from San Emigdio Ranchhouse, and 13 mi (21 km) west of Wheeler Ridge.

DRAINAGE AREA.--48.8 mi² (126.4 km²).

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

GAGE.--Water-stage recorder and sharp-crested weir with rectangular flume for flows below 7 ft³/s (0.2 m³/s). Datum of gage is 1,617.57 ft (493.035 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 1.62 ft³/s (0.0459 m³/s), 1,170 acre-ft/yr (1.44 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 234 ft³/s (6.63 m³/s) Dec. 4 (gage height, 11.43 ft or 3.484 m, from floodmarks), from rating curve extended above 20 ft³/s (0.57 m³/s) as explained below; minimum daily, 0.87 ft³/s (0.025 m³/s) July 23-27, Aug. 3, 4.

Period of record: Maximum discharge, 6,690 ft³/s (189 m³/s) Aug. 5, 1961 (gage height, 19.87 ft or 6.056 m, from floodmarks), from rating curve extended above 20 ft³/s (0.57 m³/s) on basis of slope-area measurements at gage heights 10.94 ft (3.335 m) and 19.87 ft (6.056 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Apr. 23, 24, 1962 and many days in 1965-66.

Maximum stage known since at least 1938 (from information by local residents), that of Aug. 5, 1961.

REMARKS.--Records good except those for Dec. 4-26, which are fair. Small diversions for stock and domestic use above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	3.5	2.1	2.1	1.7	1.4	1.8	1.3	.96	1.0	.93	1.3
2	2.0	4.4	2.1	2.1	1.8	1.4	1.9	1.2	.99	1.0	.90	1.3
3	1.9	2.4	2.1	2.1	1.8	1.5	1.9	1.2	.99	1.0	.87	1.3
4	1.9	2.1	35	2.1	1.8	1.5	1.9	1.2	.99	1.0	.87	1.3
5	1.9	2.0	10	2.1	1.7	1.8	1.9	1.3	.96	1.0	.90	1.3
6	1.9	2.0	3.0	2.1	1.6	2.1	2.3	1.3	.90	.99	.93	1.3
7	1.9	2.0	2.1	2.1	1.6	1.8	2.5	1.3	.93	.93	.99	1.3
8	2.0	2.0	2.1	2.1	1.5	3.2	2.7	1.2	.93	.93	.99	1.3
9	2.0	2.0	2.1	2.1	1.5	2.2	3.3	1.1	.96	.90	1.0	1.3
10	2.0	2.0	2.1	2.1	1.6	2.4	2.9	1.1	.93	.90	1.0	1.3
11	2.0	2.0	2.1	2.1	1.5	4.2	4.9	1.1	.96	.90	1.0	1.3
12	2.0	2.0	2.1	2.1	1.5	3.1	2.5	1.1	.99	.90	1.0	1.3
13	2.0	2.0	2.1	2.1	1.5	2.7	2.3	1.1	.96	.90	1.0	1.3
14	2.0	2.0	2.1	2.1	1.6	2.0	1.8	1.1	.96	.90	1.1	1.4
15	2.0	2.0	2.1	2.1	1.5	1.9	2.0	1.1	.96	.93	1.1	1.4
16	2.0	2.0	2.1	2.0	1.5	1.9	2.7	1.1	.96	.96	1.1	1.4
17	2.0	2.2	2.1	2.0	1.5	1.9	3.9	1.1	.99	.93	1.1	1.4
18	2.0	2.1	2.1	2.0	1.5	1.9	2.6	1.1	1.0	.93	1.1	1.4
19	2.0	2.2	2.1	2.0	1.5	1.9	2.3	1.2	1.1	.93	1.4	1.4
20	2.0	2.2	2.1	2.0	1.5	1.9	1.9	1.5	1.2	.93	1.2	1.3
21	2.0	2.2	2.1	2.0	1.5	1.9	2.0	1.6	1.1	.90	1.2	1.4
22	2.0	2.4	2.1	1.9	1.5	2.0	1.9	1.4	1.1	.90	1.2	1.4
23	2.0	2.4	2.1	1.9	1.5	1.9	1.7	1.3	1.0	.87	1.2	1.3
24	2.0	2.2	2.1	1.8	1.5	1.9	1.7	1.2	1.1	.87	1.2	1.3
25	2.0	2.2	2.1	1.8	1.4	1.9	2.1	1.1	1.2	.87	1.2	1.3
26	2.1	2.2	2.1	1.8	1.4	2.0	3.4	1.1	1.2	.87	1.2	1.3
27	2.1	2.1	2.2	1.8	1.4	2.0	2.3	1.1	1.1	.87	1.2	1.3
28	6.0	2.1	2.0	1.8	1.4	2.0	1.6	1.0	1.0	.90	1.3	1.4
29	6.1	2.1	2.1	1.8	---	1.8	1.3	.99	1.0	.96	1.3	1.4
30	3.0	2.1	2.2	1.8	---	1.8	1.2	.99	1.0	.96	1.3	1.4
31	2.3	---	2.1	1.7	---	1.8	---	.99	---	.93	1.3	---
TOTAL	71.0	88.7	106.9	61.6	43.3	63.7	69.2	36.47	30.42	28.76	34.08	40.1
MEAN	2.29	2.96	3.45	1.99	1.55	2.05	2.31	1.18	1.01	.93	1.10	1.34
MAX	6.1	24	35	2.1	1.8	4.2	4.9	1.6	1.2	1.0	1.4	1.4
MIN	1.9	2.0	2.0	1.7	1.4	1.4	1.2	.99	.90	.87	.87	1.3
AC-FT	141	176	212	122	86	126	137	72	60	57	68	80

CAL YR 1974 TOTAL 833.00 MEAN 2.28 MAX 35 MIN 1.6 AC-FT 1650
WTR YR 1975 TOTAL 674.23 MEAN 1.85 MAX 35 MIN .87 AC-FT 1340

Peak discharge (base, 25 ft³/s).--Nov. 22 (time unknown) 85 ft³/s (10.50 ft); Dec. 4 (time unknown) 234 ft³/s (11.43 ft).

NOTE.--No gage-height record Dec. 4-25.

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

LOCATION.--Lat 35°18'41", long 118°34'10", in SE¼SW¼ sec.17, T.30 S., R.32 E., Kern County, on right bank 0.5 mi (0.8 km) upstream from Harper Canyon, 1.0 mi (1.6 km) upstream from Oiler Canyon, and 3.6 mi (5.8 km) north-east of Caliente.

DRAINAGE AREA.--165 mi² (427 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,617.27 ft (492.944 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 2.50 ft³/s (0.0708 m³/s), 1,810 acre-ft/yr (2.23 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 25 ft³/s (0.71 m³/s) Mar. 22 (gage height, 1.80 ft or 0.549 m); no flow for many days.

Period of record: Maximum discharge, 1,410 ft³/s (39.9 m³/s) Aug. 8, 1963 (gage height, 7.48 ft or 2.280 m, from floodmarks), from rating curve extended above 51 ft³/s (1.44 m³/s) on basis of slope-area measurement of maximum flow; no flow for several months in most years.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	2.3	1.1	1.2	1.0	1.3	4.0	2.1	.55	.17		
2	.37	2.1	1.1	1.3	1.1	1.3	3.2	2.0	.56	.18		
3	.46	1.7	1.1	1.3	1.4	1.3	3.1	1.9	.59	.18		
4	.46	1.6	4.0	1.2	2.6	1.3	2.9	2.3	.59	.17		
5	.50	1.5	2.5	1.2	3.1	1.3	3.4	2.2	.48	.16		
6	.56	1.4	1.9	1.2	2.1	1.4	4.2	2.2	.40	.15		
7	1.3	1.3	1.7	1.7	1.9	1.3	4.2	2.0	.40	.11		
8	1.9	1.2	1.5	2.2	1.8	1.7	3.6	1.9	.38	.10		
9	1.2	1.3	1.5	2.5	1.7	1.8	3.1	1.8	.36	.09		
10	1.0	1.2	1.5	1.9	3.6	2.0	2.9	1.8	.31	.07		
11	1.0	1.1	1.4	1.8	2.6	2.6	3.1	1.7	.23	.06		
12	.96	1.0	1.3	1.7	2.2	2.1	2.9	1.7	.21	.05		
13	.89	1.0	1.3	1.6	2.3	2.3	2.6	1.5	.17	.05		
14	.82	1.0	1.3	1.5	2.9	3.8	2.6	1.5	.12	.05		
15	.75	1.0	1.3	1.5	2.5	2.8	2.8	1.5	.13	.04		
16	.70	1.1	1.3	1.4	2.3	3.8	2.5	1.6	.13	.05		
17	.70	1.1	1.3	1.3	2.2	3.4	3.6	1.5	.15	.03		
18	.62	1.1	1.3	1.3	2.1	3.1	3.2	1.4	.22	.03		
19	.62	1.1	1.3	1.2	2.0	2.8	2.9	1.3	.29	.03		
20	.62	1.0	1.3	1.2	2.0	2.8	2.6	1.5	.30	.02		
21	.67	1.1	1.2	1.2	1.9	2.8	2.6	1.6	.31	.02		
22	.75	1.5	1.4	1.1	1.8	12	2.5	1.4	.26	.01		
23	.82	1.4	1.4	1.1	1.7	6.3	2.6	1.2	.18	.01		
24	.82	1.2	1.3	1.1	1.6	4.2	2.5	1.1	.22	.01		
25	.82	1.2	1.4	1.1	1.5	9.2	2.6	1.1	.30	0		
26	.89	1.2	1.4	1.1	1.4	5.9	2.6	.91	.30	0		
27	.89	1.2	1.3	1.1	1.4	4.8	2.5	.79	.28	0		
28	5.2	1.2	1.6	1.1	1.4	4.2	2.4	.75	.21	0		
29	4.0	1.1	1.3	1.0	---	4.0	2.1	.66	.16	0		
30	2.3	1.1	1.3	1.1	---	3.8	2.1	.62	.15	0		
31	1.7	---	1.2	1.1	---	3.8	---	.62	---	0		---
TOTAL	34.63	38.3	45.8	42.3	56.1	105.2	87.9	46.15	8.94	1.84	0	0
MEAN	1.12	1.28	1.48	1.36	2.00	3.39	2.93	1.49	.30	.059	0	0
MAX	5.2	2.3	4.0	2.5	3.6	12	4.2	2.3	.59	.18	0	0
MIN	.34	1.0	1.1	1.0	1.0	1.3	2.1	.62	.12	0	0	0
AC-FT	69	76	91	84	111	209	174	92	18	3.6	0	0
CAL YR 1974	TOTAL 826.17		MEAN 2.26	MAX 50	MIN .10	AC-FT 1640						
WTR YR 1975	TOTAL 467.16		MEAN 1.28	MAX 12	MIN 0	AC-FT 927						

Peak discharge (base, 50 ft³/s).--No peak above base.

11196420 TEHACHAPI CREEK NEAR TEHACHAPI, CALIF.

LOCATION.--Lat 35°10'26", long 118°28'43", in NE¼SW¼ sec.6, T.32 S., R.33 E., Kern County, on right bank 1.3 mi (2.1 km) downstream from Brite Creek, and 3.2 mi (5.1 km) northwest of Tehachapi.

DRAINAGE AREA.--53.2 mi² (137.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 3,534.48 ft (1,077.310 m) above mean sea level. Prior to Aug. 5, 1964, at site 0.2 mi (0.3 km) upstream at different datum.

AVERAGE DISCHARGE.--13 years, 0.38 ft³/s (0.0108 m³/s), 275 acre-ft/yr (339,000 m³/yr).

EXTREMES.--Current year: Maximum discharge, 28 ft³/s (0.79 m³/s) Apr. 17 (gage height, 0.79 ft or 0.241 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) many days.

Period of record: Maximum discharge, 1,700 ft³/s (48.1 m³/s) Aug. 8, 1963 (gage height, 5.30 ft or 1.615 m in gage well, 6.40 ft or 1.951 m, from floodmarks, site and datum then in use), from slope-area measurement of maximum flow; no flow for parts of most years.

REMARKS.--Records fair.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.03	.01	.14	.06	.05	.12	.33	.01	.12	.03	.02
2	.01	.02	.01	.14	.08	.06	.07	.26	.01	.15	.03	.02
3	.02	.02	.01	.40	.13	.05	.12	.35	.01	.18	.02	.01
4	.02	.02	.16	.26	.36	.07	.17	.36	.01	.15	.02	.01
5	.01	.02	.02	.08	.09	.08	.27	.33	.01	.18	.02	.01
6	.01	.02	.01	.08	.05	.09	.28	.26	.01	.18	.02	.01
7	.26	.02	.01	.26	.04	.08	.51	.26	.01	.18	.02	.01
8	.01	.02	.01	.26	.05	.16	.16	.14	.02	.22	.02	.01
9	.01	.02	.01	.08	.06	.11	.14	.14	.07	.20	.02	.01
10	.01	.02	.01	.08	.34	.29	.34	.14	.08	.10	.02	.01
11	.01	.01	.01	.04	.07	.58	1.2	.14	.05	.09	.01	.01
12	.01	.01	.01	.04	.07	.22	.19	.13	.04	.09	.01	.01
13	.01	.01	.01	.04	.13	.92	.14	.07	.06	.10	.01	.01
14	.01	.01	.01	.08	.16	1.4	.16	.07	.04	.10	.02	.01
15	.01	.01	.01	.08	.08	.08	.17	.08	.04	.12	.02	.01
16	.01	.01	.01	.08	.04	.60	.37	.08	.04	.11	.02	.02
17	.01	.01	.01	.08	.04	.09	4.4	.06	.04	.07	.02	.01
18	.01	.01	.01	.08	.04	.08	1.2	.03	.05	.07	.03	.01
19	.01	.01	.01	.08	.04	.08	.73	.03	.06	.05	.05	.01
20	.01	.01	.01	.08	.04	.08	.56	.04	.06	.05	.05	.01
21	.01	.02	.01	.08	.04	.08	.54	.04	.06	.04	.05	.01
22	.02	.10	.01	.04	.03	.74	.47	.04	.05	.04	.04	.01
23	.02	.01	.01	.08	.04	.09	.51	.02	.06	.02	.05	.01
24	.02	.01	.09	.08	.04	.07	.50	.03	.07	.02	.02	.01
25	.02	.01	.54	.08	.04	1.1	.52	.03	.08	.02	.02	.01
26	.02	.01	.04	.07	.04	.15	.50	.03	.09	.02	.02	.01
27	.02	.01	.04	.05	.04	.12	.41	.02	.10	.01	.02	.01
28	.79	.01	.04	.06	.04	.09	.52	.02	.10	.01	.02	.01
29	.16	.01	.04	.09	---	.08	.38	.01	.10	.02	.02	.01
30	.02	.01	.14	.17	---	.12	.40	.01	.10	.02	.02	.01
31	.02	---	.08	.10	---	.14	---	.01	---	.02	.02	---
TOTAL	1.59	.51	1.40	3.36	2.28	7.95	16.05	3.56	1.53	2.75	.76	.33
MEAN	.051	.017	.045	.11	.081	.26	.54	.11	.051	.089	.025	.011
MAX	.79	.10	.54	.40	.36	1.4	4.4	.36	.10	.22	.05	.02
MIN	.01	.01	.01	.04	.03	.05	.07	.01	.01	.01	.01	.01
AC-FT	3.2	1.0	2.8	6.7	4.5	16	32	7.1	3.0	5.5	1.5	.7
CAL YR 1974 TOTAL	253.11											
WTR YR 1975 TOTAL	42.07											
MEAN .69												
MAX												
MIN 0												
AC-FT 502												
MIN .01												
AC-FT 83												

Peak discharge (base, 10 ft³/s).--Apr. 17 (1600) 28 ft³/s (0.79 ft).

11197000 TULARE LAKE IN KINGS COUNTY, CALIF.

LOCATION.--Lat 36°02'36", long 119°38'34", in SE¼NE¼ sec.1, T.22 S., R.21 E., Kings County, at El Rico Ranch, 6.0 mi (9.7 km) southwest of Corcoran, and 14.2 mi (22.8 km) southeast of Stratford.

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

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

EXTREMES.--Current year: Lake dry all year.

Period of record: Maximum elevation, 196.8 ft (59.98 m) June 27, 28, 1941; lake dry or practically dry for parts of 1906, 1914-16, 1919, 1937, 1946, 1950-53, 1955-56, 1958, 1969, 1971; lake dry for entire years 1920-22, 1924-36, 1947-49, 1954, 1957, 1959-61, 1972-75. Lake elevation of June 27, 28, 1941, was highest known since about 1890. Historical accounts indicate that Tulare Lake under natural conditions reached an elevation of 216 ft (65.8 m) above mean sea level in 1862 and 1868. This lake elevation was the highest since at least the early 1800's.

REMARKS.--Tulare Lake receives water from Kings, Kaweah, and Tule Rivers during high-water periods and occasionally from Kern River, Deer Creek, and several small intermittent streams. Its natural boundary has been greatly altered by construction of levees and other reclamation work. Elevation at lowest point of lakebed is now about 175 ft (53.3 m) above mean sea level, lower than previously determined because of variable subsidence.

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

TULARE LAKE BASIN

11197250 AVENAL CREEK NEAR AVENAL, CALIF.

LOCATION.--Lat 35°51'15", long 120°07'34", in SW¼NW¼ sec.10, T.24 S., R.17 E., Kings County, on right bank 550 ft (168 m) downstream from road ford, 0.4 mi (0.6 km) downstream from unnamed tributary, and 10 mi (16 km) south of Avenal.

DRAINAGE AREA.--57.1 mi² (147.9 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 825 ft (251.5 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 2.79 ft³/s (0.0790 m³/s), 2,020 acre-ft/yr (2.49 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 30 ft³/s (0.85 m³/s) Mar. 8 (gage height, 2.13 ft or 0.649 m); no flow most of year.

Period of record: Maximum discharge, 2,600 ft³/s (74.6 m³/s) Feb. 24, 1969 (gage height, 7.89 ft or 2.405 m), from rating curve extended above 510 ft³/s (14.4 m³/s) on basis of slope-area measurements at gage heights 5.72 ft (1.743 m) and 7.54 ft (2.298 m); no flow for several months in each year.

REMARKS.--Records good. Minor diversions for stock above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	0	0					
2					0	0	0					
3					0	0	0					
4					0	0	0					
5					0	0	.55					
6					0	0	.78					
7					0	0	.63					
8					0	13	.63					
9					0	.98	.68					
10					2.7	.54	.42					
11					.46	.42	.34					
12					0	.38	.21					
13					0	0	.02					
14					0	.25	0					
15					0	.16	.08					
16					0	0	.21					
17					0	0	.15					
18					0	0	.03					
19					0	0	0					
20					0	0	0					
21					0	0	0					
22					0	2.5	0					
23					0	1.2	0					
24					0	.78	0					
25					0	.50	0					
26					0	.50	0					
27					0	.46	0					
28					0	.34	0					
29					---	.18	0					
30					---	0	0					
31		---			---	0	---		---			---
TOTAL	0	0	0	0	3.16	22.19	4.73	0	0	0	0	0
MEAN	0	0	0	0	.11	.72	.16	0	0	0	0	0
MAX	0	0	0	0	2.7	13	.78	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	6.3	44	9.4	0	0	0	0	0
CAL YR 1974	TOTAL 478.10	MEAN 1.31	MAX 114	MIN 0	AC-FT 948							
WTR YR 1975	TOTAL 30.08	MEAN .08	MAX 13	MIN 0	AC-FT 60							

Peak discharge (base, 30 ft³/s).--No peak above base.

11197800 POSO CREEK NEAR OILDALE, CALIF.

LOCATION.--Lat 35°30'50", long 118°54'17", in SW¼SW¼ sec.6, T.28 S., R.29 E., Kern County, on downstream side of highway bridge opposite mouth of Hillvale Canyon, 10 mi (16 km) northeast of Oildale, and 12 mi (19 km) north-east of Bakersfield.

DRAINAGE AREA.--230 mi² (600 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213 m) from topographic map.

AVERAGE DISCHARGE.--16 years, 30.1 ft³/s (0.852 m³/s), 21,810 acre-ft/yr (26.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 710 ft³/s (20.1 m³/s) Mar. 26 (gage height, 9.55 ft or 2.911 m); no flow for many days.

Period of record: Maximum discharge, 6,700 ft³/s (190 m³/s) Feb. 25, 1969 (gage height, 12.85 ft or 3.917 m), from rating curve extended above 820 ft³/s (23.2 m³/s) on basis of contracted-opening measurement at gage height 11.57 ft (3.527 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Aug. 4-7, 1974.

Flood of Apr. 4, 1958, reached a stage of 8.6 ft (2.62 m), from floodmarks (discharge, 2,750 ft³/s or 77.9 m³/s), furnished by Kern County Land Co.

REMARKS.--Records good. Oilfield waste comprises most of low flow.

REVISIONS.--WSP 1735: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	23	12	16	18	27	94	90	36	5.5		
2	1.0	27	12	14	21	27	82	88	34	4.6		
3	.36	21	12	13	29	27	75	86	35	4.6		
4	.36	18	29	15	35	26	71	88	36	4.3		
5	.54	18	66	15	60	26	71	86	32	3.7		
6	1.5	16	43	15	55	30	91	80	28	3.7		
7	1.5	15	32	19	47	29	103	76	27	4.0		
8	1.9	15	26	35	42	30	95	74	22	3.3		
9	3.6	15	22	69	47	41	90	70	22	3.5		
10	2.8	14	21	51	100	43	80	67	18	3.3		
11	3.2	14	19	39	117	43	78	66	15	2.8		
12	2.3	13	19	35	61	42	78	67	14	2.0		
13	2.8	13	18	32	45	39	78	67	11	1.5		
14	3.2	13	18	32	68	55	80	67	8.6	1.4		
15	2.8	13	18	31	109	58	95	65	8.6	.98		
16	2.3	13	18	30	66	63	90	67	9.2	1.4		
17	2.3	12	17	28	49	69	85	66	7.1	1.4		
18	2.3	11	17	26	42	63	80	64	8.1	1.1		
19	2.8	11	16	26	38	60	75	60	9.8	.87		
20	3.2	12	16	25	35	60	72	61	9.2	.76		
21	3.2	11	15	24	36	61	70	66	10	.66		
22	2.9	13	16	23	34	91	70	62	9.8	.54		
23	2.3	21	16	22	30	175	70	58	8.6	.21		
24	2.8	18	15	21	30	124	70	55	7.6	.13		
25	3.2	15	14	21	29	150	90	54	7.1	.05		
26	2.8	14	15	21	28	515	110	52	8.1	0		
27	4.1	14	16	21	27	284	100	50	8.1	0		
28	11	13	16	21	28	182	95	47	6.7	0		
29	33	13	16	19	---	136	94	46	6.3	0		
30	32	13	16	19	---	110	92	42	5.9	0		
31	24	---	15	19	---	97	---	38	---	0		---
TOTAL	163.56	452	621	797	1326	2783	2524	2025	468.8	56.30	0	0
MEAN	5.28	15.1	20.0	25.7	47.4	89.8	84.1	65.3	15.6	1.82	0	0
MAX	33	27	66	69	117	515	110	90	36	5.5	0	0
MIN	.36	11	12	13	18	26	70	38	5.9	0	0	0
AC-FT	324	897	1230	1580	2630	5520	5010	4020	930	112	0	0
CAL YR 1974 TOTAL	16259.63		MEAN 44.5	MAX 960	MIN .14	AC-FT 32250						
WTR YR 1975 TOTAL	11216.66		MEAN 30.7	MAX 515	MIN 0	AC-FT 22250						

Peak discharge (base, 70 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
12-5	0730	7.72	76	3-23	0200	8.41	197
1-9	1400	7.76	81	3-26	0700	9.55	710
2-5	1500	7.69	73	4-7	1200	8.16	105
2-11	0400	8.10	146	4-26	unknown	8.35	145
2-15	0800	8.03	123				

TULARE LAKE BASIN

11199500 WHITE RIVER NEAR DUCOR, CALIF.

LOCATION.--Lat 35°48'53", long 118°55'42", in SE¼NE¼ sec.27, T.24 S., R.28 E., Tulare County, on right bank 0.1 mi (0.2 km) downstream from Tyler Gulch, and 8.3 mi (13.4 km) southeast of Ducor.

DRAINAGE AREA.--92.9 mi² (240.6 km²).

PERIOD OF RECORD.--October 1942 to September 1953, February 1971 to current year. Monthly discharge only for October 1942 to September 1944, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 695 ft (212 m), from topographic map. October 1942 to September 1946, at site 200 ft (61 m) upstream and October 1946 to September 1953, at site 300 ft (91 m) downstream at different datum.

AVERAGE DISCHARGE.--15 years (1942-53, 1972-75), 10.1 ft³/s (0.286 m³/s), 7,320 acre-ft/yr (9.03 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 96 ft³/s (2.72 m³/s) Mar. 25 (gage height, 4.01 ft or 1.222 m); no flow for several months.

Period of record: Maximum discharge, 2,300 ft³/s (65.1 m³/s), estimated by Bureau of Reclamation, Mar. 9, 1943; no flow for several months in each year.

REMARKS.--Records good. Small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1.4	3.0	3.0	7.0	14	12	8.4	.29		
2		0	1.3	2.8	5.0	6.5	12	11	8.1	.36		
3		0	1.8	2.6	12	6.5	12	12	7.6	.29		
4		0	8.4	2.6	12	6.5	12	12	6.4	.17		
5		0	10	2.6	30	6.5	12	12	5.2	.12		
6		0	4.0	2.6	12	6.5	17	11	4.6	.06		
7		0	2.6	4.0	7.5	6.0	18	11	4.1	0		
8		0	2.3	7.5	6.0	7.5	16	11	3.7	0		
9		0	1.8	18	7.5	11	14	11	3.2	0		
10		0	1.8	8.1	20	10	13	11	2.7	0		
11		0	1.8	5.6	16	9.4	13	10	2.3	0		
12		0	1.5	4.8	9.4	8.7	13	11	1.9	0		
13		0	1.5	4.4	7.5	6.0	13	12	1.6	0		
14		0	1.8	4.4	20	19	13	12	1.1	0		
15		0	1.8	4.4	22	15	16	12	1.1	0		
16		0	1.8	4.4	14	14	14	12	1.1	0		
17		.32	1.8	4.0	11	15	14	11	.88	0		
18		.85	1.8	4.0	9.4	12	13	11	1.3	0		
19		1.0	1.8	4.0	8.1	11	12	11	1.6	0		
20		1.2	1.5	4.0	8.1	10	12	11	1.9	0		
21		1.2	1.8	4.0	8.7	10	12	11	1.6	0		
22		2.0	2.6	3.7	7.0	19	11	9.9	1.3	0		
23		4.8	2.6	3.3	7.5	22	11	9.6	1.1	0		
24		2.6	2.3	3.3	7.5	15	11	9.6	.88	0		
25		2.0	2.3	3.3	7.5	31	17	9.6	1.1	0		
26		1.8	2.6	3.3	7.0	60	16	9.6	1.1	0		
27		1.8	2.6	3.3	7.0	29	13	9.6	.88	0		
28		1.8	3.0	3.0	7.0	20	12	9.2	.56	0		
29		1.8	3.0	3.0	---	16	12	9.2	.45	0		
30		1.5	3.0	3.0	---	15	12	8.8	.29	0		
31		---	3.0	3.0	---	14	---	8.4	---	0		---
TOTAL	0	24.67	81.3	134.0	299.7	445.1	400	331.5	78.04	1.29	0	0
MEAN	0	.82	2.62	4.32	10.7	14.4	13.3	10.7	2.60	.042	0	0
MAX	0	4.8	10	18	30	60	18	12	8.4	.36	0	0
MIN	0	0	1.3	2.6	3.0	6.0	11	8.4	.29	0	0	0
AC-FT	0	49	161	266	594	883	793	658	155	2.6	0	0
CAL YR 1974	TOTAL	3449.73	MEAN 9.45	MAX 280	MIN 0	AC-FT 6840						
WTR YR 1975	TOTAL	1795.60	MEAN 4.92	MAX 60	MIN 0	AC-FT 3560						

Peak discharge (base, 30 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
1-9	0100	3.48	32	3-22	1800	3.57	41
2-5	0300	3.62	46	3-25	2200	4.01	96
2-14	1900	3.47	31				

11200800 DEER CREEK NEAR FOUNTAIN SPRINGS, CALIF.

LOCATION.--Lat 35°56'30", long 118°49'19", in SE¼NE¼ sec.10, T.23 S., R.29 E., Tulare County, on left bank 1.0 mi (1.6 km) upstream from Pothole Creek, 6.3 mi (10.1 km) northeast of Fountain Springs, and 12 mi (19 km) east of Terra Bella.

DRAINAGE AREA.--83.3 mi² (215.7 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 980 ft (299 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 37.6 ft³/s (1.065 m³/s), 27,240 acre-ft/yr (33.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 539 ft³/s (15.3 m³/s) Mar. 25 (gage height, 5.53 ft or 1.686 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Sept. 27.

Period of record: Maximum discharge, 3,340 ft³/s (94.6 m³/s) Feb. 24, 1969 (gage height, 9.85 ft or 3.002 m), from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of slope-area measurements at gage heights 8.83 ft (2.691 m) in gage well, 9.18 ft (2.798 m), from floodmarks, and 12.54 ft (3.822 m), from floodmarks; no flow Aug. 14-22, 1968 and for several months in 1972.

Flood of Dec. 6, 1966, reached a stage of 12.54 ft (3.822 m), from floodmarks (discharge, 5,330 ft³/s or 151 m³/s).

REMARKS.--Records excellent except those for the period June 28 to July 16, which are good. No storage or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	14	9.7	11	14	29	54	56	32	10	3.5	2.5
2	3.0	16	9.7	11	17	28	48	55	30	9.8	3.3	2.3
3	4.1	12	9.9	11	29	26	47	57	31	9.4	3.0	2.3
4	4.2	11	38	11	40	25	46	60	30	9.0	2.6	2.3
5	4.4	10	34	11	48	26	51	55	27	8.6	2.5	2.2
6	4.7	9.9	19	12	32	28	61	51	26	8.2	2.3	2.0
7	4.6	9.6	15	25	27	24	57	48	25	7.6	2.4	1.7
8	5.4	9.4	14	47	25	34	51	48	23	7.6	2.3	1.7
9	6.1	9.7	13	47	55	35	50	49	23	8.2	2.3	2.1
10	6.2	9.5	12	27	91	35	48	50	21	9.0	1.9	2.7
11	5.8	9.4	12	22	57	33	49	51	19	8.0	2.1	2.8
12	5.4	9.1	12	20	42	31	48	53	19	7.5	1.9	2.8
13	4.9	8.9	12	20	37	32	47	55	18	7.0	1.7	3.2
14	4.6	8.7	12	21	66	46	52	55	16	7.0	2.0	2.7
15	4.3	8.7	12	21	52	36	60	55	16	7.0	2.1	2.5
16	4.0	8.7	11	20	40	46	52	54	16	7.0	2.2	2.3
17	3.9	8.8	11	19	35	41	56	51	16	7.5	2.3	2.5
18	3.7	9.0	11	18	32	37	51	49	16	7.9	2.0	2.6
19	3.5	9.2	11	17	29	38	48	49	17	7.0	2.5	2.6
20	3.8	9.2	11	16	30	39	47	50	18	6.4	3.2	2.6
21	3.9	9.0	11	16	29	38	49	46	17	5.7	3.3	2.5
22	4.1	17	11	15	26	90	50	43	16	5.0	3.0	2.2
23	4.3	14	12	15	25	68	49	40	15	4.5	2.8	2.0
24	4.5	12	11	14	24	55	47	40	14	4.1	2.5	1.9
25	4.8	11	11	14	24	225	92	40	14	3.8	2.4	1.8
26	5.0	10	11	14	25	175	71	39	13	3.6	2.3	1.6
27	5.7	10	11	14	25	106	61	38	13	3.4	2.2	1.4
28	16	10	12	13	27	81	59	37	12	3.3	2.3	1.5
29	25	10	11	13	---	67	57	37	12	3.3	2.7	1.8
30	14	9.8	11	13	---	61	57	35	11	3.7	2.7	1.7
31	12	---	12	13	---	59	---	33	---	3.6	2.7	---
TOTAL	188.1	313.6	413.3	561	1003	1694	1615	1479	576	203.7	77.0	66.8
MEAN	6.07	10.5	13.3	18.1	35.8	54.6	53.8	47.7	19.2	6.57	2.48	2.23
MAX	25	17	38	47	91	225	92	60	32	10	3.5	3.2
MIN	2.2	8.7	9.7	11	14	24	46	33	11	3.3	1.7	1.4
AC-FT	373	622	820	1110	1990	3360	3200	2930	1140	404	153	132
CAL YR 1974 TOTAL	12035.3			MEAN 33.0	MAX 811	MIN 1.6	AC-FT 23870					
WTR YR 1975 TOTAL	8190.5			MEAN 22.4	MAX 225	MIN 1.4	AC-FT 16250					

Peak discharge (base, 100 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
1-8	1845	3.84	127	3-22	1230	4.09	172
2-4	2045	3.69	102	3-25	1330	5.53	539
2-10	1045	3.77	115	4-25	0930	3.95	147

TULARE LAKE BASIN

11201200 DEER CREEK DIVERSION NEAR TERRA BELLA, CALIF.

LOCATION.--Lat 35°59'27" (revised), long 118°59'06", in NE¼NE¼ sec.30, T.22 S., R.28 E., Tulare County, on right bank 1,000 ft (305 m) downstream from diversion structure, 3.8 mi (6.1 km) northeast of Terra Bella.

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

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 510 ft (155 m), from topographic map.

EXTREMES.--Period of record: Maximum daily discharge, 14 ft³/s (0.40 m³/s) Dec. 2, 1973; no flow for several months in each year.

REMARKS.--Records good. Diversion receives water from Deer Creek 1,000 ft (305 m) upstream. Water is used for ground-water recharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	1.1	1.4	.21	1.6	0	.05	.69	.08		
2	0	0	1.1	1.3	.63	1.3	0	.03	.39	.15		
3	0	0	1.5	1.6	.54	1.0	0	.10	.24	.17		
4	0	0	1.9	1.4	.52	.78	0	.01	.10	.12		
5	0	0	2.2	1.6	.93	.90	0	0	.39	.08		
6	0	0	1.3	1.7	.54	.84	.08	.01	.39	.08		
7	0	0	1.1	2.1	.57	.66	.02	.06	.15	.02		
8	0	0	1.1	2.0	.36	.51	0	0	.10	0		
9	0	0	1.1	1.2	.21	.75	0	0	.08	0		
10	0	0	1.3	.96	.77	.75	0	0	0	.01		
11	0	0	1.3	.96	.87	.69	0	0	0	0		
12	0	0	1.3	.93	.36	.54	0	.18	1.0	0		
13	0	0	1.3	.96	.15	.21	0	.24	1.1	0		
14	0	0	1.2	.90	.30	.78	0	.02	.75	0		
15	0	0	1.2	.78	.24	.78	0	1.3	.78	0		
16	0	0	1.3	.78	.01	.96	0	2.0	.75	0		
17	0	0	1.2	.72	0	.75	0	1.7	.66	0		
18	0	0	1.1	.78	0	.51	0	.93	.78	0		
19	0	0	1.0	.78	0	.57	0	1.1	.84	0		
20	0	0	1.0	.69	1.9	.51	0	1.0	.87	0		
21	0	0	1.1	.66	3.5	.36	0	.75	.45	0		
22	0	0	1.1	.57	3.2	.95	0	.43	.57	0		
23	0	0	1.0	.57	2.7	.74	0	0	.57	0		
24	0	.21	1.0	.30	2.3	.54	0	0	.42	0		
25	0	.24	1.0	.27	2.2	.93	.78	0	.39	0		
26	0	.36	1.1	.18	1.9	1.6	.72	0	.18	0		
27	0	.48	1.3	.27	1.6	.99	.27	.08	.11	0		
28	.32	.69	1.4	.10	1.7	.69	.03	.03	.11	0		
29	1.5	.87	1.3	.03	---	.18	0	.54	.09	0		
30	.14	.96	1.3	.07	---	.07	.07	.78	.08	0		
31	0	---	1.3	.15	---	0	---	.75	---	0		---
TOTAL	1.96	3.81	38.5	26.71	28.21	22.44	1.97	12.09	13.03	.71	0	0
MEAN	.063	.13	1.24	.86	1.01	.72	.066	.39	.43	.023	0	0
MAX	1.5	.96	2.2	2.1	3.5	1.6	.78	2.0	1.1	.17	0	0
MIN	0	0	1.0	.03	0	0	0	0	0	0	0	0
AC-FT	3.9	7.6	76	53	56	45	3.9	24	26	1.4	0	0
CAL YR 1974	TOTAL	309.16	MEAN .85	MAX 5.3	MIN 0	AC-FT 613						
WTR YR 1975	TOTAL	149.43	MEAN .41	MAX 3.5	MIN 0	AC-FT 296						

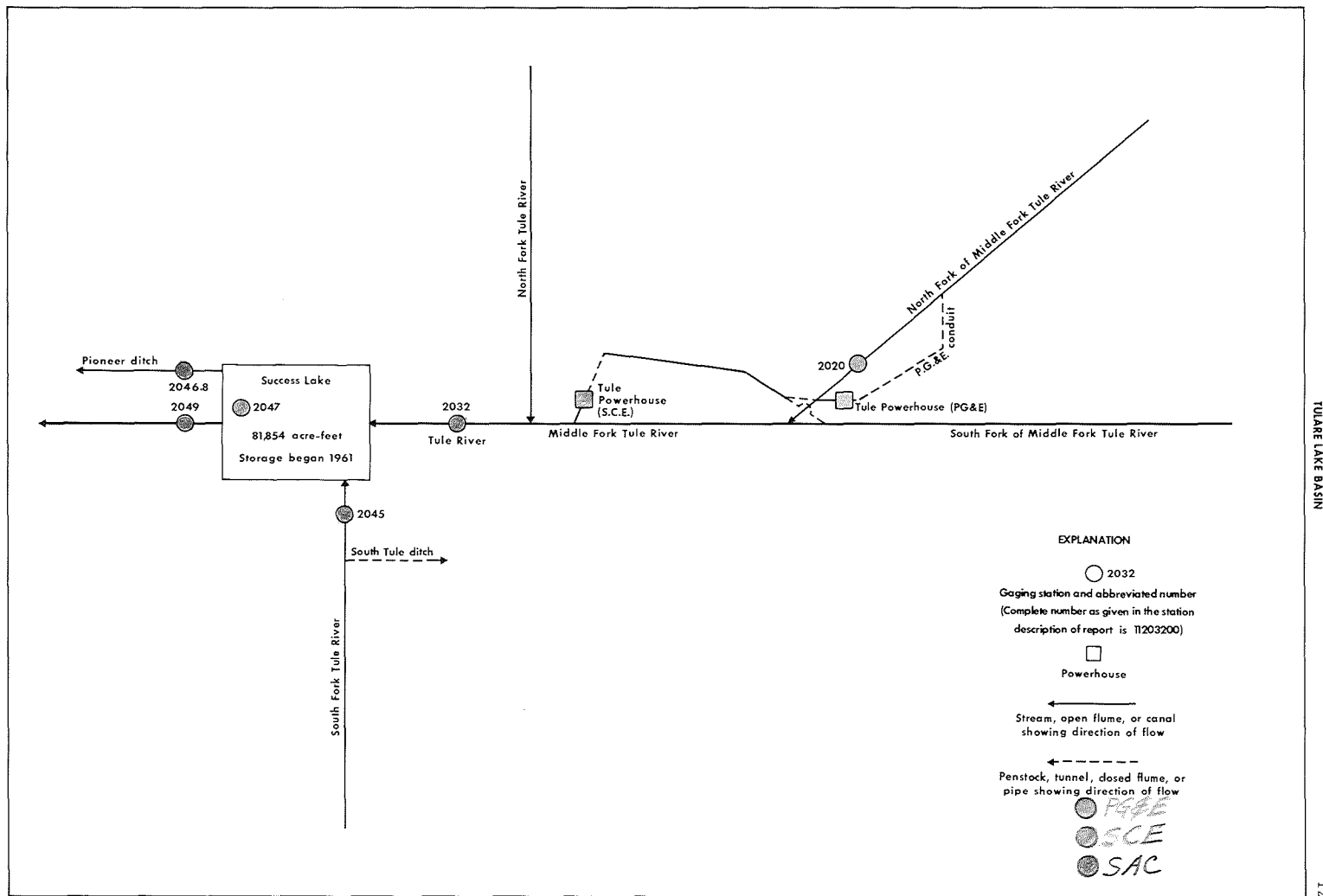


FIGURE 5.--Schematic diagram showing diversions and storage in Tule River basin.

11202000 NORTH FORK OF MIDDLE FORK TULE RIVER NEAR SPRINGVILLE, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF NORTH FORK OF MIDDLE FORK TULE RIVER AND
PACIFIC GAS AND ELECTRIC CO. CONDUIT NEAR SPRINGVILLE, CALIF., WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	24	17	17	21	53	51	77	241	56	27	21
2	18	21	17	17	27	51	49	79	230	54	26	21
3	18	20	19	17	26	48	51	96	220	52	26	20
4	19	20	49	17	27	47	52	105	211	50	25	20
5	19	20	28	17	27	50	54	88	207	48	25	20
6	18	19	23	30	26	50	52	78	202	47	25	20
7	15	20	22	27	27	45	48	74	193	45	24	20
8	18	20	22	42	28	55	47	85	183	44	24	20
9	19	19	21	29	68	52	46	107	173	43	23	21
10	19	19	20	24	86	48	44	132	164	41	23	23
11	18	19	19	23	47	44	43	158	153	39	23	22
12	17	19	19	24	39	41	43	186	144	39	23	22
13	17	18	19	25	37	43	45	217	134	38	23	21
14	17	19	19	25	43	42	50	236	129	37	23	20
15	17	19	19	25	37	41	47	234	126	36	22	19
16	17	17	19	24	33	45	46	221	119	37	22	19
17	17	17	19	24	31	41	44	219	109	36	22	20
18	17	17	18	24	30	42	43	232	101	36	22	20
19	17	17	18	23	29	47	43	254	94	35	24	19
20	16	17	18	23	29	49	44	238	88	34	24	19
21	17	19	18	23	28	46	53	185	82	33	24	18
22	16	24	18	22	28	77	57	162	79	33	23	18
23	16	20	17	21	28	55	58	161	76	32	22	18
24	17	20	17	21	31	53	60	181	73	31	22	18
25	17	18	17	21	34	130	103	206	69	30	22	18
26	18	18	17	21	38	91	77	223	67	30	21	18
27	18	17	17	20	42	69	69	228	64	30	21	17
28	39	17	18	20	48	59	67	230	61	29	21	17
29	27	17	17	19	---	54	68	233	60	28	22	17
30	23	17	17	19	---	56	73	234	58	28	21	17
31	25	---	17	20	---	56	---	237	---	28	21	---
TOTAL	583	568	615	704	995	1680	1627	5396	3910	1179	716	583
MEAN	18.8	18.9	19.8	22.7	35.5	54.2	54.2	174	130	38.0	23.1	19.4
MAX	39	24	49	42	86	130	103	254	241	56	27	23
MIN	15	17	17	17	21	41	43	74	58	28	21	17
AC-FT	1160	1130	1220	1400	1970	3330	3230	10700	7760	2340	1420	1160
CAL YR 1974	TOTAL	20972	MEAN 57.5	MAX 283	MIN 15	AC-FT	41600					
WTR YR 1975	TOTAL	18556	MEAN 50.8	MAX 254	MIN 15	AC-FT	36810					

11203200 TULE RIVER NEAR SPRINGVILLE, CALIF.

LOCATION.--Lat 36°06'02", long 118°52'07", in NE¼SW¼ sec.17, T.21 S., R.29 E., Tulare County, on left bank 10 ft (3 m) downstream from highway bridge, 3.5 mi (5.6 km) southwest of Springville, and 4.1 mi (6.6 km) upstream from Success Dam.

DRAINAGE AREA.--247 mi² (640 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 680 ft (207 m), from topographic map. Prior to Mar. 20, 1968, at site 1.9 mi (3.1 km) upstream at different datum.

AVERAGE DISCHARGE.--18 years, 143 ft³/s (4.050 m³/s), 103,600 acre-ft/yr (128 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,300 ft³/s (36.8 m³/s) Feb. 10; minimum daily, 12 ft³/s (0.34 m³/s) Sept. 6, 7.

Period of record: Maximum discharge, 49,600 ft³/s (1,400 m³/s) Dec. 6, 1966 (gage height, 17.18 ft or 5.236 m in gage well, 19.7 ft or 6.00 m, from floodmarks, site and datum then in use), from rating curve extended above 7,400 ft³/s (210 m³/s) on basis of slope-area measurement of maximum flow; no flow many days in 1961.

Flood in December 1955 reached a stage of 13.7 ft (4.18 m), previous site and datum, from floodmarks (discharge, 21,000 ft³/s or 595 m³/s).

REMARKS.--Records good. Many small diversions above station for irrigation. Power is developed on Middle Fork and tributaries. Diversion to Tule River diversion ditch starts 400 ft (122 m) upstream most of which is returned to the river 0.5 mi (0.8 km) downstream. Records since Mar. 20, 1968, include flow diverted to Tule River diversion ditch.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	56	42	48	52	155	221	239	450	82	24	16
2	15	59	42	46	83	156	196	249	430	78	24	14
3	21	36	42	47	137	147	189	279	411	75	19	13
4	20	44	185	46	145	136	187	322	379	72	19	13
5	20	43	165	46	170	146	214	284	360	67	19	13
6	21	41	95	51	116	176	248	246	351	63	17	12
7	20	41	77	115	98	157	231	219	338	60	17	12
8	24	40	68	136	98	181	201	228	317	53	16	13
9	26	40	62	160	261	202	191	272	290	55	16	15
10	26	39	57	105	696	202	184	322	275	58	15	15
11	24	39	56	91	292	181	180	398	256	50	15	22
12	22	40	56	81	196	165	180	460	238	46	15	24
13	21	39	55	78	162	165	176	558	221	45	18	20
14	21	38	54	77	201	255	193	599	209	45	18	18
15	20	35	51	78	179	181	206	604	202	42	16	17
16	18	37	51	76	149	234	196	543	196	42	16	17
17	17	37	50	70	136	218	190	508	183	42	18	17
18	17	38	50	71	124	181	174	526	170	39	18	17
19	18	39	49	67	114	181	166	571	162	38	17	15
20	17	39	48	66	110	181	162	571	165	36	19	15
21	15	40	49	64	111	181	177	417	149	35	16	14
22	15	84	49	62	104	360	196	343	142	34	18	16
23	16	60	50	61	99	292	203	318	132	32	16	15
24	17	50	48	58	100	255	196	347	124	28	16	16
25	18	47	48	58	106	670	359	407	119	26	16	16
26	19	45	48	57	115	577	301	444	108	25	14	16
27	21	45	48	56	124	373	249	450	104	25	14	14
28	91	44	49	55	137	294	234	445	97	26	15	16
29	108	42	50	51	---	252	225	444	92	24	16	16
30	58	42	48	51	---	235	228	445	86	24	17	16
31	48	---	48	48	---	236	---	442	---	24	17	---
TOTAL	828	1319	1890	2176	4415	7325	6253	12500	6756	1391	531	473
MEAN	26.7	44.0	61.0	70.2	158	236	208	403	225	44.9	17.1	15.8
MAX	108	84	185	160	696	670	359	604	450	82	24	24
MIN	14	35	42	46	52	136	162	219	86	24	14	12
AC-FT	1640	2620	3750	4320	8760	14530	12400	24790	13400	2760	1050	938

CAL YR 1974 TOTAL 54074.7 MEAN 148 MAX 2420 MIN 9.8 AC-FT 107300
WTR YR 1975 TOTAL 45857.0 MEAN 126 MAX 696 MIN 12 AC-FT 90960

Date	Time	Peak discharge (base, 350 ft ³ /s)	Date	Time	Discharge
2-10	1100	1,300	5-15	0200	710
3-25	1430	1,190	5-20	0230	629
4-25	1000	533	5-27	0200	496

11203200 TULE RIVER NEAR SPRINGVILLE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: November 1963 to July 1966.

Water temperatures: October 1965 to September 1967, October 1968 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 30.5°C July 26; minimum, 3.5°C Jan. 2, 3.

Period of record:

Water temperatures: Maximum, 35.5°C July 1, 1972; minimum (1966-67, 1969 to current year), 2.5°C Jan. 5-8, 1971.

TEMPERATURE (DEG. C) OF WATER WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	19.0	13.0	12.0	8.5	7.5	6.0	4.0	9.0	6.5	13.5	11.0
2	24.0	21.0	13.0	12.0	10.0	7.5	5.5	3.5	8.5	8.0	12.5	10.0
3	24.0	21.0	13.0	11.0	10.5	10.0	5.0	3.5	8.0	7.5	13.0	10.5
4	23.0	21.0	12.5	11.0	11.0	10.5	6.0	4.0	8.0	7.5	13.0	10.5
5	22.5	20.0	12.5	11.0	11.0	10.0	6.0	5.0	9.5	7.5	13.0	12.0
6	22.0	18.5	13.0	11.0	10.5	9.0	6.5	5.5	10.0	8.0	12.5	11.0
7	21.0	19.0	13.5	11.0	10.0	8.0	8.5	6.5	10.5	9.5	12.5	11.0
8	21.0	18.5	13.5	13.0	9.5	8.0	9.0	8.5	12.0	10.0	12.5	11.0
9	21.0	19.0	13.5	12.5	9.0	8.0	9.0	7.0	12.0	10.5	12.5	9.5
10	21.0	18.5	13.5	12.0	9.0	8.5	7.0	6.0	10.5	9.5	10.5	8.5
11	20.5	17.5	13.5	11.5	8.5	8.0	7.0	7.0	10.5	8.5	10.5	8.5
12	21.0	17.5	13.5	11.5	8.5	7.5	7.5	6.0	10.0	8.0	12.0	9.0
13	21.0	17.5	14.0	12.0	9.0	8.0	8.0	6.0	10.0	9.5	12.5	10.5
14	21.0	17.5	14.0	12.5	9.5	8.5	8.0	6.0	10.0	9.0	11.0	9.0
15	21.0	17.0	13.5	12.0	9.0	8.5	8.5	6.5	9.0	7.5	11.5	7.5
16	21.0	17.0	12.5	12.0	10.0	9.0	8.5	7.0	8.0	6.0	11.5	9.5
17	21.0	17.0	12.5	12.0	9.5	8.5	8.5	7.5	7.5	5.0	10.5	7.5
18	20.0	17.0	13.0	12.0	10.0	8.5	9.0	8.0	8.0	5.5	12.5	8.5
19	20.0	17.5	13.0	12.0	10.0	9.5	9.5	8.0	9.0	6.5	13.5	10.5
20	20.5	17.5	12.5	11.5	9.5	8.0	9.5	7.5	9.5	8.5	13.5	11.0
21	19.5	17.0	12.5	11.5	9.0	9.0	9.5	8.0	9.0	7.5	12.0	10.0
22	19.5	16.5	12.5	11.5	9.0	8.0	10.0	8.0	9.5	6.0	12.0	10.0
23	19.0	16.0	11.5	10.5	8.0	6.0	10.0	8.0	10.5	6.5	11.5	8.0
24	18.0	15.5	10.5	9.5	6.0	4.5	10.0	8.0	11.0	7.5	13.0	9.0
25	18.0	15.5	10.5	9.5	5.5	4.0	10.5	8.5	12.0	9.0	13.0	10.0
26	17.0	16.5	10.5	9.0	5.5	4.0	10.5	8.5	12.5	9.5	10.0	7.5
27	18.0	16.0	10.0	8.5	7.0	5.0	10.5	8.0	12.5	10.0	10.5	7.0
28	17.5	14.0	10.5	9.5	8.5	7.0	8.0	5.5	13.5	10.5	11.0	8.0
29	14.0	12.5	9.5	8.0	7.5	6.5	6.0	4.0	---	---	11.0	7.0
30	13.5	11.5	9.5	8.0	6.5	5.0	6.0	4.0	---	---	12.5	8.5
31	13.0	12.5	---	---	6.0	5.0	6.5	4.0	---	---	12.5	10.0
MONTH	24.0	11.5	14.0	8.0	11.0	4.0	10.5	3.5	13.5	5.0	13.5	7.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	8.0	16.5	12.5	18.5	15.5	22.5	18.5	27.5	21.5	25.0	21.0
2	12.5	8.0	16.5	13.0	18.0	14.5	22.5	18.5	28.0	22.5	24.0	20.5
3	13.0	9.0	16.5	13.5	18.0	15.5	23.0	19.0	29.0	23.0	24.0	21.5
4	12.5	10.5	15.5	11.5	19.0	15.5	23.0	19.0	29.5	23.5	25.0	22.5
5	12.0	9.0	12.5	9.0	19.5	16.5	24.0	19.5	29.5	24.0	25.5	23.5
6	10.5	8.0	14.5	10.0	20.0	17.0	25.0	21.0	28.5	24.0	26.0	24.0
7	10.0	7.5	15.5	11.5	20.0	17.0	26.0	21.5	27.5	23.0	25.0	23.0
8	11.0	7.5	17.0	13.0	19.5	16.0	25.5	22.0	29.0	23.0	25.0	24.0
9	12.0	9.0	17.0	13.5	20.5	17.0	24.5	22.5	28.0	23.0	24.0	23.0
10	13.0	9.5	17.0	14.0	21.0	17.0	25.5	21.5	29.0	23.0	23.5	23.0
11	12.5	10.5	17.0	14.5	20.5	17.0	27.0	23.0	29.0	23.0	23.5	22.5
12	14.0	9.5	17.0	14.0	21.5	18.0	27.5	22.5	28.5	22.5	22.5	21.5
13	15.0	11.5	17.0	14.0	22.0	18.5	26.5	22.5	27.5	22.5	22.5	21.5
14	12.0	11.5	16.5	13.5	22.0	18.5	28.0	22.5	27.0	22.0	22.5	22.0
15	12.0	10.0	16.0	12.5	23.0	19.5	28.0	22.5	25.0	22.0	23.0	22.0
16	13.0	10.0	16.0	13.0	22.0	19.0	28.0	22.5	27.5	22.0	23.0	22.5
17	11.5	10.0	16.0	13.0	20.5	18.0	27.5	23.0	26.5	22.5	24.0	22.0
18	12.5	8.5	17.0	14.0	19.5	17.0	27.0	23.5	24.5	22.0	24.0	23.5
19	13.5	10.5	17.0	14.0	19.0	15.0	27.0	23.0	26.0	22.0	23.5	22.0
20	15.0	10.5	16.5	11.0	19.0	15.0	27.5	23.0	25.5	21.5	23.5	21.0
21	15.5	12.5	13.5	9.0	21.0	16.5	27.5	23.0	26.0	21.5	23.0	21.5
22	15.5	13.0	14.5	11.0	22.0	18.0	28.0	23.5	26.0	21.5	22.5	21.5
23	14.0	11.5	16.5	12.5	22.5	19.0	28.5	24.0	27.0	22.0	22.5	21.0
24	14.5	10.5	17.0	14.0	21.5	18.5	28.5	24.0	27.5	22.0	23.0	21.0
25	14.0	11.0	17.5	14.5	20.5	16.5	29.5	24.5	28.0	23.0	23.0	20.5
26	11.5	9.0	17.0	14.5	21.0	16.5	30.5	25.5	28.0	23.0	21.5	20.5
27	13.0	8.5	17.0	13.5	22.0	18.0	28.0	25.5	26.0	21.0	21.5	19.5
28	15.5	11.5	17.5	14.0	22.5	18.5	28.5	23.5	25.5	21.0	20.5	18.5
29	16.0	12.0	18.0	14.5	23.0	19.0	28.5	23.5	25.5	21.0	19.5	18.5
30	16.0	13.0	18.0	14.5	23.0	19.0	27.5	23.0	25.5	21.0	19.5	18.5
31	---	---	18.5	15.0	---	---	27.0	21.5	26.0	21.0	---	---
MONTH	16.0	7.5	18.5	9.0	23.0	14.5	30.5	18.5	29.5	21.0	26.0	18.5

TULARE LAKE BASIN

11204500 SOUTH FORK TULE RIVER NEAR SUCCESS, CALIF.

LOCATION.--Lat 36°02'33", long 118°51'24", in NW¼SW¼ sec.4, T.22 S., R.29 E., Tulare County, on left bank 0.5 mi (0.8 km) upstream from Crew Creek, 4 mi (6 km) southeast of Success, and 5 mi (8 km) upstream from mouth.

DRAINAGE AREA.--109 mi² (282 km²).

PERIOD OF RECORD.--June 1930 to December 1954, January 1956 to current year. Monthly and yearly discharge only for some periods, published in WSP 1735.

GAGE.--Water-stage recorder. Altitude of gage is 770 ft (235 m), from topographic map. Prior to June 26, 1951, at site 0.4 mi (0.6 km) downstream at different datum.

AVERAGE DISCHARGE.--43 years, 41.8 ft³/s (1.184 m³/s), 30,280 acre-ft/yr (37.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 434 ft³/s (12.3 m³/s) Mar. 25 (gage height, 4.16 ft or 1.268 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Sept. 30.

Period of record: Maximum discharge, 14,300 ft³/s (405 m³/s) Dec. 6, 1966 (gage height, 12.50 ft or 3.810 m in gage well, 13.3 ft or 4.05 m, from floodmarks), from rating curve extended above 4,300 ft³/s (122 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in most years.

REMARKS.--Records excellent. Diversions for irrigation of about 640 acres (2.59 km²) above station.

REVISIONS (WATER YEARS).--WSP 1315-A: 1931-32(M). WSP 1445: 1952-53(P), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	25	13	11	13	44	77	95	91	24	7.1	2.6
2	2.7	22	12	12	22	43	70	95	87	22	7.1	2.5
3	3.6	15	12	12	32	39	70	105	82	21	6.3	2.5
4	2.9	14	78	13	50	38	71	114	78	20	5.9	2.5
5	2.8	14	51	13	52	42	78	95	72	19	5.0	2.5
6	2.8	13	27	16	37	51	90	86	69	18	4.4	2.5
7	2.7	12	22	44	31	46	82	83	66	17	4.4	2.4
8	4.9	12	20	50	30	60	73	90	62	16	4.7	2.4
9	4.1	11	18	50	150	61	72	100	59	17	5.0	2.8
10	3.8	11	16	30	188	57	71	109	56	18	5.2	3.1
11	3.6	11	16	26	91	51	71	121	52	16	4.6	2.9
12	3.2	11	15	23	58	46	70	130	50	15	3.8	4.4
13	2.9	10	15	24	50	55	71	143	48	14	3.8	3.6
14	2.7	10	15	25	105	76	79	149	46	14	3.8	3.1
15	2.4	9.5	14	24	76	58	78	149	44	13	3.5	2.9
16	2.2	10	14	22	58	81	71	140	42	13	3.5	2.9
17	2.3	10	14	21	49	68	68	137	41	13	3.5	3.0
18	2.1	11	14	20	43	61	63	138	42	12	3.6	3.2
19	2.3	11	13	20	37	65	60	143	42	11	3.8	3.1
20	2.0	11	13	19	39	73	59	140	45	11	4.0	2.9
21	1.9	12	13	18	37	67	66	117	41	9.8	3.8	2.7
22	2.8	34	13	18	32	145	69	105	37	9.5	3.4	2.4
23	2.8	20	12	17	31	108	69	100	35	8.9	3.3	1.9
24	2.9	17	11	16	31	90	66	101	33	8.4	3.1	1.9
25	3.0	16	11	16	33	240	157	105	33	7.8	3.0	2.0
26	3.0	14	13	16	34	191	108	107	32	7.6	2.9	2.2
27	3.4	14	13	16	36	133	92	105	30	7.3	3.2	2.2
28	34	14	14	13	39	108	91	103	28	7.1	2.9	1.9
29	32	13	13	11	---	92	91	101	28	6.9	3.0	1.6
30	15	13	12	12	---	87	93	96	26	7.4	2.9	1.5
31	14	---	13	12	---	87	---	93	---	7.4	2.8	---
TOTAL	172.5	420.5	550	640	1484	2463	2346	3495	1497	412.1	127.3	78.1
MEAN	5.56	14.0	17.7	20.6	53.0	79.5	78.2	113	49.9	13.3	4.11	2.60
MAX	34	34	78	50	188	240	157	149	91	24	7.1	4.4
MIN	1.7	9.5	11	11	13	38	59	83	26	6.9	2.8	1.5
AC-FT	342	834	1090	1270	2940	4890	4650	6930	2970	817	252	155
CAL YR 1974	TOTAL	18563.9	MEAN 50.9	MAX 1280	MIN 1.7	AC-FT 36820						
WTR YR 1975	TOTAL	13685.5	MEAN 37.5	MAX 240	MIN 1.5	AC-FT 27150						

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-9	1600	3.78	294	3-25	1215	4.16	434
3-22	1000	3.64	252	4-25	0815	3.79	297

11204680 PIONEER DITCH BELOW SUCCESS DAM, CALIF.

LOCATION.--Lat 36°03'34", long 118°55'22", in SW¼NW¼ sec.35, T.21 S., R.28 E., Tulare County, on left bank 0.1 mi (0.2 km) downstream from Success Dam, and 5.5 mi (8.8 km) east of Porterville.

PERIOD OF RECORD.--April 1959 to current year. Prior to October 1960, monthly diversions only, published with Tule River near Porterville.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 549.00 ft (167.335 m) above mean sea level (levels by Corps of Engineers). Prior to Feb. 1, 1961, at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE.--16 years, 7.02 ft³/s (0.199 m³/s), 5,090 acre-ft/yr (6.28 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 29 ft³/s (0.82 m³/s) Apr. 15, 1961; no flow at times in most years.

REMARKS.--Records excellent except those for October, July to September, which are good. Ditch receives water from Success Lake (see sta 11204700).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	0					0	3.8	14	7.2	13	13
2	15	0					0	3.0	14	9.5	13	13
3	15	0					0	0	13	10	13	13
4	15	0					0	0	15	11	13	13
5	14	0					0	0	15	11	13	13
6	15	0					0	0	13	11	13	13
7	12	0					0	0	14	11	13	13
8	9.8	0					0	.70	14	11	13	13
9	9.4	0					0	8.1	12	12	13	13
10	9.4	0					0	14	12	12	13	13
11	9.2	.80					0	15	14	12	13	13
12	9.3	1.6					0	13	14	12	13	13
13	9.6	.60					0	12	14	12	13	13
14	9.6	0					0	12	14	12	13	13
15	9.6	0					0	13	8.2	12	13	13
16	9.6	0					0	14	0	12	13	13
17	9.6	0					0	8.1	.90	12	13	13
18	9.6	0					0	0	6.6	12	13	13
19	9.6	0					0	0	12	12	13	13
20	9.3	0					0	0	15	12	13	13
21	9.3	0					0	0	16	12	13	13
22	9.2	0					0	0	16	12	13	13
23	9.1	0					0	.40	16	12	13	13
24	8.4	0					.60	5.6	16	12	13	13
25	8.6	0					1.1	11	16	12	13	13
26	9.0	0					1.2	12	13	12	13	13
27	9.0	0					1.2	12	0	12	13	13
28	5.3	0					.70	12	0	12	13	13
29	0	0				---	0	12	0	13	13	13
30	0	0				---	.40	13	0	13	12	12
31	0	---				---	---	14	---	13	12	---
TOTAL	291.5	3.00	0	0	0	0	5.20	208.70	327.70	360.7	401	389
MEAN	9.40	.10	0	0	0	0	.17	6.73	10.9	11.6	12.9	13.0
MAX	15	1.6	0	0	0	0	1.2	15	16	13	13	13
MIN	0	0	0	0	0	0	0	0	0	7.2	12	12
AC-FT	578	6.0	0	0	0	0	10	414	650	715	795	772
CAL YR 1974	TOTAL	2268.30	MEAN 6.21	MAX 16	MIN 0	AC-FT 4500						
WTR YR 1975	TOTAL	1986.80	MEAN 5.44	MAX 16	MIN 0	AC-FT 3940						

TULARE LAKE BASIN

11204700 SUCCESS LAKE NEAR SUCCESS, CALIF.

LOCATION.--Lat 36°03'40", long 118°55'18", in SE¼NW¼ sec.35, T.21 S., R.28 E., Tulare County, in control tower near right abutment of Success Dam on Tule River, 5 mi (8 km) east of Porterville.

DRAINAGE AREA.--391 mi² (1,013 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 81,247 acre-ft (100 hm³) June 22 (elevation, 652.25 ft or 198.806 m); minimum, 9,448 acre-ft (11.6 hm³) Oct. 24, 25 (elevation, 594.63 ft or 181.243 m).
Period of record: Maximum contents, 101,300 acre-ft (125 hm³) Dec. 7, 1966 (elevation, 658.63 ft or 200.750 m); minimum since reservoir first filled, 3,406 acre-ft (4.20 hm³) Oct. 17, 1972 (elevation, 579.52 ft or 176.638 m).

REMARKS.--Lake is formed by earthfill dam and dike. Storage began November 1961. Usable capacity, 81,854 acre-ft (101 hm³) between elevations 559.0 ft (170.38 m), invert of outlet structure and 652.5 ft (198.88 m), spillway crest. Surcharge flood control storage, 117,402 acre-ft (145 hm³) between ungated spillway crest and elevation 686.8 ft (209.34 m), maximum spillway design flood pool. No dead storage. Siltation in the reservoir has eliminated dead storage. Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

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

575	2,281	620	28,717
580	3,543	640	55,952
585	5,170	660	101,553
590	7,197	690	213,567
600	12,528		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11368	10519	11286	12214	13755	19056	37082	50202	75063	80818	61156	33405
2	10967	10688	11019	12336	13999	19207	37595	50624	75784	80699	60383	32702
3	10659	10824	10813	12447	14326	19318	38064	51196	76327	80509	59600	32000
4	10418	10933	10956	12559	14768	19550	38577	51905	76897	80296	58789	31320
5	10240	11042	11036	12684	15224	19873	39188	52471	77379	80083	57932	30608
6	10086	11146	10910	12816	15511	20255	39874	52975	77863	79870	56766	29908
7	9934	11251	10739	13114	15759	20575	40423	53432	78303	79282	55602	29220
8	9788	11357	10547	13383	15994	21040	40829	53908	78744	78628	54508	28534
9	9681	11463	10446	13604	16778	21527	41239	54474	81032	78001	53432	27859
10	9612	11563	10273	13656	18514	22005	41583	55131	81056	77379	52338	27147
11	9606	11652	10048	13689	18906	22401	41916	55987	81104	76737	51245	26409
12	9601	11748	9809	13683	18875	22776	42252	56962	81176	76168	50073	25666
13	9574	11850	9729	13689	18788	23171	42576	58132	81224	75580	48922	24955
14	9537	11940	9879	13611	18882	23769	43003	59378	81247	74884	47808	24220
15	9500	12025	10015	13520	18859	24193	43405	60609	81224	74237	46699	23518
16	9490	12128	10157	13416	18710	24770	43780	61727	81200	73617	45624	22837
17	9479	12214	10295	13306	18537	25271	44130	62689	79165	72958	44584	22185
18	9469	12305	10435	13190	18459	25703	44408	63741	79540	72281	43592	21511
19	9469	12410	10569	13063	18459	26188	44673	64908	79870	71544	42789	20840
20	9474	12491	10699	12955	18514	26727	44939	66011	80154	70835	42028	20174
21	9474	12621	10830	12822	18561	27245	45221	66803	80414	70090	41307	19502
22	9469	12841	10962	12677	18584	28281	45624	67458	80604	69350	40639	18843
23	9453	12999	11088	12715	18608	29065	45985	68098	80794	68576	39940	18149
24	9448	13126	11210	12834	18639	29709	46333	68764	80913	67726	39253	17432
25	9448	13005	11333	12967	18670	31309	47158	69540	81176	66945	38590	16660
26	9453	12715	11457	13101	18717	32860	47839	70345	81128	66132	37874	15973
27	9474	12416	11587	13229	18788	33865	48339	71178	81104	65347	37094	15252
28	9702	12122	11712	13332	18922	34623	48812	71977	81032	64471	36304	14556
29	10015	11838	11844	13435	---	35276	49240	72782	81009	63643	35527	13860
30	10179	11569	11964	13552	---	35902	49671	73551	80913	62786	34812	13184
31	10312	---	12098	13637	---	36525	---	74304	---	61976	34132	---
MAX	11368	13126	12098	13689	18922	36525	49671	74304	81247	80818	61156	33405
MIN	9448	10519	9729	12214	13755	19056	37082	50202	75063	61976	34132	13184
(a)	596.23	598.42	599.30	601.74	609.07	626.97	636.26	649.24	652.11	643.28	624.97	601.04
(b)	-1,412	+1,257	+529	+1,539	+5,285	+17,603	+13,146	+24,633	+6,609	-18,937	-27,844	-20,948
(c)	212	97	58	61	95	197	443	1,120	1,664	1,703	1,199	587

CAL YR 1974 b +1,165
WTR YR 1975 b +1,460

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

11204900 TULE RIVER BELOW SUCCESS DAM, CALIF.

LOCATION.--Lat 36°03'23", long 118°55'22", in NW¼SW¼ sec.35, T.21 S., R.28 E., Tulare County, on right bank 1,000 ft (300 m) downstream from Success Dam, and 5 mi (8 km) east of Porterville.

DRAINAGE AREA.--393 mi² (1,018 km²).

PERIOD OF RECORD.--October 1953 to current year. Prior to October 1960, published as "at Worth Bridge, near Porterville."

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 536.00 ft (163.373 m) above mean sea level (levels by Corps of Engineers). Prior to October 1960, at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents, evaporation, and diversion).--22 years, 179 ft³/s (5.069 m³/s), 129,700 acre-ft/yr (160 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 600 ft³/s (17.0 m³/s) Aug. 13 (gage height, 6.20 ft or 1.890 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Nov. 23, 24.

Period of record: Maximum discharge, 27,000 ft³/s (765 m³/s) Dec. 23, 1955 (gage height, 21.65 ft or 6.599 m, site and datum then in use), from rating curve extended above 1,400 ft³/s (39.6 m³/s) on basis of studies of upstream peaks; no flow at times in 1954-57, 1959-61. Maximum discharge since construction of Success Dam in 1961, 9,050 ft³/s (256 m³/s) Dec. 6, 1966 (includes flow through spillway); no flow at times in 1962, 1965.

Flood of Nov. 19, 1950, reached a stage of 26 ft (7.9 m), from floodmarks, site and datum then in use (discharge, 32,000 ft³/s or 906 m³/s).

REMARKS.--Records good. Flow regulated by Success Lake beginning Nov. 23, 1961 (see sta 11204700). Discharge records during periods of high flow include flow over spillway that bypasses the gaging station. Pioneer ditch (see sta 11204680) diverts above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	.90	184	.50	13	122	.80	91	99	120	423	365
2	201	.90	183	.50	13	122	.90	91	109	120	415	360
3	167	.80	184	.50	12	126	1.0	91	125	150	415	356
4	119	.80	184	.50	12	60	.70	75	132	147	417	356
5	95	.80	184	.50	13	38	.70	67	125	149	432	369
6	86	.80	184	.50	13	36	.70	66	121	149	593	363
7	86	.40	184	.50	13	36	35	65	115	352	596	354
8	86	.40	183	41	13	42	54	64	111	388	572	353
9	81	.40	130	91	13	46	62	64	96	401	558	353
10	46	.40	159	99	13	40	68	64	77	384	556	374
11	23	.40	185	99	210	37	75	64	75	360	572	396
12	22	.50	183	99	301	42	73	64	80	345	593	409
13	28	.50	124	99	300	44	70	68	88	353	600	397
14	28	.40	1.3	132	300	45	76	70	105	359	583	384
15	28	.40	1.1	149	300	45	75	70	116	359	564	364
16	20	.40	.50	149	300	45	71	90	117	359	552	357
17	13	.40	.50	149	298	38	80	101	117	369	543	353
18	11	.50	.50	148	211	29	85	101	117	379	512	351
19	10	.50	.50	147	152	10	81	102	117	396	406	354
20	9.3	.50	.50	147	136	1.0	79	101	117	399	396	357
21	9.4	.50	.50	146	121	1.0	78	96	117	399	369	354
22	9.4	.40	.50	146	121	1.0	76	92	118	417	358	351
23	9.4	.30	.50	61	121	1.0	76	81	113	429	359	363
24	13	.30	.50	11	121	1.0	69	77	110	434	359	373
25	11	133	.50	10	121	1.0	78	77	110	439	344	379
26	9.4	201	.50	10	121	1.0	85	85	110	439	370	383
27	9.0	198	.50	10	121	1.0	85	91	116	439	398	367
28	6.6	197	.50	10	121	1.7	86	91	120	439	408	359
29	.90	196	.50	10	---	1.0	89	91	120	439	406	354
30	.90	188	.50	10	---	1.0	91	91	120	437	385	348
31	.90	---	.50	13	---	1.0	---	91	---	438	365	---
TOTAL	1400.20	1125.60	2261.40	1989.50	3604	1015.7	1801.80	2532	3313	10787	14419	10956
MEAN	45.2	37.5	72.9	64.2	129	32.8	60.1	81.7	110	348	465	365
MAX	201	201	185	149	301	126	91	102	132	439	600	409
MIN	.90	.30	.50	.50	12	1.0	.70	64	75	120	344	348
AC-FT	2780	2230	4490	3950	7150	2010	3570	5020	6570	21400	28600	21730
MEAN a	35.1	60.3	82.5	90.3	226	322	289	507	260	79.4	44.7	36.0
AC-FT a	2,160	3,590	5,070	5,550	12,530	19,810	17,170	31,190	15,490	4,880	2,750	2,140

CAL YR 1974 TOTAL 69077.90 MEAN 189 MAX 645 MIN .30 AC-FT 137000 MEAN a 207 AC-FT a 150,200
WTR YR 1975 TOTAL 55205.20 MEAN 151 MAX 600 MIN .30 AC-FT 109500 MEAN a 169 AC-FT a 122,300

a Adjusted for change in contents in and evaporation from Success Lake and for diversion to Pioneer ditch.

TULARE LAKE BASIN

11204900 TULE RIVER BELOW SUCCESS DAM, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: December 1961 to September 1969, water years 1970 to current year (partial-record station).

Water temperatures: November 1970 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 26.0°C Mar. 30; minimum, 3.0°C Jan. 3.

Period of record:

Water temperatures: Maximum, 29.0°C (recorded) Sept. 13-15, 1972; minimum, 3.0°C Jan. 3, 1975.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
DEC. 16...	1400	.44	190	45	--	22	266	0	218	6.6	8.0	.61
MAR. 04...	1230	41	--	32	7.5	17	153	0	125	7.9	10	--
MAY 27...	1600	90	--	24	5.4	12	118	0	97	5.1	5.2	--

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED BORON (B) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC. 16...	256	.35	.30	198	0	--	100	0	0	.0	0
MAR. 04...	173	.24	19.2	111	0	.7	200	--	--	--	--
MAY 27...	144	.20	35.0	82	0	.6	100	--	--	--	--

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
DEC. 16...	1400	.44	345	7.5	15.5	7.7
MAR. 04...	1230	41	198	8.0	--	11.9
MAY 27...	1600	90	170	7.4	14.0	11.2

11204900 TULE RIVER BELOW SUCCESS DAM, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	24.5	17.0	12.5	13.0	12.5	---	---	11.5	8.0	10.0	9.5
2	24.5	24.5	19.5	13.0	12.5	11.5	13.0	7.0	9.0	8.0	10.0	9.5
3	24.5	24.5	21.0	10.0	12.5	11.5	11.5	3.0	10.0	8.0	10.0	9.5
4	24.5	24.0	19.5	10.5	12.5	11.5	12.0	3.5	8.5	7.5	10.5	9.5
5	24.5	24.0	20.0	10.0	12.0	11.0	12.5	7.0	11.5	8.0	11.0	9.5
6	24.0	23.5	21.0	10.0	13.5	11.5	11.0	6.5	11.0	8.0	11.0	9.5
7	23.5	23.0	22.0	11.0	---	---	15.0	10.5	10.5	8.0	11.5	9.0
8	23.5	23.0	19.0	13.5	---	---	11.5	8.0	12.0	8.5	10.5	9.5
9	23.0	22.5	17.5	12.5	---	---	8.0	8.0	10.5	8.5	10.0	9.5
10	23.5	22.0	21.0	12.5	---	---	8.0	8.0	12.0	8.0	11.0	9.5
11	24.0	21.5	20.5	11.5	---	---	8.0	7.5	9.5	8.0	10.5	9.5
12	24.0	21.5	21.0	11.5	---	---	8.0	7.5	9.0	8.5	11.0	9.5
13	23.0	21.5	21.0	12.5	---	---	8.0	7.5	9.5	9.0	11.5	9.5
14	23.0	21.5	20.5	13.0	---	---	8.0	8.0	10.0	9.0	10.5	9.5
15	23.0	21.0	19.0	12.0	---	---	8.0	8.0	10.0	9.0	11.5	9.5
16	24.0	20.5	16.5	12.5	---	---	8.0	8.0	10.0	9.0	11.0	9.5
17	23.5	20.5	15.0	13.0	---	---	8.0	7.5	9.5	9.0	11.5	9.5
18	23.5	20.5	16.5	12.5	---	---	8.0	8.0	9.5	9.0	12.5	9.5
19	22.5	20.0	17.0	13.0	---	---	8.5	8.0	9.5	9.0	24.0	9.5
20	24.0	20.0	18.5	11.5	---	---	8.5	8.0	9.5	9.0	15.5	11.5
21	23.0	19.5	16.5	12.5	---	---	8.5	8.0	9.5	9.0	20.0	10.0
22	23.5	19.0	15.5	12.5	---	---	8.5	8.0	10.0	9.0	20.0	11.5
23	22.5	18.0	17.0	9.5	---	---	11.0	7.5	10.0	9.0	23.0	8.0
24	22.0	19.0	17.0	9.5	---	---	11.5	7.5	9.5	9.0	25.0	10.5
25	22.0	19.0	14.0	10.0	---	---	11.5	7.5	9.5	9.0	19.0	13.0
26	20.5	19.0	13.5	13.5	---	---	11.0	7.5	9.5	9.5	20.0	8.0
27	22.0	19.0	13.5	13.0	---	---	11.0	7.5	9.5	9.5	21.5	8.0
28	19.5	15.0	13.5	13.0	---	---	11.0	7.5	10.0	9.5	21.5	11.0
29	16.5	13.5	13.0	13.0	---	---	11.0	7.0	---	---	23.0	8.5
30	21.0	10.5	13.0	12.5	---	---	11.0	7.0	---	---	26.0	9.5
31	16.5	13.5	---	---	---	---	11.0	7.0	---	---	17.5	11.5
MONTH	25.0	10.5	22.0	9.5	---	---	15.0	3.0	12.0	7.5	26.0	8.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	9.0	12.5	11.0	13.5	12.5	14.5	10.5	16.0	15.5	24.0	23.5
2	24.5	9.5	12.5	11.0	13.5	12.5	15.0	11.0	16.0	15.5	24.0	24.0
3	24.5	10.0	12.0	11.0	13.5	12.5	---	---	16.0	16.0	24.0	24.0
4	23.0	12.5	11.5	11.0	13.5	12.5	---	---	16.5	16.0	24.5	24.0
5	16.5	12.0	12.5	11.0	13.5	12.5	15.0	11.0	16.5	16.0	24.5	24.0
6	20.5	9.0	13.0	11.0	13.5	13.0	15.0	11.0	17.0	16.5	24.5	24.5
7	13.5	10.5	13.0	11.5	13.5	12.5	15.5	10.5	17.0	16.5	24.5	24.0
8	12.0	10.5	13.0	11.0	13.5	12.5	15.5	10.0	17.5	17.0	25.0	24.5
9	11.5	10.5	13.0	11.0	14.0	12.5	15.0	11.0	17.5	17.0	25.0	24.5
10	11.5	10.5	13.0	11.5	14.0	12.5	16.0	10.0	18.0	17.5	25.0	24.5
11	11.5	10.5	13.0	11.5	14.0	12.5	15.5	11.0	18.0	17.5	25.0	25.0
12	12.0	10.5	13.0	11.5	14.0	12.5	15.5	10.5	18.5	18.0	25.0	25.0
13	11.5	10.5	13.5	11.5	14.0	12.5	15.5	10.5	18.5	18.0	25.0	25.0
14	11.5	10.5	13.0	11.5	13.5	13.0	15.0	11.0	19.0	18.5	25.0	25.0
15	11.5	10.5	13.0	12.0	13.5	12.5	15.0	12.5	19.0	19.0	25.5	25.0
16	12.0	10.5	12.5	12.0	14.0	12.5	15.0	10.0	19.5	19.0	25.0	25.0
17	11.5	10.5	13.0	12.0	14.5	12.0	14.5	12.5	20.0	19.5	25.0	25.0
18	11.5	10.5	15.5	12.0	15.0	11.0	15.5	12.5	20.0	16.0	25.5	25.0
19	12.0	10.5	15.5	12.0	15.5	11.0	15.0	12.5	20.0	20.0	25.5	25.0
20	12.0	10.5	13.0	12.0	15.0	11.0	14.5	14.0	20.5	20.0	25.5	25.0
21	12.0	11.0	13.0	12.0	15.5	11.0	15.0	13.0	21.0	20.0	25.5	25.0
22	12.0	10.5	13.0	12.0	15.5	11.0	15.5	14.0	21.0	20.5	25.5	25.0
23	11.0	10.5	13.5	12.0	15.5	10.5	15.0	14.5	21.5	21.0	25.5	25.0
24	12.5	11.0	13.5	12.5	15.0	11.0	15.0	14.5	21.5	21.5	25.5	25.0
25	12.0	10.5	13.5	12.0	15.5	11.0	15.0	14.5	22.0	21.5	25.5	25.0
26	12.0	11.0	13.5	12.0	15.0	10.5	15.0	15.0	22.5	21.5	25.5	25.5
27	12.0	11.0	13.5	12.5	15.5	10.5	15.0	15.0	23.0	22.0	25.5	25.0
28	11.5	11.0	13.5	12.5	15.5	11.0	15.5	15.0	23.0	22.5	25.0	25.0
29	12.0	11.0	13.5	12.5	15.0	11.0	16.0	15.0	23.5	23.0	25.0	24.5
30	12.0	11.0	13.5	12.5	15.0	11.0	15.5	15.0	23.5	23.5	25.0	24.5
31	---	---	13.5	12.5	---	---	16.0	15.5	24.0	23.5	---	---
MONTH	24.5	9.0	15.5	11.0	15.5	10.5	16.0	10.0	24.0	15.5	25.5	23.5

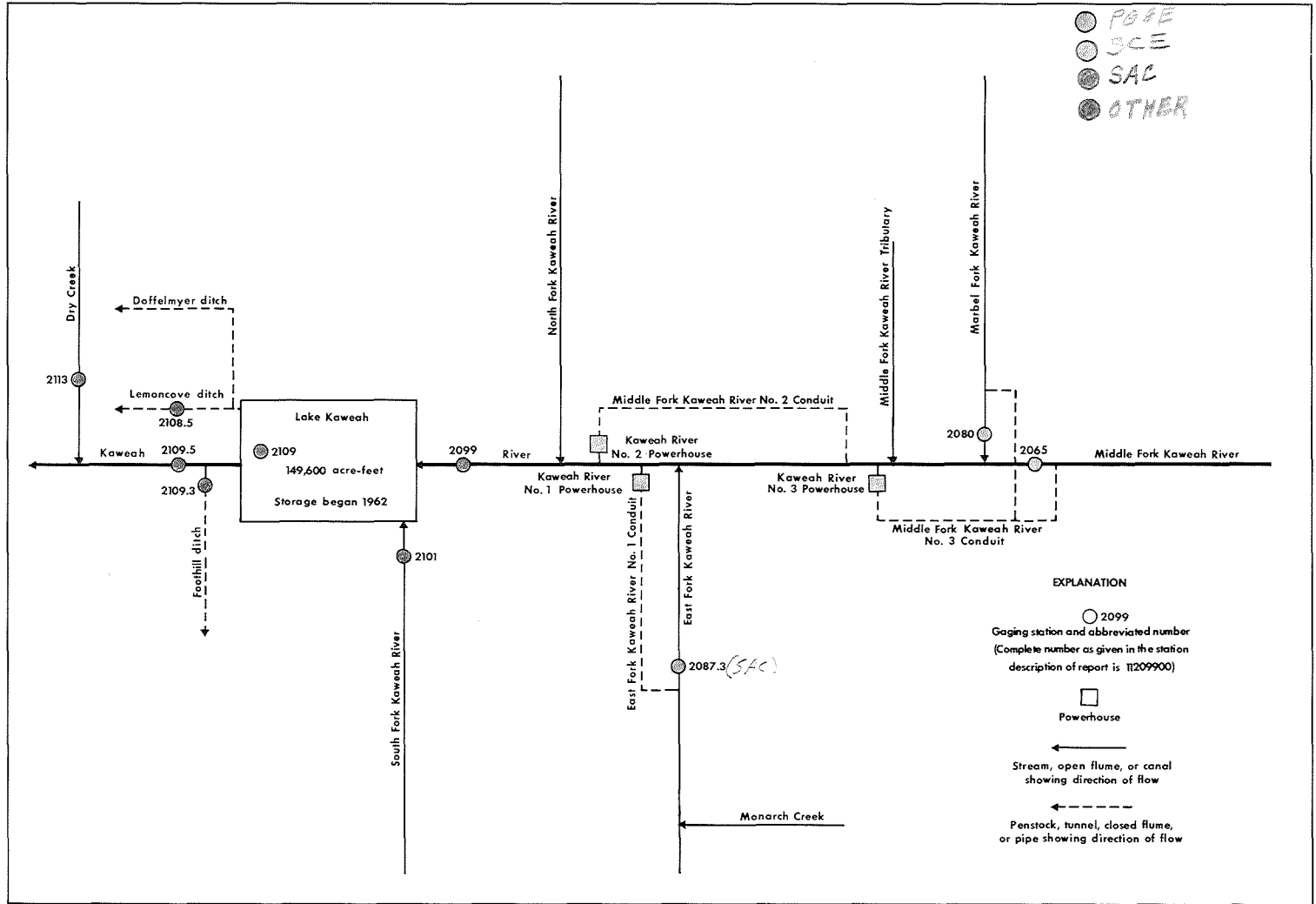


FIGURE 6.--Schematic diagram showing diversions and storage in Kaweah River basin.

11206500 MIDDLE FORK KAWEAH RIVER NEAR POTWISHA CAMP, CALIF.

LOCATION.--Lat 36°30'46", long 118°47'25", in NW¼NW¼ sec.25, T.16 S., R.29 E. (unsurveyed), Tulare County, Sequoia National Park, on right bank 0.7 mi (1.1 km) southeast of Potwisha Camp, and 0.9 mi (1.4 km) upstream from confluence with Marble Fork Kaweah River.

DRAINAGE AREA.--102 mi² (264 km²).

PERIOD OF RECORD.--July 1949 to current year. Monthly discharge only for water years 1956-57, published in WSP 1735. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.

GAGE.--Water-stage recorder and concrete control on river; water-stage recorder and concrete-lined channel for conduit diversion. Altitude of gage is 2,100 ft (640 m), from topographic map. Prior to October 1955, at datum 0.70 ft (0.213 m) higher.

AVERAGE DISCHARGE (River only).--26 years, 134 ft³/s (3.795 m³/s), 97,080 acre-ft/yr (120 hm³/yr).
(Combined river and diversion).--26 years, 175 ft³/s (4.956 m³/s), 126,800 acre-ft/yr (156 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 1,370 ft³/s (38.8 m³/s) June 1 (gage height, 7.65 ft or 2.332 m); minimum daily, 10 ft³/s (0.28 m³/s) Dec. 23, Sept. 7.
Period of record: Maximum discharge, 46,800 ft³/s (1,330 m³/s) Dec. 23, 1955 (gage height, 29.0 ft or 8.84 m, from floodmarks, datum then in use), by slope-area measurement of maximum flow; minimum daily, 0.1 ft³/s (0.003 m³/s) Nov. 12-15, 1949.
(Combined flow).--Current year: Maximum discharge, 1,440 ft³/s (40.8 m³/s) June 1; minimum daily, 16 ft³/s (0.45 m³/s) Oct. 18-23.
Period of record: Maximum discharge, 46,800 ft³/s (1,330 m³/s) Dec. 23, 1955; minimum daily, 8.8 ft³/s (0.25 m³/s) Sept. 23-25, 1949.

REMARKS.--Records good. Middle Fork No. 3 conduit diverts from left bank of Middle Fork Kaweah River, 0.5 mi (0.8 km) upstream from station in NE¼ sec.26, T.16 S., R.29 E. Flow from this conduit joins with that of Marble Fork Kaweah River No. 3 conduit, and the combined flow passes through Kaweah River No. 3 powerhouse of Southern California Edison Co.; water is returned to Kaweah River 2.7 mi (4.3 km) downstream from confluence of Marble and Middle Forks. See schematic diagram of Kaweah River basin. For records of combined discharge of river and conduit, see following page.

COOPERATION.--Gage-height record and 15 discharge measurements for river and gage-height record and 14 discharge measurements for conduit furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	21	15	15	18	66	69	138	1040	210	15	16
2	12	20	15	15	20	61	62	149	980	193	20	13
3	13	19	16	16	20	55	68	192	895	181	20	11
4	13	19	99	16	19	49	72	214	880	171	19	11
5	13	18	27	16	18	56	71	161	885	185	18	11
6	13	18	16	27	18	59	67	138	920	181	18	11
7	13	18	14	24	28	72	55	140	834	167	17	10
8	14	18	15	27	26	60	51	188	778	154	15	11
9	13	18	13	15	131	54	50	270	782	145	16	11
10	13	18	13	16	86	52	48	353	782	139	16	12
11	13	18	12	17	36	47	50	439	718	145	16	12
12	13	18	12	17	32	41	49	582	638	139	16	12
13	13	18	12	20	30	42	59	750	546	120	16	11
14	13	17	11	21	32	42	78	822	618	97	16	11
15	12	17	11	22	20	40	69	790	674	85	16	11
16	12	17	11	18	17	54	60	738	598	72	16	11
17	12	17	11	17	16	41	53	738	490	66	16	11
18	12	17	11	19	18	48	51	806	385	63	16	11
19	12	16	11	18	17	68	49	890	282	60	18	12
20	12	16	11	18	18	69	55	754	250	53	18	12
21	12	16	11	18	17	56	83	451	248	47	19	11
22	12	24	11	17	17	103	93	345	282	42	19	11
23	12	19	10	17	17	68	89	365	308	39	16	11
24	12	18	11	17	20	77	105	538	280	40	16	11
25	12	18	11	17	24	259	214	698	210	34	16	11
26	12	17	11	18	27	150	131	806	230	31	16	11
27	13	16	11	17	38	102	119	822	246	27	16	11
28	35	15	11	16	50	82	120	818	248	24	16	11
29	21	15	11	18	---	72	131	865	244	23	16	11
30	18	15	11	17	---	78	138	930	227	23	16	11
31	21	---	13	17	---	87	---	995	---	17	16	---
TOTAL	433	531	478	563	830	2210	2409	16885	16498	2973	520	341
MEAN	14.0	17.7	15.4	18.2	29.6	71.3	80.3	545	550	95.9	16.8	11.4
MAX	35	24	99	27	131	259	214	995	1040	210	20	16
MIN	12	15	10	15	16	40	48	138	210	17	15	10
AC-FT	859	1050	948	1120	1650	4380	4780	33490	32720	5900	1030	676
CAL YR 1974 TOTAL	56245				855	10	AC-FT	111600				
WTR YR 1975 TOTAL	44671				1040	10	AC-FT	88600				

11206500 MIDDLE FORK KAWEAH RIVER NEAR POTWISHA CAMP, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF MIDDLE FORK KAWEAH RIVER AND MIDDLE FORK KAWEAH RIVER NO. 3 CONDUIT NEAR POTWISHA CAMP, CALIF., WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	48	28	26	40	133	136	200	1110	275	67	25
2	17	44	27	25	50	128	129	211	1050	258	61	25
3	21	40	31	26	50	122	135	254	964	246	58	24
4	20	39	132	26	50	116	140	276	949	236	55	22
5	20	36	61	26	51	123	139	222	954	250	52	22
6	20	34	47	40	54	127	134	198	989	246	50	23
7	20	35	47	41	68	139	122	200	902	232	50	20
8	24	35	47	59	69	128	118	249	846	220	47	21
9	21	34	45	44	182	121	117	331	851	211	45	25
10	21	34	45	39	147	119	115	415	851	205	44	29
11	20	34	42	39	102	113	117	501	786	212	43	34
12	20	34	42	40	98	107	116	643	706	206	41	31
13	19	34	42	46	95	109	126	811	613	187	40	27
14	19	33	40	48	98	108	146	883	686	163	40	26
15	17	32	39	50	84	106	136	844	742	151	38	25
16	17	32	38	47	78	122	126	806	665	138	37	23
17	17	32	37	46	65	108	118	806	557	132	36	25
18	16	31	36	50	67	115	116	875	452	129	35	25
19	16	29	35	49	65	136	114	959	348	126	43	26
20	16	28	34	50	65	137	120	822	316	119	46	24
21	16	29	34	50	64	124	148	517	314	113	52	21
22	16	50	32	49	57	172	158	411	348	108	41	20
23	16	39	27	49	61	136	154	431	374	104	35	20
24	17	36	26	50	72	145	170	605	346	100	33	19
25	17	35	28	51	84	328	279	766	275	99	32	18
26	17	34	28	52	91	219	195	875	296	93	31	18
27	20	33	27	47	104	170	182	890	312	90	31	18
28	59	31	29	38	117	150	183	887	314	87	30	18
29	47	30	27	38	---	140	194	934	310	85	30	18
30	37	29	27	35	---	146	201	999	292	80	28	17
31	47	---	26	34	---	155	---	1060	---	73	26	---
TOTAL	687	1044	1206	1310	2228	4302	4384	18881	18518	4974	1297	689
MEAN	22.2	34.8	38.9	42.3	79.6	139	146	609	617	160	41.8	23.0
MAX	59	50	132	59	182	328	279	1060	1110	275	67	34
MIN	16	28	26	25	40	106	114	198	275	73	26	17
AC-FT	1360	2070	2390	2600	4420	8530	8700	37450	36730	9870	2570	1370
CAL YR 1974	TOTAL	71764	MEAN 197	MAX	913	MIN 16	AC-FT	142300				
WTR YR. 1975	TOTAL	59520	MEAN 163	MAX	1110	MIN 16	AC-FT	118100				

11208000 MARBLE FORK KAWEAH RIVER AT POTWISHA CAMP, CALIF.

LOCATION.--Lat 36°31'08", long 118°48'03", in SE¼ sec.23, T.16 S., R.29 E. (unsurveyed), Tulare County, Sequoia National Park, on left bank 0.1 mi (0.2 km) north of Potwisha Camp, 0.3 mi (0.5 km) upstream from confluence with Middle Fork Kaweah River, and 7.9 mi (12.7 km) northeast of Three Rivers.

DRAINAGE AREA.--51.4 mi² (133.1 km²).

PERIOD OF RECORD.--March 1950 to current year. Monthly discharge only for March 1950, published in WSP 1315-A. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.

GAGE.--Water-stage recorder on river; water-stage recorder and concrete control for conduit diversion. Altitude of gage is 2,150 ft (655 m), from topographic map.

AVERAGE DISCHARGE (River only).--25 years, 74.2 ft³/s (2.101 m³/s), 53,760 acre-ft/yr (66.3 hm³/yr).
(Combined river and diversion).--25 years, 99.3 ft³/s (2.812 m³/s), 71,940 acre-ft/yr (88.7 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 954 ft³/s (27.0 m³/s) June 1 (gage height, 6.44 ft or 1.963 m); minimum daily, 0.94 ft³/s (0.027 m³/s) Oct. 14.
Period of record: Maximum discharge, 12,500 ft³/s (354 m³/s) Dec. 23, 1955 (gage height, 13.4 ft or 4.08 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of slope-area measurement of maximum flow; no flow Sept. 5-15, Oct. 24-28, 1953, Oct. 26-31, 1957.
(Combined flow).--Current year: Maximum discharge, 978 ft³/s (27.7 m³/s) June 1; minimum daily, 4.5 ft³/s (0.13 m³/s) Oct. 1.
Period of record: Maximum discharge, 12,500 ft³/s (354 m³/s) Dec. 23, 1955; minimum daily, 1.6 ft³/s (0.045 m³/s) July 30, Sept. 14-16, 1961, Aug. 25, 1968.

REMARKS.--Records good. Marble Fork Kaweah River No. 3 conduit diverts from left bank of Marble Fork 0.3 mi (0.5 km) above station; water is returned to Kaweah River 2.7 mi (4.3 km) downstream from confluence of Marble and Middle Forks. See schematic diagram of Kaweah River basin. For records of combined discharge of river and conduit, see following page.

COOPERATION.--Gage-height record and 15 discharge measurements for river and gage-height record and 14 discharge measurements for conduit furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	9.7	1.1	8.9	5.5	33	26	88	679	126	7.4	4.3
2	2.1	5.0	1.1	8.1	7.4	27	19	94	619	112	5.5	2.5
3	3.3	4.3	3.9	6.7	6.1	24	21	129	577	103	5.5	1.5
4	3.7	4.5	3.8	5.5	6.1	20	26	141	577	115	6.7	1.5
5	3.9	4.3	13	5.5	4.3	25	21	96	596	144	6.1	1.6
6	3.5	3.3	9.7	12	4.3	29	23	78	581	129	5.0	2.3
7	3.5	3.1	6.1	13	4.3	24	18	76	548	112	5.5	3.7
8	4.3	4.5	5.0	14	4.5	37	15	115	522	108	6.1	1.9
9	2.6	4.3	4.1	6.1	31	29	14	184	537	96	7.4	1.6
10	1.2	4.1	3.9	4.5	16	25	12	239	530	82	12	2.1
11	1.1	4.3	2.8	4.3	8.1	17	12	292	484	92	13	2.7
12	1.1	5.5	2.3	4.1	4.8	13	12	362	424	76	16	2.3
13	.98	4.8	2.8	5.0	5.0	14	15	440	371	61	16	1.9
14	.94	4.5	2.0	6.7	5.5	11	24	480	434	43	16	1.6
15	1.9	3.9	1.5	5.0	4.8	13	16	480	467	32	18	1.5
16	3.7	3.1	1.8	4.1	4.5	17	14	464	405	27	17	1.5
17	3.7	2.8	2.2	4.3	9.4	13	13	457	322	29	18	1.6
18	3.5	1.6	1.6	5.0	9.7	16	13	480	253	26	24	1.6
19	3.5	1.2	1.4	5.5	8.9	26	12	540	181	19	30	1.6
20	3.3	1.1	1.2	5.5	6.7	30	14	460	155	14	29	1.5
21	3.1	1.5	1.2	5.5	5.5	25	32	294	175	11	21	1.5
22	3.3	9.7	1.1	5.0	4.5	35	37	248	227	8.1	19	1.5
23	3.1	3.1	2.1	4.8	4.1	23	42	260	248	4.5	20	2.0
24	3.5	3.9	6.1	5.0	4.5	29	49	374	195	5.0	18	1.5
25	3.7	3.4	7.4	5.5	5.5	98	119	464	126	7.4	1.8	1.4
26	3.7	1.3	8.1	5.5	8.1	56	70	533	155	7.4	6.8	1.6
27	4.3	1.1	4.6	4.1	15	39	61	533	172	7.4	32	1.9
28	11	1.1	1.8	3.7	23	30	66	533	172	13	25	1.9
29	5.5	1.0	1.7	4.1	---	26	76	555	155	7.4	11	1.6
30	4.8	1.2	3.8	4.3	---	27	90	596	144	7.4	4.3	1.5
31	8.9	---	8.6	4.5	---	35	---	643	---	5.5	4.5	---
TOTAL	108.32	107.2	152.0	185.8	227.1	866	982	10728	11031	1630.1	427.6	57.2
MEAN	3.49	3.57	4.90	5.99	8.11	27.9	32.7	346	368	52.6	13.8	1.91
MAX	11	9.7	38	14	31	98	119	643	679	144	32	4.3
MIN	.94	1.0	1.1	3.7	4.1	11	12	76	126	4.5	1.8	1.4
AC-FT	215	213	301	369	450	1720	1950	21280	21880	3230	848	113
CAL YR 1974	TOTAL	32387.52	MEAN	88.7	MAX	567	MIN	.94	AC-FT	64240		
WTR YR 1975	TOTAL	26502.32	MEAN	72.6	MAX	679	MIN	.94	AC-FT	52570		

TULARE LAKE BASIN

11208000 MARBLE FORK KAWEAH RIVER AT POTWISHA CAMP, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF MARBLE FORK KAWEAH RIVER AND MARBLE FORK KAWEAH RIVER NO. 3 CONDUIT AT POTWISHA CAMP, CALIF., WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	15	9.4	11	16	67	48	113	696	157	25	8.4
2	5.0	11	8.9	9.7	18	61	44	119	642	143	21	8.2
3	6.2	11	11	9.3	18	58	47	154	613	134	20	9.3
4	6.6	11	46	7.6	20	53	51	166	611	146	19	9.0
5	6.8	11	21	7.6	18	56	46	121	630	175	17	8.9
6	6.4	10	19	14	18	58	48	103	614	160	16	7.7
7	6.4	11	17	17	18	51	42	101	580	143	17	7.8
8	7.6	12	17	20	19	62	39	141	553	140	16	7.6
9	7.6	12	17	16	48	52	39	211	567	128	16	9.6
10	6.6	12	17	15	39	48	37	264	559	114	21	11
11	6.3	12	17	14	35	41	37	316	513	124	22	13
12	6.1	13	16	14	29	38	36	385	453	108	25	13
13	5.7	13	17	15	27	39	39	463	400	93	25	13
14	5.4	13	16	17	30	36	48	503	463	75	24	11
15	5.0	13	16	18	25	38	40	504	497	64	26	10
16	5.7	13	16	18	24	42	38	491	435	59	24	9.8
17	5.4	13	16	18	23	37	37	484	351	61	24	9.6
18	5.2	11	16	20	23	41	37	506	282	58	30	9.9
19	5.2	11	15	21	23	51	36	568	211	51	36	9.9
20	5.3	10	15	21	22	55	38	491	185	46	37	9.3
21	5.2	10	14	22	21	50	57	326	205	43	34	9.0
22	5.4	20	14	22	21	60	63	279	257	40	30	9.0
23	5.2	13	11	22	21	48	68	292	278	37	29	7.9
24	5.6	14	12	23	27	53	74	407	225	37	27	7.4
25	5.8	13	13	24	33	120	144	498	157	35	13	7.1
26	5.8	12	14	24	38	76	94	567	186	32	17	6.8
27	6.4	11	12	21	46	61	85	567	203	32	37	6.6
28	24	11	12	15	56	53	90	565	203	37	29	6.6
29	18	10	11	15	---	47	100	585	186	31	15	6.3
30	10	9.8	12	15	---	49	114	627	175	31	10	6.2
31	14	---	12	13	---	58	---	672	---	26	9.5	---
TOTAL	224.4	361.8	480.3	519.2	756	1659	1716	11589	11930	2560	711.5	268.9
MEAN	7.24	12.1	15.5	16.7	27.0	53.5	57.2	374	398	82.6	23.0	8.96
MAX	24	20	46	24	56	120	144	672	696	175	37	13
MIN	4.5	9.8	8.9	7.6	16	36	36	101	157	26	9.5	6.2
AC-FT	445	718	953	1030	1500	3290	3400	22990	23660	5080	1410	533
CAL YR 1974	TOTAL	41183.8	MEAN	113	MAX	601	MIN	4.5	AC-FT	81690		
WTR YR 1975	TOTAL	32776.1	MEAN	89.8	MAX	696	MIN	4.5	AC-FT	65010		

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.

LOCATION.--Lat 36°27'05", long 118°47'15", in NW¼NW¼ sec.14, T.17 S., R.29 E., Tulare County, on left bank just downstream from diversion dam, and 6.6 mi (10.6 km) east of Three Rivers.

DRAINAGE AREA.--85.8 mi² (222.2 km²).

PERIOD OF RECORD.--May 1952 to September 1955, October 1957 to current year. Prior to October 1962, combined only.

GAGE.--Water-stage recorder and Parshall flume on river; water-stage recorder and Parshall flume for conduit diversion. Altitude of gage is 2,500 ft (762 m), from topographic map. May 15, 1952, to Sept. 30, 1955, at site 200 ft (61 m) downstream at different datum.

AVERAGE DISCHARGE (River only).--21 years, 95.3 ft³/s (2.699 m³/s), 69,040 acre-ft/yr (85.1 hm³/yr).
(Combined river and conduit).--21 years, 120 ft³/s (3.398 m³/s), 86,940 acre-ft/yr (107 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 1,050 ft³/s (29.7 m³/s) June 1 (gage height, 6.70 ft or 2.042 m); minimum daily, 0.60 ft³/s (0.017 m³/s) Sept. 15.
Period of record: Maximum discharge, 13,000 ft³/s (368 m³/s) Dec. 6, 1966 (gage height, 21 ft or 6.4 m, from floodmarks), from rating curve extended as explained below; no flow Jan. 22, Oct. 18-20, 1962.
(Combined flow).--Current year: Maximum discharge, 1,080 ft³/s (30.6 m³/s) June 1; minimum daily, 15 ft³/s (0.42 m³/s) Oct. 1.
Period of record: Maximum discharge, 13,000 ft³/s (368 m³/s) Dec. 6, 1966 (gage height, 21 ft or 6.4 m, from floodmarks), from rating curve extended above 850 ft³/s (24.1 m³/s) on basis of critical-depth measurement of maximum flow over diversion dam; minimum daily, 3.5 ft³/s (0.099 m³/s) Sept. 28, 29, 1960.

REMARKS.--East Fork Kaweah River No. 1 conduit diverts up to 30 ft³/s (0.85 m³/s) from left bank of river near diversion dam. Flow from this conduit passes through Kaweah River No. 1 powerplant of Southern California Edison Co.; water is returned to Middle Fork Kaweah River in sec.8, T.17 S., R.29 E., 1.9 mi (3.1 km) downstream from mouth of East Fork. For records of combined discharge of river and conduit, see following page.

COOPERATION.--Records furnished by Southern California Edison Co. and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	7.2	1.8	3.0	11	33	56	106	724	164	18	2.2
2	1.3	4.3	1.7	2.3	18	30	54	115	653	153	17	2.0
3	1.3	3.1	2.3	2.9	14	29	60	138	724	138	14	1.8
4	1.3	3.1	97	2.2	11	26	60	142	722	128	15	1.7
5	1.3	2.9	19	2.2	12	39	70	124	736	135	12	1.6
6	1.2	2.7	9.0	6.4	11	43	65	119	734	132	11	1.5
7	1.2	2.5	6.5	12	15	39	60	112	647	122	9.9	1.3
8	1.9	2.9	5.5	20	15	70	58	145	679	119	9.0	1.2
9	1.2	2.3	4.2	11	105	50	58	193	668	115	7.7	1.1
10	1.2	1.9	3.8	8.7	85	44	56	276	659	109	7.6	.90
11	1.1	2.4	3.5	7.2	36	38	56	343	588	106	7.0	.80
12	1.1	2.4	3.3	6.8	23	32	54	397	565	100	6.3	.70
13	1.1	2.1	2.8	7.8	25	33	65	466	536	91	5.9	.70
14	1.1	1.9	2.4	8.1	25	32	72	514	529	80	5.0	.70
15	1.1	1.8	2.1	7.8	18	30	65	525	543	72	4.5	.60
16	1.1	1.6	2.2	6.8	15	39	63	514	518	72	4.2	.70
17	1.1	1.5	2.0	6.2	28	32	56	504	544	70	3.3	1.2
18	1.1	1.4	2.1	6.9	25	36	54	533	383	68	3.3	1.5
19	1.1	1.4	1.9	6.9	12	43	50	588	337	63	4.4	1.4
20	1.0	1.4	1.9	6.9	14	43	56	565	303	58	12	1.4
21	1.0	3.0	1.8	6.6	11	41	70	380	271	54	10	1.4
22	1.0	7.6	1.9	6.6	8.4	88	80	350	276	54	4.9	19
23	1.0	2.6	1.6	6.7	11	56	80	427	292	48	4.4	19
24	1.0	2.1	8.0	6.3	13	60	91	436	266	41	4.0	19
25	1.0	1.5	24	4.6	15	230	167	569	223	35	3.6	7.2
26	1.0	1.3	24	3.9	17	103	109	630	223	32	3.3	1.4
27	1.0	2.1	16	2.6	21	65	97	654	218	30	3.1	1.4
28	23	2.1	4.9	1.6	28	52	97	634	214	28	2.9	1.3
29	6.8	2.0	2.6	2.9	---	47	103	674	206	26	2.6	1.2
30	4.1	1.8	2.8	19	---	50	106	711	184	24	2.5	1.2
31	6.8	---	2.7	13	---	58	---	648	---	21	2.3	---
TOTAL	71.8	76.9	265.3	215.9	642.4	1611	2188	12532	14165	2488	220.7	97.10
MEAN	2.32	2.56	8.56	6.96	22.9	52.0	72.9	404	472	80.3	7.12	3.24
MAX	23	7.6	97	20	105	230	167	711	736	164	18	19
MIN	1.0	1.3	1.6	1.6	8.4	26	50	106	184	21	2.3	.60
AC-FT	142	153	526	428	1270	3200	4340	24860	28100	4930	438	193
CAL YR 1974 TOTAL	44865.00			MEAN 123	MAX 700	MIN 1.0	AC-FT 88990					
WTR YR 1975 TOTAL	34574.10			MEAN 94.7	MAX 736	MIN .60	AC-FT 68580					

TULARE LAKE BASIN

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF EAST FORK KAWEAH RIVER AND EAST FORK KAWEAH RIVER NO. 1 CONDUIT NEAR THREE RIVERS, CALIF., WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	30	21	22	30	58	77	130	751	192	46	22
2	17	26	21	21	38	55	74	139	679	181	45	22
3	19	24	23	23	35	54	79	162	748	166	43	21
4	18	24	116	22	31	51	77	166	748	156	43	21
5	18	24	42	22	33	64	87	148	762	163	39	21
6	18	24	33	27	35	68	81	143	760	160	39	20
7	17	25	31	33	41	64	75	136	674	150	37	19
8	24	25	30	43	40	95	73	169	706	147	36	20
9	20	23	27	34	129	75	73	217	696	144	35	26
10	20	24	27	31	109	69	71	300	687	138	34	28
11	19	24	27	29	61	64	74	366	616	135	33	28
12	18	25	26	29	48	58	73	419	593	129	32	28
13	17	25	26	30	50	59	84	488	564	120	33	27
14	17	25	25	30	50	58	91	541	557	108	33	25
15	17	24	25	30	43	56	84	552	571	100	33	24
16	16	23	25	29	40	65	83	541	546	100	31	23
17	16	23	26	28	30	58	76	531	571	98	30	25
18	16	22	25	29	33	62	73	560	410	96	30	25
19	16	22	25	29	36	69	70	615	365	91	32	23
20	16	22	24	29	39	69	76	592	331	86	37	22
21	16	24	24	29	36	67	90	407	299	82	32	21
22	16	32	24	29	33	114	100	377	304	82	31	27
23	16	26	19	29	36	82	100	453	320	76	30	20
24	16	25	22	28	38	85	111	462	291	69	29	20
25	16	25	24	30	40	253	188	595	251	63	29	17
26	16	23	24	30	42	126	130	657	251	61	28	18
27	19	22	25	29	46	88	118	681	246	59	28	18
28	46	21	25	21	53	75	118	661	242	56	28	18
29	30	21	23	21	---	70	127	701	234	54	27	18
30	26	20	23	19	---	73	130	738	212	52	25	17
31	30	---	22	18	---	80	---	675	---	49	23	---
TOTAL	601	723	880	853	1275	2384	2763	13322	14985	3363	1031	664
MEAN	19.4	24.1	28.4	27.5	45.5	76.9	92.1	430	500	108	33.3	22.1
MAX	46	32	116	43	129	253	188	738	762	192	46	28
MIN	15	20	19	18	30	51	70	130	212	49	23	17
AC-FT	1190	1430	1750	1690	2530	4730	5480	26420	29720	6670	2040	1320
CAL YR 1974	TOTAL	52885	MEAN 145	MAX 727	MIN 15	AC-FT	104900					
WTR YR 1975	TOTAL	42844	MEAN 117	MAX 762	MIN 15	AC-FT	84980					

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971.

Water temperatures: June 1968 to current year.

Sediment records: Water years 1968-71 (partial-record station).

EXTREMES.--Current year:

Water temperatures: Maximum, 19.0°C on several days during July and August; minimum, 2.0°C on several days during December to February.

Period of record:

Water temperatures: Maximum, 22.0°C on several days in 1972; minimum, 0.5°C on several days in 1970 and 1971.

REMARKS.--Records furnished by Southern California Edison Co.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	15.0	8.5	8.5	5.0	5.0	3.0	2.0	3.0	2.0	7.0	6.5
2	15.5	15.5	8.5	8.0	5.0	5.0	2.0	2.0	3.5	3.0	6.5	5.5
3	16.0	15.5	8.0	7.0	6.5	5.0	2.0	2.0	3.5	3.5	6.5	5.5
4	16.0	15.5	7.0	6.0	7.0	6.5	2.0	2.0	3.5	3.5	6.5	6.0
5	15.5	15.0	6.5	6.5	7.0	6.0	2.0	2.0	4.5	3.5	7.0	6.5
6	15.0	14.5	6.5	6.5	6.0	5.5	3.5	2.0	4.5	4.5	7.0	6.5
7	14.5	14.0	7.0	6.5	5.5	5.0	4.5	3.5	4.5	4.5	6.5	6.0
8	14.0	14.0	8.0	7.0	5.0	4.5	5.0	4.5	5.0	4.5	6.5	6.0
9	14.0	14.0	8.0	8.0	4.5	4.5	5.0	4.5	5.5	5.0	6.5	5.5
10	14.0	14.0	8.0	8.0	4.5	4.0	4.5	4.0	5.5	5.5	5.5	5.0
11	14.0	13.5	8.0	7.0	4.0	4.0	4.0	4.0	5.5	5.0	5.0	5.0
12	13.5	13.5	8.0	7.0	4.5	4.0	4.0	4.0	5.0	4.5	6.0	5.5
13	13.5	13.5	8.0	8.0	4.5	4.5	4.0	3.5	5.5	4.5	6.0	6.0
14	13.5	13.0	8.5	8.0	4.5	4.5	4.5	4.0	5.5	5.5	6.0	4.5
15	13.5	13.0	8.5	8.5	4.5	4.5	4.5	4.5	5.5	4.5	5.0	4.5
16	13.5	13.5	8.5	8.5	4.5	4.5	4.5	4.5	4.5	3.5	5.5	4.5
17	13.5	13.5	8.5	8.5	5.0	4.5	4.5	4.5	3.5	2.0	4.5	4.0
18	13.5	13.0	8.5	8.5	5.0	5.0	4.5	4.5	3.0	2.0	6.0	4.5
19	13.5	13.5	8.5	8.5	5.0	4.5	5.0	4.5	3.5	3.0	7.0	5.5
20	13.5	13.5	8.5	8.0	4.5	4.0	5.0	5.0	4.5	3.5	7.0	6.5
21	13.5	13.5	8.5	8.0	4.5	4.0	5.0	5.0	4.5	4.5	6.5	6.0
22	13.5	13.0	8.5	8.5	4.5	4.5	5.5	5.0	4.5	3.5	6.0	5.5
23	13.0	12.0	8.5	7.0	4.5	3.5	5.5	5.5	4.0	3.5	5.5	4.5
24	12.0	11.5	7.0	6.5	3.5	3.0	5.5	5.5	4.5	4.0	7.0	5.5
25	11.5	11.5	6.5	6.5	3.0	2.0	5.5	5.5	5.0	4.5	7.0	6.0
26	11.5	11.5	6.5	6.0	2.0	2.0	5.5	5.5	5.5	5.0	6.0	5.0
27	11.5	11.5	6.0	5.5	3.0	2.0	5.5	5.5	6.5	5.5	5.0	4.0
28	11.5	10.5	5.5	5.5	3.5	3.0	5.5	3.5	6.5	6.0	4.0	4.0
29	10.5	9.0	5.5	5.0	3.5	3.5	3.5	2.0	---	---	5.0	3.5
30	9.0	8.0	5.0	5.0	3.5	3.0	2.0	2.0	---	---	6.5	4.5
31	8.5	8.0	---	---	3.0	3.0	2.0	2.0	---	---	6.5	5.5
MONTH	16.0	8.0	8.5	5.0	7.0	2.0	5.5	2.0	6.5	2.0	7.0	3.5
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.5	5.0	9.5	7.0	11.0	8.5	13.0	11.0	16.0	14.5	16.0	16.0
2	6.0	4.5	10.0	7.0	11.0	8.0	13.0	11.0	16.5	15.0	16.0	15.5
3	6.5	5.0	10.0	8.0	11.5	8.5	13.0	11.0	17.0	16.0	16.0	15.5
4	6.5	6.0	10.0	6.0	12.0	8.5	14.0	11.5	18.0	16.5	16.5	16.0
5	6.0	5.0	6.0	4.0	13.0	8.5	14.5	13.0	19.0	17.0	17.0	16.5
6	5.0	3.5	7.0	5.5	12.0	9.0	15.5	14.0	19.0	16.5	18.0	17.0
7	4.5	3.0	9.5	6.0	13.0	9.0	15.5	13.5	17.0	16.0	18.0	17.0
8	4.5	3.5	10.0	8.0	13.0	9.0	15.5	14.0	18.5	16.5	18.0	17.0
9	5.0	4.5	10.5	7.0	13.5	9.5	16.0	15.5	17.0	16.0	17.0	17.0
10	5.5	5.0	10.5	7.0	13.0	9.5	18.0	15.5	18.5	17.0	17.0	16.5
11	5.5	5.0	10.5	7.0	13.0	9.5	18.0	16.5	18.5	17.0	16.5	15.0
12	7.0	5.0	10.5	7.0	13.0	10.0	18.0	16.0	18.5	18.0	15.5	14.5
13	8.5	6.5	10.5	7.0	13.5	10.0	17.0	15.5	18.0	17.0	15.5	15.0
14	8.5	6.5	10.5	8.0	14.5	11.0	17.0	16.0	18.0	17.0	16.0	15.5
15	6.5	6.0	10.5	7.0	15.0	11.5	17.0	15.0	18.0	16.5	16.0	16.0
16	6.0	5.0	10.5	7.0	15.0	11.0	16.0	15.5	17.0	17.0	16.5	16.0
17	5.0	4.5	10.5	8.0	14.0	10.5	16.5	15.5	17.0	17.0	18.0	16.5
18	5.5	4.5	11.0	8.0	13.0	10.0	17.0	15.5	18.0	17.0	18.5	18.0
19	6.5	5.5	10.5	8.5	11.0	9.0	17.0	15.5	17.0	16.0	18.5	18.0
20	9.0	5.5	9.5	5.5	11.0	9.0	17.0	15.5	16.5	14.0	18.0	16.5
21	9.0	7.0	6.5	4.5	12.0	10.0	17.0	15.5	15.0	14.0	16.5	16.0
22	9.0	8.5	9.0	6.0	14.0	11.5	18.0	16.0	16.0	15.0	16.5	16.0
23	9.0	7.0	10.5	7.0	14.0	11.5	18.5	16.5	16.5	15.5	16.5	15.5
24	8.0	6.5	11.0	8.0	13.5	10.5	19.0	16.5	16.5	16.0	16.0	15.0
25	8.0	5.5	11.0	8.0	11.0	10.5	19.0	16.5	17.0	16.5	15.5	14.5
26	5.5	4.5	10.5	8.0	11.5	10.5	19.0	18.0	18.0	17.0	15.0	15.0
27	7.0	5.0	10.0	7.0	13.0	11.0	19.0	18.0	18.0	18.0	15.0	15.0
28	9.0	6.5	10.5	8.0	13.0	11.0	18.5	16.5	18.0	18.0	15.0	14.5
29	9.5	7.0	10.5	8.0	13.0	11.0	18.5	16.5	18.0	16.5	14.5	14.0
30	9.5	8.0	11.0	8.0	13.0	10.0	18.5	16.0	16.5	16.0	14.5	14.0
31	---	---	11.5	8.5	---	---	17.0	14.5	16.5	16.0	---	---
MONTH	9.5	3.0	11.5	4.0	15.0	8.0	19.0	11.0	19.0	14.0	18.5	14.0

TULARE LAKE BASIN

11209900 KAWEAH RIVER AT THREE RIVERS, CALIF.

LOCATION.--Lat 36°26'38", long 118°54'09", in SW¼SW¼ sec.13, T.17 S., R.28 E., Tulare County, on right bank opposite schoolhouse in Three Rivers, 0.2 mi (0.3 km) downstream from North Fork Kaweah River.

DRAINAGE AREA.--418 mi² (1,083 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 809.62 ft (246.772 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 512 ft³/s (14.50 m³/s), 370,900 acre-ft/yr (457 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,250 ft³/s (120 m³/s) June 1 (gage height, 7.70 ft or 2.347 m); minimum daily, 41 ft³/s (1.16 m³/s) Oct. 1, 20.

Period of record: Maximum discharge, 73,000 ft³/s (2,070 m³/s) Dec. 5, 1966 (gage height, 16.69 ft or 5.087 m in gage well, 19.0 ft or 5.79 m, from floodmarks), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of slope-area measurements at gage heights 13.68 ft (4.170 m) and 16.69 ft (5.087 m); minimum, 14 ft³/s (0.40 m³/s) Sept. 9, 10, 1959, Oct. 16, 1961.

Flood of Dec. 23, 1955, reached a stage of 17.9 ft (5.46 m), from floodmarks.

REMARKS.--Records good. Diversions for 200 acres (809,000 m²) above station. Power is developed on the Middle and East Fork Kaweah River.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	122	75	82	121	356	440	677	3360	695	146	67
2	43	107	73	81	162	349	400	684	3170	644	137	67
3	48	95	78	83	178	334	408	833	2900	611	128	64
4	48	90	406	85	174	319	428	969	2840	568	121	60
5	49	87	266	83	168	327	459	752	2890	604	118	57
6	49	83	156	107	166	408	456	659	2880	605	112	52
7	47	83	137	172	166	345	417	618	2660	559	110	50
8	58	84	130	194	202	559	390	768	2520	518	106	44
9	59	85	123	198	515	472	379	1040	2480	502	101	60
10	55	83	117	141	670	421	379	1310	2460	470	101	73
11	53	83	115	133	371	384	375	1580	2270	482	97	86
12	51	83	113	127	300	360	374	1940	2050	454	94	83
13	48	84	113	132	267	346	386	2390	1780	416	94	79
14	46	83	108	138	300	380	458	2640	1930	371	93	71
15	45	82	106	146	272	338	447	2640	2010	341	90	65
16	43	80	106	141	236	420	405	2510	1860	320	87	62
17	43	80	108	134	196	377	383	2460	1590	313	86	64
18	42	78	106	137	204	361	374	2640	1280	305	86	70
19	42	76	103	141	196	394	364	2960	992	291	93	66
20	41	74	93	141	196	410	358	2690	898	272	102	63
21	43	80	102	141	196	372	438	1750	868	254	135	59
22	43	134	96	141	176	685	482	1420	937	239	102	50
23	44	109	85	141	180	499	496	1430	1020	227	91	47
24	45	101	77	141	196	452	510	1930	949	218	85	50
25	46	92	74	143	225	1370	959	2380	747	206	81	52
26	47	87	90	145	247	961	693	2710	764	193	79	49
27	50	82	92	139	274	645	592	2790	806	186	75	44
28	131	79	97	113	307	542	601	2780	804	183	74	45
29	184	77	92	110	---	462	619	2880	779	179	74	44
30	103	76	86	101	---	468	677	3030	742	172	74	43
31	102	---	83	107	---	501	---	3210	---	161	71	---
TOTAL	1789	2639	3606	4018	6861	14617	14147	59070	53236	11559	3043	1786
MEAN	57.7	88.0	116	130	245	472	472	1905	1775	373	98.2	59.5
MAX	184	134	406	198	670	1370	959	3210	3360	695	146	86
MIN	41	74	73	81	121	319	358	618	742	161	71	43
AC-FT	3550	5230	7150	7970	13610	28990	28060	117200	105600	22930	6040	3540
CAL YR 1974	TOTAL	213047	MEAN 584	MAX 3000	MIN 41	AC-FT 422600						
WTR YR 1975	TOTAL	176371	MEAN 483	MAX 3360	MIN 41	AC-FT 349800						

Peak discharge (base, 1,800 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
3-25	1230	6.77	2,480	5-19	2300	7.40	3,600
5-14	2300	7.30	3,400	6-1	2215	7.70	4,250

11209900 KANEAH RIVER AT THREE RIVERS, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: November 1963 to July 1966.

Water temperatures: October 1965 to December 1966, January 1968 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 26.5°C July 25, 26, Aug. 4, 5, 11; minimum, 1.0°C Dec. 25, 26.

Period of record:

Water temperatures: Maximum, 30.0°C July 14, 15, 1972; minimum, 0.5°C Jan. 7, 1971, Dec. 12, 1972.

REMARKS.--Clock stopped Oct. 22 to Nov. 7, June 25 to July 2; range in temperature, 8.0°C to 18.0°C, and 12.0°C to 19.0°C, respectively.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	16.0	---	---	8.5	5.0	5.5	2.0	5.5	4.0	13.0	8.5
2	22.0	16.0	---	---	8.5	5.0	5.0	1.5	6.0	5.0	12.0	7.5
3	23.0	17.0	---	---	8.5	7.5	5.0	1.5	6.5	5.0	12.0	8.0
4	21.0	18.0	---	---	9.0	8.0	5.5	1.5	5.5	5.0	11.5	8.0
5	21.0	16.5	---	---	10.0	7.0	5.5	2.5	9.0	5.0	10.5	9.5
6	21.0	15.5	---	---	9.5	6.0	5.5	3.5	9.5	6.0	11.5	8.5
7	18.5	15.5	---	---	8.0	6.5	8.0	5.5	9.0	7.0	9.0	8.0
8	20.0	15.5	12.5	10.0	8.5	5.0	8.5	6.5	11.0	7.0	12.0	8.5
9	20.0	16.5	12.5	10.0	8.0	5.0	6.5	5.0	10.0	8.0	9.0	7.5
10	20.0	16.0	13.0	9.5	7.0	5.5	7.0	4.5	10.0	7.5	9.5	7.0
11	20.0	15.0	12.5	8.5	7.0	5.0	6.5	4.5	10.0	6.0	9.0	7.0
12	20.0	14.5	13.0	9.0	7.5	4.5	7.5	4.0	9.0	6.0	11.5	7.5
13	19.5	14.0	13.0	9.0	7.0	6.0	8.0	4.0	8.0	7.0	11.0	7.5
14	20.0	14.0	13.0	9.5	8.0	6.5	8.5	4.5	8.0	6.0	8.5	6.5
15	20.0	14.0	13.0	9.0	8.0	5.5	8.0	4.5	9.0	5.0	11.0	6.0
16	20.0	14.0	11.5	9.0	8.0	4.5	8.5	5.0	5.5	3.5	10.0	6.5
17	19.5	14.5	11.5	10.5	6.5	5.0	9.0	5.0	7.5	3.0	9.5	5.0
18	18.5	14.0	12.0	10.0	8.0	6.0	8.5	5.5	8.0	3.0	12.0	6.0
19	18.0	14.5	12.5	10.5	8.5	6.5	9.5	5.5	7.0	4.0	13.0	7.5
20	18.5	15.0	12.5	9.0	8.0	5.0	9.5	5.5	7.0	6.0	10.0	8.5
21	18.0	14.0	11.0	9.5	7.5	6.0	9.0	5.5	6.5	4.5	10.5	8.0
22	---	---	11.5	10.0	6.5	4.5	10.0	5.5	9.0	3.5	9.5	6.5
23	---	---	11.5	9.0	6.0	3.5	9.5	6.0	10.0	4.5	10.0	5.5
24	---	---	11.0	7.0	5.0	2.0	10.0	5.5	11.0	5.0	12.5	7.0
25	---	---	10.5	7.0	4.5	1.0	10.0	5.5	11.0	6.0	10.5	7.5
26	---	---	10.0	6.0	5.5	1.0	10.0	6.0	11.5	7.0	9.0	6.0
27	---	---	9.0	5.5	6.0	3.0	9.0	5.0	12.0	8.0	9.0	5.0
28	---	---	9.5	6.5	7.0	4.5	7.0	3.0	13.0	8.0	9.0	5.5
29	---	---	9.0	5.0	7.0	3.5	6.0	2.0	---	---	10.5	4.0
30	---	---	9.0	5.0	5.0	2.5	6.0	1.5	---	---	12.0	6.0
31	---	---	---	---	5.5	2.0	6.0	1.5	---	---	10.0	7.5
MONTH	---	---	---	---	10.0	1.0	10.0	1.5	13.0	3.0	13.0	4.0

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

TULARE LAKE BASIN

11210100 SOUTH FORK KAWEAH RIVER AT THREE RIVERS, CALIF.

LOCATION.--Lat 36°25'00", long 118°54'48", in SW¼SE¼ sec.26, T.17 S., R.28 E., Tulare County, on right bank 200 ft (61 m) upstream from unnamed tributary, 0.5 mi (0.8 km) upstream from mouth, and 1.8 mi (2.9 km) southwest of Three Rivers.

DRAINAGE AREA.--86.7 mi² (224.6 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 807.22 ft (246.041 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 67.6 ft³/s (1.914 m³/s), 48,980 acre-ft/yr (60.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 793 ft³/s (22.5 m³/s) May 31 (gage height, 4.09 ft or 1.247 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Oct. 3, Sept. 27-30.

Period of record: Maximum discharge, 11,600 ft³/s (329 m³/s) Dec. 6, 1966 (gage height, 9.30 ft or 2.835 m in gage well, 10.4 ft or 3.17 m, from floodmarks), from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in 1960-62.

Flood of December 23, 1955, reached a stage of 9.5 ft (2.90 m), from floodmarks (discharge, 10,000 ft³/s or 283 m³/s).

REMARKS.--Records good. Several small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	15	9.6	11	12	36	66	79	572	60	7.8	2.0
2	1.8	14	9.6	10	22	36	59	81	528	55	6.9	1.8
3	1.5	11	11	10	30	34	56	89	518	50	5.8	1.7
4	2.0	11	72	10	28	32	56	104	508	46	5.4	1.7
5	2.3	10	39	10	28	35	65	86	520	41	5.0	1.7
6	2.0	9.9	24	14	23	57	68	74	516	40	5.0	1.8
7	2.1	9.2	19	25	23	45	64	67	470	37	4.7	1.8
8	2.3	9.2	17	29	27	87	59	73	431	34	4.4	2.3
9	4.1	9.6	14	34	92	88	58	96	409	34	4.2	2.8
10	3.9	9.6	13	23	177	80	58	125	400	33	4.4	5.5
11	3.4	9.6	13	20	75	68	56	157	359	29	4.4	5.8
12	3.1	9.6	12	18	50	59	56	193	326	27	4.1	3.9
13	3.0	10	13	17	41	62	56	243	291	24	4.4	2.9
14	2.7	10	13	17	50	72	64	278	291	23	4.1	2.4
15	2.6	9.6	12	17	45	59	64	287	296	22	3.6	2.2
16	2.6	9.6	12	17	38	80	60	281	272	21	3.8	2.1
17	2.6	9.6	12	16	33	66	57	288	223	21	3.8	2.2
18	2.7	9.6	12	15	31	60	53	333	183	20	4.1	2.4
19	2.8	9.6	12	15	29	61	50	391	146	18	4.1	2.3
20	3.0	9.2	12	15	31	61	49	379	135	16	4.1	2.2
21	2.8	11	12	14	31	57	53	224	125	16	6.9	2.0
22	2.1	22	12	14	27	114	57	177	121	15	4.7	1.7
23	2.3	14	11	14	27	87	60	196	117	13	3.8	1.6
24	2.3	12	11	14	26	76	60	296	105	12	3.0	1.7
25	2.5	12	11	14	28	236	104	373	91	11	2.2	1.8
26	2.6	11	11	14	28	195	82	411	82	10	2.0	1.7
27	3.1	11	11	14	30	120	73	419	79	10	2.2	1.5
28	15	10	12	13	32	94	72	435	74	10	2.7	1.5
29	22	10	12	12	---	79	70	464	70	9.6	3.0	1.5
30	13	9.6	11	12	---	73	73	485	64	9.2	2.7	1.5
31	13	---	11	12	---	72	---	524	---	8.7	2.2	---
TOTAL	133.2	327.5	476.2	490	1114	2381	1878	7708	8322	775.5	129.5	68.0
MEAN	4.30	10.9	15.4	15.8	39.8	76.8	62.6	249	277	25.0	4.18	2.27
MAX	22	22	72	34	177	236	104	524	572	60	7.8	5.8
MIN	1.5	9.2	9.6	10	12	32	49	67	64	8.7	2.0	1.5
AC-FT	264	650	945	972	2210	4720	3730	15290	16510	1540	257	135

CAL YR 1974 TOTAL 28008.9 MEAN 76.7 MAX 683 MIN 1.1 AC-FT 55560
WTR YR 1975 TOTAL 23802.9 MEAN 65.2 MAX 572 MIN 1.5 AC-FT 47210

Peak discharge (base, 500 ft³/s).--May 31 (2315) 793 ft³/s (4.09 ft).

11210850 LEMONCOVE DITCH BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'55", long 119°00'22", in SW¼SW¼ sec.25, T.17 S., R.27 E., Tulare County, on left bank 250 ft (76 m) downstream from outlet tunnel of Terminus Dam, and 2.4 mi (3.9 km) northeast of Lemoncove.

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

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 546.3 ft (166.51 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--13 years, 4.97 ft³/s (0.141 m³/s), 3,600 acre-ft/yr (4.44 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 8.8 ft³/s (0.25 m³/s) May 5, 1970; no flow at times in 1962, 1969, 1975.

REMARKS.--Records excellent. Ditch receives water from Lake Kaweah (see sta 11210900) which is used for irrigation. At times up to 3 ft³/s (0.085 m³/s) is diverted 200 ft (61 m) upstream into Doffelmyer ditch for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	1.2	.60	.90	1.1	.90	.80	5.0	8.1	8.1	8.0	8.1
2	8.4	1.0	.60	.90	1.0	.80	.80	5.0	8.0	8.1	8.0	8.1
3	8.4	1.0	.60	.90	1.0	.90	.80	5.0	8.0	8.1	8.0	8.0
4	8.4	1.0	.60	.90	1.0	1.0	.80	6.3	8.0	8.1	8.0	8.0
5	8.4	1.0	.80	1.1	1.0	.90	.80	7.6	8.1	8.1	8.0	8.0
6	8.4	1.0	1.1	1.3	1.0	.90	.90	8.0	8.2	8.1	8.0	8.1
7	8.4	1.0	1.2	1.3	1.0	1.0	1.0	8.0	8.1	8.1	8.0	8.1
8	8.4	1.0	1.2	1.3	1.0	1.0	1.0	8.0	8.1	8.1	8.0	8.2
9	8.4	1.0	1.0	1.3	.90	1.0	1.0	8.0	8.1	8.1	8.0	8.2
10	8.4	1.0	1.0	1.4	.90	1.2	1.0	8.0	8.1	8.1	8.1	8.2
11	8.2	1.0	1.0	1.3	.90	1.2	1.0	8.1	8.1	8.1	8.1	8.1
12	8.2	1.0	1.0	1.2	1.0	1.1	1.0	8.1	8.0	8.1	8.1	8.1
13	8.2	.90	1.0	1.2	1.1	1.0	1.0	8.2	8.1	8.1	8.1	8.1
14	8.2	.90	1.0	1.2	1.1	.90	1.0	8.2	8.1	8.1	8.1	8.1
15	8.2	.90	1.0	1.2	1.1	1.1	1.0	8.2	8.1	8.0	8.1	8.1
16	8.2	.90	1.0	1.4	1.1	1.2	1.0	8.1	8.2	8.0	8.1	8.1
17	8.2	.90	1.0	1.3	1.1	1.2	1.0	8.1	8.2	8.0	8.1	8.1
18	8.3	.80	1.1	1.3	.70	1.2	1.0	8.1	8.2	8.0	8.1	8.1
19	8.3	.80	1.1	1.3	0	1.2	1.0	8.1	8.2	8.0	8.1	8.1
20	8.3	.80	1.1	1.3	0	1.2	1.0	8.1	8.2	8.0	8.1	8.1
21	8.3	.80	1.1	1.3	0	1.2	.90	8.1	8.2	8.0	8.1	8.1
22	8.3	.80	1.1	1.3	0	1.2	1.1	8.1	8.2	8.0	8.1	8.1
23	8.3	.80	1.1	1.3	0	1.2	1.9	8.1	8.2	8.0	8.1	8.1
24	8.3	.60	1.0	1.3	.90	1.0	2.3	8.1	8.1	8.0	8.1	8.1
25	8.3	.60	1.0	1.3	1.3	1.0	2.3	8.1	8.1	8.1	8.1	8.1
26	8.4	.60	1.0	1.3	1.1	1.0	3.3	8.1	8.1	8.1	8.0	8.1
27	8.4	.60	1.1	1.3	1.1	1.0	4.6	8.1	8.1	8.1	8.0	8.1
28	4.0	.60	1.1	1.3	1.1	1.0	5.0	8.1	8.1	8.1	8.0	8.1
29	1.2	.60	1.1	1.3	---	.80	5.0	8.1	8.1	8.1	8.0	8.1
30	1.2	.60	1.1	1.1	---	.80	5.0	8.1	8.1	8.1	8.0	8.1
31	1.2	---	.90	1.1	---	.80	---	8.1	---	8.1	8.1	---
TOTAL	232.2	25.70	30.60	37.90	23.50	31.90	50.30	239.3	243.5	250.1	249.7	243.0
MEAN	7.49	.86	.99	1.22	.84	1.03	1.68	7.72	8.12	8.07	8.05	8.10
MAX	8.4	1.2	1.2	1.4	1.3	1.2	5.0	8.2	8.2	8.1	8.1	8.2
MIN	1.2	.60	.60	.90	0	.80	.80	5.0	8.0	8.0	8.0	8.0
AC-FT	461	51	61	75	47	63	100	475	483	496	495	482

CAL YR 1974 TOTAL 1745.20 MEAN 4.78 MAX 8.4 MIN .60 AC-FT 3460
WTR YR 1975 TOTAL 1657.70 MEAN 4.54 MAX 8.4 MIN 0 AC-FT 3290

TULARE LAKE BASIN

11210900 LAKE KAWEAH NEAR LEMONCOVE, CALIF.

LOCATION.--Lat 36°24'53", long 119°00'07", in SE¼SW¼ sec.25, T.17 S., R.27 E., Tulare County, in control tower near left abutment of Terminus Dam on Kaweah River, 2.1 mi (3.4 km) northeast of Lemoncove.

DRAINAGE AREA.--560 mi² (1,450 km²).

PERIOD OF RECORD.--October 1961 to current year. Fragmentary prior to March 1962.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to May 22, 1962, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 151,217 acre-ft (186 hm³) June 16 (elevation, 694.83 ft or 211.784 m); minimum, 7,913 acre-ft (9.76 hm³) Feb. 17 (elevation, 569.44 ft or 173.565 m).

Period of record: Maximum contents, 160,200 acre-ft (198 hm³) July 3, 4, 1967 (elevation, 699.39 ft or 213.174 m), storage increased by a temporary sandbag dam in the ungated spillway; minimum since reservoir first filled, 7,559 acre-ft (9.32 hm³) Oct. 20, 1970 (elevation, 568.38 ft or 173.242 m).

REMARKS.--Reservoir is formed by earthfill dam and earthfill auxiliary dam; completed and storage began in February 1962. Usable capacity, 149,433 acre-ft (184 hm³) between elevations 520.0 ft (158.50 m), invert of outlet structure and 694.0 ft (211.53 m), spillway crest. Dead storage, 166 acre-ft (205,000 m³). Spillway design flood pool elevation, 745.1 ft (227.11 m), capacity, 266,000 acre-ft (328 hm³). Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

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

520	166	580	11,966
525	343	600	22,767
530	598	620	39,354
535	954	640	61,695
540	1,464	660	89,818
550	2,937	680	123,423
560	5,093	700	161,476
570	8,105	720	204,327

CONTENTS, IN ACRE-Feet, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7937	9597	14396	14586	13307	8595	28022	51531	136161	137848	64387	9608
2	7944	9601	14517	14586	13358	8785	28767	52515	139240	136498	61695	9299
3	7954	10017	14605	14576	13475	8767	29588	53832	141283	135134	59116	8967
4	7964	10190	15176	14581	13549	8609	30448	55518	143147	133646	56550	8821
5	7978	10356	15161	14581	13624	8467	31440	56573	145079	132109	53914	8803
6	7992	10513	15010	14630	13643	8641	32438	57482	146733	130617	51394	8800
7	8005	10658	15015	14807	13657	8606	33197	58327	147737	128966	48899	8792
8	8029	10805	15001	14921	13751	9162	33886	59410	148395	127180	46514	8774
9	8084	10965	14956	15050	14591	9566	34660	61073	149365	125331	44198	8767
10	8132	11114	14886	14991	15674	9677	35425	63203	150495	123422	41926	8832
11	8163	11264	14856	14896	15151	9624	36169	65778	150436	121276	39699	8934
12	8188	11416	14851	14787	14232	9769	36939	69053	150027	118843	37515	9047
13	8205	11569	14876	14679	13192	10029	37707	73006	149463	116377	35294	9143
14	8219	11719	14911	14581	11948	10529	38639	77228	149930	113722	33071	9217
15	8226	11861	14941	14522	10561	10862	39521	81354	150885	110838	31027	9273
16	8222	12004	14946	14479	8956	11446	40235	85276	151217	107702	29309	9318
17	8222	12144	14941	14425	7913	11831	40945	89071	150807	104525	27703	9366
18	8222	12281	14916	14372	7934	12246	41662	93182	149852	101424	26153	9412
19	8222	12414	14866	14319	8119	12750	42375	97960	148725	98365	24722	9468
20	8219	12534	14807	14256	8195	13275	43064	102282	147718	95141	23308	9521
21	8215	12741	14763	14213	8226	13869	43697	103975	146636	92486	21953	9555
22	8212	13032	14708	14155	8184	15276	44282	104692	145732	90224	20492	9582
23	8208	13261	14674	14093	8139	16272	44829	105529	144983	87926	18984	9582
24	8205	13451	14650	14031	8132	17080	45337	107431	144197	85535	17490	9601
25	8208	13615	14659	13969	8195	19951	46730	110255	143166	83071	15989	9601
26	8212	13770	14703	13912	8250	22325	47578	113774	142252	80541	14483	9624
27	8236	13907	14679	13855	8320	23617	48192	117379	141473	78033	12959	9627
28	8467	14040	14654	13742	8404	24659	48865	120688	140714	75464	11365	9631
29	8970	14165	14610	13615	---	25501	49623	124159	139901	72785	10480	9631
30	9165	14285	14591	13475	---	26285	50556	127853	139033	70059	10198	9635
31	9351	---	14591	13368	---	27204	---	131832	---	67239	9904	---
MAX	9351	14285	15176	15050	15674	27204	50556	131832	151217	137848	64387	9635
MIN	7937	9597	14396	13368	7913	8467	28022	51531	136161	67239	9904	8767
(a)	573.47	584.99	585.62	583.05	570.86	606.30	630.61	684.62	688.48	644.33	574.92	574.22
(b)	+1,397	+4,934	+306	-1,223	-4,964	+18,800	+23,352	+81,276	+7,201	-71,794	-57,335	-269
(c)	160	85	44	48	52	95	282	907	1,492	1,399	743	289

CAL YR 1974 b +4,713

WTR YR 1975 b +1,681

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Evaporation, in acre-feet.

TULARE LAKE BASIN

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11210930 FOOTHILL DITCH BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'48", long 119°00'47", in NW¼NE¼ sec.35, T.17 S., R.27 E., Tulare County, on left bank 0.7 mi (1.1 km) downstream from Terminus Dam, and 2.1 mi (3.4 km) northeast of Lemoncove.

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

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 492.8 ft (150.21 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--14 years, 19.1 ft³/s (0.541 m³/s), 13,840 acre-ft/yr (17.1 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 50 ft³/s (1.4 m³/s) Feb. 10, 1962; no flow many days in February and March 1975.

REMARKS.--Records excellent except those for the period Sept. 3-30, which are good. Ditch receives water from Lake Kaweah (see sta 11210900) which is used for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	21	20	23	24	0	8.2	24	29	31	33	26
2	21	20	20	23	24	0	7.9	24	30	31	33	26
3	21	19	21	23	12	0	13	24	32	31	34	26
4	21	18	25	23	0	0	18	24	32	31	34	24
5	21	18	28	23	0	0	20	24	32	31	34	22
6	21	19	26	23	0	0	20	23	33	31	34	22
7	21	19	24	24	0	0	24	23	33	31	34	22
8	21	20	24	25	0	0	25	23	33	31	34	22
9	21	20	24	25	0	0	23	23	33	31	33	22
10	21	20	24	25	0	0	22	23	33	31	33	22
11	21	19	24	25	0	1.8	22	24	33	31	33	22
12	21	19	24	25	0	3.5	22	25	33	31	33	22
13	21	19	24	25	0	3.4	22	25	33	31	33	22
14	21	19	24	25	0	3.3	22	26	33	31	33	22
15	21	20	24	25	0	3.3	23	26	32	32	33	22
16	21	19	24	24	0	3.1	23	26	32	32	32	22
17	21	19	24	24	0	3.1	22	26	33	32	32	22
18	22	19	24	24	0	3.1	21	26	33	32	32	23
19	22	19	24	25	0	3.1	21	26	32	32	32	24
20	22	19	24	25	0	2.9	21	27	31	32	32	24
21	22	19	24	25	0	4.7	23	27	31	31	32	24
22	21	20	24	25	0	7.4	25	28	31	31	32	24
23	21	20	24	25	0	7.4	25	28	31	31	32	24
24	21	20	23	25	0	7.7	25	28	31	31	32	24
25	21	20	23	25	0	3.8	25	28	31	32	32	24
26	21	20	23	24	0	4.0	25	28	31	33	32	25
27	21	19	24	25	0	8.7	25	28	31	33	31	25
28	21	19	24	25	0	9.0	25	29	31	33	31	25
29	21	20	24	25	---	8.7	24	29	31	33	29	25
30	21	20	24	25	---	8.4	24	29	30	33	26	25
31	21	---	23	24	---	8.3	---	29	---	33	26	---
TOTAL	655	582	736	757	60	108.7	646.1	803	954	980	996	704
MEAN	21.1	19.4	23.7	24.4	2.14	3.51	21.5	25.9	31.8	31.6	32.1	23.5
MAX	22	21	28	25	24	9.0	25	29	33	33	34	26
MIN	21	18	20	23	0	0	7.9	23	29	31	26	22
AC-FT	1300	1150	1460	1500	119	216	1280	1590	1890	1940	1980	1400
CAL YR 1974 TOTAL	10444.0			MEAN 28.6	MAX 38	MIN 14	AC-FT 20720					
WTR YR 1975 TOTAL	7981.8			MEAN 21.9	MAX 34	MIN .00	AC-FT 15830					

11210950 KAWEAH RIVER BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'51", long 119°00'42", in SE¼SE¼ sec.26, T.17 S., R.27 E., Tulare County, on left bank 0.6 mi (1.0 km) downstream from Terminus Dam, and 2.2 mi (3.5 km) northeast of Lemnecove.

DRAINAGE AREA.--561 mi² (1,453 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 495.90 ft (151.150 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE (adjusted for change in contents, evaporation, and diversion).--14 years, 657 ft³/s (18.61 m³/s), 476,000 acre-ft/yr (587 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,580 ft³/s (73.1 m³/s) June 11 (gage height, 6.63 ft or 2.021 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Nov. 10.
Period of record: Maximum discharge, 5,610 ft³/s (159 m³/s) June 3, 1969 (gage height, 8.77 ft or 2.673 m); no flow at times in most years.

REMARKS.--Records excellent. Flow regulated by Lake Kaweah (see sta 11210900). Lemnecove ditch (see sta 11210850) diverts water from Lake Kaweah for irrigation. Foothill ditch (see sta 11210930) diverts water from the gage pool for irrigation. Doffelmyer ditch diverts up to 3 ft³/s (0.085 m³/s) above the station for irrigation. At times some of this water is returned to the river above the station.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1967(M). WRD Calif. 1971: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	13	1.7	64	126	302	107	218	1380	1280	1520	153
2	8.5	6.5	1.4	64	126	303	92	209	1800	1310	1430	154
3	10	6.0	34	64	144	358	58	210	2100	1270	1370	153
4	12	4.7	128	64	167	396	42	211	2100	1280	1370	99
5	12	3.7	311	64	166	393	41	223	2130	1310	1370	32
6	12	1.0	247	62	174	393	41	218	2270	1340	1330	25
7	13	3.0	129	82	180	400	86	206	2360	1360	1280	25
8	12	1.2	129	123	180	406	89	208	2360	1390	1240	26
9	12	.60	129	159	181	412	47	220	2160	1410	1200	25
10	12	.40	129	170	365	469	33	242	2090	1390	1180	19
11	12	.50	113	170	700	481	36	260	2430	1530	1160	14
12	12	1.1	93	170	797	368	35	340	2430	1640	1120	12
13	12	1.0	82	170	809	291	35	410	2160	1620	1120	13
14	12	1.0	76	170	910	266	36	550	1810	1620	1110	13
15	12	1.3	75	160	942	251	50	650	1660	1760	1020	13
16	12	.90	81	145	926	246	80	657	1750	1860	871	13
17	12	.80	87	144	643	275	64	659	1860	1850	806	13
18	12	.80	95	147	252	240	41	652	1830	1820	774	13
19	12	1.2	100	147	149	195	36	684	1630	1790	755	12
20	12	1.1	100	149	196	216	36	722	1480	1820	749	11
21	12	1.7	101	151	216	161	123	968	1450	1550	752	11
22	12	2.2	101	150	219	101	200	1100	1440	1320	780	11
23	12	1.5	87	152	219	107	239	1030	1440	1320	775	11
24	12	1.2	65	152	214	131	268	1030	1360	1360	779	9.6
25	12	1.1	55	152	218	112	289	1090	1290	1400	775	9.4
26	12	2.2	52	152	238	54	311	1110	1230	1400	770	9.5
27	12	2.2	79	152	258	124	307	1140	1180	1390	765	10
28	14	2.0	92	151	285	124	294	1250	1180	1420	768	12
29	14	1.7	91	146	---	120	256	1340	1180	1480	457	11
30	16	2.2	79	142	---	142	230	1360	1180	1490	162	11
31	16	---	66	134	---	124	---	1370	---	1520	155	---
TOTAL	377.5	67.80	3009.1	4122	10000	7961	3602	20537	52720	46300	29713	943.5
MEAN	12.2	2.26	97.1	133	357	257	120	662	1757	1494	958	31.5
MAX	16	13	311	170	942	481	311	1370	2430	1860	1520	154
MIN	8.5	.40	1.4	62	126	54	33	206	1180	1270	155	9.4
AC-FT	749	134	5970	8180	19830	15790	7140	40740	104600	91840	58940	1870
MEAN a	66.2	107	128	140	272	569	540	2,033	1,944	388	78.4	63.4
AC-FT a	4,070	6,350	7,840	8,580	15,100	34,960	32,150	125,000	115,700	23,880	4,820	3,770

CAL YR 1974	TOTAL	220184.40	MEAN	603	MAX	2620	MIN	.40	AC-FT	436700	MEAN a	651	AC-FT a	471,200
WTR YR 1975	TOTAL	179352.90	MEAN	491	MAX	2430	MIN	.40	AC-FT	355700	MEAN a	528	AC-FT a	382,200

a Adjusted for change in contents in and evaporation from Lake Kaweah and diversion to Lemnecove and Foothill ditches.

11210950 KAWEAH RIVER BELOW TERMINUS DAM, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: December 1961 to September 1969, water years 1970 to current year (partial-record station).

Water temperatures: November 1970 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 28.0°C on several days during September; minimum, 6.5°C Jan. 4-6.

Period of record:

Water temperatures: Maximum, 28.5°C Aug. 29, Sept. 1, 1972, and on several days in 1974; minimum (1971-72, 1973 to current year), 5.0°C Jan. 9, 10, 1971.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
DEC. 16...	1120	83	560	19	--	10	79	0	65	8.1	6.4	.32
MAR. 04...	1030	396	--	19	4.2	11	83	0	68	8.2	8.2	--
MAY 28...	0815	1140	--	6.0	1.2	3.2	28	0	23	2.6	2.1	--

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED BORON (B) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC. 16...	106	.14	23.8	66	1	--	100	0	0	.0	10
MAR. 04...	113	.15	121	65	0	.6	100	--	--	--	--
MAY 28...	49	.07	151	20	0	.3	0	--	--	--	--

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
DEC. 16...	1120	83	120	7.9	11.0	11.3
MAR. 04...	1030	396	125	7.6	--	10.9
MAY 28...	0815	1140	50	7.2	14.0	11.1

TULARE LAKE BASIN

11210950 KAWEAH RIVER BELOW TERMINUS DAM, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	26.5	20.5	16.5	15.0	13.5	9.5	9.0	7.0	8.5	7.5	10.5	9.5
2	25.0	22.0	17.5	14.0	14.0	9.5	9.0	7.0	8.0	7.5	10.5	10.0
3	26.0	22.0	18.0	13.0	12.0	11.5	8.5	7.0	8.5	7.5	11.0	10.0
4	24.5	21.5	17.0	13.0	12.5	12.0	8.5	6.5	8.0	7.5	11.0	10.5
5	25.5	21.0	17.5	12.5	12.5	11.5	8.5	6.5	9.0	7.5	11.5	11.0
6	25.5	20.0	18.0	12.5	12.5	11.0	7.5	6.5	9.0	7.5	11.5	11.0
7	22.0	20.5	18.0	12.0	11.5	11.0	8.0	7.0	8.5	7.5	12.0	11.0
8	24.5	20.0	17.0	14.0	12.0	11.0	7.5	7.0	9.0	8.0	12.0	11.0
9	24.5	20.5	16.0	13.5	11.5	10.5	7.5	7.0	9.0	8.0	11.5	11.0
10	25.0	20.0	17.5	13.5	11.5	10.5	8.0	7.0	9.0	8.0	11.0	10.5
11	24.0	19.0	17.5	12.5	11.5	10.5	7.5	7.0	9.5	8.0	11.0	10.5
12	24.0	19.0	18.0	12.5	11.5	10.5	8.0	7.0	9.5	9.0	11.5	10.5
13	24.0	19.0	17.5	12.5	10.5	10.5	8.0	7.0	9.5	9.0	11.5	10.5
14	24.0	18.5	17.0	13.0	11.0	10.0	8.0	7.0	9.5	9.5	11.0	10.0
15	24.0	18.5	16.5	12.5	11.0	10.0	8.0	7.0	9.5	9.0	11.5	10.0
16	23.5	18.5	15.0	13.0	11.0	10.0	7.5	7.0	9.5	9.0	11.5	10.0
17	23.0	18.5	14.5	13.5	10.0	10.0	8.0	7.0	9.5	8.5	11.5	10.0
18	23.0	18.5	15.0	13.0	11.0	10.0	8.0	7.5	10.5	8.0	12.0	10.5
19	22.5	18.5	15.5	13.5	10.5	10.0	8.5	7.5	9.5	8.0	11.5	10.0
20	23.0	18.5	16.5	12.0	11.0	9.5	8.0	7.5	9.0	8.5	11.0	10.5
21	22.5	18.0	14.0	12.5	10.0	9.5	8.0	7.5	9.0	8.0	12.0	10.5
22	22.0	18.0	14.0	12.5	10.0	9.5	9.0	7.5	9.5	8.0	12.5	10.0
23	21.5	17.5	15.5	12.0	10.5	9.0	9.0	7.5	9.5	8.0	12.5	9.5
24	21.5	17.5	15.5	11.0	10.5	8.0	9.0	7.5	9.5	8.0	12.5	10.0
25	21.0	17.5	14.5	10.5	10.0	8.0	9.0	7.5	10.0	8.0	11.0	10.0
26	20.0	17.5	15.0	10.5	9.5	7.5	9.0	8.0	10.0	8.5	14.0	9.0
27	21.0	18.0	14.0	10.0	9.0	7.5	9.0	7.5	10.0	9.0	12.0	9.0
28	18.0	16.5	14.0	11.0	9.0	8.0	9.0	8.0	10.5	9.0	11.5	9.5
29	16.5	15.5	14.0	10.0	9.0	8.0	9.0	7.5	---	---	11.5	9.0
30	18.5	14.5	14.0	9.5	9.0	7.5	8.5	7.5	---	---	11.5	9.5
31	16.0	15.0	---	---	9.0	7.5	8.5	7.5	---	---	11.0	9.0
MONTH	26.5	14.5	18.0	9.5	14.0	7.5	9.0	6.5	10.5	7.5	14.0	9.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	9.0	12.5	11.0	13.0	12.5	16.0	15.0	21.0	20.0	26.0	24.0
2	13.0	9.0	12.5	11.0	13.0	12.5	16.0	15.5	21.5	20.5	26.0	24.0
3	13.5	9.0	12.5	11.0	13.0	12.5	16.0	15.5	22.0	21.0	26.0	24.0
4	13.5	9.0	12.5	11.0	13.0	13.0	16.0	15.0	22.5	21.0	27.0	24.0
5	11.0	9.5	12.5	10.5	13.0	13.0	16.0	15.5	23.0	22.0	28.0	23.0
6	13.0	9.0	12.5	11.0	13.5	13.0	16.0	15.5	23.0	22.5	28.0	22.5
7	11.0	9.0	13.0	11.0	13.5	13.0	16.5	15.5	23.5	23.0	27.5	22.0
8	12.5	9.5	13.0	11.0	13.5	13.0	16.5	15.5	24.0	23.5	25.5	23.0
9	14.0	9.5	13.0	11.0	13.5	13.5	16.5	16.0	24.5	23.5	27.5	23.0
10	14.5	9.0	13.0	11.5	14.0	13.5	16.5	16.0	25.5	24.5	27.0	23.0
11	13.5	9.5	12.5	11.5	15.0	14.0	16.5	16.0	25.5	25.0	26.5	22.5
12	14.5	9.5	12.5	11.0	14.5	14.0	17.0	16.0	26.0	25.0	27.5	22.0
13	15.5	9.5	12.5	11.5	14.0	14.0	17.0	15.5	26.0	25.5	27.0	22.0
14	12.5	10.0	12.5	11.5	14.5	14.0	17.0	16.0	26.5	25.0	27.0	22.0
15	12.0	9.5	12.5	11.5	15.0	14.0	17.0	16.5	26.5	25.5	27.0	22.0
16	11.5	10.0	12.5	11.5	16.0	15.0	17.0	16.5	26.5	25.5	27.0	22.0
17	14.0	10.0	12.5	11.5	16.0	15.0	17.5	17.0	27.0	25.0	28.0	23.5
18	15.0	9.5	12.5	12.0	15.0	14.0	17.5	17.0	26.5	25.5	28.0	23.5
19	14.5	10.0	12.5	11.5	14.5	14.0	17.5	17.0	26.5	25.5	27.5	23.0
20	15.5	9.5	12.5	12.0	15.0	14.0	18.0	17.0	26.5	25.0	27.0	22.0
21	12.0	10.0	12.5	11.5	15.0	14.5	18.0	17.5	26.5	25.0	28.0	21.5
22	12.0	10.5	12.0	11.5	15.0	14.5	18.0	17.5	26.0	25.0	28.0	22.0
23	11.5	10.0	12.0	11.5	15.0	14.0	18.5	17.5	26.0	25.0	28.0	22.0
24	11.5	10.5	12.0	11.5	15.0	14.5	18.5	18.0	26.0	25.0	28.0	21.0
25	11.5	10.5	12.5	12.0	15.5	14.5	19.0	18.0	26.0	25.0	27.5	20.5
26	11.5	10.0	12.5	12.0	15.5	14.5	19.0	18.0	26.0	25.0	27.5	21.0
27	11.5	10.5	12.5	12.0	15.5	14.5	19.0	18.5	26.0	25.0	26.0	21.0
28	12.0	10.5	12.5	12.0	15.5	14.5	19.5	19.0	26.0	25.0	26.0	21.0
29	12.0	10.5	13.0	12.0	16.0	14.5	20.0	19.0	26.5	24.5	26.0	20.5
30	12.0	11.0	13.0	12.5	16.0	15.0	20.0	19.5	26.5	24.5	25.5	20.0
31	---	---	13.0	12.5	---	---	20.5	20.0	26.0	24.0	---	---
MONTH	15.5	9.0	13.0	10.5	16.0	12.5	20.5	15.0	27.0	20.0	28.0	20.0

11211300 DRY CREEK NEAR LEMONCOVE, CALIF.

LOCATION.--Lat 36°26'51", long 119°01'38", in NE¼SE¼ sec.15, T.17 S., R.27 E., Tulare County, on right bank 0.5 mi (0.8 km) downstream from Bequette Canyon, 2.9 mi (4.7 km) upstream from mouth, and 4.4 mi (7.1 km) north of Lemoncove.

DRAINAGE AREA.--75.6 mi² (195.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 570 ft (174 m), from topographic map. Prior to Mar. 8, 1969, 1.6 mi (2.6 km) downstream at different datum.

AVERAGE DISCHARGE.--16 years, 20.2 ft³/s (0.572 m³/s), 14,630 acre-ft/yr (18.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 420 ft³/s (11.9 m³/s) Mar. 25 (gage height, 4.28 ft or 1.305 m); no flow for several months.

Period of record: Maximum discharge, 14,500 ft³/s (411 m³/s) Dec. 6, 1966 (gage height, 7.30 ft or 2.225 m in gage well, 8.94 ft or 2.725 m, from floodmarks, site and datum then in use); no flow for several months in each year.

Flood of Dec. 23, 1955, reached a discharge of 6,070 ft³/s (172 m³/s) from slope-area measurement. Flood of 1867 is believed to have exceeded that of December 1955, from information by local residents.

REMARKS.--Records good. Small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1.4	3.5	3.1	9.3	41	28	7.3	1.2		
2		0	1.4	3.2	6.7	8.6	36	28	7.1	1.2		
3		0	2.3	3.0	22	9.2	34	26	7.1	1.2		
4		0	3.9	3.0	18	9.3	33	26	6.3	1.2		
5		0	31	3.1	24	9.7	53	25	5.7	1.0		
6		0	10	4.7	15	17	67	24	4.9	.82		
7		0	6.0	17	12	19	52	23	4.1	.60		
8		0	4.4	20	11	66	43	22	3.8	.44		
9		0	3.7	36	39	55	40	21	3.3	.31		
10		0	3.2	17	124	56	38	20	3.3	.31		
11		0	2.9	11	52	45	37	20	3.1	.20		
12		0	2.7	8.8	32	40	35	19	2.4	.11		
13		0	2.6	7.3	26	38	34	19	2.3	.05		
14		0	2.6	6.8	30	55	36	18	2.2	.03		
15		0	2.6	6.3	26	41	38	18	1.8	.05		
16		0	2.3	5.7	21	61	34	18	1.7	.06		
17		.11	2.4	5.3	19	64	33	18	1.6	.05		
18		.51	2.5	4.9	16	46	32	16	1.5	.07		
19		.62	2.3	4.5	15	40	31	15	1.8	.06		
20		.72	2.3	4.1	16	36	31	14	1.9	.08		
21		1.6	2.3	4.0	16	34	31	13	2.4	.12		
22		14	2.5	3.7	14	136	32	12	2.3	.06		
23		6.7	2.6	3.6	12	80	31	11	1.9	.05		
24		3.2	2.6	3.5	11	54	32	10	1.8	.03		
25		2.2	2.7	3.5	11	199	49	9.6	1.8	.02		
26		1.8	2.8	3.5	10	155	39	9.1	1.8	0		
27		1.6	2.8	3.4	9.8	90	35	8.6	1.7	0		
28		1.5	3.7	3.2	9.7	71	33	8.1	1.5	0		
29		1.5	4.6	3.0	---	59	32	7.8	1.3	0		
30		1.4	4.1	3.0	---	51	30	7.3	1.2	0		
31		---	3.6	3.0	---	47	---	7.3	---	0		---
TOTAL	0	37.46	161.9	212.6	621.3	1701.1	1122	521.8	90.9	9.32	0	0
MEAN	0	1.25	5.22	6.86	22.2	54.9	37.4	16.8	3.03	.30	0	0
MAX	0	14	39	36	124	199	67	28	7.3	1.2	0	0
MIN	0	0	1.4	3.0	3.1	8.6	30	7.3	1.2	0	0	0
AC-FT	0	74	321	422	1230	3370	2230	1030	180	18	0	0
CAL YR 1974	TOTAL	7954.84	MEAN	21.8	MAX	800	MIN	0	AC-FT	15780		
WTR YR 1975	TOTAL	4478.38	MEAN	12.3	MAX	199	MIN	0	AC-FT	8880		

Peak discharge (base, 50 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
12-4	2000	2.86	70	3-17	0115	2.96	82
1-9	0300	2.70	52	3-22	1000	3.84	252
2-10	1100	3.63	198	3-25	1530	4.28	420
3-8	1530	3.25	122	4-6	0030	3.01	88
3-14	0400	2.86	70	4-25	1300	2.85	69

TULARE LAKE BASIN

11211790 COTTONWOOD CREEK NEAR ELDERWOOD, CALIF.

LOCATION.--Lat 36°31'47", long 119°07'33", in SE¼SE¼ sec.15, T.16 S., R.26 E., Tulare County, on left bank 25 ft (8 m) upstream from State Highway 65 bridge, 4.0 mi (6.4 km) north of Elderwood, and 8.0 mi (12.9 km) north of Woodlake.

DRAINAGE AREA.--60.4 mi² (156.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 575 ft (175.3 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 187 ft³/s (5.30 m³/s) Mar. 22 (gage height, 3.15 ft or 0.960 m); no flow many days.

Period of record: Maximum discharge, 1,660 ft³/s (47.0 m³/s) Apr. 1, 1974 (gage height, 5.56 ft or 1.695 m); no flow for several months in each year.

Flood of February 24, 1969, reached a stage of 10.4 ft (3.17 m), from floodmarks.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.40	3.0	4.1	3.4	7.4	19	11	1.4	0	0	.41
2	0	.20	3.0	3.4	8.6	6.8	17	11	1.2	0	0	0
3	0	.20	4.9	3.4	16	6.8	17	11	1.0	.37	0	0
4	0	.20	32	3.4	11	6.8	16	11	.80	1.6	0	0
5	0	.20	20	3.4	14	7.4	33	11	.60	.60	0	0
6	0	.03	11	5.3	8.0	13	28	11	.40	0	0	0
7	.60	1.6	9.2	14	6.3	12	24	10	.19	0	.27	0
8	1.8	2.7	9.2	15	5.3	31	20	8.6	0	0	.82	0
9	2.4	3.7	8.0	25	17	22	18	7.4	0	0	0	0
10	.23	5.3	8.0	13	57	26	17	7.4	0	0	0	0
11	0	5.3	6.8	10	26	20	17	7.4	0	.23	0	0
12	0	5.8	6.8	8.0	19	18	16	6.8	0	.82	0	0
13	0	5.3	6.3	6.8	17	17	16	6.8	0	1.6	0	0
14	0	5.3	6.3	6.3	22	37	16	5.8	0	.18	0	0
15	0	4.9	5.3	6.3	16	21	16	5.8	0	0	0	0
16	0	4.9	5.3	5.3	12	40	15	5.8	0	0	0	0
17	0	4.9	5.3	4.9	11	29	15	4.9	0	0	0	0
18	0	4.9	4.9	4.9	10	20	15	4.7	0	0	.17	0
19	0	4.9	4.9	4.1	9.2	16	16	4.5	0	0	.46	0
20	0	5.3	4.1	4.1	11	14	15	4.3	0	0	0	0
21	0	6.3	4.1	4.1	10	12	15	4.0	0	0	0	0
22	0	16	4.1	3.4	8.6	78	14	3.8	0	0	0	0
23	1.4	6.3	4.1	3.4	8.0	38	14	3.6	0	.42	0	0
24	2.4	4.1	3.4	3.4	8.0	29	13	3.2	0	1.1	0	0
25	.45	3.0	4.1	3.4	7.4	67	18	3.0	0	1.6	0	0
26	0	3.0	3.4	3.4	7.4	54	17	2.7	0	.87	0	0
27	0	3.0	4.1	3.4	7.4	36	13	2.5	0	0	0	0
28	.37	3.0	6.8	3.0	7.4	29	13	2.3	0	0	0	0
29	3.9	3.0	6.3	3.0	---	26	13	2.0	0	0	0	0
30	1.8	3.0	4.9	3.0	---	24	12	1.8	0	0	0	0
31	.40	---	4.1	3.0	---	21	---	1.6	---	0	.82	---
TOTAL	15.75	116.73	213.7	187.2	364.0	785.2	508	186.7	5.59	9.39	2.54	.41
MEAN	.51	3.89	6.89	6.04	13.0	25.3	16.9	6.02	.19	.30	.082	.014
MAX	3.9	16	32	25	57	78	33	11	1.4	1.6	.82	.41
MIN	0	.03	3.0	3.0	3.4	6.8	12	1.6	0	0	0	0
AC-FT	31	232	424	371	722	1560	1010	370	11	19	5.0	.8
CAL YR 1974	TOTAL	4782.13	MEAN	13.1	MAX	348	MIN	0	AC-FT	9490		
WTR YR 1975	TOTAL	2395.21	MEAN	6.56	MAX	78	MIN	0	AC-FT	4750		

Peak discharge (base, 40 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
12-4	1200	2.54	40	3-16	1400	2.68	75
2-10	0815	2.96	128	3-22	0730	3.15	187
3-8	1515	2.52	49	3-25	1315	3.05	160
3-14	0200	2.64	67				

11212000 SAND CREEK NEAR ORANGE COVE, CALIF.

LOCATION.--Lat 36°37'36", long 119°14'48", in SW¼NW¼ sec.15, T.15 S., R.25 E., Tulare County, on right bank 3.8 mi (6.1 km) east of Orange Cove.

DRAINAGE AREA.--31.6 mi² (81.8 km²).

PERIOD OF RECORD.--October 1944 to September 1954, annual maximum, water years 1956, 1967, 1969, February 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (149 m), from topographic map.

AVERAGE DISCHARGE.--14 years (1944-54, 1971-75), 2.30 ft³/s (0.065 m³/s), 1,670 acre-ft/yr (2.06 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 72 ft³/s (2.04 m³/s) Mar. 22 (gage height, 3.90 ft or 1.189 m), from rating curve extended as explained below; no flow for several months.

Period of record: Maximum discharge, 805 ft³/s (22.8 m³/s) Apr. 1, 1974 (gage height, 4.96 ft or 1.512 m), from rating curve extended above 56 ft³/s (1.6 m³/s) on basis of slope-area measurements at gage heights 4.00 ft (1.219 m), 4.80 ft (1.463 m), and 8.75 ft (2.667 m); no flow for several months in each year.

Maximum discharge since 1944, 3,520 ft³/s (99.7 m³/s) Jan. 25, 1969 (gage height, 8.75 ft or 2.667 m, from floodmarks).

Flood of Feb. 25, 1969, reached a stage of 8.35 ft (2.545 m), from floodmarks (discharge, 2,900 ft³/s or 82.1 m³/s).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.1	2.2	2.0	1.4	2.7	6.1	2.8	.59			
2	0	2.2	2.2	2.0	3.1	3.6	5.4	2.5	.51			
3	0	1.9	3.7	1.8	4.3	2.9	5.4	2.5	.51			
4	0	1.7	2.0	2.0	3.1	3.0	5.5	2.7	.47			
5	0	1.3	8.2	2.0	3.4	3.7	13	2.9	.37			
6	0	.92	3.7	3.2	2.5	9.4	9.9	2.7	.27			
7	0	.97	2.8	5.1	2.3	6.3	7.3	2.5	.21			
8	0	1.3	2.4	8.9	2.2	15	5.9	2.4	.15			
9	0	1.5	2.0	9.4	5.5	9.8	5.1	2.2	.10			
10	0	1.6	1.8	4.3	18	10	4.6	2.0	.06			
11	0	1.6	1.7	3.3	8.3	7.8	4.4	2.1	.02			
12	0	1.7	1.6	2.9	4.5	8.3	4.4	2.0	0			
13	0	1.8	1.6	2.8	5.7	8.1	4.0	2.2	0			
14	0	1.8	1.5	2.6	9.9	17	4.4	1.8	0			
15	0	1.8	1.5	2.5	4.9	8.3	4.7	1.7	0			
16	0	2.0	1.5	2.4	3.6	13	4.4	2.0	0			
17	0	2.0	1.5	2.2	3.2	10	4.4	2.1	0			
18	0	2.0	1.5	2.2	2.8	6.8	4.2	1.7	0			
19	0	2.0	1.5	2.2	2.6	5.8	3.9	1.5	0			
20	0	2.0	1.4	1.9	3.6	5.1	3.9	1.6	0			
21	0	2.4	1.5	1.7	3.1	5.4	3.9	1.7	0			
22	0	9.1	1.7	1.6	2.6	25	3.6	1.6	0			
23	0	4.4	1.6	1.7	2.5	11	3.4	1.5	0			
24	0	3.2	1.4	1.7	2.5	8.0	3.5	1.5	0			
25	0	2.7	1.5	1.6	2.6	18	5.5	1.4	0			
26	0	2.6	1.7	1.6	2.5	15	5.1	1.1	0			
27	0	2.5	1.7	1.5	2.5	10	4.1	.91	0			
28	1.9	2.4	2.9	1.4	2.7	8.6	3.9	.78	0			
29	6.2	2.3	2.5	1.3	---	7.6	3.3	.74	0			
30	2.3	2.2	2.0	1.3	---	6.8	3.1	.97	0			
31	1.8	---	2.0	1.3	---	6.6	---	.78	---			---
TOTAL	12.2	67.99	84.8	82.4	115.9	278.6	150.3	56.88	3.26	0	0	0
MEAN	.39	2.27	2.74	2.66	4.14	8.99	5.01	1.83	.11	0	0	0
MAX	6.2	9.1	20	9.4	18	25	13	2.9	.59	0	0	0
MIN	0	.92	1.4	1.3	1.4	2.7	3.1	.74	0	0	0	0
AC-FT	24	135	168	163	230	553	298	113	6.5	0	0	0

CAL YR 1974 TOTAL 1778.92 MEAN 4.87 MAX 202 MIN 0 AC-FT 3530
WTR YR 1975 TOTAL 852.33 MEAN 2.34 MAX 25 MIN 0 AC-FT 1690

Peak discharge (base, 20 ft ³ /s)						
Date	Time	G.H.	Discharge	Date	Time	G.H.
12-4	0915	3.69	29	3-16	1445	3.63
1-8	1900	3.60	21	3-22	0700	3.90
2-10	1030	3.69	29	3-25	1145	3.72
3-8	1200	3.65	26	4-5	1545	3.69
3-13	2345	3.75	36			

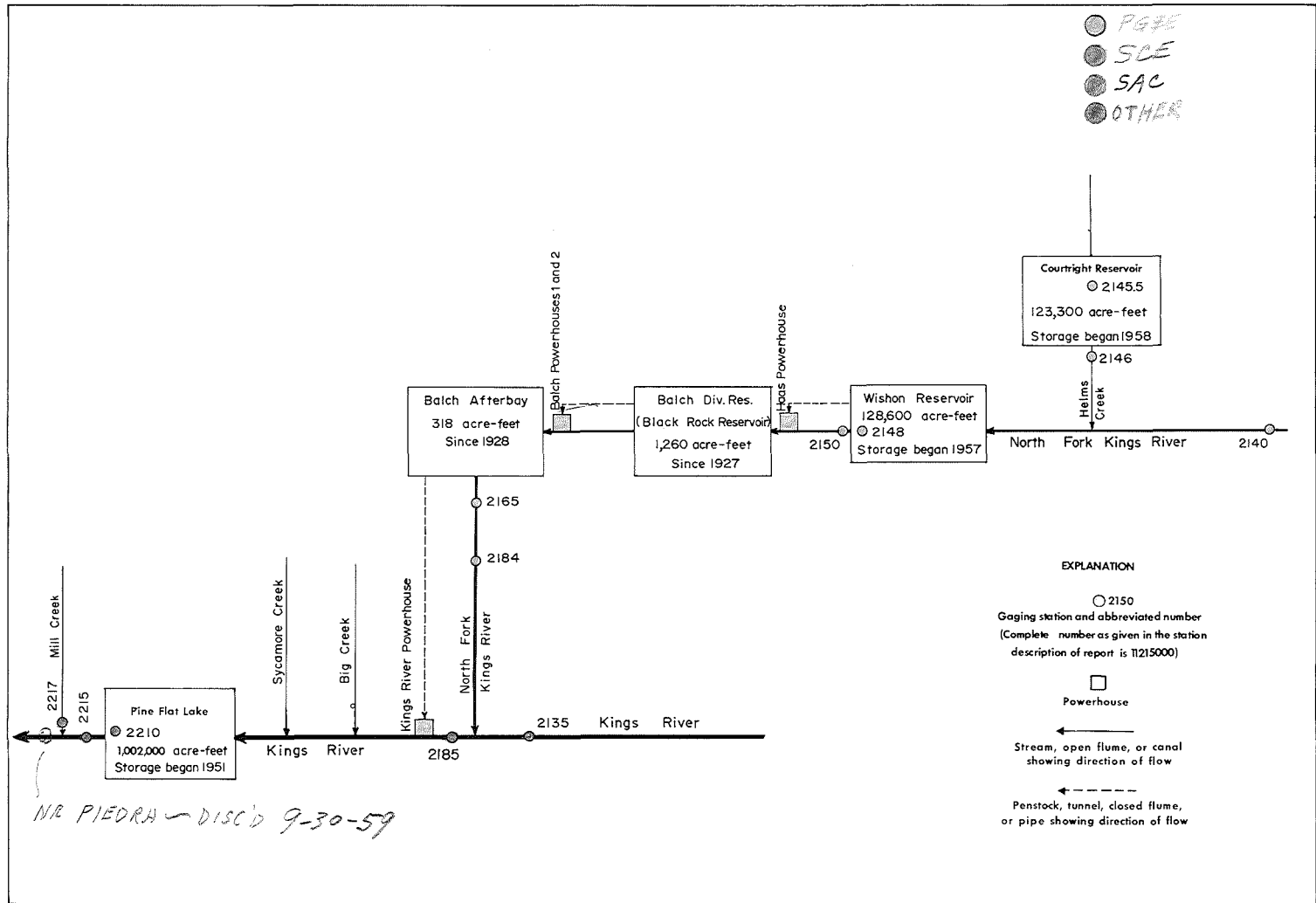


FIGURE 7.--Schematic diagram showing diversions and storage in Kings River basin.

11213500 KINGS RIVER ABOVE NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°51'48", long 119°07'24", in NW¼NE¼ sec.27, T.12 S., R.26 E., Fresno County, on right bank at Rogers Crossing, 0.9 mi (1.4 km) upstream from North Fork, 2.9 mi (4.7 km) south of Balch Camp, and 9.6 mi (15.4 km) southeast of Trimmer.

DRAINAGE AREA.--952 mi² (2,466 km²).

PERIOD OF RECORD.--October 1926 to December 1928, October 1931 to current year. Monthly figures only for some periods, published in WSP 1315-A. Prior to September 1965, published as Kings River above North Fork.

GAGE.--Water-stage recorder. Datum of gage is 1,001.5 ft (305.26 m) above mean sea level (river-profile survey). March 1927 to December 1928, at site 0.5 mi (0.8 km) downstream at different datum. October 1931 to September 1965, on left bank at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--46 years, 1,435 ft³/s (40.64 m³/s), 1,040,000 acre-ft/yr (1.28 km³/yr).

EXTREMES.--Current year: Maximum discharge, 10,400 ft³/s (295 m³/s) June 1 (gage height, 8.84 ft or 2.694 m); minimum daily, 182 ft³/s (5.15 m³/s) Oct. 25-27.

Period of record: Maximum discharge, 59,100 ft³/s (1,670 m³/s) Dec. 23, 1955 (gage height, 18.26 ft or 5.566 m, present datum), from rating curve extended above 19,000 ft³/s (538 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 70 ft³/s (1.98 m³/s) Jan. 14, 1963.

REMARKS.--Records good. No diversion or regulation above station. See schematic diagram of Kings River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1938(M), 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	269	201	228	270	585	851	1310	9060	2540	662	261
2	205	254	201	225	343	600	794	1330	8460	2360	605	252
3	218	248	228	218	360	580	794	1590	8220	2230	570	245
4	230	242	770	228	371	565	794	1860	7890	2140	540	238
5	230	238	406	230	382	590	865	1590	8130	2230	520	230
6	228	235	332	282	382	764	824	1450	8430	2430	510	228
7	222	232	336	315	388	716	770	1430	8130	2450	496	220
8	228	238	332	414	406	1130	758	1740	7680	2360	468	215
9	240	235	315	385	890	914	734	2230	7410	2300	452	230
10	232	232	309	336	1010	818	746	2720	7590	2200	444	309
11	225	228	300	329	683	746	716	3170	7320	2400	424	329
12	218	230	297	318	605	692	692	3970	6640	2340	420	340
13	210	228	291	322	600	674	722	5130	5650	2140	416	312
14	205	228	279	322	630	704	824	6170	6090	1880	410	288
15	202	228	273	318	550	674	844	6480	6530	1660	402	273
16	212	222	273	312	500	758	782	6340	6640	1460	392	261
17	212	220	267	303	436	704	740	6310	5520	1390	382	250
18	210	218	261	306	428	698	722	6840	4200	1360	371	273
19	208	212	255	309	420	734	710	7950	3150	1310	388	285
20	205	210	252	309	420	752	734	7230	2870	1240	416	270
21	202	215	252	309	406	728	858	4480	2750	1170	424	255
22	202	278	248	309	378	935	1000	3540	2940	1100	399	240
23	202	240	232	312	385	812	1100	3580	3360	1040	368	228
24	200	232	208	315	399	886	1170	5100	3120	998	346	222
25	182	238	215	318	424	1660	1510	6950	2350	949	329	218
26	182	230	235	326	452	1380	1210	7530	2260	893	312	210
27	182	228	235	326	476	1110	1100	7740	2520	851	309	203
28	265	218	252	288	505	942	1130	7740	2550	824	306	197
29	281	205	240	264	---	872	1240	7650	2590	928	300	193
30	242	201	232	267	---	865	1350	7650	2610	830	288	187
31	263	---	230	255	---	893	---	8640	---	740	273	---
TOTAL	6751	6932	8757	9298	13499	25481	27084	147440	162660	50743	12942	7462
MEAN	218	231	282	300	482	822	903	4756	5422	1637	417	249
MAX	281	278	770	414	1010	1660	1510	8640	9060	2540	662	340
MIN	182	201	201	218	270	565	692	1310	2260	740	273	187
AC-FT	13390	13750	17370	18440	26780	50540	53720	292400	322600	100600	25670	14800
CAL YR 1974	TOTAL	653901	MEAN	1792	MAX	10300	MIN	182	AC-FT	1297000		
WTR YR 1975	TOTAL	479049	MEAN	1312	MAX	9060	MIN	182	AC-FT	950200		

Peak discharge (base, 6,300 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-19	2400	8.44	9,180	6-6	0030	8.66	9,840
6-1	0200	8.84	10,400				

11213500 KINGS RIVER ABOVE NORTH FORK, NEAR TRIMMER, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1955.

Water temperatures: December 1965 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 22.5°C on several days during August; minimum, 1.0°C Jan. 3.

Period of record:

Water temperatures: Maximum (1967 to current year), 27.0°C Aug. 9-11, 1972; minimum, freezing point Dec. 14, 15, 1967.

REMARKS.--Clock stopped Aug. 26 to Sept. 24; range in temperatures, 18.0°C to 22.0°C.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	16.5	11.5	10.0	7.0	5.5	3.5	2.0	4.5	3.5	10.0	8.0
2	19.0	17.5	11.5	10.5	7.0	6.0	2.5	1.5	5.5	4.5	9.5	7.5
3	19.5	17.0	11.0	9.5	8.5	7.0	2.5	1.0	6.0	5.0	9.5	7.0
4	19.0	17.0	10.5	9.0	9.0	8.5	3.0	1.5	5.5	5.0	9.5	7.5
5	17.0	15.0	10.5	9.0	8.5	7.5	3.5	2.0	7.0	5.5	9.0	8.5
6	16.5	14.5	10.5	9.0	7.5	6.5	5.0	3.5	7.5	6.0	9.0	8.0
7	16.5	15.0	11.0	9.0	7.5	6.5	7.0	5.0	8.0	7.5	8.0	7.5
8	16.5	14.5	11.5	10.0	7.0	6.0	7.0	6.5	9.0	7.0	9.0	7.5
9	17.0	15.0	11.5	10.5	6.0	5.0	7.0	6.0	8.5	7.5	8.5	7.0
10	17.0	15.0	11.0	9.5	5.5	4.5	6.0	5.0	8.0	7.0	7.5	6.5
11	16.5	14.5	10.5	9.0	6.0	4.5	6.0	5.0	7.0	5.5	9.0	6.5
12	16.0	14.0	10.5	9.0	6.5	5.0	5.5	4.0	6.5	5.5	10.0	8.0
13	16.0	14.0	10.5	9.0	7.0	6.0	5.5	4.0	7.0	6.5	9.5	8.0
14	16.0	14.0	11.0	9.5	7.0	6.5	6.0	4.5	7.0	6.0	8.0	6.0
15	16.0	13.5	11.0	9.5	7.0	6.5	6.5	4.5	6.5	5.0	9.0	6.5
16	15.5	13.5	10.5	9.5	6.5	5.0	7.0	5.5	5.5	4.5	8.5	7.0
17	15.0	13.5	11.5	10.0	6.5	4.5	6.5	5.0	5.0	3.0	7.5	5.5
18	14.5	13.0	12.0	11.0	6.5	5.5	7.0	5.0	5.5	3.0	9.5	6.0
19	14.5	13.0	12.0	11.0	6.5	5.5	7.0	5.0	5.5	4.0	10.5	8.0
20	15.0	13.5	11.5	10.0	6.0	5.0	7.5	5.5	6.5	5.5	10.0	9.0
21	15.0	13.5	11.0	10.0	6.0	4.5	7.0	5.5	6.5	5.5	9.0	8.5
22	14.5	13.0	11.5	10.5	7.0	6.0	7.0	5.5	7.0	4.5	8.5	7.5
23	14.0	12.5	11.5	10.0	6.0	4.0	7.0	5.5	7.5	5.0	9.0	6.0
24	14.0	12.0	10.0	8.0	4.0	2.5	7.0	5.5	8.0	5.5	11.0	8.0
25	14.0	12.5	9.0	7.5	2.5	1.5	7.0	5.5	9.0	6.5	11.0	8.0
26	13.5	12.5	8.5	7.0	3.0	1.5	7.5	5.5	9.0	6.5	8.0	6.0
27	14.0	12.5	8.0	6.5	4.0	2.5	7.5	5.0	9.5	7.5	6.5	5.0
28	14.0	12.0	8.0	6.5	5.5	4.0	5.0	3.5	10.0	7.5	6.5	5.0
29	12.0	10.5	7.0	6.0	4.5	3.5	4.0	2.5	---	---	8.0	5.0
30	11.5	9.5	7.0	6.0	4.0	3.0	4.0	2.5	---	---	10.0	6.5
31	11.0	10.5	---	---	4.0	2.5	4.0	2.0	---	---	9.5	8.0
MONTH	19.5	9.5	12.0	6.0	9.0	1.5	7.5	1.0	10.0	3.0	11.0	5.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	6.5	11.5	8.5	13.0	9.5	15.0	13.5	20.0	16.0	---	---
2	10.0	6.5	12.0	9.5	13.0	9.5	15.5	13.5	21.0	17.0	---	---
3	10.5	7.5	12.0	10.0	13.0	9.5	16.0	14.0	21.5	17.5	---	---
4	9.5	8.5	11.5	8.0	13.5	9.5	16.0	14.5	21.5	18.0	---	---
5	9.0	6.5	8.5	6.5	13.5	10.0	17.0	15.0	22.0	18.5	---	---
6	7.0	5.5	10.5	7.5	13.5	10.0	17.5	15.5	21.0	19.0	---	---
7	6.5	5.0	11.5	9.0	13.5	10.0	17.5	15.5	21.0	17.0	---	---
8	8.0	5.5	12.0	10.0	13.5	10.0	17.5	16.0	21.5	18.0	---	---
9	9.5	5.5	12.0	10.0	14.0	10.5	17.5	16.0	21.5	19.0	---	---
10	9.0	7.5	12.0	9.5	14.0	11.0	19.0	16.5	22.5	19.0	---	---
11	9.0	7.5	12.0	9.0	14.0	10.5	19.0	16.5	22.5	19.5	---	---
12	10.5	7.5	12.5	9.0	14.0	11.5	18.5	17.5	22.5	19.5	---	---
13	12.0	9.0	12.0	8.5	14.5	11.0	18.5	17.0	22.5	19.0	---	---
14	11.0	9.0	12.0	8.5	15.5	12.5	19.0	17.0	22.5	18.5	---	---
15	9.0	8.0	11.5	8.0	16.0	13.0	18.5	17.0	22.5	19.0	---	---
16	8.0	7.0	12.0	8.5	16.0	12.5	18.5	17.0	22.0	19.0	---	---
17	7.5	6.0	11.5	8.5	15.0	12.5	20.0	17.5	22.0	19.0	---	---
18	9.5	6.5	12.5	8.5	13.5	12.0	20.5	18.5	21.0	19.0	---	---
19	11.0	8.5	12.0	9.0	12.5	11.0	20.5	18.0	21.0	18.5	---	---
20	12.5	9.0	11.0	6.5	13.0	11.0	20.0	18.0	21.5	18.0	---	---
21	13.0	10.5	9.0	5.5	15.0	12.5	20.0	18.0	19.5	17.0	---	---
22	13.0	11.0	10.5	8.0	16.0	13.5	20.5	18.0	20.5	17.5	---	---
23	12.5	10.5	12.0	9.0	16.0	14.0	21.0	18.5	21.5	18.0	---	---
24	11.0	10.0	12.5	9.5	15.0	13.0	21.5	18.5	21.5	18.5	---	---
25	10.5	7.5	12.5	9.0	13.0	11.0	21.5	19.0	22.0	18.5	20.5	18.0
26	8.5	6.5	12.0	9.0	14.5	12.0	22.0	19.5	---	---	20.0	18.0
27	10.5	6.5	12.0	8.5	15.0	13.0	20.5	19.0	---	---	20.0	17.5
28	11.5	8.5	12.0	8.5	15.0	13.0	21.0	18.0	---	---	19.5	17.5
29	12.5	9.5	12.0	8.5	15.5	13.5	20.5	18.0	---	---	19.5	17.0
30	12.0	10.0	12.5	9.0	15.5	13.5	20.5	18.0	---	---	19.0	16.5
31	---	---	13.0	9.5	---	---	19.5	16.5	---	---	---	---
MONTH	13.0	5.0	13.0	5.5	16.0	9.5	22.0	13.5	22.5	16.0	---	---

11214000 NORTH FORK KINGS RIVER BELOW MEADOW BROOK, CALIF.

LOCATION.--Lat 37°04'53", long 118°51'43", in NE¼NE¼ sec.12, T.10 S., R.28 E., Fresno County, Sierra National Forest, on left bank 800 ft (244 m) downstream from Nichols Canyon, 0.6 mi (1.0 km) downstream from Meadow Brook, 3.9 mi (6.3 km) west of Blackcap Mountain, 5.9 mi (9.5 km) east of Courtright Dam, and 23 mi (37 km) southeast of town of Huntington Lake.

DRAINAGE AREA.--37.7 mi² (97.6 km²).

PERIOD OF RECORD.--October 1921 to September 1935, October 1956 to current year. Monthly discharge only for some periods and yearly estimates for some incomplete years, published in WSP 1315-A. Records for Jan. 1-23, and Dec. 1-21, 1934, published in WSP 551 and 766, respectively, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 8,144.66 ft (2,482.492 m) above mean sea level, unadjusted (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE.--33 years, 72.7 ft³/s (2.059 m³/s), 52,670 acre-ft/yr (64.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,030 ft³/s (29.2 m³/s) June 6 (gage height, 4.92 ft or 1.500 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 1, 18-20.

Period of record: Maximum discharge, 2,040 ft³/s (57.8 m³/s) June 2, 1969 (gage height, 5.65 ft or 1.722 m), from rating curve extended above 800 ft³/s (22.7 m³/s); minimum recorded, 0.3 ft³/s (0.008 m³/s) Sept. 12-14, 1924.

Flood of Dec. 23, 1955, reached a stage of 5.85 ft (1.783 m), from floodmarks (discharge, 2,000 ft³/s or 56.6 m³/s).

REMARKS.--No regulation or diversion above station. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1315-A: 1922(M). WSP 1515: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	4.3	3.0	6.2	9.6	27	21	34	686	173	14	3.0
2	1.7	3.9	2.9	5.6	20	24	19	43	625	149	11	2.9
3	1.9	4.1	2.8	5.4	31	21	21	71	583	133	10	2.7
4	1.9	3.7	2.7	5.1	34	20	19	71	583	131	9.4	2.4
5	1.9	3.4	3.7	5.0	31	18	18	50	622	144	9.0	2.3
6	1.9	3.4	4.9	5.3	23	18	28	49	667	146	8.3	2.1
7	2.0	4.2	6.3	6.5	17	19	25	75	637	134	8.0	2.0
8	2.7	3.8	8.9	6.7	14	22	18	116	584	118	7.3	2.3
9	2.4	3.8	9.0	7.9	14	20	17	142	583	111	7.0	4.3
10	2.0	3.7	9.1	8.4	20	18	16	167	593	101	6.3	4.6
11	1.9	4.3	9.4	8.5	21	17	15	205	560	102	6.0	7.0
12	1.9	4.6	9.6	8.4	18	15	15	269	512	96	5.7	6.3
13	1.8	4.7	9.7	8.8	14	15	16	343	492	83	5.4	6.0
14	1.8	4.8	9.7	9.7	14	16	19	398	541	69	5.1	6.0
15	1.7	4.4	9.7	11	12	15	18	425	563	57	4.8	5.4
16	1.7	4.2	9.6	9.6	11	15	16	441	507	47	4.6	4.8
17	1.7	3.8	9.6	10	11	15	16	463	415	42	4.3	4.3
18	1.6	3.6	9.5	12	11	15	15	515	308	40	4.3	4.3
19	1.6	3.2	9.5	14	11	16	17	540	219	37	8.0	4.1
20	1.6	3.4	8.7	14	10	17	19	446	218	34	8.0	3.7
21	1.7	3.2	8.0	14	9.9	15	27	273	214	30	12	3.3
22	1.7	3.2	7.3	15	9.8	17	31	221	260	27	9.0	3.2
23	1.7	4.8	6.6	16	9.9	20	40	303	286	25	7.6	3.0
24	1.7	5.7	5.8	17	12	20	46	435	234	23	6.7	2.9
25	1.7	5.0	5.6	17	13	25	35	532	171	21	6.0	2.7
26	1.7	4.3	5.2	16	15	24	29	563	193	19	5.4	2.9
27	1.8	3.9	5.3	13	18	20	26	561	210	20	4.8	2.9
28	2.6	3.3	5.4	11	21	18	36	566	205	19	4.3	2.6
29	3.5	3.1	5.9	11	---	17	49	551	197	22	4.1	2.4
30	4.2	3.1	6.3	11	---	19	44	587	188	19	3.7	2.3
31	5.2	---	6.3	9.5	---	26	---	649	---	16	3.3	---
TOTAL	64.8	118.9	216.0	318.6	455.2	584	731	10104	12656	2188	213.4	108.7
MEAN	2.09	3.96	6.97	10.3	16.3	18.8	24.4	326	422	70.6	6.88	3.62
MAX	5.2	5.7	9.7	17	34	27	49	649	686	173	14	7.0
MIN	1.6	3.1	2.7	5.0	9.6	15	15	34	171	16	3.3	2.0
AC-FT	129	236	428	632	903	1160	1450	20040	25100	4340	423	216
CAL YR 1974 TOTAL	32401.0			MEAN 88.8	MAX 658	MIN 1.5	AC-FT 64270					
WTR YR 1975 TOTAL	27758.6			MEAN 76.1	MAX 686	MIN 1.6	AC-FT 55060					

Date	Time	G.H.	Discharge	Peak discharge (base, 400 ft ³ /s)	Date	Time	G.H.	Discharge
5-19	1915	4.44	676		6-6	2100	4.92	1,030
5-26	1945	4.52	727		6-15	1930	4.54	740
6-1	1930	4.88	992					

RESERVOIRS IN TULARE LAKE BASIN, CALIF.

11214550 COURTRIGHT RESERVOIR.--Lat 37°04'40", long 118°58'05", in NW¼ sec.7, T.10 S., R.28 E., Fresno County, Sierra National Forest, at left end of dam on Helms Creek 2.5 mi (4.0 km) upstream from mouth, 4.6 mi (7.4 km) east of Nelson Mountain, and 9.7 mi (15.6 km) west of Blackcap Mountain. Drainage area, 39.7 mi² (102.8 km²). Period of record, October 1958 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 116,000 acre-ft (143 hm³) July 13 (elevation, 8,179.47 ft or 2,493.102 m); minimum, 59,890 acre-ft (73.8 hm³) Dec. 2 (elevation, 8,135.14 ft or 2,479.591 m). Extremes for period of record: Maximum contents, 124,200 acre-ft (153 hm³) July 13, 1967 (elevation, 8,184.55 ft or 2,494.651 m); no contents in 1961-62, 1968, 1970.

Reservoir is formed by rockfill dam completed in 1958. Usable capacity, 123,300 acre-ft (152 hm³) between elevations 7,902 ft (2,408.5 m), invert of tunnel and 8,184 ft (2,494.5 m), elevation of spillway. Dead storage negligible. See schematic diagram of Kings River basin. Record of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

11214800 WISHON RESERVOIR.--Lat 37°00'20", long 118°58'00", in NW¼ sec.6, T.11 S., R.28 E., Fresno County, Sierra National Forest, on right end of dam on North Fork Kings River 1.2 mi (1.9 km) north of Cliff Camp, 1.3 mi (2.1 km) upstream from Cliff Camp gaging station, and 20 mi (32 km) southeast of town of Big Creek. Drainage area, 177 mi² (458 km²). Period of record, December 1957 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 127,600 acre-ft (157 hm³) June 16 (elevation, 6,549.02 ft or 1,996.141 m); minimum, 8,360 acre-ft (10.3 hm³) Apr. 18 (elevation, 6,377.10 ft or 1,943.740 m). Extremes for period of record: Maximum contents, 129,700 acre-ft (160 hm³) July 29, 1958 (elevation, 6,551.1 ft or 1,996.78 m); no contents in 1960.

Reservoir is formed by rockfill dam completed in 1957. Capacity, 128,600 acre-ft (159 hm³) between elevations 6,317 ft (1,925.4 m), bottom of slide gates and 6,550 ft (1,996.4 m), operating crest of spillway gates. Dead storage negligible. Water is diverted to Haas powerhouse for power. See schematic diagram of Kings River basin. Record of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Courtright Reservoir				Wishon Reservoir		
Sept. 30.....	8,135.7	60,500	--	6,520.1	99,900	--
Oct. 31.....	8,135.4	60,100	-400	6,508.7	89,800	-10,100
Nov. 30.....	8,135.2	59,900	-200	6,506.3	87,800	-2,000
Dec. 31.....	8,135.6	60,400	+500	6,506.7	88,000	+200
CAL YR 1974.....	--	--	+6,200	--	--	-15,500
Jan. 31.....	8,136.1	60,800	+400	6,474.3	61,900	-26,100
Feb. 28.....	8,137.2	62,000	+1,200	6,433.1	35,500	-26,400
Mar. 31.....	8,138.7	63,500	+1,500	6,385.2	11,700	-23,800
Apr. 30.....	8,140.4	65,200	+1,700	6,382.1	10,400	-1,300
May 31.....	8,163.4	92,700	+27,500	6,503.9	85,700	+75,300
June 30.....	8,179.1	115,400	+22,700	6,545.9	124,400	+38,700
July 31.....	8,174.8	108,900	-6,500	6,536.6	115,300	-9,100
Aug. 31.....	8,152.6	78,900	-30,000	6,534.6	113,300	-2,000
Sept. 30.....	8,136.3	61,000	-17,900	6,525.2	104,500	-8,800
WTR YR 1975.....	--	--	+500	--	--	+4,600

11214600 HELMS CREEK BELOW COURTRIGHT DAM, CALIF.

LOCATION.--Lat 37°04'35", long 118°58'04", in SW¼NW¼ sec.7, T.10 S., R.28 E., Fresno County, Sierra National Forest, on left bank 500 ft (152 m) downstream from Courtright Dam, 2.5 mi (4.0 km) upstream from North Fork Kings River, and 17 mi (27 km) southeast of town of Huntington Lake.

DRAINAGE AREA.--39.7 mi² (102.8 km²).

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

GAGE.--Water-stage recorder and broad-crested weir with V-notch. Altitude of gage is 7,840 ft (2,390 m), from Pacific Gas and Electric Co. survey.

AVERAGE DISCHARGE (adjusted for storage).--17 years, 76.4 ft³/s (2.164 m³/s), 55,350 acre-ft/yr (68.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 517 ft³/s (14.6 m³/s) Aug. 5 (gage height, 6.29 ft or 1.917 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Feb. 24, 25.
Period of record: Maximum discharge, 1,340 ft³/s (37.9 m³/s) Aug. 29, 1969 (gage height, 5.81 ft or 1.771 m); maximum gage height, 6.52 ft (1.987 m) June 2, 1961, Sept. 16, 1971; no flow Nov. 21-24, Dec. 1, 3-6, 1970.

REMARKS.--Flow regulated by Courtright Reservoir 500 ft (152 m) upstream since October 1958 (see sta 11214550). No diversion above station. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1715: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	7.2	7.1	2.9	2.9	2.9	2.8	3.4	6.3	7.1	200	493
2	5.2	7.2	5.3	2.9	2.8	2.9	2.8	3.5	6.5	7.2	200	491
3	5.8	7.2	3.3	2.9	2.8	2.9	2.8	3.7	6.7	7.2	200	490
4	7.1	7.2	3.2	2.9	2.8	2.9	2.8	3.6	6.8	7.2	200	488
5	7.1	7.2	2.8	2.9	2.8	2.9	2.8	3.4	6.9	7.2	371	487
6	7.1	7.2	2.9	2.9	2.8	2.9	2.8	3.3	7.1	7.2	502	487
7	7.1	7.2	2.9	2.9	2.8	2.9	2.8	3.5	7.1	7.2	500	484
8	7.1	7.2	2.9	2.9	2.8	2.8	2.8	3.9	7.1	7.2	498	479
9	7.1	7.1	2.9	2.9	2.8	2.8	2.8	4.0	7.1	7.2	498	477
10	7.1	7.1	2.9	2.9	2.8	2.8	2.8	4.0	7.2	7.2	492	476
11	7.1	7.1	2.9	2.9	2.8	2.8	2.8	4.1	7.4	7.3	490	474
12	7.0	7.1	2.9	2.9	2.8	2.8	2.8	4.3	7.4	7.4	494	470
13	6.9	7.1	2.9	2.9	2.8	2.8	2.8	4.4	7.4	7.4	498	468
14	6.9	7.1	2.9	2.9	2.8	2.8	2.8	4.4	7.4	7.4	497	467
15	6.9	7.1	2.9	2.9	2.8	2.8	2.8	4.3	7.4	104	496	465
16	7.1	7.1	2.9	2.9	2.8	2.8	2.8	4.4	7.3	197	493	464
17	7.1	7.1	2.9	2.9	2.8	2.8	2.8	4.3	7.1	196	494	463
18	7.1	7.1	2.9	2.9	2.8	2.8	2.8	4.8	7.2	196	491	185
19	7.1	7.1	2.9	2.9	2.8	2.8	2.8	4.9	7.2	196	491	6.0
20	7.1	7.1	2.9	2.9	2.8	2.8	2.8	4.3	7.2	196	495	6.0
21	7.1	7.1	2.9	2.9	2.8	2.8	2.8	4.1	7.2	196	501	6.0
22	7.1	7.2	2.9	2.9	2.8	2.8	2.8	4.2	7.2	196	502	6.0
23	7.1	7.2	2.9	2.9	2.7	2.8	3.2	4.6	7.2	196	500	6.0
24	7.1	7.2	2.9	2.9	2.6	2.8	3.3	5.1	7.2	196	500	6.0
25	7.1	7.2	2.9	2.9	2.6	2.8	3.3	5.2	7.2	196	498	6.0
26	7.1	7.2	2.9	2.9	2.7	2.8	3.3	5.2	7.2	195	497	6.0
27	7.1	7.2	2.9	2.9	2.8	2.8	3.3	5.3	7.2	195	498	6.0
28	7.1	7.2	2.9	2.9	2.8	2.8	3.3	5.4	7.2	196	496	6.0
29	7.1	7.2	2.9	2.9	---	2.8	3.5	5.5	7.2	196	495	6.0
30	7.1	7.2	2.9	2.9	---	2.8	3.5	5.8	7.2	190	493	6.0
31	7.1	---	2.9	2.9	---	2.8	---	6.0	---	201	492	---
TOTAL	214.5	214.7	97.2	89.9	77.9	87.5	88.3	136.9	213.8	3339.4	14072	8380.0
MEAN	6.92	7.16	3.14	2.90	2.78	2.82	2.94	4.42	7.13	108	454	279
MAX	7.1	7.2	7.1	2.9	2.9	2.9	3.5	6.0	7.4	201	502	493
MIN	5.2	7.1	2.9	2.9	2.6	2.8	2.8	3.3	6.3	7.1	200	6.0
AC-FT	425	426	193	178	155	174	175	272	424	6620	27910	16620
CAL YR 1974 TOTAL	28140.3		MEAN 77.1	MAX 589	MIN 2.4	AC-FT 55820						
WTR YR 1975 TOTAL	27012.1		MEAN 74.0	MAX 502	MIN 2.6	AC-FT 53580						

11215000 NORTH FORK KINGS RIVER NEAR CLIFF CAMP, CALIF.

LOCATION.--Lat 36°59'38", long 118°58'49", in NE¼NW¼ sec.12, T.11 S., R.27 E., Fresno County, Sierra National Forest, on right bank at Cliff Camp bridge, 1 mi (2 km) northwest of Cliff Camp, 1.2 mi (1.9 km) downstream from Wishon Dam, and 2 mi (3 km) downstream from Woodchuck Creek.

DRAINAGE AREA.--181 mi² (469 km²).

PERIOD OF RECORD.--August 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 6,143.95 ft (1,872.676 m) above mean sea level, adjustment of 1912 (levels by San Joaquin Light and Power Corp.). Prior to Nov. 24, 1922, at site 1 mi (2 km) upstream at different datum.

AVERAGE DISCHARGE (adjusted for storage and diversion).--54 years, 362 ft³/s (10.25 m³/s), 262,300 acre-ft/yr (323 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 750 ft³/s (21.2 m³/s) June 16 (gage height, unknown); minimum daily, 11 ft³/s (0.31 m³/s) Apr. 17, 18.

Period of record (prior to regulation by Wishon Reservoir): Maximum discharge, 14,000 ft³/s (396 m³/s) Dec. 11, 1937 (gage height, 18.0 ft or 5.49 m, from floodmarks), from rating curve extended above 4,200 ft³/s (119 m³/s) on basis of velocity-area studies; minimum, 0.6 ft³/s (0.017 m³/s) Dec. 30, 1930.

1957 to current year: Maximum discharge, 4,880 ft³/s (138 m³/s) May 28, 1958 (gage height, 11.75 ft or 3.581 m); minimum daily, 0.8 ft³/s (0.023 m³/s) Dec. 14, 1957.

REMARKS.--Flow regulated by Wishon Reservoir 1.2 mi (1.9 km) upstream since Dec. 5, 1957 (see sta 11214800) and Courtright Reservoir since Oct. 17, 1958 (see sta 11214550). Water diverted for power from Wishon Reservoir by tunnel to Haas powerhouse since Dec. 10, 1958. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1715: 1951, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	19	18	18	17	25	15	33	27	24	21	21
2	19	19	18	18	18	24	16	41	27	24	21	21
3	19	18	20	18	16	23	18	43	27	24	21	21
4	19	18	24	18	17	21	18	37	26	24	21	21
5	19	18	20	18	16	24	17	24	26	23	21	21
6	19	18	19	19	16	22	15	21	26	23	21	21
7	19	18	19	20	17	19	15	29	26	23	21	21
8	19	18	19	20	17	18	14	43	26	23	21	21
9	19	18	18	19	24	17	13	48	26	23	21	21
10	19	18	18	19	20	16	14	48	26	23	21	21
11	19	18	18	19	18	16	13	51	147	23	21	21
12	19	18	18	19	18	16	13	58	337	23	21	21
13	19	18	19	19	18	16	18	62	226	23	21	21
14	19	18	18	19	18	15	18	59	151	29	21	21
15	19	18	18	19	17	15	14	52	206	23	21	21
16	19	18	18	19	17	15	12	50	551	23	21	21
17	19	18	18	19	16	15	11	47	460	23	21	21
18	19	18	18	19	16	15	11	49	27	23	21	20
19	19	18	18	19	16	18	12	49	27	23	21	20
20	19	18	18	19	16	18	18	38	26	23	21	20
21	18	18	18	18	16	17	27	28	25	23	21	20
22	18	18	18	18	16	16	29	27	25	23	21	20
23	18	18	18	18	16	15	30	30	25	22	21	20
24	18	18	18	18	18	20	29	32	25	22	21	20
25	18	18	18	18	19	34	35	27	25	22	21	20
26	18	18	18	18	20	20	20	27	24	22	21	20
27	18	18	18	18	21	17	20	27	25	22	21	20
28	21	18	18	17	24	15	27	27	24	22	21	20
29	19	18	18	17	---	15	34	27	24	22	21	20
30	19	18	18	17	---	17	35	27	24	22	21	20
31	19	---	18	16	---	18	---	27	---	22	21	---
TOTAL	584	542	572	570	498	572	581	1188	2667	714	651	617
MEAN	18.8	18.1	18.5	18.4	17.8	18.5	19.4	38.3	88.9	23.0	21.0	20.6
MAX	21	19	24	20	24	34	35	62	551	29	21	21
MIN	18	18	18	16	16	15	11	21	24	22	21	20
AC-FT	1160	1080	1130	1130	988	1130	1150	2360	5290	1420	1290	1220
CAL YR 1974	TOTAL	8223	MEAN 22.5	MAX 42	MIN 18	AC-FT 16310						
WTR YR 1975	TOTAL	9756	MEAN 26.7	MAX 551	MIN 11	AC-FT 19350						

NOTE.--No gage-height record May 25 to June 20.

11216500 NORTH FORK KINGS RIVER ABOVE DINKEY CREEK, AT BALCH CAMP, CALIF.

LOCATION.--Lat 36°54'12", long 119°07'14", in SE¼NE¼ sec.10, T.12 S., R.26 E., Fresno County, Sierra National Forest, on left bank 12 ft (4 m) downstream from bridge at Balch Camp, 300 ft (91 m) upstream from Dinkey Creek, and 9.3 mi (15.0 km) east of Trimmer.

DRAINAGE AREA.--250 mi² (648 km²).

PERIOD OF RECORD.--October 1919 to September 1930 (published as "above Dinkey Creek"), March 1960 to current year. Records for water year 1920 incomplete, yearly estimate and monthly discharge only for some months, published in WSP 1315-A.

GAGE.--Water-stage recorder. Concrete control since Apr. 15, 1966. Altitude of gage is 1,240 ft (378 m), from river-profile map. October 1919 to Sept. 30, 1930, and Mar. 24, 1960, to Apr. 14, 1966, at site 100 ft (30 m) downstream at different datum.

AVERAGE DISCHARGE (prior to storage and diversion).--11 years (1919-30), 387 ft³/s (10.96 m³/s), 280,200 acre-ft/yr (345 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,110 ft³/s (31.4 m³/s) June 5 (gage height, 3.44 ft or 1.049 m); minimum daily, 11 ft³/s (0.31 m³/s) many days.
Period of record (prior to regulation by Wishon and Courtright Reservoirs): Maximum discharge, 6,080 ft³/s (172 m³/s) June 4, 1922 (gage height, 12.18 ft or 3.712 m, site and datum then in use); minimum, 4 ft³/s (0.11 m³/s) Aug. 29 to Sept. 1, 1924.
1960 to current year: Maximum discharge, 14,000 ft³/s (396 m³/s) Feb. 1, 1963 (gage height, 13.24 ft or 4.036 m, site and datum then in use, backwater from Dinkey Creek), from rating curve extended above 890 ft³/s (25.2 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) Nov. 3, 1964.

REMARKS.--Flow regulated by Courtright Reservoir (see sta 11214550) and Wishon Reservoir (see sta 11214800), Black Rock Reservoir, capacity, 1,260 acre-ft (1.55 hm³), Balch Afterbay, capacity, 318 acre-ft (392,000 m³), and Haas and Balch powerplants. Diversion from Balch Afterbay to Kings River powerhouse began Mar. 1, 1962. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1966(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	91	17	12	12	19	24	13	17	18	18	17
2	17	87	25	13	18	15	23	12	18	18	18	17
3	17	78	45	14	18	17	23	17	498	19	18	17
4	17	27	36	15	15	23	16	13	517	18	18	17
5	16	40	20	13	15	24	18	13	581	18	18	18
6	17	40	14	16	14	28	17	12	579	18	18	17
7	16	61	13	17	13	31	16	12	566	18	18	17
8	17	42	13	23	13	33	20	12	488	18	18	17
9	16	26	13	19	16	23	20	12	520	18	18	18
10	17	357	17	15	24	27	15	12	520	19	18	18
11	17	200	16	13	23	33	15	12	499	18	18	18
12	16	79	14	13	22	32	15	11	662	18	18	18
13	16	50	14	13	21	35	15	13	564	18	18	17
14	17	50	12	13	26	30	15	16	529	18	18	17
15	17	55	12	13	19	20	15	23	555	18	18	17
16	17	47	15	12	18	23	19	12	693	18	18	17
17	17	47	14	12	17	21	21	12	738	18	18	17
18	17	47	16	12	22	19	21	12	376	18	18	18
19	16	45	13	12	28	19	13	12	141	18	18	18
20	15	63	12	17	25	18	13	11	25	18	18	17
21	17	39	13	18	22	19	16	11	15	18	23	17
22	16	47	12	16	16	32	20	11	19	18	18	17
23	17	54	12	19	16	22	22	13	19	18	20	17
24	17	55	11	13	19	23	27	11	19	18	18	17
25	17	31	12	12	24	51	19	11	19	18	18	17
26	17	39	12	12	28	60	13	11	18	18	18	17
27	18	41	12	12	31	34	13	11	18	18	18	17
28	24	18	12	16	30	30	15	11	18	21	22	16
29	76	16	12	17	---	20	13	15	18	18	18	17
30	51	16	12	13	---	20	13	11	18	18	21	17
31	61	---	12	12	---	20	---	13	---	18	18	---
TOTAL	663	1888	483	447	565	821	525	391	9267	563	572	516
MEAN	21.4	62.9	15.6	14.4	20.2	26.5	17.5	12.6	309	18.2	18.5	17.2
MAX	76	357	45	23	31	60	27	23	738	21	23	18
MIN	15	16	11	12	12	15	13	11	15	18	18	16
AC-FT	1320	3740	958	887	1120	1630	1040	776	18380	1120	1130	1020
CAL YR 1974 TOTAL	12194.1			MEAN 33.4	MAX 595	MIN 9.3	AC-FT 24190					
WTR YR 1975 TOTAL	16701.0			MEAN 45.8	MAX 738	MIN 11	AC-FT 33130					

11216500 NORTH FORK KINGS RIVER ABOVE DINKEY CREEK, AT BALCH CAMP, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: September 1967 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 20.5°C on several days during May; minimum, 2.0°C Jan. 2, 3, 29, 31.

Period of record:

Water temperatures: Maximum, 26.0°C June 22, 23, 25-27, 1968, July 14, 1972; minimum, freezing point Dec. 14-16, 21, 1967.

REMARKS.--Clock stopped June 15-26, July 3-10, 12-19; range in temperature, 10.0°C to 14.0°C, 12.5°C to 18.5°C, and 13.5°C to 19.0°C, respectively.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	12.5	10.5	9.0	7.0	5.0	4.0	2.5	4.5	4.0	10.5	5.5
2	16.0	14.0	9.5	8.0	7.5	5.5	3.5	2.0	5.5	4.5	10.5	5.5
3	16.5	14.0	10.0	8.0	8.5	7.5	4.0	2.0	6.0	5.0	10.5	5.5
4	15.0	13.5	10.0	8.0	9.0	8.5	5.0	2.5	6.0	5.0	9.5	5.5
5	15.0	12.0	10.0	8.0	8.5	7.0	5.0	3.0	8.0	5.5	7.5	6.5
6	15.0	12.0	10.0	8.0	8.0	6.5	6.5	4.5	8.0	5.5	9.0	6.0
7	14.0	12.5	10.0	8.5	8.5	6.5	6.5	6.5	8.0	6.5	7.0	6.0
8	15.5	13.0	11.0	9.0	8.0	6.5	8.0	7.0	8.5	6.0	10.5	6.5
9	15.5	13.0	10.0	9.0	7.5	5.5	7.0	6.0	8.5	7.5	7.0	6.5
10	15.0	12.0	9.0	8.5	6.5	5.0	7.0	5.0	9.5	6.5	9.0	6.0
11	14.5	11.5	9.5	8.5	6.5	4.5	6.5	5.5	8.0	5.0	8.5	5.5
12	14.5	11.5	10.0	8.5	6.5	4.5	6.5	4.5	7.0	5.0	10.0	5.0
13	14.5	11.0	10.0	8.5	6.5	5.0	7.0	4.5	6.5	6.0	7.5	5.0
14	15.0	11.5	10.5	9.0	7.0	5.5	7.0	4.5	6.5	5.0	6.5	4.5
15	14.5	11.5	10.0	8.5	7.5	5.5	7.0	4.5	7.5	4.0	10.0	4.5
16	14.0	11.0	10.0	9.0	6.0	4.5	7.5	5.0	5.0	3.5	8.5	5.0
17	14.0	11.5	10.5	10.0	6.0	4.5	7.5	5.0	6.0	2.5	8.0	4.0
18	14.0	11.5	10.5	9.5	6.5	4.5	7.5	5.0	6.5	2.5	10.5	4.5
19	13.5	11.5	10.0	9.5	6.5	5.5	8.0	5.0	5.5	3.5	11.0	5.5
20	15.0	12.0	10.0	9.0	6.5	5.0	8.0	5.5	6.0	4.5	7.5	6.5
21	14.0	12.0	10.0	9.0	6.0	4.5	7.5	5.0	5.0	4.0	8.5	6.0
22	14.0	11.5	10.5	9.0	6.0	4.5	8.0	5.5	7.5	3.0	9.0	5.5
23	13.5	11.0	9.5	8.0	5.0	3.0	7.0	5.0	8.0	3.5	10.0	4.5
24	13.5	11.0	9.0	7.5	4.5	3.0	7.5	4.5	8.0	4.0	12.0	6.5
25	13.5	11.0	8.0	7.0	4.5	2.5	7.5	4.5	9.0	4.5	8.5	7.0
26	12.5	11.0	8.0	6.5	4.5	3.0	7.5	4.5	9.0	4.5	7.0	5.0
27	13.0	11.5	8.0	6.5	5.0	3.5	7.5	4.0	8.5	5.0	6.5	4.5
28	12.0	11.0	8.0	6.0	6.0	5.0	4.5	2.5	9.0	5.0	8.5	4.0
29	11.0	10.0	7.5	5.5	5.0	3.5	4.5	2.0	---	---	11.0	4.0
30	11.5	9.0	7.5	5.5	4.5	3.0	5.0	2.5	---	---	12.5	5.0
31	10.5	10.0	---	---	4.5	2.5	5.0	2.0	---	---	10.5	6.0
MONTH	16.5	9.0	11.0	5.5	9.0	2.5	8.0	2.0	9.5	2.5	12.5	4.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	5.0	17.0	9.0	19.0	12.0	17.0	13.0	17.5	12.0	17.0	12.0
2	11.0	5.0	17.0	9.0	20.0	11.5	18.0	13.0	18.0	12.0	17.0	12.0
3	10.5	5.5	14.5	10.0	14.0	10.5	---	---	18.0	12.5	17.0	12.0
4	13.5	7.5	11.5	8.0	11.0	10.0	---	---	18.5	13.0	17.5	12.5
5	7.5	6.5	13.5	6.5	11.0	10.5	---	---	19.0	13.0	18.0	13.0
6	10.5	6.0	14.0	8.0	11.0	10.5	---	---	15.5	13.0	18.0	13.0
7	8.5	5.0	16.0	8.0	11.0	10.5	---	---	17.5	12.0	18.0	13.5
8	11.5	5.5	18.0	9.0	11.0	10.5	---	---	18.0	12.5	16.0	14.0
9	12.5	5.0	18.0	10.0	11.0	10.5	---	---	17.0	12.5	17.5	14.0
10	12.5	5.5	18.0	10.0	11.0	10.5	---	---	18.0	13.0	16.0	14.0
11	10.5	6.5	19.0	10.5	11.0	10.5	20.0	14.5	18.0	13.0	17.5	13.0
12	11.5	6.0	20.0	11.0	11.0	11.0	---	---	18.0	13.0	17.0	13.0
13	13.5	6.5	19.5	11.5	11.5	11.0	---	---	18.0	13.0	17.5	13.0
14	10.5	8.0	19.0	11.0	11.5	11.0	---	---	18.0	13.0	17.5	13.0
15	9.0	7.0	17.5	9.5	---	---	---	---	18.0	13.0	18.0	13.5
16	9.0	6.0	18.5	10.5	---	---	---	---	18.0	12.5	18.0	13.5
17	9.0	5.0	19.0	11.0	---	---	---	---	18.0	12.5	19.0	15.0
18	11.0	5.5	20.0	11.5	---	---	---	---	14.5	12.5	19.0	15.0
19	11.0	7.0	20.5	12.5	---	---	---	---	17.5	12.5	18.0	14.0
20	16.5	6.5	14.0	9.0	---	---	19.5	14.5	17.0	12.0	17.5	14.0
21	16.0	8.0	17.0	8.0	---	---	17.5	14.0	16.0	12.0	17.5	14.0
22	15.5	8.0	16.0	8.5	---	---	19.5	13.5	17.5	12.0	18.0	14.0
23	13.0	8.0	17.5	9.5	---	---	19.5	13.5	17.5	12.5	18.0	14.0
24	12.0	7.5	19.5	10.5	---	---	19.0	13.0	18.0	12.5	18.0	14.0
25	12.0	8.0	20.5	11.5	---	---	19.0	13.5	18.0	13.0	17.5	14.0
26	11.0	6.0	20.0	12.0	---	---	19.5	14.5	18.0	13.0	17.0	13.5
27	12.0	6.0	20.0	11.5	17.0	12.5	18.0	14.5	17.0	13.0	17.0	13.5
28	13.5	8.0	20.5	12.0	17.0	12.5	18.0	14.0	16.5	12.0	17.0	13.5
29	15.5	8.0	18.0	11.5	17.0	13.0	18.5	13.5	17.0	12.0	17.0	13.0
30	17.0	9.0	20.5	12.0	17.0	13.0	18.5	13.0	16.5	12.0	17.0	13.0
31	---	---	20.5	12.5	---	---	17.5	12.0	17.0	12.0	---	---
MONTH	17.0	5.0	20.5	6.5	---	---	---	---	19.0	12.0	19.0	12.0

11218400 NORTH FORK KINGS RIVER BELOW DINKEY CREEK, NEAR BALCH CAMP, CALIF.

LOCATION.--Lat 36°52'47", long 119°07'40", in NW¼ sec.22, T.12 S., R.26 E., Fresno County, Sierra National Forest, on right bank 1.1 mi (1.8 km) upstream from mouth, 1.7 mi (2.7 km) south of Balch Camp, 2.1 mi (3.4 km) downstream from Dinkey Creek, and 9 mi (14 km) east of Trimmer.

DRAINAGE AREA.--387 mi² (1,002 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,035 ft (315.5 m), from river-profile map.

EXTREMES.--Current year: Maximum discharge, 3,020 ft³/s (85.5 m³/s) June 5 (gage height, 8.03 ft or 2.448 m); minimum daily, 28 ft³/s (0.79 m³/s) Oct. 1, 20.

Period of record: Maximum discharge, 27,400 ft³/s (776 m³/s) Feb. 1, 1963 (gage height, 19.20 ft or 5.852 m), from rating curve extended above 4,900 ft³/s (139 m³/s); minimum daily, 14 ft³/s (0.40 m³/s) Aug. 26-30, 1964, Sept. 1-4, 6-23, Sept. 26 to Oct. 6, 1968.

REMARKS.--Flow regulated by Courtright Reservoir (see sta 11214550), Wishon Reservoir (see sta 11214800), Black Rock Reservoir, capacity, 1,260 acre-ft (1.55 hm³), Balch Afterbay, capacity, 318 acre-ft (392,000 m³), and Haas and Balch powerplants. Diversion from Balch Afterbay to Kings River powerhouse began Mar. 1, 1962. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	118	39	40	68	223	220	373	1670	241	67	43
2	29	115	42	43	91	216	199	405	1830	226	64	43
3	30	97	81	46	89	207	217	529	2200	210	61	41
4	31	48	245	47	90	205	211	555	2160	196	59	41
5	33	53	108	45	83	226	218	391	2210	188	58	40
6	33	60	73	68	81	260	207	331	2140	179	56	39
7	31	73	66	94	83	236	188	329	1980	168	56	38
8	33	66	62	130	86	314	182	485	1780	159	54	38
9	35	51	57	92	203	225	176	700	1730	150	52	40
10	33	377	59	75	214	199	176	837	1710	144	52	42
11	32	217	59	71	137	181	170	955	1560	134	51	52
12	31	95	57	67	120	167	169	1200	1650	127	50	50
13	31	62	61	72	133	177	191	1460	1470	120	49	46
14	31	60	54	75	149	162	230	1610	1370	116	49	43
15	30	63	52	78	117	154	203	1590	1390	110	49	41
16	30	59	58	75	109	179	187	1560	1450	112	48	39
17	30	58	60	74	95	154	172	1660	1460	112	47	39
18	29	58	59	79	99	151	170	1820	829	109	47	39
19	29	54	53	85	101	171	159	1950	574	105	71	39
20	28	74	49	89	102	183	166	1520	438	99	75	39
21	29	55	50	90	95	175	231	898	403	94	73	38
22	29	96	48	90	88	219	291	814	409	91	60	37
23	29	77	41	92	93	178	320	1080	405	87	55	36
24	29	91	40	88	109	191	345	1470	375	84	50	35
25	30	59	41	90	128	754	477	1710	324	79	49	35
26	30	63	43	91	149	388	307	1800	309	77	47	34
27	32	64	42	84	169	278	263	1780	299	75	46	34
28	98	44	46	65	195	226	285	1750	284	76	48	33
29	124	41	40	68	---	204	328	1720	271	73	46	34
30	74	39	43	66	---	214	371	1830	255	71	47	33
31	88	---	42	55	---	254	---	1930	---	69	44	---
TOTAL	1209	2487	1870	2324	3276	7071	7029	37042	34935	3881	1680	1181
MEAN	39.0	82.9	60.3	75.0	117	228	234	1195	1165	125	54.2	39.4
MAX	124	377	245	130	214	754	477	1950	2210	241	75	52
MIN	28	39	39	40	68	151	159	329	255	69	44	33
AC-FT	2400	4930	3710	4610	6500	14030	13940	73470	69290	7700	3330	2340
CAL YR 1974	TOTAL	106763	MEAN 293	MAX 1850	MIN 28	AC-FT 211800						
WTR YR 1975	TOTAL	103985	MEAN 285	MAX 2210	MIN 28	AC-FT 206300						

TULARE LAKE BASIN

11218500 KINGS RIVER BELOW NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°52'29", long 119°08'27", in SW¼NE¼ sec.21, T.12 S., R.26 E., Fresno County, on right bank 0.8 mi (1.3 km) downstream from North Fork, 2.4 mi (3.9 km) southwest of Balch Camp, and 8.5 mi (13.7 km) southeast of Trimmer.

DRAINAGE AREA.--1,342 mi² (3,476 km²).

PERIOD OF RECORD.--October 1951 to current year. Prior to January 1952 monthly discharge only, published in WSP 1735. Published as Kings River below North Fork, October 1951 to September 1965.

GAGE.--Water-stage recorder. Datum of gage is 942.42 ft (287.250 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE (adjusted for change in contents in Wishon and Courtright Reservoirs).--24 years, 2,179 ft³/s (61.71 m³/s), 1,579,000 acre-ft/yr (1,947 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 12,600 ft³/s (357 m³/s) June 1; minimum daily, 239 ft³/s (6.77 m³/s) Sept. 27.

Period of record: Maximum discharge, 85,200 ft³/s (2,410 m³/s) Dec. 23, 1955 (gage height, 23.08 ft or 7.035 m), from rating curve extended above 22,000 ft³/s (623 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 97 ft³/s (2.75 m³/s) Jan. 13, 1963.

Flood of Nov. 19, 1950, reached a stage of 21.6 ft (6.58 m), from floodmarks (discharge, 74,200 ft³/s or 2,100 m³/s).

REMARKS.--Records good. Flow regulated by Courtright and Wishon Reservoirs (see sta 11214550, 11214800).

Records include flow diverted to Kings River powerplant since Mar. 1, 1962. This station measures inflow to Pine Flat Lake. See schematic diagram of Kings River basin.

COOPERATION.--Records of diversion to Kings River powerplant and contents for Courtright and Wishon Reservoirs furnished by Pacific Gas and Electric Co.

REVISIONS (WATER YEARS).--WSP 1930: Drainage area. WRD Calif. 1972: Adjusted data for 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	544	387	241	266	454	827	1420	2230	12600	3440	1310	713
2	448	369	243	287	571	1050	1380	2090	11900	3200	1110	846
3	418	345	439	409	1200	1340	1360	2550	12100	3070	996	796
4	436	290	1280	849	1250	1300	1280	2650	11700	2450	1100	841
5	270	291	786	620	1270	1540	1260	2570	11700	2640	1210	904
6	261	295	415	640	1060	1950	1040	2060	12200	2890	1160	616
7	426	305	414	1080	1090	1800	1300	2160	11700	3160	1200	609
8	522	304	404	1200	564	2240	1380	2870	11000	3150	1120	1080
9	517	286	381	1220	1460	1530	1280	3520	10500	2990	777	971
10	685	609	369	1060	1900	1750	1410	3980	10700	2770	709	898
11	459	445	363	489	1540	1770	1210	4610	10300	3160	1030	998
12	305	325	354	404	1440	1780	932	5790	9590	2520	1100	1050
13	241	290	354	1040	1350	1790	983	7490	8170	2320	1080	609
14	449	288	398	1080	1340	1810	1500	8680	8540	2360	833	484
15	420	291	328	1200	804	1700	1420	8960	9080	2280	1120	932
16	463	281	332	1180	792	1840	1350	8790	9310	2030	692	973
17	512	278	376	1090	1080	1750	1010	8860	8100	1930	925	996
18	486	276	434	385	1210	1730	1100	9550	6210	1890	1130	966
19	242	266	315	394	1240	1790	926	10800	4760	1480	1040	982
20	374	284	307	1200	1260	1710	959	9610	4400	1330	1090	311
21	403	270	305	1170	1400	1520	1460	6240	4140	1800	1160	626
22	401	374	300	1070	1190	1360	1690	5200	4350	1890	1020	654
23	520	317	274	1130	1230	1140	1830	5720	4810	1780	924	652
24	462	323	242	1130	1360	1540	1940	7460	4520	1650	635	586
25	483	297	252	442	1430	3020	2440	9470	3600	1650	911	584
26	417	293	278	421	1480	2650	1840	10400	3420	1370	989	571
27	283	292	279	1130	1520	2030	1440	11000	3750	1250	936	239
28	363	264	302	938	1300	1880	1820	10900	3770	1480	949	281
29	405	248	313	987	---	1350	1860	10600	3710	1590	891	544
30	316	241	321	1000	---	1180	2260	10800	3640	1520	663	526
31	351	---	353	1080	---	1590	---	12100	---	1360	440	---
TOTAL	12882	9424	11752	26591	33785	52257	43080	209710	234270	68400	30250	21838
MEAN	416	314	379	858	1207	1686	1436	6765	7809	2206	976	728
MAX	685	609	1280	1220	1900	3020	2440	12100	12600	3440	1310	1080
MIN	241	241	241	266	454	827	926	2060	3420	1250	440	239
AC-FT	25550	18690	23310	52740	67010	103700	85450	416000	464700	135700	60000	43320
MEAN a	246	277	390	441	751	1,325	1,443	8,436	8,843	1,952	456	280
AC-FT a	15,130	16,470	24,000	27,100	41,730	81,470	85,850	518,700	526,200	120,000	28,030	16,680

CAL YR 1974 TOTAL 963889 MEAN 2641 MAX 12400 MIN 241 AC-FT 1912000 MEAN a 2629 AC-FT a 1903000
WTR YR 1975 TOTAL 754239 MEAN 2066 MAX 12600 MIN 239 AC-FT 1496000 MEAN a 2073 AC-FT a 1501000

a Adjusted for change in contents in Wishon and Courtright Reservoirs.

11218500 KINGS RIVER BELOW NORTH FORK, NEAR TRIMMER, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1955 to July 1963, water years 1964-66 (partial-record station),
October 1967 to September 1969, water years 1970, 1973 to current year (partial-record station).
Water temperatures: October 1966 to current year.

EXTREMES.--Current year:

Water temperatures: Minimum, 1.5°C Jan. 2, 3.

Period of record:

Water temperatures: Maximum (1966-73), 24.0°C July 31, 1971; minimum, freezing point on several days in 1966 and 1967.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Samples collected at gaging station 1 mi (2 km) upstream. Temperature subject to fluctuation because of powerplant operation upstream. Stream temperature affected by backwater from Pine Flat Lake May 13 to July 14.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT. 23...	1215	235	5.4	.8	3.4	24	0	20	2.6	.9	.00	--
MAY 07...	1340	A1760	--	--	--	18	0	15	--	--	.01	.00
28...	1115	9200	1.1	.8	1.2	7	0	6	.0	1.4	--	--

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	DIS- SOLVED BORON (B) (UG/L)
OCT. 23...	.10	.02	43	.06	27.3	1	17	0	.4	--	.2	0
MAY 07...	.10	.09	26	.04	124	--	--	--	--	2	.9	--
28...	--	--	22	.03	546	--	6	0	.2	--	--	0

DATE	TIME	DIS- CHARGE (CFS)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
OCT. 23...	1215	--	235	45	7.3	15.0	10.6
MAY 07...	1340	1760	--	30	7.2	13.0	10.9
28...	1115	--	9200	20	8.3	13.0	11.4

A Mean discharge.

TULARE LAKE BASIN

11218500 KINGS RIVER BELOW NORTH FORK, NEAR TRIMMER, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	14.0	12.0	10.0	9.0	6.0	4.0	2.0	3.5	3.0	8.5	5.5
2	16.5	14.0	12.0	9.0	7.5	6.0	4.0	1.5	4.0	3.5	7.0	5.0
3	17.0	14.5	11.5	9.0	8.0	7.0	4.5	1.5	4.0	3.5	7.0	4.5
4	16.5	14.0	11.5	9.0	8.5	7.5	5.0	2.5	4.0	3.5	6.0	4.5
5	17.5	14.0	12.0	9.0	9.0	6.5	5.0	2.5	5.0	3.5	6.5	5.0
6	17.5	14.5	12.0	9.0	8.5	6.0	4.5	3.5	5.0	3.5	6.0	5.0
7	16.5	13.5	12.0	9.0	8.0	6.5	6.0	4.5	5.5	4.0	5.0	5.0
8	16.5	13.5	12.5	10.0	8.5	6.0	5.0	4.5	7.0	4.5	6.5	5.0
9	17.5	13.5	12.5	10.0	8.0	5.0	5.0	4.5	6.0	4.5	6.0	5.0
10	16.0	13.5	11.5	9.5	7.0	4.5	5.0	3.5	5.5	4.0	5.5	4.5
11	16.0	13.0	12.0	9.0	6.5	4.5	4.5	4.0	5.0	3.5	5.5	4.5
12	16.5	13.0	12.0	9.0	7.5	4.5	5.5	3.0	4.5	3.5	6.5	4.5
13	16.5	13.5	12.0	9.0	7.5	5.5	5.0	3.0	4.5	3.5	5.5	4.5
14	16.0	12.5	11.5	9.5	7.5	5.5	5.5	3.0	4.5	3.0	5.5	4.0
15	15.5	12.5	12.0	9.5	7.5	5.0	5.0	3.5	6.0	3.0	6.0	4.0
16	15.0	13.0	11.0	9.5	7.0	4.5	5.5	3.5	4.0	2.5	6.0	4.0
17	14.5	12.5	11.5	10.0	5.5	4.5	5.5	3.5	4.0	2.0	5.0	3.5
18	14.5	12.5	11.5	10.0	7.0	5.0	6.5	4.0	4.0	2.0	6.0	3.5
19	16.0	13.5	12.0	10.0	7.5	5.5	7.0	4.0	3.5	2.5	7.0	4.5
20	15.5	12.0	12.0	9.5	7.0	5.0	6.0	4.0	4.0	3.0	6.0	5.5
21	15.0	12.0	10.0	9.5	6.0	4.5	6.0	3.5	4.0	3.0	6.5	5.5
22	14.5	12.0	11.5	10.0	5.5	4.0	6.0	4.0	5.0	2.5	7.5	5.5
23	14.0	12.0	12.0	9.5	5.5	3.0	6.0	4.0	5.0	2.5	7.5	5.0
24	14.0	11.5	11.0	8.5	5.0	2.5	6.0	3.5	5.0	3.0	7.5	6.0
25	13.0	11.5	10.5	8.0	4.0	2.0	7.0	4.0	5.5	3.5	8.5	5.5
26	13.5	11.5	10.0	7.5	4.5	2.0	6.5	4.0	5.5	3.5	6.0	4.5
27	14.0	11.0	9.5	7.0	3.5	3.0	5.5	3.5	5.5	4.0	6.0	4.0
28	13.0	11.5	9.5	6.5	5.0	3.5	5.0	3.0	7.0	4.0	6.5	4.0
29	11.5	10.0	9.0	6.0	5.5	3.0	4.5	2.5	---	---	8.0	4.0
30	12.5	9.0	9.0	6.0	4.0	3.0	4.5	2.5	---	---	8.5	4.5
31	10.5	10.5	---	---	4.5	2.5	4.5	2.0	---	---	7.0	5.5
MONTH	17.5	9.0	12.5	6.0	9.0	2.0	7.0	1.5	7.0	2.0	8.5	3.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	5.0	10.5	8.5	---	---	---	---	14.5	13.0	14.5	11.5
2	7.5	5.0	12.0	8.5	---	---	---	---	16.0	13.0	14.0	11.5
3	9.5	5.5	11.0	9.0	---	---	---	---	17.5	14.0	14.5	11.5
4	8.5	6.5	10.0	8.0	---	---	---	---	17.5	13.5	13.5	11.5
5	7.5	6.0	9.0	7.0	---	---	---	---	16.0	12.5	13.5	11.5
6	7.5	5.5	11.5	7.5	---	---	---	---	16.0	12.5	16.0	12.0
7	7.0	5.0	10.5	8.5	---	---	---	---	15.0	12.5	16.5	12.5
8	7.5	5.0	11.0	9.0	---	---	---	---	15.5	13.0	13.5	11.5
9	8.0	5.5	11.0	9.5	---	---	---	---	16.0	13.0	14.0	12.0
10	8.0	5.5	11.5	9.0	---	---	---	---	16.5	13.5	17.0	12.0
11	7.5	6.0	10.5	9.0	---	---	---	---	16.0	12.5	14.5	12.0
12	10.0	6.5	11.5	9.0	---	---	---	---	15.5	12.5	14.0	12.5
13	11.0	7.5	---	---	---	---	---	---	15.5	12.0	17.0	12.5
14	9.5	7.0	---	---	---	---	---	---	15.5	12.0	17.0	14.0
15	8.0	6.0	---	---	---	---	16.0	13.5	13.5	11.5	15.5	13.0
16	7.5	6.5	---	---	---	---	15.0	13.5	17.5	12.5	14.5	12.5
17	8.0	6.0	---	---	---	---	16.0	13.5	14.5	12.0	15.0	13.0
18	8.5	6.5	---	---	---	---	17.0	14.0	13.5	11.5	16.0	13.0
19	10.5	8.0	---	---	---	---	17.5	15.0	13.5	11.5	16.0	13.0
20	12.0	8.5	---	---	---	---	19.0	16.0	14.0	12.0	19.5	14.0
21	10.5	9.0	---	---	---	---	17.0	14.0	14.5	11.5	18.0	14.0
22	11.0	8.5	---	---	---	---	16.0	14.0	14.0	12.0	17.0	13.5
23	10.5	8.5	---	---	---	---	16.0	13.5	14.5	12.0	17.0	13.5
24	10.0	9.0	---	---	---	---	16.0	14.0	17.5	12.5	17.0	13.5
25	9.5	7.5	---	---	---	---	16.0	14.0	15.0	12.0	17.0	13.5
26	9.0	6.5	---	---	---	---	18.0	14.0	15.0	12.0	17.0	13.0
27	11.0	7.0	---	---	---	---	17.5	14.5	15.0	11.5	19.0	15.5
28	10.0	8.0	---	---	---	---	16.0	14.0	13.5	11.5	18.5	13.0
29	10.5	8.5	---	---	---	---	15.5	13.5	14.5	11.5	17.0	13.0
30	11.0	8.5	---	---	---	---	15.5	13.0	14.5	11.5	16.0	14.0
31	---	---	---	---	---	---	14.5	13.0	17.5	12.0	---	---
MONTH	12.0	5.0	---	---	---	---	---	---	17.5	11.5	19.5	11.5

11221000 PINE FLAT LAKE NEAR PIEDRA, CALIF.

LOCATION.--Lat 36°49'58", long 119°19'29", in SE¼NE¼ sec.2, T.13 S., R.24 E., Fresno County, near center of Pine Flat Dam on Kings River, 1.9 mi (3.1 km) upstream from Mill Creek, 3.5 mi (5.6 km) northeast of Piedra, and 16 mi (26 km) northeast of Sanger.

DRAINAGE AREA.--1,545 mi² (4,002 km²).

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1970, published as "Pine Flat Reservoir."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Apr. 8, 1952, nonrecording mercury gage on dam at same datum.

EXTREMES.--Current year: Maximum contents, 890,860 acre-ft (1.10 km³) June 17 (elevation, 932.27 ft or 284.156 m); minimum, 354,380 acre-ft (437 hm³) Sept. 30 (elevation, 811.59 ft or 247.373 m).

Period of record: Maximum contents, 1,009,000 acre-ft (1.24 km³) July 15, 1967, June 8, 9, 1974 (elevation, 952.76 ft or 290.401 m); minimum since gross pool elevation first obtained, 194,342 acre-ft (240 hm³) Sept. 5, 1972 (elevation, 757.18 ft or 230.788 m).

REMARKS.--Reservoir is formed by gravity-type concrete dam; regulation of discharge from reservoir began Dec. 4, 1951. Total capacity, 1,002,000 acre-ft (1.24 km³) between elevations 565.5 ft (172.36 m), bottom of lower tier of river outlets and 951.5 ft (290.02 m), gross pool elevation. No dead storage. Reservoir is used for flood control and conservation storage. Water is released down Kings River for diversion by the Kings River Water Association. Records, including extremes, represent contents at 2400 hours. See schematic diagram of Kings River basin.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

REVISIONS.--WSP 1930: Drainage area.

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

715	104,400	840	457,750
720	113,400	860	538,750
740	154,000	890	673,401
760	201,424	920	824,151
780	255,450	950	992,551
800	316,150	960	1,053,000
820	383,550		

PZF = 942.42 +

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	464840	464918	480421	490057	502883	555645	586215	571690	783367	819053	600713	424078
2	463902	465622	480659	489254	503413	553245	585552	571211	792487	813868	594374	422178
3	462964	466170	481814	488451	504922	551363	584361	571996	802193	808492	587939	419837
4	462223	466601	485207	488571	507087	549356	583171	573392	811546	801931	581674	418021
5	461093	466993	486887	488250	509503	547737	583171	574658	821706	796027	574877	415840
6	460003	467425	487769	488250	511802	547737	582378	574571	831671	790772	567081	412708
7	459265	467817	488531	489133	514024	548248	581718	574440	840788	786210	559300	409515
8	458915	468288	489254	491223	515261	550893	581234	575270	848229	781664	551747	406591
9	458449	468759	489856	493076	518855	551192	580399	577371	855273	776156	543488	402769
10	458255	469820	490499	494246	524292	552090	579960	580223	862620	769751	535211	399507
11	457556	470607	491062	494448	527710	552945	579257	584802	869016	763886	527877	396584
12	456548	471119	491586	494287	530805	553930	577985	590908	874284	756732	520886	393780
13	455502	471552	492149	495256	534076	555388	576802	600489	876979	749415	513860	390128
14	454729	471986	492834	496226	537316	557492	576977	613046	880286	742041	506637	386530
15	453956	472380	493399	497359	539130	558568	577284	626017	884651	734163	500524	383621
16	454690	472775	493923	498535	540735	561110	577590	638762	888917	725940	493843	381006
17	455425	473248	494408	499305	542513	563096	577196	650422	890860	717820	487448	378751
18	456199	473722	494771	498454	544506	564914	577152	662238	889195	709504	481455	376679
19	456393	474156	494771	497117	546715	566387	576802	675968	884430	700607	475263	374963
20	456936	474631	494811	497441	548845	567689	576495	688353	878797	691430	469191	372658
21	457478	475501	494529	498129	551192	568774	576277	693742	872801	683080	463745	371195
22	458060	476332	494246	498900	552988	570950	575839	696735	867319	674827	457944	369595
23	458798	476966	493883	499792	554487	571429	574921	699493	862675	665823	453261	368243
24	459498	477561	493520	500686	555903	572562	573959	705413	857773	656036	445497	366788
25	460198	478037	493278	500442	557320	579828	574527	714929	851910	646543	445115	365268
26	460743	478553	492713	500077	558439	584052	573610	726039	846014	637791	442023	363614
27	461288	478990	492190	501255	559127	585906	572344	736850	841110	630098	438676	361071
28	462613	479427	491787	501906	558051	587143	571865	746802	835901	623229	435456	358571
29	463316	479824	491304	502516	---	586789	571778	755316	830261	617581	432324	356421
30	463706	480102	490942	502924	---	586347	571778	763378	824523	612277	429316	354380
31	464253	---	490580	503372	---	586524	---	772566	---	608682	426281	---
MAX	464840	480102	494811	503372	559127	587143	586215	772566	890860	819053	600713	424078
MIN	453956	464918	480421	488250	502883	547737	571778	571211	783367	608682	426281	354380
(a)	841.67	845.69	848.31	851.47	864.53	871.06	867.70	910.12	920.07	875.58	831.74	811.59
(b)	-1,526	+15,849	+10,478	+12,792	+54,679	+28,473	-14,746	+200,788	+51,957	-217,841	-180,401	-71,901
(c)	1,337	466	223	254	383	674	1,094	2,309	3,551	3,462	2,768	2,168

CAL YR 1974 b -52,569

WTR YR 1975 b -111,399

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Evaporation, in acre-feet.

11221500 KINGS RIVER BELOW PINE FLAT DAM, CALIF.

LOCATION.--Lat 36°49'50", long 119°20'07", in SW¼NW¼ sec.2, T.13 S., R.24 E., Fresno County, on right bank 3,200 ft (975 m) downstream from Pine Flat Dam, and 2.9 mi (4.7 km) northeast of Piedra.

DRAINAGE AREA.--1,545 mi² (4,002 km²).

PERIOD OF RECORD.--October 1953 to current year. Monthly and yearly discharges only and adjusted flow for some periods published in WSP 1735.

GAGE.--Water-stage recorder and concrete control since Sept. 1, 1956. Datum of gage is 556.97 ft (169.764 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1956, at site 0.2 mi (0.3 km) downstream at datum 3.48 ft (1.061 m) lower.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation).--22 years, 2,242 ft³/s (63.49 m³/s), 1,624,000 acre-ft/yr (2.00 km³/yr).

EXTREMES.--Current year: Maximum discharge, 7,450 ft³/s (211 m³/s) June 19 (gage height, 7.72 ft or 2.353 m); minimum daily, 28 ft³/s (0.79 m³/s) Feb. 13.
Period of record: Maximum discharge, 17,100 (484 m³/s) June 3, 4, 8, 9, 1969 (gage height, 10.73 ft or 3.271 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Feb. 26, 27, 1962.

REMARKS.--Records excellent. Flow regulated by Pine Flat Lake 0.6 mi (1.0 km) upstream (see sta 11221000) and Wishon and Courtright Reservoirs (see sta 11214550 and 11214800). See schematic diagram of Kings River basin.

REVISIONS.--WSP 1930: Drainage area. WRD Calif. 1972: Adjusted discharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	931	77	72	542	823	2040	1780	2380	6800	6230	4340	1770
2	910	74	72	683	743	2240	1850	2460	6790	5860	4340	1750
3	850	74	73	715	646	2370	2000	2300	6740	5780	4330	1850
4	803	74	72	727	452	2480	2040	2120	6520	5740	4310	1870
5	793	74	51	793	205	2470	1800	2080	6380	5620	4590	1950
6	793	74	56	755	179	2160	1740	2170	6740	5560	5070	2080
7	772	74	65	618	98	2080	1800	2230	6760	5460	5130	2130
8	670	74	74	582	137	1860	1800	2490	6880	5500	5010	2330
9	680	75	74	511	134	1760	1840	2590	6600	5720	5000	2830
10	720	75	77	494	41	1600	1800	2640	6710	6060	4870	2480
11	745	75	79	502	98	1530	1750	2690	6720	6140	4730	2450
12	755	75	79	516	63	1490	1760	2740	6810	6160	4620	2420
13	755	75	79	524	28	1420	1720	2720	6780	6080	4610	2400
14	755	75	79	587	29	1080	1630	2430	6780	6070	4530	2360
15	755	75	79	614	89	1040	1490	2500	6790	6320	4210	2280
16	143	55	79	614	188	991	1380	2570	6940	6270	4130	2240
17	129	52	142	689	233	994	1360	3080	7100	6120	4200	2040
18	116	51	290	821	252	1020	1310	3690	7130	6120	4220	1960
19	127	48	321	1080	281	1180	1270	4020	7300	6070	4240	1810
20	127	48	344	977	294	1250	1240	3970	7300	6000	4220	1460
21	127	48	422	775	302	1260	1640	3860	7260	6030	3960	1310
22	124	48	444	690	344	1110	2040	4060	7230	6030	4000	1320
23	117	43	445	675	540	1190	2410	4340	7170	6320	3290	1280
24	111	42	444	675	705	1240	2560	4380	7110	6620	3090	1250
25	106	42	444	603	757	1120	2550	4400	6620	6690	2570	1290
26	107	42	474	566	933	1270	2340	4520	6450	5590	2500	1340
27	107	42	558	529	1170	1480	2250	4980	6250	5180	2610	1460
28	111	44	558	577	1850	1530	2190	5460	6390	4900	2520	1480
29	108	72	553	661	---	1600	2120	5890	6540	4470	2440	1520
30	107	72	517	765	---	1620	2330	6360	6590	4240	2180	1500
31	107	---	509	828	---	1670	---	6640	---	4250	1950	---
TOTAL	13561	1869	7625	20688	11614	48145	55790	108760	204180	179200	121810	56210
MEAN	437	62.3	246	667	415	1553	1860	3508	6806	5781	3929	1874
MAX	931	77	558	1080	1850	2480	2560	6640	7300	6690	5130	2830
MIN	106	42	51	494	28	991	1240	2080	6250	4240	1950	1250
AC-FT	26900	3710	15120	41030	23040	95500	110700	215700	405000	355400	241600	111500
MEAN a	265	299	431	463	951	1,665	1,638	8,481	8,773	2,038	520	254
AC-FT a	16,290	17,810	26,530	28,440	52,820	102,400	97,450	521,500	522,000	125,300	32,000	15,130
CAL YR 1974 TOTAL	1018279		MEAN 2790	MAX 10700	MIN 24	AC-FT 2020000	MEAN a 2734	AC-FT a 1979000				
WTR YR 1975 TOTAL	829452		MEAN 2272	MAX 7300	MIN 28	AC-FT 1645000	MEAN a 2152	AC-FT a 1558000				

a Adjusted for change in contents in Wishon and Courtright Reservoirs, Pine Flat Lake, and evaporation from Pine Flat Lake.

11221500 KINGS RIVER BELOW PINE FLAT DAM, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1955 to July 1963, water years 1964-66 (partial-record station).
Water temperatures: October 1969 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 19.0°C Oct. 24, 25, 27; minimum, 8.5°C on many days during February to April.

Period of record:

Water temperatures: Maximum (1970 to current year), 23.0°C Sept. 5, 6, 1972; minimum (1969-73, 1974 to current year), 7.0°C Dec. 23, 24, 26, 1970, Jan. 4, 1971.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	15.0	---	---	15.0	12.0	10.5	10.5	9.5	9.0	9.0	9.0
2	15.5	15.0	---	---	13.5	12.5	10.5	10.0	10.0	9.5	9.0	9.0
3	15.5	15.5	---	---	13.5	12.5	10.5	10.5	10.0	9.5	9.0	9.0
4	15.5	15.5	---	---	13.0	12.5	10.5	10.5	9.5	9.5	9.0	9.0
5	15.5	15.5	---	---	14.0	12.0	10.5	10.5	10.5	9.5	9.0	9.0
6	15.5	15.5	---	---	13.5	11.0	11.0	10.5	10.5	9.5	9.0	9.0
7	15.5	15.5	---	---	12.5	12.0	11.0	11.0	10.5	10.0	9.0	9.0
8	16.0	15.5	---	---	13.5	11.5	11.0	10.5	11.5	10.0	9.0	9.0
9	16.0	16.0	---	---	13.0	11.0	10.5	10.0	10.5	10.0	9.0	9.0
10	16.0	15.5	---	---	12.5	11.5	10.5	10.0	14.5	10.5	9.0	9.0
11	16.0	15.5	---	---	12.0	11.5	10.0	10.0	11.5	10.0	9.0	9.0
12	16.0	15.5	---	---	12.5	11.0	10.0	10.0	11.0	10.0	9.0	9.0
13	16.0	15.5	---	---	12.0	11.5	10.0	10.0	11.0	10.5	9.0	9.0
14	16.0	15.5	---	---	12.5	11.5	10.0	10.0	11.5	9.5	9.0	8.5
15	16.0	15.5	---	---	12.0	11.0	10.0	10.0	10.5	8.5	9.0	8.5
16	17.5	15.5	---	---	12.0	10.5	10.0	9.5	9.5	9.0	9.0	8.5
17	17.5	16.5	---	---	11.0	11.0	10.0	9.5	9.5	8.5	8.5	8.5
18	17.5	16.5	---	---	12.0	11.0	9.5	9.5	9.5	8.5	9.0	8.5
19	17.5	16.5	---	---	12.0	12.0	10.0	9.5	9.0	9.0	9.0	9.0
20	18.0	17.0	---	---	12.0	12.0	10.0	9.5	10.0	9.0	9.0	8.5
21	18.0	17.0	---	---	12.0	12.0	10.0	9.5	9.5	9.0	9.0	8.5
22	17.5	16.5	---	---	12.0	11.5	10.0	9.5	9.5	9.0	9.0	8.5
23	18.5	16.5	---	---	12.0	11.5	10.5	10.0	9.5	9.0	9.0	8.5
24	19.0	16.0	---	---	12.0	11.5	10.5	10.0	9.5	9.0	9.0	9.0
25	19.0	16.5	---	---	11.5	11.5	10.5	10.0	9.0	9.0	9.0	9.0
26	18.0	16.5	---	---	11.5	11.5	10.5	9.5	9.0	9.0	9.0	8.5
27	19.0	17.0	15.0	11.5	11.5	11.5	10.0	9.5	9.0	9.0	9.0	8.5
28	17.5	16.5	15.0	12.0	11.5	11.5	10.0	9.5	9.0	9.0	9.0	8.5
29	16.5	15.5	15.0	12.0	11.5	11.0	10.0	9.5	---	---	9.0	8.5
30	---	---	15.0	12.0	11.5	11.0	9.5	9.0	---	---	9.0	8.5
31	---	---	---	---	11.0	10.5	9.5	9.0	---	---	8.5	8.5
MONTH	19.0	15.0	---	---	15.0	10.5	11.0	9.0	14.5	8.5	9.0	8.5
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.5	9.0	9.0	10.0	10.0	12.0	12.0	13.0	13.0	16.0	16.0
2	8.5	8.5	9.0	9.0	10.0	10.0	12.0	12.0	13.5	13.0	16.0	16.0
3	9.0	8.5	9.0	9.0	10.0	10.0	12.0	12.0	13.5	13.0	16.5	16.0
4	9.0	8.5	0.0	9.0	10.5	10.0	12.0	12.0	13.5	13.0	16.5	16.0
5	9.0	8.5	9.0	9.0	10.5	10.0	12.0	12.0	13.5	13.0	16.5	16.5
6	9.0	8.5	9.0	9.0	10.5	10.0	12.0	12.0	13.5	13.5	16.5	16.5
7	9.0	8.5	9.5	9.0	10.5	10.5	12.5	12.0	14.0	13.5	16.5	16.5
8	8.5	8.5	9.5	9.0	11.0	10.5	12.5	12.0	14.0	13.5	16.5	16.5
9	9.0	8.5	9.5	9.0	15.5	10.5	12.5	12.0	14.0	13.5	17.0	16.5
10	9.0	8.5	9.5	9.0	17.0	15.5	12.5	12.0	14.0	13.5	17.0	16.5
11	8.5	8.5	9.5	9.0	18.0	16.5	12.5	12.0	14.0	13.5	17.0	16.5
12	8.5	8.5	9.5	9.0	17.0	16.5	12.5	12.0	14.0	13.5	17.0	16.5
13	9.0	8.5	9.5	9.0	18.0	17.0	12.5	12.0	14.0	14.0	17.0	16.5
14	8.5	8.5	9.5	9.0	17.5	16.5	12.5	12.0	14.0	14.0	17.0	16.5
15	8.5	8.5	9.5	9.0	17.0	15.5	12.5	12.0	14.0	14.0	17.0	16.5
16	9.0	8.5	9.5	9.0	17.0	15.5	12.5	12.0	14.0	14.0	17.0	16.5
17	9.0	8.5	9.5	9.0	16.5	15.5	12.5	12.5	14.0	14.0	17.5	17.0
18	9.0	8.5	9.5	9.0	16.0	15.0	12.5	12.5	14.5	14.0	17.5	17.0
19	9.0	9.0	9.5	9.0	16.0	15.5	13.0	12.5	14.5	14.0	17.5	17.0
20	9.0	9.0	9.5	9.0	16.0	15.0	13.0	12.5	15.0	14.5	17.5	17.0
21	9.5	9.0	10.0	9.5	16.0	15.5	13.0	12.5	15.0	14.5	17.5	17.0
22	9.0	9.0	9.5	9.5	16.5	16.0	13.0	13.0	15.0	15.0	17.5	17.0
23	9.0	9.0	9.5	9.5	16.5	16.0	13.0	12.5	15.0	15.0	17.5	17.0
24	9.0	9.0	9.5	9.5	16.5	15.5	13.0	12.5	15.0	15.0	17.5	17.5
25	9.0	9.0	9.5	9.5	15.5	15.0	13.0	13.0	15.0	15.0	17.5	17.5
26	9.0	8.5	10.0	9.5	16.0	12.5	13.0	13.0	15.5	15.0	17.5	17.5
27	9.0	8.5	10.0	9.5	12.5	12.0	13.0	13.0	15.5	15.0	17.5	17.0
28	9.0	9.0	10.0	9.5	12.0	12.0	13.0	13.0	15.5	15.0	17.5	17.0
29	9.0	9.0	10.0	9.5	12.0	12.0	13.0	13.0	16.0	15.5	17.5	17.0
30	9.0	9.0	10.0	9.5	12.0	12.0	13.0	13.0	16.0	15.5	17.5	17.0
31	---	---	10.0	10.0	---	---	13.0	13.0	16.0	15.5	---	---
MONTH	9.5	8.5	10.0	9.0	18.0	10.0	13.0	12.0	16.0	13.0	17.5	16.0

TULARE LAKE BASIN

11221700 MILL CREEK NEAR PIEDRA, CALIF.

LOCATION.--Lat 36°49'07", long 119°20'27", in NE¼NE¼ sec.10, T.13 S., R.24 E., Fresno County, on left bank 150 ft (46 m) upstream from road bridge, 0.7 mi (1.1 km) upstream from mouth, and 2.3 mi (3.7 km) east of Piedra.

DRAINAGE AREA.--127 mi² (329 km²).

PERIOD OF RECORD.--October 1957 to current year in reports of Geological Survey. November 1938 to September 1957 in reports of Kings River Water Association.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 550 ft (168 m), from topographic map. Prior to July 14, 1958, at site 150 ft (46 m) upstream at same datum.

AVERAGE DISCHARGE.--18 years, 40.0 ft³/s (1.133 m³/s), 28,980 acre-ft/yr (35.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 725 ft³/s (20.5 m³/s) Mar. 22 (gage height, 4.05 ft or 1.234 m); no flow for several months.

Period of record: Maximum discharge, 11,000 ft³/s (311 m³/s) Dec. 6, 1966 (gage height, 9.53 ft or 2.905 m in gage well, 10.2 ft or 3.11 m, from floodmarks); maximum gage height, 9.65 ft (2.941 m) in gage well, Jan. 19, 1969 (backwater from debris); no flow for several months in most years.

REMARKS.--Records good. Some small diversions above station for irrigation. See schematic diagram of Kings River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	6.0	9.5	12	23	83	44	10	1.2		
2		.99	6.0	9.5	28	22	76	44	9.5	.90		
3		1.9	11	9.5	49	20	70	43	9.5	.65		
4		1.6	72	8.8	41	20	66	44	8.2	.45		
5		1.9	61	8.8	43	23	154	44	7.0	.45		
6		1.9	25	13	32	48	133	44	6.0	.45		
7		1.6	17	30	27	50	98	43	5.5	.25		
8		1.9	14	41	27	180	85	41	5.5	.10		
9		2.2	12	60	67	133	80	41	5.5	.10		
10		2.5	12	32	190	133	78	38	5.0	.05		
11		2.5	11	25	98	103	76	33	4.6	0		
12		2.5	10	20	66	96	70	33	4.2	0		
13		2.8	9.5	17	66	98	68	32	4.2	0		
14		2.8	9.5	16	84	149	70	32	4.2	0		
15		2.8	9.5	15	70	106	76	32	3.8	0		
16		3.1	9.5	14	54	145	68	30	3.0	0		
17		3.1	9.5	13	50	129	64	30	3.0	0		
18		3.4	9.5	12	43	106	62	29	3.0	0		
19		3.4	8.8	12	36	94	58	26	3.4	0		
20		3.8	8.8	12	38	87	54	25	3.8	0		
21		5.0	8.8	12	38	80	52	26	4.2	0		
22		28	8.8	12	33	367	50	25	4.2	0		
23		14	8.8	11	30	163	50	22	3.4	0		
24		8.8	8.8	11	29	116	48	20	3.0	0		
25		7.6	8.8	11	27	392	68	17	3.0	0		
26		6.4	8.8	11	26	300	64	16	3.0	0		
27		6.4	8.8	10	23	163	56	15	2.6	0		
28		6.4	12	10	23	126	52	13	2.6	0		
29		5.9	12	10	---	106	46	12	2.0	0		
30		5.9	11	9.5	---	96	44	12	1.6	0		
31		---	10	9.5	---	89	---	11	---	0		---
TOTAL	0	141.09	438.2	495.1	1350	3763	2119	917	138.5	4.60	0	0
MEAN	0	4.70	14.1	16.0	48.2	121	70.6	29.6	4.62	.15	0	0
MAX	0	28	72	60	190	392	154	44	10	1.2	0	0
MIN	0	0	6.0	8.8	12	20	44	11	1.6	0	0	0
AC-FT	0	280	869	982	2680	7460	4200	1820	275	9.1	0	0
CAL YR 1974	TOTAL	15456.89	MEAN 42.3	MAX 1810	MIN 0	AC-FT 30660						
WTR YR 1975	TOTAL	9366.49	MEAN 25.7	MAX 392	MIN 0	AC-FT 18580						

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-10	1400	3.69	319	3-25	1100	3.94	632
3-8	1300	3.43	263	4-5	1400	3.44	269
3-22	0730	4.05	725				

11224500 LOS GATOS CREEK ABOVE NUNEZ CANYON, NEAR COALINGA, CALIF.

LOCATION.--Lat 36°12'53", long 120°28'11", in NW¼SE¼ sec.5, T.20 S., R.14 E., Fresno County, on right bank 50 ft (15 m) downstream from highway bridge, 1.1 mi (1.8 km) upstream from Nunez Canyon, 3.0 mi (4.8 km) downstream from White Creek, and 8.1 mi (13.0 km) northwest of Coalinga.

DRAINAGE AREA.--95.8 mi² (248.1 km²).

PERIOD OF RECORD.--May 1945 to current year. Prior to October 1949 monthly discharge only, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 1,067.2 ft (325.28 m) above mean sea level. Prior to Aug. 2, 1959, at site 100 ft (30 m) downstream at same datum.

AVERAGE DISCHARGE.--30 years, 4.12 ft³/s (0.117 m³/s), 2,980 acre-ft/yr (3.67 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 378 ft³/s (10.7 m³/s) Feb. 2 (gage height, 6.51 ft or 1.984 m), from rating curve extended above 149 ft³/s (4.22 m³/s); no flow for several months.
Period of record (1949 to current year): Maximum discharge, 4,360 ft³/s (123 m³/s) Feb. 24, 1969 (gage height, 10.34 ft or 3.152 m in gage well, 11.30 ft or 3.444 m, from floodmarks), from rating curve extended above 800 ft³/s (22 m³/s) on basis of slope-area measurement at gage height 10.34 ft (3.152 m); no flow for several months in each year.

REMARKS.--Records good except those for discharges above 10 ft³/s (0.283 m³/s), which are fair. Minor diversion for irrigation and stock ponds.

REVISIONS (WATER YEARS).--WSP 1215: 1950. WSP 1735: 1952(M), 1956(M). WSP 1930: Drainage area.
WRD Calif. 1972: 1970(P), 1971(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.70	.22	12	1.0	2.3	4.9				
2		0	1.0	.16	105	1.0	2.0	4.5				
3		0	29	.16	18	.85	2.0	3.3				
4		0	24	.16	13	.85	1.8	3.3				
5		0	4.1	.16	12	1.6	8.4	3.3				
6		0	2.0	.16	4.9	6.1	7.9	3.7				
7		0	1.2	.16	2.9	69	5.7	2.9				
8		0	.85	.16	2.3	65	5.7	2.6				
9		0	.70	.16	36	33	5.7	1.8				
10		0	.70	.16	23	16	4.1	1.4				
11		0	.45	.16	12	12	4.9	1.2				
12		0	.45	.22	7.0	7.4	5.3	1.2				
13		0	.45	.22	10	6.6	2.9	.70				
14		0	.36	.22	13	20	2.6	.55				
15		0	.36	.22	7.9	11	2.9	.55				
16		0	.36	.22	6.6	7.4	3.3	.55				
17		0	.36	.22	5.7	6.6	3.1	.45				
18		0	.45	.22	5.3	4.9	2.6	.10				
19		0	.45	.22	4.9	3.7	2.3	.03				
20		0	.45	.22	4.1	3.3	2.0	.16				
21		0	.45	.22	3.7	3.7	1.8	.28				
22		0	.28	.22	3.3	21	1.8	.22				
23		0	.28	.22	2.9	7.9	1.6	.16				
24		0	.22	.22	2.6	4.9	1.8	.02				
25		0	.16	.22	2.3	4.1	2.3	.01				
26		0	.16	.22	1.8	3.3	2.6	0				
27		0	.10	.22	1.4	2.9	2.0	0				
28		0	.22	.22	1.4	2.6	1.8	0				
29		.03	.22	.22	---	2.3	1.6	0				
30		.45	.22	.22	---	2.3	1.6	0				
31		---	.22	.22	---	2.6	---	0	---			---
TOTAL		.48	70.92	6.22	325.0	334.90	96.4	37.88	0	0	0	0
MEAN		.016	2.29	.20	11.6	10.8	3.21	1.22	0	0	0	0
MAX		.45	29	.22	105	69	8.4	4.9	0	0	0	0
MIN		0	.10	.16	1.4	.85	1.6	0	0	0	0	0
AC-FT		1.0	141	12	645	664	191	75	0	0	0	0
CAL YR 1974	TOTAL	1293.35	MEAN	3.54	MAX	128	MIN	0	AC-FT	2570		
WTR YR 1975	TOTAL	871.80	MEAN	2.39	MAX	105	MIN	0	AC-FT	1730		

Peak discharge (base, 40 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
12-3	2130	5.53	144	2-9	0700	5.23	86
2-2	0700	6.51	378	3-7	1900	6.33	332

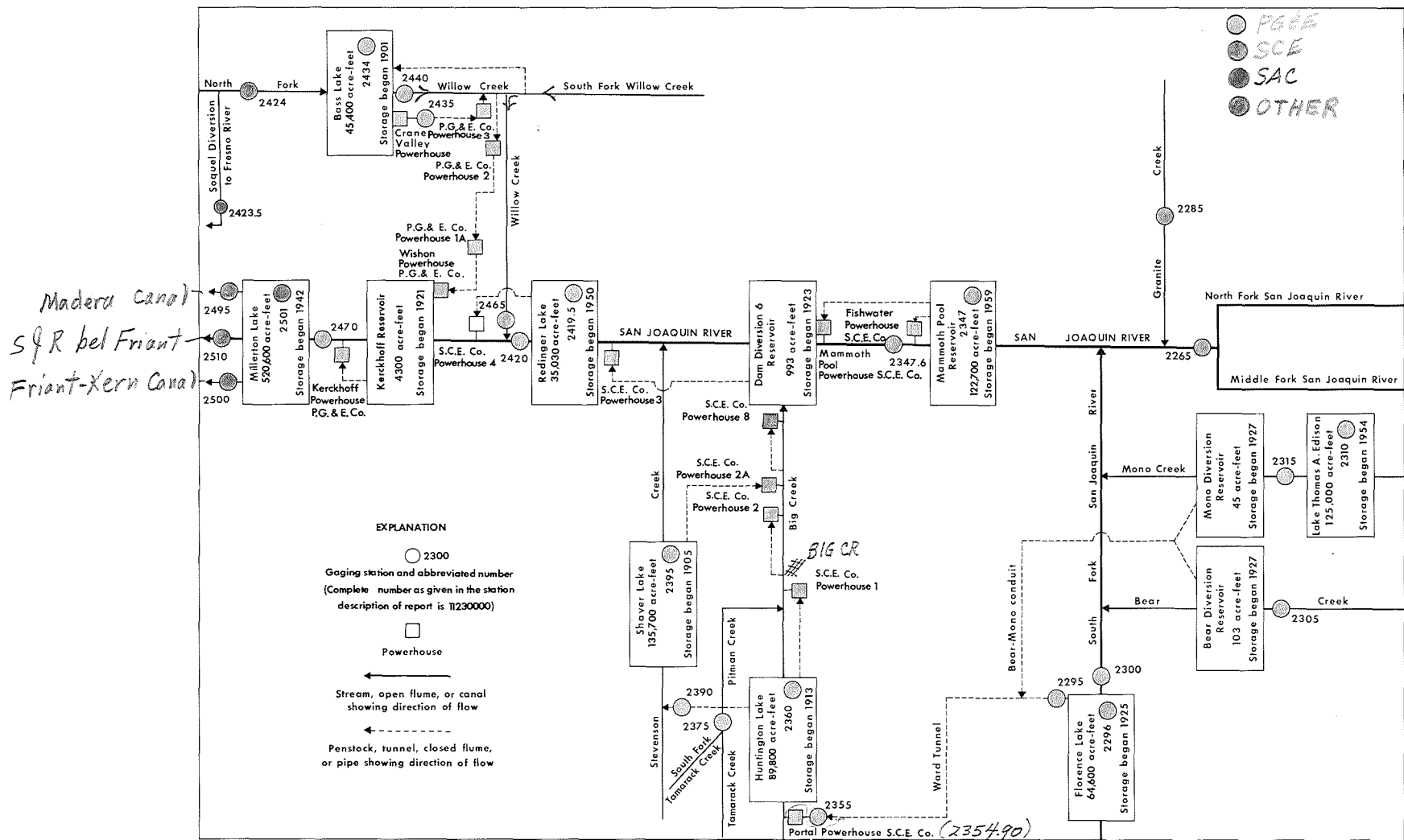


FIGURE 8.-- Schematic diagram showing diversions and storage in San Joaquin River basin.

11226500 SAN JOAQUIN RIVER AT MILLER CROSSING, CALIF.

LOCATION.--Lat 37°30'38", long 119°11'47", in SE¼NE¼ sec.11, T.5 S., R.25 E., Madera County, Sierra National Forest, on right bank at Miller Crossing, 2.4 mi (3.9 km) downstream from North Fork San Joaquin River, 4.6 mi (7.4 km) east of Clover Meadow Ranger Station, and 23 mi (37 km) northeast of town of Bass Lake.

DRAINAGE AREA.--249 mi² (645 km²).

PERIOD OF RECORD.--October 1921 to September 1928, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as Middle Fork San Joaquin River at Miller Bridge.

GAGE.--Water-stage recorder. Altitude of gage is 4,570 ft (1,393 m), from topographic map. Prior to Mar. 24, 1922, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--31 years, 601 ft³/s (17.02 m³/s), 435,400 acre-ft/yr (537 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,260 ft³/s (177 m³/s) June 1 (gage height, 17.35 ft or 5.288 m); minimum daily, 54 ft³/s (1.53 m³/s) Oct. 24-26.
Period of record: Maximum discharge, 16,600 ft³/s (470 m³/s) Dec. 23, 1955 (gage height, 21.28 ft or 6.486 m), from rating curve extended above 5,200 ft³/s (147 m³/s) on basis of contracted-opening measurement of maximum flow; minimum, 19 ft³/s (0.54 m³/s) Nov. 17, 1961.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and six discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	92	68	103	95	290	301	518	4760	1570	317	128
2	70	85	70	106	102	337	267	649	4560	1450	303	119
3	83	82	96	101	140	295	276	815	4280	1370	295	115
4	78	79	124	100	147	278	267	771	3930	1380	290	110
5	75	78	115	96	174	281	245	533	4040	1580	288	107
6	71	77	144	125	188	320	238	491	4400	1670	283	107
7	70	86	148	120	188	303	245	590	4330	1580	258	106
8	79	78	133	168	220	285	236	898	3930	1500	241	107
9	78	75	125	120	269	303	236	1170	3720	1470	247	166
10	74	74	116	117	204	271	241	1350	3650	1580	234	241
11	70	82	120	115	191	258	243	1530	3730	1530	230	312
12	66	83	116	114	184	245	243	1860	3680	1430	226	224
13	63	83	113	117	201	226	262	2250	3690	1290	226	184
14	61	84	102	119	175	224	355	2760	3900	1100	214	164
15	59	79	114	119	167	232	309	2770	4060	935	206	148
16	58	79	116	114	157	226	269	2820	3610	771	199	138
17	57	74	113	119	148	220	249	3200	2880	810	191	137
18	56	71	100	132	145	208	238	3480	2080	815	188	145
19	55	66	97	129	148	226	265	3700	1660	781	323	145
20	55	68	96	137	153	247	334	2720	1540	725	295	142
21	55	83	94	140	130	249	437	1710	1530	702	276	133
22	55	69	85	145	138	232	518	1500	1840	680	243	125
23	55	88	66	148	161	220	537	1890	1990	645	197	116
24	54	95	84	157	184	247	553	2780	1750	607	179	113
25	54	92	91	169	186	564	616	3370	1330	590	172	106
26	54	84	82	161	197	465	431	3550	1370	569	170	103
27	55	83	79	129	224	323	382	3530	1530	545	170	100
28	95	71	82	101	249	283	460	3500	1580	545	159	95
29	83	70	79	109	---	256	545	3280	1650	499	144	93
30	86	70	82	99	---	276	565	3420	1610	437	136	90
31	97	---	87	93	---	340	---	4110	---	358	132	---
TOTAL	2091	2380	3137	3822	4865	8730	10363	67515	88610	31514	7032	4119
MEAN	67.5	79.3	101	123	174	282	345	2178	2954	1017	227	137
MAX	97	95	148	169	269	564	616	4110	4760	1670	323	312
MIN	54	66	66	93	95	208	236	491	1330	358	132	90
AC-FT	4150	4720	6220	7580	9650	17320	20560	133900	175800	62510	13950	8170
CAL YR 1974	TOTAL	259648	MEAN 711	MAX 4150	MIN 54	AC-FT 515000						
WTR YR 1975	TOTAL	234178	MEAN 642	MAX 4760	MIN 54	AC-FT 464500						

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-18	2100	16.42	4,730	6-14	2130	16.53	4,900
6-1	2030	17.35	6,260	6-22	2300	14.46	2,280
6-6	2200	16.94	5,570				

SAN JOAQUIN RIVER BASIN

11228500 GRANITE CREEK NEAR CATTLE MOUNTAIN, CALIF.

LOCATION.--Lat 37°31'36", long 119°15'28", in NE¼ sec.5, T.5 S., R.25 E., Madera County, Sierra National Forest, on right bank 0.7 mi (1.1 km) downstream from confluence of East and West Forks of Granite Creek, 1.6 mi (2.6 km) northwest of Cattle Mountain, and 21 mi (34 km) northeast of town of Bass Lake.

DRAINAGE AREA.--47.8 mi² (123.8 km²).

PERIOD OF RECORD.--October 1921 to September 1928, May 1952 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 6,800 ft (2,073 m), from topographic map. Prior to May 14, 1922, nonrecording gage at same site at different datum.

AVERAGE DISCHARGE.--7 years (1921-28), 110 ft³/s (3.115 m³/s), 79,640 acre-ft/yr (98.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge recorded, 323 ft³/s (9.15 m³/s) May 28 (gage height, 6.54 ft or 1.993 m); minimum daily, 0.54 ft³/s (0.015 m³/s) Oct. 1.

Period of record: Maximum discharge recorded, 3,140 ft³/s (88.9 m³/s) Dec. 23, 1964 (gage height, 9.49 ft or 2.893 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s); no flow at times in 1924, 1926.

REMARKS.--Records poor. Some regulation by manipulation of stoplogs in controls for fishwater purposes; no diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and eight discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	4.2	7.0	8.7	10		---	149	224	212	13	3.3
2	.65	4.2	10	8.7	22		---	181	224	207	10	2.7
3	.91	3.3	3.3	8.7	34		---	239	231	190	9.1	2.5
4	1.1	3.3	3.0	8.7	57		---	219	226	188	8.7	2.3
5	1.1	3.0	17	8.7	44		---	156	224	193	6.9	2.3
6	1.1	3.3	90	8.7	33		---	149	221	186	6.4	2.0
7	1.2	3.0	75	11	33		---	168	219	173	5.6	2.0
8	3.0	3.9	68	12	22		---	244	221	166	4.9	2.3
9	3.6	3.9	60	14	19		---	242	221	158	2.7	3.0
10	2.3	4.5	54	14	26		---	239	219	154	2.3	11
11	1.6	4.9	47	13	32		---	237	219	147	2.3	34
12	1.4	4.5	42	13	29		---	237	219	131	2.3	19
13	1.2	4.2	36	16	20		---	237	216	108	1.6	12
14	1.1	4.5	30	13	20		---	229	214	79	1.4	8.2
15	.91	4.9	27	13	20		---	242	212	59	1.2	6.9
16	.91	4.9	38	13	20		43	239	209	46	1.2	4.9
17	1.1	4.9	50	12	17		45	237	209	48	.91	4.5
18	1.1	3.3	34	12	16		50	239	209	49	.91	5.6
19	1.1	3.0	27	12	17		74	237	212	44	13	4.9
20	1.1	3.3	25	12	22		86	239	221	38	20	4.2
21	1.1	3.6	22	12	22		126	244	252	32	33	3.9
22	1.1	5.6	19	12	20		152	244	269	32	23	3.6
23	1.1	7.0	14	11	---		143	244	274	28	15	3.0
24	1.1	6.4	13	11	---		145	239	277	26	10	2.5
25	1.1	5.8	11	11	---		133	229	255	24	8.7	2.3
26	1.1	5.2	11	10	---		122	231	252	22	6.9	6.8
27	1.1	4.8	10	9.0	---		102	234	244	26	5.6	14
28	3.6	4.2	11	7.5	---		119	234	237	24	4.9	14
29	4.2	5.0	11	7.0	---		164	237	231	22	4.5	14
30	3.3	6.0	11	7.2	---		195	231	219	19	4.2	13
31	3.6	---	9.6	7.6	---		---	226	---	15	3.6	---
TOTAL	49.42	132.6	885.9	337.5	---		---	6952	6880	2846	233.82	214.7
MEAN	1.59	4.42	28.6	10.9	---		---	224	229	91.8	7.54	7.16
MAX	4.2	7.0	90	16	---		---	244	277	212	33	34
MIN	.54	3.0	3.0	7.0	---		---	149	209	15	.91	2.0
AC-FT	98	263	1760	669	---		---	13790	13650	5650	464	426

11229500 WARD TUNNEL INTAKE AT FLORENCE LAKE, CALIF.

LOCATION.--Lat 37°16'27", long 118°58'23", in NW¼ sec.1, T.8 S., R.27 E., Fresno County, Sierra National Forest, in gatehouse at entrance to tunnel.

PERIOD OF RECORD.--April 1925 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as Florence Lake tunnel at intake 1925-36 and as Ward tunnel at intake 1937-60.

GAGE.--Water-stage recorder, concrete control, and Venturi meter. Datum of gage is 7,213.89 ft (2,198.794 m) above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--50 years, 281 ft³/s (7.958 m³/s), 203,600 acre-ft/yr (251 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,990 ft³/s (56.4 m³/s) Apr. 30, 1926; no flow at times.

REMARKS.--Records good. Ward tunnel diverts from Florence Lake, a reservoir on South Fork San Joaquin River, to Huntington Lake via Portal powerhouse and further used in Big Creek powerplants. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and rating table for Venturi meter furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1515: 1931. WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	588	433	23	31	30	117	111	189	1050	568	528	168
2	595	407	23	30	33	107	103	205	927	617	528	169
3	616	361	30	29	38	91	109	240	277	617	525	169
4	653	305	40	28	48	89	106	265	291	617	523	168
5	575	237	36	28	61	87	88	238	301	620	519	168
6	431	116	44	29	68	88	96	208	257	474	517	168
7	318	62	60	31	69	87	104	221	229	211	513	168
8	268	41	64	36	65	88	99	295	354	477	511	168
9	267	37	56	37	64	92	92	395	697	653	510	168
10	278	35	52	41	63	91	91	471	984	655	508	168
11	289	35	51	45	70	87	85	438	1070	566	504	248
12	287	33	50	46	87	83	85	566	1280	390	353	521
13	284	32	45	44	83	84	95	873	1500	391	249	517
14	280	32	40	44	75	81	107	924	1120	391	249	513
15	287	29	41	44	72	85	100	1010	575	393	249	521
16	295	28	40	43	68	87	90	1050	1050	391	249	546
17	292	28	38	41	62	81	84	1080	1200	393	248	554
18	289	25	36	42	61	87	83	1090	1110	391	248	550
19	286	24	35	44	59	92	89	1100	1280	391	248	546
20	281	23	33	44	56	98	107	1070	1280	391	248	544
21	278	24	32	44	53	91	136	1170	1340	391	248	536
22	275	24	28	46	52	78	168	1220	1300	390	247	534
23	272	23	23	48	55	94	176	1110	1110	390	247	614
24	295	29	22	48	62	115	197	1110	1150	390	247	643
25	269	30	25	52	72	145	192	1030	1430	390	245	659
26	259	27	26	51	39	117	151	1080	1380	388	212	656
27	255	26	27	45	111	111	136	1090	1360	390	169	648
28	251	24	27	35	109	102	159	1070	1020	388	170	643
29	247	20	27	32	---	101	193	1130	480	433	170	638
30	319	21	28	33	---	112	210	1080	380	500	169	491
31	424	---	30	29	---	132	---	1060	---	534	169	---
TOTAL	10603	2571	1132	1220	1785	3000	3642	24078	27782	14181	10320	12804
MEAN	342	85.7	36.5	39.4	63.8	96.8	121	777	926	457	333	427
MAX	653	433	64	52	111	145	210	1220	1500	655	528	659
MIN	247	20	22	28	30	78	83	189	229	211	169	168
AC-FT	21030	5100	2250	2420	3540	5950	7220	47760	55110	28130	20470	25400
CAL YR 1974 TOTAL	148960				1470	MIN 20	AC-FT 295500					
WTR YR 1975 TOTAL	113118				1500	MIN 20	AC-FT 224400					

SAN JOAQUIN RIVER BASIN

11229600 FLORENCE LAKE NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°16'26", long 118°58'23", in NW¼ sec.1, T.8 S., R.27 E., Fresno County, Sierra National Forest, in gatehouse of Ward tunnel intake near dam on South Fork San Joaquin River, 16 mi (26 km) northeast of town of Big Creek.

DRAINAGE AREA.--171 mi² (443 km²).

PERIOD OF RECORD.--November 1925 to current year. Prior to October 1931, published in WSP 721.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 63,700 acre-ft (78.5 hm³) July 20 (elevation, 7,326.72 ft or 2,233.184 m); minimum, 253 acre-ft (312,000 m³) Nov. 30 (elevation, 7,224.65 ft or 2,202.073 m).
Period of record: Maximum contents, 66,000 acre-ft (81.4 hm³) July 3, 1932 (elevation, 7,329.14 ft or 2,233.922 m); minimum occurred during period of no record, Oct. 2-4, 1926, or Nov. 30 to Dec. 2, 1927.
NOTE.--Prior to 1960, maximum and minimum daily contents were published. Maximum and minimum daily contents (1926-39) were summarized in WSP 881.

REMARKS.--Lake is formed by multiple-arch concrete dam; storage began in April 1925. Usable capacity, 64,400 acre-ft (79.4 hm³) between elevations 7,220.9 ft (2,200.93 m), throat of Venturi tube in Ward Tunnel intake and 7,327.5 ft (2,233.42 m), top of spillway drum gates, above mean sea level. Additional storage of 168 acre-ft (207,000 m³) is not available for diversion. Water is diverted through Ward tunnel to Huntington Lake via Portal powerhouse and used for further power development in Big Creek powerplants. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

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

7,220.9	0	7,235	1,770	7,260	11,600	7,290	32,000
7,222	63	7,240	2,980	7,265	14,600	7,300	39,900
7,224	201	7,245	4,670	7,270	17,800	7,310	48,300
7,227	495	7,250	6,650	7,275	21,100	7,320	57,300
7,230	887	7,255	8,950	7,280	24,600	7,330	66,800

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22470	2790	261	271	286	374	370	454	17334	55189	60139	46404
2	21379	2055	263	271	286	354	366	502	20350	55464	59424	46122
3	20262	1419	279	271	286	348	366	612	24411	55630	58692	45847
4	19094	395	281	271	289	349	358	606	28317	55824	57954	45574
5	18102	496	279	271	291	347	341	507	32510	56321	57210	45293
6	17288	319	299	271	294	347	356	479	37208	57182	56451	45011
7	16683	291	312	271	298	346	352	554	41873	58543	55676	44739
8	16204	279	311	279	306	354	352	692	45942	59301	54904	44511
9	15709	276	304	279	309	354	352	790	49372	59706	54025	44300
10	15194	275	300	279	315	352	352	868	52140	60092	53333	44113
11	14642	274	299	279	335	347	352	1153	54116	60744	52545	43844
12	14104	273	296	282	343	347	352	1537	55409	61672	52032	43047
13	13567	271	290	282	333	342	352	1725	56156	62424	51727	42197
14	13028	272	285	283	332	347	352	2118	57815	62929	51396	41344
15	12483	267	284	284	327	347	352	2330	61141	63226	51074	40464
16	11913	267	283	284	322	346	350	2476	62767	63360	50727	39526
17	11358	266	280	284	320	347	349	2747	62862	63475	50380	38700
18	10807	264	278	285	313	346	348	3578	63101	63571	50051	37896
19	10263	263	276	288	311	348	352	4915	62281	63628	49795	37049
20	9725	263	275	292	309	349	371	5369	61188	63647	49566	36146
21	9187	265	273	295	305	347	416	4425	59969	63618	49354	35233
22	8652	263	268	296	306	346	434	3128	59188	63551	49116	34326
23	8131	267	262	298	311	357	452	2491	58964	63446	48818	33387
24	7556	272	262	300	325	376	459	2899	58262	63312	48485	32341
25	7038	271	266	303	332	398	428	4321	56534	63139	48154	31252
26	6539	267	266	303	438	385	393	6036	54996	62919	47866	30135
27	6040	267	266	298	381	376	397	7336	53723	62681	47632	29036
28	5598	262	267	291	371	371	438	8930	53070	62405	47414	27941
29	5154	259	267	288	---	370	474	10215	53659	62043	47181	26858
30	4530	259	269	287	---	374	457	11838	54619	61502	46930	26023
31	3672	---	271	286	---	378	---	14245	---	60838	46662	---
MAX	22470	2790	312	303	438	398	474	14245	63101	63647	60139	46404
MIN	3672	259	261	271	286	342	341	454	17334	55189	46662	26023
(a)	7,242.15	7,224.73	7,224.87	7,225.05	7,225.91	7,225.98	7,226.67	7,264.45	7,317.08	7,323.76	7,308.13	7,282.00
(b)	-19,900	-3,410	+12	+15	+85	+7	+79	+13,800	+40,400	+6,220	-14,200	-20,600

CAL YR 1974 b -98
WTR YR 1975 b +2,480

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11230000 SOUTH FORK SAN JOAQUIN RIVER NEAR FLORENCE LAKE, CALIF.

LOCATION.--Lat 37°16'24", long 118°57'54", in SE¼ sec.36, T.7 S., R.27 E., Fresno County, Sierra National Forest, on left bank 0.1 mi (0.2 km) downstream from spillway of Florence Lake Dam, 6 mi (10 km) upstream from Bear Creek, and 14.7 mi (23.7 km) east of Big Creek.

DRAINAGE AREA.--171 mi² (443 km²).

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1925, published as "near Lake Florence."

GAGE.--Water-stage recorder, Parshall flume, and concrete control. Altitude of gage is 7,200 ft (2,195 m), from topographic map.

AVERAGE DISCHARGE (combined flow of South Fork San Joaquin River and Ward tunnel at intake).--54 years, 318 ft³/s (9.006 m³/s), 230,400 acre-ft/yr (284 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,140 ft³/s (32.3 m³/s) June 16 (gage height, 12.21 ft or 3.722 m); minimum daily, 0.96 ft³/s (0.027 m³/s) June 10.
Period of record: Maximum discharge, 4,320 ft³/s (122 m³/s) June 6, 1940 (gage height, 15.38 ft or 4.688 m); no flow at times.

REMARKS.--Records fair. Flow regulated by Florence Lake 0.1 mi (0.2 km) upstream beginning in 1925 (see sta 11229600) and by diversion into Ward tunnel (see sta 11229500). See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and five discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	5.2	4.0	3.9	4.0	3.9	3.9	4.4	5.9	10	10	9.3
2	6.8	4.8	4.0	3.9	3.9	3.9	3.9	4.4	6.1	10	10	9.1
3	6.8	4.6	4.5	3.9	3.9	3.9	3.8	4.5	5.2	10	10	9.1
4	6.8	4.5	4.5	3.9	3.9	4.3	3.8	4.3	4.6	10	10	9.1
5	6.7	4.4	4.2	3.9	4.0	3.9	3.8	4.2	6.2	10	9.9	9.1
6	6.7	4.2	4.1	3.9	4.1	3.8	3.8	4.2	8.1	10	9.9	9.1
7	6.6	4.2	4.1	3.9	4.1	3.8	3.8	4.3	8.3	10	9.7	9.1
8	6.6	4.2	4.1	3.9	4.1	3.8	3.8	4.3	8.6	10	9.7	9.5
9	6.6	4.2	4.0	4.0	4.1	3.8	3.9	4.3	8.9	10	9.6	9.1
10	6.7	4.2	4.0	4.0	4.0	3.8	3.9	4.3	.96	10	9.9	9.1
11	6.7	4.2	3.9	4.0	4.1	3.8	3.9	4.3	9.9	10	9.6	7.3
12	6.7	4.2	3.9	4.0	4.1	3.8	3.9	4.4	10	10	9.5	6.8
13	6.6	4.2	3.9	4.0	4.1	3.8	3.9	4.4	10	10	9.5	6.6
14	6.6	4.2	3.9	4.0	4.1	3.8	3.9	4.5	10	10	9.4	6.5
15	6.5	4.2	4.0	3.9	4.0	3.8	3.9	4.5	10	10	9.4	6.5
16	6.4	4.2	4.0	3.9	4.0	3.8	3.9	4.5	396	10	9.4	6.5
17	6.6	4.2	4.0	3.9	3.9	3.9	3.9	4.6	510	10	9.3	6.5
18	6.7	4.2	4.0	3.9	4.0	3.9	3.9	4.7	11	10	9.4	6.5
19	6.7	4.2	4.0	3.9	4.0	3.9	4.1	4.8	11	10	9.5	6.4
20	6.7	4.2	4.0	3.9	4.0	3.9	4.2	4.9	11	10	9.5	6.4
21	6.6	4.2	4.0	3.9	4.0	3.9	4.2	4.9	10	10	9.4	6.3
22	6.5	4.2	3.9	3.9	4.0	3.8	4.3	4.8	10	10	9.3	6.3
23	6.5	4.1	3.9	3.9	4.0	3.8	4.3	4.7	10	10	9.3	6.3
24	6.4	4.0	3.9	4.0	4.0	4.1	4.3	4.6	10	10	9.3	6.2
25	6.4	4.0	3.9	4.0	4.1	4.2	4.2	4.8	10	10	9.3	6.2
26	6.3	4.0	3.9	4.0	4.0	4.1	4.1	5.0	10	10	9.3	6.1
27	6.3	4.0	3.9	4.0	4.0	3.9	4.2	5.1	10	10	9.1	6.0
28	6.6	4.0	3.9	4.0	4.0	3.9	4.2	5.2	9.6	10	9.1	6.0
29	6.3	4.0	3.9	4.0	---	3.9	4.3	5.5	9.6	10	9.1	5.9
30	6.2	4.0	3.9	4.0	---	4.0	4.3	5.6	10	10	9.3	5.9
31	6.1	---	3.9	4.0	---	3.9	---	5.8	---	10	9.3	---
TOTAL	203.4	127.0	124.1	122.3	112.5	120.8	120.3	144.8	1150.96	310	295.0	218.8
MEAN	6.56	4.23	4.00	3.95	4.02	3.90	4.01	4.67	38.4	10.0	9.52	7.29
MAX	6.8	5.2	4.5	4.0	4.1	4.3	4.3	5.8	510	10	10	9.5
MIN	6.1	4.0	3.9	3.9	3.9	3.8	3.8	4.2	.96	10	9.1	5.9
AC-FT	403	252	246	243	223	240	239	287	2280	615	585	434
CAL YR 1974	TOTAL	4252.20	MEAN	11.6	MAX	623	MIN	3.9	AC-FT	8430		
WTR YR 1975	TOTAL	3049.96	MEAN	8.36	MAX	510	MIN	.96	AC-FT	6050		

SAN JOAQUIN RIVER BASIN

11230500 BEAR CREEK NEAR LAKE THOMAS A. EDISON, CALIF.

LOCATION.--Lat 37°20'18", long 118°58'23", in SW¼ sec.12, T.7 S., R.27 E. (unsurveyed), Fresno County, Sierra National Forest, on right bank 0.2 mi (0.3 km) upstream from diversion dam, 1.7 mi (2.7 km) upstream from mouth, 2.1 mi (3.4 km) south of Lake Thomas A. Edison, and 2.4 mi (3.9 km) northeast of Mono Hot Springs.

DRAINAGE AREA.--52.5 mi² (136.0 km²).

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as "near Vermilion Valley."

GAGE.--Water-stage recorder. Datum of gage is 7,366.94 ft (2,245.443 m) above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--54 years, 89.8 ft³/s (2.543 m³/s), 65,060 acre-ft/yr (80.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 777 ft³/s (22.0 m³/s) June 6 (gage height, 5.50 ft or 1.676 m); minimum daily, 7.7 ft³/s (0.22 m³/s) Oct. 25, 26, Nov. 19, 22.
Period of record: Maximum discharge, 1,800 ft³/s (51.0 m³/s) Sept. 5, 1972 (gage height, 6.98 ft or 2.128 m); maximum gage height, 7.12 ft (2.170 m) July 26, 1956; minimum discharge recorded, 1.2 ft³/s (0.034 m³/s) Sept. 29 to Oct. 5, 1924.

REMARKS.--Records good except those for winter periods, which are fair. No storage or diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and seven discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 611: 1922(M). WSP 1345: 1931-35. WSP 1515: 1922-30. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	15	41	17	40	30	42	617	241	42	24
2	12	17	21	50	29	33	28	46	596	216	38	22
3	15	18	13	57	60	29	30	68	570	198	38	22
4	13	18	24	43	86	28	26	59	560	193	37	20
5	13	15	90	29	80	26	25	47	586	244	36	19
6	13	15	81	27	53	26	30	47	575	274	34	18
7	14	13	73	35	40	27	31	63	612	271	32	18
8	17	12	65	35	35	28	28	95	575	251	30	18
9	15	11	57	29	35	31	30	128	580	257	29	28
10	14	11	62	33	45	29	26	155	580	254	29	38
11	12	10	63	32	61	28	23	184	527	254	31	59
12	12	11	40	30	40	26	24	241	508	238	30	49
13	10	11	37	26	32	23	27	299	503	210	30	50
14	9.4	11	45	21	34	26	29	342	517	176	30	47
15	9.0	9.4	36	19	35	29	28	354	527	145	28	41
16	8.5	9.0	35	18	29	25	27	358	503	117	28	35
17	9.0	9.0	35	19	33	27	26	384	419	120	27	33
18	9.0	8.5	45	20	31	25	26	428	310	122	25	46
19	8.5	7.7	41	20	29	26	27	450	228	117	45	40
20	8.5	8.1	34	21	27	26	29	354	198	111	59	35
21	8.5	8.1	29	20	26	23	38	241	190	99	85	31
22	8.1	7.7	26	21	25	24	43	204	234	94	81	29
23	8.1	12	29	20	22	29	46	251	267	92	68	27
24	8.1	11	31	22	24	33	52	388	234	83	57	25
25	7.7	11	38	23	25	36	41	472	179	81	49	23
26	7.7	9.9	38	21	26	35	35	476	184	76	45	22
27	8.1	9.4	33	15	28	38	35	485	222	71	40	20
28	10	8.1	32	13	33	33	46	485	238	68	35	18
29	14	11	46	13	---	32	54	458	244	63	32	17
30	22	10	50	13	---	32	53	527	251	57	29	15
31	21	---	43	14	---	36	---	575	---	50	27	---
TOTAL	356.2	339.9	1307	800	1040	909	993	8706	12334	4843	1226	889
MEAN	11.5	11.3	42.2	25.8	37.1	29.3	33.1	281	411	156	39.5	29.6
MAX	22	18	90	57	86	40	54	575	617	274	85	59
MIN	7.7	7.7	13	13	17	23	23	42	179	50	25	15
AC-FT	707	674	2590	1590	2060	1800	1970	17270	24460	9610	2430	1760
CAL YR 1974 TOTAL	40061.1											
WTR YR 1975 TOTAL	33743.1											
MEAN 110												
MAX 764												
MIN 7.7												
AC-FT 79460												
66930												

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-18	1930	5.33	639	6-6	2200	5.50	777
5-25	1930	5.34	661	6-15	2130	5.35	661
5-31	1830	5.47	746				

11231000 LAKE THOMAS A. EDISON NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°22'13", long 118°59'13", in sec.26, T.6 S., R.27 E. (unsurveyed), Fresno County, Sierra National Forest, in outlet works of dam on Mono Creek at lower end of Vermilion Valley, 18.1 mi (29.1 km) northeast of town of Big Creek.

DRAINAGE AREA.--90.0 mi² (233.1 km²).

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 112,300 acre-ft (138 hm³) Oct. 1-3; maximum elevation, 7,635.57 ft (2,327.322 m) Oct. 1; minimum contents, 26,000 acre-ft (32.1 hm³) May 8 (elevation, 7,577.74 ft or 2,309.695 m).

Period of record: Maximum contents, 125,900 acre-ft (155 hm³) Aug. 18, 1958 (elevation, 7,642.95 ft or 2,329.571 m); minimum since appreciable storage was attained, 5,080 acre-ft (6.26 hm³) Mar. 27, 1969 (elevation, 7,553.09 ft or 2,302.182 m).

NOTE.--Prior to 1960, maximum and minimum daily contents were published.

REMARKS.--Lake is formed by earthfill dam; dam completed and storage began on Oct. 12, 1954. Usable capacity, 125,000 acre-ft (154 hm³) between elevations 7,508.9 ft (2,288.71 m), invert of outlet works and 7,642.5 ft (2,329.43 m), top of gates in service spillway, above mean sea level. Dead storage negligible. Water is released for diversion to Ward tunnel via Mono Creek diversion works. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents..

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

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

7,508.9	0	7,535	513	7,560	9,520	7,610	68,600
7,515	18	7,540	928	7,570	18,100	7,620	85,000
7,520	64	7,545	1,830	7,580	28,500	7,630	102,400
7,525	156	7,550	3,570	7,590	40,500	7,640	120,400
7,530	297	7,555	6,150	7,600	53,800	7,643	126,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112329	98957	78283	54475	43336	39271	39045	28094	54545	95297	107396	97219
2	112311	98729	77492	53685	43478	38996	39070	27984	56679	95891	107503	96502
3	112311	98483	76981	53044	43517	38697	38485	27640	58705	96450	107611	95786
4	112275	98009	76293	52181	43608	38435	37826	27277	60642	97044	107718	95089
5	112239	97448	75557	51395	43660	38248	37259	26895	62623	97641	107790	94358
6	112202	96712	74823	50777	43712	38011	36607	26513	64790	98360	107790	93576
7	111732	95996	74062	50108	43790	37813	35887	26144	66960	99028	107790	92796
8	111082	95262	73317	49415	43855	37604	35220	26090	68979	99663	107844	92121
9	110559	95106	72545	48997	43959	37358	34508	26414	70960	100315	107898	91447
10	110019	94654	71773	48538	44049	37234	33827	26818	72915	100951	107969	90791
11	109550	93889	70992	47987	44101	37247	33125	27353	74840	101588	108005	90808
12	109047	93108	70243	47479	44049	37296	32444	27973	76636	102208	107736	90912
13	108472	92363	69406	46957	43855	37419	31789	28762	78465	102705	107056	90963
14	107951	91602	68600	46454	43543	37481	31166	29750	80310	103149	106411	91033
15	107432	90877	67835	45938	43245	37530	30477	30877	82237	103558	105750	91084
16	106913	90083	67053	45332	42947	37629	29807	32045	83923	103877	105107	91119
17	106358	89328	66250	44689	42626	37727	29120	33280	85329	104215	104394	91205
18	105785	88554	65462	44153	42317	37777	28438	34689	86333	104572	103931	91257
19	105250	87784	64668	43621	42022	37838	27762	36192	87237	104858	103682	91309
20	104715	86998	63906	43102	41713	37900	27091	37481	87938	105143	103398	91326
21	104144	86248	63136	42857	41370	38024	26665	38310	88572	105428	103078	91343
22	103522	85397	62368	42908	41065	38136	26764	39033	89328	105696	102740	91395
23	102918	84583	61577	42947	40759	38223	26917	39850	90118	105964	102420	91412
24	102314	83805	60686	42998	40454	38310	27091	41001	90808	106214	102155	91412
25	101712	83011	59934	43037	40164	38535	27244	42446	91395	106465	101765	91412
26	101128	82237	59172	43076	40026	38609	27364	44049	91965	106590	101287	91412
27	100526	81430	58428	43115	39825	38672	27474	45660	92640	106751	100668	91412
28	100174	80628	57660	43128	39548	38734	27618	47345	93299	106895	100033	91412
29	99857	79843	56895	43154	---	38784	27773	48902	93993	107092	99328	91412
30	99398	79079	56122	43180	---	38871	27950	50545	94636	107181	98641	91395
31	99204	---	55237	43219	---	38983	---	52458	---	107288	97921	---
MAX	112329	98957	78283	54475	44101	39271	39070	52458	94636	107288	108005	97219
MIN	99204	79079	55237	42857	39548	37234	26665	26090	54545	95297	97921	90791
(a)	7,628.21	7,616.47	7,601.04	7,592.16	7,589.28	7,588.83	7,579.49	7,599.06	7,625.60	7,632.76	7,627.48	7,623.73
(b)	-13,100	-20,100	-23,800	-12,000	-3,670	-565	-11,000	+24,500	+42,200	+12,700	-9,370	-6,530

CAL YR 1974 b +156
WTR YR 1975 b -21,000

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

SAN JOAQUIN RIVER BASIN

11231500 MONO CREEK BELOW LAKE THOMAS A. EDISON, CALIF.

LOCATION.--Lat 37°21'40", long 118°59'26", in SW¼ sec.35, T.6 S., R.27 E. (unsurveyed), Fresno County, Sierra National Forest, on left bank 0.6 mi (1.0 km) upstream from diversion dam, 1 mi (2 km) downstream from Lake Thomas A. Edison Dam, and 1.9 mi (3.1 km) northeast of Mono Hot Springs.

DRAINAGE AREA, --92.5 mi² (239.6 km²).

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as "near Vermilion Valley."

GAGE.--Water-stage recorder. Altitude of gage is 7,400 ft (2,256 m), from topographic map.

AVERAGE DISCHARGE (adjusted for storage).--54 years, 152 ft³/s (4.305 m³/s), 110,100 acre-ft/yr (136 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 410 ft³/s (11.6 m³/s) Dec. 16 (gage height, 6.53 ft or 1.990 m); minimum daily, 12 ft³/s (0.34 m³/s) June 5.

Period of record: Maximum discharge, 1,760 ft³/s (49.8 m³/s) June 2, 1938 (gage height, 8.62 ft or 2.627 m); minimum daily, 0.3 ft³/s (0.008 m³/s) Nov. 11, 12, 1954.

REMARKS.--Records good. Flow regulated by Lake Thomas A. Edison 1 mi (2 km) upstream beginning Oct. 12, 1954 (see sta 11231000). No diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and six discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1011: 1943. WSP 1515: 1956.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	138	386	398	19	190	19	15	13	20	21	357
2	19	138	390	398	19	190	88	155	13	20	21	357
3	18	138	390	398	19	190	322	266	13	20	19	357
4	18	240	390	394	19	187	369	276	13	20	19	357
5	18	280	390	394	20	187	369	276	12	20	19	373
6	23	353	390	394	20	187	369	276	18	20	19	386
7	246	373	390	390	20	187	365	273	30	19	19	386
8	308	355	390	369	20	187	365	121	30	19	19	386
9	251	104	398	231	21	187	369	18	28	19	19	386
10	253	248	406	253	21	106	369	19	24	19	19	386
11	256	373	406	280	21	19	365	21	23	20	19	29
12	256	373	402	280	110	19	365	22	22	20	173	17
13	256	373	402	280	196	19	361	25	22	20	338	16
14	256	373	402	280	193	19	361	26	22	21	338	16
15	256	373	402	280	190	19	365	22	22	21	338	16
16	263	373	402	315	190	19	365	19	21	21	338	16
17	270	373	406	342	190	19	361	19	21	20	338	17
18	270	377	406	294	190	19	361	21	21	20	263	16
19	270	381	406	294	190	19	357	21	22	20	225	18
20	270	390	402	294	190	20	357	19	22	20	222	17
21	270	394	402	126	190	19	252	16	22	20	219	17
22	276	394	402	20	190	19	15	15	22	20	219	17
23	283	394	398	20	190	19	15	15	22	20	210	17
24	283	390	398	20	190	19	15	16	22	20	163	18
25	283	390	398	20	187	19	15	17	22	20	228	17
26	283	390	398	20	112	19	15	16	22	20	263	18
27	283	390	402	20	160	18	15	16	20	21	315	18
28	243	390	406	20	190	18	15	15	20	21	334	18
29	181	390	402	20	---	18	15	14	20	21	357	17
30	241	390	402	20	---	18	15	14	20	21	357	17
31	138	---	402	20	---	19	---	13	---	21	357	---
TOTAL	6559	10038	12366	6884	3267	2194	7009	2077	624	624	5808	4083
MEAN	212	335	399	222	117	70.8	234	67.0	20.8	20.1	187	136
MAX	308	394	406	398	196	190	369	276	30	21	357	386
MIN	18	104	386	20	19	18	15	13	12	19	19	16
AC-FT	13010	19910	24530	13650	6480	4350	13900	4120	1240	1240	11520	8100
WAL YR 1974	TOTAL	71629	MEAN 196	MAX 606	MIN 16	AC-FT	142100					
CTR YR 1975	TOTAL	61533	MEAN 169	MAX 406	MIN 12	AC-FT	122100					

11234700 MAMMOTH POOL RESERVOIR NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°19'45", long 119°19'40", in SW¼ sec.10, T.7 S., R.24 E., Madera County, Sierra National Forest, in gatehouse of power tunnel intake near dam on San Joaquin River, 10 mi (16 km) northwest of town of Big Creek.

DRAINAGE AREA.--995 mi² (2,577 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 124,100 acre-ft (153 hm³) June 2 (elevation, 3,333.76 ft or 1,016.130 m); minimum, 4,600 acre-ft (5.67 hm³) Apr. 30 (elevation, 3,139.98 ft or 957.066 m).
Period of record: Maximum contents, 126,500 acre-ft (156 hm³) June 2, 3, 1969; maximum elevation, 3,335.86 ft (1,016.770 m) June 3, 1969; minimum contents since appreciable storage was attained, 4,580 acre-ft (5.65 hm³) Apr. 5, 1973 (elevation, 3,139.87 ft or 957.032 m).

REMARKS.--Reservoir is formed by an earthfill dam; storage began Oct. 8, 1959. Usable capacity, 119,900 acre-ft (148 hm³) between elevations 3,100.00 ft (944.880 m), invert of power tunnel and 3,330.00 ft (1,014.984 m), crest of spillway, above mean sea level. Additional storage of 2,780 acre-ft (3.45 hm³) is not available for release. Water is diverted through tunnel for power development; water is returned to river 8.5 mi (13.7 km) downstream from dam. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

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

3,100	0	3,130	3,110	3,180	14,100	3,260	56,400
3,105	417	3,140	4,600	3,190	17,400	3,280	72,100
3,110	861	3,150	6,400	3,200	21,400	3,300	89,800
3,115	1,360	3,160	8,620	3,220	31,100	3,320	109,300
3,120	1,900	3,170	11,200	3,240	42,800	3,335	125,500

 CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
 INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34080	24157	19902	24317	22856	15123	27071	4625	124087	120117	113855	80759
2	33517	24440	19676	24048	21942	15389	24704	4668	123491	119874	112843	79352
3	32957	24741	20251	23849	21899	15326	22780	5270	123334	119372	112045	78030
4	32445	25018	21608	24121	21999	15192	20976	5977	123010	118892	111176	76680
5	32643	25284	22297	24454	21798	15379	19184	5321	123323	118837	110352	75233
6	32819	24980	22310	24467	21768	16605	16867	4608	123402	119055	109440	73956
7	32263	24394	22874	24583	21738	18657	14515	4623	123133	119219	108389	72630
8	31722	23989	23414	24891	21907	21124	12426	5272	122876	119077	107335	71267
9	31179	24335	23414	24653	23468	23093	10834	7233	122876	118848	106176	70082
10	30627	24426	23387	24399	24947	23568	8452	10015	122786	118675	105086	68702
11	30074	23939	23260	24900	24788	23803	6133	13573	122652	118578	104031	67244
12	30238	23468	23223	25013	24756	24125	4883	18164	122540	118189	102889	65976
13	30398	22945	23066	24625	24578	24840	5100	24545	122753	117714	101812	63993
14	29631	22456	23355	24235	24289	25037	5455	32819	122887	117179	100602	61918
15	29222	21982	23658	23491	23704	25127	5029	41541	122663	117789	99595	60743
16	28847	22235	23676	22505	22896	25170	5034	49632	122238	117671	98666	59563
17	28749	22487	23676	22354	22274	25089	4755	59321	121971	117972	97245	58429
18	28474	21942	23608	22928	21495	24989	4730	70272	121058	118448	96059	57379
19	28614	21387	23559	23482	20626	24928	4749	82402	120648	118091	95268	56462
20	28774	20843	23473	23405	19740	24975	4669	90275	120460	118026	94527	55428
21	28109	21252	23853	23080	18704	24970	4668	93693	120449	117778	93655	54377
22	27639	20851	24166	22744	17795	24905	4707	96192	120803	117660	92683	53203
23	27086	20440	23966	22381	17109	24648	4631	100245	120826	117510	91630	52210
24	26468	20370	23803	22301	16505	25724	4635	107847	120527	117414	90461	51244
25	25864	19930	24139	22937	16022	28692	4777	117756	120017	117211	89299	50390
26	26011	19513	24012	23373	15546	28588	4628	123021	119765	116986	88070	49495
27	26180	19342	23880	23165	14976	28135	4663	123099	120073	116623	86822	48593
28	25753	19617	24071	23030	14856	27415	4620	123021	120184	116325	85664	47599
29	25345	19422	24362	22816	---	28253	4613	122887	120250	115856	84394	46817
30	25060	19664	24203	22500	---	29699	4613	123189	120195	115262	83094	46731
31	24639	---	24007	22253	---	29442	---	123716	---	114574	81731	---
MAX	34080	25284	24362	25013	24947	29699	27071	123716	124087	120117	113855	80759
MIN	24639	19342	19676	22253	14856	15123	4613	4608	119765	114574	81731	46731
(a)	3,207.25	3,195.80	3,205.87	3,201.96	3,182.50	3,216.86	3,140.05	3,333.39	3,330.23	3,325.00	3,291.16	3,246.12
(b)	-9,980	-4,980	+4,340	-1,750	-7,400	+14,590	-24,830	+119,100	-3,520	-5,620	-32,840	-35,000

CAL YR 1974 b -20,270

WTR YR 1975 b +12,110

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

LOCATION.--Lat 37°19'00", long 119°19'37", in NW¼SW¼ sec.14, T.7 S., R.24 E., Madera County, Sierra National Forest, on right bank 1,500 ft (457 m) upstream from Shakeflat Creek, 4,900 ft (1,494 m) downstream from Mammoth Pool Dam, and 10 mi (16 km) northwest of town of Big Creek.

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

EXTREMES.--Current year: Maximum discharge, 9,450 ft³/s (268 m³/s) June 2 (gage height, 14.52 ft or 4.426 m); minimum daily, 11 ft³/s (0.31 m³/s) Feb. 23 to Mar. 4, Apr. 19-24.
Period of record: Maximum discharge, 18,400 ft³/s (521 m³/s) June 3, 1969 (gage height, 18.38 ft or 5.602 m); minimum daily, 0.3 ft³/s (0.008 m³/s) Oct. 14, Dec. 5, 1959.

REMARKS.--Records good. Flow regulated by Mammoth Pool Reservoir 4,900 ft (1,494 m) upstream (see sta 11234700). Flow partly regulated by Florence Lake (see sta 11229600), Lake Thomas A. Edison (see sta 11231000) and diversions through Ward tunnel (see sta 11229500), and through Mono-Bear conduit to Ward tunnel. See schematic diagram of San Joaquin River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	18	12	14	17	11	13	28	7300	158	27	27
2	19	13	12	14	22	11	18	28	7180	71	27	27
3	19	13	20	14	14	11	25	28	6180	46	27	27
4	20	13	21	14	15	11	25	29	5700	46	27	27
5	24	13	15	14	13	12	28	28	5450	46	27	26
6	24	12	14	16	14	14	26	28	6010	46	27	26
7	24	12	13	15	13	16	25	28	6000	38	27	26
8	24	12	13	17	15	18	24	28	5260	28	27	26
9	24	12	13	15	19	14	24	28	4870	28	27	26
10	24	12	13	15	18	14	23	28	4760	28	27	26
11	24	12	13	15	13	13	23	29	4660	27	27	26
12	24	12	13	15	13	12	22	30	4360	27	26	26
13	24	12	13	14	15	12	20	31	4420	28	26	24
14	24	12	14	14	13	12	21	36	4850	28	26	24
15	24	12	14	14	13	13	22	47	4700	28	26	24
16	23	12	14	14	12	13	26	48	3960	26	26	24
17	24	13	14	14	12	12	26	50	3860	31	26	23
18	24	13	14	14	12	13	19	51	2020	31	26	27
19	24	12	14	14	12	13	11	45	816	31	28	27
20	24	12	14	14	12	13	11	46	544	31	29	27
21	24	14	14	14	12	13	11	53	370	31	28	27
22	24	13	14	14	12	15	11	54	634	31	28	26
23	24	13	14	14	11	12	11	53	995	31	28	26
24	24	13	14	14	11	12	11	54	840	31	28	26
25	24	12	14	14	11	16	12	54	236	29	28	26
26	24	12	14	14	11	14	19	2820	48	27	28	26
27	23	12	14	14	11	13	36	5350	63	27	27	26
28	25	12	15	14	11	13	36	5480	153	27	27	25
29	24	12	14	14	---	13	36	5090	247	27	27	29
30	23	12	14	14	---	13	31	4940	229	27	27	29
31	24	---	14	14	---	13	---	6020	---	27	27	---
TOTAL	723	377	438	444	377	405	646	30662	96715	1138	839	782
MEAN	23.3	12.6	14.1	14.3	13.5	13.1	21.5	989	3224	36.7	27.1	26.1
MAX	25	18	21	17	22	18	36	6020	7300	158	29	29
MIN	19	12	12	14	11	11	11	28	48	26	26	23
AC-FT	1430	748	869	881	748	803	1280	60820	191800	2260	1660	1550
CAL YR 1974	TOTAL	112637	MEAN 309	MAX 5380	MIN 11	AC-FT 223400						
WTR YR 1975	TOTAL	133546	MEAN 366	MAX 7300	MIN 11	AC-FT 264900						

11235500 WARD TUNNEL OUTLET AT HUNTINGTON LAKE, CALIF.

LOCATION.--Lat 37°15'25", long 119°09'38", in SE¼SW¼ sec.5, T.8 S., R.26 E., Fresno County, Sierra National Forest, at tunnel outlet at east end of Huntington Lake, 0.9 mi (1.4 km) east of Lakeshore Post Office, and 6 mi (10 km) northeast of Big Creek.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1960, published as Ward tunnel at outlet.

GAGE.--Pressure-differential recorder to record discharge through penstock. November 1927 to May 23, 1956, water-stage recorder at datum 6,999.00 ft (2,133.295 m) above mean sea level (levels by Southern California Edison Co.). May 24, 1956, to Sept. 30, 1968, no recorder, see REMARKS below.

AVERAGE DISCHARGE.--48 years, 485 ft³/s (13.74 m³/s), 351,400 acre-ft/yr (433 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 2,080 ft³/s (58.9 m³/s) June 21, 1935; no flow at times in 1961, 1964-65, 1968, 1971-72, 1974.

REMARKS.--Daily discharge for the period May 24, 1956, to Sept. 30, 1968, computed as the sum of Ward tunnel at intake, Mono-Bear conduit, Camp Creek conduit, and corrected for change in contents of Portal Forebay. Tunnel diverts from Florence Lake to Huntington Lake via Portal powerhouse, receives diversions from Bear and Mono Creeks and at times from several other small tributaries of South Fork San Joaquin River. See record for sta 11229500 Ward tunnel intake at Florence Lake.

COOPERATION.--Records collected by Southern California Edison Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	610	620	477	465	59	324	176	283	1630	828	585	581
2	625	602	474	462	62	314	190	368	1400	852	573	577
3	658	566	488	462	83	331	416	632	869	832	558	575
4	667	601	512	467	94	335	545	668	857	813	557	573
5	578	581	506	464	110	331	525	602	893	911	558	579
6	480	562	505	467	120	312	535	582	845	864	558	585
7	626	499	506	470	110	320	548	605	796	531	547	591
8	661	495	505	416	115	311	538	619	898	692	550	595
9	599	195	510	308	101	332	536	557	1220	916	550	610
10	602	304	512	265	110	251	510	694	1560	922	536	637
11	607	477	509	424	113	117	521	693	1680	865	544	175
12	604	462	505	320	187	149	520	888	1680	660	590	206
13	602	477	500	396	157	117	535	1260	1680	632	643	577
14	597	476	490	454	309	133	585	1340	1530	602	643	566
15	599	472	500	335	286	47	548	1440	1120	572	643	565
16	615	468	505	359	290	216	531	1510	1340	545	642	583
17	619	455	498	428	283	133	507	1550	1410	533	641	585
18	609	482	473	486	253	130	523	1610	1470	540	603	593
19	612	471	471	367	272	133	532	1650	1630	535	500	588
20	613	464	471	375	217	163	553	1540	1540	533	551	582
21	616	471	473	215	290	142	572	1450	1640	519	648	579
22	620	474	470	90	245	112	217	1430	1600	510	572	569
23	629	477	453	85	252	143	292	1350	1540	513	454	578
24	639	478	450	91	268	142	252	1600	1500	501	473	622
25	605	544	454	87	282	235	257	1580	1670	498	556	645
26	592	472	455	85	149	201	238	1590	1660	486	530	640
27	602	483	461	103	294	168	206	1640	1670	480	557	634
28	611	481	461	58	371	169	232	1610	1350	495	557	625
29	452	478	461	71	---	147	276	1630	861	504	590	620
30	640	475	462	63	---	159	243	1630	653	572	588	568
31	616	---	464	59	---	212	---	1600	---	575	583	---
TOTAL	18805	14562	14981	9197	5482	6329	12659	36201	40192	19831	17680	17003
MEAN	607	485	483	297	196	204	422	1168	1340	640	570	567
MAX	667	620	512	486	371	335	585	1650	1680	922	648	645
MIN	452	195	450	58	59	47	176	283	653	480	454	175
AC-FT	37300	28880	29710	18240	10870	12550	25110	71800	79720	39330	35070	33730
CAL YR 1974 TOTAL	266718		MEAN 731	MAX 1750	MIN 173	AC-FT 529000						
WTR YR 1975 TOTAL	212922		MEAN 583	MAX 1680	MIN 47	AC-FT 422300						

SAN JOAQUIN RIVER BASIN

11236000 HUNTINGTON LAKE NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°14'03", long 119°12'41", in SW¼ sec.14, T.8 S., R.25 E., Fresno County, Sierra National Forest, in gate tower of dam 1 on Big Creek, 2 mi (3 km) northeast of town of Big Creek.

DRAINAGE AREA.--80.5 mi² (208.5 km²).

PERIOD OF RECORD.--April 1913 to current year. Prior to October 1926, monthly contents only, published in WSP 1315-A; 1926-51, published in WSP 721.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.). Prior to June 19, 1920, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 88,900 acre-ft (110 hm³) June 22 (elevation, 6,949.78 ft or 2,118.293 m); minimum, 31,900 acre-ft (39.3 hm³) May 10 (elevation, 6,901.23 ft or 2,103.495 m).
Period of record: Maximum contents, 90,500 acre-ft (112 hm³) May 31, 1926 (elevation, 6,950.92 ft or 2,118.640 m); minimum, 2,100 acre-ft (2.59 hm³) Nov. 6, 1937 (elevation, 6,838.53 ft or 2,084.384 m).
NOTE.--Prior to 1960, maximum and minimum daily contents were published. Maximum and minimum daily contents (1913-39) were summarized in WSP 881.

REMARKS.--Lake is formed by four dams; storage began Apr. 11, 1913. Dams were raised in 1914 and again in 1917. Usable capacity, 89,200 acre-ft (110 hm³) between elevations 6,819.9 ft (2,078.71 m), invert of outlet tunnel No. 1 and 6,950 ft (2,118.4 m), spillway crest at dam 1, above mean sea level. Additional storage of 600 acre-ft (740,000 m³) is not available for release. Huntington-Shaver conduit has diverted water from Huntington Lake to Shaver Lake since Apr. 21, 1928 (see sta 11239000). Water is used for power development in Big Creek powerplants. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

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

6,819.9	0	6,835	1,550	6,870	11,300	6,920	50,800
6,820	8	6,840	2,350	6,880	16,400	6,930	62,600
6,822	142	6,845	3,320	6,890	22,900	6,940	75,300
6,825	382	6,850	4,480	6,900	30,900	6,950	89,200
6,830	899	6,860	7,430	6,910	40,200	6,951	90,610

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88380	88294	83331	78201	76052	67345	51801	36604	69360	88008	87438	87779
2	88351	88294	83081	78120	75758	67168	51104	35487	72012	88051	87466	87793
3	88437	88179	83275	78486	75278	66878	50857	35067	73362	88008	87452	87765
4	88551	88151	83206	78784	74854	66461	50891	34639	74615	87893	87438	87736
5	88523	88094	83012	79150	74417	66146	51048	34013	76052	88094	87410	87736
6	88294	88008	82887	79627	73940	65820	51104	33356	77204	88437	87410	87750
7	88308	87779	82707	79804	73532	65495	51127	32806	77971	88451	87353	87779
8	88408	87979	82596	80351	73164	65971	51104	32421	78703	87951	87324	87808
9	88365	88351	82471	80283	72717	66171	51003	32012	80009	87879	87254	87951
10	88337	88365	82318	80351	72326	65695	50891	31976	81917	87965	87154	88165
11	88337	88108	82179	80665	71777	64845	50801	32038	83735	88094	87112	87936
12	88308	87822	82028	81105	71347	64049	50690	32581	85261	88237	87154	87965
13	88279	87580	81876	81091	71360	63307	50601	34114	86572	88251	87296	87951
14	88251	87339	81670	80981	71153	62494	50679	35225	87608	88065	87438	87936
15	88208	87083	81491	80802	70959	61467	50656	35883	87750	87979	87580	87922
16	88208	86828	81325	80692	70739	60871	50612	36929	87936	87979	87736	87922
17	88222	86516	81160	80788	70441	60047	50445	38261	88051	87965	87965	87936
18	88208	86289	80967	80679	70118	59230	50334	40176	88237	87965	88022	87979
19	88208	86035	80775	81394	69797	58381	50278	42405	88508	88065	88065	88008
20	88208	85768	80665	81298	69437	57596	50223	43979	88565	88094	88079	88008
21	88194	85697	80515	80871	69129	56983	50212	44586	88780	88079	88265	88008
22	88194	85486	80310	80269	68732	57006	49535	44997	88837	88022	88351	87979
23	88208	85247	80064	80460	68426	56195	48885	45654	88694	87979	88136	87951
24	88237	84993	79818	80064	68108	55435	47717	47499	88351	87908	87936	88008
25	88237	84867	79572	79559	67878	55111	46059	49756	88322	87808	87893	88122
26	88194	84615	79367	79015	67636	54393	44323	52254	88237	87679	87793	88208
27	88208	84364	79178	78540	67484	53646	42528	54891	88094	87523	87765	88279
28	88465	84126	79042	78025	67421	52902	40880	57443	88179	87410	87722	88351
29	88122	83861	78839	77540	---	53187	39401	60047	88322	87282	87750	88408
30	88222	83609	78608	77042	---	53210	37980	62913	87993	87353	87779	88351
31	88279	---	78405	76519	---	52561	---	66008	---	87395	87779	---
MAX	88551	88365	83331	81394	76052	67345	51801	66008	88837	88451	88351	88408
MIN	88122	83609	78405	76519	67421	52561	37980	31976	69360	87282	87112	87736
(a)	6,949.38	6,946.07	6,942.28	6,940.88	6,933.90	6,921.55	6,907.73	6,932.78	6,949.18	6,948.76	6,949.03	6,949.43
(b)	-115	-4,670	-5,200	-1,890	-9,100	-14,900	-14,600	+28,000	+22,000	-598	+384	+572

CAL YR 1974 b -6,170
WTR YR 1975 b -43

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11237500 PITMAN CREEK BELOW TAMARACK CREEK, CALIF.

LOCATION.--Lat 37°11'54", long 119°12'48", in NW¼NW¼ sec.35, T.8 S., R.25 E., Fresno County, Sierra National Forest, on right bank 250 ft (76 m) upstream from Huntington-Shaver conduit tunnel, 0.8 mi (1.3 km) downstream from confluence of Tamarack Creek and South Fork Tamarack Creek, 1.4 mi (2.3 km) upstream from mouth, and 1.9 mi (3.1 km) east of town of Big Creek.

DRAINAGE AREA.--22.9 mi² (59.3 km²).

PERIOD OF RECORD.--October 1927 to current year. Records for water year 1928 incomplete, yearly estimate published in WSP 1315-A.

GAGE.--Water-stage recorder, Parshall flume, and concrete control. Altitude of gage is 7,005 ft (2,135 m), from Southern California Edison Co. contour map. Prior to Sept. 29, 1940, at site 10 ft (3 m) downstream at same datum.

AVERAGE DISCHARGE.--48 years, 39.8 ft³/s (1.127 m³/s), 28,840 acre-ft/yr (35.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 993 ft³/s (28.1 m³/s) June 1 (gage height, 7.88 ft or 2.402 m); minimum daily, 0.39 ft³/s (0.011 m³/s) Oct. 1.

Period of record: Maximum discharge, 3,670 ft³/s (104 m³/s) Dec. 23, 1955 (gage height, 11.20 ft or 3.414 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of slope-area measurement at gage height 10.77 ft (3.283 m); no flow Oct. 15-18, 1931.

REMARKS.--Records good except those for winter periods, which are poor. No diversion above station; practically all flow diverted below station to Huntington-Shaver conduit. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and 11 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 931: 1940. WSP 1315-A: 1944. WSP 1395: 1928-29, 1938. WSP 1515: 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	2.3	1.6	2.4	4.3	9.1	15	29	587	57	8.2	2.9
2	.51	2.0	1.6	2.4	4.7	10	14	31	525	52	7.9	2.8
3	.56	1.9	1.6	2.4	4.5	10	14	39	482	45	7.6	2.6
4	.72	1.9	1.7	2.5	4.6	10	14	43	467	42	7.3	2.4
5	1.1	1.9	2.1	2.5	4.6	11	14	37	499	39	6.8	2.3
6	.96	1.8	2.1	2.7	5.2	10	15	38	447	35	6.6	2.2
7	1.1	2.0	2.3	3.2	6.1	9.7	15	42	384	33	6.1	2.1
8	1.9	2.1	2.3	3.2	6.4	10	14	54	361	30	5.7	2.3
9	1.5	1.9	2.4	3.3	6.4	10	13	77	349	29	5.3	3.4
10	1.2	1.9	2.3	3.4	6.1	10	13	121	347	27	5.2	5.6
11	1.1	2.2	2.3	3.5	6.1	9.7	13	146	304	25	4.7	8.5
12	.96	2.3	2.4	3.5	6.1	9.4	13	180	268	23	6.1	5.3
13	.90	2.4	2.4	3.4	6.1	9.4	14	229	244	21	4.3	4.3
14	.87	2.5	2.3	3.4	5.9	9.7	14	278	251	19	4.2	3.3
15	.84	2.4	2.4	3.5	5.9	9.4	14	292	238	18	4.0	2.8
16	.78	2.4	2.6	3.6	5.5	9.4	14	294	196	18	3.8	2.6
17	.75	2.2	2.7	3.7	5.5	9.4	14	319	164	17	3.7	2.5
18	.70	2.1	2.6	4.1	5.5	9.1	13	391	148	17	4.1	2.6
19	.67	1.9	2.5	4.5	5.7	10	13	364	122	16	15	2.6
20	.64	1.9	2.5	4.8	5.7	10	14	278	113	15	9.7	2.3
21	.61	1.7	2.5	5.5	5.9	10	16	191	111	15	8.2	2.2
22	.59	2.2	2.4	6.4	5.9	11	19	203	112	14	7.3	1.9
23	.56	2.4	2.3	6.6	6.1	12	21	290	106	13	6.1	1.8
24	.61	2.4	2.2	6.8	6.8	11	24	401	94	12	5.3	1.7
25	.64	2.4	2.2	7.1	7.1	14	24	459	80	11	4.5	1.7
26	.70	2.2	2.2	7.3	7.3	15	21	489	76	11	4.2	1.6
27	.78	2.1	2.3	6.8	7.6	14	20	472	73	10	4.0	1.6
28	2.4	1.8	2.3	6.4	7.9	13	22	482	67	10	3.7	1.5
29	2.6	1.7	2.4	5.7	---	12	26	485	64	9.4	3.6	1.4
30	1.9	1.7	2.4	5.0	---	13	29	524	60	9.1	3.4	1.4
31	2.3	---	2.4	4.5	---	16	---	569	---	8.8	3.1	---
TOTAL	31.84	62.6	70.3	134.1	165.5	336.3	499	7847	7339	701.3	178.0	82.2
MEAN	1.03	2.09	2.27	4.33	5.91	10.8	16.6	253	245	22.6	5.74	2.74
MAX	2.6	2.5	2.7	7.3	7.9	16	29	569	587	57	15	8.5
MIN	.39	1.7	1.6	2.4	4.3	9.1	13	29	60	8.8	3.1	1.4
AC-FT	63	124	139	266	328	667	990	15560	14560	1390	353	163

CAL YR 1974 TOTAL 16865.67 MEAN 46.2 MAX 398 MIN .39 AC-FT 33450
WTR YR 1975 TOTAL 17447.14 MEAN 47.8 MAX 587 MIN .39 AC-FT 34610

Peak discharge (base, 200 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-18	2030	7.07	660	6-1	1800	7.88	993
5-26	1900	7.40	785	6-5	1900	7.38	777

SAN JOAQUIN RIVER BASIN

11239000 HUNTINGTON-SHAVER CONDUIT OUTLET NEAR SHAVER LAKE, CALIF.

LOCATION.--Lat 37°09'18", long 119°13'53", in NW¼NW¼ sec.15, T.9 S., R.25 E., Fresno County, Sierra National Forest, on left bank at tunnel outlet, 2.3 mi (3.7 km) northeast of Shaver Lake, and 3.5 mi (5.6 km) south of town of Big Creek.

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for October 1928, published in WSP 1315-A. Prior to October 1960, published as Huntington-Shaver conduit at outlet.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,680 ft (2,036 m), from topographic map.

AVERAGE DISCHARGE.--47 years, 224 ft³/s (6.344 m³/s), 162,300 acre-ft/yr (200 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,780 ft³/s (50.4 m³/s) June 3, 4, 1938; minimum daily, 0.90 ft³/s (0.025 m³/s) Sept. 8-11, 1955, Nov. 15, 19, 26, 27, 1966.

REMARKS.--Records good. Conduit diverts from Huntington Lake to Shaver Lake with additions from Pitman Creek and seepage en route. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and nine discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 931: 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.1	1.4	1.9	3.3	7.3	12	489	1690	520	5.3	2.2
2	2.4	2.8	1.4	1.9	3.3	7.7	11	475	1680	517	5.0	2.2
3	2.4	2.6	1.5	1.9	3.3	8.5	11	478	1680	514	4.4	2.0
4	2.4	2.6	1.4	2.0	3.1	8.9	12	480	1700	510	4.1	2.0
5	2.6	2.4	1.5	2.0	3.3	8.9	11	466	1710	507	3.8	1.9
6	2.6	2.2	1.7	2.0	3.3	8.5	12	454	1700	365	3.5	1.9
7	2.6	2.2	1.7	2.2	3.5	8.1	12	447	1690	56	3.3	1.7
8	2.8	1.7	1.9	2.4	3.5	7.7	11	448	1680	532	3.1	1.7
9	2.8	1.7	2.0	2.4	3.5	8.5	11	466	1690	528	3.1	1.9
10	2.6	1.7	2.0	2.4	3.3	8.1	11	504	1680	501	2.8	2.8
11	2.6	1.9	2.0	2.4	3.8	7.7	11	536	1670	407	2.8	6.8
12	2.6	2.0	2.0	2.4	4.1	7.3	10	584	1660	226	2.6	3.5
13	2.6	2.2	2.0	2.4	4.1	6.6	11	670	1660	224	2.6	2.6
14	2.4	2.4	2.0	2.4	3.5	7.3	13	1100	1660	224	2.6	2.0
15	2.4	2.2	2.2	2.6	3.3	7.3	12	1530	1660	128	2.6	1.7
16	2.4	2.0	2.4	2.6	3.3	7.3	11	1530	1640	51	2.6	1.5
17	2.4	2.0	2.4	2.6	3.3	7.3	11	1550	1620	50	2.4	1.5
18	2.4	1.9	2.4	2.8	3.3	7.0	11	1580	1610	37	2.8	1.5
19	2.2	1.9	2.2	3.1	3.3	7.7	11	1580	1600	16	14	1.5
20	2.2	1.9	2.0	3.3	3.5	8.1	12	1540	1600	15	9.3	1.5
21	2.2	1.7	2.0	3.5	3.5	8.1	31	1500	1590	14	6.6	1.5
22	2.2	1.7	2.0	4.1	3.5	8.1	72	1510	1600	13	5.0	1.5
23	2.2	2.0	2.0	4.1	3.8	8.9	73	1540	1600	11	4.4	1.5
24	2.2	2.0	1.9	4.4	4.1	8.5	379	1600	1590	9.7	3.8	1.5
25	2.2	2.0	1.9	4.4	4.7	11	622	1610	1580	8.5	3.5	1.5
26	2.4	1.9	1.9	5.0	5.0	11	599	1630	1580	8.1	3.5	1.5
27	2.2	1.7	1.9	4.7	5.3	11	577	1630	1570	7.3	3.3	1.5
28	2.8	1.5	1.9	4.1	6.0	10	555	1630	1160	6.6	3.3	1.5
29	3.3	1.4	1.9	3.8	---	9.7	528	1640	531	6.3	2.8	1.5
30	2.6	1.4	1.9	3.5	---	11	504	1650	524	6.3	2.6	1.5
31	3.1	---	1.9	3.3	---	13	---	1670	---	6.3	2.4	---
TOTAL	77.2	60.7	59.3	92.6	104.8	266.1	4167	34517	46605	6025.1	123.9	59.4
MEAN	2.49	2.02	1.91	2.99	3.74	8.58	139	1113	1554	194	4.00	1.98
MAX	3.3	3.1	2.4	5.0	6.0	13	622	1670	1710	532	14	6.8
MIN	2.2	1.4	1.4	1.9	3.1	6.6	10	447	524	6.3	2.4	1.5
AC-FT	153	120	118	184	208	528	8270	68460	92440	11950	246	118
CAL YR 1974	TOTAL	143688.6	MEAN 394	MAX 1590	MIN 1.4	AC-FT 285000						
WTR YR 1975	TOTAL	92158.1	MEAN 252	MAX 1710	MIN 1.4	AC-FT 182800						

11239500 SHAVER LAKE NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°08'40", long 119°18'08", in SE¼ sec.13, T.9 S., R.24 E., Fresno County, Sierra National Forest, near center of dam on Stevenson Creek, 6 mi (10 km) southwest of town of Big Creek.

DRAINAGE AREA.--29.1 mi² (75.4 km²).

PERIOD OF RECORD.--November 1909 to current year. Prior to January 1927, monthly contents only, published in WSP 1315-A, January 1927 to September 1931, published in WSP 721.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.). Prior to Jan. 11, 1927, gage on rockfilled dam a short distance upstream at different datum.

EXTREMES.--Current year: Maximum contents, 125,600 acre-ft (155 hm³) July 22 (elevation, 5,365.48 ft or 1,635.398 m); minimum, 17,200 acre-ft (21.2 hm³) Apr. 24 (elevation, 5,292.10 ft or 1,613.032 m). Period of record: Maximum contents, 135,900 acre-ft (168 hm³) July 5, 1946 (elevation, 5,370.25 ft or 1,636.852 m); minimum, 652 acre-ft (804,000 m³) Mar. 7, 1942 (elevation, 5,249.38 ft or 1,600.011 m).

NOTE.--Prior to 1960, maximum and minimum daily contents were published. Maximum and minimum daily contents (1928-39) were summarized in WSP 881.

REMARKS.--Storage began prior to 1905. Original lake formed by rockfilled dam, usable capacity, 5,500 acre-ft (6.78 hm³). Water diverted by Fresno flume and Lumber Co.'s flumes Nos. 1 and 2 beginning prior to 1907 and discontinued July 7, 1920. Present lake formed by concrete-arch dam; dam completed Nov. 18, 1927. Usable capacity of present lake, 135,600 acre-ft (167 hm³) between elevations 5,225 ft (1,592.6 m), trash-rack foundation and 5,370.13 ft (1,636.816 m), crest of spillway, above mean sea level. Additional storage of 92 acre-ft (113,000 m³) is not available for release. Water is received from Pitman Creek (since Feb. 22, 1928) and Huntington Lake (since Apr. 21, 1928) through Huntington-Shaver conduit and released for power development in Big Creek plants. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

REVISIONS.--WSP 1565: Drainage area.

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

5,225	0	5,250	700	5,280	9,190	5,330	60,900
5,230	42	5,255	1,250	5,290	15,600	5,340	76,700
5,235	97	5,260	2,070	5,300	24,000	5,350	94,600
5,240	191	5,265	3,210	5,310	34,500	5,360	114,200
5,245	379	5,270	4,750	5,320	46,800	5,371	137,500

CONTENTS, IN ACRE-Feet, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79978	66965	55797	45668	47093	43304	39680	18360	63033	116120	118942	100894
2	79415	66965	55246	45576	47336	43432	38936	18368	65406	116489	118218	100177
3	78818	66981	55667	45589	47390	43189	37958	18457	67685	117107	118177	99446
4	78224	66424	55507	45615	47511	42894	37040	18522	69929	118095	117518	98637
5	78224	65837	54987	45615	47551	42869	36286	18433	72201	119067	116778	98004
6	78207	65284	54445	45839	47578	42819	35353	18303	74413	119791	116100	97334
7	77651	64704	54474	45904	47646	43125	34387	18182	76558	119895	115405	97277
8	77162	64140	54488	46127	47767	43393	33335	18150	78682	120913	114690	96798
9	76574	64155	53932	46180	48158	43585	32242	18239	80683	121935	113997	96397
10	75990	64171	53381	46206	48334	43381	31145	18449	82763	122897	113976	95978
11	75407	63594	52807	46232	48063	43061	30036	18774	84769	123694	113246	95559
12	75407	63018	52233	46259	47686	42781	28961	19238	86751	124114	112515	95140
13	75240	62443	51684	46298	47497	42604	27877	19918	88707	124534	111827	94701
14	74628	61873	51684	46324	47174	42339	26902	21408	90743	124956	111121	94341
15	74018	61287	51656	46272	46864	42024	25806	23715	92699	125210	110415	93926
16	73440	61302	51135	46285	46959	42200	24728	26003	94625	125294	109973	93548
17	72935	61302	50601	46311	46639	41872	23650	28724	96530	125400	109952	93133
18	72348	60719	50057	46337	46298	41533	22552	31244	98349	125484	109291	92718
19	72348	60123	49485	46377	45970	41372	21453	33629	100197	125505	108689	92177
20	72348	59541	48943	46403	45655	41285	20368	35817	101921	125548	107969	91711
21	71696	59437	48984	46442	45289	41099	19387	37767	103698	125569	107293	91264
22	71149	58846	48998	46482	44952	40738	18506	39729	105607	125062	106577	90780
23	70553	58270	48415	46508	45004	40813	17638	41822	107392	124408	105903	90266
24	69976	58077	47834	46561	44693	40564	17504	44072	109171	123736	105705	89806
25	69357	57505	47834	46587	44395	41024	17915	46416	110919	123044	104995	89328
26	69357	56918	47242	46653	44072	40825	18085	48781	112779	122352	104324	88834
27	69389	56333	46718	46666	43803	40564	18182	51121	114751	122352	103620	88362
28	69214	56319	46771	46692	43585	40293	18279	53465	115916	121685	102916	87908
29	68658	55840	46784	46718	---	40428	18336	55797	115854	120997	102212	87435
30	68093	55783	46219	46718	---	40552	18360	58210	115773	120330	101514	86894
31	67528	---	45655	46784	---	40317	---	60614	---	119605	101475	---
MAX	79978	66981	55797	46784	48334	43585	39680	60614	115916	125569	118942	100894
MIN	67528	55783	45655	45576	43585	40293	17504	18150	63033	116120	101475	86894
(a)	5,334.32	5,326.50	5,319.13	5,319.99	5,317.53	5,314.93	5,293.56	5,329.78	5,360.76	5,362.62	5,353.60	5,345.85
(b)	-13,100	-11,700	-10,100	+1,130	-3,200	-3,270	-22,000	+42,300	+55,200	+3,830	-18,100	-14,600

CAL YR 1974 b -10,400
WTR YR 1975 b +6,320

a Elevation, in feet, at end of month.

b.Change in contents, in acre-feet, rounded to Geological Survey standards.

SAN JOAQUIN RIVER BASIN

11241950 REDINGER LAKE NEAR AUBERRY, CALIF.

LOCATION.--Lat 37°08'42", long 119°26'58", in SW¼ sec.15, T.9 S., R.23 E., Madera County, Sierra National Forest, on upstream face of dam No. 7 on San Joaquin River, 4.2 mi (6.8 km) northeast of Auberry.

DRAINAGE AREA.--1,295 mi² (3,354 km²).

PERIOD OF RECORD.--November 1950 to current year. Prior to October 1965, monthend contents only, published in WSP 1930.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 25,950 acre-ft (32.0 hm³) Jan. 19 (elevation, 1,402.63 ft or 427.522 m); minimum, 10,700 acre-ft (13.2 hm³) Oct. 1 (elevation, 1,363.50 ft or 415.595 m).
Period of record: Maximum contents, 26,100 acre-ft (32.2 hm³) June 15, 1963, Oct. 29, 1964, Oct. 27, 1967, Nov. 4, 1973; maximum elevation, 1,403.00 ft (427.634 m) Nov. 4, 1973; minimum contents since appreciable storage was attained, 6,280 acre-ft (7.74 hm³) Mar. 3, 1956 (elevation, 1,347.98 ft or 410.864 m).

REMARKS.--Lake is formed by a concrete dam; storage began Nov. 19, 1950. Usable capacity, 26,120 acre-ft (32.2 hm³) between elevations 1,320.0 ft (402.34 m), invert of tunnel and 1,403.0 ft (427.63 m), top of radial gates. Additional storage of 8,914 acre-ft (11.0 hm³) is not available for release. Water is used for power development in Big Creek powerhouse No. 4. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

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

1,320	0	1,330	2,010	1,355	8,200	1,380	16,500
1,322	384	1,335	3,120	1,360	9,650	1,385	18,400
1,324	778	1,340	4,280	1,365	11,200	1,390	20,400
1,326	1,180	1,345	5,520	1,370	12,900	1,400	24,700
1,328	1,590	1,350	6,810	1,375	14,600	1,403	26,119

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12790	25451	22966	23001	23869	24502	24847	13455	25502	25342	24992	24902
2	13854	25415	22901	23407	24479	24051	24884	13836	25073	25110	25110	25186
3	14787	25291	23224	23654	24748	24189	24902	14628	25037	24884	25214	25128
4	15899	25082	23755	23654	24600	24627	24658	15650	25209	24965	25105	25397
5	15410	24807	23856	23632	24609	25051	24578	16482	25566	24717	25168	25497
6	14920	25177	23945	23272	24685	25556	24988	16928	25593	24096	25186	25552
7	15974	25442	24074	22801	24798	25033	25305	16783	25209	24247	25051	25401
8	16928	25515	23896	22685	24484	25250	25397	17415	25378	24730	25195	25419
9	18940	24942	23887	22288	25046	24198	24951	18222	25269	25042	25598	25278
10	20823	23954	23887	22215	25227	24282	25447	19045	25333	25442	25291	25278
11	22901	24484	23949	21791	25246	25037	25860	19924	25223	25447	25401	25237
12	23460	24915	23967	21401	25033	24879	25819	20903	25137	25438	25442	25273
13	23671	25305	23914	22069	25273	24511	24475	21954	25451	25429	25378	25214
14	24345	25447	24042	22698	25643	24399	23075	23062	25314	25442	25378	25296
15	24582	25406	23958	23971	25333	24416	21515	24162	25182	25474	25470	24381
16	24933	25442	23640	25415	24906	24304	19801	25209	25182	25579	25159	23324
17	24947	25383	23588	25879	24614	24256	18301	25828	25150	25511	25424	22258
18	25374	25429	23632	25842	24555	24189	16527	25447	25406	25301	25474	21273
19	24381	25433	23588	25119	24632	24145	14801	25019	25323	25182	25424	20229
20	23601	25442	23544	25141	24820	24216	13518	24515	25506	25028	25415	19442
21	24220	24712	23425	25419	25191	24645	12675	23927	25269	25128	25438	18512
22	24582	24573	23429	25415	25214	24502	12281	24385	25566	25146	24965	17524
23	25092	24632	23434	24771	24735	24983	12177	25278	25470	25195	25694	16520
24	25442	24515	23456	24884	24488	25323	12224	25369	25602	25164	25227	15524
25	25492	24493	23281	24560	24434	25689	13910	24784	25319	25141	25415	14791
26	25470	24390	23315	24425	24189	25579	13970	25566	25598	25191	25451	13784
27	25442	24202	23320	24614	24506	25611	13282	25064	25736	25042	25511	13296
28	25060	23998	22646	24511	24376	25671	12729	25096	25768	25046	25470	12729
29	25173	23869	22693	24533	---	25351	12824	24690	25497	25137	25520	11647
30	25232	23808	22693	24466	---	24640	13372	24979	25722	24983	25502	10834
31	25337	---	22923	24425	---	24829	---	25524	---	24852	24861	---
MAX	25492	25515	24074	25879	25643	25689	25860	25828	25768	25579	25694	25552
MIN	12790	23808	22646	21401	23869	24051	12177	13455	25037	24096	24861	10834
(a)	1,401.30	1,397.89	1,395.87	1,399.28	1,399.17	1,400.18	1,371.49	1,401.71	1,402.14	1,400.23	1,400.25	1,363.84
(b)	+14,600	-1,530	-885	+1,500	-49	+453	-11,500	+12,200	+198	-870	+9	-14,000

CAL YR 1974 b -1,980

WTR YR 1975 b +107

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11242000 SAN JOAQUIN RIVER ABOVE WILLOW CREEK, NEAR AUBERRY, CALIF.

LOCATION.--Lat 37°08'40", long 119°27'13", in SW¼SW¼ sec.15, T.9 S., R.23 E., Madera County, Sierra National Forest, on right bank 1,000 ft (305 m) downstream from diversion dam, 0.4 mi (0.6 km) upstream from Willow Creek, and 4.2 mi (6.8 km) northeast of Auberry.

DRAINAGE AREA.--1,295 mi² (3,354 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,175.54 ft (358.305 m) above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--24 years, 419 ft³/s (11.87 m³/s), 303,600 acre-ft/yr (374 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,760 ft³/s (276 m³/s) June 2 (gage height, 19.40 ft or 5.913 m); minimum daily, 3.5 ft³/s (0.099 m³/s) Dec. 5, Apr. 3, 4, 6, 7.

Period of record: Maximum discharge, 73,200 ft³/s (2,070 m³/s) Dec. 23, 1955 (gage height, 54.2 ft or 16.52 m, from floodmarks), from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of computed flow over dam; no flow Sept. 25, 1951.

REMARKS.--Records good. Flow regulated by nine powerplants and six reservoirs with combined capacity of about 559,900 acre-ft (690 hm³). Conduit to powerhouse No. 4 diverts 1,000 ft (305 m) above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and 13 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	14	23	18	17	8.4	9.6	23	7060	243	17	21
2	22	13	23	19	11	8.2	6.1	23	7460	31	17	21
3	19	15	20	19	8.2	8.2	3.5	23	6060	25	17	22
4	19	17	5.0	19	7.6	8.2	3.5	23	5520	13	17	22
5	21	18	3.5	19	7.3	8.8	3.6	23	5220	13	17	23
6	20	19	7.0	16	7.3	8.6	3.5	23	5930	21	18	23
7	21	19	12	7.8	7.3	8.8	3.5	23	6190	17	20	23
8	20	19	13	8.2	7.5	8.4	5.2	24	5160	13	20	23
9	20	20	13	8.4	7.5	8.2	6.2	24	4880	13	20	23
10	19	20	15	8.8	7.5	8.2	6.5	24	4710	13	20	21
11	18	20	16	9.6	7.5	8.2	14	24	4750	13	20	20
12	15	20	16	9.8	7.3	8.2	141	24	4240	13	20	21
13	17	20	16	10	7.6	8.0	13	24	4100	13	20	21
14	19	20	16	12	7.6	9.2	11	24	4730	17	21	23
15	19	20	17	12	7.8	8.2	11	24	4640	16	21	22
16	20	21	17	14	7.6	8.0	10	24	3880	15	21	22
17	20	21	17	14	7.1	7.8	10	86	3890	15	21	21
18	20	21	17	15	7.0	7.8	7.4	639	1980	15	22	21
19	21	21	17	16	6.6	7.8	8.0	721	1060	15	21	23
20	21	21	17	14	6.8	7.8	7.0	714	714	15	22	23
21	22	19	18	14	7.0	8.2	7.8	685	714	15	21	23
22	23	10	19	14	7.0	8.2	7.6	207	638	15	21	23
23	23	19	18	14	7.0	8.0	16	25	1180	15	21	22
24	23	20	20	14	7.5	8.0	23	365	962	15	19	23
25	23	20	20	14	8.0	8.2	23	740	650	15	19	23
26	23	21	20	14	8.2	8.2	23	1820	31	15	21	23
27	23	21	20	14	8.2	8.2	23	5480	32	15	22	25
28	11	23	20	15	8.4	6.5	23	5320	197	16	22	24
29	9.6	23	18	17	---	5.7	22	5120	428	17	22	24
30	13	23	17	17	---	4.7	22	4660	204	17	22	24
31	17	---	18	17	---	3.6	---	5600	---	17	22	---
TOTAL	604.6	578	508.5	433.6	222.4	242.5	474.0	32559	97210	721	624	673
MEAN	19.5	19.3	16.4	14.0	7.94	7.82	15.8	1050	3240	23.3	20.1	22.4
MAX	23	23	23	19	17	9.2	141	5600	7460	243	22	25
MIN	9.6	10	3.5	7.8	6.6	3.6	3.5	23	31	13	17	20
AC-FT	1200	1150	1010	860	441	481	940	64580	192800	1430	1240	1330
CAL YR 1974 TOTAL	134358.7			MEAN 368	MAX 5280	MIN 3.5	AC-FT 266500					
WTR YR 1975 TOTAL	134850.6			MEAN 369	MAX 7460	MIN 3.5	AC-FT 267500					

11242350 SOQUEL DIVERSION NEAR SUGAR PINE, CALIF.

LOCATION.--Lat 37°25'32", long 119°32'53", in SW¼NE¼ sec.10, T.6 S., R.22 E., Madera County, Sierra National Forest, on left bank 100 ft (30 m) downstream from headgate on North Fork Willow Creek, and 4.8 mi (7.7 km) east of Sugar Pine.

PERIOD OF RECORD.--October 1965 to current year. Monthly discharge only for October 1965 to September 1969, published with records for North Fork Willow Creek near Sugar Pine.

GAGE.--Water-stage recorder. Altitude of gage is 5,400 ft (1,650 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 12.7 ft³/s (0.360 m³/s), 9,200 acre-ft/yr (11.3 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 58 ft³/s (1.64 m³/s) June 9-12, 1975; no flow for several days in 1971-73, 1975.

REMARKS.--Records good. Ditch diverts water from right bank of North Fork Willow Creek 100 ft (30 m) upstream for irrigation in Madera Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	2.2	1.7	3.5	9.8	14	14	25	21	38	4.9	.95
2	1.4	1.9	2.4	3.5	17	13	14	28	28	37	.07	.93
3	2.0	1.8	19	3.5	12	13	14	31	55	36	0	.88
4	1.5	1.7	23	3.5	12	13	13	31	54	34	0	.81
5	1.3	1.7	9.4	3.5	9.5	16	12	27	50	32	0	.80
6	1.4	1.7	7.0	10	7.8	17	11	25	40	31	0	.80
7	1.7	1.7	6.2	8.3	8.0	17	10	25	57	30	0	.80
8	1.8	1.8	5.3	7.4	8.3	18	11	29	57	28	1.2	.88
9	1.5	1.7	4.8	6.4	33	15	10	34	58	27	2.4	.77
10	1.4	1.7	4.6	5.7	30	13	10	36	58	26	2.1	.72
11	1.3	1.7	4.3	5.5	11	12	11	37	58	24	2.0	.72
12	1.1	1.7	4.3	5.8	9.3	11	11	37	58	23	1.9	.72
13	1.1	1.7	4.3	5.8	9.6	9.6	12	35	57	22	1.7	.72
14	1.1	1.7	4.1	5.8	9.2	9.8	13	33	57	21	1.6	.72
15	.98	1.6	4.1	5.7	8.4	11	15	41	57	21	1.5	.72
16	.97	1.5	4.1	5.5	7.8	9.7	11	55	56	21	1.5	.72
17	.96	1.5	4.0	5.7	8.0	9.6	10	55	55	21	1.5	.72
18	.94	1.5	3.9	6.1	7.1	9.8	11	53	54	20	1.4	.72
19	.92	1.5	3.7	6.2	7.2	11	11	48	53	19	1.3	.72
20	.91	1.5	3.7	6.1	7.7	11	12	43	51	18	1.2	.72
21	.91	2.8	3.7	6.0	7.3	10	15	41	48	17	1.1	.68
22	.92	2.4	3.5	6.0	7.1	9.9	17	40	46	16	1.0	.66
23	.93	2.1	3.2	5.9	7.5	9.8	17	41	45	16	1.0	.64
24	.95	2.1	3.5	6.0	8.1	11	19	42	44	15	1.0	.64
25	.95	1.9	3.6	6.2	8.6	26	28	41	42	14	.96	.64
26	1.0	1.9	3.5	5.9	9.3	18	21	36	41	14	.88	.64
27	1.1	1.7	3.7	5.3	10	15	19	34	41	13	.88	.64
28	5.1	1.7	5.2	4.9	12	14	20	32	40	13	.88	.64
29	2.2	1.7	3.5	4.7	---	14	21	27	40	13	.88	.64
30	1.9	1.7	3.7	4.8	---	15	23	24	39	13	.88	.55
31	2.4	---	3.6	5.0	---	15	---	19	---	12	.96	---
TOTAL	43.15	53.8	164.6	174.2	302.6	411.2	436	1105	1460	685	36.69	21.91
MEAN	1.39	1.79	5.31	5.62	10.8	13.3	14.5	35.6	48.7	22.1	1.18	.73
MAX	5.1	2.8	23	10	33	26	28	55	58	38	4.9	.95
MIN	.51	1.5	1.7	3.5	7.1	9.6	10	19	21	12	0	.55
AC-FT	86	107	326	346	600	816	865	2190	2900	1360	73	43

CAL YR 1974 TOTAL 3921.46 MEAN 10.7 MAX 36 MIN .33 AC-FT 7780
WTR YR 1975 TOTAL 4894.15 MEAN 13.4 MAX 58 MIN 0 AC-FT 9710

11242400 NORTH FORK WILLOW CREEK NEAR SUGAR PINE, CALIF.

LOCATION.--Lat 37°23'52", long 119°33'55", in SW¼NE¼ sec.21, T.6 S., R.22 E., Madera County, on right bank at road bridge 0.6 mi (1.0 km) downstream from Sequel Campground, 3.0 mi (4.8 km) upstream from Chilkoat Creek, and 4.7 mi (7.6 km) southeast of Sugar Pine.

DRAINAGE AREA.--16.9 mi² (43.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,200 ft (1,580 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 20.9 ft³/s (0.592 m³/s), 15,140 acre-ft/yr (18.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 350 ft³/s (9.91 m³/s) June 1 (gage height, 4.50 ft or 1.372 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Oct. 19-21.

Period of record: Maximum discharge, 1,600 ft³/s (453 m³/s) Dec. 6, 1966 (gage height, 5.90 ft or 1.798 m), from rating curve extended above 250 ft³/s (7.08 m³/s) on basis of a step-backwater survey; minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 18, 19, 26-28, 1968.

REMARKS.--Records fair. No storage above station. Madera Irrigation District diverts up to 50 ft³/s (1.42 m³/s) through Sequel ditch (see sta 11242350) to the Fresno River basin 2.2 mi (3.5 km) upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	6.5	4.1	2.9	14	8.8	7.9	22	224	7.6	7.9	6.8
2	3.2	5.6	3.9	2.9	45	8.6	8.0	22	199	7.2	14	6.6
3	3.8	5.2	26	2.9	38	8.3	7.9	26	157	7.0	13	6.3
4	3.2	5.0	28	2.9	17	7.8	7.3	29	148	6.4	12	6.1
5	3.1	5.0	7.4	2.9	7.8	17	7.0	18	164	6.2	12	5.9
6	3.0	4.9	5.3	8.8	5.1	22	6.4	16	183	6.2	11	5.7
7	3.3	5.0	4.7	9.0	4.6	24	5.7	19	138	6.0	11	5.7
8	3.5	5.1	4.2	10	4.7	33	6.0	26	128	5.8	9.2	5.7
9	3.3	5.0	3.9	7.0	19	19	5.8	35	135	5.8	7.6	6.8
10	3.2	4.9	3.8	5.7	15	13	5.7	47	121	5.6	7.8	6.3
11	3.1	4.8	3.8	5.2	13	11	6.7	62	111	5.4	7.6	6.2
12	3.0	4.8	3.8	4.9	9.9	10	7.1	81	97	5.2	7.4	6.3
13	2.9	4.8	3.8	4.8	9.7	9.7	7.9	109	89	5.1	7.3	6.1
14	2.8	4.8	3.5	4.7	11	8.8	8.8	128	90	4.9	7.3	5.8
15	2.8	4.4	3.5	4.7	9.2	8.7	7.8	104	83	4.8	7.2	5.5
16	2.7	4.0	3.5	4.6	7.4	9.8	6.9	90	66	5.0	7.1	5.3
17	2.7	4.0	3.5	4.5	6.7	8.1	6.3	108	50	5.1	6.9	5.3
18	2.7	4.0	3.3	4.6	6.1	7.9	6.5	131	38	5.0	7.7	5.5
19	2.6	4.0	3.3	4.6	6.1	8.4	6.4	146	28	4.9	15	5.4
20	2.6	4.0	3.3	4.6	6.6	8.5	8.7	119	22	4.6	11	5.2
21	2.6	16	3.2	4.6	6.5	7.6	11	73	22	4.6	10	5.0
22	2.7	9.3	2.9	4.4	5.9	7.4	13	65	24	4.4	8.8	4.8
23	2.7	5.9	2.7	4.3	6.0	7.2	13	81	24	4.1	8.2	4.8
24	2.7	5.3	2.8	4.6	6.1	10	18	110	21	4.1	7.9	4.7
25	2.7	5.0	3.1	4.0	6.3	38	37	133	16	4.0	7.7	4.7
26	2.7	4.7	3.3	3.9	6.5	20	17	149	13	4.0	7.5	4.6
27	2.8	4.5	3.4	3.7	6.6	11	14	150	12	3.9	7.4	4.5
28	23	4.3	3.6	3.5	7.6	9.8	16	162	11	3.8	7.2	4.4
29	6.3	4.2	3.0	3.6	---	8.3	18	174	9.5	3.9	7.2	4.4
30	5.4	4.1	3.1	3.7	---	9.1	21	187	8.5	3.9	7.3	4.3
31	7.2	---	3.0	3.7	---	9.1	---	213	---	3.8	7.1	---
TOTAL	121.0	159.1	160.7	146.2	307.4	389.9	318.8	2835	2432.0	158.3	276.3	164.7
MEAN	3.90	5.30	5.18	4.72	11.0	12.6	10.6	91.5	81.1	5.11	8.91	5.49
MAX	23	16	28	10	45	38	37	213	224	7.6	15	6.8
MIN	2.6	4.0	2.7	2.9	4.6	7.2	5.7	16	8.5	3.8	6.9	4.3
AC-FT	240	316	319	290	610	773	632	5620	4820	314	548	327
CAL YR 1974	TOTAL	7579.8	MEAN 20.8	MAX 107	MIN 2.6	AC-FT 15030						
WTR YR 1975	TOTAL	7469.4	MEAN 20.5	MAX 224	MIN 2.6	AC-FT 14820						

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-14	1900	3.98	164	6-1	2000	4.50	350
5-18	1930	4.02	175	6-5	2000	4.24	244

Peak discharge (base, 100 ft³/s)

11243400 BASS LAKE NEAR BASS LAKE, CALIF.

LOCATION.--Lat 37°17'36", long 119°31'40", in NE¼ sec.26, T.7 S., R.22 E., Madera County, Sierra National Forest, at outlet tower at dam on North Fork Willow Creek, 2.2 mi (3.5 km) southeast of town of Bass Lake, and 5 mi (8 km) north of town of North Fork.

DRAINAGE AREA.--50.4 mi² (130.5 km²).

PERIOD OF RECORD.--January 1911 to current year. Bass Lake was formerly called Crane Valley Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.).

EXTREMES.--Current year: Maximum contents, 45,490 acre-ft (56.1 hm³) June 15 (elevation, 3,376.47 ft or 1,029.148 m); minimum, 17,930 acre-ft (22.1 hm³) Jan. 10 (elevation, 3,347.55 ft or 1,021.333 m).
Period of record: Maximum contents, 45,960 acre-ft (56.7 hm³) June 17, 1923 (elevation, 3,376.8 ft or 1,029.25 m); minimum, 35 acre-ft (43,200 m³) Nov. 19, 1953 (elevation, 3,270.2 ft or 996.76 m).

REMARKS.--Reservoir formed by earth- and rockfill dam; completed in 1901 and raised in 1910. Since 1910 usable contents 45,100 acre-ft (55.6 hm³) between elevations, 3,280.22 ft (999.811 m), invert of outlet conduit No. 3 and 3,376.40 ft (1,029.127 m), top of spillway gates, above mean sea level. Additional storage of 300 acre-ft (370,000 m³) not available for release. Water is released through Crane Valley powerhouse below dam for use in three small powerhouses before being discharged into Kerckhoff Reservoir at Wishon powerhouse. Water diverted from South Fork Willow Creek via Browns Creek ditch into Bass Lake near left end of dam. Madera Irrigation District has water rights to divert up to 50 ft³/s (1.42 m³/s) from North Fork Willow Creek through Soquel ditch (see sta 11242350) into Nelder Creek (Fresno River basin) during October and March to July each year. Chilkoote ditch can divert up to 7 ft³/s (0.20 m³/s) from Chilkoote Creek into North Fork Willow Creek just upstream from diversion dam from Oct. 1 to Aug. 1 each water year if available. See schematic diagram of San Joaquin River basin.

COOPERATION.--Records of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

MONTHEND CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Contents
Sept. 30.....	29,190
Oct. 31.....	22,700
Nov. 30.....	20,310
Dec. 31.....	18,770
Jan. 31.....	19,530
Feb. 28.....	25,260
Mar. 31.....	29,010
Apr. 30.....	30,000
May 31.....	41,330
June 30.....	44,560
July 31.....	42,190
Aug. 31.....	34,900
Sept. 30.....	26,450

LOCATION.--Lat 37°17'21", long 119°31'44", in SE¼ sec.26, T.7 S., R.22 E., Madera County, Sierra National Forest, on left bank 1,000 ft (305 m) downstream from Crane Valley powerhouse and dam, and 2.5 mi (4.0 km) southeast of town of Bass Lake.

GAGE.--Water-stage recorder and concrete flume. Altitude of gage is 3,300 ft (1,006 m), from topographic map.

AVERAGE DISCHARGE.--35 years, 69.5 ft³/s (1.968 m³/s), 50,350 acre-ft/yr (62.1 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 167 ft³/s (4.73 m³/s) June 23, 24, 1965; no flow at times.

REMARKS.--Conduit diverts from Bass Lake in sec.26, T.7 S., R.22 E. Water passes through Crane Valley powerhouse, then to powerhouse No. 3, and is stored temporarily at Manzanita Lake on North Fork Willow Creek; flow then diverts to powerhouses No. 2 and 1A before it enters San Joaquin River at Kerckhoff Reservoir through Wishon powerhouse No. 1. See schematic diagram of San Joaquin River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	69	3.1	1.0	5.1	121	121	141	142	121	62	149
2	125	1.0	70	73	5.0	120	125	133	142	121	.02	149
3	122	1.0	120	121	3.7	119	129	121	142	73	0	149
4	122	69	110	121	7.1	118	130	101	143	.04	78	149
5	122	120	44	120	8.6	118	102	90	142	.03	138	114
6	121	120	0	120	3.8	100	105	81	143	.03	139	148
7	121	120	0	120	0	89	120	81	142	66	139	148
8	121	55	0	120	0	90	132	81	142	119	141	148
9	129	.89	71	120	.70	93	140	82	138	120	141	148
10	141	.89	119	80	3.9	46	140	83	142	120	141	143
11	141	67	120	23	0	104	141	84	142	63	140	148
12	138	119	120	1.0	0	121	141	35	142	0	140	148
13	136	103	52	1.0	0	122	141	.18	142	0	144	148
14	132	83	1.1	.93	0	122	141	29	141	75	148	148
15	138	58	1.1	.78	0	122	141	79	141	123	148	148
16	140	.57	72	.78	0	121	141	86	141	122	148	148
17	140	.57	120	.78	0	121	141	86	142	122	148	148
18	140	69	120	.78	0	121	141	86	143	62	148	148
19	138	120	120	.78	3.4	122	141	86	143	0	148	147
20	136	120	119	.80	46	121	142	76	143	0	148	148
21	131	119	119	.35	76	119	141	87	143	75	148	147
22	123	54	119	0	1.1	97	140	87	143	122	148	147
23	122	0	120	0	1.1	104	140	87	132	122	149	147
24	122	0	57	0	75	116	140	87	122	122	149	146
25	51	71	.57	0	120	79	136	87	122	122	149	146
26	0	121	19	0	120	71	132	88	121	49	149	146
27	0	52	57	0	124	91	134	112	121	.03	149	145
28	.01	0	8.8	0	122	71	138	138	121	76	149	146
29	69	0	4.4	0	---	124	140	140	121	118	149	147
30	120	0	68	0	---	124	140	140	121	117	149	147
31	120	---	55	0	---	123	---	140	---	121	149	---
TOTAL	3501.01	1713.92	2010.07	1026.98	726.50	3330	4036	2834.18	4105	2351.13	4076.02	4388
MEAN	113	57.1	64.8	33.1	25.9	107	135	91.4	137	75.8	131	146
MAX	141	121	120	121	124	124	142	141	143	123	149	149
MIN	0	0	0	0	0	46	102	.18	121	0	0	114
AC-FT	6940	3400	3990	2040	1440	6610	8010	5620	8140	4660	8080	8700
CAL YR 1974	TOTAL	34446.51	MEAN	94.4	MAX	148	MIN	0	AC-FT	68320		
WTR YR 1975	TOTAL	34098.81	MEAN	93.4	MAX	149	MIN	0	AC-FT	67630		

11244000 NORTH FORK WILLOW CREEK NEAR BASS LAKE, CALIF.

LOCATION.--Lat 37°17'20", long 119°31'45", in SE¼ sec.26, T.7 S., R.22 E., Madera County, Sierra National Forest, on right bank 1,500 ft (457 m) downstream from Bass Lake spillway, and 2.5 mi (4.0 km) southeast of town of Bass Lake.

DRAINAGE AREA.--50.8 mi² (131.6 km²).

PERIOD OF RECORD.--May 1940 to current year. Prior to October 1944, published as Willow Creek below Crane Valley Reservoir. October 1944 to September 1954, published as "below Crane Valley Reservoir."

Gage.--Water-stage recorder. Broad-crested weir with V-notch Dec. 21, 1961, to Jan. 16, 1969, and since Mar. 26, 1971. Altitude of gage is 3,200 ft (975 m), from topographic map.

AVERAGE DISCHARGE.--35 years, 13.0 ft³/s (0.368 m³/s), 9,420 acre-ft/yr (11.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 112 ft³/s (3.17 m³/s) June 9 (gage height, 2.75 ft or 0.838 m); minimum daily, 0.28 ft³/s (0.008 m³/s) Dec. 26, 27, Jan. 4, 5, Sept. 23-27, 30.
Period of record: Maximum discharge, 1,300 ft³/s (36.8 m³/s) Jan. 26, 1969 (gage height, unknown); minimum daily, 0.1 ft³/s (0.003 m³/s) Nov. 13-16, 1940.

REMARKS.--Flow regulated by Bass Lake (see sta 11243400) 1,500 ft (457 m) upstream and by diversion into Pacific Gas and Electric Co. conduit No. 3 near Bass Lake (see sta 11243500). Record for Soquel diversion (see sta 11242350) shows flow diverted from North Fork Willow Creek into Nelder Creek in Fresno River basin. Brown's Creek ditch diverted 23,820 acre-ft (29.4 hm³) from South Fork Willow Creek into Bass Lake during the current year. See schematic diagram of San Joaquin River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	.40	.32	.31	.59	.35	.52	.50	1.8	1.7	1.4	.57
2	.35	.39	.32	.29	2.8	.35	.50	.49	2.0	1.7	1.4	.54
3	.35	.37	1.2	.29	1.4	.34	.48	.52	2.2	1.7	1.4	.53
4	.35	.37	1.7	.28	1.3	.34	.48	.60	2.2	1.7	1.3	.51
5	.34	.37	.63	.28	1.2	.60	.92	.54	2.2	1.7	1.3	.49
6	.35	.36	.47	.66	1.1	1.2	.81	.54	2.9	1.8	1.3	.48
7	.38	.36	.42	.45	1.1	1.7	.72	.53	61	1.8	1.2	.47
8	.57	.36	.39	1.3	.99	2.1	.80	.53	61	1.7	1.2	.47
9	.57	.35	.37	.84	5.8	1.1	.91	.54	35	1.5	1.2	.45
10	.57	.35	.37	.54	3.9	1.0	.96	.55	2.2	1.5	1.1	.44
11	.59	.35	.36	.44	1.4	.84	.83	.56	2.2	1.5	1.1	.42
12	.57	.35	.35	.39	1.1	.75	.71	.57	16	1.5	1.1	.42
13	.35	.35	.35	.36	2.0	.88	.62	.62	32	1.5	1.1	.40
14	.34	.35	.34	.35	1.5	.92	.84	.67	32	1.5	1.1	.39
15	.34	.35	.33	.33	.96	.81	1.2	.72	32	1.5	1.1	.38
16	.34	.35	.53	.32	.86	.98	.90	.77	32	1.5	1.0	.37
17	.34	.35	.83	.31	.77	.83	.76	.90	32	1.5	1.0	.36
18	.34	.34	.59	.30	.71	.72	.65	.98	16	1.5	1.0	.35
19	.34	.34	.31	.30	.63	.71	.59	1.0	1.8	1.5	1.0	.33
20	.34	.34	.31	.29	.49	.71	.55	1.1	1.8	1.5	.94	.32
21	.34	.71	.30	.37	.45	.80	.52	1.1	1.8	1.5	.91	.30
22	.34	.54	.31	.46	.42	2.4	.50	1.1	1.8	1.5	.87	.29
23	.34	.38	.29	.45	.40	1.1	.49	1.1	1.8	1.5	.84	.28
24	.34	.36	.29	.42	.40	.84	.58	1.2	1.8	1.5	.80	.28
25	.34	.35	.29	.45	.39	2.5	.81	1.3	1.7	1.5	.78	.28
26	.34	.34	.28	.46	.37	1.2	.60	1.4	1.7	1.5	.75	.28
27	.34	.33	.28	.45	.37	.88	.55	1.6	1.7	1.5	.73	.28
28	1.0	.33	.39	.45	.36	.72	.53	1.6	1.6	1.5	.69	.29
29	.45	.33	.31	.44	---	.63	.52	1.5	1.6	1.5	.66	.29
30	.38	.32	.30	.44	---	.57	.50	1.5	1.6	1.5	.63	.28
31	.41	---	.32	.45	---	.55	---	1.7	---	1.4	.60	---
TOTAL	12.66	11.14	13.85	13.47	33.76	29.42	20.35	28.33	413.5	48.2	31.50	11.54
MEAN	.41	.37	.45	.43	1.21	.95	.68	.91	13.8	1.55	1.02	.38
MAX	1.0	.71	1.7	1.3	5.8	2.5	1.2	1.7	61	1.8	1.4	.57
MIN	.32	.32	.28	.28	.36	.34	.48	.49	1.6	1.4	.60	.28
AC-FT	25	22	27	27	67	58	40	56	820	96	62	23
CAL YR 1974	TOTAL 363.22		MEAN 1.00	MAX	3.2	MIN .28	AC-FT 720					
WTR YR 1975	TOTAL 667.72		MEAN 1.83	MAX	61	MIN .28	AC-FT 1320					

SAN JOAQUIN RIVER BASIN

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11246500 WILLOW CREEK AT MOUTH, NEAR AUBERRY, CALIF.

LOCATION.--Lat 37°09'03", long 119°27'34", in SE¼NE¼ sec.16, T.9 S., R.23 E., Madera County, Sierra National Forest, on left bank 40 ft (12 m) upstream from bridge, 0.4 mi (0.6 km) upstream from mouth, 1.3 mi (2.1 km) downstream from Whiskey Creek, and 4.3 mi (6.9 km) northeast of Auberry.

DRAINAGE AREA.--130 mi² (337 km²).

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

GAGE.--Water-stage recorder. Concrete control since Oct. 22, 1964. Datum of gage is 1,174.69 ft (358.046 m) above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--23 years, 55.6 ft³/s (1.575 m³/s), 40,280 acre-ft/yr (49.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 724 ft³/s (20.5 m³/s) Mar. 25 (gage height, 8.97 ft or 2.734 m); minimum daily, 0.82 ft³/s (0.023 m³/s) Sept. 30.
Period of record: Maximum discharge, 15,700 ft³/s (445 m³/s) Dec. 23, 1955 (gage height, 28.5 ft or 8.69 m, from floodmarks), from rating curve extended above 4,700 ft³/s (133 m³/s); no flow at times in 1955, 1959-62, 1964-66, 1968, 1972.

REMARKS.--Records good. Flow regulated by Bass Lake 10 mi (16 km) upstream (see sta 11243400) and diversion into Pacific Gas and Electric Co. conduit No. 1. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and 13 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1963: 1956-58(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	11	3.9	5.4	9.1	26	47	86	200	14	6.6	2.9
2	29	9.6	3.8	5.1	49	25	43	91	179	14	6.0	2.9
3	4.6	7.6	15	5.7	38	25	43	111	147	14	5.9	2.7
4	2.5	6.5	125	5.6	21	24	42	124	128	14	5.4	2.3
5	2.1	6.1	30	5.6	24	34	56	80	110	13	5.3	2.1
6	2.1	5.9	15	17	17	65	50	62	101	12	5.3	2.0
7	1.8	5.7	12	27	17	57	48	62	121	12	5.1	2.0
8	2.0	6.0	9.9	52	17	254	42	75	115	13	5.4	1.7
9	2.4	4.9	8.5	34	198	78	41	127	127	11	5.2	2.0
10	5.5	4.4	7.9	19	256	63	44	182	70	11	4.2	1.7
11	5.7	4.1	7.5	15	45	53	44	223	39	10	3.7	3.7
12	8.4	3.9	7.3	13	31	50	39	277	33	10	3.4	2.9
13	6.8	3.7	7.2	13	44	48	39	355	69	9.5	3.3	2.3
14	4.5	3.6	6.8	12	49	55	49	363	75	9.1	3.3	2.0
15	4.1	3.5	6.6	11	30	46	66	370	68	8.9	3.7	1.7
16	3.8	3.5	6.5	11	25	61	57	304	61	9.5	3.4	1.5
17	3.7	3.5	6.4	10	21	50	48	341	56	9.9	3.1	1.5
18	3.4	3.4	6.4	10	19	42	41	373	53	9.1	3.0	1.5
19	2.8	3.3	6.1	10	18	41	36	391	28	8.9	6.5	1.4
20	3.0	3.4	5.9	10	22	39	37	318	25	8.9	6.4	1.4
21	2.6	6.6	5.7	10	19	39	41	160	25	9.1	5.0	1.3
22	2.7	21	6.0	9.9	17	38	49	132	22	8.9	4.3	1.3
23	2.3	8.1	5.5	9.5	16	46	47	142	20	8.5	3.7	1.2
24	2.1	6.0	4.9	9.5	16	46	47	194	19	7.9	3.6	1.2
25	2.2	5.1	5.4	9.3	17	539	55	241	19	7.8	3.3	1.1
26	2.3	4.7	6.4	9.3	18	148	57	223	18	7.4	3.2	1.1
27	2.4	4.4	6.6	9.1	19	75	55	219	17	7.0	3.1	1.0
28	28	4.3	7.3	7.5	22	58	54	241	16	6.6	3.1	.94
29	24	4.0	6.4	8.1	---	55	60	226	16	6.6	3.1	.91
30	9.3	3.9	5.4	7.8	---	51	66	212	15	7.1	3.0	.82
31	8.4	---	6.0	7.2	---	52	---	205	---	7.0	2.9	---
TOTAL	185.6	171.7	363.3	388.6	1094.1	2283	1443	6510	1992	305.7	132.5	68.37
MEAN	5.99	5.72	11.7	12.5	39.1	73.6	48.1	210	66.4	9.86	4.27	2.28
MAX	29	21	125	52	256	539	66	391	200	14	6.6	17
MIN	1.1	3.3	3.8	5.1	9.1	24	36	62	15	6.6	2.9	.82
AC-FT	368	341	721	771	2170	4530	2860	12910	3950	606	263	136
CAL YR 1974	TOTAL	17560.40	MEAN	48.1	MAX	1100	MIN	.96	AC-FT	34830		
WTR YR 1975	TOTAL	14937.87	MEAN	40.9	MAX	539	MIN	.82	AC-FT	29630		

11247000 SAN JOAQUIN RIVER BELOW KERCKHOFF POWERHOUSE, NEAR PRATHER, CALIF.

LOCATION.--Lat 37°04'45", long 119°33'36", in NE¼NW¼ sec.10, T.10 S., R.22 E., Fresno County, on left bank 1.1 mi (1.8 km) downstream from Kerckhoff powerhouse, 1.4 mi (2.3 km) upstream from Big Sandy Creek, and 3.8 mi (6.1 km) southeast of Prather.

DRAINAGE AREA.--1,480 mi² (3,833 km²).

PERIOD OF RECORD.--April 1910 to September 1914, December 1936 to December 1937, December 1942 to current year. Published as "near North Fork" 1910-14 and as "below Kerckhoff powerhouse" 1915-60.

GAGE.--Water-stage recorder. Datum of gage is 563.4 ft (171.72 m) above mean sea level (levels by Bureau of Reclamation). Prior to Oct. 1, 1914, at site 11 mi (18 km) upstream at different datum.

AVERAGE DISCHARGE.--36 years (1910-14, 1943-75), 2,372 ft³/s (67.18 m³/s), 1,719,000 acre-ft/yr (2.12 km³/yr).

EXTREMES.--Current year: Maximum discharge, 13,100 ft³/s (371 m³/s) June 2 (gage height, 23.89 ft or 7.282 m); minimum daily, 319 ft³/s (9.03 m³/s) Oct. 9.

Period of record: Maximum discharge, 92,200 ft³/s (2,610 m³/s) Dec. 23, 1955 (gage height, 51.0 ft or 15.54 m, from floodmarks), from rating curve extended above 20,000 ft³/s (566 m³/s) on basis of records for San Joaquin River above Willow Creek, near Auberry and Willow Creek at mouth, near Auberry; minimum daily, 24 ft³/s (0.68 m³/s) Sept. 26, 1966.

REMARKS.--Records excellent. Flow regulated by 12 powerplants and eight reservoirs with total usable capacity of 609,300 acre-ft (751 hm³). Earliest storage began in 1901 at Bass Lake (see sta 11243400). See records for Florence Lake, Lake Thomas A. Edison, Mammoth Pool Reservoir, Huntington, Shaver, and Redinger Lakes given elsewhere in this report. Backwater from Millerton Lake has affected record at times since November 1947, when spillway gates were installed at Friant Dam. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record, telemark readings, and 10 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	540	1380	1170	401	638	1700	3550	3480	10600	3770	1870	1890
2	746	545	1140	583	1570	1690	3510	3490	11200	3440	1810	1840
3	823	739	1300	619	1060	1680	3520	3510	9760	3290	1750	1940
4	1140	933	1760	600	854	1720	3530	3570	9300	2700	1590	1960
5	1130	1120	1390	489	1130	1700	3640	3450	8750	2770	1970	1830
6	1030	1200	1130	981	963	1750	3570	3430	9100	2950	1960	1900
7	782	1270	569	1370	856	1740	3540	3400	9550	2800	2080	1720
8	880	1390	665	1140	876	1770	3550	3470	8690	2470	1900	1870
9	319	630	1330	1690	1700	1720	3550	3530	8450	2570	1760	1740
10	476	499	1240	1170	1730	1720	3560	3610	8080	2580	1690	1940
11	493	901	1280	510	1730	1720	3570	3680	8070	2680	1910	2080
12	518	1160	1310	547	1700	1730	3480	3700	7800	2520	1900	1890
13	630	1210	1310	868	1710	1970	3170	3740	7510	2430	1910	2280
14	1170	1220	789	665	1760	2000	3530	3770	8090	2430	2010	2270
15	1170	1430	698	667	1750	1980	3580	3850	8210	1790	1930	2230
16	1170	888	1230	567	1720	2040	3540	3820	7450	1690	1940	2320
17	1170	624	1450	612	1720	2050	3490	3870	7270	1710	1730	2240
18	985	1150	1280	510	1720	1970	3450	4430	5880	1680	1750	2250
19	1280	1420	1200	516	1700	1990	3410	4640	4720	1720	1960	2220
20	1230	1470	1280	716	1700	1940	3400	4590	4230	1750	2060	2150
21	1260	1460	949	885	1710	1870	3400	4410	4170	1660	1970	2160
22	1170	1700	758	858	1710	2340	3390	3950	4020	1850	2090	2240
23	1150	1230	1400	928	1700	2220	3400	3670	4600	1890	1950	2230
24	1360	1110	1120	821	1690	1780	3410	3940	4490	1710	1650	2080
25	1640	1350	786	698	1690	2660	3590	4520	4250	2060	1960	2000
26	808	1420	1280	606	1700	3400	3530	5280	3560	1890	1970	2000
27	623	1470	1000	675	1720	2760	3450	9280	3460	1630	1920	2010
28	1260	582	1350	747	1730	2580	3440	9200	3470	1800	1930	1860
29	1660	1210	687	706	---	1810	3430	8870	3900	1960	1980	1950
30	1160	744	1020	815	---	958	3450	8580	3540	1970	1950	1850
31	1470	---	1440	711	---	1820	---	8910	---	1940	1980	---
TOTAL	31243	33455	35311	23671	42237	60778	104630	145640	202170	70100	58830	60940
MEAN	1008	1115	1139	764	1508	1961	3488	4698	6739	2261	1898	2031
MAX	1660	1700	1760	1690	1760	3400	3640	9280	11200	3770	2090	2320
MIN	319	499	569	401	638	958	3170	3400	3460	1630	1590	1720
AC-FT	61970	66360	70040	46950	83780	120600	207500	288900	401000	139000	116700	120900
CAL YR 1974 TOTAL	1028163			MEAN 2817	MAX 8570	MIN 319	AC-FT 2039000					
WTR YR 1975 TOTAL	869005			MEAN 2381	MAX 11200	MIN 319	AC-FT 1724000					

11249500 MADERA CANAL AT FRIANT, CALIF.

LOCATION.--Lat 37°00'10", long 119°42'21", in NW¼SW¼ sec.5, T.11 S., R.21 E., Madera County, at Friant Dam 0.9 mi (1.4 km) northeast of Friant.

PERIOD OF RECORD.--October 1943 to current year. October 1954 to September 1966 published as Friant-Madera Canal at Friant.

GAGE.--Discharge computed on basis of valve openings in dam and head on valves. Prior to Oct. 1, 1948, water-stage recorder at several sites at various datums. Oct. 1, 1948, to Sept. 30, 1949, water-stage recorder at site 8.8 mi (14.2 km) downstream.

AVERAGE DISCHARGE.--32 years, 299 ft³/s (8.468 m³/s), 216,600 acre-ft/yr (267 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,330 ft³/s (37.7 m³/s) July 2, 1973; no flow many days in each year.

REMARKS.--Canal diverts from Millerton Lake (see sta 11250100) at right end of Friant Dam for irrigation between San Joaquin and Fresno Rivers.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by the Geological Survey, rounded to Geological Survey standards.

REVISIONS (WATER YEARS).--WSP 1151: 1944-48.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	705	330	778	1210	1200	1160	312
2					0	724	419	742	1230	1240	1140	309
3					0	721	460	754	1260	1250	1130	305
4					0	719	522	769	1280	1200	1120	302
5					0	716	557	803	1280	1170	1100	298
6					0	482	538	819	1280	1160	1090	295
7					0	256	529	815	1300	1160	1080	292
8					0	202	442	906	1270	1220	1090	289
9					0	203	366	953	1260	1240	1100	286
10					0	152	300	971	1280	1270	1080	332
11					0	125	273	979	1290	1300	1070	354
12					66	125	262	974	1300	1300	1060	352
13					102	125	257	996	1300	1300	1040	351
14					102	126	282	1040	1290	1290	1050	352
15					102	127	296	1050	1280	1300	1050	199
16					149	127	297	1040	1290	1300	927	0
17					175	111	298	1030	1300	1290	860	282
18					175	103	298	1030	1300	1280	740	315
19					175	103	299	991	1300	1210	672	0
20					217	103	299	972	1260	1170	667	0
21					240	104	299	940	1210	1160	661	0
22					239	104	425	918	1190	1150	656	0
23					326	105	557	902	1180	1200	590	0
24					423	131	590	868	1180	1220	551	0
25					567	146	623	853	1180	1240	545	0
26					659	147	585	889	1180	1280	444	0
27					672	195	554	916	1170	1280	328	0
28					670	239	552	1000	1130	1280	325	0
29					---	250	672	1100	1100	1270	321	0
30					---	282	766	1130	1140	1210	318	0
31		---			---	299	---	1180	---	1170	315	---
TOTAL	0	0	0	0	5059	8057	12947	29108	37220	38310	25280	5225
MEAN	0	0	0	0	181	260	432	939	1241	1236	815	174
MAX	0	0	0	0	672	724	766	1180	1300	1300	1160	354
MIN	0	0	0	0	0	103	257	742	1100	1150	315	0
AC-FT	0	0	0	0	10030	15980	25680	57740	73830	75990	50140	10360
CAL YR 1974	TOTAL	199299.00	MEAN 546	MAX 1310	MIN 0	AC-FT 395300						
WTR YR 1975	TOTAL	161206.00	MEAN 442	MAX 1300	MIN 0	AC-FT 319800						

SAN JOAQUIN RIVER BASIN

11250000 FRIANT-KERN CANAL AT FRIANT, CALIF.
(National stream-quality accounting network station)

LOCATION.--Lat 36°59'53", long 119°42'11", in SE¼SW¼ sec.5, T.11 S., R.21 E., Fresno County, at Friant Dam 0.9 mi (1.4 km) northeast of Friant.

PERIOD OF RECORD.--March 1949 to current year.

GAGE.--Discharge computed on basis of valve openings in dam and head on valves. Prior to July 8, 1949, non-recording gages at various sites and datums. July 8 to Sept. 30, 1949, water-stage recorder at site 0.2 mi (0.3 km) downstream.

AVERAGE DISCHARGE.--26 years, 1,386 ft³/s (39.25 m³/s), 1,004,000 acre-ft/yr (1.24 km³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 4,564 ft³/s (129 m³/s) Apr. 17, 1962, Aug. 4, 1971; no flow for several months in most years.

REMARKS.--Canal diverts from Millerton Lake (see sta 11250100) at left end of Friant Dam for irrigation in upper San Joaquin Valley.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1340	395		0	1500	1850	1870	4360	3540	4440	3460	2530
2	920	296		0	1180	1890	2060	4180	3450	4320	3170	2550
3	777	305		0	799	1960	2120	4040	3470	4080	3280	2610
4	684	377		0	750	2040	2000	4220	3520	3850	3470	2570
5	663	410		0	829	2030	1910	4350	3480	3680	3710	2440
6	710	428		500	902	1970	1920	4360	3300	3710	3620	2290
7	726	416		298	909	1840	1740	4360	2970	3810	3320	2350
8	671	382		0	961	1710	1580	4350	3040	4080	3050	2420
9	597	356		0	1180	1520	1630	4340	3430	4170	2830	2260
10	627	320		0	1310	1220	1680	4260	3650	4170	2930	2160
11	645	274		0	1190	1120	1570	4300	3510	3840	3120	2080
12	605	305		0	1350	1070	1400	4360	3470	3640	3170	1910
13	639	360		167	1380	1030	1450	4360	3370	3710	3170	1760
14	748	390		221	1280	927	1770	4390	3630	3820	3080	1620
15	897	407		203	1250	835	2220	4400	3840	3750	2820	1410
16	997	420		127	1340	856	2390	4280	4040	3730	2530	1450
17	1050	429		0	1460	899	2400	4020	3960	3600	2520	1440
18	971	448		75	1860	964	2380	3970	3970	3390	2240	1420
19	931	468		75	2010	1030	2360	4000	4190	3240	2460	1320
20	977	444		75	2130	1070	2540	4010	4090	3320	2410	1570
21	1010	214		75	2220	1070	3370	3680	3840	3470	2370	1880
22	1040	0		75	2300	1020	3600	3460	3930	3610	2280	2050
23	1060	0		75	2480	979	3720	3200	4070	3680	2170	2130
24	1030	0		75	2680	1020	3760	3010	4290	3660	2280	2190
25	893	0		75	2960	1170	3830	3160	4390	3570	2460	2180
26	745	0		75	2880	1220	3660	3410	4390	3520	2590	2000
27	757	0		88	2340	1260	3770	3610	4300	3680	2620	1780
28	639	0		153	2040	1230	3950	3690	4140	3840	2580	1770
29	459	0		327	---	1140	4140	3580	4270	3990	2790	1840
30	416	0		688	---	1300	4310	3440	4420	4010	2520	1920
31	431	---		1300	---	1530	---	3410	---	3830	2550	---
TOTAL	24655	7844	0	4747	45470	40770	77100	122560	113960	117210	87570	59900
MEAN	795	261	0	153	1624	1315	2570	3954	3799	3781	2825	1997
MAX	1340	468	0	1300	2960	2040	4310	4400	4420	4440	3710	2610
MIN	416	0	0	0	750	835	1400	3010	2970	3240	2170	1320
AC-FT	48900	15560	0	9420	90190	80870	152900	243100	226000	232500	173700	118800
CAL YR 1974	TOTAL	836249.00	MEAN	2291	MAX	4370	MIN	0	AC-FT	1659000		
WTR YR 1975	TOTAL	701786.00	MEAN	1923	MAX	4440	MIN	0	AC-FT	1392000		

PERIOD OF RECORD.--Chemical analyses: October 1974 to September 1975.
Sediment records: Water year 1975 (partial-record station).

[illegible][illegible]

SAN JOAQUIN RIVER BASIN

11250000 FRIANT-KERN CANAL AT FRIANT, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RFSI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM
OCT.									
23...	.25	.01	23	21	.03	65.8	6	0	40
NOV.									
11...	.12	.02	--	--	--	--	--	--	--
JAN.									
31...	.20	.01	21	28	.03	56.7	13	2	32
FEB.									
26...	.19	.06	--	--	--	--	--	--	--
MAR.									
31...	.49	.04	--	--	--	--	--	--	--
APR.									
30...	.16	.02	43	37	.06	507	15	0	35
JUNE									
06...	.12	.00	--	--	--	--	--	--	--
30...	.20	.01	--	--	--	--	--	--	--
AUG.									
06...	.34	.02	21	24	.03	197	11	2	29
SEP.									
03...	.14	.01	--	--	--	--	--	--	--
30...	.41	.02	--	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
23...	.4	24	7.2	15.0	2	91000	84	82	6.4
NOV.									
11...	--	22	7.2	17.0	--	1500	--	--	--
JAN.									
31...	.4	29	7.2	10.0	1	840	82	<1	1.8
FEB.									
26...	--	30	7.6	10.0	--	1200	82	82	--
MAR.									
31...	--	44	7.0	11.0	--	570	84	86	--
APR.									
30...	.4	45	7.4	12.5	3	280	82	81	--
JUNE									
06...	--	30	7.0	13.0	--	230	85	9	--
30...	--	24	6.8	16.0	--	29	--	81	--
AUG.									
06...	.3	22	7.6	20.0	2	190	<1	<1	2.5
SEP.									
03...	--	26	6.6	20.5	--	1600	84	81	--
30...	--	29	5.6	23.0	--	2200	15	82	--

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

11250000 FRIANT-KERN CANAL AT FRIANT, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHYTOPLANKTON			
	PHYLUM	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
	.CLASS			
	..ORDER			
	...FAMILY			
	....GENUS			
	.....SPECIES			
OCT 23	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...SCENEDESMACEAE			
	....ACTINASTRUM			
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		<1
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			
	..PENNALES	PENNATE		<1
	...ACHNANTHACEAE			
	....ACHNANTHES		40000	42
	...FRAGILARIACEAE			
	....SYNEDRA			<1
	.CHRYSOPHYCEAE			
	..CHRYSONOMADALES			
	...OCHROMONADACEAE			
	....DINOBRYON			
	CRYPTOPHYTA			<1
	.CRYPTOPHYCEAE			
	..CRYPTOMONADALES			
	...CRYPTOMONADACEAE			
	....CRYPTOMONAS			
	CYANOPHYTA	BLUE-GREEN ALGAE		<1
	.MYXOPHYCEAE			
	..HORMOGONALES	FILAMENTOUS		
	...OSCILLATORIACEAE			
	....LYNGBYA		51000	56
	TOTAL PHYTOPLANKTON		91000	
NOV 11	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		45	3
	....MELOSIRA		120	8
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		1200	83
	...FRAGILARIACEAE			
	....SYNEDRA		75	5
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		15	1
	TOTAL PHYTOPLANKTON		1500	
JAN 31	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		220	26
	....MELOSIRA		120	14
	..PENNALES	PENNATE		
	...FRAGILARIACEAE			
	....ASTERIONELLA		240	28
	....FRAGILARIA		210	25
	....SYNEDRA		50	6
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		17	2
	TOTAL PHYTOPLANKTON		840	

SAN JOAQUIN RIVER BASIN

11250000 FRIANT-KERN CANAL AT FRIANT, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OTOBER 1974 TO SEPTEMBER 1975

DATE	PHYLUM ..CLASS ...ORDER ...FAMILY ...GENUS....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
FEB 26	CHRYSTOPHYTA ..BACILLARIOPHYCEAE ...CENTRALES ...COSCONODISCACEAE ...MELOSIRA ...PENNALES ...FRAGILARIACEAE ...FRAGILARIA ...SYNEDRA	YELLOW-GREEN ALGAE DIATOMS CENTRIC PENNATE	190 1000 12	16 83 1
	TOTAL PHYTOPLANKTON		1200	
MAR 31	CHRYSTOPHYTA ..BACILLARIOPHYCEAE ...PENNALES ...ACHNANTHACEAE ...ACHNANTHES ...FRAGILARIACEAE ...FRAGILARIA ..CHRYSTOPHYCEAE ...CHRYSONOMADALES ...OCHROMONADACEAE ...DINOBRYON	YELLOW-GREEN ALGAE DIATOMS PENNATE	17 540 17	3 94 3
	TOTAL PHYTOPLANKTON		570	

DATE	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M
SEP. 03-30	6.20	19.0	.300	9.10

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)
OCT. 23...	0800	1	0	1	<10	<9	<1	0	0	0
JAN. 31...	1300	2	0	2	<10	<9	1	0	0	0
APR. 30...	1100	4	0	4	<10	<10	0	0	0	0
AUG. 06...	1300	7	6	1	<10	<10	0	0	0	0

DATE	TOTAL COBALT (CO) (UG/L)	SUS- PENDE COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDE LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)
OCT. 23...	<50	<50	0	<10	<8	2	<100	<93	7
JAN. 31...	<50	<49	1	1600	1600	2	<100	<94	6
APR. 30...	<50	<48	2	<10	<6	4	<100	<99	1
AUG. 06...	<50	<50	0	10	7	3	<100	<98	2

11250000 FRIANT-KERN CANAL AT FRIANT, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 23...	.0	.0	.0	1	0	1	50	40	10
JAN. 31...	.1	.0	.1	0	0	0	40	20	20
APR. 30...	1.1	.9	.2	0	0	0	30	10	20
AUG. 06...	.0	.0	.0	--	--	0	60	60	0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
JAN. 31...	1300	10.0	1000	2	5.4	E63
FEB. 26...	1130	10.0	2910	3	24	E87
MAR. 31...	1230	11.0	1410	3	11	E82
APR. 30...	1130	--	4370	2	24	E94
JUNE 06...	1400	13.0	3400	5	46	81
30...	1300	16.0	4450	4	48	68
SEP. 03...	1100	20.5	2640	2	14	80
30...	1000	23.0	1880	2	10	81

SAN JOAQUIN RIVER BASIN

11250100 MILLERTON LAKE AT FRIANT, CALIF.

LOCATION.--Lat 37°00'00", long 119°42'13", in SW¼SW¼ sec.5, T.11 S., R.21 E., Fresno County, near center of Friant Dam on San Joaquin River just upstream from Cottonwood Creek, 0.9 mi (1.4 km) northeast of Friant.

DRAINAGE AREA.--1,638 mi² (4,242 km²).

PERIOD OF RECORD.--October 1941 to current year. Monthend contents only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to May 29, 1944, nonrecording gage on left bank at same datum.

EXTREMES.--Current year: Maximum contents, 488,100 acre-ft (602 hm³) June 18 (elevation, 571.27 ft or 174.123 m); minimum, 137,000 acre-ft (169 hm³) Oct. 2 (elevation, 469.38 ft or 143.067 m).

Period of record: Maximum contents, 528,700 acre-ft (652 hm³) June 12, 1973 (elevation, 579.66 ft or 176.680 m); minimum since lake first filled, 133,600 acre-ft (165 hm³) Apr. 11, 1969 (elevation, 467.81 ft or 142.588 m).

REMARKS.--Reservoir is formed by gravity-type concrete dam with spillway near center, completed in December 1942. Control valves installed in February 1944 and spillway gates installed in November 1947. Usable capacity, 503,200 acre-ft (620 hm³) between elevations 375.4 ft (114.42 m), invert of river outlet and 578.0 ft (176.17 m), top of drum-type spillway gates, above mean sea level. Not available for release, 17,400 acre-ft (21.5 hm³). Millerton Lake is one of the storage units in Central Valley project. Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records furnished by Bureau of Reclamation.

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

400	36,400	500	215,600
420	57,000	520	279,400
440	83,300	540	353,000
460	117,500	560	436,500
480	161,700	580	530,400

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137500	152500	201600	267900	302200	292800	333200	358600	360600	449600	275700	168700
2	137000	153100	205600	268900	303500	291200	335300	355600	374000	445200	270600	166600
3	137100	153700	206500	270100	304400	289300	337100	352800	384400	441100	265300	164500
4	137900	154700	210100	271100	305000	287400	339200	349900	393700	436400	259200	162700
5	138800	156000	212900	272000	305800	285600	342000	346500	402000	432200	253500	160800
6	139300	157500	215000	273100	306100	284500	344500	343000	411400	428300	247900	159400
7	139400	159100	216100	275200	306100	284200	347200	339400	422200	423800	243200	157600
8	139800	161000	217300	277700	306100	284800	350400	335800	431200	418200	238700	155800
9	139100	161700	219800	281200	307800	285200	353700	332300	439200	412500	234200	154100
10	138800	161900	222200	283400	309600	286300	357000	328900	445800	406800	229600	153000
11	138500	163100	224600	284500	310900	287700	360600	325700	452600	401800	224900	152300
12	138300	164700	227100	285400	311700	289200	364400	322400	459000	397000	220200	151500
13	138200	166400	229600	286800	312700	291500	367400	319000	464900	391800	215600	151700
14	139000	168000	231100	287600	313800	293800	370400	315700	471500	386300	211400	152300
15	139500	169900	232400	288500	314800	296200	372800	312400	477900	379700	207400	153400
16	139800	170900	234800	289400	315400	298800	374500	309300	482600	373200	204300	154900
17	140100	171100	237500	290600	315700	301100	376100	306800	486800	366700	200900	155800
18	140000	172400	239900	291400	315200	303200	377600	305600	488100	360800	197700	156800
19	140600	174200	242200	292200	314300	305100	379200	304800	486400	355400	195400	158400
20	141000	176200	244700	293300	313200	306700	380200	303900	484000	349900	193300	159500
21	141500	178700	246600	294900	311800	308500	379900	303300	482200	343900	191100	160000
22	141700	182000	247900	296300	310200	312100	378700	302300	479700	338000	189200	160300
23	141800	184400	250600	298000	308300	314800	376900	301300	478100	332100	187700	160500
24	142300	186500	252700	299400	305600	316300	375100	301100	475900	325700	185200	160200
25	143700	189000	254100	300600	302100	320100	373300	301900	473000	320100	182900	159800
26	143900	191800	256600	301600	298600	324700	371800	303800	468900	314300	180700	159700
27	143700	194600	258600	302600	296200	327700	370200	313500	464600	307500	178600	160100
28	144800	195700	261200	303700	294400	330100	368100	322700	460900	300800	176600	160100
29	147100	197900	262500	304400	---	331300	365300	331400	457700	294100	174300	160200
30	148500	199300	264400	304600	---	330300	362000	339500	453500	287500	172500	160100
31	150500	---	267200	303600	---	330400	---	348500	---	281300	170600	---
MAX	150500	199300	267200	304600	315700	331300	380200	358600	488100	449600	275700	168700
MIN	137000	152500	201600	267900	294400	284200	333200	301100	360600	281300	170600	151500
(a)	475.31	494.32	516.41	526.88	524.31	534.16	542.29	538.86	563.80	520.56	483.57	479.35
(b)	+11,400	+48,800	+67,900	+36,400	-9,200	+36,000	+31,600	-13,500	+105,000	-172,200	-110,700	-10,500
(c)	749	303	260	260	541	787	1,166	2,227	3,447	3,261	2,063	1,375

CAL YR 1974 b -84,000
WTR YR 1975 b +21,000

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

11251000 SAN JOAQUIN RIVER BELOW FRIANT, CALIF.

LOCATION.--Lat 36°59'04", long 119°43'24", in SW¼SW¼ sec.7, T.11 S., R.21 E., Fresno County, on left bank 0.5 mi (0.8 km) west of Friant, 1.5 mi (2.4 km) downstream from Cottonwood Creek, 2 mi (3.2 km) downstream from Friant Dam, and at mile 268.1 (431.4 km).

DRAINAGE AREA.--1,676 mi² (4,341 km²).

PERIOD OF RECORD.--October 1907 to current year. Published as "near Pollasky" October 1907 to December 1908 and as "near Friant" January 1909 to September 1938. Monthly discharge only for October 1907 to November 1908, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 294.00 ft (89.611 m) above mean sea level (levels by Bureau of Reclamation). Oct. 18, 1907, to Nov. 9, 1913, nonrecording gage at site 4.5 mi (7.2 km) upstream at different datum. Nov. 10, 1913, to Sept. 30, 1968, water-stage recorder at site 2.5 mi (4.0 km) upstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents in and evaporation from Millerton Lake and for diversions to Madera and Friant-Kern Canals).--68 years, 2,363 ft³/s (66.92 m³/s), 1,712,000 acre-ft/yr (2.11 km³).

EXTREMES.--Current year: Maximum discharge, 182 ft³/s (5.15 m³/s) July 28 (gage height, 2.77 ft or 0.844 m); minimum daily, 28 ft³/s (0.79 m³/s) Nov. 10-13.

Period of record: Maximum discharge, 77,200 ft³/s (2,190 m³/s) Dec. 11, 1937 (gage height, 23.8 ft or 7.254 m, site and datum then in use); minimum, 38 ft³/s (1.08 m³/s), regulated, July 29, 1940. Maximum discharge since construction of Friant Dam in 1941, 12,400 ft³/s (351 m³/s) June 6, 1969; minimum, 5.5 ft³/s (0.16 m³/s) Oct. 20, 1941.

REMARKS.--Records good. Flow regulated by Millerton Lake beginning in 1941 (see sta 11250100) and by other reservoirs described in REMARKS for San Joaquin River below Kerckhoff powerhouse. Diversion for irrigation through Madera and Friant-Kern Canals (see sta 11249500, 11250000) began in 1944 and 1949, respectively. See schematic diagram of San Joaquin River basin.

REVISIONS (WATER YEARS).--WSP 843: 1914(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	70	39	38	41	38	44	112	100	125	144	88
2	90	70	39	38	46	38	44	115	100	123	129	88
3	85	70	42	36	41	38	46	113	102	123	129	88
4	75	66	42	38	38	38	46	113	106	121	127	88
5	76	60	41	38	42	39	57	112	106	123	127	88
6	76	60	38	39	46	52	73	110	123	125	125	88
7	76	60	39	39	62	41	55	108	123	123	123	87
8	76	50	41	44	62	41	50	110	121	121	123	87
9	75	30	39	41	62	39	47	110	125	123	123	87
10	75	28	39	39	78	41	44	110	119	119	121	87
11	73	28	39	39	65	52	44	110	117	112	119	83
12	73	28	39	38	63	46	42	108	121	112	119	82
13	73	28	41	38	65	47	39	110	121	110	119	82
14	73	30	41	38	63	65	39	112	123	110	112	82
15	71	32	41	38	47	46	44	112	121	110	100	75
16	71	33	41	38	41	49	42	112	115	110	99	70
17	70	33	41	38	38	49	42	115	117	110	99	70
18	70	32	38	39	36	42	41	115	119	108	99	71
19	70	32	38	39	38	42	42	112	121	110	99	71
20	71	32	39	38	39	41	36	112	119	110	99	71
21	71	34	38	38	39	42	41	110	121	108	97	71
22	73	36	38	38	38	100	33	102	121	110	95	71
23	76	34	38	38	38	66	77	100	121	108	90	71
24	78	34	38	38	39	54	136	100	123	121	92	70
25	78	34	38	38	41	66	136	99	123	142	94	70
26	80	36	39	39	41	68	100	95	123	142	94	68
27	80	36	39	39	41	57	76	95	125	151	94	73
28	83	36	39	38	41	54	75	97	125	163	94	82
29	82	38	38	39	---	50	90	97	125	163	94	82
30	82	38	38	39	---	49	110	97	125	160	94	82
31	76	---	38	39	---	47	---	99	---	160	90	---
TOTAL	2373	1228	1218	1196	1331	1537	1791	3322	3551	3856	3363	2373
MEAN	76.5	40.9	39.3	38.6	47.5	49.6	59.7	107	118	124	108	79.1
MAX	95	70	42	44	78	100	136	115	125	163	144	88
MIN	70	28	38	36	36	38	33	95	100	108	90	68
AC-FT	4710	2440	2420	2370	2640	3050	3550	6590	7040	7650	6670	4710
MEAN a	1,070	1,128	1,148	788	1,692	2,223	3,612	4,816	6,979	2,394	1,992	2,096
AC-FT a	65,790	67,100	70,580	48,440	93,970	136,700	214,900	296,100	415,300	147,200	122,500	124,700
CAL YR 1974 TOTAL	68419		MEAN 187	MAX 1360	MIN 28	AC-FT 135700	MEAN a 2934	AC-FT a 2124000				
WTR YR 1975 TOTAL	27139		MEAN 74.4	MAX 163	MIN 28	AC-FT 53830	MEAN a 2491	AC-FT a 1803000				

a Adjusted for change in contents in and evaporation from Millerton Lake and for diversions to Madera and Friant-Kern Canals.

SAN JOAQUIN RIVER BASIN

11253310 CANTUA CREEK NEAR CANTUA CREEK, CALIF.

LOCATION.--Lat 36°24'08", long 120°25'57", in SE¼SE¼ sec.34, T.17 S., R.14 E., Fresno County, on left bank 9.2 mi (14.8 km) southwest of town of Cantua Creek, and 19 mi (31 km) north of Coalinga.

DRAINAGE AREA.--46.4 mi² (120.2 km²).

PERIOD OF RECORD.--Water years 1958-65 (annual maximum), October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 680 ft (207 m), from topographic map. Prior to October 1966, crest-stage gage at datum 2.00 ft (0.610 m) lower.

AVERAGE DISCHARGE.--9 years, 2.98 ft³/s (0.0844 m³/s), 2,160 acre-ft/yr (2.66 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 300 ft³/s (8.50 m³/s) Mar. 7 (gage height, 3.57 ft or 1.088 m); no flow for several months.

Period of record: Maximum discharge, 1,920 ft³/s (54.3 m³/s) Feb. 24, 1969 (gage height, 6.60 ft or 2.012 m), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurements at gage heights 4.57 ft (1.393 m), 6.04 ft (1.841 m), and 6.60 ft (2.012 m); no flow for several months in each year.

REMARKS.--Records good. Some small dams for stock use above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	1.3	3.4	3.0	.86	.17		
2					76	1.2	3.3	2.7	.88	.21		
3					9.9	1.3	3.3	2.7	.94	.22		
4					11	1.4	3.4	2.8	.84	.21		
5					9.6	1.5	4.9	2.9	.76	.20		
6					5.4	12	4.5	2.8	.68	.16		
7					5.8	44	4.3	2.7	.64	.12		
8					5.1	24	7.3	2.6	.63	.08		
9					30	13	6.0	2.5	.59	.05		
10					12	9.6	5.9	2.4	.53	.02		
11					6.8	8.3	5.5	2.3	.49	0		
12					4.8	6.6	4.8	2.2	.48	0		
13					5.7	7.2	4.2	2.1	.42	0		
14					5.0	8.6	4.0	2.0	.37	0		
15					4.0	6.9	4.1	2.0	.34	0		
16					3.6	6.1	4.4	2.1	.33	0		
17					3.0	5.5	4.6	2.0	.31	0		
18					2.8	5.0	3.8	1.7	.34	0		
19					2.6	4.7	3.5	1.6	.43	0		
20					2.4	4.5	3.5	1.7	.46	0		
21					2.1	4.6	3.3	1.9	.45	0		
22					1.9	7.7	3.2	1.8	.37	0		
23					1.9	5.8	3.2	1.6	.32	0		
24					1.7	4.9	3.2	1.4	.31	0		
25					1.8	4.9	3.6	1.3	.36	0		
26					1.5	4.4	3.6	1.2	.39	0		
27					1.4	4.3	3.2	1.2	.32	0		
28					1.4	4.0	3.0	1.1	.26	0		
29					---	3.9	2.8	.99	.22	0		
30					---	3.7	2.8	.94	.17	0		
31		---			---	3.6	---	.90	---	0		---
TOTAL	0	0	0	0	219.2	224.5	120.6	61.13	14.49	1.44	0	0
MEAN	0	0	0	0	7.83	7.24	4.02	1.97	.48	.047	0	0
MAX	0	0	0	0	76	44	7.3	3.0	.94	.22	0	0
MIN	0	0	0	0	0	1.2	2.8	.90	.17	0	0	0
AC-FT	0	0	0	0	435	445	239	121	29	2.9	0	0
CAL YR 1974	TOTAL	446.42	MEAN	1.22	MAX	24	MIN	0	AC-FT	885		
WTR YR 1975	TOTAL	641.36	MEAN	1.76	MAX	76	MIN	0	AC-FT	1270		

Peak discharge (base, 50 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-2	0600	3.53	286	3-7	1730	3.57	300
2-9	0445	2.69	69				

11253500 JAMES BYPASS NEAR SAN JOAQUIN, CALIF.

LOCATION.--Lat 36°39'09", long 120°10'49", in NE¼SW¼ sec.1, T.15 S., R.16 E., Fresno County, on right bank 3.2 mi (5.1 km) north of San Joaquin.

PERIOD OF RECORD.--October 1947 to current year. Published as "Fresno Slough bypass" in WSP 1315-A and 1735. Daily discharge for period October 1954 to September 1972 are in files of Bureau of Reclamation.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft (49 m), from topographic map.

AVERAGE DISCHARGE.--28 years, 148 ft³/s (4.191 m³/s), 107,200 acre-ft/yr (132 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 5,570 ft³/s (158 m³/s) June 7, 1969; no flow for all or most of each year.

REMARKS.--No flow since June 21, 1974. Diversion above station for irrigation. James Bypass carries overflow from Kings River to San Joaquin River. Figures for the calendar year 1974 are as follows: Total, 43,496 ft³/s (1,231.8 m³/s); mean, 119 ft³/s (3.37 m³/s); maximum, 2,180 ft³/s (61.7 m³/s); minimum, 0 ft³/s (0 m³/s); runoff, 86,270 acre-ft (106 hm³).

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WRD Calif. 1972: Annual data.

SAN JOAQUIN RIVER BASIN

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11257500 FRESNO RIVER NEAR KNOWLES, CALIF.

LOCATION.--Lat 37°14'14", long 119°46'26", in SE¼NW¼ sec.15, T.8 S., R.20 E., Madera County, on left bank at Fresno Crossing, 0.1 mi (0.2 km) downstream from Bean Gulch, and 6 mi (9.7 km) northeast of Knowles.

DRAINAGE AREA.--133 mi² (344 km²).

PERIOD OF RECORD.--September 1911 to August 1913, November 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,086.4 ft (331.13 m) above mean sea level (river-profile survey). Prior to June 13, 1930, nonrecording gage 10 ft (3 m) upstream and June 13, 1930, to Jan. 13, 1931, water-stage recorder at site 40 ft (12 m) upstream at datum 0.34 ft (0.104 m) lower.

AVERAGE DISCHARGE.--60 years (1911-12, 1916-75), 80.0 ft³/s (2.266 m³/s), 57,960 acre-ft/yr (71.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,270 ft³/s (36.0 m³/s) Mar. 25 (gage height, 4.12 ft or 1.256 m); minimum daily, 0.32 ft³/s (0.009 m³/s) Oct. 1.

Period of record: Maximum discharge, 13,300 ft³/s (377 m³/s) Dec. 23, 1955 (gage height, 11.52 ft or 3.511 m), from rating curve extended above 3,900 ft³/s (110 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in some years.

REMARKS.--Records good. Diversions for irrigation of 160 acres (648,000 m²) above station. Diversions into Fresno River basin above station of up to 50 ft³/s (1.42 m³/s) at times since 1897 from the San Joaquin River basin and up to 60 ft³/s (1.70 m³/s) at times since 1888 from the Merced River basin. Diversions are for irrigation downstream from station.

REVISIONS (WATER YEARS).--WSP 1515: 1916-19, 1920(M), 1921-23, 1925-26(M), 1932(M), 1935-36(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	20	13	21	50	96	191	208	141	63	12	3.1
2	.48	20	14	27	302	96	169	206	139	62	12	3.2
3	1.5	16	39	27	160	91	165	217	157	67	7.0	3.3
4	6.5	13	214	30	165	86	159	269	166	69	2.4	3.1
5	5.9	13	103	31	132	108	266	218	157	66	2.3	3.0
6	5.5	12	53	57	93	345	300	191	152	62	2.3	3.0
7	5.0	12	36	121	84	276	233	180	149	59	2.1	3.0
8	4.9	13	29	136	87	481	213	190	154	54	2.1	3.0
9	5.8	14	26	135	486	296	210	207	150	52	2.1	3.1
10	6.0	13	25	80	445	264	207	216	148	54	4.0	3.2
11	5.6	12	26	62	230	228	202	220	147	48	4.4	3.0
12	5.4	12	26	49	151	244	194	222	144	48	3.8	3.0
13	5.0	12	25	43	220	208	191	220	140	48	4.4	3.0
14	4.6	12	25	41	285	256	224	216	136	46	4.1	2.9
15	4.6	11	25	39	158	208	366	214	134	45	4.4	2.9
16	4.5	11	25	37	125	256	272	227	128	40	5.0	2.8
17	4.4	11	25	36	105	205	235	227	126	31	6.2	2.7
18	4.7	11	25	35	98	174	232	222	123	28	7.6	2.2
19	6.8	11	25	34	89	165	202	220	122	28	8.9	2.3
20	4.7	11	24	34	119	159	195	214	119	26	11	2.5
21	4.4	14	24	34	104	150	205	193	117	25	11	2.9
22	4.4	45	23	33	87	480	206	182	100	23	10	3.1
23	4.4	26	22	32	81	248	199	180	90	20	7.7	3.4
24	4.7	18	15	31	80	205	198	182	89	18	5.8	3.1
25	4.8	17	17	31	82	754	362	180	92	16	4.4	2.9
26	5.0	17	21	32	82	528	254	178	87	15	3.9	2.7
27	5.2	15	23	32	86	329	208	172	86	13	3.5	2.5
28	18	15	36	30	89	254	199	167	81	13	3.3	2.4
29	59	14	28	25	---	223	201	158	68	12	3.2	2.3
30	20	14	24	28	---	206	203	152	63	12	3.2	2.3
31	16	---	26	27	---	201	---	147	---	12	3.1	---
TOTAL	238.10	455	1062	1410	4275	7820	6661	6195	3705	1175	167.2	85.9
MEAN	7.68	15.2	34.3	45.5	153	252	222	200	124	37.9	5.39	2.86
MAX	59	45	214	136	486	754	366	269	166	69	12	3.4
MIN	.32	11	13	21	50	86	159	147	63	12	2.1	2.2
AC-FT	472	902	2110	2800	8480	15510	13210	12290	7350	2330	332	170
CAL YR 1974	TOTAL	29611.03	MEAN	81.1	MAX	1520	MIN	.24	AC-FT	58730		
WTR YR 1975	TOTAL	33249.20	MEAN	91.1	MAX	754	MIN	.32	AC-FT	65950		

Date	Time	G.H.	Peak discharge (base, 590 ft ³ /s)	Date	Time	G.H.	Discharge
2-9	1100	3.57	908	3-22	0700	3.40	810
3-8	0200	3.19	694	3-25	1545	4.12	1,270

11257500 FRESNO RIVER NEAR KNOWLES, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: July 1971 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 31.0°C July 26; minimum, 2.0°C Dec. 24-26, Jan. 2, 3.

Period of record:

Water temperatures: Maximum, 33.0°C Aug. 11, 1971; minimum, freezing point Jan. 5, 7, 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	15.5	13.0	11.0	8.5	4.5	4.0	2.5	6.0	4.5	12.0	9.5
2	22.0	19.0	13.5	11.0	7.5	5.0	4.0	2.0	6.5	6.0	11.5	9.0
3	23.0	18.0	13.5	9.5	9.0	7.0	4.0	2.0	7.5	6.0	11.5	8.5
4	22.0	18.0	13.5	9.0	9.5	8.0	5.0	2.5	7.0	6.5	11.0	9.0
5	21.5	15.5	13.0	8.5	8.0	7.0	5.0	3.0	7.5	6.5	10.5	9.0
6	21.5	15.5	13.0	9.0	8.0	6.5	6.0	4.5	9.0	6.5	10.0	8.5
7	20.0	16.5	12.0	9.0	7.5	6.0	7.5	6.5	9.5	8.5	9.0	8.0
8	20.5	17.0	12.5	8.5	8.5	6.0	8.0	7.5	11.5	8.5	9.5	9.0
9	21.0	16.5	12.5	9.0	7.5	5.5	7.5	5.5	10.5	8.0	9.0	7.5
10	20.5	15.0	13.0	8.5	6.5	5.5	6.5	5.0	8.5	7.5	8.5	7.0
11	20.5	15.0	13.5	8.5	7.0	5.5	6.5	5.5	7.5	5.5	10.0	7.5
12	20.0	14.5	13.0	9.0	7.5	5.5	7.5	4.5	7.5	6.0	11.0	8.5
13	20.0	14.0	13.5	9.0	8.5	6.5	7.5	4.5	8.5	7.5	10.0	7.0
14	20.0	14.5	13.5	9.5	9.0	7.5	7.5	4.0	8.0	7.0	7.5	5.5
15	20.0	13.5	13.0	9.5	9.0	7.5	7.5	4.5	7.0	5.0	9.5	6.0
16	19.5	13.5	12.0	9.5	8.5	6.0	8.0	5.0	6.5	5.0	9.5	7.5
17	19.0	14.0	12.0	11.0	7.0	5.5	8.5	5.0	6.0	3.5	8.0	6.0
18	18.5	13.5	12.5	10.0	7.5	6.0	8.5	5.0	7.0	4.0	11.0	6.5
19	18.0	14.0	12.0	8.5	8.0	7.0	9.0	5.0	7.0	5.5	11.5	8.5
20	19.0	15.0	12.5	8.5	8.5	7.0	9.0	5.5	8.5	6.5	11.0	9.0
21	18.5	14.0	11.0	10.0	7.0	6.0	9.0	5.5	7.0	5.5	9.0	7.5
22	18.0	13.0	10.5	8.5	7.5	5.5	9.5	5.5	7.5	4.5	9.5	7.5
23	16.5	12.0	11.0	8.0	5.5	3.0	9.5	5.5	8.5	5.0	10.0	6.5
24	16.0	12.0	11.0	7.0	4.5	2.0	9.5	5.5	9.0	6.0	12.5	9.0
25	17.0	12.5	10.5	6.5	4.0	2.0	10.0	5.5	10.5	7.0	12.5	7.5
26	16.5	12.5	10.5	6.5	4.5	2.0	10.0	6.0	11.0	8.0	9.0	5.5
27	17.0	14.0	9.5	5.5	5.0	3.5	8.0	4.5	11.5	8.5	8.5	6.0
28	16.0	13.0	9.0	5.5	6.5	5.0	7.0	3.0	12.0	9.0	9.0	5.0
29	13.0	11.0	9.0	4.5	6.0	5.0	6.5	3.0	---	---	9.5	7.0
30	14.5	11.0	8.5	5.0	5.0	4.0	6.5	2.5	---	---	11.0	7.5
31	12.5	11.5	---	---	4.5	3.5	6.0	2.5	---	---	11.5	9.0
MONTH	23.5	11.0	13.5	4.5	9.5	2.0	10.0	2.0	12.0	3.5	12.5	5.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.0	15.0	11.0	21.0	17.0	21.5	17.5	27.5	19.0	24.5	18.5
2	11.0	8.5	15.0	11.5	20.0	16.0	22.0	17.0	28.0	19.0	24.5	18.5
3	11.0	9.0	14.0	11.0	19.5	15.5	21.5	17.5	28.5	20.5	25.0	18.5
4	11.5	9.0	12.0	9.5	20.0	15.5	21.5	17.5	29.5	21.5	26.0	19.0
5	10.5	7.5	12.0	7.5	21.0	16.0	22.5	18.0	29.0	22.0	26.5	20.0
6	7.5	6.0	13.5	8.5	21.5	16.5	23.5	19.0	28.0	22.0	27.0	20.5
7	8.0	5.0	15.0	10.0	20.5	16.5	24.5	20.0	27.5	20.0	26.5	21.0
8	9.5	6.0	16.0	11.5	20.0	15.5	25.5	20.5	28.5	21.0	25.0	22.0
9	10.5	6.0	16.5	12.0	21.0	16.0	25.5	21.5	28.5	21.0	26.0	21.5
10	12.0	9.0	16.5	12.5	22.0	16.5	27.0	22.0	27.0	22.0	24.5	20.5
11	11.0	8.0	16.5	12.5	21.5	17.0	27.0	22.0	28.5	21.5	25.0	19.5
12	12.5	9.0	17.5	13.0	21.0	17.0	26.5	21.0	28.5	21.0	25.5	20.0
13	13.5	10.0	18.0	13.5	22.0	16.5	26.5	21.0	28.0	21.0	25.5	20.0
14	13.0	10.5	17.5	14.0	23.0	18.0	26.5	21.5	28.0	21.0	25.0	19.5
15	10.5	8.5	16.5	13.0	23.5	19.0	23.0	20.5	28.5	21.0	25.5	20.0
16	9.5	7.5	16.5	12.5	21.5	18.0	26.0	19.5	28.0	20.5	26.0	19.5
17	11.0	7.0	17.5	13.0	20.5	16.5	26.5	21.5	27.5	19.5	27.0	21.5
18	11.0	8.0	18.5	14.0	19.5	15.0	27.0	21.0	23.5	20.5	26.0	21.5
19	13.0	9.0	18.5	14.5	18.0	14.0	27.5	20.5	25.0	20.5	25.0	19.5
20	14.0	10.0	16.0	11.5	18.5	14.0	27.5	20.5	26.0	19.0	25.5	19.0
21	14.5	10.5	14.0	8.5	20.0	14.5	28.0	20.5	26.5	19.0	25.5	19.0
22	14.0	11.0	15.5	10.5	21.5	16.5	28.5	21.0	27.0	19.5	25.5	19.0
23	13.5	10.5	17.0	12.0	20.5	17.5	29.0	21.5	27.0	20.0	25.0	17.5
24	13.5	11.5	18.5	13.5	19.0	16.0	29.5	21.5	27.5	20.5	25.0	18.0
25	12.5	10.0	19.0	14.0	17.5	13.0	30.0	22.5	28.0	20.5	25.0	18.0
26	10.5	8.0	18.5	14.5	19.0	14.0	31.0	23.5	27.0	20.5	24.0	17.5
27	12.5	9.0	18.5	14.0	20.5	16.0	30.5	23.0	25.5	20.0	23.5	17.0
28	14.0	10.5	19.0	14.5	21.0	16.5	29.5	22.5	25.0	19.0	22.5	16.5
29	14.5	10.5	21.0	14.5	22.0	18.0	29.0	22.0	25.0	19.0	22.5	16.0
30	14.5	11.0	20.5	15.0	22.0	18.0	27.5	20.5	25.0	19.0	22.0	16.0
31	---	---	20.5	16.0	---	---	27.0	18.5	25.0	18.0	---	---
MONTH	14.5	5.0	21.0	7.5	23.5	13.0	31.0	17.0	29.5	18.0	27.0	16.0

11258000 FRESNO RIVER NEAR DAULTON, CALIF.

LOCATION.--Lat 37°05'51", long 119°53'19", in NW¼NW¼ sec.3, T.10 S., R.19 E., Madera County, on left bank 0.4 mi (0.6 km) downstream from Willow Creek, and 5.3 mi (8.5 km) southeast of Daulton.

DRAINAGE AREA.--258 mi² (668 km²).

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 377.37 ft (115.022 m) above mean sea level. October 1941 to Sept. 27, 1946, at site 300 ft (91 m) downstream and Sept. 28, 1946, to Sept. 28, 1949, at present site, at datum 8.37 ft (2.551 m) higher. Sept. 29, 1949, to Mar. 19, 1963, at datum 6.00 ft (1.829 m) higher. Mar. 20, 1963, to May 22, 1973, at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--34 years, 106 ft³/s (3.002 m³/s), 76,800 acre-ft/yr (94.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 877 ft³/s (24.8 m³/s) Mar. 26 (gage height, 8.42 ft or 2.566 m); no flow for many days.

Period of record: Maximum discharge, 17,500 ft³/s (496 m³/s) Dec. 23, 1955 (gage height, 17.64 ft or 5.377 m, present datum), from rating curve extended above 6,400 ft³/s (181 m³/s) on basis of slope-area measurement at gage height 17.69 ft (5.392 m); maximum gage height, 17.69 ft (5.392 m) Feb. 24, 1969 (present datum); no flow at times in most years.

Flood of Mar. 3, 1938, reached a discharge of 15,000 ft³/s (425 m³/s), furnished by Bureau of Reclamation.

REMARKS.--Records good. No diversion for irrigation between this station and station near Knowles. Some regulation at low flow by mining operations and partial detention of high flows by Hidden Dam which was under construction. See REMARKS for station near Knowles.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	19	15	24	34	116	265	242	145	63	13	2.4
2	0	21	15	22	219	120	238	240	145	60	13	2.2
3	0	23	24	22	384	116	223	242	147	60	12	2.1
4	0	20	149	23	225	112	219	277	174	66	8.1	1.8
5	0	18	194	25	286	119	283	271	168	63	5.4	1.7
6	0	9.9	95	27	176	347	433	234	162	62	4.0	1.6
7	0	13	58	86	137	378	408	217	147	59	2.9	1.5
8	0	14	43	112	126	555	335	217	157	55	2.7	1.4
9	0	15	33	190	319	423	321	229	156	29	2.8	.86
10	0	16	33	128	541	398	300	238	154	1.6	2.9	.72
11	0	16	28	81	381	365	288	240	151	32	2.5	.16
12	0	15	25	64	250	349	274	242	148	69	3.2	0
13	0	10	24	55	210	321	263	241	145	75	3.6	0
14	0	13	24	51	438	403	264	237	139	53	2.8	0
15	0	13	24	47	290	356	416	235	137	43	1.9	0
16	0	14	23	45	210	354	363	237	134	35	2.1	0
17	0	13	23	42	176	367	323	246	132	31	2.6	0
18	0	12	24	41	149	297	295	241	130	30	2.7	0
19	0	12	23	40	136	269	267	239	130	28	3.7	0
20	0	12	24	40	146	253	253	232	127	27	5.2	0
21	0	85	23	40	163	239	253	221	125	25	6.8	0
22	0	52	22	38	132	526	255	200	113	23	7.1	0
23	0	58	22	36	117	473	250	192	96	21	8.1	0
24	.08	29	22	31	110	340	243	192	93	18	6.0	0
25	.96	22	18	35	109	471	339	195	93	17	4.3	0
26	1.2	19	18	36	107	740	342	193	83	15	3.4	0
27	1.1	17	22	35	107	464	274	184	87	15	2.8	0
28	2.0	17	28	35	111	370	247	176	84	15	2.5	0
29	2.7	17	32	32	---	315	243	169	71	13	2.8	0
30	32	14	28	30	---	287	241	159	64	13	2.6	0
31	24	---	25	32	---	274	---	151	---	13	2.9	---
TOTAL	64.04	628.9	1161	1545	5789	10517	8718	6829	3837	1129.6	146.4	16.44
MEAN	2.07	21.0	37.5	49.8	207	339	291	220	128	36.4	4.72	.55
MAX	32	85	194	190	541	740	433	277	174	75	13	2.4
MIN	0	9.9	15	22	34	112	219	151	64	1.6	1.9	0
AC-FT	127	1250	2300	3060	11480	20860	17290	13550	7610	2240	290	33
CAL YR 1974	TOTAL	37462.35	MEAN 103	MAX 3240	MIN 0	AC-FT 74310						
WTR YR 1975	TOTAL	40381.38	MEAN 111	MAX 740	MIN 0	AC-FT 80100						

Peak discharge (base, 600 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-9	2045	7.83	648	3-22	1700	8.00	757
3-8	1230	7.71	676	3-26	0130	8.42	877

SAN JOAQUIN RIVER BASIN

11258900 WEST FORK CHOWCHILLA RIVER NEAR MARIPOSA, CALIF.

LOCATION.--Lat 37°25'14", long 119°52'25", in SW¼SE¼ sec.10, T.6 S., R.19 E., Mariposa County, on left bank 15 ft (5 m) downstream from bridge on Indian Peak Road, 0.5 mi (0.8 km) downstream from Humbug Creek, and 6.7 mi (10.8 km) southeast of Mariposa.

DRAINAGE AREA.--33.6 mi² (87.0 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,680 ft (512 m), from topographic map.

AVERAGE DISCHARGE.--18 years, 17.7 ft³/s (0.501 m³/s), 12,820 acre-ft/yr (15.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,170 ft³/s (33.1 m³/s) Feb. 9 (gage height, 6.53 ft or 1.990 m); no flow many days.

Period of record: Maximum discharge, 4,350 ft³/s (123 m³/s) Jan. 25, 1969 (gage height, 8.93 ft or 2.722 m in gage well, 11.1 ft or 3.38 m, from floodmarks); no flow many days in each year.

REMARKS.--No known diversions above station.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.20	.80	1.9	28	19	46	33	7.7	2.2		
2	0	.60	.80	1.8	551	17	41	31	7.2	2.2		
3	0	.50	22	1.8	163	17	41	33	7.2	2.1		
4	0	.40	59	1.8	308	17	40	38	6.9	2.0		
5	0	.40	9.6	1.7	118	47	103	31	6.3	2.0		
6	0	.40	4.0	8.1	52	145	97	30	5.8	1.8		
7	0	.40	2.8	11	41	189	84	29	5.3	1.6		
8	0	.50	2.2	84	41	149	92	27	5.1	1.5		
9	0	.50	1.9	32	470	78	93	25	4.8	1.4		
10	0	.60	1.7	15	501	71	83	25	4.3	1.2		
11	0	.60	1.6	9.7	106	60	76	24	4.0	1.1		
12	0	.60	1.5	7.2	60	57	67	23	3.8	1.0		
13	0	.50	1.5	6.1	132	68	60	22	3.7	.90		
14	0	.50	1.4	5.4	94	84	78	21	3.3	.90		
15	0	.50	1.4	4.9	53	64	137	20	3.1	.90		
16	0	.60	1.4	4.5	42	109	108	21	2.9	1.2		
17	0	.60	1.3	4.1	35	74	82	20	2.9	1.3		
18	0	.60	1.3	4.0	31	58	68	18	3.1	1.2		
19	0	.60	1.2	3.7	30	51	62	17	3.2	1.0		
20	0	.70	1.2	3.7	42	46	55	17	3.1	.90		
21	0	1.8	1.2	3.5	32	56	52	16	3.1	.80		
22	0	5.9	1.3	3.3	27	285	47	15	3.0	.70		
23	0	2.1	1.2	3.2	25	83	43	14	2.8	.60		
24	0	1.4	1.1	3.1	24	67	45	14	2.8	.60		
25	0	1.1	1.1	3.1	23	296	53	12	3.1	.50		
26	0	1.0	1.1	3.1	21	132	43	12	3.0	.40		
27	0	.90	1.2	3.1	20	90	39	11	2.9	.20		
28	.20	.90	3.3	2.9	20	71	36	10	2.6	.10		
29	.30	.80	2.4	2.9	---	62	35	9.5	2.4	0		
30	.10	.80	1.8	3.0	---	56	34	8.8	2.2	0		
31	.20	---	1.8	2.9	---	53	---	8.1	---	0		---
TOTAL	.80	27.00	136.10	246.5	3090	2671	1940	635.4	121.6	32.30	0	0
MEAN	.026	.90	4.39	7.95	110	86.2	64.7	20.5	4.05	1.04	0	0
MAX	.30	5.9	59	84	551	296	137	38	7.7	2.2	0	0
MIN	0	.20	.80	1.7	20	17	34	8.1	2.2	0	0	0
AC-FT	1.6	54	270	489	6130	5300	3850	1260	241	64	0	0
CAL YR 1974	TOTAL	5460.20	MEAN 15.0	MAX 643	MIN 0	AC-FT 10830						
WTR YR 1975	TOTAL	8900.70	MEAN 24.4	MAX 551	MIN 0	AC-FT 17650						

11258980 CHOWCHILLA RIVER NEAR RAYMOND, CALIF.

LOCATION.--Lat 37°15'36", long 119°56'43", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.8 S., R.18 E., Madera County, on right bank 20 ft (6 m) downstream from County Road 613 bridge, 2,300 ft (701 m) downstream from Chapman Creek, and 3.8 mi (6.1 km) northwest of Raymond.

DRAINAGE AREA.--201 mi² (521 km²).

PERIOD OF RECORD.--October 1971 to current year. December 1958 to September 1970 in files of California Department of Water Resources.

GAGE.--Water-stage recorder and concrete improved control. Datum of gage is 565.67 ft (172.416 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,300 ft³/s (65.1 m³/s) Mar. 22 (gage height, 7.35 ft or 2.240 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) Oct. 19, 20.
Period of record: Maximum discharge, 8,530 ft³/s (242 m³/s) Feb. 11, 1973 (gage height, 14.43 ft (4.398 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) Oct. 19, 20, 1974.

REMARKS.--Records good except those for flows below 0.2 ft³/s (0.006 m³/s), which are fair. No large storage or diversions above station.

REVISIONS (WATER YEARS).--WRD Calif. 1973: 1972(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	5.5	7.4	14	24	83	251	172	44	12	.54	.33
2	.03	7.0	7.0	13	788	79	224	162	43	12	.46	.33
3	.03	7.4	16	13	585	74	211	156	42	11	.46	.33
4	.03	5.5	168	12	676	71	203	199	40	10	.41	.28
5	.03	4.3	121	12	567	84	294	178	39	9.8	.38	.23
6	.03	4.0	42	14	278	516	420	158	37	9.4	.35	.19
7	.03	3.8	26	30	197	352	354	150	34	8.8	.32	.09
8	.03	3.6	20	70	172	835	335	143	32	8.4	.29	.12
9	.03	3.6	16	275	957	375	332	136	31	8.0	.27	.09
10	.03	3.6	14	114	1310	354	322	129	28	7.4	.25	.09
11	.03	3.6	13	65	463	338	312	126	26	7.0	.23	.33
12	.03	3.8	12	48	312	302	280	123	25	6.4	.19	.28
13	.02	4.0	11	38	333	265	258	118	24	5.5	.15	.44
14	.02	3.8	11	33	543	396	260	110	23	5.2	.12	.44
15	.02	3.6	10	28	258	332	491	110	22	5.2	.15	.50
16	.02	3.6	10	26	193	381	384	106	22	4.9	.12	.50
17	.02	3.6	10	24	160	390	345	103	21	4.9	.07	.44
18	.02	3.6	10	22	129	288	295	97	19	4.9	.09	.28
19	.01	3.6	10	20	120	256	268	91	20	4.9	.15	.28
20	.01	4.0	10	19	162	228	256	90	22	4.0	.76	.19
21	.02	5.5	9.8	19	151	216	244	88	21	3.6	1.4	.19
22	.02	18	9.8	18	117	939	231	83	20	2.8	1.8	.15
23	.02	26	9.8	18	102	423	218	79	20	2.3	1.5	.12
24	.02	16	9.4	17	94	335	211	74	18	2.0	1.0	.09
25	.03	14	9.4	16	91	919	278	71	20	1.7	.76	.07
26	.03	11	9.4	16	87	689	246	64	18	1.3	.56	.09
27	.03	9.8	9.8	16	86	423	218	60	16	1.1	.44	.09
28	.03	8.8	14	15	85	369	197	57	15	1.0	.33	.07
29	.03	8.4	16	15	---	318	183	54	13	.88	.33	.05
30	6.5	7.7	17	14	---	290	176	50	12	.77	.28	.07
31	6.4	---	15	15	---	272	---	48	---	.64	.33	---
TOTAL	13.63	210.7	673.8	1069	9040	11192	8297	3385	767	167.79	14.49	6.75
MEAN	.44	7.02	21.7	34.5	323	361	277	109	25.6	5.41	.47	.23
MAX	6.5	26	168	275	1310	939	491	199	44	12	1.8	.50
MIN	.01	3.6	7.0	12	24	71	176	48	12	.64	.07	.05
AC-FT	27	418	1340	2120	17930	22200	16460	6710	1520	333	29	13
CAL YR 1974 TOTAL	31831.36			MEAN 87.2	MAX 2810	MIN .01	AC-FT 63140					
WTR YR 1975 TOTAL	34837.16			MEAN 95.4	MAX 1310	MIN .01	AC-FT 69100					

Peak discharge (base, 660 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-2	1700	6.44	1,690	3-6	1300	4.58	696
2-4	1800	5.72	1,270	3-8	0300	6.37	1,650
2-9	1200	7.23	2,210	3-22	0930	7.35	2,300
2-10	1030	7.00	2,050	3-25	1700	6.70	1,850
2-14	0200	5.02	900				

SAN JOAQUIN RIVER BASIN

11258980 CHOWCHILLA RIVER NEAR RAYMOND, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1971 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 34.0°C July 26; minimum, 1.5°C Jan. 2, 3.

Period of record:

Water temperatures: Maximum recorded, 34.5°C June 28, 1973; minimum, 1.0°C Dec. 12, 1972.

REMARKS.--No flow at probe Oct. 1-29.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	16.0	14.0	9.0	5.5	5.0	2.5	7.0	6.0	15.5	11.0
2	---	---	15.5	14.0	8.5	6.5	4.5	1.5	7.0	6.5	15.5	11.0
3	---	---	15.0	12.5	9.5	8.5	4.5	1.5	7.5	6.5	15.5	10.5
4	---	---	14.5	12.5	11.0	9.5	5.5	2.5	8.0	7.0	15.0	11.0
5	---	---	14.5	12.0	10.0	8.0	6.5	4.0	8.0	6.5	13.5	11.5
6	---	---	14.5	12.0	9.5	6.5	7.0	6.0	9.0	7.5	12.0	10.5
7	---	---	14.0	12.5	9.0	7.5	9.0	7.0	10.5	9.0	11.0	10.5
8	---	---	14.0	12.0	10.5	8.0	10.0	8.5	12.0	10.0	11.5	9.5
9	---	---	14.0	11.5	9.0	6.0	9.0	6.5	11.5	10.0	10.5	10.0
10	---	---	13.5	11.5	8.5	7.5	8.0	6.5	10.5	9.0	10.5	9.0
11	---	---	13.5	11.5	8.5	7.5	8.0	7.0	9.5	7.5	11.5	9.5
12	---	---	14.0	11.5	9.5	7.5	8.5	5.5	9.5	8.5	12.5	10.5
13	---	---	14.0	12.0	10.0	8.5	7.5	5.0	10.0	9.0	12.0	9.5
14	---	---	14.5	12.5	10.0	8.0	8.0	5.0	10.5	9.0	9.0	7.5
15	---	---	14.0	12.0	10.0	8.5	8.0	5.5	9.0	7.5	11.0	7.0
16	---	---	13.5	12.0	9.5	7.0	7.5	5.5	8.0	7.0	11.5	9.5
17	---	---	13.5	12.5	8.5	7.5	9.0	7.0	8.0	5.5	10.0	8.0
18	---	---	13.5	12.0	9.5	7.5	8.0	7.0	8.5	5.5	12.5	8.0
19	---	---	13.0	11.0	9.5	8.5	9.5	6.5	8.0	7.0	14.0	10.0
20	---	---	13.0	11.0	10.0	8.5	8.5	6.5	10.0	7.5	13.0	11.0
21	---	---	13.0	12.0	9.0	8.0	8.5	7.0	9.5	6.5	11.0	9.5
22	---	---	12.5	10.5	9.5	6.5	10.0	6.5	9.5	6.0	11.0	9.0
23	---	---	11.5	9.0	6.5	4.5	10.0	6.0	10.5	6.0	11.0	8.5
24	---	---	11.0	8.0	5.0	3.0	10.0	6.0	11.0	6.5	14.0	11.0
25	---	---	11.5	8.5	5.0	2.5	10.5	6.5	12.5	7.5	14.0	10.0
26	---	---	11.0	8.0	5.0	2.0	10.5	6.5	13.5	8.5	10.5	8.0
27	---	---	10.0	7.5	6.0	4.0	8.5	5.5	14.0	10.0	11.0	8.5
28	---	---	10.0	7.0	7.5	6.0	7.5	3.5	15.0	10.5	10.5	8.0
29	---	---	9.5	6.5	7.0	4.5	7.5	4.0	---	---	11.0	8.5
30	17.0	15.5	9.0	6.0	5.0	3.5	7.0	3.0	---	---	12.0	9.5
31	16.5	15.0	---	---	5.5	3.0	6.5	3.0	---	---	12.5	11.0
MONTH	---	---	16.0	6.0	11.0	2.0	10.5	1.5	15.0	5.5	15.5	7.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	10.0	20.0	14.5	28.5	22.0	29.0	20.5	30.0	21.5	27.0	20.0
2	13.5	9.5	20.5	15.5	27.0	21.5	29.0	20.0	30.5	22.0	27.5	20.0
3	13.5	10.5	18.0	15.0	27.0	21.0	29.0	20.5	31.0	22.5	28.0	20.0
4	14.0	11.5	16.0	13.0	28.0	21.5	29.5	20.5	31.5	23.0	29.0	20.5
5	13.0	9.5	17.0	12.0	29.5	22.5	30.5	21.0	31.5	23.5	29.0	21.5
6	10.0	8.0	18.0	12.5	29.5	23.0	31.5	22.0	30.5	23.0	29.0	22.0
7	9.0	7.0	19.5	14.0	29.5	22.5	31.5	22.5	29.5	21.5	28.0	22.0
8	10.5	8.5	21.0	15.0	29.0	21.5	32.0	22.5	31.0	22.0	26.5	23.0
9	12.0	8.0	22.0	16.5	30.0	22.0	31.5	24.0	31.0	22.0	26.5	22.5
10	13.0	10.0	22.5	17.0	30.5	23.0	32.5	24.5	29.0	23.5	24.0	22.0
11	13.0	11.0	22.5	17.0	30.5	23.0	32.5	23.5	30.5	22.5	27.5	21.5
12	14.0	11.5	24.0	17.5	29.5	23.0	32.0	23.0	30.5	22.5	28.5	21.5
13	15.0	12.5	25.0	19.0	31.5	23.0	32.0	23.0	29.5	22.0	28.5	21.5
14	15.0	13.5	25.0	20.0	32.0	24.5	32.0	23.5	30.0	22.0	28.0	21.5
15	13.5	11.0	23.5	18.5	32.0	24.5	26.5	23.0	30.0	22.0	28.0	21.5
16	12.0	9.5	23.5	17.5	31.0	23.5	31.5	22.5	29.5	22.0	28.5	21.5
17	12.0	8.0	25.0	18.5	29.0	22.5	32.5	23.5	29.0	21.5	29.5	23.5
18	13.5	10.5	26.0	20.0	28.5	20.5	32.0	23.5	24.0	22.0	27.5	23.5
19	15.5	12.0	26.0	20.0	27.5	20.5	31.5	23.0	27.5	21.5	27.5	21.5
20	16.5	12.0	21.0	17.5	28.0	20.0	32.0	23.0	28.5	21.0	26.5	21.0
21	18.5	13.5	21.5	14.5	29.5	21.5	32.0	23.5	29.0	21.5	26.5	21.5
22	17.0	13.5	22.5	16.0	30.0	21.5	32.5	23.5	29.5	21.5	25.0	21.0
23	17.5	13.0	24.5	17.0	28.0	22.0	32.5	23.5	29.5	22.0	24.5	20.5
24	16.5	14.0	26.0	18.5	25.5	20.5	33.0	24.0	29.0	21.5	24.5	20.5
25	14.5	12.5	27.0	19.0	27.0	18.0	33.5	25.0	29.5	22.0	24.0	20.5
26	14.0	10.0	25.5	19.5	28.5	19.0	34.0	25.0	29.0	22.0	24.0	20.0
27	16.0	10.5	26.0	19.5	28.5	20.0	33.5	24.5	28.0	21.0	23.5	19.5
28	18.0	12.5	26.5	20.0	29.5	20.0	32.5	24.5	27.5	20.5	23.0	19.5
29	18.5	13.5	27.5	20.0	30.0	21.5	31.5	24.0	27.5	20.0	23.0	19.0
30	19.0	14.5	28.0	21.0	29.5	21.0	30.0	22.5	27.5	20.0	23.0	18.5
31	---	---	27.5	21.5	---	---	29.5	20.5	27.5	20.0	---	---
MONTH	19.0	7.0	28.0	12.0	32.0	18.0	34.0	20.0	31.5	20.0	29.5	18.5

11259300 CHOWCHILLA RIVER BELOW RAYNOR CREEK, NEAR RAYMOND, CALIF.

LOCATION.--Lat 37°12'00", long 120°00'23", in SE¼SW¼ sec.28, T.8 S., R.18 E., Madera County, on left bank 200 ft (60 m) downstream from Raynor Creek, 1.9 mi (3.1 km) downstream from Buchanan damsite, and 5.6 mi (9.0 km) southwest of Raymond.

DRAINAGE AREA.--254 mi² (658 km²).

PERIOD OF RECORD.--October 1972 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 381.32 ft (116.226 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,740 ft³/s (49.3 m³/s) Feb. 10 (gage height, 6.38 ft or 1.945 m); no flow Oct. 1-27.

Period of record: Maximum discharge, 11,100 ft³/s (314 m³/s) Feb. 11, 1973 (gage height, 9.97 ft or 3.039 m); no flow many days each year.

REMARKS.--Records good. No large storage or diversions above station. Some regulation of low flow by mining operation during the construction of Buchanan Dam 1.9 mi (3.1 km) upstream and partial detention of high flows. Gates at dam were open all year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	3.9	6.7	16	27	150	296	162	50	12	.82	.19
2	0	.91	6.7	15	564	143	256	154	47	12	.66	.13
3	0	.74	14	15	824	135	238	150	44	10	.59	.09
4	0	.59	115	14	710	134	238	182	42	9.7	.59	.03
5	0	.59	162	14	896	143	308	173	41	9.1	.53	.02
6	0	.91	71	17	387	478	491	150	39	9.1	.47	.02
7	0	.82	38	42	238	425	403	143	37	6.7	.41	.01
8	0	.74	27	81	200	881	355	135	35	6.7	.36	.01
9	0	.74	22	273	779	439	363	132	32	6.1	.27	.01
10	0	.74	19	123	1320	403	339	126	31	5.5	.23	.03
11	0	.74	17	75	652	387	321	123	29	4.7	.23	.03
12	0	.74	16	55	355	332	290	121	26	4.7	.16	.03
13	0	.74	15	45	311	304	265	117	25	4.3	.13	.05
14	0	.91	14	38	691	486	259	110	23	3.9	.13	.05
15	0	.91	14	33	375	383	521	107	22	3.5	.13	.05
16	0	.91	13	31	279	435	439	105	20	3.5	.13	.07
17	0	.91	13	28	232	468	375	103	22	3.9	.11	.07
18	0	.91	13	26	182	332	307	97	20	5.5	.16	.13
19	0	.91	12	24	148	293	268	94	20	5.5	.23	.13
20	0	1.3	12	22	162	259	256	91	22	4.7	.19	.13
21	0	3.9	12	22	182	238	244	91	22	4.7	.36	.11
22	0	4.3	12	21	160	956	229	88	21	4.3	.47	.09
23	0	10	11	20	150	555	214	84	20	3.5	1.1	.07
24	0	15	11	20	145	395	202	80	20	3.2	1.3	.07
25	0	15	11	19	158	801	259	78	20	2.6	1.0	.07
26	0	14	11	19	162	936	250	74	19	2.3	.82	.05
27	0	12	11	19	158	510	211	70	16	1.8	.59	.05
28	.10	9.7	13	19	152	403	192	65	15	1.4	.53	.05
29	.13	7.9	18	18	---	335	178	62	14	1.3	.41	.05
30	.09	7.3	20	18	---	310	169	58	13	1.1	.27	.07
31	12	---	17	41	---	296	---	54	---	1.0	.23	---
TOTAL	12.32	118.76	767.4	1223	10599	12745	8736	3379	807	158.3	13.61	1.96
MEAN	.40	3.96	24.8	39.5	379	411	291	109	26.9	5.11	.44	.065
MAX	12	15	162	273	1320	956	521	182	50	12	1.3	.19
MIN	0	.59	6.7	14	27	134	169	54	13	1.0	.11	.01
AC-FT	24	236	1520	2430	21020	25280	17330	6700	1600	314	27	3.9
CAL YR 1974	TOTAL	36246.86	MEAN	99.3	MAX	3960	MIN	0	AC-FT	71900		
WTR YR 1975	TOTAL	38561.35	MEAN	106	MAX	1320	MIN	0	AC-FT	76490		

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-2	2130	6.18	1,500	3-8	0800	5.93	1,240
2-4	2300	5.96	1,270	3-22	1600	6.34	1,690
2-10	1400	6.38	1,740	3-25	2100	6.33	1,680
2-14	0800	5.52	914				

SAN JOAQUIN RIVER BASIN

11260480 MARIPOSA CREEK NEAR CATHEYS VALLEY, CALIF.

LOCATION.--Lat 37°23'56", long 120°00'10", in SW¼NE¼ sec.21, T.6 S., R.18 E., Mariposa County, on downstream side of bridge on White Rock Road, 0.3 mi (0.5 km) downstream from China Gulch, and 5.7 mi (9.2 km) southeast of town of Catheys Valley.

DRAINAGE AREA.--65.7 mi² (170 km²).

PERIOD OF RECORD.--October 1958 to current year. Prior to October 1963, published as "near Cathay."

GAGE.--Water-stage recorder. Altitude of gage is 1,230 ft (375 m), from topographic map.

AVERAGE DISCHARGE.--17 years, 29.1 ft³/s (0.824 m³/s), 21,080 acre-ft/yr (26.0 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 1,550 ft³/s (43.9 m³/s) Feb. 2; no flow many days.
Period of record: Maximum discharge, 7,460 ft³/s (211 m³/s) Feb. 24, 1969 (gage height, 11.63 ft or 3.545 m); no flow many days in each year.
Flood of Apr. 3, 1958, reached a stage of 11.62 ft (3.542 m), discharge, 7,180 ft³/s (203 m³/s).

REMARKS.--Probably minor diversions above the station for irrigation.

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

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		3.9	1.0	3.7	84	26	69	37	7.6	1.8		
2		3.5	.80	3.2	1550	24	61	36	7.2	1.8		
3		2.1	100	2.8	594	22	56	34	7.1	1.8		
4		1.5	254	2.7	626	22	53	39	6.8	1.8		
5		1.3	44	2.4	315	40	188	33	6.3	1.8		
6		1.2	18	26	140	184	231	30	5.6	1.6		
7		1.2	11	46	97	376	185	29	5.2	1.4		
8		1.5	8.2	271	78	316	179	28	5.0	1.2		
9		1.6	6.7	105	516	148	172	26	4.3	1.1		
10		1.6	6.1	44	738	147	150	25	3.8	1.0		
11		1.5	5.7	26	199	126	117	24	3.5	.80		
12		1.5	5.3	19	120	101	98	23	3.3	.70		
13		1.3	5.1	15	364	117	84	21	3.2	.70		
14		1.4	5.0	13	262	135	84	20	2.9	.60		
15		1.5	5.0	11	139	128	148	19	2.7	.70		
16		1.5	5.1	9.5	102	259	136	19	2.6	.90		
17		1.6	4.7	8.3	79	185	115	18	2.6	1.1		
18		1.6	4.3	7.8	64	137	96	17	2.9	1.0		
19		1.7	4.1	7.1	57	111	83	16	3.1	.90		
20		1.6	3.8	6.5	77	93	74	16	3.3	.80		
21		3.9	3.6	6.0	58	88	68	16	3.2	.70		
22		17	3.5	5.6	47	612	62	15	3.0	.60		
23		6.3	3.1	5.3	43	183	55	14	2.7	.60		
24		3.5	2.8	5.1	39	139	49	13	2.8	.50		
25		2.5	2.7	4.9	36	502	53	13	3.2	.50		
26		1.9	2.6	4.8	32	235	53	12	2.9	.40		
27		1.6	2.7	4.6	30	159	46	11	2.5	.30		
28		1.4	11	4.3	28	126	42	10	2.3	.30		
29		1.2	7.7	4.4	---	104	39	9.5	2.0	.30		
30		1.0	5.0	4.3	---	90	38	8.7	1.9	.20		
31		---	4.4	4.3	---	81	---	8.1	---	.20		---
TOTAL	0	74.9	547.00	683.6	6514	5016	2884	640.3	115.5	28.10	0	0
MEAN	0	2.50	17.6	22.1	233	162	96.1	20.7	3.85	.91	0	0
MAX	0	17	254	271	1550	612	231	39	7.6	1.8	0	0
MIN	0	1.0	.80	2.4	28	22	38	8.1	1.9	.20	0	0
AC-FT	0	149	1080	1360	12920	9950	5720	1270	229	56	0	0
CAL YR 1974	TOTAL	10553.20	MEAN 28.9	MAX 1360	MIN 0	AC-FT 20930						
WTR YR 1975	TOTAL	16503.40	MEAN 45.2	MAX 1550	MIN 0	AC-FT 32730						

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.
(Hydrologic bench-mark station)

LOCATION.--Lat 37°43'54", long 119°33'28" (unsurveyed), Mariposa County, Yosemite National Park, on right bank 10 ft (3 m) downstream from footbridge at Happy Isles, 0.4 mi (0.6 km) downstream from Illilouette Creek, and 2.0 mi (3.2 km) southeast of Yosemite National Park Headquarters.

DRAINAGE AREA.--181 mi² (469 km²).

PERIOD OF RECORD.--August 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,016.58 ft (1,224.254 m) above mean sea level. Prior to Nov. 2, 1916, nonrecording gage at datum 0.55 ft (0.168 m) lower.

AVERAGE DISCHARGE.--60 years, 345 ft³/s (9.770 m³/s), 250,000 acre-ft/yr (308 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,650 ft³/s (132 m³/s) June 2 (gage height, 8.02 ft or 2.444 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Oct. 26, 27.
Period of record: Maximum discharge, 9,860 ft³/s (279 m³/s) Dec. 23, 1955 (gage height, 12.73 ft or 3.880 m), from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of contracted-opening measurements at gage heights 10.4 ft (3.17 m) and 11.55 ft (3.520 m); minimum, 1.5 ft³/s (0.042 m³/s) Sept. 30, 1926.

REMARKS.--Records good. Up to 5 ft³/s (0.142 m³/s) can be diverted above station for Yosemite Valley water supply.

REVISIONS (WATER YEARS).--WSP 1215: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	26	16	21	49	148	166	302	3660	872	140	33
2	10	23	16	20	47	140	150	350	3630	788	125	31
3	13	21	29	22	60	130	152	442	3060	708	119	27
4	13	19	49	22	67	135	140	400	2920	659	116	25
5	12	18	34	21	66	131	135	307	3100	833	117	24
6	11	18	34	32	67	137	137	274	3240	963	115	23
7	11	18	36	37	67	128	140	319	3100	923	106	23
8	12	19	37	42	66	128	133	478	2870	799	96	24
9	12	18	38	38	79	124	119	584	2840	779	88	40
10	13	18	36	45	74	119	117	745	2850	801	87	50
11	13	18	37	45	72	112	115	910	2810	865	84	102
12	12	17	37	46	74	105	122	1120	2580	765	83	118
13	11	16	37	48	76	106	142	1510	2480	700	85	97
14	10	16	34	49	70	106	175	1820	2670	545	77	76
15	9.8	16	33	52	66	102	160	1920	2750	440	73	61
16	9.3	16	34	51	64	105	139	1940	2360	350	69	51
17	8.8	16	34	53	59	96	124	2130	1980	336	65	43
18	8.5	16	32	57	61	98	124	2480	1350	375	63	39
19	8.1	16	30	60	64	104	137	2720	970	376	79	36
20	7.7	15	29	63	64	105	171	2150	831	343	98	34
21	7.4	19	28	65	57	102	220	1270	876	326	104	37
22	7.4	24	26	69	57	102	244	1160	1140	308	95	37
23	7.4	22	19	72	63	105	256	1330	1270	298	77	36
24	7.2	23	21	76	76	113	269	1970	1090	291	64	33
25	7.2	24	23	79	86	184	251	2440	747	275	57	30
26	7.0	22	23	81	96	154	199	2560	738	257	52	27
27	7.0	21	22	71	108	140	186	2520	877	248	50	24
28	22	19	23	53	126	128	213	2570	909	265	49	23
29	23	18	22	56	---	126	261	2530	950	232	44	21
30	18	17	22	46	---	148	307	2660	935	205	40	19
31	23	---	21	44	---	193	---	3080	---	169	36	---
TOTAL	351.3	569	912	1536	1981	3854	5204	46991	61583	16094	2553	1244
MEAN	11.3	19.0	29.4	49.5	70.8	124	173	1516	2053	519	82.4	41.5
MAX	23	26	49	81	126	193	307	3080	3660	963	140	118
MIN	7.0	15	16	20	47	96	115	274	738	169	36	19
AC-FT	697	1130	1810	3050	3930	7640	10320	93210	122100	31920	5060	2470
CAL YR 1974	TOTAL	153870.3	MEAN 422	MAX 2900	MIN 7.0	AC-FT	305200					
WTR YR 1975	TOTAL	142872.3	MEAN 391	MAX 3660	MIN 7.0	AC-FT	283400					

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-19	0100	7.04	3,090	6-5	2345	7.71	4,090
6-2	0015	8.02	4,650	6-15	0330	7.12	3,200

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: March 1968 to current year.

Water temperatures: October 1965 to current year.

Sediment records: Water years 1970-71, 1973 to current year (partial-record station).

EXTREMES.--Current year:

Water temperatures: Maximum, 19.5°C July 25; minimum, 0.5°C Dec. 31 to Jan. 2.

Period of record:

Water temperatures: Maximum (1966 to current year), 19.5°C July 25, 1975; minimum, freezing point on many days during winter period most years.

REMARKS.--Clock stopped Oct. 6, 7; range in temperature, 9.5°C to 11.5°C.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- CHARGE (CFS)	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CAC03 (MG/L)
OCT. 08...	0900	--	11	7.9	6.3	.0	2.3	.8	15	0	12
NOV. 19...	0900	--	16	8.3	3.7	.1	3.6	.4	10	0	8
JAN. 15...	0900	--	49	7.7	2.9	.2	3.0	.4	11	0	9
MAR. 06...	0800	--	137	7.0	3.4	.0	2.1	.6	9	0	7
APR. 16...	0900	--	137	7.9	5.7	.4	2.5	.5	12	0	10
MAY 22...	0830	1160	--	5.9	1.2	.0	1.4	.5	7	0	6
JULY 11...	0900	--	951	3.4	.8	.7	.6	.3	5	0	4
AUG. 25...	1100	--	58	5.3	1.7	.4	1.3	.2	12	0	10

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)
OCT. 08...	1.4	4.1	.0	.03	.00	.03	.00	26	30	.04	.77
NOV. 19...	1.2	4.5	.0	.04	.00	.04	.00	28	27	.04	1.21
JAN. 15...	1.3	4.5	.0	.03	.00	.03	.00	25	25	.03	3.31
MAR. 06...	1.4	3.5	.0	.05	.00	.05	.00	23	22	.03	8.51
APR. 16...	1.5	3.0	.0	.01	.00	.01	.02	33	27	.04	12.2
MAY 22...	1.1	.7	.0	.00	.00	.00	.01	28	14	.04	87.7
JULY 11...	1.2	.7	.1	.04	.01	.05	.00	6	10	.01	15.4
AUG. 25...	1.6	1.4	.1	.02	.01	.03	.00	9	18	.01	1.41

DATE	HARD- NESS (CA) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 08...	16	4	23	.3	<10	7.1	9.0	--	--	--	--
NOV. 19...	10	2	44	.5	5	7.2	5.5	--	--	--	--
JAN. 15...	8	0	43	.5	56	6.8	2.0	--	--	--	--
MAR. 06...	9	2	33	.3	52	6.8	3.5	<1	--	--	--
APR. 16...	16	6	25	.3	5	7.2	.5	--	9.9	--	--
MAY 22...	3	0	46	.4	12	6.9	4.0	<1	--	--	--
JULY 11...	5	1	20	.1	12	7.3	14.0	--	--	88	15
AUG. 25...	6	0	32	.2	--	--	--	--	--	82	84

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

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.--Continued

WATER QUALITY DATA. WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	CYANIDE (CN) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)
NOV. 19...	0900	90	<10	.00	4	<100	<10

DATE	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 19...	<10	<10	<100	<.1	0	<10	10

TEMPERATURE (DEG. C) OF WATER. WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	10.5	6.0	5.5	3.0	2.5	1.5	0.5	1.0	1.0	4.5	3.5
2	12.0	11.0	5.5	4.5	3.5	3.0	1.0	0.5	1.5	1.0	4.5	3.0
3	11.0	9.0	5.0	4.5	3.5	3.0	1.5	1.0	1.5	1.5	4.5	2.0
4	9.5	9.0	5.0	4.5	3.5	3.0	1.5	1.0	1.5	1.5	4.5	3.0
5	9.5	9.0	5.0	4.5	3.0	2.0	2.0	1.5	2.0	1.5	4.5	4.0
6	---	---	5.0	4.5	2.5	2.0	2.0	2.0	2.0	2.0	4.5	3.5
7	---	---	5.5	4.5	2.5	2.0	2.0	1.5	2.5	2.0	4.5	3.5
8	10.5	9.5	5.0	4.5	2.5	2.0	2.0	1.5	3.5	2.5	4.5	3.5
9	10.5	9.0	5.0	4.0	2.0	2.0	1.5	1.0	3.5	3.0	4.5	3.5
10	10.0	9.0	5.0	4.0	2.0	2.0	1.5	1.0	3.0	2.5	3.5	3.0
11	10.0	9.0	5.0	4.5	2.0	1.5	2.5	1.5	2.5	2.0	4.0	2.5
12	9.5	8.0	5.5	4.5	2.5	2.0	3.5	2.5	3.0	2.0	4.0	1.5
13	9.5	8.0	5.5	5.0	2.5	2.0	3.5	1.5	3.0	2.5	3.5	2.0
14	9.5	8.0	6.0	5.0	2.5	2.0	2.5	1.5	2.5	2.0	2.0	1.5
15	10.0	8.5	6.0	5.0	3.0	2.5	3.0	2.0	2.0	1.5	2.0	1.5
16	10.0	8.5	6.0	5.5	3.0	2.5	2.5	2.0	1.5	1.0	2.0	1.5
17	10.0	8.5	6.0	5.0	3.0	2.0	3.5	2.5	1.0	1.0	2.0	1.0
18	10.0	8.5	6.0	5.0	2.0	1.5	3.5	2.5	1.5	1.0	5.0	2.0
19	10.0	8.5	5.5	5.0	2.0	1.5	3.5	2.5	2.0	1.5	5.5	3.5
20	10.0	9.0	5.5	5.0	3.0	2.0	3.5	2.5	2.5	2.0	5.5	4.5
21	10.0	8.5	6.0	5.5	3.0	2.5	3.5	2.5	2.5	2.0	4.5	1.5
22	9.5	8.0	5.5	3.5	2.5	1.5	3.5	3.0	2.5	2.0	2.0	1.5
23	9.0	8.0	4.0	3.0	2.0	1.5	4.0	3.0	3.0	2.0	2.5	1.5
24	9.0	7.5	4.0	3.5	2.0	1.5	4.5	3.5	3.0	2.5	5.5	2.5
25	9.0	7.5	3.5	3.0	2.0	1.5	4.5	3.5	3.5	2.5	5.5	2.0
26	9.0	7.5	3.5	3.0	2.0	1.5	3.5	2.5	3.5	2.5	---	---
27	9.5	8.0	3.5	3.0	2.5	2.0	3.0	1.0	4.5	3.0	---	---
28	8.0	5.0	3.0	2.5	2.0	2.0	1.5	1.0	5.0	3.0	---	---
29	5.5	5.0	3.0	2.5	2.0	1.5	1.0	1.0	---	---	---	---
30	5.5	4.5	3.0	2.5	2.0	1.5	1.0	1.0	---	---	---	---
31	6.0	5.5	---	---	1.5	0.5	1.0	1.0	---	---	---	---
MONTH	12.0	4.5	6.0	2.5	3.5	0.5	4.5	0.5	5.0	1.0	5.5	1.0

SAN JOAQUIN RIVER BASIN

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1			---	---	10.0	7.0	12.0	8.5	16.0	12.0	13.0	11.0
2			---	---	9.5	6.0	12.5	8.0	16.5	13.0	13.0	11.5
3			---	---	10.0	6.0	13.0	8.0	17.0	13.0	13.0	11.0
4			---	---	10.0	5.5	14.0	9.0	16.5	13.5	14.0	12.0
5			---	---	10.5	7.0	15.0	10.0	17.5	14.0	14.5	12.5
6			---	---	10.5	6.0	15.0	11.0	16.5	14.0	15.0	12.5
7			6.0	3.0	10.0	6.0	15.0	10.5	15.5	13.0	14.5	13.0
8			6.0	3.0	11.0	6.5	16.0	11.0	17.5	13.5	14.5	13.5
9			6.5	3.0	11.0	7.0	15.5	12.0	16.5	12.5	14.5	12.5
10			6.5	3.0	11.5	7.5	16.5	13.5	16.5	14.0	14.5	12.0
11			7.0	2.5	11.0	7.5	17.0	13.5	16.5	13.5	14.5	11.0
12			7.0	2.5	10.5	7.5	17.0	13.0	17.0	13.5	15.0	12.0
13			6.5	2.5	11.5	8.0	17.0	12.5	16.0	13.5	14.5	12.0
14			6.5	2.5	12.5	8.5	16.5	12.0	15.5	13.0	14.0	11.0
15			6.0	2.5	11.0	8.5	14.5	11.5	15.5	12.5	13.5	11.5
16			7.0	3.5	11.5	8.0	16.5	12.5	15.0	12.0	14.0	11.5
17			7.0	3.5	9.5	7.5	17.0	14.0	15.0	12.0	15.0	13.5
18			7.5	3.5	9.0	7.5	17.5	15.0	14.0	12.5	16.0	14.0
19			6.0	4.0	8.0	7.0	18.0	14.0	14.0	12.0	15.0	13.0
20			---	---	10.5	7.5	17.5	14.0	13.0	11.0	14.5	12.5
21			---	---	12.0	7.5	17.5	14.0	13.5	10.5	14.0	12.0
22			---	---	12.5	8.5	18.5	14.5	15.0	11.5	13.0	11.5
23			9.5	6.0	11.0	8.5	18.5	14.5	15.0	12.0	12.5	10.5
24			9.5	5.0	9.0	7.5	19.0	14.5	15.0	12.0	12.5	10.5
25			9.0	5.0	10.5	6.5	19.5	14.0	16.0	13.0	12.0	10.5
26			8.5	5.0	11.5	7.5	18.5	15.0	15.5	14.0	11.0	10.0
27			9.0	5.0	11.5	7.0	19.0	16.0	14.5	12.0	11.0	10.0
28			9.0	5.5	12.0	8.0	18.5	16.0	14.0	11.5	10.5	9.5
29			9.0	5.5	12.0	9.0	17.0	14.5	13.5	10.5	10.5	9.0
30			9.5	5.0	12.0	8.5	15.5	13.0	14.5	11.5	10.0	8.5
31			10.0	6.0	---	---	15.0	10.0	13.5	11.0	---	---
MONTH			---	---	12.5	5.5	19.5	8.0	17.5	10.5	16.0	8.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- CHARGE (CFS)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY)
NOV. 19...	0830	--	16	2	.09
JAN. 15...	0800	--	49	2	.26
MAR. 06...	0745	--	139	2	.75
APR. 16...	0815	--	137	1	.37
MAY 22...	0830	1160	--	4	13

11266500 MERCED RIVER AT POHONO BRIDGE, NEAR YOSEMITE, CALIF.

LOCATION.--Lat 37°43'01", long 119°39'55", Mariposa County, Yosemite National Park, on left bank 150 ft (46 m) upstream from Pohono bridge, 0.4 mi (0.6 km) upstream from Artist Creek, and 4.8 mi (7.7 km) southwest of Yosemite National Park headquarters.

DRAINAGE AREA.--321 mi² (831 km²).

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for October and November 1916, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 3,861.66 ft (1,177.034 m) above mean sea level. Prior to Sept. 5, 1918, at datum 1.8 ft (0.549 m) higher. Sept. 5, 1918, to Sept. 30, 1955, at datum 1.0 ft (0.305 m) higher.

AVERAGE DISCHARGE.--59 years, 606 ft³/s (17.16 m³/s), 439,000 acre-ft/yr (541 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,280 ft³/s (206 m³/s) June 2 (gage height, 10.80 ft or 3.292 m); minimum daily, 25 ft³/s (0.71 m³/s) Oct. 20-27.

Period of record: Maximum discharge, 23,400 ft³/s (663 m³/s) Dec. 23, 1955 (gage height, 21.52 ft or 6.559 m, from floodmarks in well), from rating curve extended above 16,300 ft³/s (462 m³/s) on basis of computation of flow over diversion dam for Yosemite powerhouse, 1 mi (1.6 km) downstream at gage heights 20.1 ft (6.13 m) and 20.98 ft (6.395 m), present datum; minimum, 3.3 ft³/s (0.093 m³/s) Sept. 29, Oct. 1, 1924.

REMARKS.--Records excellent. No diversions between stations at Happy Isles bridge and Pohono bridge. One ft³/s (0.028 m³/s) sewage effluent returns between stations (see REMARKS for sta 11264500).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	48	41	46	103	319	345	570	6060	1300	211	67
2	30	45	40	46	110	316	313	642	6160	1190	188	63
3	33	42	80	46	113	287	322	826	5340	1080	176	59
4	32	39	124	48	128	298	304	741	5070	998	171	56
5	31	38	90	48	122	313	290	605	5220	1140	166	53
6	31	37	86	79	126	311	271	561	5580	1270	162	50
7	30	37	86	88	130	294	263	625	5220	1220	154	48
8	31	38	86	113	134	296	275	894	4820	1080	146	48
9	32	38	85	95	196	283	258	1140	4700	1020	136	52
10	32	38	81	98	182	267	270	1460	4680	1030	131	78
11	32	37	81	98	167	252	267	1840	4550	1090	128	111
12	31	37	81	99	167	235	273	2200	4200	971	123	145
13	30	37	84	101	178	244	303	2810	3950	886	122	130
14	29	37	77	104	162	232	374	3370	4160	723	121	108
15	29	38	76	108	149	231	349	3630	4220	614	117	90
16	28	37	78	110	145	240	316	3580	3650	531	111	78
17	27	37	80	109	129	222	285	3940	3100	495	107	70
18	26	37	73	117	132	234	287	4500	2290	518	105	66
19	26	36	72	128	138	249	304	4960	1790	516	122	62
20	25	36	69	134	145	268	344	4150	1550	480	147	60
21	25	46	66	138	131	276	436	2570	1560	453	150	58
22	25	57	63	145	132	281	484	2210	1820	430	141	59
23	25	50	52	152	137	281	506	2630	1980	410	122	57
24	25	50	48	158	154	299	521	3600	1810	395	107	55
25	25	54	51	167	174	461	507	4380	1330	374	96	52
26	25	54	52	169	198	377	426	4590	1250	350	89	48
27	25	53	52	151	222	330	399	4510	1390	336	84	46
28	44	50	54	104	263	284	433	4640	1390	342	82	44
29	54	46	50	112	---	285	505	4550	1430	314	79	42
30	40	44	48	98	---	319	591	4730	1390	284	75	40
31	42	---	47	91	---	400	---	5320	---	247	70	---
TOTAL	947	1273	2153	3300	4267	8984	10821	86774	101660	22087	3939	1995
MEAN	30.5	42.4	69.5	106	152	290	361	2799	3389	712	127	66.5
MAX	54	57	124	169	263	461	591	5320	6160	1300	211	145
MIN	25	36	40	46	103	222	258	561	1250	247	70	40
AC-FT	1880	2520	4270	6550	8460	17820	21460	172100	201600	43810	7810	3960
CAL YR 1974	TOTAL	264085	MEAN 724	MAX 4760	MIN 25	AC-FT 523800						
WTR YR 1975	TOTAL	248260	MEAN 680	MAX 6160	MIN 25	AC-FT 492300						

Peak discharge (base, 2,900 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-19	0300	9.53	5,590	6-6	0215	10.21	6,470
6-2	0130	10.80	7,280				

11267350 BIG CREEK DIVERSION NEAR FISH CAMP, CALIF.

LOCATION.--Lat 37°28'10", long 119°36'51", in SE¼NE¼ sec.25, T.5 S., R.21 E., Mariposa County, Sierra National Forest, on right bank 0.5 mi (0.8 km) downstream from diversion weir, 0.5 mi (0.8 km) upstream from Rainier Creek, and 1.2 mi (1.9 km) southeast of Fish Camp.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,400 ft (1,646 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 13.1 ft³/s (0.371 m³/s), 9,490 acre-ft/yr (11.7 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 66 ft³/s (1.87 m³/s) June 1, 2, 1975; no flow July, 1, 2, 1973.

REMARKS.--Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	6.0	4.2	4.8	5.5	15	13	42	66	11	2.1	1.9
2	3.0	5.0	4.1	4.7	12	14	13	45	66	18	2.1	1.7
3	4.0	4.6	17	4.7	10	15	14	47	65	25	2.1	1.7
4	3.0	4.3	31	4.8	9.5	14	13	46	64	24	2.1	1.7
5	2.9	4.0	11	5.0	8.9	20	12	36	64	23	1.9	1.7
6	3.0	3.8	8.1	13	8.3	16	14	33	64	22	1.9	1.7
7	3.6	4.0	7.1	11	8.1	14	15	38	62	20	1.9	1.7
8	3.7	4.5	6.7	10	8.0	14	13	48	60	17	1.9	1.7
9	3.2	4.1	6.6	14	8.0	12	12	53	60	17	1.9	1.7
10	3.0	3.8	6.4	7.6	8.0	11	11	56	58	16	1.9	1.7
11	3.0	3.8	5.8	7.4	7.9	11	11	57	54	16	1.9	1.7
12	2.8	3.8	5.6	7.6	7.7	11	11	59	54	15	1.9	1.7
13	2.7	3.7	5.6	7.8	7.5	10	13	60	53	15	1.9	1.7
14	2.7	3.7	6.2	7.7	7.3	11	13	61	53	14	1.9	1.7
15	2.6	3.6	5.6	7.4	7.2	10	13	61	52	8.3	1.9	1.6
16	2.5	3.4	5.6	7.0	7.6	10	12	61	51	2.4	1.9	1.5
17	2.5	3.4	5.4	6.7	7.7	9.7	12	62	50	2.4	1.9	1.5
18	2.5	3.2	5.4	7.0	7.8	9.9	11	64	48	2.4	1.9	1.5
19	2.4	3.2	5.4	7.1	7.9	11	11	65	47	2.4	2.0	1.5
20	2.4	3.2	5.2	7.2	8.1	11	15	61	45	2.4	1.9	1.5
21	2.4	7.6	4.9	7.2	8.3	11	20	59	40	2.4	1.9	1.5
22	2.4	6.9	4.6	7.3	8.5	11	24	58	30	2.2	1.9	1.5
23	2.5	5.3	4.6	7.2	8.8	12	24	60	29	1.8	1.9	1.5
24	2.5	5.1	4.6	7.5	9.3	11	27	62	29	1.5	1.9	1.5
25	2.5	4.7	4.7	7.7	9.9	31	37	63	29	1.4	1.9	1.5
26	2.4	4.3	4.8	7.5	11	20	25	64	29	1.4	1.9	1.5
27	2.5	4.2	4.9	6.8	12	14	23	64	27	1.3	1.9	1.4
28	16	4.0	6.6	6.2	14	14	28	64	12	1.2	1.9	1.4
29	5.5	4.2	5.5	5.7	---	13	33	63	12	1.0	1.9	1.4
30	4.7	4.3	4.9	5.6	---	14	37	64	11	1.4	1.9	1.4
31	6.6	---	4.8	5.5	---	15	---	65	---	2.1	1.9	---
TOTAL	107.3	129.7	212.9	226.7	244.8	415.6	530	1741	1384	291.0	59.8	47.7
MEAN	3.46	4.32	6.87	7.31	8.74	13.4	17.7	56.2	46.1	9.39	1.93	1.59
MAX	16	7.6	31	14	14	31	37	65	66	25	2.1	1.9
MIN	1.8	3.2	4.1	4.7	5.5	9.7	11	33	11	1.0	1.9	1.4
AC-FT	213	257	422	450	486	824	1050	3450	2750	577	119	95
CAL YR 1974 TOTAL	2673.57		MEAN 7.32	MAX 45	MIN .30	AC-FT 5300						
WTR YR 1975 TOTAL	5390.50		MEAN 14.8	MAX 66	MIN 1.0	AC-FT 10690						

11268000 SOUTH FORK MERCED RIVER NEAR EL PORTAL, CALIF.

LOCATION.--Lat 37°39'05", long 119°53'04", in NW¼NE¼ sec.29, T.3 S., R.19 E., Mariposa County, on right bank 1,500 ft (460 m) upstream from mouth, and 5.9 mi (9.5 km) west of El Portal.

DRAINAGE AREA.--241 mi² (624 km²).

PERIOD OF RECORD.--November 1950 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (427 m), from topographic map.

AVERAGE DISCHARGE.--24 years (1951-75), 350 ft³/s (9.912 m³/s), 253,600 acre-ft/yr (313 hm³/yr).

EXTREMES.--Current year; Maximum discharge, 4,770 ft³/s (135 m³/s) June 1 (gage height, 10.34' ft or 3.152 m); minimum daily, 12 ft³/s (0.34 m³/s) Oct. 1.
Period of record: Maximum discharge, 46,500 ft³/s (1,320 m³/s) Dec. 23, 1955 (gage height, 18.70 ft or 5.700 m), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement at gage height 17.63 ft (5.374 m); minimum, 2.2 ft³/s (0.062 m³/s) Aug. 26, 27, 1961.

REMARKS.--Records good. Big Creek ditch diverts up to 60 ft³/s (1.70 m³/s) at times into Fresno River basin. Diversion of 0.5 ft³/s (0.014 m³/s) at Wawona for domestic use and irrigation of golf course. Chemical-quality data for this station are published in the partial-record section of this report.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	44	31	54	137	354	433	565	3090	485	67	28
2	15	43	33	55	557	333	386	583	2850	442	63	26
3	25	36	130	58	390	308	377	715	2510	400	58	26
4	20	32	225	65	404	298	361	751	2410	363	54	24
5	17	30	150	80	321	427	425	582	2610	394	51	23
6	17	29	113	134	261	875	412	508	2630	436	48	22
7	17	28	86	175	269	957	386	496	2420	425	46	21
8	17	29	71	210	317	1330	378	575	2180	356	45	21
9	18	29	63	180	1630	799	391	680	2220	317	43	22
10	18	30	58	163	1400	634	423	795	2220	307	41	26
11	18	29	60	148	687	540	416	955	2060	293	41	30
12	18	28	61	136	455	479	406	1210	1850	268	39	27
13	18	27	59	125	529	456	500	1500	1710	234	37	24
14	17	27	57	120	552	467	650	1720	1840	197	36	22
15	17	28	58	115	386	455	540	1880	1770	165	36	21
16	15	29	58	111	315	482	518	1860	1470	163	35	20
17	15	28	58	102	258	437	487	2050	1250	168	34	20
18	15	28	58	103	235	399	487	2300	928	166	33	19
19	15	27	57	108	224	398	467	2520	752	159	42	19
20	15	27	56	107	271	395	475	2260	673	147	59	19
21	14	32	54	106	248	380	520	1200	647	135	57	18
22	14	106	52	105	222	556	550	1070	727	126	52	18
23	14	66	50	106	217	478	547	1300	831	118	46	21
24	14	49	49	106	229	482	550	1910	740	109	40	18
25	14	40	51	109	242	1670	804	2320	552	100	36	17
26	15	39	53	113	258	1090	574	2340	548	93	34	17
27	15	37	62	107	270	770	494	2270	604	86	32	16
28	19	35	82	87	305	600	490	2390	581	80	31	16
29	24	34	69	81	---	512	530	2380	571	77	31	16
30	41	33	62	78	---	465	584	2520	557	75	30	16
31	35	---	57	70	---	481	---	2810	---	72	29	---
TOTAL	558	1079	2183	3417	11589	18307	14561	47015	45801	6956	1326	633
MEAN	18.0	36.0	70.4	110	414	591	485	1517	1527	224	42.8	21.1
MAX	41	106	225	210	1630	1670	804	2810	3090	485	67	30
MIN	12	27	31	54	137	298	361	496	548	72	29	16
AC-FT	1110	2140	4330	6780	22990	36310	28880	93250	90850	13800	2630	1260
CAL YR 1974	TOTAL	133376	MEAN 365	MAX 2010	MIN 12	AC-FT 264600						
WTR YR 1975	TOTAL	153425	MEAN 420	MAX 3090	MIN 12	AC-FT 304300						

Date	Time	Peak discharge (base, 2,000 ft ³ /s)	Date	Time	G.H.	Discharge
2-9	1030	9.00 2,270	5-19	unknown	9.69	3,420
3-7	2315	8.95 2,200	6-1	2245	10.34	4,770
3-25	1015	9.37 2,850	6-5	2245	9.98	4,000

NOTE.--No gage-height record Nov. 19 to Jan. 14.

SAN JOAQUIN RIVER BASIN

11269500 LAKE MCCLURE AT EXCHEQUER, CALIF.

LOCATION.--Lat 37°35'02", long 120°16'09", in NW¼SE¼ sec.13, T.4 S., R.15 E., Mariposa County, on left end of New Exchequer Dam on Merced River, 0.9 mi (1.4 km) east of Exchequer, and 5.5 mi (8.8 km) northeast of Merced Falls.

DRAINAGE AREA.--1,037 mi² (2,686 km²).

PERIOD OF RECORD.--April 1926 to September 1930 (daily gage heights; also summary of yearly contents in WSP 881), October 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Merced Irrigation District). Prior to Oct. 1, 1964, indicator in powerhouse at same datum. Oct. 1, 1964, to July 31, 1966, nonrecording gage at center of upstream face of dam at same datum.

EXTREMES.--Current year: Maximum contents, 1,022,000 acre-ft (1,260 hm³) June 17-24 (elevation, 866.7 ft or 264.17 m); minimum, 624,400 acre-ft (770 hm³) Jan. 31 (elevation, 799.6 ft or 243.72 m).

Period of record: Maximum contents, 1,026,000 acre-ft (1,270 hm³) July 14, 15, 1969 (elevation, 867.2 ft or 264.32 m); practically no storage at times in 1926, 1930-31, 1964-65 when reservoir was drained for inspection or construction. Minimum since construction of New Exchequer Dam under normal operations, 273,900 acre-ft (338 hm³) Nov. 28, 1972 (elevation, 704.2 ft or 214.64 m).

REMARKS.--Reservoir is formed by a rockfill dam with a reinforced concrete face completed in March 1967. Dam is downstream from and connected to the original concrete arch and gravity-type dam which was completed in April 1926. Usable capacity, 1,024,000 acre-ft (1,260 hm³) between elevations 440.0 ft (134.11 m), invert entrance to outlet tunnel and 867.0 ft (264.26 m), top of spillway gates. Dead storage, 300 acre-ft (370,000 m³).

Water is released through a series of powerplants down the Merced River to a diversion dam for Merced Irrigation District's main canal. Records, including extremes, represent total contents at 2400 hours.

REVISIONS (WATER YEARS).--WSP 881: 1926-32 (yearly summaries only). WSP 1345: 1951(M). WSP 1930: Drainage area.

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

700	263,000	820	729,600
720	317,800	840	845,800
750	415,900	860	975,700
780	534,500	870	1,046,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	720900	685700	651000	630700	626300	679000	755200	758600	924700	1018000	940600	822700
2	718700	685200	650000	629700	640500	680000	754600	758000	939300	1018000	935900	817900
3	716000	685200	650000	628700	645500	681000	754600	757400	950600	1016000	932000	814900
4	713300	683600	652000	628300	652000	680500	755200	758000	961400	1015000	928700	810800
5	712200	682600	652000	627800	655000	681000	756900	757400	972300	1013000	924000	806600
6	709500	681600	651500	627800	656500	684700	759700	756300	984000	1013000	920100	802500
7	706900	679000	650500	627800	657000	689400	760800	755200	992300	1013000	916200	798900
8	704200	677400	649000	630200	658000	697800	760800	754600	999900	1010000	911600	794200
9	702600	676400	648000	631200	666600	702600	760300	755200	1006000	1009000	906400	790200
10	701000	675900	647000	631700	674800	705800	761400	756300	1010000	1008000	902500	786100
11	699900	674300	646500	631700	676900	708500	761400	759700	1013000	1006000	898600	781400
12	697800	673300	645000	631700	675400	710100	762000	763100	1015000	1004000	894800	778000
13	696800	672300	644500	631700	675400	710600	761400	767700	1017000	1003000	891600	774000
14	696800	670200	644000	630700	675400	713300	760800	773400	1019000	1001000	887100	770500
15	696800	669200	643000	630200	675400	716000	761400	780900	1020000	997900	883300	766000
16	696800	667700	642500	629200	674800	719800	762000	787800	1020000	994400	878200	762000
17	696800	666100	642000	629200	674300	722000	762500	796000	1022000	990900	873800	758000
18	696800	665600	641000	629200	674300	723600	763100	805400	1022000	988100	870000	754100
19	696800	664600	640000	629700	674800	725800	762500	816700	1022000	984700	866300	750100
20	696800	663600	639500	629200	675400	726900	762500	825700	1022000	982600	863100	746200
21	696200	663100	638500	629200	675400	729100	762000	830000	1022000	979900	860000	741800
22	696200	662100	638500	628700	675400	735700	760800	831800	1022000	976400	856300	737900
23	696200	660500	638000	627800	675900	739000	760800	834800	1022000	973000	853200	734000
24	696200	659000	637100	627800	676400	741800	760800	840900	1022000	969600	850100	730200
25	694100	658000	636100	627800	675400	750700	762000	850100	1021000	966900	847000	726300
26	692000	657000	635100	628300	674800	755800	762000	860000	1020000	963500	843400	722000
27	689600	656000	634100	627800	675900	756300	761400	869400	1019000	960800	839700	717600
28	689400	655000	633600	626800	677400	755800	760300	878900	1019000	956700	836000	713300
29	689400	653500	632600	625800	---	755800	759100	889000	1018000	952000	832400	709000
30	688300	652500	632200	625300	---	755200	758600	899300	1018000	948600	828700	705300
31	687300	---	631200	624400	---	754100	---	911000	---	944600	826300	---
MAX	720900	685700	652000	631700	677400	756300	763100	911000	1022000	1018000	940600	822700
MIN	687300	652500	631200	624400	626300	679000	754600	754600	924700	944600	826300	705300
(a)	812.1	805.3	801.0	799.6	812.2	824.4	825.2	850.3	866.1	855.4	836.8	815.5
(b)	-35,800	-34,800	-21,300	-6,800	+53,000	+76,700	+4,500	+152,400	+107,000	-73,400	-118,300	-121,000

CAL YR 1974 b -26,800
WTR YR 1975 b -17,800

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

11270900 MERCED RIVER BELOW MERCED FALLS DAM, NEAR SNELLING, CALIF.

LOCATION.--Lat 37°31'18", long 120°19'53", in SE¼SW¼ sec.4, T.5 S., R.15 E., Merced County, on right bank 0.1 mi (0.2 km) south of Merced Falls, 0.2 mi (0.3 km) downstream from Merced Falls Dam, and 5.8 mi (9.3 km) east of Snelling.

DRAINAGE AREA.--1,061 mi² (2,748 km²).

PERIOD OF RECORD.--April 1901 to current year. Records for water years 1914-16 incomplete, yearly estimates published in WSP 1315-A. Published as "near Merced Falls" 1901-13; as "at Exchequer" 1916-64. Records at present site are about equivalent when adjusted for diversion to North Side Canal and change in contents in Lake McClure.

GAGE.--Water-stage recorder. Datum of gage is 310.55 ft (94.656 m) above mean sea level. See WSP 1930 for history of changes prior to Oct. 1, 1964.

AVERAGE DISCHARGE (adjusted for diversion to North Side Canal and change in contents in Lake McClure since 1965 and change in contents in McSwain Reservoir since 1969).--74 years, 1,339 ft³/s (37.92 m³/s), 970,100 acre-ft per year (1.20 km³/yr).

EXTREMES.--Current year: Maximum discharge, 7,020 ft³/s (199 m³/s) June 10 (gage height, 11.10 ft or 3.383 m); minimum daily, 185 ft³/s (5.24 m³/s) Oct. 14.

Period of record (1901-13, 1915 to current year): Maximum discharge observed, 47,700 ft³/s (1,350 m³/s) Jan. 31, 1911 (gage height, 23.3 ft or 7.10 m, site and datum then in use); no flow for part of Nov. 21, 1901. Maximum discharge since construction of Exchequer Dam in 1926, 46,200 ft³/s (1,310 m³/s) Dec. 4, 1950 (gage height, 22.6 ft or 6.89 m, from floodmarks, site and datum then in use), from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of computation of peak flow over dam; minimum daily, 3.4 ft³/s (0.096 m³/s) Mar. 5, 1966.

REMARKS.--Records excellent. Merced Falls Dam diverts water to North Side Canal to irrigate 4,100 acres (16.6 km²) below station. Flow regulated by Exchequer, McSwain, and Merced Falls powerplants, Lake McClure since 1926 (see sta 11269500), and McSwain Reservoir since 1966, capacity, 9,200 acre-ft (11.3 km³).

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	589	677	498	447	511	1310	1850	2840	2160	2210	1820
2	1200	596	676	500	645	511	1210	1880	2800	2150	2240	1840
3	1190	586	686	504	474	514	1020	1890	3040	2140	2230	2040
4	1190	653	683	505	564	521	912	1890	3010	2130	2260	2110
5	1190	687	688	503	708	529	930	1940	2990	2140	2290	2110
6	1190	693	685	501	942	528	917	2050	3410	2140	2280	2120
7	1170	695	692	498	989	542	1160	2100	4160	2140	2240	2110
8	1140	693	692	509	981	535	1640	2100	4140	2150	2250	2110
9	1040	690	693	500	1020	517	1790	2150	4710	2150	2250	2120
10	1000	687	650	498	1260	528	1600	2180	5530	2150	2230	2130
11	880	687	623	496	1770	525	1510	2180	6050	2180	2210	2100
12	829	682	627	503	2000	520	1500	2430	5810	2190	2190	2120
13	398	697	620	499	2080	578	1510	2670	5540	2210	2180	2120
14	185	697	616	505	1840	543	1490	2820	5720	2250	2130	2120
15	202	695	618	502	1500	525	1500	2840	6080	2220	2110	2130
16	199	678	574	498	1510	547	1490	2840	5760	2220	2080	2130
17	198	680	525	499	1200	528	1560	2830	4530	2140	2080	2120
18	193	696	508	498	848	522	1760	2830	3460	2150	2080	2120
19	194	689	494	508	713	526	1780	2830	2850	2140	2010	2110
20	204	685	496	500	703	524	1780	2840	2710	2140	1930	2100
21	202	685	498	502	709	536	1790	2840	2770	2150	1890	2110
22	200	700	500	501	710	613	1780	2840	2770	2160	1830	2120
23	196	701	491	498	709	528	1760	2870	2770	2160	1810	2120
24	193	699	493	482	700	803	1770	2880	2770	2170	1830	2130
25	340	698	495	495	715	1440	1770	2870	2750	2200	1830	2140
26	614	681	497	494	605	2010	1770	2870	2730	2190	1830	2130
27	630	692	496	502	519	1990	1780	2870	2350	2180	1840	2120
28	615	683	497	504	517	1980	1780	2880	2150	2180	1830	2140
29	595	702	501	502	---	1990	1780	2860	2140	2160	1820	2140
30	756	678	504	481	---	2000	1820	2840	2140	2150	1820	2130
31	589	---	503	436	---	1720	---	2840	---	2160	1830	---
TOTAL	19922	20374	17998	15421	27378	26184	46169	78600	110480	67150	63640	62960
MEAN	643	679	581	497	978	845	1539	2535	3683	2166	2053	2099
MAX	1200	702	693	509	2080	2010	1820	2880	6080	2250	2290	2140
MIN	185	586	491	436	447	511	912	1850	2140	2130	1810	1820
AC-FT	39520	40410	35700	30590	54300	51940	91580	155900	219100	133200	126200	124900
MEAN a	67.2	87.6	254	383	1,937	2,095	1,639	5,069	5,546	1,034	210	132
AC-FT a	4,130	5,210	15,620	23,520	107,600	128,800	97,520	311,700	330,000	63,580	12,890	7,870
(b)	936	52	131	165	56	0	1,210	3,260	4,200	4,500	4,380	3,800
CAL YR 1974	TOTAL	523700	MEAN	1435	MAX	5210	MIN 185	AC-FT	1039000	MEAN a 1432	AC-FT a 1037000	
WTR YR 1975	TOTAL	556276	MEAN	1524	MAX	6080	MIN 185	AC-FT	1103000	MEAN a 1530	AC-FT a 1108000	

a Adjusted for diversion to North Side Canal and change in contents in Lake McClure and McSwain Reservoir.

b Diversion, in acre-feet, to North Side Canal, furnished by Merced Irrigation District.

11271290 MERCED RIVER AT SHAFFER BRIDGE, NEAR CRESSEY, CALIF.

LOCATION.--Lat 37°27'15", long 120°36'28", in NW¼SW¼ sec.36, T.5 S., R.12 E., Merced County, near center of span on downstream side of county road bridge, 0.6 mi (1.0 km) upstream from Dry Creek, and 4.0 mi (6.4 km) north-east of Cressey.

DRAINAGE AREA.--1,117 mi² (2,893 km²).

PERIOD OF RECORD.--October 1965 to current year (low flow only).

GAGE.--Water-stage recorder. Datum of gage is 116.79 ft (35.598 m) above mean sea level.

REMARKS.--Records fair. Most water released from Lake McClure (see sta 11269500, 11270900) is diverted upstream into the Main Canal of Merced Irrigation District. Flow past station consists of releases from diversion dam, irrigation return flow, and tributary inflow. No records computed above 200 ft³/s (5.66 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166							---	---	157	105	
2	172							---	---	146	120	
3	186							---	---	131	162	
4	186							---	---	125	176	
5	183							---	---	128	172	
6	180							---	---	112	---	
7	180							---	---	118	176	
8	183							---	---	122	143	
9	---							---	---	137	155	
10	---							190	---	131	176	
11	---							190	---	137	149	
12	---							197	---	152	169	
13	---							---	---	146	140	
14	---							---	---	155	149	
15	---							---	---	176	131	
16	190							---	---	197	134	
17	169							---	---	169	146	
18	169							---	---	115	169	
19	158							---	---	118	---	
20	162							---	---	110	---	
21	162							---	---	118	---	
22	158							---	---	125	197	
23	146							---	---	120	183	
24	146							---	---	105	---	
25	143							---	---	100	194	
26	---							---	---	102	---	
27	---							---	---	105	176	
28	---							---	---	94	172	
29	---							---	198	88	176	
30	---							---	173	100	---	
31	---							---	---	105	---	
TOTAL	---							---	---	3944	---	
MEAN	---							---	---	127	---	
MAX	---							---	---	197	---	
MIN	---							---	---	88	---	
AC-FT	---							---	---	7820	---	
(a)	936	52	131	1,940	1,730	4,690	49,530	110,400	110,700	115,500	106,100	73,680

a Diversion, in acre-feet, to Main Canal near diversion dam, near Merced Falls, furnished by Merced Irrigation District.

SAN JOAQUIN RIVER BASIN

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11271320 DRY CREEK NEAR SNELLING, CALIF.

LOCATION.--Lat 37°33'18", long 120°27'44", in NE¼SE¼ sec.30, T.4 S., R.14 E., Merced County, on left bank 650 ft (198 m) downstream from Fields Road, and 2.8 mi (4.5 km) northwest of Snelling.

DRAINAGE AREA.--67.6 mi² (175 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 230 ft (70 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 20.0 ft³/s (0.566 m³/s), 14,490 acre-ft/yr (17.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,470 ft³/s (70.0 m³/s) Feb. 2 (gage height, 11.03 ft or 3.362 m); no flow for several months.

Period of record: Maximum discharge, 6,710 ft³/s (190 m³/s) Jan. 21, 1969 (gage height, 17.01 ft or 5.185 m); no flow for several months in most years.

REMARKS.--Records good. Small weir upstream from gage regulates storage for stock pond and irrigation pumping.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.17	.29	53	5.1	11	.58				0
2		0	.17	.29	1140	4.4	8.9	.55				0
3		0	1.8	.29	288	3.6	7.7	.55				0
4		0	4.1	.28	516	3.2	7.1	.31				0
5		0	6.9	.25	158	4.5	18	.17				0
6		0	2.2	.51	72	61	38	.08				0
7		0	1.3	7.8	47	329	58	0				0
8		0	1.1	82	55	421	32	0				0
9		0	1.8	31	524	133	24	0				0
10		0	.99	12	178	159	14	0				0
11		0	.68	7.0	63	108	10	0				0
12		0	.54	4.2	34	45	7.7	0				0
13		0	.54	2.6	423	284	6.0	0				0
14		0	.54	2.0	174	254	5.0	0				0
15		0	.54	2.0	52	91	4.8	0				.83
16		0	.41	1.6	32	170	4.5	0				.39
17		0	.41	1.3	23	72	4.0	0				.21
18		0	.41	1.2	18	40	2.8	0				0
19		0	.35	1.1	16	29	2.4	0				0
20		0	.35	.99	24	23	2.1	0				0
21		0	.35	.92	19	19	1.9	0				.46
22		0	.35	.91	13	467	1.7	0				.22
23		0	.29	.75	10	91	.66	0				0
24		.19	.23	.71	9.0	44	.38	0				0
25		.24	.23	.68	7.9	178	.40	0				0
26		.23	.23	1.3	7.3	85	2.0	0				0
27		.23	.29	1.5	6.4	32	2.0	0				0
28		.20	.41	1.3	5.7	23	1.4	0				0
29		.17	.41	1.2	---	18	.93	0				0
30		.17	.41	.86	---	15	.72	0				0
31		---	.35	.64	---	13	---	0	---			---
TOTAL	0	1.43	28.85	169.47	3968.3	3224.8	280.09	2.24	0	0	0	2.11
MEAN	0	.048	.93	5.47	142	104	9.34	.072	0	0	0	.070
MAX	0	.24	6.9	82	1140	467	58	.58	0	0	0	.83
MIN	0	0	.17	.25	5.7	3.2	.38	0	0	0	0	0
AC-FT	0	2.8	57	336	7870	6400	556	4.4	0	0	0	4.2
CAL YR 1974	TOTAL	3211.70	MEAN	8.80	MAX	396	MIN	0	AC-FT	6370		
WTR YR 1975	TOTAL	7677.29	MEAN	21.0	MAX	1140	MIN	0	AC-FT	15230		

Peak discharge (base, 1,000 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-2	0445	11.03	2,470	3-7	2000	10.65	2,260
2-4	1115	9.86	1,850	3-13	1915	8.96	1,410
2-9	0500	9.67	1,760	3-22	0330	9.10	1,480

11272500 MERCED RIVER NEAR STEVINSON, CALIF.

LOCATION.--Lat 37°22'15", long 120°55'46", in SW¼NE¼ sec.36, T.6 S., R.9 E., Merced County, on right bank 5 mi (8.0 km) upstream from mouth, and 6 mi (9.7 km) northwest of Stevinson.

DRAINAGE AREA.--1,275 mi² (3,297 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. October 1940 to Aug. 15, 1955, at datum 55.74 ft (16.990 m) higher, Aug. 16, 1955, to Sept. 30, 1959, at datum 54.74 ft (16.685 m) higher.

AVERAGE DISCHARGE.--35 years, 667 ft³/s (18.89 m³/s), 483,200 acre-ft/yr (596 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,210 ft³/s (119 m³/s) June 17 (elevation, 66.61 ft or 20.303 m); minimum daily, 184 ft³/s (5.21 m³/s) July 25.

Period of record: Maximum discharge, 13,600 ft³/s (385 m³/s) Dec. 5, 1950 (elevation, 73.79 ft or 22.491 m, present datum); no flow July 19 to Aug. 21, 1961, result of temporary dam.

REMARKS.--Records good. Practically entire flow is diverted above station for irrigation of 120,000 acres (486 km²); some return flow enters above station. Flow regulated by three reservoirs, combined capacity, 1,035,000 acre-ft (1.28 km³), the largest of which is Lake McClure (see sta 11269500).

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	329	695	698	521	479	638	1620	395	851	418	197	355
2	354	615	683	519	491	625	1270	368	836	377	208	366
3	378	600	715	513	1360	605	1090	354	827	326	221	375
4	362	593	781	515	1180	598	1050	344	850	310	278	405
5	347	581	800	518	1040	601	877	324	963	305	252	509
6	326	627	749	520	1020	629	838	338	916	312	232	543
7	332	651	729	522	1020	646	867	360	957	289	259	539
8	333	672	721	521	1090	739	816	334	1580	272	275	595
9	340	685	715	529	1100	1020	999	306	1920	253	270	617
10	413	688	716	555	1440	837	1230	294	2160	265	278	583
11	761	691	710	540	1330	727	1240	293	3020	248	296	614
12	887	669	669	523	1590	732	1150	319	3740	244	248	646
13	821	668	660	520	1980	670	1130	313	3950	244	251	675
14	794	672	655	519	2420	722	1110	439	3730	279	257	701
15	496	680	654	518	2450	967	1020	613	3730	271	239	784
16	384	682	648	518	1830	745	923	747	4020	282	251	812
17	328	682	639	512	1650	730	883	818	3960	274	261	826
18	304	675	597	508	1500	712	882	800	3290	250	301	795
19	284	675	567	506	1190	651	990	841	2210	235	333	826
20	271	679	546	505	999	622	1040	820	1440	263	339	810
21	262	679	535	506	906	614	1010	856	1090	279	370	852
22	259	679	535	503	873	640	963	843	1020	244	370	911
23	255	680	530	503	847	1010	864	873	1020	230	357	912
24	247	697	525	502	831	796	684	881	918	208	329	938
25	243	697	521	496	815	738	649	938	897	184	355	980
26	234	687	520	492	803	1090	573	969	854	185	325	1010
27	292	680	520	496	782	1700	543	946	793	195	300	1030
28	462	689	525	493	673	1670	525	869	720	224	301	1050
29	532	690	526	503	---	1650	459	869	518	199	270	1120
30	545	685	522	500	---	1720	430	870	474	186	269	1150
31	580	---	520	497	---	1780	---	836	---	204	286	---
TOTAL	12755	20043	19431	15893	33689	27624	27725	19170	53254	8055	8778	22329
MEAN	411	668	627	513	1203	891	924	618	1775	260	283	744
MAX	887	697	800	555	2450	1780	1620	969	4020	418	370	1150
MIN	234	581	520	492	479	598	430	293	474	184	197	355
AC-FT	25300	39760	38540	31520	66820	54790	54990	38020	105600	15980	17410	44290
CAL YR 1974	TOTAL	233099	MEAN 639	MAX 3220	MIN 155	AC-FT 462400						
WTR YR 1975	TOTAL	268746	MEAN 736	MAX 4020	MIN 184	AC-FT 533100						

11274000 SAN JOAQUIN RIVER NEAR NEWMAN, CALIF.

LOCATION.--Lat 37°21'02", long 120°58'34", in NW¼SW¼ sec.3, T.7 S., R.9 E., Stanislaus County, on left bank 600 ft (180 m) downstream from bridge on Hills Ferry Road, 650 ft (198 m) downstream from Merced River, and 3.5 mi (5.6 km) northeast of Newman.

DRAINAGE AREA.--9,520 mi² (24,657 km²).

PERIOD OF RECORD.--April 1912 to current year. Prior to Oct. 1, 1937, and subsequent to Oct. 1, 1943, flow that bypassed station at discharges above 9,000 ft³/s (255 m³/s) not included in records.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Mar. 3, 1931, nonrecording gage at various sites within 540 ft (165 m) of bridge, and Mar. 3, 1931, to Sept. 30, 1959, water-stage recorder within 600 ft (183 m) of bridge at datum 47.31 ft (14.420 m) higher. Oct. 1, 1959, to Aug. 9, 1960, water-stage recorder at site 70 ft (21 m) upstream at datum 0.25 ft (0.076 m) lower. Aug. 9, 1960, to Mar. 29, 1971, at datum 0.25 ft (0.076 m) lower.

AVERAGE DISCHARGE.--63 years, 2,010 ft³/s (56.92 m³/s), 1,456,000 acre-ft/yr (1,795 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,640 ft³/s (131 m³/s) Feb. 15 (elevation, 56.74 ft or 17.294 m); minimum daily, 422 ft³/s (12.0 m³/s) July 28.

Period of record: Maximum discharge (river only), 28,000 ft³/s (793 m³/s) Feb. 26, 1969 (elevation, 65.90 ft or 20.086 m, from high-water mark in well); river and Merced River Slough, 34,400 ft³/s (974 m³/s) Feb. 26, 1969 (elevation, 65.90 ft or 20.086 m, present datum); minimum, 15 ft³/s (0.42 m³/s) Aug. 9, 10, 1924.

Flood of Jan. 2, 1868, reached a stage of 21.7 ft (6.61 m), from floodmarks; flood of February 1886, reached a stage of 19.8 ft (6.04 m), from floodmarks; and flood of 1911 reached a stage of 19 ft (5.8 m), from floodmarks. All stages referred to datum in use from 1931 to 1959. Discharges unknown.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, ground-water withdrawals, diversions for irrigation, and imported water; low flows consist mainly of return water from irrigated areas.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	683	1100	976	806	938	1230	2820	1010	1080	796	448	795
2	672	1110	963	791	997	1240	2300	934	1110	770	462	822
3	702	1160	1010	781	1710	1210	1930	878	1110	694	476	835
4	732	1150	1210	769	2610	1180	1810	825	1100	647	512	841
5	709	1110	1430	752	3210	1160	1700	783	1150	642	499	902
6	643	1120	1510	749	3710	1220	1680	770	1140	651	493	915
7	616	1100	1480	748	3820	1330	1770	773	1090	624	493	876
8	591	1120	1390	752	3820	1510	1860	720	1560	620	502	867
9	582	1130	1320	758	3490	1860	2060	663	1910	589	493	889
10	616	1120	1260	813	3330	1960	2430	637	2070	538	520	906
11	888	1120	1230	911	3160	1990	2570	627	2610	535	514	974
12	1030	1100	1190	912	3440	2110	2400	629	3190	518	502	1040
13	1040	1090	1170	872	4150	2000	2180	645	3570	507	511	1090
14	1060	1100	1180	854	4470	1890	2030	714	3380	543	499	1130
15	850	1130	1160	842	4570	2210	1850	817	3400	556	503	1240
16	705	1150	1130	833	4200	2230	1620	940	3530	575	519	1310
17	626	1150	1100	828	3770	2170	1540	1080	3690	608	557	1310
18	564	1140	1040	816	3270	2260	1560	1110	3420	646	624	1240
19	542	1130	964	816	2670	2200	1680	1160	2480	596	682	1230
20	537	1140	922	911	2190	2040	1780	1170	1720	590	736	1220
21	554	1110	887	983	1920	1890	1740	1180	1360	595	886	1250
22	579	1080	864	1030	1740	1770	1670	1170	1300	560	943	1340
23	558	1070	844	1040	1620	2000	1510	1180	1320	534	932	1340
24	549	1070	831	1050	1510	2200	1270	1210	1260	593	907	1350
25	543	1060	822	1040	1450	2460	1190	1230	1190	448	970	1390
26	550	1040	816	1020	1370	2800	1160	1280	1140	432	946	1390
27	608	1020	816	1000	1320	3330	1200	1310	1090	454	856	1410
28	797	1010	825	967	1250	3620	1180	1260	1050	422	807	1400
29	916	1000	830	979	---	3720	1130	1180	884	432	727	1510
30	961	981	820	963	---	3530	1080	1150	847	430	710	1580
31	966	---	817	938	---	3180	---	1100	---	450	707	---
TOTAL	21969	32911	32807	27324	75705	65500	52700	30135	55751	17495	19936	34392
MEAN	709	1097	1058	881	2704	2113	1757	972	1858	564	643	1146
MAX	1060	1160	1510	1050	4570	3720	2820	1310	3690	796	970	1580
MIN	537	981	816	748	938	1160	1080	627	847	422	448	795
AC-FT	43580	65280	65070	54200	150200	129900	104500	59770	110600	34700	39540	68220
CAL YR 1974	TOTAL	420285	MEAN	1151	MAX	3780	MIN	352	AC-FT	833600		
WTR YR 1975	TOTAL	466625	MEAN	1278	MAX	4570	MIN	422	AC-FT	925600		

SAN JOAQUIN RIVER BASIN

11274500 ORESTIMBA CREEK NEAR NEWMAN, CALIF.

LOCATION.--Lat 37°18'48", long 121°07'32", in SE¼NE¼ sec.19, T.7 S., R.8 E., Stanislaus County, on right bank 220 ft (67 m) upstream from California aqueduct siphon, 3 mi (5 km) downstream from Oso Creek, and 5 mi (8 km) west of Newman.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--January 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 216.01 ft (65.837 m) above mean sea level. Prior to Oct. 1, 1958, at site 1,320 ft (402 m) downstream at datum 24.14 ft (7.358 m) lower. Oct. 1, 1958, to Aug. 13, 1969, at site 1,200 ft (366 m) downstream at datum 27.14 ft (8.272 m) lower.

AVERAGE DISCHARGE.--43 years, 15.1 ft³/s (0.428 m³/s), 10,940 acre-ft/yr (13.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,010 ft³/s (28.6 m³/s) Mar. 8 (gage height, 6.08 ft or 1.853 m); no flow for several months.

Period of record: Maximum discharge, 10,200 ft³/s (289 m³/s) Apr. 2, 1958 (gage height, 6.57 ft or 2.003 m, site and datum then in use), from rating curve extended above 5,000 ft³/s (142 m³/s); no flow for all or parts of each year.

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

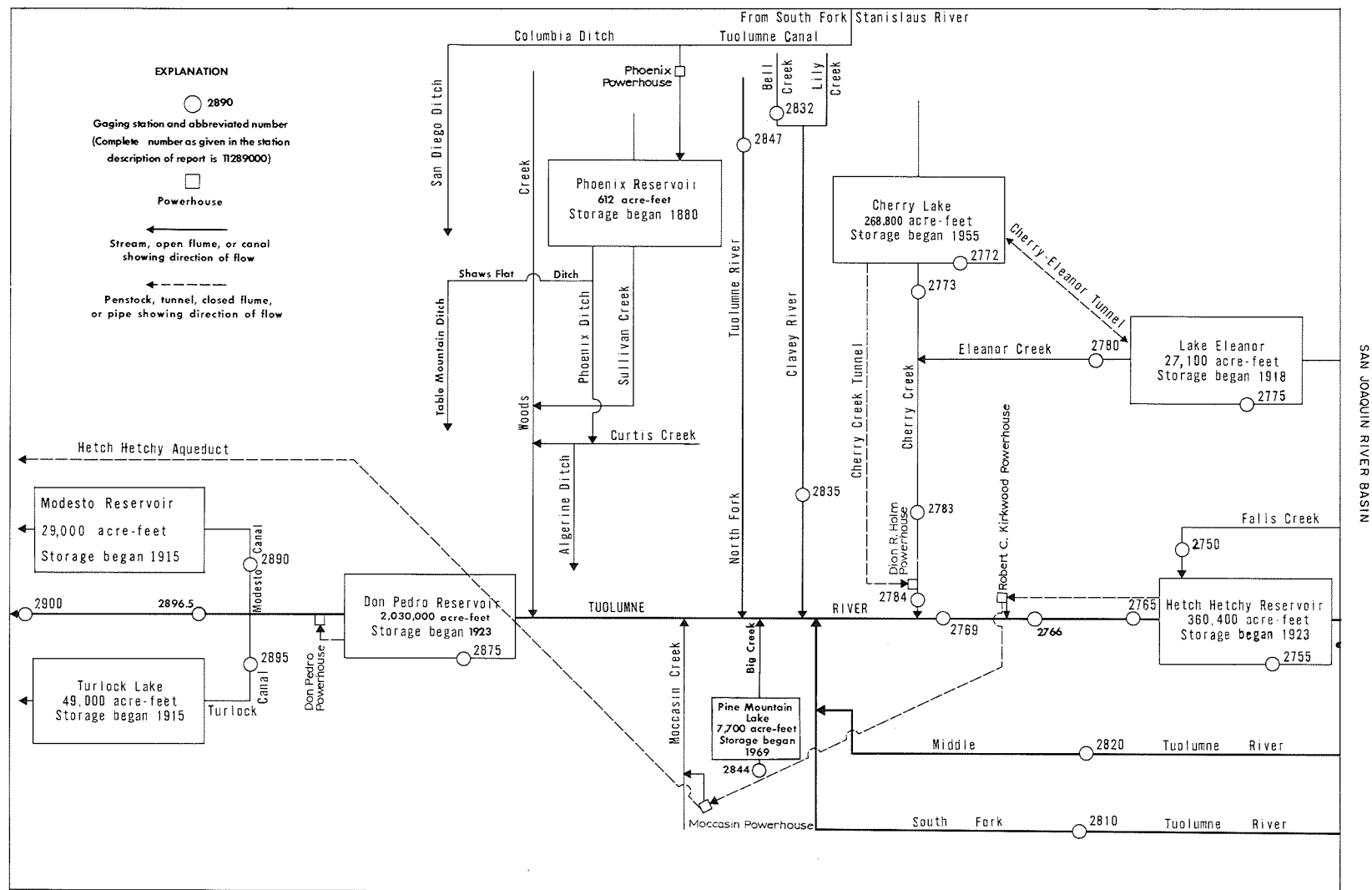
REVISIONS (WATER YEARS).--WSP 1445: 1932(M), 1938(P), 1940-41(M), 1945, 1951(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0		.01	.79	16	2.3	.12			
2			0		0	.59	14	2.1	.09			
3			.10		0	.51	13	2.0	.06			
4			0		17	.59	13	2.0	.06			
5			0		38	1.9	17	1.9	.01			
6			0		13	5.1	26	1.5	0			
7			0		7.7	117	20	1.4	0			
8			0		16	514	18	1.2	0			
9			0		82	280	16	.96	0			
10			0		232	110	14	.79	0			
11			0		76	68	12	.59	0			
12			0		32	42	10	.51	0			
13			0		200	36	8.7	.47	0			
14			0		218	91	8.2	.43	0			
15			0		63	59	7.7	.39	0			
16			0		30	135	8.2	.39	0			
17			0		18	95	8.2	.35	0			
18			0		12	60	7.2	.35	0			
19			0		9.2	44	6.3	.35	0			
20			0		7.7	34	5.9	.35	0			
21			0		5.9	28	5.5	.31	0			
22			0		3.5	198	4.8	.31	0			
23			0		2.6	98	4.4	.27	0			
24			0		2.1	60	4.4	.27	0			
25			0		1.6	60	4.8	.24	0			
26			0		1.3	51	5.1	.21	0			
27			0		1.1	36	4.4	.21	0			
28			0		.90	28	3.5	.18	0			
29			0		---	24	2.9	.15	0			
30			0		---	20	2.7	.15	0			
31		---	0		---	18	---	.12	---			---
TOTAL	0	0	.10	0	1090.61	2315.48	291.9	22.75	.34	0	0	0
MEAN	0	0	.003	0	39.0	74.7	9.73	.73	.011	0	0	0
MAX	0	0	.10	0	232	514	26	2.3	.12	0	0	0
MIN	0	0	0	0	0	.51	2.7	.12	0	0	0	0
AC-FT	0	0	.2	0	2160	4590	579	45	.7	0	0	0
CAL YR 1974	TOTAL	4593.01	MEAN 12.6	MAX 489	MIN 0	AC-FT 9110						
WTR YR 1975	TOTAL	3721.18	MEAN 10.2	MAX 514	MIN 0	AC-FT 7380						

Peak discharge (base, 100 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-10	0830	5.35	450	3-14	0400	4.49	106
2-13	1900	5.49	543	3-16	1230	4.91	234
3-8	1600	6.08	1,010	3-22	0700	5.30	420



SAN JOAQUIN RIVER BASIN

11274630 DEL PUERTO CREEK NEAR PATTERSON, CALIF.

LOCATION.--Lat 37°29'12", long 121°12'29", in SE¼NW¼ sec.21, T.5 S., R.7 E., Stanislaus County, on left bank 1.0 mi (1.6 km) upstream from Delta-Mendota Canal crossing, and 4.4 mi (7.1 km) west of Patterson.

DRAINAGE AREA.--72.6 mi² (188.0 km²).

PERIOD OF RECORD.--October 1958 to May 1965 (maximums only), June 1965 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 200 ft (61 m), from topographic map. Prior to June 1965, crest-stage gage at site 1.0 mi (1.6 km) downstream at different datum.

AVERAGE DISCHARGE.--10 years, 5.15 ft³/s (0.146 m³/s), 3,730 acre-ft/yr (4.60 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 209 ft³/s (5.92 m³/s) Mar. 7 (gage height, 3.44 ft or 1.049 m); no flow for several months.

Period of record: Maximum discharge, 1,800 ft³/s (51.0 m³/s) Feb. 16, 1959 (gage height, 14.68 ft or 4.474 m, site and datum then in use), from rating curve extended above 690 ft³/s (19.5 m³/s); no flow for several months in each year.

REMARKS.--Records good. Some stock ponds and small diversions above station.

REVISIONS (WATER YEARS).--WSP 1930: 1959-60(M), drainage area. WRD Calif. 1970: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	1.3	2.6	3.4	11	3.8	1.7	.06		
2			0	1.2	31	3.2	10	3.8	1.7	.06		
3			0	1.0	16	3.2	10	3.5	1.8	.06		
4			0	1.1	14	3.2	9.2	3.5	1.6	.07		
5			.86	.99	16	3.7	12	3.5	1.4	.07		
6			.88	.98	8.9	4.7	11	3.5	1.5	.06		
7			.90	1.2	7.5	71	10	3.2	1.6	.05		
8			.88	1.2	6.8	119	12	3.2	1.4	0		
9			.88	1.2	24	63	11	3.0	1.1	0		
10			.88	1.2	36	37	9.6	2.8	.91	0		
11			1.0	1.3	20	29	9.2	2.8	.84	0		
12			1.0	1.2	13	21	8.4	2.5	.67	0		
13			1.0	1.1	21	21	8.0	2.6	.56	0		
14			.88	1.2	36	33	7.6	2.8	.36	0		
15			1.0	1.2	17	21	8.0	3.1	.34	0		
16			.75	1.2	12	37	7.6	3.1	.35	0		
17			.79	1.0	9.2	31	7.6	3.0	.27	0		
18			.75	1.0	7.3	24	6.4	2.7	.24	0		
19			.75	1.0	6.3	20	6.4	2.4	.21	0		
20			.75	1.0	5.8	18	6.4	2.3	.22	0		
21			.75	1.0	5.3	16	5.6	2.2	.18	0		
22			.77	.94	4.8	46	5.2	2.0	.14	0		
23			.74	.88	4.4	36	5.2	1.9	.09	0		
24			.62	.88	4.4	25	5.1	1.9	.08	0		
25			.51	.88	4.0	27	5.4	1.8	.11	0		
26			.47	.91	3.8	23	5.3	2.1	.10	0		
27			.70	.89	3.8	19	4.7	2.4	.09	0		
28			1.5	.81	3.7	16	4.5	2.1	.09	0		
29			2.0	.88	---	14	4.2	1.6	.07	0		
30			1.6	.88	---	13	3.8	1.5	.06	0		
31		---	1.5	.79	---	13	---	1.6	---	0		---
TOTAL	0	0	25.11	32.31	344.6	814.4	230.4	82.2	19.78	.43	0	0
MEAN	0	0	.81	1.04	12.3	26.3	7.68	2.65	.66	.014	0	0
MAX	0	0	2.0	1.3	36	119	12	3.8	1.8	.07	0	0
MIN	0	0	0	.79	2.6	3.2	3.8	1.5	.06	0	0	0
AC-FT	0	0	50	64	684	1620	457	163	39	.9	0	0
CAL YR 1974	TOTAL	1220.80	MEAN	3.34	MAX	72	MIN	0	AC-FT	2420		
WTR YR 1975	TOTAL	1549.23	MEAN	4.24	MAX	119	MIN	0	AC-FT	3070		

Peak discharge (base, 50 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-2	1100	2.48	69	3-8	1445	3.41	203
2-13	2215	2.37	58	3-16	1200	2.31	52
3-7	1630	3.44	209	3-22	1030	2.51	72

11275000 FALLS CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'15", long 119°45'48", in NW¼SE¼ sec.3, T.1 N., R.20 E., Tuolumne County, Yosemite National Park, on right bank 0.2 mi (0.3 km) upstream from Wampana Falls, 0.6 mi (1.0 km) upstream from mouth, and 2 mi (3 km) northeast of Hetch Hetchy.

DRAINAGE AREA.--46.0 mi² (119.1 km²).

PERIOD OF RECORD.--October 1915 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1918, published as "near Sequoia."

GAGE.--Water-stage recorder. Altitude of gage is 5,350 ft (1,631 m), from topographic map.

AVERAGE DISCHARGE.--60 years, 144 ft³/s (4.078 m³/s), 104,300 acre-ft/yr (129 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,450 ft³/s (41.1 m³/s) June 2 (gage height, 6.31 ft or 1.923 m); minimum daily, 0.12 ft³/s (0.003 m³/s) Oct. 7-9.

Period of record: Maximum discharge, 6,660 ft³/s (189 m³/s) Nov. 19, 1950, Dec. 23, 1955 (gage height, 9.0 ft or 2.74 m, from floodmarks), from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of velocity-area studies; no flow at times in many years.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 531: 1917(M). WSP 931: 1938. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	14	7.0	14	35	106	70	130	1160	429	28	6.4
2	.16	11	6.6	14	45	96	68	183	1270	405	23	5.6
3	.32	8.6	45	12	31	91	68	204	1050	385	20	5.0
4	.19	7.5	76	12	32	90	57	168	1000	376	19	4.4
5	.17	6.9	31	12	30	94	53	141	964	395	18	3.9
6	.14	6.3	28	74	28	82	55	134	1160	438	17	3.4
7	.12	6.0	28	63	34	70	54	153	1140	428	16	3.0
8	.12	9.3	26	55	50	66	47	208	1000	372	15	2.6
9	.12	9.2	23	39	77	57	50	275	859	351	13	2.5
10	.44	7.6	20	34	41	51	48	345	830	332	12	2.6
11	.77	6.5	21	36	34	47	51	406	856	327	12	5.5
12	.92	6.2	27	38	31	44	59	533	946	298	11	10
13	.95	6.2	34	40	48	44	69	677	842	256	10	9.9
14	.86	6.3	24	40	37	47	76	772	972	203	10	7.5
15	.78	6.4	23	40	31	45	64	856	1020	176	9.5	7.7
16	.72	6.4	29	38	29	45	56	870	868	139	9.0	7.8
17	.63	6.1	28	39	29	41	53	931	771	127	8.6	6.9
18	.54	5.9	23	47	28	45	55	1070	483	127	9.0	6.1
19	.48	5.6	20	50	35	56	59	1120	343	118	24	5.4
20	.42	5.2	19	50	41	68	80	934	314	104	31	5.0
21	.37	11	18	49	32	57	115	521	325	95	29	4.7
22	.33	18	17	51	31	52	133	358	485	86	27	4.4
23	.27	14	15	49	33	50	126	393	589	80	22	4.2
24	.26	16	12	50	35	74	136	603	583	73	17	3.7
25	.24	15	11	54	38	233	140	855	362	65	14	3.2
26	.22	13	12	55	37	90	92	935	289	57	12	2.7
27	.21	11	12	46	54	88	87	906	351	52	11	2.4
28	14	10	14	45	83	73	102	879	380	48	10	2.0
29	13	8.7	16	35	---	70	123	844	421	44	8.6	1.8
30	11	7.7	15	38	---	84	133	829	445	39	7.9	1.6
31	18	---	14	36	---	90	---	937	---	33	7.1	---
TOTAL	66.88	271.6	694.6	1255	1089	2246	2379	18170	22078	6458	480.7	141.9
MEAN	2.16	9.05	22.4	40.5	38.9	72.5	79.3	586	736	208	15.5	4.73
MAX	18	18	76	74	83	233	140	1120	1270	438	31	10
MIN	.12	5.2	6.6	12	28	41	47	130	289	33	7.1	1.6
AC-FT	133	539	1380	2490	2160	4450	4720	36040	43790	12810	953	281
CAL YR 1974 TOTAL	59293.09			MEAN 162	MAX 1090	MIN .12	AC-FT 117600					
WTR YR 1975 TOTAL	55330.68			MEAN 152	MAX 1270	MIN .12	AC-FT 109700					

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-18	2030	5.98	1,150	6-7	0745	6.17	1,310
5-26	0415	5.79	1,010	6-15	0815	6.02	1,190
6-2	0615	6.31	1,450				

11275500 HETCH HETCHY RESERVOIR AT HETCH HETCHY, CALIF.

LOCATION.--Lat 37°56'52", long 119°47'13", in NW¼NW¼ sec.16, T.1 N., R.20 E., Tuolumne County, Yosemite National Park, near center of O'Shaughnessy Dam on Tuolumne River at Hetch Hetchy, 1.5 mi (2.4 km) downstream from Falls Creek.

DRAINAGE AREA.--455 mi² (1,178 km²).

PERIOD OF RECORD.--May 1923 to current year. Prior to October 1930 monthend contents, published in WSP 1315-A.

GAGE.--Nonrecording gage. Datum of gage is 1.84 ft (0.561 m) above mean sea level. Prior to Oct. 1, 1927, nonrecording gage at same site and datum. Oct. 1, 1927, to July 9, 1972, water-stage recorder at same site and datum. Prior to October 1974, datum published as at mean sea level.

EXTREMES.--Current year: Maximum contents, 358,200 acre-ft (442 hm³) July 19, 20 (gage height, 3,804.9 ft or 1,159.73 m); minimum, 41,800 acre-ft (51.5 hm³) May 2 (gage height, 3,582.6 ft or 1,091.98 m).

Period of record: Maximum contents, 369,100 acre-ft (455 hm³) Dec. 3, 1950 (gage height, 3,810.4 ft or 1,161.41 m); no contents at times in 1929-31.

REMARKS.--Reservoir is formed by concrete gravity-type dam, completed to crest gage height 3,726.5 ft (1,135.84 m) in 1923 and raised to 3,812.0 ft (1,161.90 m) in 1937; storage began Apr. 6, 1923. Ten-foot (3-m) drum gates were installed on spillway in 1949. Capacity, 360,400 acre-ft (444 hm³) between gage heights 3,512.0 ft (1,070.46 m), somewhat above bottom outlet and 3,806.0 ft (1,160.07 m), top of drum-type spillway gates. Water is diverted from reservoir through tunnel to Robert C. Kirkwood powerplant 15 mi (24 km) downstream where flow is diverted from powerplant tailrace in a closed conduit through Hetch Hetchy aqueduct to Moccasin Creek powerplant with flow in excess of aqueduct capacity being spilled to river. At Moccasin Creek diversion dam, water re-enters Hetch Hetchy aqueduct and flows into Crystal Springs Reservoir, which supplies city of San Francisco. Surplus water is spilled into Don Pedro Reservoir at Red Mountain Bar. Flow down river is for State Department of Fish and Game and Raker Act requirements. Hetch Hetchy Reservoir is main storage unit of Hetch Hetchy water-supply system for San Francisco. See schematic diagram of Tuolumne River basin. Records, including extremes, represent contents at 0800 hours.

COOPERATION.--Record of gage heights furnished by city and county of San Francisco.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,512	0	3,540	8,700	3,640	97,000	3,740	238,900
3,513	51	3,560	22,900	3,660	119,900	3,760	273,700
3,515	154	3,580	39,500	3,680	146,200	3,780	310,400
3,520	410	3,600	57,400	3,700	175,000	3,800	348,600
3,530	3,300	3,620	76,500	3,720	206,000	3,810.4	369,100

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	271600	222400	177100	136600	102800	76100	56900	41900	228800	331600	348800	305900
2	269800	220900	177000	135100	101800	75700	55900	41800	244200	334300	347800	304200
3	268400	219200	175800	133600	100800	75200	55100	43000	257300	336400	346600	302500
4	266800	217800	173800	132300	99900	74600	54200	43900	268000	337900	345300	301100
5	265000	216300	172800	130900	98900	73800	53400	44000	276800	339900	344100	299600
6	263400	214700	171300	129800	97900	73600	52400	43900	286400	342400	342800	297900
7	262000	213200	170000	129000	97000	73000	51400	43600	295500	345100	341400	296400
8	260500	211800	169500	128200	96000	72700	50500	43900	306300	347000	339900	295000
9	258900	210300	169000	127500	95400	72200	49300	45000	313200	348600	338500	293400
10	257300	208900	168500	126300	95200	71500	48300	47000	318800	350700	337200	291800
11	255700	207300	165500	125300	94500	70700	47600	50600	223000	352700	335800	290400
12	254000	205700	164200	124100	93400	69900	47800	53700	327800	354500	334300	289100
13	252400	204100	162900	123100	92500	69000	47200	58800	331200	356000	332700	287800
14	250900	202400	161700	121600	91800	68100	46400	65300	335600	356800	331400	286400
15	249200	201300	160300	120500	90700	66900	46000	73500	340100	357400	329900	284900
16	247600	199700	158800	119700	89600	66300	45500	81400	343700	358000	328500	283800
17	246100	198100	157800	118400	88400	65400	44900	90400	344700	358000	327000	282300
18	244500	196500	156600	117600	87100	64300	44300	101300	342600	358000	325500	280700
19	242600	195100	155200	116400	85900	63400	43700	112400	337700	358200	324200	279500
20	241300	193700	153800	115600	84800	62500	43500	124000	332000	358200	322800	278000
21	239800	192100	152400	114200	83700	61700	42900	130900	326800	357800	321500	276400
22	238100	190800	151100	113500	82500	60900	42800	134300	323800	357400	320400	275000
23	236500	189300	149500	112200	81300	60200	43500	138100	323000	357000	319000	273500
24	234800	187600	147900	111500	80100	59300	44300	144200	322200	356400	317700	271900
25	233200	186400	146600	110300	79100	59800	44700	152200	321300	356000	316400	270500
26	231300	185800	145300	109600	77900	60200	44700	164300	319600	355000	314900	269100
27	229700	182900	143800	108600	77300	59900	43000	175600	319000	354100	313400	267700
28	228700	181600	142400	107300	76500	59100	42500	186600	320900	353300	311900	265900
29	227200	180200	140800	106900	---	58400	42500	196800	324300	352300	310200	264500
30	225300	177000	139400	105200	---	57400	42000	206300	328000	351300	308700	263100
31	223800	---	138100	103900	---	57400	---	216500	---	350200	307200	---
MAX	271600	222400	177100	136600	102800	76100	56900	216500	344700	358200	348800	305900
MIN	223800	177000	138100	103900	76500	57400	42000	41800	223000	331600	307200	263100
(a)	3,731.0	3,701.3	3,674.0	3,646.2	3,620.0	3,600.0	3,582.8	3,726.5	3,789.3	3,800.8	3,778.3	3,754.0
(b)	-49,000	-46,800	-38,900	-34,200	-27,400	-19,100	-15,400	+174,500	+111,500	+22,200	-43,000	-44,100

CAL YR 1974 b -61,600

WTR YR 1975 b -9,700

a Gage height, in feet, at end of month.

b Change in contents, in acre-feet.

11276500 TUOLUMNE RIVER NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°56'15", long 119°47'50", in SW¼SE¼ sec.17, T.1 N., R.20 E., Tuolumne County, Yosemite National Park, on left bank 1 mi (2 km) downstream from O'Shaughnessy Dam at Hetch Hetchy, and 2.5 mi (4.0 km) downstream from Falls Creek.

DRAINAGE AREA.--457 mi² (1,184 km²).

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "at Hetch Hetchy damsite, near Sequoia" 1910-14 and as "below Hetch Hetchy damsite, near Sequoia" 1915-18.

GAGE.--Water-stage recorder with concrete control since May 5, 1970. Altitude of gage is 3,480 ft (1,061 m), from topographic map. Prior to Jan. 1, 1915, water-stage recorder at site 1 mi (1.6 km) upstream, at damsite, at different datum. Jan. 1, 1915, to Sept. 30, 1968, water-stage recorder, at same site and datum. Oct. 1, 1968, to May 4, 1970, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum.

AVERAGE DISCHARGE (prior to diversion to Robert C. Kirkwood powerplant and Hetch Hetchy aqueduct).--57 years (1910-67), 999 ft³/s (28.29 m³/s), 723,800 acre-ft/yr (892 hm³/yr); 8 years (1967-75), 351 ft³/s (9.940 m³/s), 254,300 acre-ft/yr (314 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,810 ft³/s (136 m³/s) June 16 (gage height, 10.49 ft or 3.197 m); minimum daily, 31 ft³/s (0.88 m³/s) Sept. 26.
Period of record: Maximum discharge, 12,900 ft³/s (365 m³/s) June 1, 1943 (gage height, 13.90 ft or 4.237 m); no flow Oct. 3, 4, 1968, Dec. 16, 1969, Feb. 20-26, 1970.

REMARKS.--Records good. Flow regulated by Hetch Hetchy Reservoir 1 mi (1.6 km) upstream beginning in April 1923 (see sta 11275500). Flow diverted above station through tunnel to Robert C. Kirkwood powerplant and Hetch Hetchy aqueduct beginning Apr. 26, 1967. See schematic diagram of Tuolumne River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	34	34	36	41	37	36	124	1290	284	81	75
2	33	34	34	39	44	37	40	88	1310	608	84	75
3	33	34	37	40	45	36	40	92	1550	614	84	75
4	33	34	40	40	44	36	40	96	2060	617	82	75
5	33	34	36	40	43	37	40	97	2590	623	81	74
6	33	34	35	42	43	39	40	96	2780	629	80	74
7	33	35	35	42	46	41	40	90	2810	638	80	74
8	32	35	35	48	46	42	40	85	2800	646	79	74
9	34	35	34	43	59	41	40	89	2980	557	77	74
10	38	35	34	41	54	40	45	191	3550	435	77	80
11	37	35	34	40	60	40	44	238	3760	405	77	74
12	35	35	34	37	40	39	43	92	3980	398	76	74
13	35	35	34	37	40	40	43	96	4330	408	76	74
14	35	35	34	37	43	40	42	82	4300	315	75	74
15	35	35	34	37	40	40	45	85	4290	126	75	53
16	35	35	34	38	40	40	45	92	4540	82	74	32
17	35	34	33	39	40	39	44	88	4810	82	74	32
18	35	34	32	39	39	38	42	81	4780	82	75	32
19	35	34	35	39	40	36	41	85	4700	82	75	32
20	34	34	37	39	41	36	40	101	4450	81	74	32
21	34	36	36	39	38	38	40	103	3770	81	73	32
22	34	38	36	39	38	42	40	98	3570	80	74	32
23	34	37	36	39	40	39	39	88	3390	80	74	32
24	34	36	37	39	39	40	40	157	2750	79	74	32
25	34	36	37	39	39	69	42	226	2280	79	76	32
26	34	35	37	40	38	42	133	77	1770	146	75	31
27	34	35	37	40	37	40	187	109	1050	165	75	32
28	34	35	36	40	37	38	46	313	351	78	74	35
29	34	35	36	40	---	36	40	575	90	78	75	35
30	34	34	36	40	---	36	101	860	91	77	76	35
31	34	---	36	40	---	36	---	1130	---	80	76	---
TOTAL	1060	1047	1095	1228	1194	1230	1538	5824	86772	8735	2378	1587
MEAN	34.2	34.9	35.3	39.6	42.6	39.7	51.3	188	2892	282	76.7	52.9
MAX	38	38	40	48	60	69	187	1130	4810	646	84	80
MIN	32	34	32	36	37	36	36	77	90	77	73	31
AC-FT	2100	2080	2170	2440	2370	2440	3050	11550	172100	17330	4720	3150
CAL YR 1974 TOTAL	193172		MEAN 529	MAX 7920	MIN 25	AC-FT 383200						
WTR YR 1975 TOTAL	113688		MEAN 311	MAX 4810	MIN 31	AC-FT 225500						

SAN JOAQUIN RIVER BASIN

11276600 TUOLUMNE RIVER ABOVE EARLY INTAKE, NEAR MATHER, CALIF.

LOCATION.--Lat 37°52'46", long 119°56'46", in SE¼SW¼ sec.1, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 0.5 mi (0.8 km) upstream from Early Intake, 2.4 mi (3.9 km) upstream from Cherry Creek, and 5.0 mi (8.0 km) west of Mather.

DRAINAGE AREA.--484 mi² (1,254 km²).

PERIOD OF RECORD.--October 1970 to current year. Records for the period October 1939 to September 1970 in the files of the California district office of the Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 2,420 ft (738 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 311 ft³/s (8.808 m³/s), 225,300 acre-ft/yr (278 hm³/yr).

EXTREMES.--Current year; Maximum discharge, 5,180 ft³/s (147 m³/s) June 16 (gage height, 18.99 ft or 5.788 m); minimum daily, 38 ft³/s (1.08 m³/s) Sept. 27.

Period of record: Maximum discharge, 9,520 ft³/s (270 m³/s) June 12, 1974 (gage height, 20.94 ft or 6.383 m); minimum daily, 36 ft³/s (1.02 m³/s) Sept. 19, 1973.

Flood of June 1, 1943, reached a stage of 22.1 ft (6.74 m), discharge, 12,900 ft³/s (365 m³/s).

REMARKS.--Records good. Flow regulated by Hetch Hetchy Reservoir 12 mi (19 km) upstream (see sta 11275500).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	46	44	44	61	103	113	203	1280	131	88	80
2	40	43	44	44	130	100	110	159	1320	557	88	80
3	41	42	57	45	113	95	108	158	1480	569	89	80
4	40	42	130	48	122	91	106	198	2010	574	88	79
5	40	41	72	48	102	100	128	172	2570	580	87	79
6	39	41	54	71	94	150	130	161	2830	588	86	79
7	39	42	51	86	110	147	122	155	2870	595	85	79
8	39	46	49	122	134	237	119	144	2850	601	84	79
9	39	43	48	109	304	164	122	145	2980	570	83	79
10	40	42	47	81	295	144	144	158	3470	401	82	80
11	43	41	46	74	168	128	149	359	3740	389	81	86
12	43	41	46	66	128	117	145	144	3880	361	80	78
13	41	41	46	62	167	116	150	150	4320	376	80	78
14	41	41	45	59	167	130	152	137	4330	355	80	78
15	41	41	45	57	120	132	173	129	4310	171	79	77
16	40	41	45	54	108	138	171	132	4510	97	79	52
17	40	41	44	54	98	129	151	134	4840	92	78	41
18	40	41	44	54	92	116	145	122	4810	90	79	41
19	40	41	44	53	92	116	148	121	4720	90	87	41
20	40	41	45	53	136	117	145	127	4510	89	80	40
21	40	46	46	52	113	116	141	135	3870	89	78	40
22	40	58	46	51	96	180	135	134	3620	87	79	40
23	40	51	45	51	95	143	127	119	3550	87	78	39
24	40	48	45	49	97	154	128	114	2910	87	78	39
25	40	46	45	49	98	472	198	297	2390	86	78	39
26	40	45	45	49	98	237	149	110	1930	86	80	39
27	41	44	45	49	97	167	338	110	1170	209	79	38
28	57	44	48	49	103	142	135	221	507	90	78	41
29	53	44	45	49	---	129	123	493	117	85	78	44
30	43	44	44	49	---	122	132	782	108	84	80	44
31	44	---	43	49	---	120	---	1080	---	83	80	---
TOTAL	1283	1308	1543	1830	3538	4552	4337	6803	87802	8349	2529	1809
MEAN	41.4	43.6	49.8	59.0	126	147	145	219	2927	269	81.6	60.3
MAX	57	58	130	122	304	472	338	1080	4840	601	89	86
MIN	39	41	43	44	61	91	106	110	108	83	78	38
AC-FT	2540	2590	3060	3630	7020	9030	8600	13490	174200	16560	5020	3590
CAL YR 1974 TOTAL	202161		MEAN 554	MAX 8230	MIN 39	AC-FT 401000						
WTR YR 1975 TOTAL	125683		MEAN 344	MAX 4840	MIN 38	AC-FT 249300						

11276900 TUOLUMNE RIVER BELOW EARLY INTAKE, NEAR MATHER, CALIF.

LOCATION.--Lat 37°52'54", long 119°58'09", in NW¼SW¼ sec.2, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 0.6 mi (1.0 km) upstream from Cherry Creek, 0.7 mi (1.1 km) downstream from Robert C. Kirkwood powerplant and Hetch Hetchy aqueduct, and 6.3 mi (10.1 km) west of Mather.

DRAINAGE AREA.--487 mi² (1,261 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,200 ft (671 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 503 ft³/s (14.24 m³/s), 364,400 acre-ft/yr (449 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,120 ft³/s (145 m³/s) June 17 (gage height, 7.99 ft or 2.435 m); minimum daily, 52 ft³/s (1.47 m³/s) Dec. 8.

Period of record: Maximum discharge, 11,300 ft³/s (320 m³/s) June 4, 1969 (gage height, 9.82 ft or 2.993 m); minimum daily, 13 ft³/s (0.37 m³/s) Nov. 18, 19, 25-27, 1966, Feb. 1, 1967.

REMARKS.--Records good. Flow regulated by Hetch Hetchy Reservoir 13 mi (21 km) upstream (see sta 11275500) and Robert C. Kirkwood powerplant beginning Apr. 26, 1967. Water is diverted to Hetch Hetchy aqueduct from the tailrace of the powerplant through a closed conduit. Flow in excess of aqueduct capacity is diverted to river. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	156	96	97	93	234	283	385	1520	360	159	147
2	133	141	159	86	180	201	277	330	1590	725	105	163
3	125	77	164	83	192	261	272	306	1710	730	111	150
4	127	132	226	75	198	250	268	365	2160	735	170	139
5	55	149	148	80	167	256	284	369	2760	740	172	128
6	61	165	128	121	131	311	295	351	3040	750	171	111
7	165	188	83	129	170	299	318	335	3030	760	167	112
8	147	343	52	170	280	401	310	318	2820	765	159	156
9	144	326	140	152	489	324	308	312	3140	708	112	151
10	139	237	136	124	522	329	297	299	3590	559	101	142
11	134	237	134	102	361	301	236	441	3780	533	166	145
12	54	230	129	101	302	279	227	327	3930	484	173	132
13	62	223	128	124	340	273	168	325	4310	455	156	117
14	77	223	89	129	341	287	252	333	4330	522	154	138
15	145	224	99	129	268	276	261	364	4290	323	165	166
16	142	223	148	129	237	269	259	363	4580	239	115	135
17	140	170	143	104	276	319	234	325	4840	228	117	116
18	140	239	139	91	282	295	224	312	4760	222	180	105
19	69	230	134	89	277	288	218	359	4730	205	192	95
20	94	224	135	127	321	283	224	390	4530	213	175	81
21	164	242	92	124	289	277	246	395	3900	242	173	91
22	165	250	101	127	249	346	232	387	3480	232	180	132
23	154	178	157	134	262	315	218	370	3500	217	119	123
24	150	165	153	109	290	358	213	341	2900	207	103	114
25	145	215	100	92	285	681	331	384	2400	189	174	106
26	88	216	144	98	281	445	292	342	1900	159	179	98
27	107	202	143	119	276	352	349	331	1210	175	171	83
28	196	125	107	116	278	315	314	436	515	223	165	107
29	182	193	106	116	---	286	297	696	282	211	162	137
30	162	127	169	114	---	207	300	991	270	208	116	117
31	164	---	167	108	---	294	---	1270	---	203	111	---
TOTAL	3974	6050	4049	3499	7637	9612	8007	12852	89797	12522	4673	3737
MEAN	128	202	131	113	273	310	267	415	2993	404	151	125
MAX	196	343	226	170	522	681	349	1270	4840	765	192	166
MIN	54	77	52	75	93	201	168	299	270	159	101	81
AC-FT	7880	12000	8030	6940	15150	19070	15880	25490	178100	24840	9270	7410
CAL YR 1974	TOTAL	214852	MEAN 589	MAX 7720	MIN 36	AC-FT 426200						
WTR YR 1975	TOTAL	166409	MEAN 456	MAX 4840	MIN 52	AC-FT 330100						

SAN JOAQUIN RIVER BASIN

11277200 CHERRY LAKE NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'33", long 119°54'47", in SE¼NW¼ sec.5, T.1 N., R.19 E., Tuolumne County, Stanislaus National Forest, on upstream face of Cherry Valley Dam on Cherry Creek, 4.2 mi (6.8 km) upstream from Eleanor Creek, 7 mi (11 km) north of Early Intake, and 7.3 mi (11.7 km) northwest of Hetch Hetchy.

DRAINAGE AREA.--117 mi² (303 km²).

PERIOD OF RECORD.--August 1956 to current year. Prior to October 1959, published as Lake Lloyd near Hetch Hetchy.

GAGE.--Water-stage recorder. Datum of gage is 2.42 ft (0.738 m) above mean sea level. Prior to October 1974, datum published as at mean sea level.

EXTREMES.--Current year: Maximum contents, 245,400 acre-ft (303 hm³) July 13 (gage height, 4,686.6 ft or 1,428.48 m); minimum, 73,200 acre-ft (90.3 hm³) Apr. 28, 29 (gage height, 4,570.4 ft or 1,393.06 m). Period of record: Maximum contents, 269,400 acre-ft (332 hm³) July 10, 1974 (gage height, 4,700.3 ft or 1,432.65 m); maximum gage height, 4,700.6 ft (1,432.74 m) July 1-3, 1957; normal minimum since reservoir first filled, 7,660 acre-ft (9.44 hm³) Jan. 24, 1960 (gage height, 4,502.1 or 1,372.24 m). Reservoir drained for inspection in 1961 and 1964.

REMARKS.--Reservoir is formed by a rockfill dam completed in 1956; storage began in December 1955. Usable capacity, 268,800 acre-ft (331 hm³) between gage heights 4,430 ft (1,350.3 m), bottom of sluice gates and 4,700 ft (1,432.6 m), top of spillway gates. Additional storage of 20 acre-ft (24,700 m³) is not available for release. Water is released down Cherry Creek for power development and domestic supply as part of Hetch Hetchy system of city and county of San Francisco. Unmeasured diversion from Lake Eleanor into Cherry Lake began Mar. 6, 1960. Diversion from Cherry Lake through tunnel to Cherry powerhouse near mouth of Cherry Creek began Aug. 1, 1960. See schematic diagram of Tuolumne River basin. Records, including extremes, represent total contents at 2400 hours.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND USABLE CONTENTS, IN ACRE-FEET)

4,440	0	4,490	3,020	4,560	60,800	4,660	201,100
4,450	75	4,500	6,030	4,580	85,100	4,680	234,100
4,460	250	4,510	11,700	4,600	111,800	4,700	268,800
4,470	675	4,520	19,700	4,620	139,900	4,705	277,900
4,480	1,530	4,540	38,900	4,640	169,700		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195700	176700	152200	130200	107400	89800	82000	73700	179900	240800	228400	200500
2	194700	175700	151400	129000	107300	90200	81700	74600	185700	241300	227400	199300
3	193900	175400	150900	127500	107200	90500	81300	76100	190100	241600	227200	198200
4	193000	174500	150800	126700	106100	90300	80800	77500	194400	242500	226100	197300
5	192200	173600	150200	126100	105100	90300	80500	77900	198700	243200	224900	196300
6	192500	172600	149500	126000	104000	90300	80700	78200	203000	244400	223700	195700
7	191700	171900	148700	126000	103000	90300	80000	78300	206500	244900	222600	195700
8	190900	170900	148300	125700	102600	90500	79300	79200	209600	245100	221400	194700
9	190100	170200	147400	125300	102800	90600	78400	80800	212300	245200	220400	193800
10	189200	169500	146700	125000	102500	90500	77700	82900	215100	245200	220000	193500
11	188400	168800	145800	124700	101800	89900	77100	85800	217900	245200	218900	192700
12	187600	167900	145200	124300	101300	89300	76400	89000	220700	245100	217700	191900
13	187900	167000	144600	123600	100400	88600	76700	92800	223600	245400	216600	191200
14	188200	166100	143700	122600	99600	87900	76300	97100	226700	244700	215400	191200
15	187400	165000	143700	121700	98800	87200	75800	101800	229900	244000	214300	190300
16	186500	164000	143400	120800	98400	86900	75300	106300	232400	243300	213100	189500
17	185500	162900	142600	119900	98000	86400	74700	111100	234100	242500	212800	188500
18	184700	162100	141700	119200	97100	85500	74100	117400	234400	241600	211700	187600
19	184000	161100	140800	118700	96000	84900	73600	123000	234200	240900	211300	186800
20	184300	160000	140100	118100	95300	84300	73600	127400	234100	240600	210900	186000
21	183300	159600	139500	117200	94300	83800	73300	130000	234600	239600	210200	186000
22	182600	158800	139100	116400	93600	83000	73300	132400	235400	238400	209200	185200
23	181800	158100	138400	115700	93000	82900	73300	135600	236600	237500	208300	184100
24	180900	157600	137500	114900	92300	83300	73700	139800	237700	236500	208100	183300
25	180100	157000	137200	114200	91500	83800	73900	144900	237300	235400	207100	182400
26	179300	156100	136600	113900	90800	84000	73700	150000	237200	234400	205800	181500
27	179800	155200	135900	113100	90200	83900	73600	154700	237500	234200	204700	180900
28	179600	154600	134700	112100	89800	83400	73200	159300	238200	233100	203500	180900
29	178800	154000	133800	110900	---	82800	73200	163600	239600	231900	202400	179900
30	178100	152900	132500	109800	---	82800	73300	168200	240100	230700	201300	179000
31	177400	---	131400	108800	---	82400	---	173600	---	229600	200900	---
MAX	195700	176700	152200	130200	107400	90600	82000	173600	240100	245400	228400	200500
MIN	177400	152900	131400	108800	89800	82400	73200	73700	179900	229600	200900	179000
(a)	4,645.0	4,628.0	4,614.0	4,597.8	4,583.6	4,577.8	4,570.5	4,642.5	4,683.5	4,677.3	4,659.9	4,646.0
(b)	-20,500	-24,500	-21,500	-22,600	-19,000	-7,400	-9,100	+100,300	+66,500	-10,500	-28,700	-21,900

CAL YR 1974 b -22,500

WTR YR 1975 b -18,900

a Gage height, in feet, at end of month.

b Change in contents, in acre-feet.

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LOCATION.--Lat 37°58'04", long 119°54'59", in SE¼SW¼ sec.5, T.1 N., R.19 E., Tuolumne County, Stanislaus National Forest, on right bank 0.7 mi (1.1 km) downstream from Cherry Valley Dam, 3.5 mi (5.6 km) upstream from Eleanor Creek, 6.7 mi (10.8 km) north of Early Intake, and 7.2 mi (11.6 km) west of Hetch Hetchy.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,337.08 ft (1,321.942 m) above mean sea level (levels by city and county of San Francisco).

AVERAGE DISCHARGE (since diversion to Cherry Creek powerplant)--15 years (1960-75), 20.5 ft³/s (0.581 m³/s), 14,850 acre-ft/yr (18.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 67 ft³/s (1.90 m³/s) Mar. 25 (gage height, 3.75 ft or 1.143 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Oct. 9, 10.
Period of record: Maximum discharge, 4,210 ft³/s (119 m³/s) July 10, 1974 (gage height, 10.53 ft or 3.210 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Apr. 10, 1957.

REMARKS.--Records good. Flow regulated by Cherry Lake 0.7 mi (1.1 km) upstream (see sta 11277200). Diversion between Lake Eleanor and Cherry Lake began Mar. 6, 1960. Diversion from Cherry Lake to Cherry powerplant began Aug. 1, 1960. See schematic diagram of Tuolumne River basin.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	5.6	5.5	5.3	5.6	7.2	8.0	7.2	5.3	9.3	16	13
2	5.5	5.5	5.5	5.3	5.7	7.3	7.7	7.1	5.3	15	16	13
3	5.5	5.5	6.4	5.3	5.5	7.2	7.7	7.3	5.4	15	15	13
4	5.0	5.5	6.7	5.4	5.6	7.2	7.7	7.3	5.3	15	14	13
5	4.2	5.5	5.9	5.3	5.5	7.9	7.7	7.0	5.3	15	14	13
6	4.2	5.5	5.7	6.2	5.4	8.2	7.4	6.9	5.3	16	14	13
7	4.2	5.5	5.7	5.8	5.6	9.5	7.4	6.9	5.3	15	14	13
8	4.2	5.5	5.5	7.2	5.7	9.5	7.2	6.7	5.3	15	13	14
9	4.1	5.5	5.5	6.0	8.2	8.8	7.2	5.9	5.3	15	12	14
10	4.1	5.5	5.5	5.7	7.1	8.5	7.2	4.8	5.3	15	12	14
11	4.6	5.5	5.5	5.7	6.5	8.2	7.2	4.8	5.3	15	12	14
12	5.3	5.5	5.5	5.7	6.2	8.3	7.2	4.7	5.3	15	12	14
13	5.3	5.5	5.5	5.7	6.9	8.3	7.2	4.6	5.3	15	12	14
14	5.4	5.5	5.5	5.5	6.7	8.3	7.4	4.6	5.3	15	12	14
15	5.4	5.4	5.5	5.5	6.4	8.0	7.4	4.5	5.3	15	12	14
16	4.7	5.3	5.5	5.5	6.4	8.2	7.4	4.7	5.3	15	13	14
17	4.8	5.3	5.5	5.5	6.4	7.8	7.4	5.0	5.3	15	13	14
18	5.5	5.3	5.5	5.5	6.2	7.9	7.4	5.0	5.4	15	13	14
19	6.4	5.3	5.5	5.5	6.5	7.9	7.4	5.0	5.4	16	13	14
20	6.4	5.3	5.5	5.5	6.8	8.1	7.4	5.1	5.3	15	13	15
21	6.4	5.9	5.5	5.5	6.7	8.2	7.4	5.0	5.5	15	13	15
22	6.2	5.5	5.5	5.5	6.6	8.2	7.2	5.0	5.9	15	13	15
23	6.0	5.3	5.5	5.5	6.7	7.8	7.2	5.3	5.9	15	13	15
24	6.0	5.3	5.5	5.5	6.8	8.9	8.0	5.3	6.0	15	13	15
25	5.8	5.3	5.5	5.5	6.8	24	8.2	5.3	6.0	15	13	15
26	5.5	5.3	5.5	5.3	6.9	12	7.6	5.3	5.9	15	13	16
27	5.6	5.3	5.5	5.3	7.0	11	7.4	5.3	6.2	16	13	16
28	6.5	5.4	5.5	5.3	7.2	9.5	7.3	5.3	6.5	16	13	16
29	5.7	5.5	5.5	5.3	---	8.9	7.2	5.3	6.4	16	13	16
30	5.7	5.5	5.3	5.3	---	8.5	7.2	5.3	6.4	16	13	11
31	5.8	---	5.3	5.3	---	8.5	---	5.3	---	16	13	---
TOTAL	169.5	163.3	173.0	172.4	179.6	277.8	223.3	172.8	167.0	466.3	408	424
MEAN	5.47	5.44	5.58	5.56	6.41	8.96	7.44	5.57	5.57	15.0	13.2	14.1
MAX	9.5	5.9	6.7	7.2	8.2	24	8.2	7.3	6.5	16	16	16
MIN	4.1	5.3	5.3	5.3	5.4	7.2	7.2	4.5	5.3	9.3	12	11
AC-FT	336	324	343	342	356	551	443	343	331	925	809	841
CAL YR 1974	TOTAL	17587.0	MEAN	48.2	MAX	1600	MIN	3.4	AC-FT	34880		
WTR YR 1975	TOTAL	2997.0	MEAN	8.21	MAX	24	MIN	4.1	AC-FT	5940		

SAN JOAQUIN RIVER BASIN

11277500 LAKE ELEANOR NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'27", long 119°52'48", in SE¼NW¼ sec.3, T.1 N., R.19 E., Tuolumne County, Yosemite National Park, 720 ft (219 m) from left bank on downstream side of dam on Eleanor Creek, 1.7 mi (2.7 km) upstream from Miguel Creek, and 5.5 mi (8.8 km) northwest of Hetch Hetchy.

DRAINAGE AREA.--78.1 mi² (202.3 km²).

PERIOD OF RECORD.--June 1918 to current year. Prior to October 1930, published in WSP 1315-A. Published as "near Sequoia" 1919-20.

GAGE.--Water-stage recorder. Datum of gage is 2.46 ft (0.750 m), revised, above mean sea level. Prior to Oct. 1, 1927, nonrecording gage on upstream side of dam at same site and datum.

EXTREMES.--Current year: Maximum contents, 27,300 acre-ft (33.7 hm³) July 2 (gage height, 4,661.2 ft or 1,420.73 m); minimum, 996 acre-ft (1.23 hm³) Jan. 4, 5 (gage height, 4,627.0 ft or 1,410.31 m).
Period of record: Maximum contents, 31,000 acre-ft (38.2 hm³) Dec. 11, 1937, from capacity table then in use (gage height, 4,663.4 ft or 1,421.40 m); no usable contents at times in 1921, 1929-30, 1956-60, 1972-74.

REMARKS.--Reservoir is formed by multiple-arch dam completed in 1918; storage began June 23, 1918. Usable capacity, 25,500 acre-ft (31.4 hm³) between gage heights 4,626.2 ft (1,410.07 m), natural outlet of old lake and 4,660.0 ft (1,420.37 m), top of 5-ft (1.5-m) flashboards. Dead storage, 639 acre-ft (787,900 m³). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Tuolumne River basin.

COOPERATION.--Periodic observations of gage height furnished by city and county of San Francisco.

REVISIONS (WATER YEARS).--WSP 1445: 1938(M). WSP 1930: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,626.2	639	4,634	4,700	4,644	11,900	4,654	20,600
4,627	996	4,636	5,960	4,646	13,500	4,656	22,400
4,628	1,480	4,638	7,330	4,648	15,300	4,658	24,300
4,630	2,450	4,640	8,710	4,650	17,000	4,660	26,100
4,632	3,580	4,642	10,300	4,652	18,800	4,663	29,100

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23700	13900	2450	1040	1620	2560	2620	3240	27200	27200	26700	26300
2	23400	13500	2210	1040	1670	2620	2560	3580	27000	27300	26700	26300
3	23200	13200	2260	1040	1720	2680	2450	3920	26800	27200	26700	26100
4	22800	12900	2560	996	1770	2680	2400	3750	26700	27100	26700	25800
5	22500	12400	2400	996	1770	2790	2400	3410	26800	27100	26600	25400
6	22200	12000	2260	1330	1720	2790	2350	3180	26900	27100	26600	25000
7	22000	11600	2110	1530	1720	2730	2260	3180	26900	27100	26600	24600
8	21600	11300	2010	1770	1820	2680	2160	3580	26800	27100	26500	24200
9	21300	10900	1920	1770	2260	2560	2110	4200	26700	27100	26500	23800
10	21000	10500	1820	1770	2300	2400	2060	4930	26600	27000	26500	23400
11	20600	10100	1720	1770	2300	2260	2060	5890	26600	27000	26400	23000
12	20200	9660	1720	1720	2210	2210	2060	6920	26700	27000	26400	22600
13	19900	9260	1770	1720	2260	2160	2160	8230	26600	27100	26400	22200
14	19600	8790	1720	1720	2160	2110	2300	9820	26600	27200	26300	21900
15	19300	8430	1670	1770	2110	2110	2350	11100	26600	27200	26300	21500
16	19100	8020	1670	1720	2010	2060	2300	12100	26400	27200	26200	21100
17	18700	7540	1620	1770	1920	2060	2260	13600	26700	27100	26100	20800
18	18300	7190	1620	1770	1870	2060	2210	15300	26800	27100	26100	20400
19	18000	6780	1580	1820	1870	2110	2210	16800	26700	27000	26300	20000
20	17600	6300	1530	1870	1870	2210	2300	17600	26700	27000	26400	19600
21	17300	5960	1430	1870	1870	2260	2510	17400	26700	27000	26500	19100
22	17000	5540	1380	1870	1820	2260	2730	17200	26800	27000	26500	18800
23	16600	5160	1330	1920	1820	2260	2840	17300	26800	27000	26500	18300
24	16300	4820	1290	1920	1870	2300	3070	18100	26900	27000	26500	18000
25	15900	4540	1290	1920	1920	3410	3130	19300	26800	27000	26500	17500
26	15500	4200	1240	1920	2010	3300	2960	20500	26700	26900	26500	17200
27	15200	3860	1190	1870	2110	3010	2790	21700	26600	26900	26400	16600
28	15100	3460	1190	1820	2300	2790	2840	22800	26600	26800	26400	16200
29	14700	3130	1140	1720	---	2620	2960	24000	26700	26700	26400	15900
30	14500	2790	1140	1670	---	2620	3130	25200	27000	26700	26400	15400
31	14200	---	1090	1620	---	2680	---	26500	---	26700	26300	---
MAX	23700	13900	2560	1920	2300	3410	3130	26500	27200	27300	26700	26300
MIN	14200	2790	1090	996	1620	2060	2060	3180	26400	26700	26100	15400
(a)	4,646.8	4,630.6	4,627.2	4,628.3	4,629.7	4,630.4	4,631.2	4,660.4	4,660.9	4,660.6	4,660.2	4,648.2
(b)	-9,700	-11,410	-1,700	+530	+680	+380	+450	+23,370	+500	-300	-400	-10,900
CAL YR 1974	b -4,730											
WTR YR 1975	b -8,500											

a Gage height, in feet, at end of month.

b Change in contents, in acre-feet.

11278000 ELEANOR CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'09", long 119°52'52", in NW¼SW¼ sec.3, T.1 N., R.19 E., Tuolumne County, Yosemite National Park, on right bank 0.5 mi (0.8 km) downstream from Lake Eleanor Dam, 1.1 mi (1.8 km) upstream from Miguel Creek, and 5.5 mi (8.8 km) northwest of Hetch Hetchy.

DRAINAGE AREA.--78.4 mi² (203.1 km²).

PERIOD OF RECORD.--October 1909 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "near Sequoia" 1910-18.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,500 ft (1,370 m), from topographic map. November 1909 to November 1915, nonrecording gage and water-stage recorder at site 1 mi (1.6 km) upstream at different datum.

AVERAGE DISCHARGE (prior to diversion to Cherry Lake).--50 years (1909-59), 223 ft³/s (6.315 m³/s), 161,400 acre-ft/yr (199 hm³/yr); 16 years (1959-75), 65.4 ft³/s (1.852 m³/s), 47,380 acre-ft/yr (58.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,290 ft³/s (36.5 m³/s) June 2 (gage height, 5.56 ft or 1.695 m); minimum daily, 3.4 ft³/s (0.096 m³/s) Nov. 16.

Period of record: Maximum discharge, 11,700 ft³/s (331 m³/s) Nov. 19, 1950 (gage height, 14.95 ft or 4.557 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of velocity-area studies; no flow at times in 1910, 1930-31, 1933, 1956.

REMARKS.--Records good. Flow regulated by Lake Eleanor 0.5 mi (0.8 km) upstream beginning in 1918 (see sta 11277500). Diversion from Lake Eleanor to Cherry Lake began in March 1960. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1923(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	4.1	4.1	4.8	5.5	5.5	4.8	5.6	670	145	14	13
2	7.6	4.1	4.1	4.8	5.1	5.2	4.4	5.6	1120	236	14	13
3	6.9	4.1	5.9	5.0	4.8	5.2	4.4	6.1	924	262	14	13
4	5.8	4.1	6.8	4.9	5.2	5.2	4.5	6.1	919	269	13	12
5	4.7	4.1	4.1	4.9	5.3	6.7	4.8	6.1	924	256	13	12
6	4.0	4.1	3.8	6.4	5.4	6.7	4.8	5.8	1080	248	12	12
7	3.8	4.1	3.7	5.9	6.3	7.7	4.8	5.6	1200	248	12	12
8	4.2	4.1	4.0	9.8	7.8	7.1	4.8	5.6	1090	242	12	12
9	4.8	4.1	4.2	6.0	12	5.6	5.3	5.3	958	233	12	12
10	4.7	3.9	4.4	5.6	6.5	5.2	5.5	4.8	899	223	13	12
11	4.4	3.7	4.3	5.6	5.1	4.9	5.5	5.3	868	214	14	12
12	4.0	3.7	4.2	4.9	4.8	4.8	5.6	5.6	855	142	13	12
13	3.7	3.7	4.4	4.4	7.6	4.7	5.2	5.7	802	105	13	12
14	3.7	3.7	4.4	4.4	5.4	5.2	5.4	6.0	801	111	13	12
15	3.7	3.6	4.3	4.4	4.8	5.5	5.7	6.2	810	114	13	12
16	3.7	3.4	4.1	4.4	4.5	5.7	5.3	5.4	726	112	14	12
17	3.7	4.0	4.1	4.8	4.4	5.4	5.8	4.4	425	108	14	13
18	3.7	4.4	4.1	4.8	4.4	6.0	6.0	4.7	349	105	14	13
19	3.7	4.2	4.1	5.2	5.4	5.8	5.9	4.3	344	102	15	15
20	3.7	4.1	4.1	5.6	6.4	6.3	5.6	4.2	325	99	14	16
21	3.6	4.9	4.3	5.4	4.9	5.4	5.4	5.3	304	76	14	16
22	4.3	4.8	4.2	5.6	4.7	5.6	5.2	5.6	317	61	13	16
23	4.8	4.8	4.1	5.6	5.0	5.9	5.2	5.6	352	61	13	15
24	4.8	4.8	4.1	5.6	5.4	9.1	6.0	5.1	393	60	13	15
25	4.4	4.8	4.1	5.6	5.8	14	6.5	4.8	375	60	13	15
26	4.1	4.7	4.1	5.6	5.7	5.8	6.1	4.8	321	58	13	16
27	4.2	4.4	4.1	5.6	6.3	5.3	5.6	4.8	286	56	13	16
28	5.0	4.4	4.6	5.6	5.7	4.9	5.6	5.2	269	54	13	16
29	4.1	4.4	4.8	5.6	---	4.8	5.6	6.4	218	43	13	16
30	4.1	4.2	4.9	5.6	---	4.8	5.6	16	142	23	13	9.6
31	4.3	---	4.8	5.5	---	4.8	---	64	---	13	13	---
TOTAL	143.2	125.5	135.3	167.9	160.2	184.8	160.9	236.0	19066	4139	410	402.6
MEAN	4.62	4.18	4.36	5.42	5.72	5.96	5.36	7.61	636	134	13.2	13.4
MAX	11	4.9	6.8	9.8	12	14	6.5	64	1200	269	15	16
MIN	3.6	3.4	3.7	4.4	4.4	4.7	4.4	4.2	142	13	12	9.6
AC-FT	284	249	268	333	318	367	319	468	37820	8210	813	799
CAL YR 1974 TOTAL	34867.6			MEAN 95.5	MAX 1160	MIN 3.1	AC-FT 69160					
WTR YR 1975 TOTAL	25331.4			MEAN 69.4	MAX 1200	MIN 3.4	AC-FT 50240					

SAN JOAQUIN RIVER BASIN

11278300 CHERRY CREEK NEAR EARLY INTAKE, CALIF.

LOCATION.--Lat 37°53'40", long 119°57'42", in NW¼SE¼ sec.35, T.1 N., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 1.2 mi (1.9 km) upstream from mouth, 1.3 mi (2.1 km) north of Early Intake, and 10.3 mi (16.6 km) southwest of Hetch Hetchy.

DRAINAGE AREA.--226 mi² (585 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,272.00 ft (692.506 m) above mean sea level (levels by city and county of San Francisco).

AVERAGE DISCHARGE (since diversion to Dion R. Holm powerplant).--15 years (1960-75), 105 ft³/s (2.974 m³/s), 76,070 acre-ft/yr (93.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,320 ft³/s (37.4 m³/s) June 2 (gage height, 7.30 ft or 2.225 m); minimum daily, 10 ft³/s (0.28 m³/s) Oct. 7, 8, 17, 18.

Period of record: Maximum discharge, 16,500 ft³/s (467 m³/s) Feb. 1, 1963 (gage height, 14.50 ft or 4.420 m), from rating curve extended above 4,600 ft³/s (130 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) Apr. 5, 6, 1964.

REMARKS.--Records good. Flow regulated by Cherry Lake 10 mi (16 km) upstream (see sta 11277200) and Lake Eleanor 9.8 mi (15.8 km) upstream (see sta 11277500). Diversion from Cherry Lake to Dion R. Holm powerplant began Aug. 1, 1960. Water is returned to creek 1.2 mi (1.9 km) below station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	15	12	13	21	90	120	129	659	162	33	31
2	17	13	12	14	38	84	107	125	1160	288	32	31
3	15	12	21	14	29	80	106	132	978	323	32	31
4	14	12	49	14	30	77	99	166	958	330	31	30
5	13	12	24	14	25	96	110	128	967	320	31	30
6	11	12	17	27	23	133	101	114	1110	312	30	29
7	10	12	15	30	27	131	93	108	1240	310	30	30
8	10	14	14	62	32	170	88	107	1130	305	29	31
9	11	12	14	35	106	132	86	104	1000	294	29	31
10	11	12	14	25	104	108	92	97	941	284	30	31
11	11	12	13	23	67	95	96	93	907	273	31	30
12	11	12	13	21	52	85	102	88	894	208	30	30
13	11	12	14	19	72	88	121	83	848	136	30	30
14	11	12	13	18	79	87	134	77	842	143	30	30
15	11	12	13	18	62	88	134	72	852	148	30	30
16	11	12	13	17	54	95	119	68	774	147	32	30
17	10	12	13	17	46	82	105	63	515	142	32	30
18	10	12	13	17	42	78	105	59	398	137	33	30
19	11	13	13	17	44	88	113	57	404	133	39	30
20	12	13	13	16	82	107	122	54	386	129	35	32
21	12	15	13	16	66	102	133	54	363	111	33	32
22	12	22	13	16	53	108	136	52	371	82	32	32
23	12	14	12	16	53	91	130	50	403	82	32	32
24	12	13	12	15	58	107	137	48	445	81	31	32
25	13	13	12	15	63	388	227	46	436	79	31	31
26	12	13	12	15	67	201	154	45	381	77	31	31
27	12	12	13	15	71	152	134	43	346	74	32	31
28	26	12	15	15	84	131	135	41	327	73	31	32
29	19	12	13	15	---	120	135	40	281	70	31	32
30	13	12	13	15	---	123	134	45	192	45	31	31
31	15	---	13	15	---	130	---	59	---	32	31	---
TOTAL	407	386	464	599	1550	3647	3608	2447	20508	5330	975	923
MEAN	13.1	12.9	15.0	19.3	55.4	118	120	78.9	684	172	31.5	30.8
MAX	28	22	49	62	106	388	227	166	1240	330	39	32
MIN	10	12	12	13	21	77	86	40	192	32	29	29
AC-FT	807	766	920	1190	3070	7230	7160	4850	40680	10570	1930	1830
CAL YR 1974	TOTAL	61584	MEAN 169	MAX 1820	MIN 10	AC-FT 122200						
WTR YR 1975	TOTAL	40844	MEAN 112	MAX 1240	MIN 10	AC-FT 81010						

11278400 CHERRY CREEK BELOW DION R. HOLM POWERHOUSE, NEAR MATHER, CALIF.

LOCATION.--Lat 37°53'24", long 119°58'08", in NE¼NW¼ sec.2, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 600 ft (183 m) upstream from mouth, 0.5 mi (0.8 km) downstream from powerhouse, 0.8 mi (1.3 km) northwest of Early Intake, and 6.2 mi (10.0 km) west of Mather.

DRAINAGE AREA.--234 mi² (606 km²).

PERIOD OF RECORD.--March 1963 to current year. Prior to October 1965, published as "below Cherry powerhouse, near Mather."

GAGE.--Water-stage recorder. Altitude of gage is 2,150 ft (655 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 670 ft³/s (18.97 m³/s), 485,400 acre-ft/yr (598 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,300 ft³/s (65.1 m³/s) June 7 (gage height, 9.82 ft or 2.993 m); minimum daily, 17 ft³/s (0.48 m³/s) Oct. 13.

Period of record: Maximum discharge, 8,530 ft³/s (242 m³/s) Dec. 24, 1964 (gage height, 13.55 ft or 4.130 m), from rating curve extended above 3,300 ft³/s (93.5 m³/s); minimum daily, 3.6 ft³/s (0.102 m³/s) Oct. 26, 27, 1964.

REMARKS.--Records good. Flow regulated by Cherry Lake 11 mi (17.7 km) upstream (see sta 11277200) and Lake Eleanor 10 mi (16.1 km) upstream (see sta 11277500). Prior to May 1971, Cherry Creek Canal diverted 2 mi (3.2 km) upstream from station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	639	383	390	705	697	817	876	1090	874	580	191
2	544	609	652	686	421	249	799	869	1710	1010	520	633
3	537	357	671	685	738	713	805	820	1580	1040	156	637
4	540	660	709	638	721	710	798	587	1550	710	568	635
5	490	651	665	384	722	737	760	891	1560	940	570	633
6	26	650	669	416	738	773	445	885	1800	690	565	560
7	533	653	669	417	734	769	802	945	1920	1030	563	195
8	532	662	378	460	728	808	803	943	1840	1020	569	638
9	542	606	658	452	520	274	793	947	1730	1020	517	658
10	542	369	645	437	835	755	803	866	1690	940	151	643
11	542	654	546	409	774	734	807	773	1660	918	561	652
12	482	654	542	403	743	720	774	924	1720	788	563	657
13	17	655	553	610	787	763	480	900	1740	494	560	563
14	20	656	554	704	787	831	855	903	1710	805	568	199
15	533	675	22	696	745	773	864	898	1700	817	562	636
16	534	715	548	693	444	484	848	890	1480	811	515	640
17	530	649	545	696	439	791	837	822	1390	811	153	640
18	527	744	537	644	747	773	842	652	1280	800	567	640
19	491	663	544	388	747	788	803	867	1280	700	614	641
20	23	664	546	688	793	819	491	823	1270	560	591	569
21	537	670	547	690	774	813	882	855	1230	750	565	199
22	522	680	24	693	740	806	888	862	1260	695	562	645
23	536	618	541	691	437	483	876	851	1300	680	514	660
24	542	368	530	692	768	832	893	777	1350	685	150	649
25	540	670	22	650	772	1180	990	681	1330	660	563	661
26	487	668	547	387	767	902	979	679	1280	520	563	647
27	19	664	553	697	768	925	876	825	1100	325	569	574
28	556	381	647	695	783	901	991	815	1060	665	564	200
29	557	679	325	707	---	870	989	817	705	645	565	652
30	557	625	648	696	---	684	991	818	904	630	519	644
31	557	---	654	694	---	818	---	759	---	595	149	---
TOTAL	13959	18608	16074	18188	19677	23175	24581	25820	43219	23628	15296	16791
MEAN	450	620	519	587	703	748	819	833	1441	762	493	560
MAX	564	744	709	707	835	1180	991	947	1920	1040	614	661
MIN	17	357	22	384	421	249	445	587	705	325	149	191
AC-FT	27690	36910	31880	36080	39030	45970	48760	51210	85720	46870	30340	33300
CAL YR 1974 TOTAL	251613		MEAN 689	MAX 2220	MIN 17	AC-FT 499100						
WTR YR 1975 TOTAL	259016		MEAN 710	MAX 1920	MIN 17	AC-FT 513800						

SAN JOAQUIN RIVER BASIN

11281000 SOUTH FORK TUOLUMNE RIVER NEAR OAKLAND RECREATION CAMP, CALIF.

LOCATION.--Lat 37°49'18", long 120°00'43", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.29, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 75 ft (23 m) downstream from highway bridge on Big Oak Flat Road, 0.5 mi (0.8 km) southwest of Oakland Recreation Camp, and 0.6 mi (1.0 km) upstream from Middle Tuolumne River.

DRAINAGE AREA.--87.0 mi² (225.3 km²).

PERIOD OF RECORD.--March 1923 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (853 m), from topographic map. Prior to Nov. 22, 1931, at site 50 ft (15 m) upstream at same datum.

AVERAGE DISCHARGE.--52 years, 93.6 ft³/s (2.651 m³/s), 67,810 acre-ft/yr (83.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,210 ft³/s (34.3 m³/s) Mar. 25 (gage height, 5.66 ft or 1.725 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Oct. 1.
Period of record: Maximum discharge, 11,900 ft³/s (337 m³/s) Dec. 23, 1955 (gage height, 10.9 ft or 3.32 m, from floodmarks), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurements at gage heights 7.48 ft (2.280 m) and 10.9 ft (3.32 m); minimum, 0.3 ft³/s (0.008 m³/s) Aug. 23, 1934.

REMARKS.--Records good. No diversion above station. One small recreation reservoir (capacity unknown) is located approximately 3.5 mi (5.6 km) upstream. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1445: 1923, 1925(M), 1926-28, 1929-30(M), 1932(M), 1935-36(M), 1937-38, 1943(M), 1945(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	18	12	17	34	116	148	227	707	115	28	15
2	7.6	14	13	17	108	115	138	232	640	112	27	15
3	7.4	12	96	16	58	108	138	270	580	104	26	14
4	7.9	12	253	18	61	106	133	291	576	100	25	14
5	8.3	12	69	17	47	159	138	240	595	97	23	13
6	7.6	11	40	39	44	253	130	218	595	93	22	13
7	7.2	12	31	62	54	358	125	216	536	89	22	12
8	7.3	13	26	131	69	406	123	242	487	85	22	12
9	7.3	13	23	67	386	234	125	285	479	80	21	13
10	9.0	12	21	45	266	185	134	328	467	76	20	14
11	9.4	12	21	37	144	158	137	372	434	71	21	17
12	9.3	11	20	31	102	141	146	430	390	66	19	16
13	8.6	11	22	29	132	140	172	508	340	62	19	14
14	8.4	11	21	28	141	136	191	572	355	58	18	13
15	8.2	11	20	28	102	135	183	590	332	56	18	13
16	7.9	11	19	27	83	141	164	540	288	56	18	12
17	7.8	11	19	26	69	124	152	590	256	55	17	12
18	7.6	11	18	27	62	117	154	655	216	53	18	12
19	7.5	11	18	28	63	126	162	680	193	51	31	12
20	7.5	11	17	28	91	140	172	605	197	48	30	12
21	7.5	21	17	28	80	166	196	414	185	46	25	12
22	7.5	40	17	28	68	155	206	369	190	43	22	12
23	7.6	18	12	28	66	143	205	408	190	41	20	14
24	7.9	15	14	28	70	232	226	513	185	38	19	11
25	8.1	14	15	28	76	710	329	590	154	36	18	11
26	8.2	14	16	29	81	292	239	595	146	34	17	10
27	10	13	18	28	85	219	209	580	148	32	16	10
28	39	12	21	18	100	182	208	595	139	31	19	10
29	27	12	17	23	---	162	215	585	136	30	23	10
30	16	12	16	22	---	158	225	615	129	30	23	10
31	16	---	14	21	---	164	---	660	---	29	18	---
TOTAL	313.6	411	956	999	2742	5981	5223	14015	10265	1917	665	378
MEAN	10.1	13.7	30.8	32.2	97.9	193	174	452	342	61.8	21.5	12.6
MAX	39	40	253	131	386	710	329	680	707	115	31	17
MIN	7.0	11	12	16	34	106	123	216	129	29	16	10
AC-FT	622	815	1900	1980	5440	11860	10360	27800	20360	3800	1320	750
CAL YR 1974	TOTAL	34649.6	MEAN	94.9	MAX	681	MIN	7.0	AC-FT	68730		
WTR YR 1975	TOTAL	43865.6	MEAN	120	MAX	710	MIN	7.0	AC-FT	87010		

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
3-7	2115	5.24	944	6-1	2330	5.28	968
3-25	0200	5.66	1,210				

11282000 MIDDLE TUOLUMNE RIVER AT OAKLAND RECREATION CAMP, CALIF.

LOCATION.--Lat 37°49'42", long 120°00'38", in SW¼NW¼ sec.28, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 1,000 ft (305 m) downstream from Oakland Recreation Camp, 0.8 mi (1.3 km) upstream from South Fork Tuolumne River, and 2.7 mi (4.3 km) east of Buck Meadows Post Office.

DRAINAGE AREA.--73.5 mi² (190.4 km²).

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for October 1916, published in WSP 1315-A. Published as Middle Fork of Tuolumne River near Buck Meadows 1917-32 and as "near Buck Meadows" 1933-40.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (853 m), from topographic map.

AVERAGE DISCHARGE.--59 years, 75.2 ft³/s (2.130 m³/s), 54,480 acre-ft/yr (67.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,110 ft³/s (31.4 m³/s) June 2 (gage height, 6.34 ft or 1.932 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 1.
Period of record: Maximum discharge, 4,920 ft³/s (139 m³/s) Dec. 23, 1955 (gage height, 11.75 ft or 3.581 m from flood profile, 11.05 ft or 3.368 m, from floodmarks inside gage well), from rating curve extended above 2,300 ft³/s (65.1 m³/s) on basis of slope-area measurement of maximum flow; no flow Sept. 4-14, 1924, Aug. 12 to Oct. 5, 1931, Sept. 11-17, 1934, Sept. 7-14, 1961.

REMARKS.--Records good. No regulation but small diversion above station for irrigation. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1919(M), 1938(M), 1951(P). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	6.5	5.4	5.5	46	45	77	100	838	153	21	8.4
2	1.9	6.0	5.6	6.3	150	47	70	101	801	141	20	7.0
3	2.9	5.3	29	6.7	50	44	72	120	753	132	18	6.8
4	3.5	5.0	92	7.2	60	42	70	130	753	123	17	6.5
5	4.1	4.8	28	7.2	30	66	77	105	783	118	16	6.4
6	3.5	4.7	16	19	27	95	67	96	814	113	14	6.0
7	3.3	4.8	13	31	30	158	69	95	765	104	13	5.6
8	3.3	5.5	10	53	37	161	69	110	696	95	13	5.5
9	3.4	5.5	8.9	27	210	97	69	135	564	87	15	5.6
10	3.4	5.3	8.2	21	161	78	74	153	684	80	12	7.1
11	3.5	5.1	9.3	17	67	69	76	182	648	74	12	18
12	3.3	5.0	8.4	15	45	59	81	213	597	67	12	15
13	3.0	4.7	8.9	13	59	64	93	265	519	60	10	10
14	2.9	4.7	8.6	13	59	67	101	312	573	55	9.6	8.1
15	2.8	4.7	7.9	13	40	66	97	350	555	51	9.3	7.2
16	2.6	4.8	7.7	13	36	80	90	360	478	51	8.9	6.5
17	2.5	4.8	7.9	12	31	59	83	392	408	50	8.4	6.3
18	2.5	5.0	7.0	12	29	55	86	448	332	48	8.6	6.0
19	2.5	5.1	7.2	12	30	60	92	510	281	44	19	5.9
20	2.5	5.0	7.7	12	44	67	96	483	277	41	25	5.9
21	2.5	6.5	7.3	12	37	90	104	340	275	38	20	5.6
22	2.5	11	7.3	12	31	122	105	299	279	36	18	5.3
23	2.5	7.2	5.3	12	30	74	100	340	281	34	15	5.0
24	2.6	6.4	4.3	12	31	84	106	422	265	32	12	4.7
25	2.8	6.3	5.9	12	32	294	147	534	209	30	10	4.5
26	2.9	6.0	6.7	12	34	155	107	582	198	28	9.3	4.3
27	3.1	5.5	7.5	12	35	115	95	588	203	26	8.6	4.2
28	7.5	5.3	8.9	6.5	40	93	95	630	187	24	8.4	4.2
29	11	5.2	7.2	9.3	---	83	98	660	182	23	8.2	4.1
30	6.5	5.2	6.7	10	---	80	104	693	168	23	7.9	4.0
31	6.2	---	6.3	8.6	---	84	---	768	---	22	7.7	---
TOTAL	109.1	166.9	370.1	434.3	1511	2753	2670	10516	14366	2003	406.9	199.7
MEAN	3.52	5.56	11.9	14.0	54.0	88.8	89.0	339	479	64.6	13.1	6.66
MAX	11	11	92	53	210	294	147	768	838	153	25	18
MIN	1.6	4.7	4.3	5.5	27	42	67	95	168	22	7.7	4.0
AC-FT	216	331	734	861	3000	5460	5300	20860	28490	3970	807	396
CAL YR 1974	TOTAL	30157.3	MEAN 82.6	MAX 486	MIN 1.5	AC-FT 59820						
WTR YR 1975	TOTAL	35506.0	MEAN 97.3	MAX 838	MIN 1.6	AC-FT 70430						

Peak discharge (base, 380 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
3-25	0730	4.28	425	6-6	0130	6.21	1,050
5-20	0500	4.70	573	6-10	0100	5.77	910
6-2	0030	6.34	1,110				

SAN JOAQUIN RIVER BASIN

11283200 BELL CREEK NEAR PINECREST, CALIF.

LOCATION.--Lat 38°09'46", long 119°56'32", in NE¼NE¼ sec.36, T.4 N., R.18 E., Tuolumne County, on right bank 1,400 ft (426 m) downstream from Bell Meadows, and 3 mi (5 km) southeast of Pinecrest.

DRAINAGE AREA.--9.11 mi² (23.59 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,450 ft (1,966 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 27.7 ft³/s (0.784 m³/s), 20,070 acre-ft/yr (24.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 353 ft³/s (10.0 m³/s) June 1 (gage height, 5.46 ft or 1.664 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Oct. 1.
 Period of record: Maximum discharge, 934 ft³/s (26.5 m³/s) Dec. 23, 1964 (gage height, 7.54 ft or 2.298 m), from rating curve extended above 160 ft³/s (4.53 m³/s) on basis of slope-area measurement at gage height 8.79 ft (2.679 m); no flow at times in most years.
 Flood of Feb. 1, 1963, reached a stage of 8.79 ft (2.679 m), from floodmarks (discharge, 1,410 ft³/s or 39.9 m³/s), from slope-area measurement of maximum flow.

REMARKS.--Records good except those for winter months, which are fair. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	1.4	1.6	1.5	4.2	16	19	29	259	52	3.5	.88
2	.13	1.1	1.3	1.2	4.6	15	17	42	222	50	3.2	.83
3	.17	.95	2.4	1.2	5.2	14	18	54	210	48	2.9	.79
4	.16	.86	7.6	1.5	5.3	17	16	36	207	46	2.8	.75
5	.17	.77	7.5	1.8	5.2	15	12	28	222	44	2.5	.71
6	.18	.72	3.7	2.4	5.0	12	14	28	226	42	2.4	.68
7	.23	.80	3.3	3.1	4.8	9.3	11	39	203	40	2.2	.64
8	.36	1.2	3.2	3.2	5.9	10	9.5	64	186	37	2.1	.64
9	.28	1.5	3.2	1.5	9.7	8.5	11	89	182	34	1.9	.69
10	.24	.97	2.8	1.5	8.0	8.0	11	122	176	32	1.8	1.1
11	.22	.96	3.1	1.7	8.4	7.6	9.9	142	173	29	1.8	1.7
12	.20	.89	3.3	1.7	7.1	7.7	10	162	165	25	1.8	1.5
13	.19	.85	3.5	1.8	6.5	7.0	13	191	163	22	1.6	1.1
14	.19	.92	2.9	2.2	5.8	5.5	15	212	167	20	1.6	.88
15	.19	.87	3.0	4.9	5.0	5.5	13	194	152	17	1.5	.77
16	.18	.81	4.0	5.0	4.3	6.0	11	191	135	15	1.5	.69
17	.18	.76	3.7	4.0	4.0	5.8	8.7	211	104	14	1.5	.68
18	.18	.71	3.4	4.8	3.8	6.9	10	228	82	13	1.5	.70
19	.20	.79	2.8	6.1	3.6	8.7	11	221	68	12	1.1	.69
20	.20	.65	2.7	6.0	3.5	8.9	12	165	63	10	7.5	.65
21	.20	1.1	2.7	5.9	3.1	7.4	16	107	64	9.3	6.4	.61
22	.21	2.0	2.0	6.4	3.3	6.0	20	110	73	7.9	4.5	.59
23	.22	2.5	1.4	6.5	3.8	5.8	20	151	77	6.8	3.2	.56
24	.22	3.1	1.4	6.6	4.8	7.7	18	197	70	5.9	2.2	.56
25	.23	2.6	1.5	7.9	5.9	15	17	208	51	5.5	1.6	.54
26	.25	2.3	1.4	7.1	7.7	9.4	15	212	54	4.8	1.2	.51
27	.27	2.3	1.6	5.0	11	8.1	15	205	59	4.8	1.1	.51
28	1.2	1.9	1.8	4.2	16	8.3	19	204	59	4.7	1.0	.51
29	.55	1.7	1.7	4.4	---	13	26	204	60	4.2	.99	.50
30	.73	1.7	1.5	4.1	---	19	31	216	56	4.1	.92	.48
31	1.7	---	1.7	4.1	---	24	---	238	---	3.8	.87	---
TOTAL	9.73	39.68	87.7	119.3	165.5	318.1	449.1	4500	3988	663.8	80.58	22.44
MEAN	.31	1.32	2.83	3.85	5.91	10.3	15.0	145	133	21.4	2.60	.75
MAX	1.7	3.1	7.6	7.9	16	24	31	238	259	52	11	1.7
MIN	.10	.65	1.3	1.2	3.1	5.5	8.7	28	51	3.8	.87	.48
AC-FT	19	79	174	237	328	631	891	8930	7910	1320	160	45
CAL YR 1974	TOTAL	10173.72	MEAN	27.9	MAX	189	MIN	.09	AC-FT	20180		
WTR YR 1975	TOTAL	10443.93	MEAN	28.6	MAX	259	MIN	.10	AC-FT	20720		

Peak discharge (base, 125 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-14	1915	5.16	297	6-1	1745	5.46	353
5-18	1930	5.21	306	6-5	1845	5.18	300
5-24	1930	5.16	297				

11283500 CLAVEY RIVER NEAR BUCK MEADOWS, CALIF.

LOCATION.--Lat 37°54'02", long 120°04'15", in SE¼NE¼ sec.35, T.1 N., R.17 E., Tuolumne County, Stanislaus National Forest, on right bank 300 ft (91 m) upstream from Forest Service road bridge, 1.7 mi (2.7 km) downstream from Quilty Creek, and 6 mi (10 km) north of Buck Meadows Post Office.

DRAINAGE AREA.--144 mi² (373 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,374.08 ft (723.620 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 257 ft³/s (7.278 m³/s), 186,200 acre-ft/yr (230 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,870 ft³/s (81.3 m³/s) May 18 (gage height, 11.72 ft or 3.572 m); minimum daily, 11 ft³/s (0.312 m³/s) Oct. 1.
Period of record: Maximum discharge, 19,200 ft³/s (544 m³/s) Feb. 1, 1963 (gage height, 21.40 ft or 6.523 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of maximum flow; minimum, 3.4 ft³/s (0.096 m³/s) Sept. 7, 8, 1961.

REMARKS.--Records good. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	45	25	32	75	370	476	737	1840	279	52	33
2	13	32	25	32	94	392	446	782	1630	258	50	32
3	27	28	132	36	93	367	442	946	1440	241	48	32
4	19	26	406	38	117	368	413	863	1380	231	46	31
5	17	25	121	37	108	427	410	689	1420	228	43	30
6	15	25	79	112	104	488	372	653	1440	227	40	28
7	14	24	66	169	118	601	344	704	1290	215	40	27
8	14	27	57	301	143	715	329	915	1130	188	40	27
9	16	27	54	159	561	532	318	1140	1060	177	39	28
10	16	26	51	119	548	439	323	1330	1030	161	37	28
11	16	25	52	102	330	376	318	1530	975	153	37	30
12	15	24	49	91	249	334	325	1690	928	141	36	31
13	14	24	59	85	326	331	368	1930	840	126	34	32
14	14	23	53	84	344	310	407	2110	875	114	33	30
15	13	22	51	86	242	303	404	2030	828	107	32	28
16	13	22	49	87	195	314	380	1860	710	100	31	27
17	12	22	51	84	165	284	354	2020	633	98	30	26
18	12	22	48	87	149	272	346	2200	504	96	29	26
19	12	23	47	95	157	290	352	2190	420	93	29	26
20	12	22	45	98	234	327	364	1820	411	89	50	25
21	12	46	42	98	196	333	422	1200	411	85	82	25
22	12	68	42	99	175	342	473	1070	403	81	81	24
23	12	38	29	102	168	325	516	1270	429	76	64	24
24	13	33	29	101	177	343	593	1600	450	71	51	23
25	13	32	38	105	194	1160	788	1730	344	66	42	23
26	13	31	36	108	217	754	603	1740	306	63	40	22
27	14	29	38	96	248	602	552	1670	325	59	38	22
28	69	28	42	65	307	511	582	1630	316	57	37	22
29	51	26	37	79	---	456	642	1560	315	55	36	21
30	33	26	37	63	---	453	710	1590	296	55	35	22
31	39	---	32	64	---	493	---	1690	---	53	34	---
TOTAL	576	871	1922	2914	6034	13612	13372	44889	24379	4043	1316	805
MEAN	18.6	29.0	62.0	94.0	216	439	446	1448	813	130	42.5	26.8
MAX	69	68	406	301	561	1160	788	2200	1840	279	82	33
MIN	11	22	25	32	75	272	318	653	296	53	29	21
AC-FT	1140	1730	3810	5780	11970	27000	26520	89040	48360	8020	2610	1600
CAL YR 1974	TOTAL	104621	MEAN 287	MAX 1670	MIN 11	AC-FT 207500						
WTR YR 1975	TOTAL	114733	MEAN 314	MAX 2200	MIN 11	AC-FT 227600						

Peak discharge (base, 1,400 ft ³ /s)				NOTE.--No gage-height record July 16 to Aug. 25.			
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
3-25	0730	9.52	1,620	5-25	0015	10.78	2,220
5-14	2315	11.54	2,720	6-2	0015	11.24	2,510
5-18	2345	11.72	2,870	6-6	0030	10.14	1,900

SAN JOAQUIN RIVER BASIN

11284400 BIG CREEK ABOVE WHITES GULCH, NEAR GROVELAND, CALIF.

LOCATION.--Lat 37°50'31", long 120°11'02", in SW¼NE¼ sec.23, T.1 S., R.16 E., Tuolumne County, on right bank 500 ft (152 m) upstream from Whites Gulch, and 2.5 mi (4.0 km) east of Groveland.

DRAINAGE AREA.--16.4 mi² (42.5 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,561.79 ft (780.834 m) above mean sea level (levels by Boise-Cascade Corp.).

AVERAGE DISCHARGE.--6 years, 7.31 ft³/s (0.207 m³/s), 5,300 acre-ft/yr (6.53 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 696 ft³/s (19.7 m³/s) Feb. 2 (gage height, 5.02 ft or 1.530 m); no flow for many days.

Period of record: Maximum discharge, 1,230 ft³/s (34.8 m³/s) Jan. 16, 1970 (gage height, 5.80 ft or 1.768 m); no flow many days in each year.

Flood of December 1964 reached a stage of 6.4 ft (1.95 m), from floodmarks (discharge not determined).

REMARKS.--Records good. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.16	.20	.89	30	4.9	14	9.3	2.4	.58	.01	
2	0	.09	.20	.80	353	4.6	12	8.4	2.4	.56	.01	
3	0	.05	15	.77	100	4.4	12	8.7	2.4	.54	.01	
4	0	.04	35	.90	143	4.2	12	9.9	2.3	.53	0	
5	0	.04	5.3	.97	61	9.7	31	8.3	2.2	.50	0	
6	0	.04	2.1	5.1	30	30	26	7.6	2.0	.45	0	
7	0	.05	1.3	6.8	26	89	23	7.2	1.9	.41	0	
8	0	.09	1.0	37	25	113	26	6.9	1.8	.38	0	
9	0	.06	.86	19	268	56	28	6.6	1.7	.35	0	
10	0	.05	.78	8.7	259	35	27	6.2	1.6	.32	0	
11	0	.05	.72	5.7	65	26	24	5.8	1.5	.29	0	
12	0	.04	.70	3.8	29	20	21	5.6	1.4	.26	0	
13	0	.04	.73	2.9	49	20	18	5.3	1.4	.24	0	
14	0	.04	.67	2.5	41	23	17	4.9	1.2	.22	0	
15	0	.04	.65	2.3	24	22	19	4.7	1.1	.23	0	
16	0	.04	.65	2.0	19	35	21	4.7	.95	.31	0	
17	0	.05	.62	1.8	15	32	21	4.5	.98	.32	0	
18	0	.06	.61	1.6	12	25	17	4.4	1.0	.28	0	
19	0	.06	.58	1.5	13	21	15	4.2	1.1	.23	0	
20	0	.06	.57	1.4	17	18	14	4.2	1.1	.20	0	
21	0	1.6	.57	1.3	12	29	13	4.3	1.1	.18	0	
22	0	1.2	.59	1.2	9.9	195	12	4.0	.94	.16	0	
23	0	.62	.55	1.2	8.9	58	11	3.8	.86	.13	0	
24	0	.39	.52	1.1	8.1	37	14	3.5	1.1	.10	0	
25	0	.31	.55	1.1	7.4	159	26	3.4	1.1	.06	0	
26	0	.26	.56	1.1	6.7	76	16	3.2	.94	.05	0	
27	0	.23	.74	1.1	6.3	41	13	3.1	.83	.04	0	
28	.34	.21	3.5	1.0	5.5	29	12	2.9	.74	.03	0	
29	.21	.20	1.9	1.1	---	23	11	2.8	.68	.03	0	
30	.04	.20	1.2	1.1	---	20	10	2.7	.61	.02	0	
31	.12	---	1.0	1.0	---	18	---	2.5	---	.02	0	---
TOTAL	.71	6.37	79.92	118.73	1643.8	1277.8	536	163.6	41.33	8.02	.03	0
MEAN	.023	.21	2.58	3.83	58.7	41.2	17.9	5.28	1.38	.26	.001	0
MAX	.34	1.6	35	37	353	195	31	9.9	2.4	.58	.01	0
MIN	0	.04	.20	.77	5.5	4.2	10	2.5	.61	.02	0	0
AC-FT	1.4	13	159	236	3260	2530	1060	325	82	16	.06	0
CAL YR 1974	TOTAL	2461.95	MEAN	6.75	MAX	216	MIN	0	AC-FT	4880		
WTR YR 1975	TOTAL	3876.31	MEAN	10.6	MAX	353	MIN	0	AC-FT	7690		

Peak discharge (base, 150 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-2	0445	5.02	696	3-7	2000	4.12	317
2-4	1430	3.71	204	3-22	0145	4.48	447
2-9	0515	4.88	625	3-25	0645	3.95	266

11284700 NORTH FORK TUOLUMNE RIVER NEAR LONG BARN, CALIF.

LOCATION.--Lat 38°05'56", long 120°05'55", in NW¼SW¼ sec.22, T.3 N., R.17 E., Tuolumne County, Stanislaus National Forest, on right bank 0.6 mi (1.0 km) upstream from small tributary, 1.5 mi (2.4 km) east of Long Barn, and 3.8 mi (6.1 km) upstream from Wrights Creek.

DRAINAGE AREA.--23.1 mi² (59.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,650 ft (1,417 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 29.1 ft³/s (0.824 m³/s), 21,080 acre-ft/yr (26.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 398 ft³/s (11.3 m³/s) Feb. 8 (gage height, 4.84 ft or 1.475 m); maximum gage height, 4.87 ft (1.484 m) Feb. 8 (backwater from ice); minimum daily discharge, 0.96 ft³/s (0.027 m³/s) Oct. 1.

Period of record: Maximum discharge, 1,670 ft³/s (47.3 m³/s) Jan. 21, 1969 (gage height, 7.61 ft or 2.320 m), from rating curve extended above 650 ft³/s (18.4 m³/s) on basis of slope-area measurement at gage height 9.8 ft (2.99 m); minimum daily, 0.2 ft³/s (0.006 m³/s) Sept. 18-25, 1962.

Flood of Dec. 23, 1955, reached a stage of 9.8 ft (2.99 m), from floodmarks (discharge, 2,560 ft³/s or 72.5 m³/s, by slope-area measurement).

REMARKS.--Records good. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	3.6	2.7	5.2	20	51	65	103	113	11	3.5	2.2
2	1.5	2.9	2.5	5.5	44	51	63	111	101	10	3.2	2.2
3	2.1	2.6	4.4	5.8	25	49	63	131	91	8.8	3.0	2.0
4	1.8	2.4	6.1	6.2	31	49	59	134	88	8.5	3.0	1.8
5	1.9	2.2	18	6.8	20	65	59	109	79	8.1	2.8	1.8
6	1.7	2.1	12	20	17	79	57	99	69	7.4	2.6	1.6
7	1.5	2.2	11	44	21	123	51	101	62	7.4	2.6	1.2
8	1.8	2.8	9.3	35	280	123	46	118	57	7.3	2.6	1.2
9	2.0	2.6	7.2	28	325	97	44	137	52	7.1	2.4	1.4
10	2.0	2.4	7.5	13	212	69	44	153	47	7.1	2.4	1.4
11	1.8	2.2	6.6	13	114	59	44	169	43	6.8	2.6	1.4
12	1.6	2.1	6.9	14	54	53	47	179	38	6.4	2.4	1.4
13	1.5	2.1	7.2	13	64	51	55	202	34	6.1	2.2	1.4
14	1.6	2.0	6.4	11	74	49	57	216	30	6.1	2.2	1.4
15	1.5	2.0	6.1	10	42	46	57	209	27	6.1	2.2	1.4
16	1.4	2.0	6.1	9.8	33	45	54	192	26	6.4	2.0	1.4
17	1.5	1.8	5.8	10	29	39	54	197	24	6.4	1.8	1.4
18	1.5	2.1	5.8	10	27	39	50	214	24	5.7	3.5	1.4
19	1.5	2.1	6.4	10	27	43	52	217	21	5.7	7.4	1.4
20	1.5	2.0	5.3	10	40	49	55	194	19	5.1	5.4	1.4
21	1.4	10	5.3	10	34	68	62	154	16	5.1	4.3	1.4
22	1.5	7.8	5.1	9.3	23	84	68	130	19	4.8	3.5	1.4
23	1.5	4.9	4.7	9.3	28	53	72	128	20	4.8	3.2	1.2
24	1.6	4.0	4.3	8.9	30	62	96	142	16	4.6	3.0	1.2
25	1.6	3.6	4.6	9.3	34	202	128	153	14	4.0	3.0	1.2
26	1.7	3.2	4.9	8.9	36	128	101	155	13	4.0	2.8	1.2
27	1.9	2.9	5.1	8.9	39	99	90	141	13	3.8	2.6	1.2
28	10	3.1	6.4	7.2	46	84	91	136	12	3.8	2.6	1.2
29	5.1	2.9	7.8	7.8	---	76	96	138	11	3.5	3.5	1.2
30	3.6	2.7	6.9	7.2	---	70	100	141	11	3.5	2.6	1.2
31	4.3	---	6.1	8.0	---	72	---	133	---	3.5	2.4	---
TOTAL	66.86	91.3	299.0	375.1	1769	2227	1980	4736	1190	188.9	93.3	43.2
MEAN	2.16	3.04	9.65	12.1	63.2	71.8	66.0	153	39.7	6.09	3.01	1.44
MAX	10	10	61	44	325	202	128	217	113	11	7.4	2.2
MIN	.96	1.8	2.5	5.2	17	39	44	99	11	3.5	1.8	1.2
AC-FT	133	181	593	744	3510	4420	3930	9390	2360	375	185	86
CAL YR 1974	TOTAL	10453.51	MEAN 28.6	MAX 212	MIN .86	AC-FT	20730					
WTR YR 1975	TOTAL	13059.66	MEAN 35.8	MAX 325	MIN .96	AC-FT	25900					

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-8	1015	4.84	398	5-3	1945	4.07	158
3-7	1445	4.06	178	5-14	2100	4.44	241
3-25	unknown	4.33	247	5-18	2115	4.42	236
4-24	2115	4.11	166				

11287500 DON PEDRO RESERVOIR NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°42'06", long 120°25'16", in NE1/4 sec.3, T.3 S., R.14 E., Tuolumne County, at New Don Pedro Dam on Tuolumne River, 500 ft (152 m) downstream from Mexican Gulch, and 3.4 mi (5.5 km) northeast of La Grange.

DRAINAGE AREA.--1,533 mi² (3,970 km²).

PERIOD OF RECORD.--September 1923 to current year. 1923-24 (year-end contents only) and October 1924 to September 1930 monthend contents, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Turlock Irrigation District). Prior to Feb. 1, 1941, nonrecording gage at site 1.5 mi (2.4 km) upstream at same datum. Feb. 2, 1941, to Nov. 3, 1970, water-stage recorder at site 1.5 mi (2.4 km) upstream at same datum. Nov. 4, 1970, to Apr. 26, 1972, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 1,852,000 acre-ft (2.28 km³) June 27, 28 (elevation, 815.8 ft or 248.66 m); minimum, 1,258,000 acre-ft (1.55 km³) Jan. 31 (elevation, 759.1 ft or 231.37 m).

Period of record: Maximum contents, 1,852,000 acre-ft (2.28 km³) June 27, 28, 1975 (elevation, 815.8 ft or 248.66 m); minimum, 29,200 acre-ft (36.0 hm³) Sept. 1-3, 5, 1934; minimum elevation, 475.0 ft (144.78 m) Sept. 1, 2, 1934. Minimum since construction of New Don Pedro Dam in 1970 under normal operations, 340,400 acre-ft (420 hm³) Oct. 28, 29, 1971 (elevation, 608.7 ft or 185.53 m).

REMARKS.--Reservoir is formed by earthfill dam completed June 23, 1971; storage began Nov. 3, 1970. Total capacity, 2,030,000 acre-ft (2.50 km³) at elevation 830.0 ft (252.98 m), top of uncontrolled spillway, of which 309,000 acre-ft (381 hm³) below elevation 600.0 ft (182.88 m), mutually agreed-upon minimum, is not available for release. Water passes through powerplant at dam and down Tuolumne River to La Grange Dam, 2.5 mi (4.0 km) downstream, where it is diverted into Turlock and Modesto Canals for irrigation. This reservoir is operated jointly by Turlock and Modesto Irrigation Districts. Prior to June 1971 reservoir was formed by a concrete gravity-type dam completed Jan. 1, 1923, capacity, 290,400 acre-ft (358 hm³). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Tuolumne River basin.

REVISIONS.--WSP 1930: Drainage area.

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

550	158,700	650	517,400	770	1,359,000
570	212,900	680	679,000	800	1,669,000
590	274,800	710	869,700	830	2,030,000
620	384,100	740	1,095,000		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1457000	1403000	1368000	1313000	1260000	1355000	1478000	1539000	1641000	1848000	1759000	1676000
2	1455000	1401000	1365000	1309000	1272000	1357000	1479000	1540000	1649000	1846000	1754000	1672000
3	1453000	1398000	1366000	1307000	1274000	1358000	1480000	1544000	1657000	1846000	1750000	1669000
4	1452000	1394000	1367000	1306000	1279000	1360000	1481000	1549000	1663000	1845000	1744000	1666000
5	1451000	1392000	1366000	1307000	1281000	1362000	1485000	1551000	1671000	1845000	1739000	1662000
6	1448000	1390000	1363000	1304000	1282000	1365000	1491000	1552000	1681000	1844000	1735000	1659000
7	1446000	1388000	1362000	1302000	1283000	1371000	1492000	1553000	1693000	1843000	1731000	1656000
8	1445000	1386000	1362000	1303000	1285000	1380000	1494000	1554000	1702000	1841000	1727000	1653000
9	1443000	1386000	1359000	1302000	1301000	1387000	1496000	1556000	1711000	1839000	1722000	1650000
10	1442000	1386000	1355000	1299000	1313000	1390000	1498000	1559000	1720000	1837000	1717000	1649000
11	1440000	1384000	1353000	1297000	1317000	1393000	1499000	1563000	1729000	1834000	1713000	1646000
12	1439000	1382000	1350000	1299000	1320000	1394000	1501000	1566000	1739000	1832000	1710000	1643000
13	1437000	1380000	1347000	1296000	1324000	1397000	1504000	1569000	1748000	1830000	1705000	1641000
14	1434000	1379000	1344000	1294000	1328000	1400000	1505000	1574000	1759000	1827000	1703000	1639000
15	1432000	1377000	1344000	1291000	1331000	1404000	1507000	1579000	1769000	1824000	1700000	1637000
16	1430000	1376000	1340000	1288000	1334000	1410000	1508000	1584000	1780000	1821000	1698000	1635000
17	1428000	1377000	1337000	1286000	1336000	1413000	1509000	1588000	1789000	1819000	1697000	1631000
18	1426000	1375000	1335000	1285000	1337000	1415000	1510000	1593000	1799000	1815000	1695000	1628000
19	1425000	1374000	1331000	1285000	1338000	1417000	1512000	1598000	1808000	1813000	1695000	1626000
20	1423000	1372000	1328000	1283000	1341000	1419000	1515000	1602000	1818000	1809000	1694000	1625000
21	1420000	1371000	1326000	1280000	1342000	1421000	1516000	1605000	1825000	1806000	1691000	1622000
22	1419000	1370000	1327000	1277000	1344000	1431000	1517000	1606000	1831000	1802000	1690000	1619000
23	1417000	1369000	1323000	1275000	1346000	1436000	1518000	1607000	1838000	1797000	1688000	1616000
24	1415000	1369000	1321000	1273000	1347000	1439000	1520000	1610000	1843000	1792000	1687000	1613000
25	1413000	1367000	1321000	1272000	1348000	1454000	1525000	1613000	1848000	1788000	1684000	1610000
26	1411000	1366000	1319000	1273000	1350000	1459000	1528000	1616000	1851000	1783000	1682000	1606000
27	1409000	1366000	1317000	1270000	1351000	1464000	1532000	1618000	1852000	1779000	1681000	1604000
28	1408000	1367000	1316000	1267000	1353000	1467000	1533000	1622000	1852000	1775000	1680000	1602000
29	1407000	1367000	1316000	1265000	---	1471000	1535000	1624000	1851000	1770000	1679000	1600000
30	1406000	1367000	1313000	1262000	---	1475000	1537000	1627000	1849000	1767000	1678000	1598000
31	1406000	---	1312000	1258000	---	1477000	---	1631000	---	1762000	1677000	---
MAX	1457000	1403000	1368000	1313000	1353000	1477000	1537000	1631000	1852000	1848000	1759000	1676000
MIN	1406000	1366000	1312000	1258000	1260000	1355000	1478000	1539000	1641000	1762000	1677000	1598000
(a)	774.8	770.8	765.0	759.1	769.3	782.0	787.8	796.6	815.5	808.2	800.7	793.5
(b)	-54,000	-39,000	-55,000	-54,000	+95,000	+124,000	+60,000	+94,000	+218,000	-87,000	-85,000	-79,000

CAL YR 1974 b +232,000

WTR YR 1975 b +138,000

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

11289000 MODESTO CANAL NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°40'04", long 120°27'26", in SE¼SW¼ sec.17, T.3 S., R.14 E., Stanislaus County, on left bank 0.5 mi (0.8 km) northeast of La Grange, and 1.4 mi (2.2 km) downstream from intake at La Grange Dam. Prior to Aug. 14, 1975, on right bank.

PERIOD OF RECORD.--April 1903 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. V-notch sharp-crested weir since Mar. 19, 1963. Datum of gage is 272.4 ft (83.03 m) above mean sea level (levels by Modesto Irrigation District). Prior to July 1904, nonrecording gage at approximate present site at different datum. July 1904 to March 1920, nonrecording gage in concrete well 0.9 mi (1.4 km) upstream and 460 ft (140 m) below intake, set by water-surface elevation to read same as previous gage. March 1920 to February 1924, nonrecording gage and February 1924 to March 1932, water-stage recorder, 0.9 mi (1.4 km) upstream and 500 ft (152 m) below intake at different datum. March 1932 to Aug. 14, 1975, on right bank at same datum.

AVERAGE DISCHARGE.--72 years, 405 ft³/s (11.47 m³/s), 293,400 acre-ft/yr (362 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,820 ft³/s (51.5 m³/s) July 1, 1935; no flow at times most years.

REMARKS.--Records excellent. Canal diverts from right bank of Tuolumne River at La Grange Dam for irrigation in Modesto and Waterford Irrigation Districts. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1904-9 (monthly figures only).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	496	28	26		0	32	724	1,070	995	933	1,220	620
2	594	27	802		0	30	723	1,020	939	933	1,200	878
3	599	27	770		0	33	764	627	953	941	1,010	663
4	598	26	620		0	229	723	310	1,160	934	1,250	720
5	600	361	598		0	245	356	1,060	1,150	931	1,210	802
6	600	460	656		0	286	223	1,070	1,040	929	1,090	728
7	656	482	150		0	372	858	1,080	921	1,050	1,060	408
8	609	421	31		0	392	765	1,090	1,010	1,070	1,200	512
9	581	208	756		0	25	697	1,070	1,170	1,070	1,220	707
10	384	206	730		0	261	716	811	1,180	1,130	997	614
11	435	373	743		0	237	668	589	1,070	1,090	1,230	752
12	433	407	728		0	309	276	1,130	1,040	928	1,150	830
13	445	402	722		0	313	252	1,050	1,220	855	1,110	644
14	448	398	211		0	378	782	660	1,010	1,030	1,140	404
15	442	403	31		0	277	779	610	922	867	1,090	507
16	429	216	772		0	23	828	646	827	976	983	582
17	452	207	716		0	376	781	688	895	1,050	983	730
18	450	461	743		0	460	692	601	625	873	890	852
19	165	523	656		0	303	310	886	626	853	842	702
20	26	504	26		0	340	279	879	732	858	840	503
21	27	450	20		0	458	792	900	923	1,070	902	412
22	27	209	8.5		0	450	735	1,050	923	1,220	738	700
23	27	39	1.3		0	221	770	1,080	925	1,390	738	735
24	27	24	1.2		0	328	804	1,060	1,060	1,260	614	782
25	27	226	1.2		22	322	784	1,020	932	1,280	971	788
26	27	235	1.2		675	345	489	1,090	928	1,250	620	788
27	27	282	1.5		916	367	584	1,180	1,040	986	620	402
28	27	27	0		813	492	818	1,220	929	1,170	620	405
29	27	27	0		-----	495	759	1,250	928	1,120	618	404
30	27	26	0		-----	213	813	1,240	931	1,030	618	402
31	27	-----	0		-----	563	-----	1,170	-----	1,130	618	-----
TOTAL	9,739	7,685	10,520.9	0	2,426	9,175	19,544	29,207	29,004	32,207	29,392	18,976
MEAN	314	256	339	0	86.6	296	651	942	967	1,039	948	633
MAX	656	523	802	0	916	563	858	1,250	1,220	1,390	1,250	878
MIN	26	24	0	0	0	23	223	310	625	853	614	402
AC-FT	19,320	15,240	20,870	0	4,810	18,200	38,770	57,930	57,530	63,880	58,300	37,640
CAL YR 1974	TOTAL 197,487.10		MEAN 541	MAX 1,430	MIN 0	AC-FT 391,700						
WTR YR 1975	TOTAL 197,875.90		MEAN 542	MAX 1,390	MIN 0	AC-FT 392,500						

SAN JOAQUIN RIVER BASIN

11289500 TURLOCK CANAL NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°39'57", long 120°26'24", in NW¼NW¼ sec.21, T.3 S., R.14 E., Stanislaus County, on right bank 2,400 ft (730 m) downstream from intake at La Grange Dam, and 1.2 mi (1.9 km) east of La Grange.

PERIOD OF RECORD.--October 1898 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 277.70 ft (84.643 m), levels by Turlock Irrigation District. July 1, 1899 to Sept. 14, 1915, nonrecording gage at different sites and datums near canal intake. Sept. 15, 1915, to Apr. 15, 1924, nonrecording gage and Apr. 16, 1924, to winter of 1936-37, water-stage recorder, both at present site at datum 0.25 ft (0.076 m) higher.

AVERAGE DISCHARGE.--77 years, 615 ft³/s (17.42 m³/s), 445,600 acre-ft/yr (549 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 2,280 ft³/s (64.6 m³/s) June 12, 1949, July 26, 1973; no diversion for irrigation during some periods in some years. Prior to 1939, unmeasured small discharge during winter called zero.

REMARKS.--Records excellent. Canal diverts from left bank of Tuolumne River at La Grange Dam for irrigation in Turlock Irrigation District and to supply town of La Grange. During fall and winter some unmeasured flow is diverted from canal at tunnel 0.3 mi (0.5 km) upstream from gage, passed through La Grange powerplant and returned to river. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS),--WSP 1315-A: 1899-1908 (monthly figures only). WSP 1445: 1917-20, 1922.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,010	22	56	37	36	6.4	962	1,300	415	1,900	2,090	525
2	857	20	1,110	39	33	6.4	1,220	1,290	1,880	1,920	2,060	1,680
3	752	20	1,230	39	20	5.5	1,300	1,070	1,910	1,900	1,980	1,940
4	720	890	1,220	39	8.7	5.5	1,260	198	1,880	1,640	2,000	1,680
5	674	1,320	1,230	36	8.1	5.5	1,190	1,300	1,890	1,690	2,090	1,520
6	716	1,160	1,200	39	7.8	6.4	296	1,370	1,930	1,730	2,080	1,180
7	691	1,200	1,060	39	7.6	6.2	1,290	1,330	1,840	1,930	2,050	845
8	744	1,210	80	39	7.2	5.9	1,230	1,520	1,740	2,020	2,090	1,130
9	738	881	1,210	39	7.5	5.6	1,260	1,460	1,810	2,060	2,060	1,100
10	748	477	1,230	39	11	5.8	1,150	1,340	1,890	2,030	1,940	1,150
11	756	1,210	1,220	38	11	427	1,200	1,020	1,980	2,050	1,980	923
12	899	1,210	1,200	37	10	926	1,040	1,640	1,970	2,000	1,740	866
13	1,020	1,250	1,210	39	9.4	1,080	311	1,690	1,940	1,860	1,620	871
14	1,170	1,210	1,110	39	9.4	1,050	1,220	1,680	1,940	2,000	1,310	694
15	394	1,210	40	38	8.5	564	1,230	1,660	1,750	2,040	1,360	1,220
16	35	1,000	1,190	39	8.5	40	1,310	1,700	1,880	2,000	987	1,290
17	35	453	1,220	39	8.5	1,060	1,240	1,610	1,940	2,050	281	1,360
18	35	1,160	1,210	39	8.5	276	1,230	1,500	1,920	2,000	814	848
19	35	1,240	1,210	36	7.2	22	1,060	1,630	1,910	1,960	895	1,010
20	35	1,300	1,280	39	6.4	26	289	1,530	1,900	1,860	1,120	981
21	36	1,340	1,190	39	6.4	26	1,240	1,650	1,760	1,980	1,170	725
22	36	1,120	39	38	6.4	25	1,370	1,660	1,580	1,900	1,370	1,020
23	36	1,020	1,250	38	6.4	24	1,300	1,710	1,800	1,640	1,250	1,080
24	36	640	395	38	6.4	24	1,310	1,600	1,820	2,000	621	1,130
25	36	1,250	40	38	6.4	756	1,290	1,350	1,860	2,030	1,450	1,130
26	35	1,270	41	35	6.4	1,080	1,070	1,470	1,890	2,110	1,190	1,110
27	35	1,120	41	37	6.4	1,080	256	1,680	1,900	2,010	1,090	1,040
28	35	69	40	39	6.4	846	1,290	1,710	1,840	2,070	1,140	605
29	35	859	38	39	-----	359	1,290	1,710	1,730	2,080	1,140	1,180
30	29	623	40	39	-----	40	1,310	1,730	1,850	2,040	897	1,260
31	21	-----	39	38	-----	851	-----	1,620	-----	2,050	520	-----
TOTAL	12,434	27,754	23,669	1,186	285.5	10,641.2	33,014	45,728	54,345	60,550	44,385	33,093
MEAN	401	925	764	38.3	10.2	343	1,100	1,475	1,812	1,953	1,432	1,103
MAX	1,170	1,340	1,280	39	36	1,080	1,370	1,730	1,980	2,110	2,090	1,940

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°39'59", long 120°26'28", in NW¼NW¼ sec.21, T.3 S., R.14 E., Stanislaus County, on left bank 0.5 mi (0.8 km) downstream from La Grange Dam, and 1.1 mi (1.8 km) east of La Grange.

DRAINAGE AREA.--1,538 mi² (3,983 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 170.19 ft (51.874 m) above mean sea level (levels by Turlock Irrigation District).

AVERAGE DISCHARGE (River only).--5 years, 446 ft³/s (12.63 m³/s), 323,100 acre-ft/yr (398 hm³/yr).
(Combined river and canals).--5 years, 1,755 ft³/s (49.70 m³/s), 1,271,000 acre-ft/yr (1.57 km³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 4,800 ft³/s (136 m³/s) Jan. 30 (gage height, 10.82 ft or 3.298 m); minimum daily, 14 ft³/s (0.40 m³/s) June 2, 3.
Period of record: Maximum discharge, 4,800 ft³/s (136 m³/s) Jan. 30, 1975 (gage height, 10.82 ft or 3.298 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Oct. 29 to Nov. 3, 1970.
(Combined flow).--Current year: Maximum daily discharge, 3,630 ft³/s (103 m³/s) July 23; minimum daily, 421 ft³/s (11.9 m³/s) Nov. 28.
Period of record: Maximum daily discharge, 3,880 ft³/s (110 m³/s) June 26, 1973; minimum daily, 0.45 ft³/s (0.01 m³/s) Nov. 2, 1970.

REMARKS.--Records good. Flow diverted into Modesto Canal (see sta 11289000) and Turlock Canal (see sta 11289500) at La Grange Dam. Flow regulated by Don Pedro powerplant, Don Pedro Reservoir 4.5 mi (7.2 km) upstream (see sta 11287500), Hetch Hetchy Reservoir (see sta 11275500), Cherry Lake (see sta 11277200), and Lake Eleanor (see sta 11277500). Tuolumne Canal (see sta 11297500) diverts water from the Stanislaus River basin into the Tuolumne River basin for power, irrigation, and domestic supply in the vicinity of Sonora upstream from station. Diversion through Hetch Hetchy aqueduct to San Francisco began Oct. 19, 1934; an average of 323 ft³/s (9.15 m³/s) was diverted during the current year. See schematic diagram of Tuolumne River basin. For records of combined discharge of river and Modesto and Turlock canals, see following page.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,040	2,600	508	588	1,560	1,140	596	225	23	16	104	22
2	1,050	2,500	767	2,820	580	611	512	212	14	17	64	148
3	876	2,370	736	2,800	1,910	1,800	259	215	14	17	29	414
4	545	1,710	836	2,210	1,880	1,520	254	213	195	17	269	609
5	523	557	904	588	1,790	1,760	255	218	207	17	206	747
6	515	543	876	3,020	1,790	1,660	253	220	69	17	29	817
7	523	543	884	2,630	1,700	1,690	262	253	23	42	24	572
8	526	543	836	2,640	1,040	980	249	246	23	69	127	532
9	530	560	876	2,800	582	606	247	219	229	83	64	713
10	692	564	864	2,760	1,700	1,800	256	216	283	199	23	554
11	677	546	884	2,010	1,570	1,310	252	220	80	129	181	819
12	528	548	884	585	1,740	596	248	277	29	26	69	772
13	302	549	868	2,790	1,780	689	249	440	197	22	29	541
14	193	550	900	2,820	1,690	634	247	218	21	88	34	527
15	1,200	550	856	2,880	1,130	601	246	216	19	25	26	511
16	1,540	561	888	2,900	583	606	243	216	19	24	22	520
17	1,530	566	900	2,880	577	611	250	214	19	77	21	592
18	1,390	551	876	2,260	1,760	1,150	247	213	18	21	27	812
19	1,560	546	876	584	1,900	1,750	230	216	18	21	22	551
20	1,600	549	1,410	2,980	1,820	1,730	212	215	18	25	21	526
21	1,860	549	868	2,880	1,930	1,800	237	218	19	90	85	506
22	2,030	549	582	2,980	1,140	1,020	240	218	18	277	22	785
23	2,030	561	1,240	2,850	592	599	242	289	19	599	22	823
24	2,020	568	1,760	2,670	1,680	1,430	236	220	36	269	21	989
25	2,000	550	718	1,870	1,590	933	233	215	16	304	119	1,020
26	1,880	543	2,490	581	945	683	237	214	16	78	22	884
27	1,770	470	2,530	2,890	674	654	237	370	16	24	20	619
28	1,990	325	2,000	2,890	731	622	237	465	16	73	20	525
29	2,000	488	732	3,000	-----	612	235	510	16	37	21	601
30	1,760	498	2,660	2,890	-----	615	235	440	16	23	24	620
31	1,770	-----	2,210	3,080	-----	611	-----	291	-----	24	25	-----
TOTAL	38,450	23,107	35,219	74,126	38,364	32,823	7,936	8,132	1,706	2,750	1,792	18,671
MEAN	1,240	770	1,136	2,391	1,370	1,059	265	262	56.9	88.7	57.8	622
MAX	2,030	2,600	2,660	3,080	1,930	1,800	596	510	283	599	269	1,020
MIN	193	325	508	581	577	596	212	212	14	16	20	22
AC-FT	76,270	45,830	69,860	147,000	76,090	65,100	15,740	16,130	3,380	5,450	3,550	37,030
CAL YR 1974	TOTAL	235,513	MEAN	645	MAX	2,660	MIN	14	AC-FT	467,100		
WTR YR 1975	TOTAL	283,076	MEAN	776	MAX	3,080	MIN	14	AC-FT	561,500		

SAN JOAQUIN RIVER BASIN

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF TUOLUMNE RIVER, MODESTO CANAL NEAR LA GRANGE, AND TURLOCK CANAL NEAR LA GRANGE, CALIF., WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,550	2,650	590	625	1,600	1,180	2,280	2,600	1,430	2,850	3,410	1,170
2	2,500	2,550	2,680	2,860	613	647	2,460	2,520	2,830	2,870	3,320	2,710
3	2,230	2,420	2,740	2,840	1,930	1,840	2,320	1,910	2,880	2,860	3,020	3,020
4	1,860	2,630	2,680	2,250	1,890	1,750	2,240	721	3,240	2,590	3,520	3,010
5	1,800	2,240	2,730	624	1,800	2,010	1,800	2,580	3,250	2,640	3,510	3,070
6	1,830	2,160	2,730	3,060	1,800	1,950	772	2,660	3,040	2,680	3,200	2,730
7	1,870	2,230	2,090	2,670	1,710	2,070	2,410	2,660	2,780	3,020	3,130	1,830
8	1,880	2,170	947	2,680	1,050	1,380	2,240	2,860	2,770	3,160	3,420	2,170
9	1,850	1,650	2,840	2,840	590	637	2,200	2,750	3,210	3,210	3,340	2,520
10	1,820	1,250	2,820	2,800	1,710	2,070	2,120	2,370	3,350	3,360	2,960	2,320
11	1,870	2,130	2,850	2,050	1,580	1,970	2,120	1,830	3,130	3,270	3,390	2,490
12	1,860	2,170	2,810	622	1,750	1,830	1,560	3,050	3,040	2,950	2,960	2,470
13	1,770	2,200	2,800	2,830	1,790	2,080	812	3,180	3,360	2,740	2,760	2,060
14	1,810	2,160	2,220	2,860	1,700	2,060	2,250	2,560	2,970	3,120	2,480	1,630
15	2,040	2,160	927	2,920	1,140	1,440	2,260	2,490	2,690	2,930	2,480	2,240
16	2,000	1,780	2,850	2,940	592	669	2,380	2,560	2,730	3,000	1,990	2,390
17	2,020	1,230	2,840	2,920	586	2,050	2,270	2,510	2,850	3,180	1,290	2,680
18	1,880	2,170	2,830	2,300	1,770	1,890	2,170	2,310	2,560	2,890	1,730	2,510
19	1,760	2,310	2,740	620	1,910	2,080	1,600	2,730	2,550	2,830	1,760	2,260
20	1,660	2,350	2,720	3,020	1,830	2,100	780	2,620	2,650	2,740	1,980	2,010
21	1,920	2,340	2,080	2,920	1,940	2,280	2,270	2,770	2,700	3,140	2,160	1,640
22	2,090	1,880	630	3,020	1,150	1,930	2,350	2,930	2,520	3,400	2,510	2,300
23	2,090	1,620	2,490	2,890	598	844	2,310	3,080	2,740	3,630	2,010	2,640
24	2,080	1,230	2,160	2,710	1,690	1,780	2,350	2,880	2,920	3,530	1,260	2,900
25	2,060	2,030	759	1,910	1,620	2,010	2,310	2,590	2,810	3,610	2,540	2,940
26	1,940	2,050	2,530	616	1,630	2,110	1,800	2,770	2,830	3,440	1,830	2,780
27	1,830	1,870	2,570	2,930	1,600	2,100	1,800	3,230	2,960	3,020	1,730	2,060
28	2,050	421	2,040	2,930	1,550	1,960	2,350	3,400	2,790	3,310	1,780	1,540
29	2,060	1,370	770	3,040	-----	1,470	2,280	3,470	2,670	3,240	1,780	2,190
30	1,820	1,150	2,700	2,930	-----	868	2,360	3,410	2,800	3,090	1,540	2,280
31	1,820	-----	2,250	3,120	-----	2,030	-----	3,080	-----	3,200	1,160	-----
TOTAL	60,620	58,571	69,413	75,347	41,119	52,655	60,504	83,081	85,050	95,500	75,570	70,770
MEAN	1,955	1,952	2,239	2,431	1,469	1,699	2,017	2,680	2,835	3,081	2,438	2,359
MAX	2,550	2,650	2,850	3,120	1,940	2,280	2,460	3,470	3,360	3,630	3,520	3,070
MIN	1,660	421	590	616	586	637	772	721	1,430	2,590	1,160	1,170
AC-FT	120,200	116,200	137,700	149,500	81,560	104,400	120,000	164,800	168,700	189,400	149,900	140,400
CL	YR	1974	TOTAL	791,443	MEAN	2,168	MAX	3,710	MIN	294	AC-FT	1,570,000
WTR	YR	1975	TOTAL	828,200	MEAN	2,269	MAX	3,630	MIN	421	AC-FT	1,643,000

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: November 1970 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum recorded, 18.0°C June 1; minimum, 9.0°C on many days during February to May.

Period of record:

Water temperatures: Maximum (1972 to current year), 20.5°C Aug. 19, 1973; minimum, 6.0°C Feb. 6-8, 10, 1971.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.0	12.0	11.5	12.0	11.5	12.5	12.0	11.0	10.5	10.0	9.5
2	12.0	11.5	12.5	11.5	12.5	11.5	12.5	12.0	11.0	10.5	10.0	9.5
3	12.0	11.5	12.5	11.5	12.5	12.0	12.5	12.0	11.0	10.5	10.0	9.0
4	12.0	11.5	12.5	11.5	12.5	12.0	12.5	12.0	10.5	10.5	9.5	9.5
5	12.0	11.5	12.5	12.0	12.5	12.0	12.0	12.0	10.5	10.5	9.5	9.5
6	12.0	11.0	12.5	11.5	12.5	12.0	12.5	12.0	11.0	10.5	9.5	9.5
7	12.0	11.5	12.5	12.0	12.5	12.0	12.5	12.0	10.5	10.5	9.5	9.5
8	12.0	11.5	12.5	11.5	12.5	12.0	12.0	12.0	11.0	10.5	9.5	9.5
9	12.0	11.5	12.5	12.0	12.5	12.0	12.0	11.5	10.5	10.5	9.5	9.0
10	12.5	11.0	12.0	12.0	12.5	12.0	12.0	11.5	10.5	10.0	9.5	9.0
11	12.0	11.5	12.5	11.5	12.5	12.0	12.0	11.5	10.5	10.0	9.5	9.0
12	12.0	11.5	12.5	12.0	12.5	12.0	12.0	11.0	10.5	10.0	9.5	9.0
13	12.0	11.0	12.5	12.0	12.5	12.0	11.5	11.0	10.5	10.0	9.5	9.0
14	12.0	11.0	12.5	12.0	12.5	12.0	12.0	10.5	10.5	10.0	9.5	9.0
15	12.0	11.5	12.5	12.0	12.5	12.0	11.5	11.0	10.0	9.5	9.5	9.0
16	12.0	11.5	12.5	12.0	12.5	12.0	11.5	11.0	10.0	9.5	10.0	9.0
17	12.0	11.5	12.0	11.5	12.5	12.0	11.5	11.0	10.0	9.5	10.0	9.0
18	12.0	11.5	12.5	12.0	12.5	12.0	11.0	11.0	10.0	9.5	10.0	9.0
19	12.0	11.5	12.5	12.0	12.5	12.0	11.0	11.0	10.0	9.5	10.0	9.0
20	12.0	11.5	12.5	12.0	13.0	12.0	11.0	10.5	10.0	9.5	9.5	9.0
21	12.0	11.5	12.5	12.0	12.5	12.5	11.0	11.0	10.0	9.0	9.5	9.0
22	12.0	11.5	12.5	12.0	12.5	12.0	11.0	11.0	10.0	9.0	9.5	9.0
23	12.0	11.5	12.5	12.0	12.5	11.0	11.5	10.5	10.0	9.5	10.0	9.0
24	12.5	11.5	12.0	12.0	13.0	11.5	11.5	11.0	10.0	9.5	10.0	9.5
25	12.5	11.5	12.5	12.0	12.5	12.0	11.0	11.0	10.0	9.5	9.5	9.0
26	12.5	11.5	12.5	12.0	13.0	11.5	11.0	10.5	10.0	9.5	9.5	9.0
27	12.0	11.5	12.5	12.0	13.0	12.5	11.0	10.0	10.0	9.5	9.5	9.0
28	12.0	11.5	12.5	12.0	12.5	12.5	11.0	10.5	10.0	9.5	10.0	9.0
29	12.0	11.5	12.5	12.0	12.5	12.0	11.0	10.5	---	---	10.0	9.0
30	12.5	11.5	12.0	12.0	12.5	12.0	11.0	10.5	---	---	10.0	9.0
31	12.0	11.5	---	---	12.5	12.0	11.0	10.5	---	---	9.5	9.0
MONTH	12.5	11.0	12.5	11.5	13.0	11.0	12.5	10.0	11.0	9.0	10.0	9.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.0	---	---	18.0	9.5	---	---	13.5	11.0	---	---
2	10.0	9.0	10.0	9.5	11.0	11.0	14.0	11.5	13.0	11.0	---	---
3	9.5	9.0	9.5	9.5	14.5	10.5	14.0	10.5	14.0	11.0	---	---
4	9.5	9.0	10.0	9.0	12.0	10.0	13.5	11.0	13.0	11.0	---	---
5	9.5	9.0	10.0	9.5	---	---	15.0	10.5	12.5	11.0	---	---
6	9.5	9.0	10.0	9.5	---	---	13.5	11.0	12.5	11.0	---	---
7	9.5	9.0	11.5	9.5	---	---	16.5	11.0	---	---	---	---
8	9.5	9.0	10.0	9.5	---	---	15.0	11.0	---	---	11.0	10.5
9	10.0	9.0	10.0	9.5	---	---	12.5	11.0	---	---	12.0	10.5
10	10.0	9.0	10.0	9.5	---	---	12.5	10.5	---	---	11.5	10.5
11	---	---	10.5	9.5	---	---	12.5	10.5	---	---	11.5	10.5
12	---	---	11.5	9.5	---	---	13.0	10.5	---	---	11.5	10.5
13	---	---	10.5	9.5	---	---	13.0	11.0	---	---	11.5	10.5
14	---	---	10.0	9.5	---	---	13.5	11.0	---	---	11.5	10.5
15	---	---	10.0	9.5	---	---	11.5	11.0	---	---	11.5	10.5
16	---	---	10.5	9.5	---	---	13.0	11.0	---	---	11.5	10.5
17	---	---	10.0	9.5	---	---	14.0	11.0	---	---	12.0	10.5
18	---	---	10.5	9.5	---	---	14.0	11.0	---	---	11.5	10.5
19	---	---	10.0	9.5	---	---	14.0	11.0	---	---	11.5	10.5
20	---	---	10.0	9.5	---	---	15.0	11.5	---	---	11.0	10.5
21	---	---	10.0	9.5	---	---	15.0	11.0	---	---	11.0	10.0
22	---	---	10.0	9.5	---	---	13.0	11.0	---	---	12.5	10.5
23	---	---	11.5	9.5	---	---	12.0	10.5	---	---	11.5	10.0
24	---	---	10.5	9.5	---	---	12.0	11.0	---	---	11.5	10.0
25	---	---	10.0	9.5	---	---	12.0	11.0	---	---	11.5	10.0
26	---	---	10.0	9.5	---	---	13.0	11.0	---	---	11.5	10.0
27	---	---	11.5	9.5	---	---	13.0	11.0	---	---	11.5	10.5
28	---	---	10.5	9.5	---	---	13.5	11.5	---	---	11.0	10.0
29	---	---	10.5	9.5	---	---	13.5	11.5	---	---	11.5	10.0
30	---	---	10.5	9.5	---	---	13.5	11.5	---	---	11.5	10.0
31	---	---	10.5	10.0	---	---	13.5	11.0	---	---	---	---
MONTH	---	---	11.5	9.0	---	---	16.5	10.5	---	---	---	---

11290000 TUOLUMNE RIVER AT MODESTO, CALIF.

LOCATION.--Lat 37°37'38", long 120°59'11", in SE&SW¼ sec.33, T.3 S., R.9 E., Stanislaus County, on left bank at bridge on Ninth Street in Modesto, and 0.2 mi (0.3 km) downstream from Dry Creek.

DRAINAGE AREA.--1,884 mi² (4,880 km²).

PERIOD OF RECORD.--1878-84, 1891-94, 1897 (gage heights only), January 1895 to December 1896, April 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, unadjusted (levels by Modesto Irrigation District). Prior to July 11, 1947, at site 1,700 ft (518 m) downstream at same datum, July 11, 1947, to Nov. 16, 1953, at site 1,000 ft (305 m) downstream at same datum.

AVERAGE DISCHARGE.--36 years (1895-96, 1940-75), 1,376 ft³/s (38.97 m³/s), 996,900 acre-ft/yr (1.23 km³/yr).

EXTREMES.--Current year: Maximum discharge, 4,090 ft³/s (116 m³/s) Feb. 1 (elevation, 45.91 ft or 13.993 m); minimum daily, 235 ft³/s (6.66 m³/s) Aug. 15.

Period of record (1895-96, 1940 to current year): Maximum discharge observed, 57,000 ft³/s (1,610 m³/s) Dec. 9, 1950 (elevation, 69.19 ft or 21.089 m); minimum, 85 ft³/s (2.41 m³/s) Oct. 25, 1961.

REMARKS.--Records good. Flow regulated by reservoirs and powerplants above station. In addition to diversions into Modesto and Turlock Canals (see sta 11289000, 11289500), there are diversions for irrigation of about 1,300 acres (5.26 km²) between station above La Grange Dam and at Modesto. See REMARKS for sta 11289650 for Tuolumne River below La Grange Dam. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2140	3310	1590	2550	3470	914	905	458	680	319	251	269
2	1590	3850	1670	1140	2300	1240	826	465	310	263	243	271
3	1490	3960	2080	2690	1440	911	669	472	290	283	275	267
4	1420	3830	1860	3130	2690	2480	547	488	290	279	284	428
5	1200	3270	1770	2660	2740	2500	596	489	300	293	297	651
6	1120	1860	2070	1200	2550	2600	781	492	375	334	364	840
7	1100	1600	1920	2900	2350	2480	868	509	375	345	318	935
8	1090	1590	2070	3080	2200	2470	1130	510	317	345	253	828
9	1020	1670	2010	3050	1630	1500	1270	520	292	294	259	741
10	925	1670	2030	3200	1770	1200	1080	465	328	287	296	821
11	964	1660	2060	3220	2280	2180	813	497	448	319	285	791
12	1020	1640	2090	2540	2120	1500	618	492	394	344	267	903
13	912	1650	2090	1180	2300	1010	574	504	332	327	305	953
14	715	1630	2080	2720	3090	1000	562	611	328	270	281	804
15	517	1590	2110	3200	2700	950	525	513	358	248	235	792
16	1180	1660	2020	3300	1700	918	511	488	300	298	253	740
17	1790	1670	1530	3320	1080	1900	506	475	370	265	254	714
18	1790	1670	1320	3320	926	1480	538	475	264	259	361	754
19	1680	1720	1270	2780	1840	1730	534	473	293	301	606	920
20	1820	1560	1260	1240	2220	2360	539	483	295	261	546	848
21	1890	1550	1540	2870	2190	2400	541	496	303	273	341	775
22	2480	1550	1140	3270	2300	2620	509	504	302	259	293	746
23	3430	1540	866	3360	1590	2950	510	512	304	392	305	912
24	3640	1540	1290	3310	1020	1670	529	540	347	579	280	1010
25	3680	1550	1760	3150	1760	2200	538	490	266	435	306	1130
26	3580	1540	1140	2400	1850	2300	513	480	271	430	331	1230
27	3410	1500	2280	1150	1300	1520	543	482	284	357	369	1190
28	3320	1450	2790	2800	951	1190	487	780	267	324	327	1010
29	3420	1330	2350	3260	---	962	480	805	270	282	308	843
30	3420	1430	1240	3380	---	947	478	825	283	291	316	839
31	3290	---	2490	3340	---	965	---	780	---	254	315	---
TOTAL	61043	58040	55786	84710	56357	53047	19520	16573	9836	9810	9724	23955
MEAN	1969	1935	1800	2733	2013	1711	651	535	328	316	314	799
MAX	3680	3960	2790	3380	3470	2950	1270	825	680	579	606	1230
MIN	517	1330	866	1140	926	911	478	458	264	248	235	267
AC-FT	121100	115100	110700	168000	111800	105200	38720	32870	19510	19460	19290	47510
CAL YR 1974	TOTAL	398836	MEAN	1093	MAX	3960	MIN	201	AC-FT	791100		
WTR YR 1975	TOTAL	458401	MEAN	1256	MAX	3960	MIN	235	AC-FT	909200		

11290000 TUOLUMNE RIVER AT MODESTO, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: July 1965 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 28.5°C July 23, 24, Aug. 3; minimum, 9.0°C Feb. 22.

Period of record:

Water temperatures: Maximum (1965-67, 1968-72, 1973 to current year), 31.5°C July 15, 1972; minimum, 6.5°C on several days in 1972.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	15.5	15.5	15.0	13.0	12.5	11.5	11.0	10.5	10.0	14.5	13.0
2	17.5	16.0	15.0	14.5	13.0	12.5	11.5	10.5	11.5	10.5	13.5	13.0
3	18.0	16.5	15.0	14.5	13.0	13.0	11.5	10.5	12.5	11.0	14.0	12.0
4	17.5	16.5	15.0	14.5	13.5	13.0	12.0	11.0	12.0	11.5	13.5	12.5
5	17.5	16.5	15.0	14.0	14.0	13.0	12.0	11.5	11.5	11.0	12.5	12.0
6	18.0	17.0	15.5	14.5	13.0	12.5	12.5	11.5	11.5	11.0	12.0	11.5
7	18.0	17.0	15.0	15.0	13.0	12.5	12.5	12.0	12.0	11.5	12.5	11.5
8	18.5	17.5	15.0	14.5	13.0	13.0	13.0	12.5	12.5	11.5	12.0	11.5
9	18.5	17.0	15.0	14.0	13.0	12.5	12.5	12.0	13.0	12.0	12.5	11.5
10	18.5	17.0	15.0	14.0	12.5	12.5	12.0	11.5	13.5	12.5	13.0	12.0
11	18.0	17.0	15.0	14.0	12.5	12.0	12.0	11.5	13.0	12.0	12.0	11.5
12	17.5	16.5	15.5	14.5	12.5	12.0	12.0	11.5	11.5	11.0	12.5	11.0
13	17.5	16.0	15.5	14.5	12.5	12.5	12.5	11.5	11.5	11.0	12.5	11.0
14	18.0	16.0	15.5	15.0	12.5	12.0	12.0	11.5	11.5	11.0	12.0	11.5
15	19.0	17.0	15.5	14.5	13.0	12.5	12.0	11.5	11.0	10.0	11.5	10.5
16	18.5	17.0	15.0	14.5	12.5	12.0	12.0	11.5	11.0	10.0	12.5	11.0
17	17.0	15.5	15.0	14.5	12.5	12.0	11.5	11.5	11.0	9.5	12.5	11.5
18	16.0	15.0	15.0	14.5	13.0	12.5	11.5	11.5	11.0	10.0	13.5	11.5
19	16.0	15.0	14.5	14.0	13.0	12.5	11.5	11.0	11.0	10.0	13.5	12.0
20	16.0	15.0	14.5	13.5	13.0	12.5	11.5	11.0	10.5	9.5	12.5	11.5
21	15.5	14.5	14.5	14.0	13.0	12.5	11.5	11.0	10.0	9.5	11.5	10.5
22	15.0	14.0	14.5	13.5	12.5	12.0	11.0	11.0	10.0	9.0	10.5	10.0
23	15.5	14.5	14.0	13.0	12.0	11.0	11.5	11.0	11.0	9.5	12.0	10.0
24	15.5	15.0	14.0	13.0	11.5	10.5	12.0	11.0	12.0	10.5	13.5	11.5
25	16.0	15.0	14.0	13.0	11.5	10.5	12.0	11.0	12.0	11.5	13.5	12.0
26	16.0	15.5	14.0	13.0	11.5	11.0	12.0	11.5	12.5	11.0	12.0	10.5
27	16.0	15.5	13.5	13.0	12.0	11.5	11.5	11.0	13.5	11.5	12.0	10.0
28	16.0	15.5	13.5	12.5	12.0	11.5	11.5	10.0	14.5	12.5	12.5	10.0
29	15.5	15.0	13.5	12.5	12.0	11.5	11.0	10.0	---	---	13.5	11.0
30	15.5	15.0	13.5	12.5	11.5	11.0	10.5	10.0	---	---	14.0	11.5
31	15.5	15.0	---	---	11.5	11.0	10.5	10.0	---	---	14.5	12.5
MONTH	19.0	14.0	15.5	12.5	14.0	10.5	13.0	10.0	14.5	9.0	14.5	10.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	12.5	20.5	17.0	---	---	---	---	27.0	23.5	---	---
2	14.5	12.5	20.0	17.5	---	---	---	---	27.0	24.0	---	---
3	14.0	12.5	18.5	16.5	---	---	---	---	28.5	24.5	---	---
4	15.0	13.0	18.5	15.5	---	---	---	---	27.5	25.5	---	---
5	14.5	13.5	21.0	15.5	---	---	---	---	28.0	24.5	---	---
6	14.0	13.0	---	---	25.5	23.5	---	---	27.0	24.0	---	---
7	14.0	12.5	19.0	18.0	25.5	22.0	---	---	25.5	23.0	---	---
8	13.5	12.5	20.0	17.5	25.5	22.5	---	---	27.0	23.5	---	---
9	14.5	12.0	20.5	17.5	26.0	22.5	---	---	27.5	24.0	---	---
10	15.0	12.5	20.5	18.0	27.0	23.0	---	---	27.0	24.0	---	---
11	16.0	13.5	20.5	18.5	26.0	23.0	---	---	27.5	24.0	---	---
12	17.0	14.5	22.0	19.0	25.5	23.0	---	---	27.0	23.5	---	---
13	18.0	15.0	20.5	20.5	27.0	23.0	---	---	26.5	23.5	---	---
14	17.0	16.0	20.5	20.5	27.0	23.5	---	---	26.5	23.0	---	---
15	17.0	15.0	---	---	24.0	23.0	---	---	26.0	23.0	---	---
16	16.5	15.0	---	---	---	---	26.5	25.0	25.5	22.5	---	---
17	17.0	14.0	---	---	---	---	27.0	24.0	25.0	23.0	---	---
18	17.0	14.0	---	---	---	---	26.5	23.0	23.0	20.0	---	---
19	17.5	14.5	---	---	---	---	26.5	23.0	23.5	20.0	19.5	18.5
20	18.0	15.0	---	---	---	---	27.5	23.5	24.5	21.5	19.0	17.5
21	18.5	16.0	---	---	---	---	28.0	23.5	25.5	22.5	19.5	17.5
22	18.5	16.0	---	---	---	---	28.0	24.0	26.0	22.5	20.0	18.0
23	18.5	16.0	---	---	---	---	28.5	25.0	26.5	19.0	19.5	18.0
24	18.0	16.5	---	---	---	---	28.5	25.0	20.5	19.0	18.5	17.5
25	17.0	15.0	---	---	---	---	27.0	24.5	20.5	19.0	18.0	17.0
26	17.0	14.0	---	---	---	---	26.5	23.0	20.5	18.5	17.5	16.5
27	18.0	15.0	---	---	---	---	28.0	23.5	19.5	19.5	17.0	16.0
28	18.0	15.5	---	---	---	---	27.0	24.0	---	---	17.5	16.0
29	19.0	16.0	---	---	---	---	27.0	24.0	---	---	18.0	16.0
30	19.5	17.0	---	---	---	---	26.5	23.0	---	---	18.0	16.5
31	---	---	---	---	---	---	26.5	23.5	---	---	---	---
MONTH	19.5	12.0	---	---	---	---	---	---	28.5	18.5	---	---

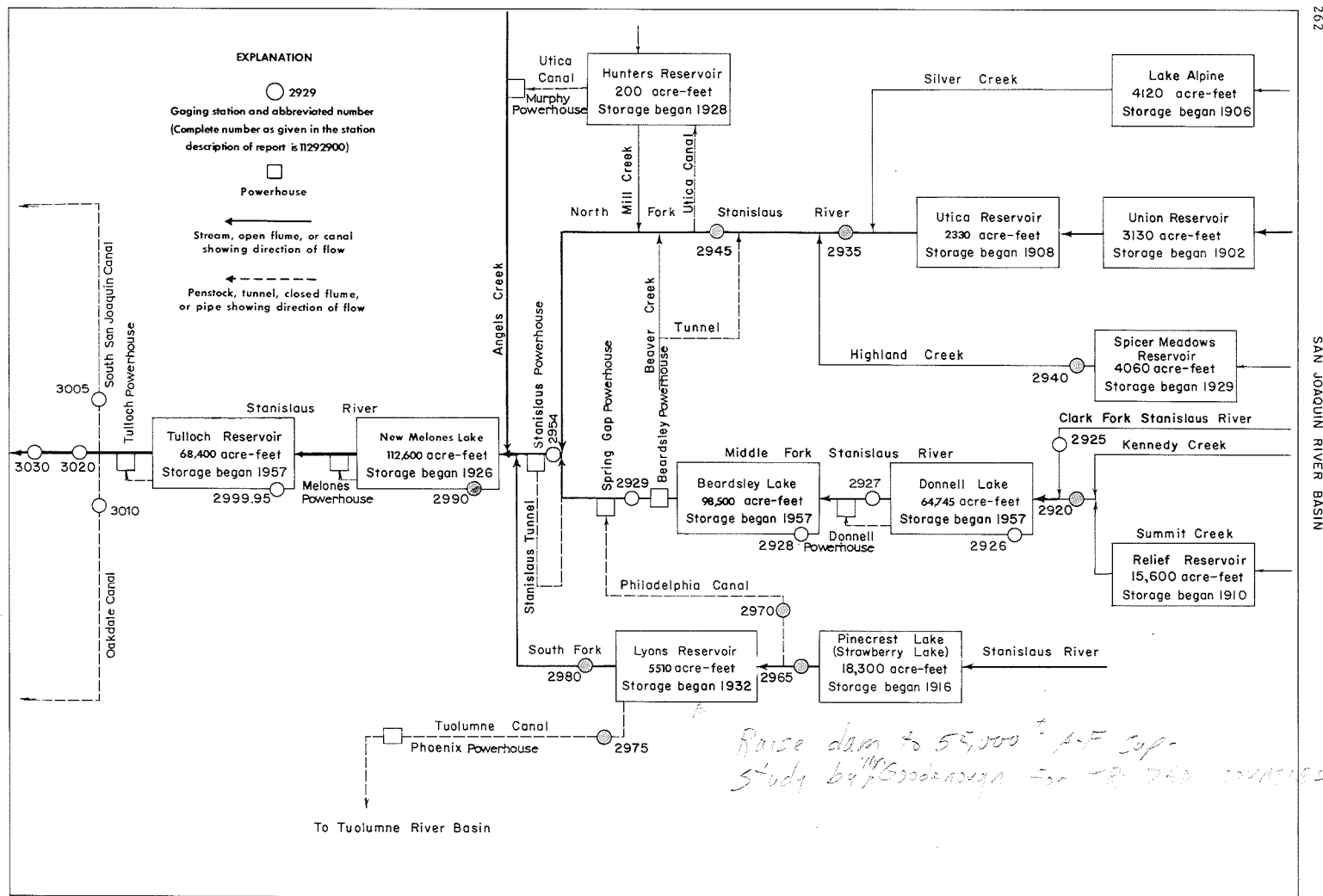


FIGURE 10.--Schematic diagram showing diversions and storage in Stanislaus River basin.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	17	16	14	11	26	31	37	1100	398	110	158
2	38	16	17	15	10	24	24	50	1090	419	109	160
3	55	16	17	16	14	22	22	55	936	405	108	158
4	55	16	18	15	19	25	21	46	887	417	108	187
5	54	16	19	15	24	25	20	41	938	467	107	217
6	53	16	18	16	27	24	23	42	1070	518	106	214
7	53	23	17	16	20	22	21	52	1020	408	103	212
8	63	37	16	14	17	21	19	69	883	412	107	209
9	83	36	16	13	14	21	19	102	789	452	120	209
10	81	36	16	14	10	20	19	140	771	452	118	209
11	94	36	15	14	11	17	19	177	826	465	141	205
12	103	36	15	14	13	16	19	208	881	440	160	200
13	100	47	14	14	13	17	20	246	850	378	159	207
14	99	63	14	14	13	16	22	296	691	329	180	213
15	128	90	15	14	13	15	21	294	784	302	204	209
16	150	92	15	15	12	15	20	277	807	245	200	205
17	70	24	14	16	12	16	19	319	707	264	197	201
18	23	21	14	18	12	19	20	356	511	267	199	198
19	27	20	14	18	13	19	20	370	369	246	217	194
20	26	20	14	19	12	20	22	300	326	229	206	190
21	26	18	14	19	13	19	26	213	346	224	200	185
22	26	18	14	19	14	15	30	185	499	205	195	181
23	26	18	14	20	16	21	30	210	567	193	191	177
24	26	18	14	21	17	24	29	280	533	167	189	173
25	26	17	14	21	18	29	29	338	333	145	188	168
26	24	17	14	18	19	19	25	352	281	145	186	101
27	21	17	14	15	20	18	25	434	335	153	185	57
28	25	15	13	15	24	18	29	727	381	152	156	56
29	21	14	12	15	---	18	32	725	436	143	165	56
30	17	15	13	14	---	20	35	764	367	128	159	55
31	17	---	14	13	---	29	---	899	---	116	156	---
TOTAL	1636	845	464	494	431	630	711	8604	20314	9284	4929	5164
MEAN	52.8	28.2	15.0	15.9	15.4	20.3	23.7	278	677	299	159	172
MAX	150	92	19	21	27	29	35	899	1100	518	217	217
MIN	17	14	12	13	10	15	19	37	281	116	103	55
AC-FT	3250	1680	920	980	855	1250	1410	17070	40290	18410	9780	10240
CAL YR 1974	TOTAL	58046	MEAN 159	MAX	912	MIN 12	AC-FT	115100				
WTR YR 1975	TOTAL	53506	MEAN 147	MAX	1100	MIN 10	AC-FT	106100				

SAN JOAQUIN RIVER BASIN

11292500 CLARK FORK STANISLAUS RIVER NEAR DARDANELLE, CALIF.

LOCATION.--Lat 38°21'50", long 119°52'13", in NE¼NE¼ sec.22, T.6 N., R.19 E., Tuolumne County, Stanislaus National Forest, on right bank 0.5 mi (0.8 km) upstream from mouth, and 2.6 mi (4.2 km) northwest of Dardanelle.

DRAINAGE AREA.--67.5 mi² (175 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 5,507.3 ft (1,678.62 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--25 years, 153 ft³/s (4.333 m³/s), 110,800 acre-ft/yr (137 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,580 ft³/s (44.7 m³/s) June 1 (gage height, 7.68 ft or 2.341 m, from high-water mark in well); minimum daily, 24 ft³/s (0.68 m³/s) Dec. 23.

Period of record: Maximum discharge, 4,350 ft³/s (123 m³/s) Nov. 20, 1950 (gage height, 11.88 ft or 3.621 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurement of maximum flow; minimum, 11 ft³/s (0.31 m³/s) Apr. 3, 1958.

REMARKS.--Records good except those for the winter period, which are fair. No storage or diversion above station. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	39	37	30	34	63	69	106	1230	423	81	42
2	37	37	34	25	33	60	68	134	1130	410	77	42
3	38	36	40	27	46	60	70	163	1250	398	74	41
4	36	37	47	27	80	63	68	131	1030	400	71	40
5	36	36	39	26	77	63	66	117	1070	426	69	38
6	35	36	37	51	73	60	67	120	1160	432	67	37
7	36	38	39	39	76	59	68	144	1080	411	64	37
8	39	37	37	33	75	59	62	200	966	397	62	38
9	37	36	37	27	91	56	66	242	885	383	61	40
10	36	36	36	27	80	56	62	315	852	361	59	51
11	36	36	36	28	64	55	63	388	896	346	59	49
12	35	36	38	29	65	53	63	440	869	322	57	42
13	34	36	37	30	68	56	67	532	844	282	56	42
14	34	36	35	31	70	55	74	680	916	253	54	44
15	33	35	35	33	62	52	70	595	897	226	53	38
16	32	35	37	38	61	52	67	589	856	205	52	38
17	32	34	36	38	57	50	65	786	715	200	51	37
18	32	34	36	40	62	51	66	938	548	190	52	38
19	32	33	36	40	68	53	69	970	468	176	83	37
20	32	33	35	41	81	55	71	684	433	163	72	37
21	32	37	34	42	37	52	83	340	468	151	70	35
22	32	33	33	42	37	52	92	258	519	140	62	34
23	32	36	24	43	39	52	93	402	534	130	56	33
24	32	37	26	45	43	57	93	684	479	121	53	34
25	32	36	28	46	45	93	92	894	392	114	50	33
26	32	35	28	45	47	67	84	998	380	107	48	32
27	33	35	27	42	51	64	84	1030	403	100	47	32
28	44	34	38	35	57	66	96	1020	424	97	46	32
29	38	33	45	36	---	70	104	1040	443	94	45	32
30	38	36	35	33	---	67	113	1100	438	91	43	32
31	41	---	38	33	---	80	---	1170	---	85	43	---
TOTAL	1080	1068	1100	1102	1679	1851	2275	17210	22575	7634	1837	1137
MEAN	34.8	35.6	35.5	35.5	60.0	59.7	75.8	555	753	246	59.3	37.9
MAX	44	39	47	51	91	93	113	1170	1250	432	83	51
MIN	32	33	24	25	33	50	62	106	380	85	43	32
AC-FT	2140	2120	2180	2190	3330	3670	4510	34140	44780	15140	3640	2260
CAL YR 1974	TOTAL	69609	MEAN 191	MAX 1080	MIN 24	AC-FT 138100						
WTR YR 1975	TOTAL	60548	MEAN 166	MAX 1250	MIN 24	AC-FT 120100						

Date	Time	G.H.	Peak discharge (base, 600 ft ³ /s)	Date	Time	G.H.	Discharge
5-14	2100	6.66	1,130	6-6	2045	7.35	1,420
5-18	2130	7.47	1,480	6-11	2130	6.70	1,130
6-1	2030	7.68	1,580	6-14	2115	6.75	1,150
6-3	2015	6.99	1,270	6-22	2215	5.48	652

11292600 DONNELL LAKE NEAR DARDANELLE, CALIF.

LOCATION.--Lat 38°19'46", long 119°57'37" (unsurveyed), T.6 N., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank in hoist house of Donnell Dam on Middle Fork Stanislaus River, 1.2 mi (1.9 km) downstream from Niagara Creek, and 6.9 mi (11.1 km) west of Dardanelle.

DRAINAGE AREA.--230 mi² (596 km²).

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1960, published as Donnell's Reservoir near Dardanelle.

GAGE.--Water-stage recorder. Datum of gage is 4.84 ft (1.475 m) above mean sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

EXTREMES.--Current year: Maximum contents, 64,300 acre-ft (79.3 hm³) July 5, 6, 9-15 (gage height, 4,916.0 ft or 1,498.40 m); minimum, 5,830 acre-ft (7.19 hm³) Mar. 14, Apr. 11 (gage height, 4,740.0 ft or 1,444.75 m).

Period of record: Maximum contents, 64,900 acre-ft (80.0 hm³) May 8, 1963 (gage height, 4,917.3 ft or 1,498.79 m); minimum since reservoir first filled, 4,800 acre-ft (5.92 hm³) Apr. 19, 1965 (gage height, 4,735.3 ft or 1,443.32 m).

REMARKS.--Lake is formed by concrete arch-type dam completed in 1957. Usable capacity, 64,745 acre-ft (79.8 hm³), revised, between gage heights 4,720.0 ft (1,438.66 m), minimum operating head and 4,917.0 ft (1,498.70 m), top of spillway gates. Lake is for power and conservation storage. Water passes through a 7.2-mi (11.6-km) tunnel to a powerplant and down the Middle Fork Stanislaus River to Beardsley Lake (see sta 11292800). Records, including extremes, represent total contents at 2400 hours of which 2,150 acre-ft (2.65 hm³) is below minimum operating head. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,735	4,730	4,790	19,100
4,740	5,830	4,800	22,100
4,750	8,220	4,820	28,400
4,760	10,800	4,850	38,700
4,770	13,400	4,880	49,800
4,780	16,200	4,917.3	64,900

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40000	37600	41600	44600	14400	6430	6550	7410	61600	64200	59900	45900
2	39600	37700	41800	43900	14500	6850	6260	7850	61400	64200	59500	45400
3	39800	37800	42000	42700	14200	6520	6100	8870	61900	64200	59000	44800
4	39300	37900	42300	41600	14000	6040	5850	9430	62100	64200	58400	44300
5	39000	38100	42400	40500	13700	6060	6340	9360	62700	64300	57900	43800
6	39100	38200	42500	39500	13100	6080	6710	9100	63100	64300	57300	43300
7	38800	38300	42600	38400	12500	6200	6310	8770	63400	64200	56700	42900
8	38600	38400	42700	37200	12700	6590	5920	8900	62700	64200	56200	42300
9	38300	38600	42900	36100	13100	6970	5880	9410	62100	64300	55600	41800
10	38100	38700	43000	34900	12600	6480	5920	10500	62200	64300	55200	41500
11	37800	38900	43100	33800	12200	6060	5830	12200	63000	64300	54600	41000
12	37600	39000	43200	32700	11600	5940	6220	14300	63500	64300	54100	40500
13	37800	39200	43300	31500	11000	5900	6620	17000	63700	64300	53700	40400
14	37600	39400	43500	30300	10100	5830	6310	20500	63600	64300	53200	40300
15	37500	39600	43600	29100	10200	6130	6010	23800	63700	64300	52800	39800
16	37300	39900	43700	27900	10200	6450	5970	26900	63500	64200	52400	39300
17	37100	40100	43800	26700	9640	6310	5970	30700	62900	64100	52100	38800
18	36700	40200	43900	25500	8870	6100	5970	35200	62600	64100	51700	38300
19	36300	40300	44000	24200	8140	5970	6400	39800	62100	63900	51500	37800
20	36400	40400	44100	23000	7700	5850	6850	43100	61800	63700	51200	38300
21	36500	40600	44300	21800	6760	5880	6690	44800	61700	63500	50800	38200
22	36600	40700	44300	20600	6920	6170	6590	46200	62000	63300	50500	38000
23	36700	40800	44400	19500	7120	6220	6570	48300	62500	63000	49900	37800
24	36700	41000	44400	18300	6450	6040	6640	51600	62900	62700	49700	37600
25	36800	41100	44600	17200	5850	6400	6690	55700	62400	62400	49200	37300
26	36900	41200	44700	16000	6130	6100	7290	60000	62600	62000	48800	37000
27	37000	41300	44800	15400	6450	6130	7700	61700	63400	61700	48400	37200
28	37200	41400	44900	15000	5970	6060	7480	61300	64200	61500	48000	37300
29	37300	41500	45000	14800	---	6450	7310	61100	64200	61200	47400	37000
30	37300	41600	45100	14400	---	6920	7430	61300	64200	60900	46900	36600
31	37500	---	45000	14100	---	6710	---	62000	---	60400	46400	---
MAX	40000	41600	45100	44600	14500	6970	7700	62000	64200	64300	59900	45900
MIN	36300	37600	41600	14100	5850	5830	5830	7410	61400	60400	46400	36600
(a)	4,846.5	4,858.0	4,867.3	4,772.5	4,740.6	4,743.8	4,746.8	4,910.4	4,915.6	4,906.7	4,871.1	4,844.1
(b)	-2,800	+4,100	+3,400	-30,900	-8,130	+740	+720	+54,570	+2,200	-3,800	-14,000	-9,800

CAL YR 1974 b +7,700
WTR YR 1975 b -3,700

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

11292700 MIDDLE FORK STANISLAUS RIVER AT HELLS HALF ACRE BRIDGE, NEAR PINECREST, CALIF.

LOCATION.--Lat 38°14'49", long 120°01'51", in SW¼NE¼ sec.31, T.5 N., R.18 E., Tuolumne County, on left bank 200 ft (61 m) upstream from Donnell powerhouse, 800 ft (244 m) downstream from Hells Half Acre bridge, 1.1 mi (1.8 km) upstream from Cow Creek, and 4.7 mi (7.6 km) northwest of Pinecrest.

DRAINAGE AREA.--287 mi² (743 km²).

PERIOD OF RECORD.--February 1956 to current year. Prior to October 1965, published as Middle Fork Stanislaus River at Hells Half Acre bridge.

GAGE.--Water-stage recorder. Datum of gage is 3,418.31 ft (1,041.901 m) above mean sea level (river-profile survey). Prior to Aug. 9, 1961, at site 1,600 ft (488 m) upstream at different datum.

AVERAGE DISCHARGE.--19 years, 257 ft³/s (7.278 m³/s), 186,200 acre-ft/yr (230 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,300 ft³/s (150 m³/s) June 1 (gage height, 10.74 ft or 3.274 m); minimum daily, 19 ft³/s (0.54 m³/s) Nov. 4-7.

Period of record: Maximum discharge, 10,200 ft³/s (289 m³/s) Dec. 24, 1964 (gage height, 13.64 ft or 4.158 m in gage well, 14.2 ft or 4.33 m, outside, from floodmarks), from rating curve extended above 5,200 ft³/s (147 m³/s) on basis of slope-area measurement at gage height 12.20 ft (3.719 m); minimum daily, 3.3 ft³/s (0.094 m³/s) Nov. 9, 10, 1957.

Maximum stage known since at least 1905, 23 ft (7.0 m) Dec. 23, 1955, from floodmarks, at present site (discharge, 26,600 ft³/s or 753 m³/s by slope-area measurement).

REMARKS.--Records good. Flow regulated by Relief Reservoir since 1909, capacity, 15,600 acre-ft (19.2 hm³), by Donnell Lake (see sta 11292600), and by diversion around station through Donnell powerhouse. See schematic diagram of Stanislaus River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	39	24	29	35	152	140	304	4990	583	51	48
2	42	21	24	30	40	167	172	351	4500	609	51	48
3	41	20	33	30	38	133	194	417	3660	568	50	48
4	40	19	70	30	39	110	185	369	3490	577	49	46
5	39	19	45	29	36	137	179	314	3450	635	48	46
6	39	19	37	40	36	198	168	307	3650	755	48	46
7	39	19	35	57	39	280	157	348	3840	699	49	46
8	41	21	33	88	44	285	146	442	3530	519	48	46
9	40	24	32	56	86	170	137	515	3130	546	46	46
10	39	24	32	48	98	138	139	599	2250	514	46	51
11	39	23	32	44	70	119	138	657	1030	497	46	48
12	38	23	33	42	62	103	145	739	2340	450	46	45
13	38	23	36	41	72	98	158	874	2350	323	46	44
14	38	23	34	40	76	101	178	964	2490	176	45	42
15	38	23	33	39	61	102	173	886	2330	116	44	41
16	38	23	33	39	57	103	162	847	2000	60	44	40
17	38	23	33	38	52	95	155	939	1020	56	44	40
18	38	24	32	39	50	97	151	1010	779	55	49	40
19	38	23	32	39	57	100	156	1020	1150	53	65	40
20	38	23	32	39	71	104	159	833	865	52	58	41
21	38	31	31	39	59	110	189	528	837	51	55	40
22	38	33	31	39	55	116	215	523	833	50	53	39
23	38	27	31	39	56	110	233	606	860	48	52	40
24	38	26	30	39	61	97	272	706	907	47	52	40
25	38	25	30	40	68	505	339	779	892	45	51	41
26	38	25	30	40	83	280	256	790	430	44	50	39
27	38	25	31	37	116	198	235	1950	165	42	48	38
28	52	24	34	33	138	165	257	3560	153	42	49	38
29	42	24	31	35	---	159	285	3420	747	43	48	39
30	39	24	30	33	---	125	312	3400	694	57	48	48
31	42	---	29	33	---	137	---	3610	---	53	48	---
TOTAL	1222	720	1033	1244	1755	4794	5785	32607	59362	8365	1527	1294
MEAN	39.4	24.0	33.3	40.1	62.7	155	193	1052	1979	270	49.3	43.1
MAX	52	39	70	88	138	505	339	3610	4990	755	65	51
MIN	38	19	24	29	35	95	137	304	153	42	44	38
AC-FT	2420	1430	2050	2470	3480	9510	11470	64680	117700	16590	3030	2570
CAL YR 1974 TOTAL	118737		MEAN 325	MAX 3420	MIN 19	AC-FT 235500						
WTR YR 1975 TOTAL	119708		MEAN 328	MAX 4990	MIN 19	AC-FT 237400						

NOTE.--No gage-height record Feb. 28 to Apr. 1.

11292700 MIDDLE FORK STANISLAUS RIVER AT HELLS HALF ACRE BRIDGE, NEAR PINECREST, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1965 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 22.0°C July 27; minimum, 1.0°C Jan. 31, Feb. 1, 4-6.

Period of record:

Water temperatures: Maximum (1966 to current year), 22.5°C Aug. 10, 1972; minimum, freezing point on many days during winter period most years.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	11.5	11.0	9.5	6.5	4.5	3.0	2.0	2.5	1.0	4.5	4.0
2	14.5	12.5	11.0	8.0	6.0	5.0	3.5	2.0	3.0	2.0	5.0	4.0
3	17.5	14.0	10.5	8.0	7.0	6.0	3.0	2.0	2.5	2.0	4.5	4.0
4	16.0	14.5	10.5	7.5	7.0	6.5	4.5	2.5	2.5	1.0	4.5	4.0
5	16.0	13.0	10.5	7.5	7.0	5.5	4.0	3.0	2.5	1.0	5.0	4.0
6	16.0	13.0	10.0	7.0	7.0	5.0	5.0	4.0	3.5	1.0	5.0	4.0
7	15.0	13.5	8.5	8.0	7.0	5.0	---	---	4.0	2.0	5.0	4.0
8	15.5	13.5	10.0	7.5	6.5	4.5	---	---	5.0	2.0	5.0	4.0
9	15.5	13.5	9.5	7.5	6.5	4.5	---	---	4.0	2.0	5.0	4.0
10	15.5	12.5	9.5	7.0	6.0	4.0	---	---	3.5	2.0	5.0	4.0
11	15.0	12.5	10.0	7.5	6.5	5.0	---	---	4.0	2.0	5.5	4.0
12	15.5	12.0	10.0	7.5	6.0	5.0	---	---	4.0	2.0	5.0	4.5
13	15.0	12.0	10.5	7.5	6.0	5.0	---	---	4.0	2.5	5.0	4.5
14	15.0	11.5	10.0	8.0	6.0	4.5	5.0	2.0	3.5	2.0	5.0	4.0
15	15.5	12.0	10.0	7.5	6.0	4.0	5.5	2.0	3.5	1.5	5.0	3.5
16	15.0	12.0	9.5	7.5	6.5	4.5	5.5	2.0	3.5	2.0	5.0	4.0
17	14.5	12.0	9.0	7.0	6.0	4.0	6.0	2.5	3.5	1.5	5.0	3.5
18	15.0	12.0	9.5	7.5	5.5	3.5	5.5	3.0	4.0	1.5	5.0	4.0
19	15.0	12.5	8.5	6.5	5.5	3.5	6.0	3.0	3.5	2.5	5.0	4.5
20	14.5	12.0	8.5	6.5	5.5	4.0	6.5	3.0	4.0	2.5	5.5	4.5
21	14.5	11.5	8.0	7.0	5.0	4.0	6.5	3.0	3.5	1.5	5.0	4.5
22	14.0	11.0	8.5	7.0	5.0	3.5	6.5	3.0	4.0	1.5	5.0	3.5
23	13.0	10.5	8.5	6.0	3.5	3.0	6.5	3.0	4.5	2.0	5.0	3.5
24	13.0	10.0	8.5	6.0	3.5	2.5	6.5	3.0	4.0	3.0	5.0	4.0
25	13.0	10.5	8.0	6.5	3.5	2.5	6.5	3.0	4.0	3.5	5.0	3.0
26	13.0	10.0	7.5	5.5	4.0	2.5	5.5	3.0	4.0	3.5	4.0	2.5
27	12.5	10.5	7.5	5.5	4.0	3.5	4.0	2.0	4.5	3.5	3.5	2.5
28	11.5	11.0	7.5	5.5	4.0	3.5	2.5	1.5	4.5	4.0	3.5	2.5
29	11.0	10.0	7.0	5.0	3.5	3.0	3.0	1.5	---	---	4.0	2.5
30	10.5	10.0	7.0	5.0	3.0	2.5	2.5	1.5	---	---	4.5	3.5
31	10.5	10.0	---	---	2.5	1.5	2.0	1.0	---	---	4.5	3.5
MONTH	17.5	10.0	11.0	5.0	7.0	1.5	---	---	5.0	1.0	5.5	2.5

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.0	3.0	5.5	4.5	9.5	7.5	14.5	10.5	18.0	13.0	16.0	12.0
2	4.0	3.0	6.0	4.5	9.5	7.5	14.5	10.5	18.5	13.5	16.0	12.0
3	4.0	3.5	5.5	4.5	10.5	7.5	14.5	11.0	18.5	14.0	16.5	12.5
4	3.5	3.0	4.5	3.5	11.0	8.0	15.0	11.0	18.5	14.0	17.0	12.5
5	3.5	2.0	4.5	3.0	10.5	8.0	15.5	11.5	18.5	14.0	17.0	12.5
6	3.0	2.0	5.0	4.0	10.5	7.5	16.0	12.0	18.5	14.5	17.0	13.5
7	3.0	2.5	6.0	4.5	10.0	7.5	16.5	12.5	18.0	13.0	17.5	14.0
8	3.5	2.5	6.0	4.5	11.5	8.0	17.0	13.0	18.0	13.5	17.0	14.0
9	3.5	3.0	6.0	5.0	11.0	8.5	16.5	14.0	18.0	13.5	18.0	14.5
10	3.5	2.5	6.0	5.0	11.5	8.5	17.5	14.0	15.5	14.5	16.5	14.5
11	4.0	3.0	7.0	5.5	11.5	8.5	18.0	14.0	17.5	13.5	17.0	13.0
12	4.5	3.5	7.0	5.5	12.0	9.0	18.0	14.0	18.0	13.5	16.0	13.0
13	4.5	3.5	7.0	6.0	12.0	10.0	18.0	14.0	18.0	14.0	17.0	13.0
14	4.5	4.0	7.0	5.5	13.0	10.0	18.0	14.5	17.5	14.0	17.5	13.5
15	4.0	3.5	6.5	4.5	12.5	9.0	16.0	15.0	17.0	13.5	17.0	13.5
16	3.5	3.0	7.0	4.5	12.5	9.0	19.0	14.5	17.5	13.5	17.0	13.5
17	4.0	2.5	7.0	5.0	12.0	9.0	19.5	15.5	17.5	13.0	16.5	14.5
18	4.5	3.0	7.0	5.5	11.5	9.0	20.0	16.0	14.5	12.5	18.5	14.5
19	5.0	4.0	7.0	5.5	11.0	9.0	20.0	15.5	14.5	12.0	18.0	15.0
20	5.5	4.0	6.5	5.0	12.0	10.0	20.5	15.5	15.0	11.5	17.5	14.5
21	5.5	4.5	6.0	4.5	13.0	9.5	20.5	15.5	14.5	11.5	17.5	14.5
22	5.5	4.5	7.5	6.0	14.0	10.0	20.0	15.5	16.0	11.5	17.5	14.5
23	5.5	4.5	8.5	7.0	13.5	9.0	20.5	15.5	16.0	12.0	17.5	14.0
24	5.0	4.5	10.0	8.0	10.0	9.0	20.5	15.5	17.0	12.5	17.0	13.5
25	4.5	3.5	10.5	9.0	12.0	8.5	21.0	16.0	17.0	12.5	17.0	13.5
26	3.5	2.5	10.5	9.5	13.0	10.0	21.5	16.5	17.0	13.0	17.0	13.5
27	4.5	3.0	11.0	8.0	14.0	10.5	22.0	17.0	17.0	12.5	16.5	13.0
28	5.0	4.0	10.5	8.5	14.5	11.0	21.0	16.5	16.5	12.5	16.0	13.0
29	5.5	4.0	10.0	7.5	14.5	10.5	20.5	16.0	16.5	12.0	16.0	13.0
30	5.0	4.5	9.5	7.0	14.5	10.5	19.0	15.0	16.5	12.0	15.5	12.5
31	---	---	10.0	7.0	---	---	17.5	13.0	16.0	12.0	---	---
MONTH	5.5	2.0	11.0	3.0	14.5	7.5	22.0	10.5	18.5	11.5	18.5	12.0

SAN JOAQUIN RIVER BASIN

11292800 BEARDSLEY LAKE NEAR STRAWBERRY, CALIF.

LOCATION.--Lat 38°12'17", long 120°04'31", in SE¼NW¼ sec.14, T.4 N., R.17 E., Tuolumne County, Stanislaus National Forest, in hoist house of Beardsley Dam on Middle Fork Stanislaus River, 2.4 mi (3.9 km) upstream from Spring Gap powerhouse, 3.9 mi (6.3 km) west of Strawberry, and 4.7 mi (7.6 km) west of Pinecrest.

DRAINAGE AREA.--309 mi² (800 km²).

PERIOD OF RECORD.--June 1957 to current year. Prior to October 1960, published as Lake Hartley near Strawberry.

GAGE.--Water-stage recorder. Datum of gage is 7.84 ft (2.390 m) above mean sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

EXTREMES.-- Current year: Maximum contents, 97,900 acre-ft (121 hm³) July 15 (gage height, 3,397.1 ft or 1,035.44 m); minimum, 25,300 acre-ft (31.2 hm³) Mar. 23 (gage height, 3,273.4 ft or 997.73 m).
Period of record: Maximum contents, 98,700 acre-ft (122 hm³) June 27, 1957 (gage height, 3,398.2 ft or 1,035.77 m); minimum since reservoir first filled, 20,000 acre-ft (24.7 hm³) Jan. 27, 28, 1962 (gage height, 3,261.3 ft or 994.04 m).

REMARKS.--Reservoir is formed by rockfill, earth-core dam completed in 1957. Capacity, 98,500 acre-ft (121 hm³) between gage heights 3,145.0 ft (958.60 m), tunnel invert and 3,398.0 ft (1,035.71 m), top of spillway gates. No dead storage. Reservoir is used for power and conservation storage. Water passes through Beardsley power-plant and down Middle Fork Stanislaus River to Melones Reservoir (see sta 11299000). Records, including extremes, represent contents at 2400 hours. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,261	19,900	3,350	66,400
3,290	33,100	3,370	79,200
3,320	48,800	3,398	98,500

 CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
 INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85400	66100	41200	26300	37400	29800	29000	32200	81300	97700	96200	96400
2	85100	65200	40300	27000	36700	29300	29400	32500	82400	97700	96100	96300
3	84200	64300	39500	28100	36300	29400	29600	32700	83600	97700	96200	96400
4	83900	64000	38700	29300	35800	29700	29900	33000	84700	97800	96200	96400
5	83600	64000	37700	30500	35400	29700	29600	33500	85900	97700	96100	96600
6	82600	64000	36900	31400	35100	29500	29200	34200	87200	97800	96400	96700
7	82200	64100	35900	31900	35000	29400	29400	35300	88500	97500	96200	96800
8	81800	63700	34900	32400	34100	29100	29700	36600	89100	97700	96200	97000
9	81300	62600	34000	32800	33600	28600	29700	38100	89200	97700	96300	97200
10	80900	61700	33000	33100	33500	28900	29500	39700	88800	97700	96200	97200
11	80600	60700	32100	33500	33400	28900	29500	41600	88800	97700	96500	97400
12	80100	59700	31200	33900	33300	28600	29100	43500	89400	97800	96500	97400
13	79200	58800	30200	34300	33500	28400	28800	45700	89900	97600	96600	97200
14	78800	57900	29200	34800	33900	28100	29100	48100	90700	97700	96600	97000
15	78400	56800	28200	35200	33000	27400	29500	50500	91400	97900	96700	97000
16	78000	55900	27800	35700	32300	26700	29500	52700	92000	97800	96800	97200
17	77600	54900	27700	36100	32300	26400	29500	55100	92500	97800	96700	97200
18	77200	54000	27500	36600	32500	26200	29400	57600	92700	97700	96900	97300
19	76800	53000	27400	37000	32700	26000	29100	60100	93000	97600	97000	97400
20	75900	52000	27300	37500	32600	25900	28700	62000	93200	97700	97000	96500
21	75100	51200	27100	37900	32900	25900	29100	63400	93400	97700	97100	96200
22	74300	50100	27000	38400	32100	25500	29600	64800	93500	97800	96900	95900
23	73400	49100	26800	38900	31400	25300	30000	66400	93700	97800	96900	95700
24	72600	48100	26700	39300	31500	25700	30400	68100	93900	97700	96700	95400
25	71700	47200	26600	39700	31600	27200	30900	69900	94200	97700	96500	95200
26	70800	46100	26400	40200	30900	28100	30500	71600	95200	97600	96400	94800
27	70100	45200	26300	40200	30300	28500	30200	75500	95600	97600	96400	94000
28	69300	44200	26200	39700	30400	28700	30700	81200	96000	97100	96300	93200
29	68500	43200	26000	39200	---	28500	31300	80100	97400	96800	96200	92700
30	67700	42200	25800	38800	---	28200	31600	79800	97700	96600	96200	92300
31	66900	---	26000	38200	---	28700	---	80800	---	96400	96300	---
MAX	85400	66100	41200	40200	37400	29800	31600	81200	97700	97900	97100	97400
MIN	66900	42200	25800	26300	30300	25300	28700	32200	81300	96400	96100	92300
(a)	3,350.9	3,307.9	3,274.8	3,300.2	3,284.4	3,280.7	3,286.9	3,372.5	3,396.8	3,395.0	3,394.9	3,389.3
(b)	-18,900	-24,700	-16,200	+12,200	-7,800	-1,700	+2,900	+49,200	+16,900	-1,300	-100	-4,000

CAL YR 1974 b -39,600

WTR YR 1975 b +6,500

a Gage height, in feet, at end of month.

b Change in contents, in acre-feet.

LOCATION.--Lat 38°11'36", long 120°05'53", in NW¼NW¼ sec.22, T.4 N., R.17 E., Tuolumne County, Stanislaus National Forest, on right bank 0.5 mi (0.8 km) downstream from Beardsley afterbay dam, 1.5 mi (2.4 km) downstream from Beardsley Dam, and 5.7 mi (9.2 km) west of Pinecrest.

Period of record: Maximum discharge, 6,630 ft³/s (188 m³/s) May 24, 1969 (gage height, 11.07 ft or 3.374 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Oct. 10, 11, 1958.

REVISIONS.--WSP 1930: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	479	476	504	99	500	432	454	543	5490	1220	616	476
2	481	473	507	101	466	430	443	546	4680	1260	613	479
3	487	476	511	104	498	431	444	547	3470	1190	606	469
4	489	201	512	102	496	433	443	551	3510	1180	540	464
5	485	35	511	100	492	433	442	554	3440	1310	475	465
6	484	32	510	188	498	433	440	554	3440	1330	470	463
7	481	42	510	499	497	433	443	554	3700	1470	465	462
8	482	116	510	515	494	433	443	560	3840	1090	460	443
9	483	496	508	519	496	431	381	564	3680	1180	459	455
10	479	517	504	519	500	415	440	552	3400	1170	461	457
11	481	524	504	519	499	444	433	570	2810	1100	460	466
12	483	498	504	509	489	480	433	577	2650	1060	460	485
13	479	487	504	500	480	463	433	587	2710	1070	459	457
14	476	487	502	500	482	452	432	596	2680	803	463	465
15	479	485	491	500	482	472	427	591	2560	754	465	469
16	481	485	266	500	482	485	427	574	2620	763	461	476
17	481	493	106	500	482	483	427	567	2620	743	461	465
18	479	495	101	500	478	486	427	572	1920	720	463	476
19	476	496	100	500	464	490	426	627	1580	690	493	468
20	477	505	100	500	475	421	424	633	1400	649	513	462
21	478	503	100	500	472	385	423	637	1400	648	533	461
22	475	511	100	500	471	385	431	643	1400	643	541	458
23	473	508	100	500	469	355	430	640	1410	630	545	461
24	477	508	100	500	468	325	436	640	1410	606	545	461
25	479	508	100	500	469	386	537	644	1270	592	535	458
26	478	508	100	500	471	383	538	652	769	591	531	458
27	477	504	100	500	453	385	538	661	633	579	527	455
28	477	507	100	500	440	383	538	996	634	582	517	460
29	478	509	100	500	---	382	538	4720	629	591	511	462
30	480	502	100	500	---	405	540	4300	1230	599	518	461
31	477	---	102	500	---	457	---	3750	---	605	476	---
TOTAL	14871	12887	9367	13274	13463	13211	13611	29702	72985	27418	15642	13917
MEAN	480	430	302	428	481	426	454	958	2433	884	505	464
MAX	489	524	512	519	500	490	540	4720	5490	1470	616	485
MIN	473	32	100	99	440	325	381	543	629	579	459	443
AC-FT	29500	25560	18580	26330	26700	26200	27000	58910	144800	54380	31030	27600
WTR YR 1974	TOTAL	297729	MEAN 816	MAX	3610	MIN 32	AC-FT	590500				

SAN JOAQUIN RIVER BASIN

11293500 NORTH FORK STANISLAUS RIVER BELOW SILVER CREEK, CALIF.

LOCATION.--Lat 38°26'22", long 120°00'53", in SE¼ sec.20, T.7 N., R.18 E., Alpine County, Stanislaus National Forest, on right bank 100 ft (30 m) downstream from Silver Creek, and 5.6 mi (9.0 km) northeast of Big Meadows.

DRAINAGE AREA.--27.8 mi² (72.0 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 6,677.3 ft (2,035.24 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--23 years, 79.5 ft³/s (2.251 m³/s), 57,600 acre-ft/yr (71.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,600 ft³/s (45.3 m³/s) May 31 (gage height, 8.17 ft or 2.490 m), from rating curve extended above 620 ft³/s (17.6 m³/s); minimum daily, 3.9 ft³/s (0.11 m³/s) Aug. 9.

Period of record: Maximum discharge, 2,780 ft³/s (78.7 m³/s) Dec. 24, 1964 (gage height, 11.16 ft or 3.402 m, from floodmarks), from rating curve extended above 500 ft³/s (14.2 m³/s); minimum daily, 0.3 ft³/s (0.008 m³/s) Oct. 10, 1958.

Flood of Nov. 20, 1950, reached a stage of 11.17 ft (3.405 m), from Pacific Gas and Electric Co. recorder chart, (discharge, 2,790 ft³/s or 79.0 m³/s).

REMARKS.--Flow regulated by Lake Alpine, Union, and Utica Reservoirs, combined capacity, 9,580 acre-ft (11.8 hm³). No diversion above station. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: 1954(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	40	14	12	7.9	27	27	33	1060	116	5.7	4.7
2	26	45	13	12	11	26	21	62	832	106	5.3	7.7
3	26	45	14	12	13	24	20	82	793	97	5.1	19
4	26	38	15	12	12	26	19	190	773	89	4.7	19
5	26	52	15	12	12	25	16	78	824	86	4.3	19
6	26	51	15	13	9.9	20	15	76	870	84	4.2	19
7	27	50	15	14	9.2	16	14	116	693	78	4.1	19
8	29	41	15	14	13	14	13	222	572	65	4.0	19
9	31	28	14	14	22	13	13	282	517	58	3.9	22
10	38	28	14	14	17	12	13	345	493	52	4.5	27
11	39	25	14	14	13	12	13	418	525	46	4.4	26
12	40	28	15	14	11	11	14	462	471	40	4.3	26
13	40	27	15	15	11	11	18	574	428	34	4.2	26
14	41	32	15	15	10	12	25	676	466	27	4.3	25
15	42	42	16	13	9.8	11	22	588	417	22	4.3	34
16	42	41	18	12	9.4	11	17	546	372	22	4.4	45
17	41	41	16	12	9.3	11	15	677	304	22	4.5	45
18	38	40	14	13	9.0	10	15	738	234	21	5.6	45
19	38	32	14	15	9.2	13	17	679	178	19	7.1	48
20	38	18	13	15	9.7	15	19	528	171	17	5.1	52
21	37	11	14	15	9.3	14	31	259	190	16	4.8	52
22	37	11	13	15	9.1	14	39	294	210	14	4.8	52
23	37	11	13	16	9.8	13	35	520	212	12	4.9	52
24	37	12	12	16	14	12	27	765	205	11	5.0	52
25	37	13	12	19	16	40	23	828	134	10	5.0	52
26	37	15	12	17	17	38	19	843	137	8.9	5.1	52
27	36	15	12	11	18	28	19	799	144	8.0	5.1	52
28	38	14	12	10	22	19	29	784	146	7.3	4.8	52
29	37	14	12	9.0	---	16	35	820	147	6.8	5.0	51
30	37	14	12	8.0	---	17	41	826	134	6.3	5.0	51
31	37	---	12	7.4	---	27	---	982	---	5.9	4.9	---
TOTAL	1084	874	430	410.4	343.6	558	644	15092	12652	1207.2	148.4	1065.4
MEAN	35.0	29.1	13.9	13.2	12.3	18.0	21.5	487	422	38.9	4.79	35.5
MAX	42	52	18	19	22	40	41	982	1060	116	7.1	52
MIN	23	11	12	7.4	7.9	10	13	33	134	5.9	3.9	4.7
AC-FT	2150	1730	853	814	682	1110	1280	29930	25100	2390	294	2110
CAL YR 1974 TOTAL	38454.5		MEAN 105		MAX 776	MIN 7.9	AC-FT 76270					
WTR YR 1975 TOTAL	34509.0		MEAN 94.5		MAX 1060	MIN 3.9	AC-FT 68450					

Date	Time	G.H.	Peak discharge (base, 300 ft ³ /s)	Date	Time	G.H.	Discharge
5-4	0145	6.63	551	5-24	2115	7.71	1,300
5-10	2300	6.47	479	5-31	2130	8.17	1,600
5-14	2115	7.34	982	6-5	2200	7.81	1,380
5-18	2145	7.48	1,090	6-11	2245	7.01	756

11294000 HIGHLAND CREEK BELOW SPICER MEADOWS RESERVOIR, CALIF.

LOCATION.--Lat 38°23'34", long 119°59'50", in SW¼ sec.3, T.6 N., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 500 ft (152 m) downstream from Spicer Meadows Reservoir dam, 5.8 mi (9.3 km) upstream from mouth, and 7 mi (11 km) east of Big Meadow.

DRAINAGE AREA.--42.4 mi² (109.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 6,374.8 ft (1,943.04 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--23 years, 125 ft³/s (3,540 m³/s), 90,560 acre-ft/yr (112 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,230 ft³/s (63.2 m³/s) June 1 (gage height, 7.75 ft or 2.362 m); minimum daily, 0.03 ft³/s (0.001 m³/s) Oct. 3.

Period of record: Maximum discharge, 9,860 ft³/s (279 m³/s) Jan. 31, 1963 (gage height, 11.88 ft or 3.621 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s); no flow Sept. 28 to Dec. 1, Dec. 4-6, 1964, Sept. 17, Oct. 4, 21-24, 1972.

Flood of Nov. 20, 1950, reached a stage of 11.50 ft (3.505 m) from Pacific Gas and Electric Co. recorder chart (discharge, 8,800 ft³/s or 249 m³/s).

REMARKS.--Flow regulated by Spicer Meadows Reservoir 500 ft (152 m) upstream, capacity, 4,060 acre-ft (5.01 hm³). See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1930: 1953.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	2.3	2.2	2.9	13	14	84	125	1370	242	33	47
2	1.8	2.3	2.3	2.9	13	15	89	194	1120	225	33	46
3	.03	1.6	2.3	2.9	13	29	68	234	1020	213	33	46
4	.90	1.7	2.1	3.0	13	68	65	143	996	202	32	45
5	.37	1.8	1.8	3.0	13	77	68	112	1060	200	31	44
6	.09	1.8	1.9	3.0	13	74	62	123	1000	200	31	43
7	1.7	1.9	1.8	3.0	13	64	51	192	874	189	31	42
8	4.6	14	1.4	3.0	13	54	45	312	738	169	34	41
9	2.9	26	1.5	3.0	13	50	43	396	668	159	40	40
10	1.5	25	1.2	3.0	13	44	41	500	632	142	40	38
11	1.4	24	1.3	3.0	13	39	40	595	668	131	39	37
12	1.4	23	1.4	3.0	13	33	43	667	623	123	39	32
13	1.2	22	1.5	3.0	13	33	54	810	582	110	38	19
14	1.5	14	1.5	3.0	13	39	72	970	623	92	38	19
15	2.6	.95	1.5	2.7	13	37	63	854	573	84	38	15
16	2.6	.82	1.6	2.7	13	30	53	822	527	73	40	1.4
17	2.6	.84	1.6	2.7	13	41	46	1000	431	68	39	1.7
18	2.6	1.5	1.6	2.7	13	29	47	1100	336	71	39	1.7
19	2.6	2.6	1.7	2.8	13	34	54	1040	270	60	39	1.9
20	2.6	2.0	1.7	2.8	13	36	62	730	259	55	39	1.9
21	2.4	6.3	1.4	2.9	13	44	96	401	273	47	38	2.0
22	2.3	12	1.5	3.0	13	42	115	396	285	43	38	2.0
23	2.3	11	1.6	3.1	13	48	115	630	299	39	38	2.0
24	2.2	11	1.6	3.1	13	36	115	889	297	34	38	2.0
25	2.3	11	1.7	3.1	13	38	108	992	213	32	38	1.1
26	2.3	11	1.7	3.1	13	84	78	1030	217	29	38	.83
27	2.3	7.6	1.8	5.6	14	113	72	993	231	27	37	6.0
28	2.4	2.2	1.8	13	14	64	100	956	239	30	37	6.0
29	2.3	2.2	2.9	13	---	54	126	983	248	34	41	5.9
30	2.3	2.1	2.9	13	---	44	146	994	261	33	48	5.9
31	2.3	---	2.9	13	---	56	---	1200	---	33	47	---
TOTAL	63.49	246.51	55.7	134.0	366	1463	2221	20383	16933	3189	1164	596.33
MEAN	2.05	8.22	1.80	4.32	13.1	47.2	74.0	658	564	103	37.5	19.9
MAX	4.6	26	2.9	13	14	113	146	1200	1370	242	48	47
MIN	.03	.82	1.2	2.7	13	14	40	112	213	27	31	.83
AC-FT	126	489	110	266	726	2900	4410	40430	33590	6330	2310	1180
CAL YR 1974 TOTAL	54859.51			MEAN 150	MAX 1000	MIN .03	AC-FT 108800					
WTR YR 1975 TOTAL	46815.03			MEAN 128	MAX 1370	MIN .03	AC-FT 92860					

Peak discharge (base, 500 ft ³ /s)						
Date	Time	G.H.	Discharge	Date	Time	G.H.
5-14	2130	7.05	1,610	6-5	2145	7.15
5-18	2115	7.28	1,800	6-11	2200	6.07
5-26	2145	7.04	1,600	6-14	2230	5.88
6-1	2100	7.75	2,230			

11294500 NORTH FORK STANISLAUS RIVER NEAR AVERY, CALIF.

LOCATION.--Lat 38°14'45", long 120°17'20", in SW¼NE¼ sec.35, T.5 N., R.15 E., Calaveras County, Stanislaus National Forest, on right bank 700 ft (213 m) upstream from intake of Utica Canal, 3.3 mi (5.3 km) upstream from Beaver Creek, and 5.1 mi (8.2 km) northeast of Avery.

DRAINAGE AREA.--163 mi² (422 km²).

PERIOD OF RECORD.--July 1914 to September 1925, November 1928 to current year. Yearly discharge only for some years, published in WSP 1515-A.

GAGE.--Water-stage recorder. Datum of gage is 3,388.3 ft (1,032.75 m) above mean sea level (river-profile survey). Prior to September 1922, nonrecording gage at same site at datum 0.05 ft (0.015 m) lower.

AVERAGE DISCHARGE.--58 years, 421 ft³/s (11.92 m³/s), 305,000 acre-ft/yr (376 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,990 ft³/s (170 m³/s) June 1 (gage height, 8.55 ft or 2.606 m); minimum daily, 23 ft³/s (0.65 m³/s) Oct. 1.

Period of record: Maximum discharge, 36,000 ft³/s (1,020 m³/s) Jan. 31, 1963 (gage height, 15.00 ft or 4.572 m, from floodmarks), from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of slope-area measurement at gage height 13.8 ft (4.21 m); minimum daily, 5.5 ft³/s (0.16 m³/s) Dec. 6, 7, 1929.

REMARKS.--Flow regulated at low and medium stages by Lake Alpine, Spicer Meadows, Union and Utica Reservoirs, combined capacity, 13,600 acre-ft (16.8 hm³). Diversion of a maximum of 10 ft³/s (0.28 m³/s) during summer from Beaver Creek into river above station. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1938(M). WSP 1515: 1915(M), 1932(M), 1936(M), 1938, 1940(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	57	30	39	78	325	446	654	4120	518	65	67
2	25	53	30	39	79	304	394	845	3450	466	63	66
3	31	55	70	38	76	341	402	1060	3070	438	61	65
4	31	54	239	39	84	384	366	885	3030	408	60	75
5	32	57	92	39	77	392	352	666	3100	390	58	74
6	28	59	66	115	79	409	314	622	3240	381	55	73
7	28	60	56	164	85	412	283	815	2830	374	54	71
8	30	66	52	197	105	403	270	1220	2400	343	54	70
9	35	67	48	105	331	335	253	1600	2170	314	57	71
10	38	74	48	86	287	286	263	1900	2060	289	62	75
11	43	72	45	78	188	258	260	2180	2070	263	62	124
12	43	68	46	74	163	236	271	2360	2030	242	60	89
13	44	68	73	79	212	247	313	2780	1800	218	59	69
14	44	67	63	83	192	247	386	3220	1870	191	59	57
15	45	67	54	82	160	235	364	3010	1770	171	58	55
16	46	56	55	77	155	246	321	2730	1600	165	58	61
17	46	50	57	75	136	212	283	3280	1400	152	59	61
18	45	50	50	79	131	213	277	3690	1110	144	68	60
19	42	50	46	84	152	245	292	3580	903	140	108	59
20	42	43	44	85	199	299	328	2770	815	124	87	63
21	42	48	42	84	154	285	449	1640	816	114	93	66
22	42	65	43	85	143	265	559	1550	858	104	72	65
23	42	53	31	84	147	235	579	2200	887	97	70	65
24	42	48	34	84	169	259	598	2960	900	87	65	64
25	42	47	42	91	195	1140	768	3280	670	81	63	64
26	42	47	41	96	213	668	503	3360	618	75	61	63
27	42	48	38	83	230	470	436	3260	603	69	60	62
28	85	45	42	63	280	385	514	3190	598	64	59	65
29	65	36	35	88	---	348	623	3260	602	66	58	67
30	50	31	37	71	---	401	747	3250	575	69	64	68
31	55	---	33	76	---	520	---	3710	---	66	68	---
TOTAL	1290	1661	1682	2562	4500	11005	12214	71527	51965	6623	2000	2054
MEAN	41.6	55.4	54.3	82.6	161	355	407	2307	1732	214	64.5	68.5
MAX	85	74	239	197	331	1140	768	3710	4120	518	108	124
MIN	23	31	30	38	76	212	253	622	575	64	54	55
AC-FT	2560	3290	3340	5080	8930	21830	24230	141900	103100	13140	3970	4070

CAL YR 1974 TOTAL 191954 MEAN 526 MAX 3470 MIN 21 AC-FT 380700
WTR YR 1975 TOTAL 169083 MEAN 463 MAX 4120 MIN 23 AC-FT 335400

Peak discharge (base, 2,000 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-14	2330	8.02	4,830	6-5	2330	7.80	4,430
5-18	2215	8.33	5,440	6-12	0115	6.51	2,540
5-26	2230	7.97	4,740	6-15	0130	6.19	2,180
6-1	2200	8.55	5,990				

11295400 STANISLAUS RIVER NEAR HATHAWAY PINES, CALIF.

LOCATION.--Lat 38°08'29", long 120°22'19", in NW¼SW¼ sec.6, T.3 N., R.15 E., Calaveras County, on right bank 1,000 ft (300 m) upstream from Stanislaus powerplant, and 3.6 mi (5.8 km) south of Hathaway Pines.

DRAINAGE AREA.--629 mi² (1,629 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,030.00 ft (313.944 m) above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE (River only).--8 years, 889 ft³/s (25.18 m³/s), 644,100 acre-ft/yr (794 hm³/yr).
(Combined river and powerplant).--8 years, 1,398 ft³/s (39.59 m³/s), 1,013,000 acre-ft/yr (1.25 km³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 10,600 ft³/s (300 m³/s) June 2 (gage height, 15.59 ft or 4.752 m); minimum daily, 27 ft³/s (0.76 m³/s) Dec. 2.
Period of record: Maximum discharge, 17,300 ft³/s (490 m³/s) Jan. 21, 1970 (gage height, 17.98 ft or 5.480 m, recorded, 18.6 ft or 5.67 m, from floodmarks); minimum daily, 19 ft³/s (0.54 m³/s) Aug. 17, 1968.
(Combined flow).--Current year: Maximum discharge, 11,100 ft³/s (314 m³/s) June 2; minimum daily, 75 ft³/s (2.12 m³/s) Nov. 7.
Period of record: Maximum discharge, 17,900 ft³/s (507 m³/s) Jan. 21, 1970; minimum daily, 45 ft³/s (1.27 m³/s) Nov. 3, 1972.

REMARKS.--Records excellent. Many diversions above station for hydro-electric powerplants. Small diversions for domestic water supply. Stanislaus tunnel diverts from left bank of Middle Fork Stanislaus River 13.7 mi (22.0 km) upstream from station in SE¼ sec.24, T.4 N., R.16 E., to Stanislaus powerplant 1,000 ft (300 m) downstream from station. See schematic diagram of Stanislaus River basin. For records of combined discharge of river and tunnel, see following page.

COOPERATION.--Records of diversion to Stanislaus powerplant furnished by Pacific Gas and Electric Co.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	64	32	33	77	464	888	1230	9170	1260	190	60
2	40	52	27	37	162	451	783	1400	8090	1300	195	62
3	48	47	51	33	116	490	771	1700	6600	1160	189	67
4	54	52	444	36	180	537	716	1570	6460	1110	175	60
5	54	68	166	39	141	529	697	1220	6510	1230	74	55
6	49	82	77	106	133	630	633	1090	6600	1230	63	53
7	48	75	55	302	133	688	585	1270	6530	1400	56	50
8	46	67	46	439	132	830	548	1790	6170	999	51	51
9	46	49	42	264	765	663	526	2300	5770	1000	52	52
10	45	40	39	179	884	541	527	2620	5330	1010	52	62
11	44	67	38	127	495	473	561	3040	4740	1000	52	77
12	45	57	37	105	355	449	532	3360	4540	865	50	68
13	44	47	43	101	509	457	595	3870	4270	814	40	78
14	43	40	55	101	525	469	720	4410	4340	562	45	49
15	42	38	46	93	338	484	743	4250	4110	459	54	55
16	42	39	40	91	283	570	673	3710	3940	459	53	54
17	42	42	41	80	230	511	609	4190	3740	415	54	57
18	42	44	43	78	218	452	589	4550	2820	403	59	55
19	41	42	41	75	228	488	524	4680	2100	372	94	65
20	39	36	40	81	474	572	548	3970	1750	267	83	52
21	38	58	36	80	331	486	724	2420	1750	273	70	51
22	37	126	34	80	251	629	898	2120	1780	255	72	51
23	37	61	31	75	244	515	940	2800	1820	238	73	49
24	38	51	29	72	274	525	958	3660	1820	200	74	48
25	38	46	33	74	305	3220	1590	4040	1540	194	78	51
26	38	41	33	73	333	1680	1070	4110	1030	180	70	47
27	40	35	35	83	332	1080	928	4080	757	164	66	47
28	100	34	44	57	415	839	1030	3950	745	164	61	42
29	106	33	37	63	---	719	1190	7600	739	171	52	45
30	59	32	34	56	---	735	1330	7480	1180	181	47	50
31	56	---	32	63	---	917	---	7220	---	185	88	---
TOTAL	1480	1565	1781	3176	8863	22093	23426	105700	116741	19520	2432	1663
MEAN	47.7	52.2	57.5	102	317	713	781	3410	3891	630	78.5	55.4
MAX	106	126	444	439	884	3220	1590	7600	9170	1400	195	78
MIN	37	32	27	33	77	449	524	1090	739	164	40	42
AC-FT	2940	3100	3530	6300	17580	43820	46470	209700	231600	38720	4820	3300
CAL YR 1974 TOTAL	399986			1096	MAX 5860	MIN 27	AC-FT 793400					
WTR YR 1975 TOTAL	308440			MEAN 845	MAX 9170	MIN 27	AC-FT 611800					

SAN JOAQUIN RIVER BASIN

11295400 STANISLAUS RIVER NEAR HATHAWAY PINES, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF STANISLAUS RIVER AND STANISLAUS
POWERPLANT AT STANISLAUS, NEAR HATHAWAY PINES, CALIF., WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571	596	566	128	640	1020	1430	1770	9710	1790	731	611
2	572	584	562	134	722	1000	1330	1940	8620	1830	737	615
3	581	578	586	138	690	1040	1310	2250	7130	1690	731	619
4	587	423	979	149	752	1090	1260	2120	6990	1640	717	612
5	587	231	700	149	711	1080	1240	1770	7040	1760	618	607
6	581	158	611	232	702	1180	1170	1640	7130	1760	607	605
7	580	75	589	857	701	1240	1120	1820	7060	1930	600	602
8	578	110	578	1010	699	1380	1080	2340	6700	1530	596	601
9	578	542	576	836	1330	1210	1020	2850	6300	1530	597	602
10	577	589	574	749	1450	1090	1070	3170	5860	1540	597	612
11	576	614	573	695	1060	1020	1100	3590	5270	1530	599	628
12	577	603	584	672	918	999	1070	3910	5070	1400	596	620
13	576	591	606	667	1070	1010	1130	4420	4800	1340	586	630
14	574	584	618	667	1090	1020	1260	4960	4870	1090	594	599
15	574	581	609	658	898	1040	1280	4800	4640	991	602	606
16	574	582	468	655	843	1120	1210	4260	4470	991	601	605
17	574	583	148	643	788	1060	1140	4730	4270	947	604	608
18	573	584	138	641	776	1000	1120	5090	3350	936	607	606
19	572	582	134	638	786	1040	1060	5220	2630	905	631	616
20	570	576	135	644	1030	1120	1080	4510	2280	800	642	603
21	569	598	134	642	887	996	1260	2960	2280	808	628	601
22	568	664	133	642	807	1140	1430	2660	2310	790	630	601
23	569	599	128	637	799	1020	1480	3340	2350	773	630	599
24	569	588	124	634	830	928	1500	4200	2350	736	630	598
25	570	583	130	637	861	3780	2130	4580	2070	731	633	601
26	570	576	129	636	889	2230	1610	4650	1560	717	625	597
27	571	570	131	646	886	1630	1470	4620	1280	702	620	597
28	632	569	141	619	969	1380	1570	4490	1270	702	614	592
29	638	568	133	625	---	1240	1730	8140	1270	710	605	595
30	590	567	130	618	---	1260	1870	8020	1710	721	600	600
31	587	---	128	625	---	1460	---	7760	---	725	640	---
TOTAL	17965	15648	11775	17923	24584	38823	39530	122580	132640	36045	19448	18188
MEAN	580	522	380	578	878	1252	1318	3954	4421	1163	627	606
MAX	638	664	979	1010	1450	3780	2130	8140	9710	1930	737	630
MIN	568	75	124	128	640	928	1020	1640	1270	702	586	592
AC-FT	35630	31040	23360	35550	48760	77010	78410	243100	263100	71500	38580	36080
CAL YR 1974 TOTAL	591090			1619	MAX 6430	MIN 75	AC-FT 1172000					
WTR YR 1975 TOTAL	495149			1357	MAX 9710	MIN 75	AC-FT 982100					

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PERIOD OF RECORD.--Water temperatures: February 1970 to current year.

Water temperatures: Minimum, 1.5°C Jan. 3.

Period of record:

Water temperatures: Maximum (1970-74), 20.5°C July 30, 1973; minimum, 1.5°C Jan. 3, 1975.

REMARKS.--Clock stopped Nov. 16 to Dec. 2, range in temperature, 10.0°C to 13.0°C.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.5	13.0	12.0	---	---	5.5	2.5	5.5	4.5	7.0	6.0
2	14.5	14.0	13.0	12.0	---	---	5.5	2.0	5.5	5.5	7.0	6.0
3	19.0	14.0	13.0	12.0	12.5	12.0	5.5	1.5	6.0	5.5	7.0	5.5
4	15.0	14.0	12.5	9.0	12.0	10.0	6.0	2.5	6.0	6.0	6.5	6.0
5	14.5	13.5	11.0	9.0	11.5	10.0	6.5	2.5	6.0	6.0	6.5	6.0
6	14.5	13.5	10.5	9.5	11.5	10.0	6.5	4.0	6.5	6.0	---	---
7	14.5	14.0	10.5	9.0	11.5	10.0	7.5	6.0	7.5	6.5	---	---
8	14.5	14.0	12.0	9.0	11.5	10.0	7.5	7.0	7.0	6.5	---	---
9	15.0	14.5	12.5	10.5	11.5	10.5	7.0	6.0	8.0	6.5	---	---
10	14.5	14.0	12.5	12.5	11.5	10.0	7.0	6.0	6.5	6.0	---	---
11	14.5	14.0	12.5	12.0	11.5	10.0	7.0	6.5	6.0	5.5	---	---
12	14.5	14.0	12.5	12.0	11.5	10.5	6.5	6.0	5.5	5.0	---	---
13	14.5	14.0	13.0	12.5	11.5	11.0	6.5	6.0	6.0	5.5	---	---
14	14.5	13.5	13.5	13.0	11.0	10.0	6.5	5.5	6.0	5.0	---	---
15	14.0	13.5	13.0	13.0	11.0	10.5	6.5	6.0	5.5	4.5	---	---
16	14.5	13.5	---	---	11.0	10.0	6.5	6.0	5.0	4.5	---	---
17	14.5	13.5	---	---	10.0	7.0	6.5	6.0	4.5	4.0	---	---
18	14.0	13.5	---	---	9.5	6.5	6.5	6.0	5.0	4.0	---	---
19	14.0	13.5	---	---	9.5	6.5	6.5	6.5	5.5	5.0	---	---
20	14.0	13.5	---	---	9.5	6.5	6.5	6.5	6.0	5.5	---	---
21	14.0	13.5	---	---	9.5	6.0	7.0	6.5	5.5	4.5	---	---
22	14.0	13.5	---	---	9.5	6.0	7.0	7.0	5.0	4.0	---	---
23	14.0	13.5	---	---	8.5	5.0	7.0	6.5	5.5	5.0	---	---
24	14.0	13.0	---	---	7.5	4.0	7.0	7.0	6.0	5.5	---	---
25	14.0	13.5	---	---	7.5	3.5	7.0	6.5	6.5	5.5	---	---
26	14.0	13.5	---	---	7.5	2.5	7.0	6.5	6.5	6.0	---	---
27	14.0	13.5	---	---	7.0	3.0	6.5	5.5	6.5	6.0	---	---
28	14.0	13.0	---	---	7.0	4.0	6.0	5.5	7.0	6.0	---	---
29	13.0	12.5	---	---	7.5	4.0	6.0	5.5	---	---	---	---
30	12.5	12.0	---	---	7.0	4.0	5.5	5.5	---	---	---	---
31	12.5	12.5	---	---	6.5	3.0	5.5	4.5	---	---	---	---
MONTH	19.0	12.0	---	---	12.5	2.5	7.5	1.5	8.0	4.0	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1											---	---
2											---	---
3											---	---
4											13.5	12.0
5											14.0	12.0
6											15.5	12.0
7											13.5	12.0
8											13.5	12.5
9											16.5	12.0
10											17.0	12.0
11											14.5	11.5
12											14.5	12.5
13											16.5	12.5
14											13.5	12.0
15											15.0	12.0
16											18.5	11.5
17											15.5	12.5
18											14.5	12.0
19											15.0	12.5
20											14.5	12.0
21											15.0	12.5
22											15.0	12.5
23											16.5	12.5
24											14.5	12.0
25											15.5	12.5
26											14.5	12.5
27											14.5	12.5
28											13.0	12.0
29											13.5	12.0
30											14.5	12.0
31											---	---
MONTH											18.5	11.5

SAN JOAQUIN RIVER BASIN

11296500 SOUTH FORK STANISLAUS RIVER AT STRAWBERRY, CALIF.

LOCATION.--Lat 38°11'51", long 120°00'27", in SW¼ sec.16, T.4 N., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 0.3 mi (0.5 km) downstream from bridge on State Highway 108 at Strawberry, 0.6 mi (1.0 km) downstream from Herring Creek, and 1.2 mi (1.9 km) downstream from Pinecrest Lake.

DRAINAGE AREA.--44.8 mi² (116.0 km²).

PERIOD OF RECORD.--October 1911 to January 1917, August 1938 to current year. Monthly discharge only for October 1913 and yearly estimates for 1912-13, published in WSP 1315-A. Published as "near Confidence" 1911-13.

GAGE.--Water-stage recorder. Datum of gage is 5,235.1 ft (1,595.66 m) above mean sea level (river-profile survey). October 1911 to January 1917, nonrecording gage at site 1 mi (2 km) downstream at different datum.

AVERAGE DISCHARGE.--42 years, (1911-16, 1938-75), 129 ft³/s (3.653 m³/s), 93,460 acre-ft/yr (115 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,600 ft³/s (45.3 m³/s) June 1 (gage height, 6.17 ft or 1.881 m); minimum daily, 12 ft³/s (0.34 m³/s) Dec. 23-26.

Period of record: Maximum discharge, 3,900 ft³/s (110 m³/s) Nov. 21, 1950 (gage height, 9.25 ft or 2.819 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of contracted-opening measurement of maximum flow at bridge 0.3 mi (0.5 km) below station; minimum, 1.3 ft³/s (0.037 m³/s) Nov. 22, 23, 1946.

REMARKS.--Flow regulated at low and medium stages by Pinecrest Lake 1.2 mi (1.9 km) upstream beginning in 1916, capacity, 18,500 acre-ft (22.6 hm³). No diversion above station. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1945(M). WSP 1515: 1916, 1943(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	83	15	13	31	61	115	55	1260	352	63	65
2	93	82	15	22	30	61	70	60	1130	324	64	65
3	93	58	21	30	28	62	60	75	989	317	64	65
4	93	36	18	30	30	63	59	62	927	309	63	65
5	91	35	18	30	35	65	60	43	1070	317	63	65
6	92	35	18	65	34	65	58	42	1190	329	64	65
7	93	35	18	84	35	65	57	46	1010	314	64	66
8	90	35	17	84	35	64	56	65	870	262	64	66
9	85	45	16	65	37	63	54	84	906	249	64	66
10	85	53	16	44	36	62	53	109	847	221	64	66
11	85	53	16	44	36	61	53	149	925	218	64	66
12	85	52	23	43	35	60	54	191	929	197	65	66
13	85	52	29	43	36	60	55	234	926	147	65	67
14	85	52	29	42	36	60	57	274	990	120	65	66
15	85	51	29	32	35	59	56	269	951	102	65	66
16	85	51	29	24	35	60	56	260	825	91	65	65
17	85	51	20	24	35	58	55	306	681	95	65	65
18	84	44	13	25	38	57	53	335	495	93	66	65
19	84	36	13	25	45	58	53	325	360	76	80	65
20	83	36	13	26	46	59	52	252	327	65	72	64
21	83	38	13	27	46	59	55	162	393	63	69	65
22	84	31	13	27	45	60	59	158	483	60	67	65
23	84	23	12	28	51	59	61	220	520	60	66	65
24	84	21	12	29	55	59	63	294	488	69	65	74
25	83	19	12	28	56	77	64	345	307	64	65	81
26	83	15	12	29	56	74	59	792	307	62	64	81
27	83	15	13	29	56	70	53	920	376	62	63	81
28	86	16	13	29	59	128	53	688	381	63	63	80
29	84	15	13	30	---	168	55	848	403	64	63	80
30	84	15	13	30	---	164	58	954	383	65	64	80
31	84	---	13	31	---	165	---	1090	---	64	66	---
TOTAL	2676	1183	525	1112	1132	2306	1766	9707	21649	4894	2024	2061
MEAN	86.3	39.4	16.9	35.9	40.4	74.4	58.9	313	722	158	65.3	68.7
MAX	93	83	29	84	59	168	115	1090	1260	352	80	81
MIN	83	15	12	13	28	57	52	42	307	60	63	64
AC-FT	5310	2350	1040	2210	2250	4570	3500	19250	42940	9710	4010	4090
CAL YR 1974	TOTAL	54675	MEAN 150	MAX	976	MIN 12	AC-FT	108400				
WTR YR 1975	TOTAL	51035	MEAN 140	MAX	1260	MIN 12	AC-FT	101200				

11297000 PHILADELPHIA CANAL NEAR STRAWBERRY, CALIF.

LOCATION.--Lat 38°10'39", long 120°02'46", in NW¼NW¼ sec.30, T.4 N., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 250 ft (76 m) downstream from diversion dam on South Fork Stanislaus River, and 2.8 mi (4.5 km) southwest of Strawberry.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,960 ft (1,511.8 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--36 years, 43.4 ft³/s (1.229 m³/s), 31,440 acre-ft/yr (38.8 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 64 ft³/s (1.81 m³/s) in 1941, 1961-63, 1965, 1971-72, 1974-75; no flow at times in some years.

REMARKS.--Canal diverts from right bank of South Fork Stanislaus River for power development in Spring Gap powerplant of Pacific Gas and Electric Co.; tailrace empties into Middle Fork Stanislaus River at powerplant above Sand Bar Flat. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	60	1.0	1.0	22	56	58	43	60	59	60	59
2	61	60	1.0	15	19	57	59	60	60	59	60	59
3	60	40	1.0	15	16	57	59	45	60	59	60	59
4	60	11	1.0	16	23	58	59	60	58	59	60	59
5	60	11	1.0	16	32	58	60	57	61	60	60	59
6	60	11	1.0	16	34	53	59	57	62	59	60	59
7	60	11	1.0	16	34	59	62	58	62	61	60	60
8	60	11	1.0	20	34	59	59	60	61	59	60	60
9	60	19	1.0	25	35	59	60	61	60	60	60	60
10	60	31	1.0	25	35	59	59	61	54	60	60	59
11	60	31	1.0	25	37	58	59	61	55	60	60	60
12	60	31	9.0	26	37	58	59	62	61	60	42	60
13	60	31	17	26	38	58	59	61	60	59	57	60
14	60	31	17	26	38	58	59	61	61	60	60	60
15	60	31	17	15	37	58	59	60	61	60	60	60
16	60	29	17	16	37	58	59	60	60	60	60	60
17	60	26	9.5	16	37	58	63	62	59	61	60	60
18	60	19	2.0	16	39	58	59	62	58	60	22	60
19	60	12	1.5	16	44	58	59	62	54	59	.56	59
20	60	13	1.0	16	46	59	59	60	56	59	.11	59
21	60	21	1.0	16	47	59	60	58	63	59	.11	60
22	60	23	1.0	16	47	60	60	60	64	59	.11	60
23	60	14	1.0	16	51	58	60	63	62	59	1.2	60
24	60	13	1.0	16	55	58	60	62	61	56	1.3	60
25	60	6.1	1.0	16	55	61	60	60	56	60	.11	60
26	60	1.2	1.0	16	55	60	60	62	58	60	.11	60
27	60	1.2	1.0	16	56	60	59	61	61	59	.11	60
28	60	1.2	1.0	17	56	61	59	57	61	60	.11	60
29	60	1.2	1.0	16	---	59	59	54	61	60	.62	60
30	60	1.2	1.0	16	---	59	59	63	60	60	29	60
31	60	---	1.0	19	---	59	---	62	---	60	59	---
TOTAL	1862	602.1	113.0	543.0	1096	1810	1784	1835	1790	1845	1113.45	1791
MEAN	60.1	20.1	3.65	17.5	39.1	58.4	59.5	59.2	59.7	59.5	35.9	59.7
MAX	61	60	17	26	56	61	63	63	64	61	60	60
MIN	60	1.2	1.0	1.0	16	53	58	43	54	56	.11	59
AC-FT	3690	1190	224	1080	2170	3590	3540	3640	3550	3660	2210	3550
CAL YR 1974	TOTAL	17162.27	MEAN 47.0	MAX 64	MIN .11	AC-FT 34040						
WTR YR 1975	TOTAL	16184.55	MEAN 44.3	MAX 64	MIN .11	AC-FT 32100						

NOTE.--No gage-height record Dec. 1 to Jan. 17.

SAN JOAQUIN RIVER BASIN

11297500 TUOLUMNE CANAL NEAR LONG BARN, CALIF.

LOCATION.--Lat 38°05'35", long 120°10'03", in SW¼ sec.24, T.3 N., R.16 E., Tuolumne County, Stanislaus National Forest, on left bank 300 ft (91 m) downstream from intake, 350 ft (107 m) downstream from Lyons Reservoir on South Fork Stanislaus River, 2 mi (3 km) west of Long Barn, and 15 mi (24 km) northeast of Sonora.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,110.0 ft (1,252.73 m) above mean sea level (river-profile survey). Prior to June 1938, at site 200 ft (61 m) downstream at different datum.

AVERAGE DISCHARGE.--38 years, 27.3 ft³/s (0.773 m³/s), 19,780 acre-ft/yr (24.4 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 59 ft³/s (1.67 m³/s) May 11, 1975; no flow at times in some years.

REMARKS.--Canal diverts from left bank of South Fork Stanislaus River into Tuolumne River basin for power and domestic supply in vicinity of Sonora. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	25	22	21	30	40	40	41	54	53	40	48
2	40	25	23	20	30	41	39	41	53	54	40	48
3	38	25	23	20	29	41	40	41	51	51	40	48
4	36	20	22	21	29	41	40	41	51	48	40	48
5	36	22	21	21	29	41	41	42	51	47	41	48
6	36	21	21	21	24	41	41	47	53	46	42	48
7	33	19	21	21	20	42	40	50	53	50	45	48
8	31	25	21	21	20	43	40	51	52	51	44	48
9	31	25	21	22	21	43	40	51	52	49	43	47
10	31	25	21	21	21	42	40	57	52	45	43	47
11	31	27	21	20	21	41	40	59	52	48	47	46
12	31	30	21	21	21	16	40	55	52	50	50	46
13	31	30	21	21	30	11	41	52	52	51	49	46
14	31	30	21	20	39	29	41	53	52	49	48	46
15	30	30	21	20	40	32	41	53	53	52	48	46
16	30	30	20	20	40	32	41	50	53	54	48	46
17	30	30	20	20	39	32	41	48	53	52	48	45
18	32	28	20	20	39	38	41	44	53	52	48	45
19	30	27	20	20	40	43	41	44	53	52	48	45
20	32	26	20	20	41	41	41	48	52	52	49	46
21	21	26	20	20	41	41	41	47	52	52	49	46
22	17	26	20	21	41	41	41	48	53	52	49	46
23	16	26	20	20	41	40	41	53	53	45	49	46
24	17	26	20	20	41	41	41	52	53	38	49	45
25	16	24	20	20	40	41	41	51	52	40	49	46
26	26	23	20	20	40	50	40	50	53	41	49	46
27	26	23	23	20	40	46	40	51	53	41	49	46
28	26	23	27	20	40	37	40	51	53	41	49	45
29	22	23	26	20	---	35	40	51	53	41	48	46
30	20	23	24	18	---	40	40	51	53	40	48	46
31	25	---	21	19	---	40	---	52	---	40	48	---
TOTAL	892	763	662	629	927	1182	1214	1525	1575	1477	1437	1393
MEAN	28.8	25.4	21.4	20.3	33.1	38.1	40.5	49.2	52.5	47.6	46.4	46.4
MAX	40	30	27	22	41	50	41	59	54	54	50	48
MIN	16	19	20	18	20	11	39	41	51	38	40	45
AC-FT	1770	1510	1310	1250	1840	2340	2410	3020	3120	2930	2850	2760
CAL YR 1974	TOTAL	15045	MEAN 41.2	MAX 57	MIN 16	AC-FT 29840						
WTR YR 1975	TOTAL	13676	MEAN 37.5	MAX 59	MIN 11	AC-FT 27130						

11298000 SOUTH FORK STANISLAUS RIVER NEAR LONG BARN, CALIF.

LOCATION.--Lat 38°05'33", long 120°10'02", in SW¼ sec.24, T.3 N., R.16 E., Tuolumne County, Stanislaus National Forest, on left bank 600 ft (183 m) downstream from Lyons Dam, 2 mi (3 km) west of Long Barn, and 15 mi (24 km) northeast of Sonora.

DRAINAGE AREA.--66.9 mi² (173.3 km²).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 4,073.4 ft (1,241.57 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--38 years, 85.7 ft³/s (2.427 m³/s), 62,090 acre-ft/yr (76.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,540 ft³/s (43.6 m³/s) June 4 (gage height, 6.11 ft or 1.862 m); minimum daily, 1.8 ft³/s (0.051 m³/s) July 19.
Period of record: Maximum discharge, 4,900 ft³/s (139 m³/s) Nov. 21, 1950 (gage height, 9.3 ft or 2.83 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of computation of maximum flow over Lyons Dam; no flow at times in 1937-39, 1952.

REMARKS.--Flow regulated by Lyons Reservoir 600 ft (183 m) upstream, capacity, 5,510 acre-ft (6.79 hm³) and Pinecrest Lake, capacity, 18,300 acre-ft (22.6 hm³). Tuolumne Canal (see sta 11297500) diverts at Lyons Dam; other diversions, see schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.4	2.3	2.4	2.7	2.2	134	67	904	4.0	2.4	2.1
2	2.6	2.4	2.4	2.4	2.8	2.2	68	75	1040	3.7	2.4	2.1
3	2.5	2.2	2.6	2.4	2.7	2.2	44	69	1220	7.6	2.4	2.2
4	2.5	2.2	2.6	2.5	2.7	2.2	35	90	1210	166	2.4	2.0
5	2.5	2.2	2.4	2.4	2.7	2.3	43	108	973	214	2.5	2.0
6	2.4	2.2	2.4	2.6	2.7	2.4	36	61	939	233	2.4	2.0
7	2.4	2.2	2.4	2.5	2.7	2.6	26	36	942	220	2.2	2.0
8	2.4	2.2	2.4	2.6	2.8	2.5	19	25	1170	172	2.2	2.3
9	2.4	2.2	2.4	2.4	3.3	2.4	14	29	1110	148	2.2	2.6
10	2.5	2.2	2.4	2.2	2.7	2.4	16	47	902	123	2.0	2.4
11	2.6	2.4	2.4	2.2	2.2	2.3	16	62	808	113	2.3	2.2
12	2.6	2.5	2.4	2.2	2.2	4.6	20	86	729	95	2.6	2.2
13	2.6	2.4	2.4	2.2	2.4	5.0	33	127	493	62	2.4	2.2
14	2.6	2.4	2.4	2.6	2.2	3.3	37	174	349	19	2.2	2.2
15	2.6	2.4	2.4	2.6	2.0	3.3	42	213	254	9.2	2.2	2.2
16	2.6	2.4	2.4	2.6	2.0	3.3	42	243	212	2.5	2.2	2.2
17	2.6	2.4	2.4	2.7	2.0	3.2	38	219	314	2.7	2.2	2.2
18	2.6	2.4	2.4	2.8	2.0	2.9	37	221	392	2.1	2.2	2.0
19	2.5	2.4	2.4	2.8	2.2	12	33	259	423	1.8	2.1	2.1
20	2.4	2.4	2.4	2.8	2.4	31	32	286	384	1.9	2.0	2.2
21	2.3	2.6	2.4	2.6	2.3	35	33	268	180	2.3	2.0	2.1
22	2.0	2.5	2.4	2.6	2.2	43	40	180	202	2.1	2.2	2.0
23	2.0	2.4	2.4	2.6	2.2	31	48	97	259	2.4	2.4	2.0
24	2.6	2.4	2.4	2.6	2.2	41	53	74	280	2.6	2.4	2.0
25	2.7	2.4	2.4	2.7	2.2	289	101	120	300	2.4	2.4	2.0
26	2.4	2.4	2.4	2.8	2.2	177	130	201	294	2.4	2.4	2.0
27	2.4	2.3	2.5	2.8	2.2	124	98	263	267	2.6	2.4	2.0
28	2.6	2.2	2.6	2.8	2.2	119	79	707	53	2.6	2.4	2.0
29	2.4	2.2	2.5	2.8	---	180	70	883	4.0	2.6	2.3	2.1
30	2.4	2.2	2.5	2.7	---	163	65	667	4.0	2.6	2.2	2.1
31	2.4	---	2.5	2.7	---	159	---	765	---	2.4	2.2	---
TOTAL	76.7	70.1	75.3	79.6	67.1	1455.3	1482	6722	16611.0	1627.5	70.8	63.7
MEAN	2.47	2.34	2.43	2.57	2.40	46.9	49.4	217	554	52.5	2.28	2.12
MAX	2.7	2.6	2.6	2.8	3.3	289	134	883	1220	233	2.6	2.6
MIN	2.0	2.2	2.3	2.2	2.0	2.2	14	25	4.0	1.8	2.0	2.0
AC-FT	152	139	149	158	133	2890	2940	13330	32950	3230	140	126
CAL YR 1974 TOTAL	34561.9			MEAN 94.7	MAX 972	MIN 1.4	AC-FT 68550					
WTR YR 1975 TOTAL	28401.1			MEAN 77.8	MAX 1220	MIN 1.8	AC-FT 56330					

11299000 MELONES LAKE NEAR SONORA, CALIF.

LOCATION.--Lat 37°57'12", long 120°30'49", in NW¼SE¼ sec.11, T.1 N., R.13 E., Tuolumne County, at gate tower near left bank at Melones Dam on Stanislaus River, 0.1 mi (0.2 km) downstream from Bear Creek, and 7.5 mi (12.1 km) southwest of Sonora.

DRAINAGE AREA.--904 mi² (2,341 km²).

PERIOD OF RECORD.--1926 (year-end content only, published in WSP 1315-A), June 1927 to current year. Prior to October 1970, published as Melones Reservoir at Melones Dam.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Prior to Feb. 28, 1961, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 113,572 acre-ft (140 hm³) July 2 (elevation, 735.5 ft or 224.18 m); minimum, 5,179 acre-ft (6.39 hm³) Nov. 1 (elevation, 623.1 ft or 189.92 m).

Period of record: Maximum contents observed, 115,800 acre-ft (143 hm³) May 27, 1951 (elevation, 736.7 ft or 224.55 m); minimum, 3,187 acre-ft (3.93 hm³) Nov. 4, 1973 (elevation, 613.3 ft or 186.93 m).

REMARKS.--Reservoir is formed by concrete overflow dam; storage began Aug. 21, 1926. Dam completed in December 1926. Capacity for power development 1 mi (2 km) below dam is 106,140 acre-ft (131 hm³) between elevations 628.0 ft (191.41 m), minimum operating level and 735.0 ft (224.03 m), top of drum-type spillway gates, above mean sea level; usable capacity for irrigation, 109,980 acre-ft (136 hm³) between elevations 610.0 ft (185.93 m), floor of outlet tunnel, and 735.0 ft (224.03 m) above mean sea level. Dead storage, 2,630 acre-ft (3.24 hm³). Released water flows down Stanislaus River to Tulloch Reservoir (see sta 11299995). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

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

610	2,630	635	8,750	660	21,500	700	59,140
615	3,495	640	10,680	665	25,025	710	72,200
620	4,480	645	12,905	670	28,900	720	86,930
625	5,650	650	15,450	680	37,580	730	103,460
630	7,070	655	18,340	690	47,620	736.7	115,800

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9911	5179	12810	15676	34781	33028	65265	74209	101420	113480	82430	28580
2	9680	6358	12620	15733	37768	32510	65539	75216	103642	113572	80793	26761
3	9680	8498	12572	16411	39273	31828	65539	74353	106190	113276	79170	25025
4	9528	11147	12572	16928	39848	31492	65539	71220	106008	112980	77406	23509
5	9490	11487	15076	17276	39084	30898	66309	67375	103642	113350	75508	21911
6	9414	11800	15129	17508	37956	31067	66835	63463	103642	113350	73491	20321
7	9566	12250	15290	18940	36943	31659	67105	59750	103460	113443	71500	18880
8	9528	12667	15183	21911	36033	33721	67240	56879	102950	112758	69680	17276
9	9452	13630	15022	23367	38520	34514	67105	55703	102440	112481	67645	15733
10	9452	15076	14915	23722	41800	34692	67240	55350	101947	112573	65787	15022
11	9452	15733	14754	23864	42200	34870	66970	56173	103154	112481	63839	14861
12	9414	15620	14541	23935	42000	34603	66970	56879	104934	112148	62082	14594
13	9490	15450	14434	23864	42500	34603	66970	58664	105353	111685	59994	14594
14	9528	15450	14330	23864	43200	35048	67105	60885	105644	110797	58426	14380
15	9604	15129	14230	23935	42800	35315	67470	63714	105587	109571	56643	14280
16	9566	14969	14030	23864	42300	37580	67510	64834	105153	108399	54645	14030
17	9338	14754	12237	23793	41400	38144	67335	66583	104497	107027	52793	13880
18	8822	14648	12025	23751	40624	38313	67078	69568	102814	105699	50965	13580
19	8498	14434	10977	23580	39751	38341	66700	72860	101930	104224	49388	13333
20	8016	14230	10639	23580	39557	38567	66348	75172	103088	102712	47730	13285
21	8084	14130	11190	23509	38990	38924	66283	73491	104880	101182	46015	13095
22	8186	14280	11620	23367	38238	42130	66478	71026	106973	99550	44336	12905
23	7582	14280	12025	23296	37307	42970	66808	69568	109205	98020	42700	12667
24	6830	14180	12430	23722	36488	43380	67078	70072	111468	96325	41012	12525
25	6190	14030	12763	25172	35671	54066	69292	71500	113091	94483	39366	12295
26	7982	13880	13142	26530	34870	59025	70352	73750	113128	92823	37674	12115
27	6530	13730	13580	27940	34069	61214	70968	76545	112851	90873	36033	11890
28	6386	13530	14080	29315	33548	62434	71584	78728	112610	89121	34514	11755
29	6414	13285	14487	30644	---	63419	72200	86930	112425	87400	33115	11620
30	5832	13047	14969	31828	---	63802	73348	95320	112980	85726	31490	11755
31	5227	---	15290	33288	---	64625	---	97680	---	84071	29979	---
MAX	9911	15733	15290	33288	43200	64625	73348	97680	113128	113572	82430	28580
MIN	5227	5179	10639	15676	33548	30898	65265	55350	101420	84071	29979	11620
(a)	623.3	645.3	649.7	675.2	675.5	704.4	710.8	726.6	735.2	718.1	671.3	642.5
(b)	-4,886	+7,820	+2,243	+17,998	+260	+31,077	+8,723	+24,332	+15,300	-28,909	-54,092	-18,224

CAL YR 1974 b +1,642
WTR YR 1975 b -46,290

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

11299995 TULLOCH RESERVOIR NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°52'34", long 120°36'12", in Rancheria Del Rio Estanislao Grant, T.1 S., R.12 E., Tuolumne County, in center of dam on Stanislaus River, 1.9 mi (3.1 km) upstream from Goodwin Dam, and 5.3 mi (8.5 km) northeast of Knights Ferry.

DRAINAGE AREA.--980 mi² (2,538 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

EXTREMES.--Current year: Maximum contents, 67,100 acre-ft (82.7 hm³) July 7 (elevation, 510.1 ft or 155.48 m); minimum, 36,900 acre-ft (45.5 hm³) Jan. 5 (elevation, 480.1 ft or 146.33 m).

Period of record: Maximum contents, 69,500 acre-ft (85.7 hm³) Jan. 7, 1965 (elevation, 512.0 ft or 156.06 m); minimum, 4,580 acre-ft (5.65 hm³) Oct. 3, 1960 (elevation, 404.0 ft or 123.14 m).

REMARKS.--Reservoir is formed by gravity-type concrete dam completed in October 1957. Usable capacity, 56,840 acre-ft (70.1 hm³) between elevations 431.0 ft (131.37 m), normal minimum water surface and 511.0 ft (155.75 m), top of radial gates. Dead storage, 11,560 acre-ft (14.3 hm³). Reservoir is used for irrigation and power. Water passes down Stanislaus River, some first passing through Tulloch powerplant at dam. Part of flow is diverted at Goodwin Dam to Oakdale Canal (see sta 11301000) and South San Joaquin Canal (see sta 11300500). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

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

404	4,580	460	23,600
411	6,020	475	33,100
420	8,200	490	45,300
430	11,100	512	69,500
445	16,400		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56700	55600	51600	37600	58600	52800	59200	49600	45400	67000	61500	57400
2	56600	55600	50900	37200	59300	52300	58800	47000	46500	67000	61100	57700
3	56500	55300	50500	37100	59800	52000	58400	45200	45700	66700	60800	58000
4	56300	55300	50200	37000	60300	52700	58000	45200	48600	66700	60300	58400
5	56000	55000	49700	36900	60000	53400	57900	44700	51400	66700	60000	58700
6	55300	54800	49100	37300	59500	54300	57800	44000	53300	67000	59600	59000
7	54700	54600	48400	37700	59400	55700	57600	43100	54800	67100	59400	59200
8	54000	53900	47800	38100	59500	57500	57400	42200	55600	67000	59200	59500
9	53100	52600	47200	38500	60400	58800	57000	41900	56500	66800	58800	59800
10	52300	51200	46600	40100	61100	60200	56700	41800	58800	67000	58600	59300
11	51300	50400	46100	41400	60900	60600	56400	41800	61800	67000	58300	58300
12	50400	50500	45500	42900	60600	60000	56100	41400	65600	66800	58000	57300
13	49500	50600	44900	44200	60900	59900	55600	41000	66600	66700	57700	56200
14	48900	50600	44300	45800	60800	59900	55300	41000	66700	66500	57000	55200
15	48700	50700	43800	47200	60400	59500	54900	40900	66800	66300	56700	54200
16	48500	50800	43300	48600	60000	60400	54600	41000	66600	66100	56500	53200
17	48300	50800	42700	50000	59500	60200	54200	41000	66300	65800	56200	52100
18	48700	51000	42100	51300	58800	59900	53900	41100	66100	65600	56100	51100
19	49000	52400	41600	52900	58400	59400	53500	41000	67000	65400	56000	50100
20	49300	53500	40900	54000	57900	59000	53200	40900	66800	65000	56000	49100
21	49200	54800	40200	55500	57500	58800	52800	40900	66600	64700	56100	48100
22	48600	55500	39500	56600	56900	60400	52500	41000	66500	64500	56200	47000
23	48000	55700	38800	58000	56400	60300	52000	41000	66200	64200	56300	46000
24	47100	56000	38500	59100	55800	60200	51800	41000	66200	64100	56400	45100
25	46900	55700	38500	59100	55200	61100	51500	41100	66100	64000	56600	44100
26	47500	55100	38200	58700	54700	61100	51100	41100	66300	63600	56800	43300
27	48600	54400	38100	58700	54000	60900	50800	41000	66500	63400	56900	42500
28	49800	53700	38000	58500	53400	60700	50500	40900	66500	63000	57000	41600
29	51200	53000	37900	58500	---	60300	50200	40900	66500	62700	56900	40700
30	53000	52400	37800	58500	---	60000	49900	41700	66600	62300	57000	39700
31	54700	---	37700	58500	---	59600	---	43700	---	62000	57200	---
MAX	56700	56000	51600	59100	61100	61100	59200	49600	67000	67100	61500	59800
MIN	46900	50400	37700	36900	53400	52000	49900	40900	45400	62000	56000	39700
(a)	499.4	497.2	481.1	502.9	498.2	503.9	494.8	488.2	509.7	505.9	501.7	483.6
(b)	-2,100	-2,300	-14,700	+20,800	-5,100	+6,200	-9,700	-6,200	+22,900	-4,600	-4,800	-17,500

CAL YR 1974 b -20,200

WTR YR 1975 b -17,100

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

11299997 STANISLAUS RIVER BELOW TULLOCH POWERPLANT, NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°52'34", long 120°36'15", in Rancheria del Rio Estanislao Grant, T.1 S., R.12 E., on Calaveras-Tuolumne County line, temperature recorder in south corner of Tulloch powerplant at downstream side of Tulloch Dam, 5.2 mi (8.4 km) northeast of Knights Ferry.

DRAINAGE AREA.--980 mi² (2,538 km²).

PERIOD OF RECORD.--Water temperatures: June 1972 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 21.0°C Oct. 7, 8; minimum, 7.5°C Feb. 12, 13.

Period of record:

Water temperatures: Maximum, 22.0°C on many days in 1972; minimum recorded, 5.0°C Jan. 13, 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	20.0	17.5	17.0	14.0	13.5	11.0	10.5	8.0	8.0	8.0	8.0
2	20.0	19.5	17.5	17.0	14.0	13.5	10.5	10.0	8.5	8.0	8.0	8.0
3	20.0	19.5	17.5	16.5	13.5	13.0	10.5	10.0	8.5	8.0	8.0	8.0
4	19.5	19.5	17.0	16.5	13.5	13.0	10.5	10.0	8.5	8.0	8.0	8.0
5	19.5	19.5	17.0	16.0	13.5	13.0	10.0	10.0	---	---	8.5	8.0
6	19.5	19.5	17.0	16.5	13.0	13.0	10.0	10.0	---	---	8.5	8.0
7	21.0	19.5	16.5	16.5	13.0	13.0	10.0	10.0	8.0	8.0	8.5	8.0
8	21.0	20.5	16.5	16.5	13.0	12.5	10.5	10.0	8.0	8.0	8.5	8.5
9	20.5	20.5	17.0	16.5	13.0	12.5	10.5	10.0	8.0	8.0	8.5	8.5
10	20.5	20.5	17.0	16.5	12.5	12.5	10.0	9.5	8.0	8.0	8.5	8.5
11	20.5	20.5	17.0	16.5	12.5	12.5	10.5	9.5	8.0	8.0	9.0	8.5
12	20.5	20.5	17.0	16.5	12.5	12.0	10.0	9.5	8.0	7.5	9.0	8.5
13	20.5	20.5	16.5	16.5	12.5	12.0	10.5	9.0	8.0	7.5	9.0	8.5
14	20.5	20.0	16.5	16.0	12.0	12.0	9.5	9.0	8.0	8.0	9.0	9.0
15	20.0	20.0	16.0	16.0	12.0	12.0	9.5	8.5	8.0	8.0	9.0	9.0
16	20.0	20.0	16.0	15.5	12.0	11.5	9.0	9.0	8.5	8.0	9.0	8.5
17	20.0	19.5	15.5	15.5	12.0	11.5	9.5	8.5	8.5	8.0	9.0	9.0
18	19.5	19.5	15.5	15.0	12.0	11.5	8.5	8.5	8.5	8.0	9.0	9.0
19	19.5	19.5	15.5	15.0	11.5	11.5	9.0	8.5	8.5	8.0	9.0	9.0
20	19.5	19.0	15.5	15.0	11.5	11.5	8.5	8.5	8.5	8.0	9.5	9.0
21	19.0	19.0	15.0	14.5	11.5	11.5	8.5	8.0	8.5	8.0	9.5	9.0
22	19.0	19.0	15.0	14.5	11.5	11.5	9.0	8.0	8.5	8.0	9.5	9.0
23	19.0	18.5	15.0	14.5	11.5	11.0	9.0	8.0	8.5	8.0	9.5	9.0
24	19.0	18.5	14.5	14.0	11.5	11.5	9.0	8.0	8.5	8.0	9.5	9.0
25	18.5	18.5	14.5	14.0	11.5	11.0	9.0	8.0	8.0	8.0	9.5	9.0
26	18.5	18.5	14.5	14.0	11.5	10.5	9.5	8.0	8.0	8.0	9.5	9.0
27	18.5	18.0	14.5	14.0	11.0	11.0	8.5	8.0	8.0	8.0	10.0	9.0
28	18.0	18.0	14.0	14.0	11.0	11.0	9.0	8.0	8.0	8.0	9.5	9.5
29	18.0	18.0	14.0	14.0	11.0	10.5	8.5	8.0	---	---	10.0	9.5
30	18.0	17.5	14.0	14.0	11.0	10.5	8.5	8.0	---	---	10.0	9.5
31	17.5	17.5	---	---	11.5	10.5	8.0	8.0	---	---	9.5	9.5
MONTH	21.0	17.5	17.5	14.0	14.0	10.5	11.0	8.0	8.5	7.5	10.0	8.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.5	9.5	9.5	11.5	11.0	14.0	14.0	16.5	16.5	18.5	18.5
2	9.5	9.5	9.5	9.5	12.0	11.5	14.0	14.0	16.5	16.5	18.5	18.5
3	9.5	9.0	9.5	9.5	12.5	12.0	14.0	14.0	16.5	16.5	18.5	18.5
4	9.5	9.0	10.0	9.5	12.5	12.5	14.0	14.0	16.5	16.5	19.0	18.5
5	9.5	9.0	10.0	9.5	12.5	12.5	14.0	14.0	16.5	16.5	19.0	19.0
6	9.5	9.0	10.0	9.5	13.0	12.5	14.5	14.0	17.0	16.5	19.0	19.0
7	9.0	9.0	10.0	10.0	13.0	13.0	14.5	14.5	17.0	17.0	19.0	19.0
8	9.0	9.0	10.0	10.0	13.0	13.0	14.5	14.5	17.0	17.0	19.0	19.0
9	9.0	9.0	10.0	10.0	13.0	13.0	14.5	14.5	17.0	17.0	19.0	19.0
10	9.0	9.0	10.5	10.0	13.5	13.0	14.5	14.5	17.0	17.0	19.5	19.0
11	9.0	9.0	10.5	10.0	13.5	13.0	15.0	14.5	17.0	17.0	19.5	19.5
12	9.0	8.5	10.5	10.0	13.5	13.5	15.0	15.0	17.0	17.0	19.5	19.5
13	9.0	8.5	10.5	10.0	13.5	13.5	15.0	15.0	17.5	17.0	19.5	19.5
14	9.0	9.0	11.0	10.5	13.5	13.5	15.0	15.0	17.5	17.0	19.5	19.5
15	9.0	8.5	11.0	10.5	13.5	13.5	15.0	15.0	17.5	17.5	19.5	19.5
16	9.0	8.5	11.0	10.5	14.0	13.5	15.0	15.0	17.5	17.5	20.0	19.5
17	9.0	8.5	11.0	11.0	14.0	13.5	15.0	15.0	17.5	17.5	20.0	20.0
18	9.0	8.5	11.0	10.5	14.0	14.0	15.5	15.0	17.5	17.5	20.0	19.5
19	9.0	8.5	11.0	10.5	14.0	14.0	15.5	15.0	17.5	17.5	20.0	20.0
20	9.0	9.0	11.0	10.5	14.0	14.0	15.5	15.5	18.0	17.5	20.0	20.0
21	9.0	9.0	11.0	10.5	14.0	14.0	15.5	15.5	18.0	17.5	20.0	20.0
22	9.0	9.0	11.0	10.0	14.0	13.5	15.5	15.5	18.0	18.0	20.0	20.0
23	9.0	9.0	11.0	10.0	14.0	13.5	15.5	15.5	18.0	18.0	20.0	20.0
24	9.0	9.0	11.0	10.0	14.0	13.5	15.5	15.5	18.0	18.0	20.0	20.0
25	9.5	9.0	11.0	10.5	14.0	13.5	16.0	15.5	18.0	18.0	20.0	20.0
26	9.5	9.0	10.5	10.5	14.0	13.5	16.0	16.0	18.0	18.0	20.0	20.0
27	9.5	9.0	11.0	10.5	14.0	13.5	16.0	16.0	18.0	18.0	20.0	19.5
28	9.5	9.5	11.0	10.5	14.0	14.0	16.0	16.0	18.5	18.0	20.0	19.5
29	9.5	9.5	11.0	10.0	14.0	14.0	16.0	16.0	18.5	18.0	20.0	19.5
30	9.5	9.5	11.0	10.0	14.0	14.0	16.0	16.0	18.5	18.5	20.0	19.5
31	---	---	11.0	11.0	---	---	16.0	16.0	18.5	18.5	---	---
MONTH	10.0	8.5	11.0	9.5	14.0	11.0	16.0	14.0	18.5	16.5	20.0	18.5

11300500 SOUTH SAN JOAQUIN CANAL NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°51'16", long 120°38'14", in Rancheria Del Rio Estanislao Grant, Tuolumne County, on left bank 0.8 mi (1.3 km) downstream from headgate at Goodwin Dam, and 3.0 mi (4.8 km) northeast of Knights Ferry.

PERIOD OF RECORD.--May 1914 to current year. Monthly and yearly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 334.18 ft (101.858 m) above mean sea level (levels by Oakdale Irrigation District). Prior to Mar. 12, 1915, nonrecording gage 100 ft (30 m) downstream. Mar. 12, 1915, to July 1, 1921, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--61 years, 430 ft³/s (12.18 m³/s), 311,500 acre-ft/yr (384 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,310 ft³/s (37.1 m³/s) July 16, 1967; no flow at times in each year except 1951, 1969, 1973-75.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Canal diverts from right bank of Stanislaus River at Goodwin Dam for irrigation in Oakdale and South San Joaquin Irrigation Districts. See schematic diagram of Stanislaus River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	304	.20	.20	9.0	1.2	895	514	1200	1290	1150	1280	834
2	305	.20	.20	9.0	1.0	903	694	1250	1290	1280	1280	780
3	307	.20	.20	9.2	1.8	1040	746	1240	1290	1270	1280	780
4	307	.20	.20	8.0	4.3	1030	843	1240	1280	1210	1280	778
5	374	.20	.20	10	4.8	993	868	1240	1270	1150	1280	778
6	515	.20	.20	5.0	4.8	958	837	1240	1270	1150	1230	776
7	514	.20	.20	1.8	4.8	927	759	1250	1270	1160	1230	774
8	533	213	.20	.80	4.8	494	644	1250	1270	1170	1230	771
9	615	504	.20	.70	4.8	134	624	1260	1280	1150	1230	770
10	615	508	.20	.70	4.8	157	626	1280	1260	1130	1230	767
11	615	510	.20	.70	4.8	158	629	1280	1100	1200	1230	766
12	613	512	.20	.70	4.8	159	630	1270	1090	1240	1230	764
13	613	512	.20	.70	4.8	161	630	1270	1110	1260	1230	763
14	608	514	3.0	.70	4.8	161	708	1270	1220	1270	1230	762
15	305	512	3.0	3.1	4.8	161	839	1270	1280	1270	1230	762
16	311	512	3.0	4.2	4.8	170	925	1270	1280	1270	1220	760
17	298	512	.20	3.6	4.8	168	981	1270	1290	1270	1220	760
18	288	439	.20	4.0	4.8	167	991	1270	1290	1270	1180	759
19	288	.20	.20	4.0	4.8	167	1030	1270	1280	1270	1120	757
20	289	.20	.20	3.8	4.8	166	1020	1270	1280	1270	1040	756
21	291	.20	.20	3.6	4.8	164	977	1270	1280	1270	988	755
22	288	.20	.20	3.8	4.8	164	932	1280	1260	1270	986	756
23	287	.20	.20	4.8	4.8	178	931	1280	1250	1210	984	755
24	289	.20	.20	4.4	4.8	180	930	1280	1240	1180	984	745
25	82	.20	.20	4.6	300	181	930	1280	1220	1220	948	731
26	.20	.20	.20	4.6	810	181	930	1280	1210	1260	925	682
27	.20	.20	.20	4.8	895	183	931	1280	1200	1270	925	652
28	.20	.20	6.0	4.8	895	183	932	1280	1200	1270	925	652
29	.20	.20	9.0	3.8	---	183	1000	1280	1140	1270	924	652
30	.20	.20	9.0	2.8	---	322	1070	1280	1100	1270	924	654
31	.20	---	9.0	3.0	---	468	---	1280	---	1280	923	---
TOTAL	9855.20	5251.80	46.80	124.70	3004.3	11556	25101	39230	37090	38180	34916	22451
MEAN	318	175	1.51	4.02	107	373	837	1265	1236	1232	1126	748
MAX	615	514	9.0	10	895	1040	1070	1280	1290	1280	1280	834
MIN	.20	.20	.20	.70	1.0	134	514	1200	1090	1130	923	652
AC-FT	19550	10420	93	247	5960	22920	49790	77810	73570	75730	69260	44530
CAL YR 1974	TOTAL	203082.50	MEAN	556	MAX	1280	MIN	.10	AC-FT	402800		
WTR YR 1975	TOTAL	226806.80	MEAN	621	MAX	1290	MIN	.20	AC-FT	449900		

NOTE.--No gage-height record Nov. 18 to Jan. 2.

SAN JOAQUIN RIVER BASIN

11301000 OAKDALE CANAL NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°51'32", long 120°37'56", in SW¼SE¼ sec.10, T.1 S., R.12 E., Tuolumne County, on left bank 0.3 mi (0.5 km) downstream from headgate at Goodwin Dam, and 3.4 mi (5.5 km) northeast of Knights Ferry.

PERIOD OF RECORD.--May 1914 to current year. Records for water years 1933-36 incomplete, monthly and yearly estimates published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 350 ft (107 m), from topographic map. Prior to Apr. 29, 1916, nonrecording gage at site 1,000 ft (300 m) upstream at different datum. Apr. 29, 1916, to July 3, 1925, nonrecording gage and July 4, 1925, to Apr. 3, 1949, water-stage recorder at present site at datum 0.18 ft (0.055 m) higher.

AVERAGE DISCHARGE.--61 years, 163 ft³/s (4.616 m³/s), 118,100 acre-ft/yr (146 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 556 ft³/s (15.7 m³/s) July 8-11, 1967; no flow at times in most years.

REMARKS.--Records excellent. Canal diverts water from left bank of Stanislaus River at Goodwin Dam 0.3 mi (0.5 km) upstream for irrigation in Oakdale Irrigation District. See schematic diagram of Stanislaus River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	424	.22	0	0	.02	0	6.1	460	508	515	520	474
2	424	.22	0	0	.09	0	154	460	508	516	520	462
3	424	.18	.08	0	0	115	244	460	509	514	520	463
4	425	.22	.06	0	.02	148	257	459	510	516	522	463
5	424	.18	0	0	0	121	181	464	510	516	523	463
6	425	.18	0	.05	0	80	157	465	510	516	486	463
7	425	.22	0	.01	0	51	157	473	510	514	484	463
8	425	.18	0	.10	.01	.32	137	477	510	513	484	449
9	422	.18	0	.06	.12	.26	125	489	509	515	485	443
10	414	.18	0	.03	.06	.26	119	494	511	514	486	436
11	414	.15	0	0	0	.12	102	496	509	516	486	433
12	414	.15	0	0	0	0	102	496	509	516	486	433
13	414	.15	0	0	.07	.10	103	496	509	515	486	433
14	417	1.9	0	0	.03	.10	250	499	510	516	487	433
15	425	6.0	0	0	0	.02	329	502	511	516	487	433
16	425	6.0	0	0	0	.28	360	502	511	516	469	432
17	419	6.0	0	0	0	.06	362	500	511	518	469	432
18	397	5.5	0	0	0	.01	381	500	511	518	470	431
19	354	5.0	0	0	0	0	409	507	511	520	470	431
20	354	4.2	0	6.5	0	0	416	508	511	519	470	430
21	355	2.6	0	6.3	0	.41	440	508	511	518	471	429
22	351	0	0	0	0	.20	448	506	511	520	472	429
23	335	0	5.4	0	0	.06	452	506	511	520	472	428
24	323	0	4.2	0	0	.10	453	507	508	521	472	415
25	92	0	0	0	0	.15	449	507	511	520	472	411
26	.88	0	0	0	0	.15	445	506	514	521	472	410
27	.44	0	0	2.2	0	.22	445	506	513	520	472	411
28	.32	0	0	1.1	0	.15	445	506	513	521	473	409
29	.32	0	0	.74	---	.10	445	506	513	521	472	409
30	.26	0	0	2.1	---	.06	454	507	514	522	473	409
31	.26	---	0	0	---	.02	---	508	---	521	473	---
TOTAL	9723.48	39.61	9.74	19.19	.42	518.15	8827.1	15280	15317	16044	15004	13060
MEAN	314	1.32	.31	.62	.015	16.7	294	493	511	518	484	435
MAX	425	6.0	5.4	6.5	.12	148	454	508	514	522	523	474
MIN	.26	0	0	0	0	0	6.1	459	508	513	469	409
AC-FT	19290	79	19	38	.8	1030	17510	30310	30380	31820	29760	25900
CAL YR 1974	TOTAL	92054.84	MEAN	252	MAX	528	MIN	0	AC-FT	182600		
WTR YR 1975	TOTAL	93842.69	MEAN	257	MAX	523	MIN	0	AC-FT	186100		

11302000 STANISLAUS RIVER BELOW GOODWIN DAM, NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°51'06", long 120°38'13", in Rancheria Del Rio Estanislao Grant, Calaveras County, on right bank 250 ft (76 m) upstream from Owl Creek, 0.9 mi (1.4 km) downstream from Goodwin Dam, and 2.9 mi (4.7 km) north-east of Knights Ferry.

DRAINAGE AREA.--986 mi² (2,554 km²).

PERIOD OF RECORD.--February 1957 to current year. Records equivalent to those published as Stanislaus River at Knights Ferry, 1903-14, and as Stanislaus River near Knights Ferry, 1915-32, if adjusted for diversions in Stanislaus and San Joaquin Water Company's canal and Oakdale and South San Joaquin canals.

GAGE.--Water-stage recorder. Datum of gage is 252.83 ft (77.063 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 773 ft³/s (21.89 m³/s), 560,000 acre-ft/yr (690 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,360 ft³/s (208 m³/s) June 2 (gage height, 15.15 ft or 4.618 m); minimum daily, 1.9 ft³/s (0.054 m³/s) Oct. 20, 21.

Period of record: Maximum discharge, 40,200 ft³/s (1,140 m³/s) Dec. 24, 1964 (gage height, 28.85 ft or 8.793 m, in gage well, 31.2 ft or 9.51 m outside, from floodmarks), from rating curve extended above 27,000 ft³/s (765 m³/s); minimum daily, 0.27 ft³/s (0.008 m³/s) Oct. 26-28, 1973.

Flood of Dec. 23, 1955, reached a stage of 37.7 ft (11.49 m), from floodmarks (discharge, 62,900 ft³/s or 1,780 m³/s, by computation of flow over Goodwin Dam).

REMARKS.--Records good. Flow regulated by reservoirs and powerplants at Donnell, Beardsley Lake, Melones, Tulloch, and several smaller reservoirs above station. South San Joaquin Canal (see sta 11300500) and Oakdale Canal (see sta 11301000) divert at Goodwin Dam 1.0 mi (1.6 km) upstream. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	45	1160	77	19	900	1360	76	6190	3.0	5.2	4.2
2	2.4	42	1160	77	19	892	980	1250	6990	284	5.2	4.0
3	2.4	40	1130	79	82	420	792	2070	5620	259	5.5	4.0
4	2.6	51	1120	72	1190	9.9	659	2430	4750	163	5.8	4.0
5	2.6	96	1120	76	1900	7.1	722	2580	5980	175	5.8	4.0
6	2.6	125	1120	76	1890	2.4	792	2650	5700	163	5.2	4.0
7	2.6	123	1110	79	1760	2.8	884	2630	5820	470	4.7	4.0
8	2.8	129	1110	82	1670	270	1050	2570	5730	592	4.7	3.6
9	2.8	133	1100	76	1790	799	1080	2090	5330	246	4.9	3.8
10	2.8	133	1090	82	1890	785	1090	1770	4070	6.6	4.9	3.6
11	2.8	133	1080	76	1890	1400	1120	1760	2460	3.4	5.2	3.4
12	2.6	133	1080	82	1880	1740	1120	2060	1740	9.8	5.2	3.4
13	2.6	133	1080	76	1890	1750	1110	2270	3300	3.6	4.9	3.4
14	2.6	133	1080	82	1880	1740	820	2150	3840	3.6	4.9	3.4
15	2.6	133	1080	73	1880	1750	574	2180	3830	3.8	5.2	3.4
16	2.6	133	1080	73	1880	1760	450	2180	3820	3.8	4.9	3.4
17	2.6	133	1070	69	1870	1740	390	2210	3660	3.8	4.9	3.6
18	2.4	133	1060	76	1870	1740	366	2230	3170	3.8	5.2	3.4
19	2.0	123	1060	70	1860	1740	300	2350	1370	3.8	4.4	3.4
20	1.9	131	735	70	1860	1740	296	2350	302	3.8	4.4	3.4
21	1.9	123	358	72	1850	1760	314	2350	23	4.0	4.7	3.2
22	111	220	338	67	1850	1760	350	2290	3.4	4.0	4.9	3.2
23	254	556	322	72	1840	1750	342	2270	3.2	4.0	4.9	3.2
24	378	610	190	67	1840	1760	342	2210	3.2	4.0	5.2	3.4
25	430	900	90	70	1510	1760	346	2280	3.0	4.0	4.7	3.2
26	410	1140	84	65	996	1760	346	2340	3.0	4.2	4.7	3.0
27	395	1140	84	72	908	1760	342	2400	3.0	4.4	4.7	2.8
28	373	1140	86	67	900	1760	342	2450	3.0	4.7	4.4	2.8
29	236	1150	80	61	---	1750	275	2450	3.0	4.7	4.4	2.8
30	45	1160	82	27	---	1560	208	2600	3.0	4.7	4.4	2.6
31	47	---	74	20	---	1430	---	2530	---	4.9	4.0	---
TOTAL	2731.5	10374	23413	2183	42664	39998.2	19162	68026	83722.8	2452.4	152.1	103.6
MEAN	88.1	346	755	70.4	1524	1290	639	2194	2791	79.1	4.91	3.45
MAX	430	1160	1160	82	1900	1760	1360	2650	6990	592	5.8	4.2
MIN	1.9	40	74	20	19	2.4	208	76	3.0	3.0	4.0	2.6
AC-FT	5420	20580	46440	4330	84620	79340	38010	134900	166100	4860	302	205
CAL YR 1974 TOTAL	435686.8			MEAN 1194	MAX 4700	MIN 1.9	AC-FT 864200					
WTR YR 1975 TOTAL	294982.6			MEAN 808	MAX 6990	MIN 1.9	AC-FT 585100					

11302000 STANISLAUS RIVER BELOW GOODWIN DAM, NEAR KNIGHTS FERRY, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: February 1966 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 27.5°C July 25-27; minimum recorded, 6.5°C Feb. 1.

Period of record:

Water temperatures: Maximum, 30.5°C July 25, 1974; minimum (1966-68, 1969 to current year), 5.5°C Feb. 3, 1972.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	19.0	16.5	15.5	13.0	12.0	9.5	8.5	8.5	6.5	---	---
2	23.0	20.0	16.5	15.5	13.0	12.5	9.0	8.0	9.0	8.0	---	---
3	23.0	20.0	16.5	15.0	12.5	12.5	9.0	8.5	8.5	7.5	---	---
4	23.0	20.0	16.0	15.0	12.5	12.5	9.0	8.5	---	---	11.0	9.0
5	22.5	19.0	15.5	15.0	12.5	12.0	9.0	8.5	---	---	10.0	9.5
6	22.0	18.5	15.5	15.0	12.5	12.0	9.0	9.0	---	---	12.5	9.5
7	22.0	18.5	15.0	15.0	12.0	11.5	9.0	9.0	---	---	11.5	11.0
8	22.0	19.5	15.0	14.5	12.0	11.5	9.0	9.0	---	---	13.0	9.0
9	22.0	19.0	15.5	14.5	12.0	11.5	10.0	9.0	---	---	9.0	8.5
10	21.5	18.5	15.5	15.0	12.0	11.5	10.0	9.5	---	---	9.0	8.5
11	21.5	18.0	15.5	15.0	12.5	11.5	9.5	9.0	---	---	9.0	8.5
12	21.5	18.0	15.5	15.0	11.5	11.0	9.5	9.0	---	---	9.5	8.5
13	21.0	17.5	16.0	15.0	11.5	11.5	9.0	8.5	---	---	9.0	8.5
14	21.5	17.5	15.5	15.0	11.5	11.0	9.5	9.0	---	---	9.0	8.5
15	21.5	17.5	15.0	15.0	11.5	11.0	9.0	9.0	---	---	9.0	8.5
16	21.0	17.5	15.0	14.5	11.5	11.0	9.5	9.0	---	---	9.5	8.5
17	21.0	17.5	14.5	14.0	11.5	11.0	9.5	9.0	---	---	9.0	8.5
18	21.0	17.0	14.5	14.0	11.5	10.5	9.0	9.0	---	---	9.5	9.0
19	20.0	18.0	14.5	14.0	11.0	11.0	9.0	8.5	---	---	9.5	9.0
20	20.0	18.0	14.0	13.5	11.0	11.0	8.5	8.5	---	---	9.5	9.0
21	20.0	17.0	14.0	13.5	11.0	11.0	8.5	8.5	---	---	9.0	9.0
22	17.5	16.0	14.0	13.5	11.0	10.5	8.5	8.5	---	---	9.5	9.0
23	17.5	16.5	13.5	13.0	10.5	10.0	8.5	8.5	---	---	9.5	9.0
24	17.5	16.5	13.5	13.0	10.5	9.5	8.5	8.0	---	---	9.5	9.0
25	17.0	17.0	13.5	13.0	10.0	9.5	8.5	8.0	---	---	9.5	9.0
26	17.5	17.0	13.5	13.0	10.0	9.0	9.0	8.0	---	---	9.5	8.5
27	17.0	17.0	13.5	13.0	9.5	9.5	9.0	8.0	---	---	10.0	9.0
28	17.0	16.5	13.0	12.5	10.0	9.5	8.5	7.5	---	---	10.0	9.0
29	16.5	16.0	13.0	12.5	9.5	9.0	8.5	7.5	---	---	10.0	9.0
30	17.0	15.5	13.0	12.5	9.0	9.0	8.5	7.0	---	---	10.0	9.0
31	16.5	16.0	---	---	9.5	8.5	8.0	7.0	---	---	10.0	9.5
MONTH	23.0	15.5	16.5	12.5	13.0	8.5	10.0	7.0	---	---	13.0	8.5

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.0	13.5	10.0	14.0	13.5	25.5	20.0	26.0	21.5	23.5	20.5
2	10.0	9.0	13.5	10.5	14.0	13.5	22.5	14.5	26.0	22.0	23.0	20.0
3	10.0	9.0	13.5	12.5	15.0	14.0	16.0	14.5	26.5	22.0	23.5	20.5
4	9.5	9.0	13.0	12.0	14.5	14.0	16.0	14.5	26.5	22.5	24.0	20.5
5	9.5	9.0	12.5	11.5	14.5	14.0	16.0	14.5	26.0	22.5	24.0	21.0
6	9.5	9.0	12.5	11.5	14.5	14.0	16.0	15.0	25.5	22.5	24.5	21.5
7	9.5	9.0	12.5	11.5	14.5	14.0	16.0	15.0	25.5	21.5	24.5	21.5
8	9.5	9.0	12.5	11.5	15.0	14.0	16.5	15.5	25.5	21.5	23.0	21.5
9	10.0	8.5	12.5	11.5	15.0	14.5	16.5	15.5	26.0	22.0	24.0	21.5
10	10.0	9.0	13.0	11.5	15.0	14.5	22.5	16.0	25.5	22.5	23.5	21.5
11	10.0	9.0	13.0	12.0	15.5	14.5	24.5	19.0	25.5	22.5	23.5	21.0
12	10.0	9.0	13.0	12.0	15.0	14.5	23.0	17.0	25.5	22.0	24.0	21.0
13	10.0	9.0	13.5	12.0	15.5	15.0	24.5	20.0	25.0	22.0	23.5	21.0
14	9.5	9.0	13.0	12.5	16.0	15.0	25.0	21.0	25.0	21.5	23.5	21.0
15	9.5	8.5	13.0	12.5	16.0	15.0	23.0	21.0	24.5	22.0	23.5	21.0
16	9.5	8.5	13.0	12.0	16.0	15.5	25.0	20.5	25.0	21.5	23.5	20.5
17	10.0	8.5	13.5	12.5	16.0	15.5	26.0	21.5	25.0	21.5	24.0	22.0
18	10.0	9.5	13.5	12.5	16.0	15.5	26.0	21.5	23.5	20.5	23.5	21.5
19	10.0	9.0	13.0	11.5	16.0	15.0	26.0	21.5	24.0	20.0	23.5	21.0
20	10.5	9.0	13.0	11.5	16.0	14.5	26.5	22.0	25.0	20.5	23.5	21.0
21	10.5	9.0	12.5	12.0	20.0	14.5	26.5	22.0	24.5	21.5	23.5	21.5
22	10.0	9.0	13.0	12.0	23.0	17.5	26.5	22.5	24.5	21.0	23.5	21.0
23	10.5	9.0	13.0	12.0	23.5	19.0	26.5	22.5	24.5	21.5	23.5	21.0
24	10.0	9.5	13.0	12.5	22.5	19.0	27.0	23.0	25.0	22.0	23.5	21.0
25	10.5	9.5	13.0	12.0	24.0	17.5	27.5	23.5	25.0	22.0	23.5	21.0
26	10.5	9.5	13.0	12.0	24.0	18.5	27.5	24.0	25.0	22.0	23.5	21.0
27	11.0	9.5	13.5	12.0	24.5	19.5	27.5	23.5	24.5	21.0	22.5	20.5
28	11.0	9.5	14.0	12.0	25.0	20.0	26.5	23.5	24.5	21.0	22.5	20.0
29	11.0	9.5	13.0	12.0	25.0	20.5	26.5	23.0	24.0	20.5	22.0	19.5
30	11.5	10.0	13.5	12.0	25.5	20.5	26.0	21.5	23.5	20.5	22.0	19.5
31	---	---	13.5	12.5	---	---	25.5	21.5	23.5	20.5	---	---
MONTH	11.5	8.5	14.0	10.0	25.5	13.5	27.5	14.5	26.5	20.0	24.5	19.5

11303000 STANISLAUS RIVER AT RIPON, CALIF.

LOCATION.--Lat 37°43'47", long 121°06'34", in NW¼SE¼ sec.29, T.2 S., R.8 E., Stanislaus County, on left bank 15 ft (5 m) downstream from railroad bridge, 1.1 mi (1.8 km) southeast of Ripon, and 15 mi (24 km) upstream from mouth.

DRAINAGE AREA.--1,075 mi² (2,784 km²).

PERIOD OF RECORD.--October 1940 to current year. April to September 1940 in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 0.72 ft (0.219 m) above mean sea level. October 1940 to Nov. 17, 1953, at site 100 ft (30 m) upstream at same datum.

AVERAGE DISCHARGE.--35 years, 1,047 ft³/s (29.65 m³/s), 758,600 acre-ft/yr (935 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,820 ft³/s (221 m³/s) June 3 (gage height, 55.37 ft or 16.877 m); minimum daily, 132 ft³/s (3.74 m³/s) Feb. 3.

Period of record: Maximum discharge, 62,500 ft³/s (1,770 m³/s) Dec. 24, 1955 (gage height, 63.25 ft or 19.279 m); minimum, 40 ft³/s (1.13 m³/s) July 21, 1961.

Flood of Feb. 12, 1938, reached a stage of 64.4 ft (19.63 m), from floodmarks.

REMARKS.--Records good. Flow regulated by reservoirs and powerplants above station (see REMARKS for sta 11302000). South San Joaquin and Oakdale Canals (see sta 11300500, 11301000) divert at Goodwin Dam 34 mi (55 km) upstream. Diversions for irrigation of 57,250 acres (232 km²) in vicinity of Oakdale area. See schematic diagram of Stanislaus River basin.

COOPERATION.--One discharge measurement furnished by California Department of Water Resources.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	397	412	1110	226	140	1150	1590	589	3960	510	253	396
2	399	375	1130	219	133	1140	1450	476	5160	433	230	312
3	354	339	1260	213	132	1100	1270	945	6970	471	224	285
4	382	321	1360	212	156	886	1130	1900	7000	612	236	291
5	397	311	1280	207	682	732	1050	2280	5350	566	230	232
6	297	314	1280	205	1460	655	1030	2430	6050	652	221	238
7	285	346	1320	207	1640	629	1080	2640	6210	606	221	334
8	303	368	1320	203	1650	664	1280	2680	6290	747	242	435
9	291	328	1320	206	1610	682	1470	2700	6340	946	238	379
10	294	288	1320	211	1810	992	1500	2400	5920	719	243	309
11	304	280	1320	201	1840	1040	1440	1990	5020	458	235	302
12	356	276	1320	196	1800	1360	1370	1970	3560	366	230	293
13	423	277	1330	192	1840	1700	1380	2170	2530	362	232	254
14	469	273	1340	188	2110	1990	1330	2440	3430	335	232	221
15	479	325	1330	186	1950	1990	1090	2330	4060	287	239	319
16	338	408	1330	185	1850	1940	959	2330	4190	267	226	310
17	358	424	1340	180	1830	2100	904	2360	4240	262	291	239
18	310	429	1330	178	1820	1930	823	2390	4150	324	342	295
19	284	441	1330	177	1820	1860	750	2430	3770	300	476	327
20	289	386	1330	177	1830	1850	741	2540	2350	331	470	366
21	303	302	1150	173	1830	1850	754	2700	1400	323	439	378
22	297	288	681	174	1820	1970	699	2630	1080	273	393	374
23	291	297	557	171	1820	2150	697	2520	893	254	347	300
24	371	507	513	170	1820	1950	715	2480	828	243	354	293
25	481	651	451	168	1910	1940	759	2510	643	229	265	306
26	596	772	333	167	1800	1990	787	2480	570	240	243	275
27	548	992	288	163	1310	1880	774	2540	567	236	311	305
28	518	1050	269	163	1190	1830	761	2590	552	242	327	254
29	514	1080	256	164	---	1860	732	2620	554	244	312	280
30	485	1090	244	162	---	1980	664	2680	566	254	274	299
31	406	---	233	154	---	1830	---	2820	---	236	368	---
TOTAL	11819	13950	30975	5798	41603	47620	30979	70560	104203	12328	8946	9201
MEAN	381	465	999	187	1486	1536	1033	2276	3473	398	289	307
MAX	596	1090	1360	226	2110	2150	1590	2820	7000	946	476	435
MIN	284	273	233	154	132	629	664	476	552	229	221	221
AC-FT	23440	27670	61440	11500	82520	94450	61450	140000	206700	24450	17740	18250
CAL YR 1974 TOTAL	522980	MEAN	1433	MAX	5160	MIN	166	AC-FT	1037000			
WTR YR 1975 TOTAL	387982	MEAN	1063	MAX	7000	MIN	132	AC-FT	769600			

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.
(National stream-quality accounting network station)

LOCATION.--Lat 37°40'34", long 121°15'55", in El Pescadero Grant, San Joaquin County, on left bank 12 ft (4 m) downstream from Durham Ferry highway bridge, 2.6 mi (4.2 km) downstream from Stanislaus River, and 3.2 mi (5.1 km) northeast of Vernalis.

DRAINAGE AREA.--13,536 mi² (35,058 km²).

PERIOD OF RECORD.--July 1922 to current year (1922-23 and 1925-29, low-water records only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. July 1922 to September 1946, at various sites on or within 100 ft (30 m) of Durham Ferry bridge. Prior to Apr. 1, 1931, at different datum. Apr. 1, 1931, to Sept. 30, 1959, at datum 5.06 ft (1.542 m) above mean sea level. Oct. 1, 1959, to Nov. 30, 1967, at site 120 ft (37 m) upstream at present datum.

AVERAGE DISCHARGE.--47 years (1924, 1929-75), 4,413 ft³/s (125.0 m³/s), 3,197,000 acre-ft/yr (3.94 km³/yr).

EXTREMES.--Current year: Maximum discharge, 9,080 ft³/s (257 m³/s) Feb. 15 (elevation, 18.60 ft or 5.669 m); minimum daily, 1,340 ft³/s (37.9 m³/s) Aug. 16.
Period of record: Maximum discharge recorded, 79,000 ft³/s (2,240 m³/s) Dec. 9, 1950 (elevation, 32.81 ft or 10.000 m, present datum), including flow through breaks in levee; maximum elevation, 34.55 ft (10.531 m) Jan. 27, 1969; minimum discharge, 19 ft³/s (0.54 m³/s) Aug. 10, 1961.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, and diversions for irrigation; low flows consist mainly of return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 831: 1936. WSP 931: 1940. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3760	4710	3860	3580	4290	3830	6420	2510	4980	2030	1430	1930
2	3830	4830	4000	3480	4250	3750	5800	2360	5860	1930	1400	1790
3	3560	5140	4200	2850	3540	3850	5060	2330	6550	1860	1400	1770
4	3400	5240	4650	3680	3610	3580	4450	3090	7350	1930	1450	1710
5	3330	5180	4640	3890	4790	3750	4100	3660	7570	1970	1420	1890
6	3120	4580	4740	3550	6080	3930	3990	3690	7070	2040	1350	2130
7	2990	3860	5010	2920	6910	4270	4140	3910	7350	2030	1400	2380
8	2970	3680	5070	3770	7250	4640	4320	4060	7560	1910	1440	2500
9	2920	3670	5030	3880	7200	4860	4880	4000	7880	2020	1470	2460
10	2770	3660	4940	3940	6870	5000	5110	3960	8100	1980	1490	2340
11	2600	3610	4890	4050	6950	5060	5100	3670	8000	1740	1550	2470
12	2860	3600	4860	4060	7140	5610	4960	3570	7510	1680	1520	2570
13	3040	3610	4840	3590	7110	5800	4740	3440	6030	1680	1440	2770
14	3040	3640	4830	2950	7800	5730	4560	3690	6120	1630	1400	2800
15	2940	3590	4840	3740	8820	6350	4240	3840	7160	1560	1350	2800
16	2690	3620	4840	4020	8670	6300	3880	3970	7740	1550	1340	2910
17	3020	3680	4730	4120	7950	6230	3470	4070	7840	1650	1480	2810
18	3220	3670	4350	4160	7120	6380	3340	4240	8040	1670	1850	2760
19	3140	3670	4130	4080	6710	6070	3220	4340	7810	1760	2270	2790
20	3060	3660	4010	3610	6830	6330	3240	4350	6600	1780	2420	2940
21	3080	3480	3940	2990	6610	6590	3310	4550	4380	1760	2300	2980
22	3140	3400	3690	3940	6300	6620	3190	4650	3480	1620	2230	2980
23	3560	3340	3130	4230	6010	7070	3070	4550	3130	1460	2220	2950
24	4120	3340	2870	4350	5410	7040	2970	4470	2860	1470	2200	3010
25	4380	3500	3080	4340	5030	6530	2890	4530	2700	1630	2090	3060
26	4560	3600	3250	4140	5460	6930	2900	4580	2440	1490	1760	3210
27	4570	3740	2890	3550	4990	7010	2950	4540	2330	1550	1710	3250
28	4530	3830	3560	3000	4240	6740	2970	4590	2290	1500	1710	3250
29	4620	3830	3740	3880	---	6630	2810	4580	2260	1440	1640	3210
30	4770	3760	3470	4150	---	6820	2630	4630	2240	1460	1620	3150
31	4820	---	2930	4270	---	6920	---	4700	---	1490	1740	---
TOTAL	108410	116720	129010	116760	173940	176220	118710	123120	171230	53270	52090	79570
MEAN	3497	3891	4162	3766	6212	5685	3957	3972	5708	1718	1680	2652
MAX	4820	5240	5070	4350	8820	7070	6420	4700	8100	2040	2420	3250
MIN	2600	3340	2870	2850	3540	3580	2630	2330	2240	1440	1340	1710
AC-FT	215000	231500	255900	231600	345000	349500	235500	244200	339600	105700	103300	157800
CAL YR 1974	TOTAL	1492070	MEAN	4088	MAX	9700	MIN	1260	AC-FT	2960000		
WTR YR 1975	TOTAL	1419050	MEAN	3888	MAX	8820	MIN	1340	AC-FT	2815000		

PERIOD OF RECORD.--Chemical analyses: December 1950 to current year.
Specific conductance: January 1973 to current year.
Water temperatures: March 1951 to current year.
Sediment records: November 1956 to current year.
Turbidity: July 1972 to current year.

Water temperatures: Maximum, 27.5°C July 26; minimum, 7.5°C Feb. 22.
Sediment concentrations: Maximum daily, 193 mg/l July 25; minimum daily, 27 mg/l Dec. 24.
Sediment discharge: Maximum daily, 3,450 tons (3,130 tonnes) June 4; minimum daily, 209 tons (190 tonnes) Dec. 24.

Water temperatures: Maximum, 30.0°C July 7, 1970; minimum, 3.0°C Jan. 24, 1962.
Sediment concentrations: Maximum daily, 1,590 mg/l Dec. 25, 1964; minimum daily, 9 mg/l Jan. 4, 1960,
Nov. 18, 1961.
Sediment discharge: Maximum daily, 54,100 tons (49,100 tonnes) Dec. 25, 1964; minimum daily, 2 tons
(1.8 tonnes) Aug. 10, 1961.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE	DIS- SOLVED SILICA (SiO2)	TOTAL IRON (FE)	DIS- SOLVED IRON (FE)	TOTAL MAN- GANESE (MN)	SUS- PENDED MAN- GANESE (MN)	DIS- SOLVED MAN- GANESE (MN)	DIS- SOLVED CAL- CIUM (CA)	DIS- SOLVED MAG- NE- SIUM (MG)
DATE	TIME	(CFS)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)	(MG/L)
OCT. 08...	1030	3000	--	--	--	--	--	--	--	--
NOV. 12...	1145	3600	16	1800	40	130	110	20	26	10
DEC. 05...	1500	4600	--	--	--	--	--	--	--	--
JAN. 09...	1400	3900	--	--	--	--	--	--	--	--
FEB. 03...	1300	3560	12	2000	20	110	80	30	32	13
MAR. 03...	1330	3856	--	--	--	--	--	--	--	--
APR. 01...	1330	6500	--	--	--	--	--	--	--	--
MAY 01...	1400	2510	18	3600	50	230	190	40	34	16
JUNE 05...	1300	7640	--	--	--	--	--	--	--	--
JULY 01...	1400	2100	--	--	--	--	--	--	--	--
AUG. 06...	1000	1440	17	6100	10	390	380	10	42	21
SEP. 02...	1300	1790	--	--	--	--	--	--	--	--

[illegible]

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM
OCT. 08...	1.9	.22	--	--	--	--	--	--	--
NOV. 12...	1.4	.16	245	241	.33	2380	110	28	47
DEC. 05...	2.0	.30	--	--	--	--	--	--	--
JAN. 09...	1.0	.12	--	--	--	--	--	--	--
FEB. 03...	1.5	.18	354	349	.48	3310	130	48	53
MAR. 03...	1.4	.16	--	--	--	--	--	--	--
APR. 01...	1.4	.18	--	--	--	--	--	--	--
MAY 01...	1.7	.28	393	374	.53	2660	150	43	50
JUNE 05...	.56	.13	--	--	--	--	--	--	--
JULY 01...	2.1	.28	--	--	--	--	--	--	--
AUG. 06...	2.8	.42	476	469	.65	1850	190	55	51
SEP. 02...	1.6	.26	--	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 08...	--	450	7.8	18.0	15	130000	480	440	--
NOV. 12...	1.9	370	7.7	13.5	10	2300	--	--	4.0
DEC. 05...	--	266	8.3	12.0	--	4900	814000	814000	--
JAN. 09...	--	230	8.3	11.0	--	4500	8280	530	--
FEB. 03...	2.7	603	8.1	10.5	20	4700	380	440	6.4
MAR. 03...	--	560	8.0	11.0	15	9300	1200	21	--
APR. 01...	--	359	7.9	11.0	.20	11000	8100	330	--
MAY 01...	2.6	666	7.4	17.0	24	23000	848	170	--
JUNE 05...	--	187	7.6	19.0	15	6600	470	390	--
JULY 01...	--	721	8.0	21.5	40	29000	800	440	--
AUG. 06...	2.9	824	7.7	23.5	60	27000	1200	240	11
SEP. 02...	--	666	7.8	22.0	25	13000	1100	310	--

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

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued
 BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHYTOPLANKTON			
	PHYLUM	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
	..CLASS			
	...ORDER			
	....FAMILY			
	....GENUS			
	.....SPECIES			
OCT 8	CHLOROPHYTA	GREEN ALGAE		
	..CHLOROPHYCEAE			
	...CHLOROCOCCALES			
	....OOCYSTACEAE			
	.....CHLORELLA			2
	...SCENEDESMACEAE			
	....SCENEDESMUS			1
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	...CENTRALES	CENTRIC		
	....COSCINODISCACEAE			
	.....CYCLOTELLA			1
	...PENNALES	PENNATE		
	....FRAGILARIACEAE			
	.....SYNEDRA			<1
	...NAVICULACEAE	NAVICULOID		<1
	....NAVICULA			<1
	...NITZSCHIACEAE			
	....NITZSCHIA			<1
	CRYPTOPHYTA			
	..CRYPTOPHYCEAE			
	...CRYPTOMONADALES			
	....CRYPTOMONADACEAE			
	.....CRYPTOMONAS			<1
	CYANOPHYTA	BLUE-GREEN ALGAE		
	..MYXOPHYCEAE			
	...CHROOCOCCALES			
	....CHROOCOCCACEAE			
	.....AGMENELLUM			87
	...OSCILLATORIALES	FILAMENTOUS		
	....HORMOGONALES			
	.....LYNGBYA			2
	TOTAL PHYTOPLANKTON		130000	
NOV 12	CHLOROPHYTA	GREEN ALGAE		
	..CHLOROPHYCEAE			
	...CHLOROCOCCALES			
	....OOCYSTACEAE			
	.....ANKISTRODESMUS			3
	...SCENEDESMACEAE			
	....SCENEDESMUS			10
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	...CENTRALES	CENTRIC		
	....COSCINODISCACEAE			
	.....CYCLOTELLA			24
	....MELOSIRA			9
	...PENNALES	PENNATE		
	....CYMBELLACEAE			
	.....CYMBELLA			2
	...FRAGILARIACEAE			
	....FRAGILARIA			2
	...GOMPHONEMACEAE			
	....GOMPHONEMA			3
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			9
	...NITZSCHIACEAE			
	....NITZSCHIA			16
	...SURIPELLACEAE			
	....CYMATOPLEURA			2
	CYANOPHYTA	BLUE-GREEN ALGAE		
	..MYXOPHYCEAE			
	...OSCILLATORIALES	FILAMENTOUS		
	....NOSTOCACEAE			
	.....ANABAENA			21
	TOTAL PHYTOPLANKTON		2300	

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued
 BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON				
DATE	PHYLUM .CLASS ..ORDER ...FAMILY ....GENUS .....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
DEC 5	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OOCYSTACEAE			9
	....ANKISTRODESMUS			1
	....CLOSTERIDIUM			2
	....KIRCHNERIELLA			
	...SCENEDESMACEAE			2
	....SCENEDESMUS			
	..TETRASPORALES			
	...PALMELLACEAE			7
	....GLOEOCYSTIS			
	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			34
	....CYCLOTELLA			3
	....MELOSIRA			
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			2
	....ACHNANTHES			1
	...COCCONEIS			
	...CYMBELLACEAE			1
	....CYMBELLA			1
	....EPITHEMIA			1
	..DIATOMACEAE			
	....DIATOMA			1
	...FRAGILARIACEAE			11
	....FRAGILARIA			
	...NAVICULACEAE	NAVICULOID		3
	....NAVICULA			
	...NITZSCHACEAE			7
	....NITZSCHIA			
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...HORMOGONALES			17
	....LYNGBYA			
	TOTAL PHYTOPLANKTON		4900	
JAN 9	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...COELASTRACEAE			9
	....COELASTRUM			
	...HYDRODICTYACEAE			7
	....PEDIASTRUM			
	...OOCYSTACEAE			1
	....ANKISTRODESMUS			
	...SCENEDESMACEAE			8
	....SCENEDESMUS			
	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			5
	....CYCLOTELLA			
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			1
	....COCCONEIS			
	...CYMBELLACEAE			1
	....AMPHORA			1
	....CYMBELLA			
	..DIATOMACEAE			
	....DIATOMA			1
	...EUNOTIACEAE			60
	....EUNOTIA			
	...NAVICULACEAE	NAVICULOID		1
	....AMPHIPRORA			1
	....NAVICULA			
	...SURIPELLACEAE			1
	....SURIPELLA			
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..CHROOCOCCALES			
	...CHROOCOCCACEAE			4
	....ANACYSTIS			
	TOTAL PHYTOPLANKTON		4500	

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

[illegible]

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		PHYTOPLANKTON		
DATE	PHYLUM	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
	.CLASS .ORDER ...FAMILY....GENUS.....SPECIES			
MAY 1	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OOCYSTACEAE			
	....ANKISTRODESMUS			2
	....OOCYSTIS			3
	...SCENEDESMACEAE			
	....SCENEDESMUS			27
	....TETRASTRUM			1
	..TETRASPORALES			
	...PALMELLACEAE			
	....SPHAEROCYSTIS			7
	..VOLVOCALES			
	...CHLAMYDOMONADACEAE			
	....CHLAMYDOMONAS			1
	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			29
	....MELOSIRA			19
	....STEPHANODISCUS			1
	..PENNALES	PENNATE		
	...CYMBELLACEAE			
	....AMPHORA			1
	...FRAGILARIACEAE			
	....ASTERIONELLA			1
	...NAVICULACEAE	NAVICULOID		
	....PINNULARIA			1
	...NITZSCHIACEAE			
	....NITZSCHIA			8
	TOTAL PHYTOPLANKTON		23000	
JUNE 5	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...SCENEDESMACEAE			
	....SCENEDESMUS			11
	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			65
	....MELOSIRA			16
	..PENNALES	PENNATE		
	...FRAGILARIACEAE			
	....ASTERIONELLA			3
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			3
	...NITZSCHIACEAE			
	....NITZSCHIA			3
	TOTAL PHYTOPLANKTON		6600	
JULY 1	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...HYDRODICTYACEAE			
	....PEDIASTRUM			9
	...OOCYSTACEAE			
	....TETRAEDRON			0
	...SCENEDESMACEAE			
	....ACTINASTRUM			12
	....SCENEDESMUS			7
	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			28
	....MELOSIRA			4
	..PENNALES	PENNATE		
	...CYMBELLACEAE			
	....CYMBELLA			<1
	...FRAGILARIACEAE			
	....FRAGILARIA			2
	...GOMPHONEMACEAE			
	....GOMPHONEMA			<1
	...NAVICULACEAE	NAVICULOID		
	....GYROSIGMA			<1

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON					
DATE	PHYLUM .CLASS ..ORDER ...FAMILY ....GENUS .....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL	
JULY 1	CHRYSOPHYTA	YELLOW-GREEN ALGAE			
	.BACILLARIOPHYCEAE	DIATOMS			
	..PENNALES	PENNATE			
	...NITZSCHIACEAE				
	....DENTICULA				1
	....NITZSCHIA				2
	...SURIPELLACEAE				
	....CYMATOPLEURA				<1
	....SURIPELLA				<1
	CYANOPHYTA	BLUE-GREEN ALGAE			
	.MYXOPHYCEAE				
	..CHROOCOCCALES				
	...CHROOCOCCACEAE				
	....ANACYSTIS				33
	TOTAL PHYTOPLANKTON		29000		
AUG 6	CHLOROPHYTA	GREEN ALGAE			
	.CHLOROPHYCEAE				
	..CHLOROCOCCALES				
	...HYDRODICTYACEAE				
	....PEDIASTRUM				<1
	...MICRACTINIACEAE				
	....GOLENKINIA				<1
	...MICRACTINIUM		1900		7
	....OOCYSTACEAE				
	...ANKISTRODESMUS		240		1
	...DICTYOSPHAERIUM				<1
	....TETRAEDRON				<1
	...SCENEDESMACEAE				
	....ACTINASTRUM				<1
	....SCENEDESMUS		990		4
	..VOLVOCALES				
	...CHLAMYDOMONADACEAE				
	....CHLAMYDOMONAS				<1
	CHRYSOPHYTA	YELLOW-GREEN ALGAE			
	.BACILLARIOPHYCEAE	DIATOMS			
	..CENTRALES	CENTRIC			
	...COSCINODISCAEAE				
	....CYCLOTELLA		10000		39
	....MELOSIRA		1700		6
	..PENNALES	PENNATE			
	...ACHNANTHACEAE				
	....RHODIOSIPHONIA				<1
	...DIATOMACEAE				
	....DIATOMA				<1
	...FRAGILARIACEAE				
	....SYNEDRA		240		1
	...GOMPHONEMACEAE				
	....GOMPHONEMA		240		1
	...NAVICULACEAE	NAVICULOID			
	....GYROSIGMA				<1
	...NAVICULA		490		2
	....PINNULARIA				<1
	...NITZSCHIACEAE				
	....NITZSCHIA		990		4
	...SURIPELLACEAE				
	....CYMATOPLEURA				1
	....SURIPELLA				<1
	CYANOPHYTA	BLUE-GREEN ALGAE			
	.MYXOPHYCEAE				
	..CHROOCOCCALES				
	...CHROOCOCCACEAE				
	....ANACYSTIS		6900		25
	...OSCILLATORIALES	FILAMENTOUS			
	....NOSTOCACEAE				
	....ANABAENA		2900		11
	....APHANIZOMENON				<1
	...HORMOGONALES				
	....OSCILLATORIA				<1
	TOTAL PHYTOPLANKTON		27000		

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued
 BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON				
DATE	PHYLUM ..CLASS ...ORDER....FAMILY.....GENUS.....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
SEPT 2	CHLOROPHYTA	GREEN ALGAE		
	..CHLOROPHYCEAE			
	...CHLOROCOCCALES			
	...COELASTRACEAE			
	....COELASTRUM		1200	9
	...MICRACTINIACEAE			
	....MICRACTINIUM			<1
	...OOCYSTACEAE			
	....ANKISTRODESMUS		75	1
	...SCENEDESMACEAE			
	....ACTINASTRUM		750	6
	....SCENEDESMUS		900	7
	..VOLVOCALES			
	...CHLAMYDOMONADACEAE			
	....CHLAMYDOMONAS		300	2
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		5000	38
	....MELOSIRA		370	3
	..PENNALES	PENNATE		
	...CYMBELLACEAE			
	....EPITHEMIA		75	1
	...DIATOMACEAE			
	....DIATOMA			<1
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		75	1
	...NITZSCHIAEAE			
	....NITZSCHIA		300	2
	...SURIPELLACEAE			
	....CYMATOPLEURA			<1
	CYANOPHYTA	BLUE-GREEN ALGAE		
	..HYPXOPHYCEAE			
	...CHROOCOCCALES			
	...CHROOCOCCACEAE			
	....AGMENELLUM		3600	27
	....ANACYSTIS		300	2
	...GOMPHOSPHERAERIA		300	2
	...OSCILLATORIALES	FILAMENTOUS		
	...NOSTOCACEAE			
	....ANABAENA			<1
	TOTAL PHYTOPLANKTON		13000	

DATE	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M
FEB. 03 TO MAR. 03...	12.0	15.0	1.10	13.0
AUG. 06 TO SEP. 02...	95.0	110	--	--
SEP. 02 TO OCT. 01...	33.0	40.0	.600	30.0

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE D ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL MIUM (CD) (UG/L)	SUS- PENDE D CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE D CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)
NOV. 12...	1145	2	0	2	<10	<9	1	0	0	0
FEB. 03...	1300	2	1	1	<10	<9	1	0	0	0
MAY 01...	1400	5	1	4	<10	<10	0	0	0	0
AUG. 06...	1000	8	5	3	<10	<10	0	20	20	0

DATE	TOTAL COBALT (CO) (UG/L)	SUS- PENDE D COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE D COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDE D LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)
NOV. 12...	50	49	1	10	4	6	<100	<96	4
FEB. 03...	<50	<50	0	2300	2300	9	100	94	6
MAY 01...	<50	<49	1	<10	0	<10	<100	<99	1
AUG. 06...	<50	<50	0	20	15	5	<100	<98	2

DATE	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE D MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE D SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE D ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 12...	.1	.0	.1	0	0	0	60	10	50
FEB. 03...	.1	.1	.0	1	0	1	40	10	30
MAY 01...	.1	.1	.0	0	0	0	40	30	10
AUG. 06...	.1	.1	.0	0	0	0	70	60	10

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	458	373	---	---	520	587	390	677	305	704	785	386
2	438	328	---	---	581	610	417	708	441	737	806	369
3	474	309	---	---	780	571	483	719	372	789	836	361
4	480	325	---	---	745	596	528	537	346	744	821	357
5	474	309	---	---	379	505	559	474	382	741	808	363
6	496	381	---	---	348	513	563	451	393	706	793	355
7	523	425	---	---	305	520	530	440	346	692	738	356
8	545	---	---	---	306	523	514	413	375	724	738	365
9	562	---	---	443	353	517	---	400	314	657	---	330
10	603	---	---	440	406	487	---	407	215	657	---	288
11	632	---	---	432	417	457	---	459	233	782	---	280
12	571	---	---	437	388	419	---	466	255	815	---	267
13	474	---	---	461	346	409	---	---	262	786	---	259
14	476	---	---	574	298	454	---	420	---	791	---	246
15	509	---	---	370	328	413	500	420	---	822	---	228
16	580	---	---	380	363	411	529	336	203	834	---	213
17	549	---	---	396	393	383	585	380	188	779	750	217
18	496	---	---	406	449	409	600	356	187	761	654	223
19	527	---	---	418	487	403	623	344	221	749	565	219
20	563	---	---	534	462	382	593	334	328	729	486	225
21	549	---	---	701	474	372	546	322	436	789	538	230
22	541	---	---	542	471	389	565	319	479	771	582	239
23	465	---	---	547	487	371	607	329	512	845	572	252
24	388	---	---	493	491	391	614	---	524	825	566	254
25	393	---	---	507	497	369	647	---	578	704	641	254
26	385	---	---	543	428	399	652	314	561	713	748	248
27	398	---	---	699	461	338	633	310	597	702	732	---
28	409	---	---	811	519	324	606	305	612	728	731	254
29	395	---	---	560	---	321	620	315	625	781	765	255
30	342	---	---	555	---	328	653	309	629	780	805	251
31	346	---	---	520	---	341	---	293	---	751	793	---
MONTH	485	---	---	---	446	436	565	413	390	754	---	281

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	DAILY		DAILY		DAILY		DAILY		DAILY		DAILY	
1	19.5	-- 18.5	15.0	-- 14.5	11.5	-- 11.0	9.0	-- 8.0	-- 8.0	--	12.5	-- 11.5
2	20.0	-- 19.0	14.5	-- 13.5	11.5	-- 11.0	9.0	-- 8.0	-- 9.5	--	12.5	-- 11.5
3	20.5	-- 19.0	13.5	-- 13.0	11.5	-- 11.5	9.0	-- 8.0	-- 10.0	--	12.5	-- 11.0
4	20.5	-- 19.5	13.5	-- 13.0	12.5	-- 11.5	9.5	-- 8.5	-- 10.5	--	13.0	-- 11.5
5	20.0	-- 19.0	13.5	-- 13.0	12.0	-- 12.0	9.5	-- 9.5	-- 10.0	--	12.5	-- 11.5
6	19.5	-- 18.5	13.5	-- 13.0	12.0	-- 11.5	10.0	-- 9.5	10.5	-- 10.5	12.0	-- 11.0
7	19.0	-- 18.5	13.5	-- 13.5	11.5	-- 11.0	11.5	-- 10.0	10.5	-- 10.5	12.0	-- 11.5
8	19.5	-- 18.5	14.0	-- 13.0	11.5	-- 11.0	11.5	-- 11.5	11.5	-- 10.5	12.0	-- 11.5
9	19.5	-- 18.5	13.5	-- 12.5	11.5	-- 11.0	11.5	-- 11.0	12.0	-- 11.5	11.5	-- 11.0
10	19.5	-- 18.0	13.5	-- 12.5	11.0	-- 11.0	11.0	-- 10.5	12.0	-- 11.5	11.5	-- 11.0
11	19.5	-- 18.0	13.5	-- 12.5	11.0	-- 10.5	10.5	-- 10.0	12.0	-- 11.5	11.5	-- 10.5
12	19.0	-- 18.0	13.5	-- 12.5	11.0	-- 11.0	10.5	-- 10.0	11.5	-- 11.0	11.5	-- 10.5
13	19.0	-- 18.0	13.5	-- 13.0	11.5	-- 11.0	10.5	-- 10.0	11.0	-- 10.5	11.5	-- 10.5
14	19.0	-- 17.5	14.0	-- 13.5	11.0	-- 10.5	10.5	-- 9.5	10.5	-- 10.0	10.5	-- 10.0
15	19.0	-- 18.0	14.0	-- 13.5	11.5	-- 11.0	10.5	-- 10.0	10.0	-- 9.5	10.0	-- 9.5
16	19.5	-- 18.0	13.5	-- 13.0	11.0	-- 11.0	10.5	-- 10.0	9.5	-- 9.0	10.5	-- 9.5
17	19.0	-- 18.0	13.5	-- 13.0	11.0	-- 10.5	10.0	-- 10.0	9.0	-- 8.0	10.5	-- 10.0
18	18.0	-- 17.0	13.5	-- 13.0	10.5	-- 10.5	10.0	-- 10.0	8.5	-- 8.0	11.5	-- 10.0
19	17.0	-- 16.5	13.0	-- 12.5	11.0	-- 10.5	10.0	-- 10.0	8.5	-- 8.5	12.0	-- 11.0
20	17.5	-- 16.5	13.0	-- 12.5	10.5	-- 10.5	-- 9.0	--	9.0	-- 8.5	12.0	-- 11.0
21	17.0	-- 15.5	13.5	-- 12.5	11.0	-- 10.5	-- 9.0	--	8.5	-- 8.0	11.5	-- 10.0
22	16.0	-- 15.0	13.0	-- 12.5	10.5	-- 9.5	-- 9.0	--	8.5	-- 7.5	10.5	-- 10.0
23	15.5	-- 14.5	12.5	-- 11.5	9.5	-- 8.5	-- 9.0	--	9.0	-- 8.0	11.0	-- 9.5
24	15.5	-- 15.0	12.0	-- 11.5	9.0	-- 8.0	-- 9.0	--	9.5	-- 8.5	12.0	-- 10.5
25	16.0	-- 15.0	12.5	-- 11.5	8.5	-- 8.0	-- 10.0	--	10.5	-- 9.0	12.5	-- 11.5
26	16.0	-- 15.5	12.5	-- 11.5	9.0	-- 8.0	-- 10.0	--	10.5	-- 9.5	11.5	-- 10.0
27	16.0	-- 15.5	12.0	-- 11.5	9.5	-- 8.5	-- 9.0	--	11.5	-- 10.5	10.5	-- 9.5
28	16.0	-- 15.5	12.0	-- 11.0	10.0	-- 9.5	-- 8.0	--	12.5	-- 11.0	10.0	-- 9.0
29	15.5	-- 15.0	11.5	-- 11.0	9.5	-- 9.0	-- 8.0	--	--	--	10.0	-- 9.0
30	15.0	-- 14.5	11.5	-- 10.5	9.0	-- 8.0	-- 8.0	--	--	--	11.5	-- 10.0
31	15.0	-- 14.5	--	--	8.5	-- 7.5	-- 7.5	--	--	--	12.0	-- 11.0
MONTH	20.5	-- 14.5	15.0	-- 10.5	12.5	-- 7.5	--	--	12.5	-- 7.5	13.0	-- 9.0

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

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	3760	69	700	4710	60	763	3860	46	479
2	3830	68	703	4830	63	822	4000	49	529
3	3560	65	625	5140	70	971	4200	61	692
4	3400	68	624	5240	73	1030	4650	69	866
5	3330	74	665	5180	69	965	4640	70	877
6	3120	68	573	4580	61	754	4740	67	857
7	2990	65	525	3860	58	604	5010	67	906
8	2970	61	489	3680	58	576	5070	61	835
9	2920	61	481	3670	59	585	5030	59	801
10	2770	57	426	3660	55	544	4940	50	667
11	2600	56	393	3610	55	536	4890	53	700
12	2860	72	556	3600	55	535	4860	50	656
13	3040	70	575	3610	57	556	4840	47	614
14	3040	68	558	3640	61	600	4830	49	639
15	2940	66	524	3590	62	601	4840	47	614
16	2690	72	523	3620	58	567	4840	52	680
17	3020	76	620	3680	58	576	4730	49	626
18	3220	57	496	3670	62	614	4350	43	505
19	3140	53	449	3670	55	545	4130	40	446
20	3060	54	446	3660	55	544	4010	44	476
21	3080	56	466	3480	56	526	3940	41	436
22	3140	55	466	3400	55	505	3690	38	379
23	3560	64	615	3340	50	451	3130	31	262
24	4120	84	934	3340	48	433	2870	27	209
25	4380	84	993	3500	48	454	3080	32	266
26	4560	75	923	3600	54	525	3250	35	307
27	4570	62	765	3740	58	586	2890	39	304
28	4530	62	758	3830	50	517	3560	48	461
29	4620	63	786	3830	48	496	3740	46	465
30	4770	72	927	3760	49	497	3470	34	319
31	4820	68	885	---	---	---	2930	31	245
TOTAL	108410	---	19469	116720	---	18278	129010	---	17118

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	3580	39	377	4290	66	764	3830	51	527
2	3480	30	282	4250	78	895	3750	53	537
3	2850	30	231	3540	70	669	3850	53	551
4	3680	50	497	3610	86	838	3580	53	512
5	3890	52	546	4790	118	1530	3750	62	628
6	3550	39	374	6080	160	2630	3930	66	700
7	2920	39	307	6910	146	2720	4270	80	922
8	3770	52	529	7250	138	2700	4640	86	1080
9	3880	52	545	7200	114	2220	4860	93	1220
10	3940	44	468	6870	100	1850	5000	105	1420
11	4050	43	470	6950	103	1930	5060	86	1170
12	4060	42	460	7140	105	2020	5610	73	1110
13	3590	41	397	7110	99	1900	5800	77	1210
14	2950	38	303	7800	109	2300	5730	97	1500
15	3740	51	515	8820	135	3210	6350	96	1650
16	4020	48	521	8670	108	2530	6300	83	1410
17	4120	44	489	7950	90	1930	6230	72	1210
18	4160	44	494	7120	86	1650	6380	72	1240
19	4080	46	507	6710	85	1540	6070	77	1260
20	3610	35	341	6830	73	1350	6330	84	1440
21	2990	42	339	6610	72	1280	6590	70	1250
22	3940	56	596	6300	63	1070	6620	68	1220
23	4230	56	640	6010	54	876	7070	86	1640
24	4350	56	658	5410	59	862	7040	81	1540
25	4340	53	621	5030	67	910	6530	83	1460
26	4140	51	570	5460	76	1120	6930	123	2300
27	3550	41	393	4990	56	754	7010	99	1870
28	3000	43	348	4240	52	595	6740	78	1420
29	3880	47	492	---	---	---	6630	79	1410
30	4150	46	515	---	---	---	6820	90	1660
31	4270	58	669	---	---	---	6920	90	1680
TOTAL	116760	---	14494	173940	---	44643	176220	---	38747

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CON- CENTRA- TION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CON- CENTRA- TION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CON- CENTRA- TION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6420	84	1460	2510	94	637	4980	116	1560
2	5800	71	1110	2360	108	688	5860	137	2170
3	5060	63	861	2330	119	749	6550	184	3250
4	4450	66	793	3090	144	1200	7350	174	3450
5	4100	80	886	3660	130	1280	7570	125	2550
6	3990	92	991	3690	106	1060	7070	144	2750
7	4140	72	805	3910	108	1140	7350	169	3350
8	4320	72	840	4060	94	1030	7560	142	2900
9	4880	81	1070	4000	96	1040	7880	128	2720
10	5110	79	1090	3960	119	1270	8100	130	2840
11	5100	73	1010	3670	88	872	8000	119	2570
12	4960	73	978	3570	91	877	7510	138	2800
13	4740	71	909	3440	90	836	6030	159	2590
14	4560	73	899	3690	95	946	6120	168	2780
15	4240	69	790	3840	103	1070	7160	152	2940
16	3880	66	691	3970	97	1040	7740	158	3300
17	3470	64	600	4070	102	1120	7840	136	2880
18	3340	91	821	4240	133	1520	8040	104	2260
19	3220	90	782	4340	102	1200	7810	112	2360
20	3240	86	752	4350	101	1190	6600	125	2230
21	3310	78	697	4550	114	1400	4380	164	1940
22	3190	88	758	4650	112	1410	3480	158	1480
23	3070	93	771	4550	108	1330	3130	155	1310
24	2970	88	706	4470	95	1150	2860	180	1390
25	2890	100	780	4530	99	1210	2700	150	1090
26	2900	112	877	4580	112	1380	2440	147	968
27	2950	83	661	4540	109	1340	2330	143	900
28	2970	90	722	4590	106	1310	2290	158	977
29	2810	103	781	4580	97	1200	2260	162	989
30	2630	96	682	4630	96	1200	2240	154	931
31	---	---	---	4700	107	1360	---	---	---
TOTAL	118710	---	25573	123120	---	35055	171230	---	66225
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CON- CENTRA- TION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CON- CENTRA- TION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CON- CENTRA- TION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2030	147	806	1430	162	625	1930	118	615
2	1930	162	844	1400	156	590	1790	104	503
3	1860	158	793	1400	152	575	1770	115	550
4	1930	152	792	1450	169	662	1710	116	536
5	1970	148	787	1420	176	675	1890	109	556
6	2040	150	826	1350	163	594	2130	116	667
7	2030	135	740	1400	178	673	2380	111	713
8	1910	139	717	1440	163	634	2500	106	715
9	2020	150	818	1470	154	611	2460	99	658
10	1980	151	807	1490	148	595	2340	95	600
11	1740	147	691	1550	153	640	2470	104	694
12	1680	157	712	1520	170	698	2570	110	763
13	1680	162	735	1440	151	587	2770	101	755
14	1630	166	731	1400	156	590	2800	102	771
15	1560	167	703	1350	159	580	2800	99	748
16	1550	163	682	1340	158	572	2910	103	809
17	1650	177	789	1480	141	563	2810	108	819
18	1670	179	807	1850	155	774	2760	103	768
19	1760	185	879	2270	170	1040	2790	102	768
20	1780	180	865	2420	145	947	2940	94	746
21	1760	165	784	2300	132	820	2980	92	740
22	1620	157	687	2230	145	873	2980	96	772
23	1460	165	650	2220	142	851	2950	97	773
24	1470	190	754	2200	155	921	3010	103	837
25	1630	193	849	2090	137	773	3060	114	942
26	1490	189	760	1760	142	675	3210	96	832
27	1550	182	762	1710	140	646	3250	99	869
28	1500	163	660	1710	135	623	3250	91	799
29	1440	189	735	1640	136	602	3210	89	771
30	1460	190	749	1620	126	551	3150	77	655
31	1490	184	740	1740	131	615	---	---	---
TOTAL	53270	---	23654	52090	---	21175	79570	---	21744
YEAR	1419050		346175						

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
OCT.										
08...	1030	18.0	3000	67	543	--	--	--	--	--
09...	1300	19.0	2930	55	435	--	--	--	--	--
DEC.										
05...	1500	12.0	4600	63	782	34	35	42	51	62
JAN.										
09...	1400	11.0	3900	42	455	24	27	36	47	58
12...	0905	9.5	4180	48	527	--	--	--	--	--
14...	0855	9.0	2760	38	277	--	--	--	--	--
FEB.										
03...	1300	10.5	3560	67	626	22	32	44	54	66
04...	0810	10.5	3320	76	663	--	--	--	--	--
10...	0805	11.5	6880	108	2010	--	--	--	--	--
14...	0805	10.5	7680	109	2250	--	--	--	--	--
17...	0810	8.5	8060	98	2130	--	--	--	--	--
21...	0810	8.0	6660	80	1440	--	--	--	--	--
23...	0855	8.5	6180	59	973	--	--	--	--	--
MAR.										
03...	1330	11.0	3850	44	461	--	--	--	--	--
08...	0900	12.0	4590	93	1150	--	--	--	--	--
09...	0850	11.5	4910	104	1380	--	--	--	--	--
APR.										
01...	1330	11.0	6500	77	1330	28	37	47	55	65
MAY										
01...	1420	17.5	2530	77	526	43	57	67	80	89
JUNE										
05...	1300	19.0	7640	112	2310	14	19	27	35	46
JULY										
01...	1400	21.5	2100	125	709	42	53	66	79	90
12...	0850	23.0	1690	167	762	--	--	--	--	--
AUG.										
04...	1300	--	1450	154	603	43	55	68	81	92
06...	0855	24.0	1350	166	605	--	--	--	--	--
06...	1000	23.5	1440	166	645	--	--	--	--	--
SEP.										
02...	1300	22.0	1790	87	420	37	46	57	69	81
06...	0750	23.0	2160	128	746	--	--	--	--	--
16...	0755	19.5	2900	114	893	--	--	--	--	--
DATE		SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
OCT.										
08...	--	70	--	--	--	--	--	--	--	--
09...	--	83	--	93	--	98	--	100	--	--
DEC.										
05...	--	68	--	82	--	95	--	99	100	--
JAN.										
09...	68	--	88	--	98	--	100	--	--	--
12...	--	57	--	75	--	94	--	100	--	--
14...	--	72	--	84	--	95	--	100	--	--
FEB.										
03...	--	70	--	80	--	86	--	100	--	--
04...	--	70	--	82	--	94	--	98	99	100
10...	--	64	--	72	--	90	--	98	100	--
14...	--	56	--	66	--	85	--	98	100	--
17...	--	55	--	65	--	88	--	99	100	--
21...	--	54	--	64	--	87	--	99	100	--
23...	--	51	--	62	--	88	--	98	100	--
MAR.										
03...	--	81	--	91	--	95	--	100	--	--
08...	--	67	--	77	--	94	--	100	--	--
09...	--	70	--	80	--	94	--	100	--	--
APR.										
01...	--	70	--	80	--	91	--	100	--	--
MAY										
01...	--	92	--	98	--	99	--	99	100	--
JUNE										
05...	--	57	--	76	--	91	--	100	--	--
JULY										
01...	--	97	--	99	--	100	--	--	--	--
12...	--	95	--	99	--	100	--	--	--	--
AUG.										
04...	--	97	--	100	--	--	--	--	--	--
06...	--	98	--	100	--	--	--	--	--	--
06...	--	98	--	--	--	--	--	--	--	--
SEP.										
02...	--	89	--	98	--	100	--	--	--	--
06...	--	82	--	89	--	94	--	97	100	--
16...	--	74	--	88	--	98	--	100	--	--

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT
CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT (T/DAY)	TUR- BID- ITY (JTU)
OCT.						
01...	0810	3740	18.0	80	808	15
02...	0805	3880	18.5	82	859	10
03...	0805	3630	19.0	74	725	15
04...	0805	3420	19.0	79	729	15
05...	0810	3350	18.5	90	814	15
06...	0820	3180	18.0	79	678	15
07...	0805	3020	18.0	79	644	15
08...	0800	3000	18.0	71	575	15
08...	1030	3000	18.0	67	543	15
09...	0805	2940	18.0	75	595	10
10...	0805	2800	18.0	66	499	15
11...	0805	2590	19.5	66	462	15
12...	0810	2830	17.5	79	604	15
13...	0820	3020	18.0	78	636	15
14...	0820	3050	17.0	82	675	15
15...	0810	2910	18.0	76	597	15
16...	0810	2730	18.0	86	634	15
17...	0810	2980	18.0	92	740	20
18...	0805	3240	17.0	66	577	15
19...	0805	3160	16.5	62	529	10
20...	0820	3070	16.5	64	530	10
21...	0805	3090	15.5	66	551	10
22...	0805	3120	15.0	64	539	10
23...	0805	3440	14.5	74	687	10
24...	0800	4100	15.0	91	1010	10
25...	0810	4350	14.5	96	1130	10
26...	0815	4550	15.0	86	1060	10
27...	0815	4600	15.5	70	869	10
28...	0800	4540	15.5	72	883	10
29...	0805	4570	15.0	70	864	10
30...	0805	4760	14.5	82	1050	10
31...	0815	4870	14.5	77	1010	10
NOV.						
01...	0805	4720	14.5	68	867	10
02...	0810	4770	13.0	70	902	10
03...	0820	5120	13.0	78	1080	10
04...	0800	5250	13.0	84	1190	10
05...	0805	5210	12.5	80	1130	10
06...	0810	4760	13.0	68	874	15
07...	0800	3910	13.0	65	686	15
08...	0800	3670	13.0	66	654	15
09...	0800	3650	12.5	68	670	15
10...	0805	3670	12.5	61	604	15
11...	0810	3610	12.5	64	624	15
12...	0805	3590	12.5	64	620	15
13...	0805	3610	12.5	64	624	10
14...	0805	3650	13.0	70	690	15
15...	0815	3590	13.0	74	717	15
16...	0900	3600	13.0	67	651	15
17...	0815	3670	13.0	63	624	15
18...	0800	3680	13.0	74	735	10
19...	0805	3660	12.5	61	603	10
20...	0805	3700	12.5	62	619	10
21...	0805	3500	13.0	64	605	10
22...	0810	3410	12.0	63	580	10
23...	0855	3340	11.5	57	514	10
24...	0845	3320	11.0	54	484	10
25...	0810	3480	11.0	53	498	10
26...	0850	3580	11.0	60	580	10
27...	0800	3720	11.0	66	663	10
28...	0755	3830	11.0	56	579	10
29...	0820	3840	11.0	54	560	10
30...	0800	3760	10.0	58	589	10
DEC.						
01...	0850	3850	11.0	51	530	10
02...	0850	3990	11.0	54	582	10
03...	0900	4130	11.0	70	781	10
04...	0840	4620	11.0	73	911	15
05...	0845	4600	12.0	78	969	10
06...	0850	4670	11.0	74	933	20
07...	0845	5000	11.0	76	1030	15
08...	0735	5080	11.0	66	905	15
09...	0850	5050	11.0	69	941	15
10...	0850	4950	10.5	54	722	10
11...	0855	4880	10.0	60	791	10
12...	0855	4870	11.0	58	763	10
13...	0855	4850	11.0	52	681	10
14...	0900	4830	10.0	58	756	10
15...	0855	4830	11.0	50	652	10

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT
CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	TUR- BID- ITY (JTU)
DEC.						
16...	0905	4850	10.5	56	733	10
17...	0855	4780	10.5	54	697	10
18...	0855	4380	10.0	49	579	10
19...	0850	4160	10.0	42	472	8
20...	0855	4020	10.0	51	554	10
21...	0850	3930	10.0	45	477	10
22...	0850	3810	9.5	44	453	9
23...	0845	3190	8.0	40	345	9
24...	0840	2830	8.0	30	229	8
25...	0850	3080	7.0	37	308	8
26...	0850	3350	8.0	40	362	8
27...	0855	2780	8.5	38	285	8
28...	0855	3570	9.5	60	578	10
29...	0905	3840	8.5	56	581	10
30...	0900	3630	8.0	44	431	9
31...	0850	3610	7.5	32	312	8
JAN.						
01...	0835	3610	8.0	52	507	8
02...	0850	3670	8.0	41	406	8
03...	0830	2700	8.0	28	204	8
04...	0900	3710	8.0	60	601	9
05...	0910	4010	9.5	62	671	10
06...	0820	3750	9.5	53	537	9
07...	0720	3570	9.5	36	347	8
08...	0805	3840	11.0	60	622	10
09...	0800	3960	10.5	66	706	10
10...	0805	3990	10.0	54	582	8
11...	0815	4100	10.0	52	576	8
12...	0905	4180	9.5	48	527	8
13...	0810	3790	10.0	51	522	8
14...	0855	2760	9.0	38	277	9
15...	0855	3750	9.5	60	607	7
16...	0855	4060	9.5	56	614	8
17...	0855	4160	9.5	55	618	9
18...	0840	4220	9.5	52	592	9
19...	0900	4200	9.5	58	658	8
20...	0810	3840	9.0	39	404	8
21...	0810	2790	9.0	40	301	7
22...	0810	3940	9.0	57	606	9
23...	0810	4270	9.0	63	726	10
24...	0900	4400	9.0	64	760	10
25...	0855	4380	10.0	62	733	10
26...	0855	4280	10.0	60	693	9
27...	0810	3760	9.0	46	467	8
28...	0810	2800	8.0	44	333	9
29...	0805	3880	8.0	55	576	8
30...	0855	4170	8.0	48	540	7
31...	0855	4310	7.5	64	745	8
FEB.						
01...	0850	4320	8.0	68	793	9
02...	0855	4430	9.5	81	969	15
03...	0805	3730	10.0	84	846	20
03...	1300	3560	10.5	67	626	20
04...	0810	3320	10.5	76	663	10
05...	0805	4700	10.0	126	1600	35
06...	0805	5930	10.5	165	2640	40
07...	0805	6860	10.0	156	2890	40
08...	0855	7270	10.5	152	2980	30
09...	0855	7260	10.5	128	2510	30
10...	0805	6880	11.5	108	2010	30
11...	0805	6940	11.5	109	2040	25
12...	0905	7170	11.0	114	2210	25
13...	0810	7100	11.0	106	2030	20
14...	0805	7680	10.5	109	2250	25
15...	0835	8820	9.0	154	3670	30
16...	0900	9020	9.0	120	2920	25
17...	0810	8060	8.5	98	2130	25
18...	0810	7340	7.5	94	1860	20
19...	0805	6640	8.5	92	1650	20
20...	0805	7020	9.0	76	1440	15
21...	0810	6660	8.0	80	1440	15
22...	0850	6330	8.5	70	1200	15
23...	0855	6180	8.5	59	973	15
24...	0810	5600	8.0	66	998	15
25...	0810	4900	10.0	63	833	15
26...	0805	5460	10.5	83	1220	15
27...	0805	5350	10.5	63	910	15
28...	0850	4270	12.0	58	669	15
MAR.						
01...	0850	3840	12.0	56	581	15

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT
CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	TUR- BID- ITY (JTU)
MAR.						
02...	0905	3660	12.5	59	583	15
03...	0805	3900	11.5	61	642	15
03...	1330	3850	11.0	44	461	15
04...	0800	3520	12.0	54	513	15
05...	0810	3740	13.0	68	687	15
06...	0810	3910	12.5	68	718	15
07...	0810	4260	12.5	86	989	15
08...	0900	4590	12.0	93	1150	20
09...	0850	4910	11.5	104	1380	25
10...	0810	4980	12.0	121	1630	30
11...	0805	4980	12.0	102	1370	20
12...	0805	5550	11.5	80	1200	15
13...	0855	5860	12.0	86	1360	15
14...	0730	5650	11.0	100	1530	30
15...	0845	6300	10.5	109	1850	20
16...	0800	6360	10.5	96	1650	20
17...	0800	6100	11.0	81	1330	15
18...	0820	6460	11.0	82	1430	15
19...	0805	6030	11.5	88	1430	15
20...	0810	6780	11.0	94	1720	15
21...	0805	6600	11.0	78	1390	15
22...	0810	6640	10.0	76	1360	15
23...	0815	6960	10.5	83	1560	15
24...	0820	7080	12.0	94	1800	20
25...	0805	6500	13.0	83	1460	15
26...	0815	6900	11.5	146	2720	20
27...	0855	7120	10.5	120	2310	25
28...	0855	6770	10.0	88	1610	20
29...	0855	6650	10.0	90	1620	20
30...	0750	6860	10.0	100	1850	20
31...	0805	6990	12.0	101	1910	20
APR.						
01...	0805	6550	11.5	98	1730	20
01...	1330	6500	11.0	77	1330	20
02...	0805	5900	11.5	84	1340	20
03...	0805	5190	12.0	70	981	20
04...	0805	4560	12.0	74	911	15
05...	0750	4150	12.5	84	941	20
06...	0750	3970	12.0	108	1160	20
07...	0800	4140	12.0	80	894	15
08...	0805	4210	11.5	80	909	15
09...	0805	4840	11.5	92	1200	20
10...	0805	5120	12.0	90	1240	20
11...	0805	5130	13.0	81	1120	20
12...	0850	5010	14.0	84	1140	15
13...	0745	4750	14.0	80	1030	15
14...	0755	4620	14.5	83	1040	20
15...	0855	4320	14.0	76	886	15
16...	0800	4000	13.5	74	799	15
17...	0850	3530	13.0	71	677	15
18...	0850	3350	13.5	95	859	20
19...	0840	3260	14.5	100	880	20
20...	0830	3240	15.0	95	831	20
21...	0805	3330	15.5	84	755	20
22...	0805	3260	15.0	91	801	20
23...	0855	3080	15.5	102	848	25
24...	0850	3020	16.5	94	766	20
25...	0805	2920	15.0	100	788	25
26...	0850	2920	13.5	128	1010	40
27...	0810	2900	14.0	84	658	15
28...	0800	3020	15.0	90	734	15
29...	0850	2880	16.0	108	840	15
30...	0855	2660	16.5	100	718	25
MAY						
01...	0855	2540	16.5	102	700	25
02...	0850	2400	17.5	110	713	30
03...	0850	2330	17.5	121	761	25
04...	0850	3020	14.5	138	1130	25
05...	0840	3670	14.5	138	1370	20
06...	0855	3680	14.5	108	1070	20
07...	0825	3880	15.0	114	1190	20
08...	0855	4080	15.5	102	1120	25
09...	0810	4010	15.5	92	996	20
10...	0700	4020	16.0	140	1520	15
11...	0820	3680	17.0	92	914	20
12...	0805	3560	17.5	98	942	20
13...	0810	3450	18.0	94	876	20
14...	0810	3620	18.0	99	968	20

SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT
CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	TUR- BID- ITY (JTU)
MAY						
15...	0800	3860	17.0	111	1160	20
16...	0805	3940	16.5	100	1060	20
17...	0835	4070	18.0	106	1170	20
18...	0805	4190	18.5	161	1820	20
19...	0820	4380	19.0	104	1230	20
20...	0805	4330	16.5	104	1220	20
21...	0815	4530	16.0	122	1490	25
22...	0800	4670	16.5	118	1490	25
23...	0805	4590	17.0	120	1490	20
24...	0815	4480	18.0	100	1210	20
25...	0805	4500	18.0	102	1240	20
26...	0810	4600	18.5	121	1500	25
27...	0820	4500	18.0	114	1390	20
28...	0810	4590	18.5	114	1410	25
29...	0815	4580	19.0	100	1240	20
30...	0820	4590	19.5	100	1240	20
31...	0800	4660	19.5	114	1430	20
JUNE						
01...	0755	4790	18.5	120	1550	20
02...	0810	5720	18.5	140	2160	20
03...	0810	6430	18.0	182	3160	20
04...	0815	7180	18.0	190	3680	20
05...	0810	7720	18.5	135	2810	15
05...	1300	7640	19.0	112	2310	15
06...	0855	7080	19.0	144	2750	20
07...	0850	7330	18.5	182	3600	15
08...	0825	7500	18.0	153	3100	15
09...	0815	7860	19.0	134	2840	15
10...	0855	8010	19.5	140	3030	15
11...	0855	8080	19.5	121	2640	15
12...	0855	7690	19.5	144	2990	20
13...	0855	6140	20.0	165	2740	30
14...	0855	6020	20.0	180	2930	25
15...	0820	7030	19.0	157	2980	20
16...	0850	7770	19.0	169	3550	15
17...	0900	7840	18.5	149	3150	15
18...	0855	8110	18.0	108	2370	15
19...	0850	7940	18.0	121	2590	15
20...	0855	6970	18.0	118	2220	20
21...	0835	4550	19.0	176	2160	30
22...	0850	3560	20.0	168	1620	35
23...	0815	3230	20.0	156	1360	40
24...	0855	2880	19.5	198	1540	40
25...	0845	2760	19.0	154	1150	35
26...	0855	2490	20.0	156	1050	35
27...	0855	2380	20.0	149	957	35
28...	0850	2330	21.0	166	1040	35
29...	0845	2240	21.0	172	1040	30
30...	0840	2280	21.0	209	1290	40
JULY						
01...	0850	2160	20.5	159	927	50
01...	1400	2100	21.5	125	709	40
02...	0855	1970	20.0	176	936	40
03...	0855	1920	20.0	222	1150	40
04...	0855	1930	20.0	166	865	40
05...	0850	1980	21.0	155	829	40
06...	0855	2030	21.5	162	888	40
07...	0845	2070	22.5	144	805	35
08...	0850	1910	22.0	143	737	35
09...	0855	1940	22.5	156	817	40
10...	0900	2020	23.0	162	884	40
11...	0900	1740	23.0	152	714	40
12...	0850	1690	23.0	167	762	45
13...	0800	1650	23.0	168	748	50
14...	0825	1650	23.5	173	771	45
15...	0835	1600	23.0	176	760	45
16...	0855	1540	21.5	168	699	45
17...	0855	1650	22.5	186	829	60
18...	0850	1650	23.0	186	829	60
19...	0825	1750	22.0	193	912	50
20...	0830	1770	23.0	191	913	60
21...	0820	1780	22.5	174	836	50
22...	0855	1630	23.5	164	722	60
23...	0840	1450	24.5	166	650	50
24...	0855	1410	24.5	200	761	60
25...	0845	1620	25.5	202	884	60
26...	0845	1460	26.0	196	773	60
27...	0810	1460	25.5	196	773	60
28...	0810	1460	25.0	163	643	45
29...	0850	1400	24.5	200	756	60

SAN JOAQUIN RIVER BASIN

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11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT
CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT CHARGE (T/DAY)	TUR- BID- ITY (JTU)
JULY						
30...	0845	1400	23.5	198	748	60
31...	0855	1470	23.0	195	774	60
AUG.						
01...	0850	1370	24.0	168	621	50
02...	0850	1350	24.5	162	590	50
03...	0820	1340	24.5	156	564	45
04...	0740	1390	24.5	172	646	50
04...	1300	1450	--	154	603	45
05...	0855	1450	24.5	186	728	50
06...	0855	1350	24.0	166	605	50
06...	1000	1440	23.5	166	645	60
07...	0855	1380	22.5	188	700	60
08...	0855	1440	22.5	168	653	45
09...	0855	1470	23.0	160	635	50
10...	0845	1460	23.0	151	595	40
11...	0840	1570	23.0	154	653	45
12...	0855	1540	23.0	186	773	50
13...	0905	1440	22.0	152	591	45
14...	0900	1450	22.0	162	634	50
15...	0855	1370	22.0	162	599	60
16...	0805	1370	21.5	164	607	50
17...	0850	1430	21.5	143	552	35
18...	0845	1790	21.5	154	744	40
19...	0830	2210	21.0	177	1060	35
20...	0855	2340	21.0	154	973	30
21...	0845	2320	22.0	132	827	30
22...	0855	2250	22.5	150	911	25
23...	0845	2230	22.5	139	837	30
24...	0825	2210	23.0	162	967	30
25...	0805	2170	24.0	135	791	30
26...	0850	1810	23.5	143	699	30
27...	0850	1720	22.0	143	664	40
28...	0905	1720	21.0	136	632	35
29...	0850	1650	21.0	138	615	30
30...	0855	1620	21.5	124	542	25
31...	0855	1690	20.5	132	602	35
SEP.						
01...	0820	1980	20.0	122	652	25
02...	0805	1780	20.0	102	490	25
02...	1300	1790	22.0	87	420	25
03...	0850	1820	21.0	115	565	30
04...	0840	1700	21.5	120	551	30
05...	0815	1850	22.5	114	569	25
07...	0725	2360	22.0	126	803	25
08...	0815	2530	21.0	122	833	20
09...	0845	2470	20.0	116	774	20
10...	0845	2330	20.0	107	673	20
11...	0815	2440	20.0	116	764	15
12...	0850	2550	20.5	128	881	20
13...	0850	2740	20.5	114	843	15
14...	0830	2770	20.0	118	883	20
15...	0805	2790	19.5	110	829	20
17...	0800	2990	20.5	125	1010	20
18...	0800	2780	20.5	116	871	15
19...	0805	2820	20.0	119	906	20
20...	0755	2910	19.5	107	841	20
21...	0905	2980	20.0	102	821	15
22...	0850	3020	20.0	110	897	15
24...	0800	2960	20.0	110	879	15
25...	0845	3090	20.0	102	851	15
26...	0855	3260	20.0	108	951	15
27...	0900	3260	19.0	116	1020	15
28...	0830	3250	18.0	100	877	15
29...	0845	3230	18.0	104	907	10
30...	0850	3140	18.0	86	729	15

SAN JOAQUIN RIVER BASIN

11306000 SOUTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.

LOCATION.--Lat 38°08'40", long 120°39'46", in SW¼NW¼ sec.4, T.3 N., R.12 E., Calaveras County, on right bank 0.1 mi (0.2 km) downstream from San Antonio Creek, and 3.7 mi (6.0 km) south of San Andreas.

DRAINAGE AREA.--118 mi² (306 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 860 ft (262 m), from topographic map. Prior to Feb. 13, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--25 years, 83.2 ft³/s (2.356 m³/s), 60,280 acre-ft/yr (74.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,100 ft³/s (116 m³/s) Mar. 25 (gage height, 7.97 ft or 2.429 m), from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.98 ft³/s (0.028 m³/s) Oct. 1.

Period of record: Maximum discharge, 17,600 ft³/s (498 m³/s) Dec. 23, 1955 (gage height, 10.29 ft or 3.136 m), from rating curve extended above 5,700 ft³/s (161 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 11.41 ft (3.478 m) Mar. 1, 1974; no flow at times in most years.

REMARKS.--Records good. Some diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1395: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.98	9.3	7.8	12	52	83	193	126	33	12	3.4	2.5
2	1.1	7.8	7.5	12	813	74	173	122	32	11	3.7	2.3
3	1.1	5.5	71	12	303	69	164	126	31	11	3.2	2.0
4	1.3	5.0	424	12	322	66	158	159	30	11	2.8	2.0
5	4.2	4.4	85	14	202	74	274	131	28	11	3.2	2.0
6	5.0	4.1	41	58	133	136	355	117	26	10	2.5	1.8
7	2.3	4.8	27	139	127	656	336	109	25	10	3.4	1.5
8	1.8	7.3	22	366	164	661	237	105	24	9.8	2.5	1.5
9	1.8	7.8	20	177	802	363	217	102	23	9.0	2.3	1.8
10	2.0	5.9	17	87	840	263	204	102	22	8.8	2.0	1.8
11	2.2	5.2	16	62	396	221	182	101	21	8.8	2.3	2.0
12	2.0	5.0	14	47	191	175	175	100	21	8.0	2.3	1.8
13	2.0	4.6	16	38	579	238	173	98	20	7.6	2.2	12
14	1.8	4.4	16	33	383	367	172	94	19	6.6	2.2	18
15	1.6	4.4	14	29	221	298	178	91	18	7.0	2.2	15
16	1.6	4.6	14	27	162	950	168	83	16	8.8	2.2	16
17	1.6	4.6	14	24	128	329	159	81	16	9.0	2.2	18
18	1.8	5.0	13	23	103	228	137	76	16	8.3	3.2	15
19	2.0	5.2	13	22	113	197	126	72	16	7.8	7.0	6.3
20	3.5	5.9	12	21	197	191	120	68	17	7.0	11	6.3
21	3.5	8.9	12	20	134	522	120	62	17	5.3	6.6	5.8
22	2.5	39	12	19	104	1150	117	57	16	4.4	4.8	5.6
23	2.2	16	11	18	94	427	117	53	15	3.7	3.7	3.9
24	2.3	12	11	18	89	424	130	50	15	3.5	3.2	3.0
25	2.3	11	10	17	84	2240	227	47	18	3.5	3.0	2.7
26	2.5	10	11	17	82	827	186	45	16	3.2	2.8	2.3
27	2.5	9.6	12	17	79	491	161	42	15	2.8	2.8	2.2
28	16	10	40	16	78	351	145	41	14	2.5	2.7	1.5
29	28	10	27	15	---	279	136	39	13	3.2	2.5	1.3
30	9.9	8.6	17	15	---	235	131	37	13	3.5	2.5	1.2
31	7.8	---	14	14	---	217	---	34	---	3.4	2.5	---
TOTAL	121.18	245.9	1041.3	1401	6975	12802	5371	2570	606	221.5	102.9	159.1
MEAN	3.91	8.20	33.6	45.2	249	413	179	82.9	20.2	7.15	3.32	5.30
MAX	28	39	424	366	840	2240	355	159	33	12	11	18
MIN	.98	4.1	7.5	12	52	66	117	34	13	2.5	2.0	1.2
AC-FT	240	488	2070	2780	13830	25390	10650	5100	1200	439	204	316
CAL YR 1974	TOTAL	37062.40	MEAN	102	MAX	3920	MIN	.74	AC-FT	73510		
WTR YR 1975	TOTAL	31616.88	MEAN	86.6	MAX	2240	MIN	.98	AC-FT	62710		

		Peak discharge (base, 1,000 ft ³ /s)					
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-2	0800	5.81	1,460	3-16	0330	6.68	2,300
2-10	0800	5.71	1,380	3-21	2300	7.81	3,850
2-13	1400	5.20	1,030	3-25	0600	7.97	4,100
3-7	1730	7.18	2,900				

11306000 SOUTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1973 to current year.

Sediment records: October 1973 to current year.

EXTREMES.--Current year:

Sediment concentrations: Maximum daily, 196 mg/l Mar. 25; minimum daily, 1 mg/l on many days.

Sediment discharge: Maximum daily, 1,560 tons (1,420 tonnes) Mar. 25; minimum daily, 0.01 ton (0.01 tonne) on many days.

Period of record:

Sediment concentrations: Maximum daily, 254 mg/l Mar. 2, 1974; minimum daily, 1 mg/l on many days each year.

Sediment discharge: Maximum daily, 3,750 tons (3,400 tonnes) Mar. 2, 1974; minimum daily, 0 tons (0 tonnes) on many days in 1974.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	5.0	---	9.5	14.0	---	---	---	---
2	---	---	---	2.0	6.5	9.0	---	---	21.0	---	---	24.5
3	---	---	9.5	---	8.0	---	---	12.5	18.0	---	---	---
4	---	---	10.5	---	8.0	11.0	10.5	---	---	---	---	---
5	---	---	9.0	4.0	7.0	10.5	8.5	9.0	22.5	---	---	22.5
6	---	---	9.0	6.5	8.5	10.0	8.0	---	---	---	22.0	---
7	---	---	---	8.5	10.0	10.5	---	13.5	---	23.0	25.0	---
8	---	---	---	9.0	---	9.5	---	---	---	---	---	---
9	17.0	---	8.0	7.0	10.5	10.0	8.5	---	---	---	---	---
10	---	---	---	7.5	10.0	10.5	---	---	---	---	---	---
11	---	---	8.0	---	9.0	---	---	---	---	25.5	---	---
12	---	---	---	---	---	---	9.0	15.0	25.0	---	---	---
13	---	---	---	---	10.0	9.0	---	---	---	---	---	---
14	19.5	---	---	5.0	---	9.0	---	---	---	---	---	---
15	---	---	8.5	---	8.0	---	9.0	14.0	---	22.5	26.0	---
16	---	---	---	---	---	10.5	---	---	---	---	---	---
17	---	---	10.0	---	5.5	---	---	---	---	---	---	---
18	---	---	10.0	7.5	---	12.0	---	---	24.5	---	---	---
19	---	---	---	---	7.5	---	---	14.0	---	---	---	---
20	---	---	---	5.0	7.5	---	---	---	---	---	---	18.5
21	---	---	---	6.0	7.5	8.0	---	---	---	21.5	---	---
22	---	---	---	5.0	---	8.0	---	14.0	---	---	---	---
23	---	---	---	---	7.5	9.5	---	---	22.0	---	---	---
24	---	---	5.5	9.0	---	9.5	---	---	---	---	---	---
25	---	---	---	---	---	9.5	---	---	---	23.0	---	---
26	---	---	5.0	---	10.5	9.0	---	---	23.0	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	14.0	---	7.0	6.0	---	6.5	---	18.5	---	---	---	22.5
29	13.0	---	---	---	---	---	---	---	---	---	---	---
30	---	---	4.5	---	---	---	---	---	24.5	---	---	---
31	13.0	---	---	---	---	11.0	---	---	---	20.0	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	26.0	MIN	2.0	MEAN	12.0						

SAN JOAQUIN RIVER BASIN

11306000 SOUTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	.98	4	.01	9.3	4	.10	7.8	1	.02		
2	1.1	4	.01	7.8	4	.08	7.5	1	.02		
3	1.1	4	.01	5.5	4	.06	71	20	11		
4	1.3	4	.01	5.0	3	.04	424	143	233		
5	4.2	7	.10	4.4	3	.04	85	6	1.4		
6	5.0	5	.07	4.1	3	.03	41	3	.33		
7	2.3	3	.02	4.8	5	.06	27	3	.22		
8	1.8	3	.01	7.3	6	.12	22	2	.12		
9	1.8	5	.02	7.8	5	.11	20	1	.05		
10	2.0	5	.03	5.9	2	.03	17	1	.05		
11	2.2	5	.03	5.2	2	.03	16	1	.04		
12	2.0	4	.02	5.0	2	.03	14	1	.04		
13	2.0	3	.02	4.6	2	.02	16	2	.09		
14	1.8	2	.01	4.4	2	.02	16	2	.09		
15	1.6	2	.01	4.4	2	.02	14	2	.08		
16	1.6	2	.01	4.6	1	.01	14	2	.08		
17	1.6	2	.01	4.6	1	.01	14	2	.08		
18	1.8	2	.01	5.0	1	.01	13	2	.07		
19	2.0	2	.01	5.2	1	.01	13	1	.04		
20	3.5	3	.03	5.9	1	.02	12	1	.03		
21	3.5	2	.02	8.9	5	.17	12	1	.03		
22	2.5	2	.01	39	29	3.2	12	1	.03		
23	2.2	2	.01	16	10	.45	11	1	.03		
24	2.3	2	.01	12	1	.03	11	1	.03		
25	2.3	2	.01	11	1	.03	10	1	.03		
26	2.5	2	.01	10	1	.03	11	1	.03		
27	2.5	2	.01	9.6	1	.03	12	1	.04		
28	16	30	3.7	10	2	.05	40	28	3.2		
29	28	33	3.1	10	1	.03	27	23	1.7		
30	9.9	8	.21	8.6	1	.02	17	13	.60		
31	7.8	5	.11	---	---	---	14	5	.19		
MONTH	121.18	---	7.65	245.9	---	4.89	1041.3	---	252.76		
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	12	1	.03	52	4	1.2	83	2	.45		
2	12	1	.03	813	129	337	74	2	.40		
3	12	2	.06	303	14	13	69	2	.37		
4	12	2	.06	322	8	7.3	66	2	.36		
5	14	2	.08	202	6	3.3	74	2	.52		
6	58	9	4.0	133	2	.72	136	10	3.7		
7	139	15	6.6	127	5	2.1	656	102	411		
8	366	28	33	164	5	2.5	661	50	94		
9	177	6	3.1	802	71	183	363	14	14		
10	87	4	.94	840	60	166	263	8	5.7		
11	62	4	.67	396	10	11	221	6	3.6		
12	47	4	.51	191	8	4.1	175	4	1.9		
13	38	4	.41	579	17	33	238	7	6.3		
14	33	4	.36	383	4	4.5	367	8	7.9		
15	29	4	.31	221	3	1.8	298	7	6.0		
16	27	3	.22	162	3	1.3	950	72	290		
17	24	3	.19	128	4	1.4	329	5	4.4		
18	23	2	.12	103	3	.83	228	4	2.5		
19	22	2	.12	113	2	.61	197	5	2.7		
20	21	2	.11	197	7	3.7	191	7	3.6		
21	20	2	.11	134	3	1.1	522	46	266		
22	19	3	.15	104	3	.84	1150	64	327		
23	18	3	.15	94	3	.76	427	8	9.2		
24	18	2	.10	89	3	.72	424	11	13		
25	17	2	.09	84	2	.45	2240	196	1560		
26	17	2	.09	82	2	.44	827	29	70		
27	17	2	.09	79	2	.43	491	16	21		
28	16	1	.04	78	2	.42	351	10	9.5		
29	15	1	.04	---	---	---	279	7	5.3		
30	15	1	.04	---	---	---	235	6	3.8		
31	14	1	.04	---	---	---	217	5	2.9		
MONTH	1401	---	51.86	6975	---	783.52	12802	---	3147.10		

SAN JOAQUIN RIVER BASIN

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11306000 SOUTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	193	4	2.1	126	2	.68	33	2	.18
2	173	3	1.4	122	2	.66	32	2	.17
3	164	3	1.3	126	4	1.4	31	2	.17
4	158	2	.85	159	3	1.3	30	2	.16
5	274	6	4.4	131	2	.71	28	2	.15
6	355	8	8.1	117	2	.63	26	2	.14
7	336	5	4.5	109	2	.59	25	2	.14
8	237	4	2.6	105	2	.57	24	2	.13
9	217	3	1.8	102	2	.55	23	2	.12
10	204	3	1.7	102	2	.55	22	2	.12
11	182	3	1.5	101	3	.82	21	2	.11
12	175	3	1.4	100	4	1.1	21	2	.11
13	173	3	1.4	98	3	.79	20	2	.11
14	172	3	1.4	94	3	.76	19	2	.10
15	178	3	1.4	91	3	.74	18	2	.10
16	168	3	1.4	83	3	.67	16	2	.09
17	159	2	.86	81	2	.44	16	2	.09
18	137	2	.74	76	2	.41	16	2	.09
19	126	2	.68	72	2	.39	16	2	.09
20	120	2	.65	68	2	.37	17	2	.09
21	120	2	.65	62	2	.33	17	3	.14
22	117	2	.63	57	2	.31	16	3	.13
23	117	2	.63	53	2	.29	15	4	.16
24	130	3	1.1	50	2	.27	15	4	.16
25	227	12	7.6	47	2	.25	18	4	.19
26	186	4	2.0	45	3	.36	16	4	.17
27	161	3	1.3	42	3	.34	15	3	.12
28	145	2	.78	41	3	.33	14	2	.08
29	136	2	.73	39	3	.32	13	2	.07
30	131	2	.71	37	3	.30	13	1	.04
31	---	---	---	34	2	.18	---	---	---
MONTH	5371	---	56.31	2570	---	17.41	606	---	3.72
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	12	1	.03	3.4	2	.02	2.5	1	.01
2	11	2	.06	3.7	2	.02	2.3	1	.01
3	11	2	.06	3.2	2	.02	2.0	1	.01
4	11	2	.06	2.8	2	.02	2.0	2	.01
5	11	3	.09	3.2	1	.01	2.0	2	.01
6	10	4	.11	2.5	2	.01	1.8	2	.01
7	10	4	.11	3.4	3	.03	1.5	2	.01
8	9.8	4	.11	2.5	2	.01	1.5	2	.01
9	9.0	3	.07	2.3	1	.01	1.8	2	.01
10	8.8	2	.05	2.0	1	.01	1.8	2	.01
11	8.8	2	.05	2.3	1	.01	2.0	2	.01
12	8.0	2	.04	2.3	1	.01	1.8	2	.01
13	7.6	2	.04	2.2	1	.01	12	4	.13
14	6.6	2	.04	2.2	1	.01	18	4	.19
15	7.0	2	.04	2.2	1	.01	15	3	.12
16	8.8	2	.05	2.2	1	.01	16	3	.13
17	9.0	2	.05	2.2	1	.01	18	3	.15
18	8.3	2	.04	3.2	3	.03	15	2	.08
19	7.8	2	.04	7.0	4	.08	6.3	1	.02
20	7.0	2	.04	11	4	.12	6.3	1	.02
21	5.3	2	.03	6.6	2	.04	5.8	1	.02
22	4.4	2	.02	4.8	1	.01	5.6	1	.02
23	3.7	2	.02	3.7	1	.01	3.9	2	.02
24	3.5	1	.01	3.2	1	.01	3.0	2	.02
25	3.5	1	.01	3.0	1	.01	2.7	2	.01
26	3.2	1	.01	2.8	1	.01	2.3	3	.02
27	2.8	1	.01	2.8	1	.01	2.2	3	.02
28	2.5	2	.01	2.7	1	.01	1.5	4	.02
29	3.2	2	.02	2.5	1	.01	1.3	3	.01
30	3.5	2	.02	2.5	1	.01	1.2	2	.01
31	3.4	2	.02	2.5	1	.01	---	---	---
MONTH	221.5	---	1.36	102.9	---	.60	159.1	---	1.13
YEAR	31616.88		4328.31						

SAN JOAQUIN RIVER BASIN

11306000 SOUTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
JAN.								
08...	0840	9.0	656	56	99	--	--	--
08...	1545	9.0	577	48	75	--	--	--
FEB.								
02...	0855	6.0	1390	238	893	--	--	--
02...	1410	6.5	645	113	197	--	--	--
09...	0920	10.5	1270	97	333	--	--	--
09...	1400	10.5	932	105	264	--	--	--
10...	0915	8.0	1100	104	309	--	--	--
10...	1615	10.0	628	17	29	--	--	--
11...	1245	9.0	292	10	7.9	--	--	--
13...	1045	9.5	739	26	52	--	--	--
13...	1330	10.0	1010	32	87	--	--	--
MAR.								
07...	1750	10.5	2870	394	3050	33	55	69
08...	0950	9.5	542	37	54	--	--	--
25...	0845	9.5	3490	355	3350	23	33	48
25...	1055	9.5	3270	405	3580	24	33	49
25...	1345	9.5	2380	215	1380	21	31	44

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
JAN.							
08...	--	--	76	82	92	100	--
08...	--	--	99	100	--	--	--
FEB.							
02...	--	--	98	100	--	--	--
02...	--	--	99	100	--	--	--
09...	--	--	100	--	--	--	--
09...	--	--	99	100	--	--	--
10...	--	--	99	99	100	--	--
10...	--	--	88	94	98	100	--
11...	--	--	66	82	92	98	100
13...	--	--	78	83	88	98	100
13...	--	--	97	99	100	--	--
MAR.							
07...	83	90	93	95	97	99	100
08...	--	--	92	95	97	100	--
25...	65	82	90	96	98	100	--
25...	67	84	91	96	99	100	--
25...	63	81	88	95	98	100	--

11308000 NORTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.

LOCATION.--Lat 38°13'17", long 120°41'54", in NE¼NW¼ sec.7, T.4 N., R.12 E., Calaveras County, on right bank 0.5 mi (0.8 km) upstream from Chile Gulch, and 1.8 mi (2.9 km) northwest of San Andreas.

DRAINAGE AREA.--85.2 mi² (220.7 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (229 m), from topographic map. Prior to Feb. 14, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--25 years, 48.6 ft³/s (1.376 m³/s), 35,210 acre-ft/yr (43.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,950 ft³/s (55.2 m³/s) Mar. 25 (gage height, 7.48 ft or 2.280 m); no flow for several days.

Period of record: Maximum discharge, 6,200 ft³/s (176 m³/s) Dec. 23, 1955 (gage height, 12.52 ft or 3.816 m), from rating curve extended above 3,900 ft³/s (110 m³/s); no flow at times in most years.

REMARKS.--Records good. Small diversions above station for irrigation.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	8.9	7.3	12	23	30	74	46	14	5.1	.51	1.1
2	.86	7.3	7.2	11	513	27	66	43	14	5.4	.44	1.2
3	1.0	6.0	24	11	210	26	61	42	13	5.5	.36	.79
4	1.4	5.8	129	11	189	25	59	55	13	5.3	.29	.71
5	1.5	5.6	47	12	144	25	110	46	11	5.6	.20	.48
6	1.6	5.4	25	44	86	40	145	41	11	5.2	.12	.66
7	1.5	6.4	18	123	63	222	139	39	11	5.2	.06	.65
8	1.4	9.5	14	248	58	356	132	37	11	4.5	.02	.52
9	1.4	9.2	13	125	278	182	165	35	10	3.9	0	.41
10	1.5	7.7	12	61	381	114	177	33	9.3	3.8	0	.30
11	1.7	7.0	11	41	142	97	141	32	8.6	3.5	0	.24
12	1.7	7.4	11	31	71	76	113	31	8.8	3.2	0	.31
13	1.7	7.1	12	25	280	72	94	30	8.3	2.7	0	.66
14	1.7	6.5	12	21	212	120	84	29	8.3	2.5	0	.72
15	1.5	6.4	11	19	104	131	96	28	6.9	2.6	0	.71
16	1.7	6.4	11	18	76	300	104	27	7.1	3.9	0	.63
17	1.8	6.4	10	16	62	218	87	27	6.6	4.6	0	.56
18	1.8	6.6	10	15	52	146	75	25	7.2	4.2	0	.42
19	2.0	6.8	10	14	49	118	67	24	7.0	3.3	3.3	.37
20	2.1	7.0	9.8	14	143	120	62	23	7.6	2.7	4.3	.31
21	2.7	9.5	9.8	13	78	122	58	23	7.8	2.6	3.7	.23
22	4.0	32	10	13	59	763	54	23	6.9	3.4	3.2	.15
23	4.4	14	10	13	50	286	51	22	6.8	2.7	2.4	.09
24	4.0	10	9.8	12	44	204	51	21	6.7	2.2	2.0	.04
25	4.3	8.7	9.6	12	40	1020	104	20	7.8	1.9	1.7	.01
26	4.3	8.2	9.7	12	36	413	81	19	7.5	1.5	1.5	0
27	4.6	7.7	10	12	33	224	66	18	6.8	1.2	1.5	0
28	9.1	7.4	18	12	31	154	57	17	6.2	.75	1.7	0
29	15	7.4	23	12	---	118	52	16	5.9	.69	1.6	0
30	8.0	7.4	16	12	---	94	49	15	5.4	.57	1.3	0
31	7.0	---	13	12	---	84	---	14	---	.59	1.2	---
TOTAL	98.16	251.7	543.2	1007	3507	5927	2674	901	261.5	100.80	31.40	12.27
MEAN	3.17	8.39	17.5	32.5	125	191	89.1	29.1	8.72	3.25	1.01	.41
MAX	15	32	129	248	513	1020	177	55	14	5.6	4.3	1.2
MIN	.86	5.4	7.2	11	23	25	49	14	5.4	.57	0	0
AC-FT	195	499	1080	2000	6960	11760	5300	1790	519	200	62	24
CAL YR 1974	TOTAL	17111.57	MEAN 46.9	MAX 1490	MIN .23	AC-FT 33940						
WTR YR 1975	TOTAL	15315.03	MEAN 42.0	MAX 1020	MIN 0	AC-FT 30380						

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-2	1230	5.35	1,060	3-25	0830	7.48	1,950
3-7	2130	5.35	1,060				

SAN JOAQUIN RIVER BASIN

11308000 NORTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: October 1973 to current year.

Sediment records: October 1973 to current year.

EXTREMES. --Current year:

Sediment concentrations: Maximum daily, 168 mg/l Mar. 25; minimum daily, 0 mg/l on several days during January and August.

Sediment discharge: Maximum daily, 665 tons (603 tonnes) Mar. 25; minimum daily, 0 tons on many days.

Period of record:

Sediment concentrations; Maximum daily, 294 mg/l Mar. 2, 1974; minimum daily, 0 mg/l on several days in 1975.

Sediment discharge: Maximum daily, 1,680 tons (1,520 tonnes) Mar. 2, 1974; minimum daily, 0 tons (0 tonnes) on many days each year.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

[illegible]

11308000 NORTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.90	1	0	8.9	2	.05	7.3	1	.02			
2	.86	1	0	7.3	2	.04	7.2	1	.02			
3	1.0	1	0	6.0	2	.03	24	5	.34			
4	1.4	1	0	5.8	2	.03	129	22	9.6			
5	1.5	1	0	5.6	3	.05	47	5	.63			
6	1.6	1	0	5.4	2	.03	25	2	.14			
7	1.5	1	0	6.4	2	.03	18	1	.05			
8	1.4	1	0	9.5	2	.05	14	1	.04			
9	1.4	2	.01	9.2	2	.05	13	1	.04			
10	1.5	2	.01	7.7	2	.04	12	1	.03			
11	1.7	2	.01	7.0	1	.02	11	1	.03			
12	1.7	2	.01	7.4	1	.02	11	1	.03			
13	1.7	2	.01	7.1	1	.02	12	1	.03			
14	1.7	2	.01	6.5	1	.02	12	2	.06			
15	1.5	2	.01	6.4	1	.02	11	2	.06			
16	1.7	2	.01	6.4	1	.02	11	1	.03			
17	1.8	2	.01	6.4	1	.02	10	1	.03			
18	1.8	2	.01	6.6	1	.02	10	1	.03			
19	2.0	2	.01	6.8	1	.02	10	1	.03			
20	2.1	2	.01	7.0	1	.02	9.8	1	.03			
21	2.7	2	.01	9.5	5	.13	9.8	1	.03			
22	4.0	2	.02	32	6	.52	10	1	.03			
23	4.4	2	.02	14	2	.08	10	1	.03			
24	4.0	2	.02	10	1	.03	9.8	1	.03			
25	4.3	2	.02	8.7	1	.02	9.6	2	.05			
26	4.3	2	.02	8.2	1	.02	9.7	3	.08			
27	4.6	2	.02	7.7	1	.02	10	2	.05			
28	9.1	4	.10	7.4	1	.02	18	2	.10			
29	15	5	.20	7.4	1	.02	23	1	.06			
30	8.0	2	.04	7.4	1	.02	16	1	.04			
31	7.0	2	.04	---	---	---	13	1	.04			
MONTH	98.16	---	.63	251.7	---	1.48	543.2	---	11.81			
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)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	12	1	.03	23	11	.73	30	1	.08			
2	11	1	.03	513	103	185	27	1	.07			
3	11	1	.03	210	11	8.0	26	1	.07			
4	11	1	.03	189	9	5.6	25	1	.07			
5	12	1	.03	144	4	1.6	25	6	.41			
6	44	16	4.1	86	2	.46	40	3	.32			
7	123	14	5.6	63	1	.17	222	76	109			
8	248	58	63	58	1	.16	356	42	52			
9	125	5	1.7	278	31	32	182	7	3.4			
10	61	3	.49	381	30	40	114	4	1.2			
11	41	2	.22	142	6	2.3	97	4	1.0			
12	31	1	.08	71	5	.96	76	3	.62			
13	25	1	.07	280	27	35	72	4	.78			
14	21	1	.06	212	7	4.4	120	7	2.3			
15	19	1	.05	104	3	.84	131	7	2.4			
16	18	1	.05	76	3	.62	300	30	30			
17	16	1	.04	62	2	.33	218	9	5.3			
18	15	1	.04	52	2	.28	146	5	2.0			
19	14	1	.04	49	3	.40	118	5	1.6			
20	14	1	.04	143	13	6.0	120	5	1.6			
21	13	1	.04	78	3	.63	122	17	17			
22	13	1	.04	59	4	.64	763	98	289			
23	13	1	.04	50	4	.54	286	11	8.5			
24	12	1	.03	44	4	.48	204	8	4.4			
25	12	1	.03	40	3	.32	1020	168	665			
26	12	0	0	36	2	.19	413	21	26			
27	12	0	0	33	2	.18	224	7	4.2			
28	12	0	0	31	2	.17	154	5	2.1			
29	12	0	0	---	---	---	118	5	1.6			
30	12	1	.03	---	---	---	94	4	1.0			
31	12	1	.03	---	---	---	84	3	.68			
MONTH	1007	---	75.97	3507	---	328.00	5927	---	1233.70			

SAN JOAQUIN RIVER BASIN

11308000 NORTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	74	2	.40	46	2	.25	14	2	.08
2	66	2	.36	43	2	.23	14	2	.08
3	61	2	.33	42	1	.11	13	3	.11
4	59	3	.48	55	2	.30	13	2	.07
5	110	8	2.4	46	1	.12	11	2	.06
6	145	7	2.7	41	1	.11	11	2	.06
7	139	6	2.3	39	2	.21	11	2	.06
8	132	6	2.1	37	2	.20	11	2	.06
9	165	6	2.7	35	2	.19	10	2	.05
10	177	6	2.9	33	2	.18	9.3	2	.05
11	141	4	1.5	32	1	.09	8.6	2	.05
12	113	2	.61	31	1	.08	8.8	2	.05
13	94	2	.51	30	1	.08	8.3	2	.04
14	84	2	.45	29	2	.16	8.3	2	.04
15	96	2	.52	28	2	.15	6.9	2	.04
16	104	2	.56	27	2	.15	7.1	2	.04
17	87	2	.47	27	2	.15	6.6	2	.04
18	75	2	.41	25	2	.14	7.2	2	.04
19	67	2	.36	24	2	.13	7.0	2	.04
20	62	2	.33	23	2	.12	7.6	2	.04
21	58	2	.31	23	1	.06	7.8	2	.04
22	54	2	.29	23	1	.06	6.9	2	.04
23	51	2	.28	22	1	.06	6.8	2	.04
24	51	3	.41	21	1	.06	6.7	2	.04
25	104	10	2.8	20	1	.05	7.8	2	.04
26	81	4	.87	19	1	.05	7.5	2	.04
27	66	3	.53	18	1	.05	6.8	2	.04
28	57	2	.31	17	1	.05	6.2	2	.03
29	52	2	.28	16	1	.04	5.9	2	.03
30	49	2	.26	15	1	.04	5.4	3	.04
31	---	---	---	14	2	.08	---	---	---
MONTH	2674	---	28.73	901	---	3.75	261.5	---	1.48
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	5.1	3	.04	.51	1	0	1.1	1	0
2	5.4	4	.06	.44	1	0	1.2	1	0
3	5.5	3	.04	.36	1	0	.79	1	0
4	5.3	2	.03	.29	1	0	.71	3	.01
5	5.6	1	.02	.20	1	0	.48	5	.01
6	5.2	1	.01	.12	1	0	.66	4	.01
7	5.2	1	.01	.06	1	0	.65	3	.01
8	4.5	1	.01	.02	1	0	.52	3	0
9	3.9	1	.01	0	0	0	.41	3	0
10	3.8	2	.02	0	0	0	.30	3	0
11	3.5	2	.02	0	0	0	.24	3	0
12	3.2	2	.02	0	0	0	.31	3	0
13	2.7	1	.01	0	0	0	.66	3	.01
14	2.5	1	.01	0	0	0	.72	3	.01
15	2.6	1	.01	0	0	0	.71	3	.01
16	3.9	1	.01	0	0	0	.63	3	.01
17	4.6	1	.01	0	0	0	.56	3	0
18	4.2	1	.01	0	0	0	.42	3	0
19	3.3	1	.01	3.3	1	.01	.37	3	0
20	2.7	1	.01	4.3	1	.01	.31	3	0
21	2.6	1	.01	3.7	1	.01	.23	3	0
22	3.4	1	.01	3.2	1	.01	.15	3	0
23	2.7	1	.01	2.4	1	.01	.09	3	0
24	2.2	1	.01	2.0	1	.01	.04	3	0
25	1.9	1	.01	1.7	1	0	.01	3	0
26	1.5	1	0	1.5	1	0	0	0	0
27	1.2	1	0	1.5	1	0	0	0	0
28	.75	1	0	1.7	1	0	0	0	0
29	.69	1	0	1.6	1	0	0	0	0
30	.57	1	0	1.3	1	0	0	0	0
31	.59	1	0	1.2	1	0	---	---	---
MONTH	100.80	---	.42	31.40	---	.06	12.27	---	.08
YEAR 15315.03			1686.11						

11308000 NORTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.--Continued
 PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM
JAN. 08...	1030	8.5	625	150	253	--	--
FEB. 02...	0930	5.5	752	134	272	--	--
02...	1445	6.5	617	161	268	--	--
09...	0935	10.5	422	74	84	--	--
09...	1430	10.5	490	51	67	--	--
13...	1720	9.0	595	54	87	--	--
MAR. 25...	0915	9.5	1780	406	1950	29	39
25...	1155	9.5	1350	304	1110	--	--
25...	1410	9.5	1150	125	388	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
JAN. 08...	--	--	--	94	98	99	100
FEB. 02...	--	--	--	95	99	100	--
02...	--	--	--	98	99	100	--
09...	--	--	--	96	99	100	--
09...	--	--	--	95	98	100	--
13...	--	--	--	96	100	--	--
MAR. 25...	54	71	85	92	98	100	--
25...	--	--	--	96	99	100	--
25...	--	--	--	95	99	100	--

SAN JOAQUIN RIVER BASIN

11308600 CALAVERAS RIVER ABOVE NEW HOGAN LAKE, NEAR SAN ANDREAS, CALIF.

LOCATION.--Lat 38°11'48", long 120°43'18", in NW¼SW¼ sec.13, T.4 N., R.11 E., Calaveras County, temperature recorder on right bank 600 ft (183 m) below confluence of the North and South Forks of the Calaveras River, and 2.3 mi (3.7 km) west of San Andreas.

DRAINAGE AREA.--307 mi² (795 km²).

PERIOD OF RECORD.--Water temperatures: October 1970 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 28.5°C Aug. 11; minimum, 2.5°C Jan. 2, 3.

Period of record:

Water temperatures: Maximum (1971-73, 1974 to current year), 31.0°C June 30, July 14, 15, 1972; minimum, 2.0°C Jan. 7, 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	18.5	15.0	13.5	9.0	6.5	5.0	3.5	6.5	5.0	11.5	10.5
2	21.5	20.0	14.5	12.0	8.5	7.5	4.5	2.5	7.0	6.5	11.5	10.0
3	21.5	19.0	14.0	11.5	10.0	8.5	4.5	2.5	7.5	6.5	12.0	9.5
4	21.0	19.5	14.0	11.5	10.5	10.0	6.0	4.0	8.0	7.5	12.0	10.5
5	20.0	17.5	13.5	11.0	10.0	9.0	6.0	4.5	7.5	7.0	11.5	11.0
6	20.0	17.0	13.0	10.5	9.5	8.5	7.0	5.5	8.5	7.0	11.5	10.0
7	20.0	16.5	11.5	11.5	9.0	8.0	8.5	7.0	9.0	8.0	11.0	10.0
8	21.0	18.0	12.5	11.0	8.5	7.0	9.0	8.5	11.0	9.0	11.5	9.5
9	21.0	18.5	12.5	10.0	8.0	6.5	8.5	7.0	11.0	10.0	11.0	10.0
10	20.0	17.5	12.5	9.5	7.5	7.0	7.5	7.0	10.0	9.0	10.5	9.5
11	19.5	17.0	12.5	9.5	8.0	7.0	7.5	7.0	9.5	8.0	11.5	9.5
12	19.0	16.5	12.5	10.0	9.0	8.0	7.0	6.0	9.0	8.0	11.5	9.0
13	18.5	16.0	12.5	10.0	9.5	8.5	7.0	5.5	10.0	9.0	11.0	8.0
14	18.5	16.0	12.5	10.5	9.0	8.0	7.0	5.0	10.0	9.0	8.5	7.0
15	18.0	16.0	12.5	10.5	9.5	8.5	7.0	5.0	9.0	6.5	9.5	8.0
16	18.0	15.5	12.0	11.0	10.0	8.5	7.0	5.5	8.0	6.5	10.5	8.0
17	18.0	16.0	12.5	11.5	10.0	8.5	7.5	5.5	7.5	5.5	9.5	8.0
18	18.0	15.5	12.5	11.0	9.0	8.0	7.0	5.5	7.0	5.5	11.5	8.5
19	17.5	15.5	12.0	10.0	9.5	8.5	7.0	5.5	8.0	7.0	11.0	9.5
20	17.5	15.5	12.0	9.5	9.5	8.5	7.0	5.5	9.0	7.5	11.0	9.0
21	17.0	14.5	12.0	11.5	9.0	8.0	7.0	5.5	8.0	6.0	10.0	8.0
22	16.5	14.0	11.5	10.5	9.0	7.0	7.5	5.5	7.5	5.5	9.0	7.5
23	16.0	13.0	11.0	9.0	7.0	5.5	8.0	5.5	8.0	6.0	10.5	8.0
24	15.5	13.0	10.5	8.5	6.0	4.0	8.0	6.0	9.0	6.5	11.5	10.0
25	16.0	13.5	11.0	9.5	5.5	3.5	8.5	6.0	9.5	7.5	11.5	9.5
26	16.5	14.0	10.5	8.5	5.5	3.0	8.0	6.5	10.0	8.0	10.0	7.0
27	16.0	14.0	10.0	8.0	6.0	5.0	7.0	5.0	11.5	9.5	10.0	7.0
28	15.5	14.0	10.0	8.0	6.5	6.0	6.0	4.0	12.0	10.0	10.0	6.5
29	15.0	13.5	9.5	7.5	6.5	5.0	6.5	4.5	---	---	10.5	7.0
30	15.0	13.0	9.5	7.0	6.0	5.0	6.0	3.5	---	---	12.0	8.5
31	14.5	14.0	---	---	5.5	4.0	5.0	3.5	---	---	12.5	10.0
MONTH	21.5	13.0	15.0	7.0	10.5	3.0	9.0	2.5	12.0	5.0	12.5	6.5
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	9.0	15.0	12.0	23.5	20.5	23.0	19.0	27.0	20.0	24.0	18.5
2	12.0	9.0	15.5	13.5	22.0	19.5	23.0	19.0	28.0	20.0	24.5	18.0
3	11.5	10.0	15.0	12.5	22.5	19.0	23.0	19.0	27.0	20.5	25.5	18.0
4	10.5	9.0	13.0	10.5	23.0	19.5	22.5	19.0	27.0	20.5	26.0	18.5
5	10.5	8.5	13.0	10.5	24.0	20.5	23.5	19.0	27.5	20.5	26.5	19.0
6	8.5	7.5	14.0	11.5	24.0	21.0	24.0	20.0	26.5	20.5	27.0	19.0
7	8.5	7.0	15.0	12.5	23.5	20.5	25.0	20.5	26.0	19.0	27.0	19.5
8	9.5	7.5	16.0	13.5	24.0	20.5	25.0	20.5	26.5	19.0	24.0	19.5
9	11.0	7.0	16.5	14.5	24.0	20.5	24.5	21.0	28.0	19.0	27.0	20.0
10	11.5	8.5	17.0	15.0	24.5	21.0	25.5	22.0	28.0	19.0	24.5	20.0
11	12.5	9.0	17.5	15.5	24.5	21.5	26.0	21.5	28.5	20.0	26.0	19.0
12	13.0	10.0	18.0	15.5	24.5	21.0	26.0	22.0	28.0	19.5	27.0	19.0
13	14.0	10.5	19.5	17.0	25.0	21.0	26.0	22.0	27.5	19.5	26.5	19.0
14	13.5	11.0	19.0	17.5	25.5	22.0	26.0	22.0	27.5	19.0	22.5	19.5
15	11.0	9.5	17.5	16.0	25.5	22.0	23.5	21.5	27.5	19.0	22.5	19.5
16	10.5	9.0	18.0	15.0	25.0	22.0	25.5	21.0	27.5	19.0	23.0	19.5
17	11.5	8.0	19.5	16.5	24.0	21.0	26.0	21.5	27.0	19.0	23.0	20.5
18	12.0	9.5	20.5	18.0	23.5	20.5	25.5	21.0	27.0	19.5	23.0	20.0
19	13.5	10.5	20.5	18.5	22.5	20.0	25.5	21.0	23.5	19.0	23.0	19.5
20	14.0	11.0	18.5	16.5	23.0	19.5	26.0	21.5	23.0	19.0	23.0	19.0
21	14.5	12.5	17.5	14.5	23.5	19.5	26.0	21.5	23.5	20.5	23.5	19.5
22	14.0	12.0	18.5	15.0	24.0	20.0	26.5	21.5	24.5	19.5	23.5	19.0
23	13.5	11.5	19.5	16.0	23.0	20.5	26.5	22.0	24.5	20.5	23.5	18.5
24	13.5	12.5	20.5	17.0	22.0	20.0	27.0	22.0	25.0	20.5	24.5	18.5
25	12.5	11.0	21.0	18.0	22.0	18.0	27.5	22.5	26.0	21.0	24.5	18.0
26	11.5	9.0	21.0	18.0	22.5	18.5	28.0	23.0	25.0	21.0	24.5	18.0
27	13.0	10.0	21.5	18.0	22.5	19.0	28.0	22.5	24.5	20.0	23.5	17.0
28	13.5	11.0	22.0	18.5	23.0	19.5	27.0	22.5	24.5	20.0	23.5	16.5
29	14.0	11.5	22.5	18.5	23.5	20.0	26.5	22.0	24.5	19.5	24.0	16.0
30	13.5	12.5	23.0	19.5	23.5	19.5	25.5	20.5	24.0	19.0	24.0	16.0
31	---	---	23.5	20.0	---	---	26.0	20.0	24.0	18.5	---	---
MONTH	14.5	7.0	23.5	10.5	25.5	18.0	28.0	19.0	28.5	18.5	27.0	16.0

11308700 NEW HOGAN LAKE NEAR VALLEY SPRINGS, CALIF.

LOCATION.--Lat 38°09'01", long 120°48'45", in SW¼SW¼ sec.31, T.4 N., R.11 E., Calaveras County, in control house at New Hogan Dam on the Calaveras River, 3.0 mi (4.8 km) south of Valley Springs.

DRAINAGE AREA.--362 mi² (938 km²).

PERIOD OF RECORD.--December 1963 to current year. Prior to October 1971, published as "New Hogan Reservoir."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 218,304 acre-ft (269 hm³) Oct. 1 (elevation, 686.10 ft or 209.123 m); minimum, 144,979 acre-ft (179 hm³) Sept. 30 (elevation, 662.30 ft or 201.869 m).

Period of record: Maximum contents, 273,130 acre-ft (337 hm³) May 7, 1974 (elevation, 700.88 ft or 213.628 m); minimum since initial season of normal operation, 9,360 acre-ft (11.5 hm³) Oct. 27, 1964 (elevation, 516.81 ft or 157.524 m).

REMARKS.--Reservoir is formed by an earthfill dam and four earthfill dikes. Storage began Dec. 20, 1963. Total capacity, 323,859 acre-ft (399 hm³) between elevations 534.5 ft (162.92 m), invert of outlet valve and 713.0 ft (217.32 m), top of spillway gates. Elevation of spillway crest is 679.5 ft (207.11 m). No dead storage. The reservoir is operated for flood control according to existing downstream channel conditions. Reservoir releases limited, insofar as possible, to amounts that will not cause flows greater than 6,000 ft³/s (170 m³/s) at Bellota. Records, including extremes, show contents at 2400 hours.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

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

545	723	600	27,320
550	1,240	610	39,169
555	1,956	630	70,540
560	2,951	650	113,200
570	6,134	670	166,978
580	11,147	700	269,652
590	18,020		

CONTENTS, IN ACRE-Feet, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218304	214943	193767	172268	177089	205177	177915	196818	192841	181019	166978	153663
2	218063	214875	193160	172207	180464	205210	178435	196979	192490	180618	166504	153266
3	217856	214807	192713	172237	182193	205541	178957	197173	192140	180186	166060	152813
4	217580	214636	192968	172237	183931	205740	179756	197528	191854	179786	165588	152332
5	217374	214228	192395	172268	184989	206071	180772	197625	191504	179387	165175	151937
6	217202	213820	191663	172569	185770	206469	182069	197949	191155	178957	164645	151599
7	217030	213378	190964	173142	186301	210342	183278	198078	190806	178558	164086	151290
8	216893	212532	190141	174534	187084	214126	184211	198208	190489	178190	163617	150924
9	216790	211822	189287	175353	190267	214466	185145	198111	190172	177670	163146	150559
10	216619	211047	188530	175718	193959	214024	186082	197916	189856	177212	162680	150251
11	216516	210342	187744	175992	195369	213582	186896	197819	189445	176754	162241	149915
12	216413	209537	186928	176144	196270	212735	187744	197755	189035	176357	161804	149580
13	216310	208767	186145	176266	199018	212194	188279	197755	188625	175901	161309	149216
14	216207	207999	185301	176357	201070	211485	189035	197658	188216	175475	160756	148854
15	216105	207200	184491	176418	202084	210644	189508	197561	187838	175110	160321	148575
16	216002	206502	183589	176418	202838	212059	190077	197431	187493	174685	159886	148297
17	215899	205607	182844	176479	203397	210442	190616	197238	187084	174170	159365	148074
18	215797	204880	181946	176510	203792	208433	191218	197108	186583	173716	159278	147852
19	215660	203989	181204	176571	204352	205905	191631	196915	186082	173323	158989	147658
20	215557	203134	180310	176601	205243	203430	191917	196689	185645	172870	158643	147436
21	215489	202608	179325	176632	205342	201920	192299	196560	185208	172448	158268	147186
22	215352	201789	178527	176662	204979	201691	192650	196334	184740	171997	157894	146965
23	215216	200939	177509	176693	204516	196624	193064	196109	184304	171455	157520	146743
24	215148	200156	176723	176784	204352	191854	193703	195884	183868	170945	157175	146522
25	215045	199116	175901	176815	204352	193959	194471	195498	183433	170495	156773	146301
26	214909	198240	175049	176845	204516	187116	195080	195177	183092	169956	156372	145997
27	214909	197658	174352	176845	204648	179909	195530	194888	182689	169388	155942	145722
28	215011	196753	173595	176845	205078	175110	195948	194599	182286	168881	155514	145474
29	214977	195723	172780	176845	---	175414	196334	194247	181853	168374	155028	145226
30	215011	194760	172358	176815	---	176449	196592	193863	181420	167928	154572	144979
31	215011	---	172268	176876	---	177273	---	193415	---	167482	154146	---
MAX	218304	214943	193767	176876	205342	214466	196592	198208	192841	181019	166978	153663
MIN	214909	194760	172268	172207	177089	175110	177915	193415	181420	167482	154146	144979
(a)	685.14	679.01	671.77	673.29	682.18	673.42	679.58	678.59	674.77	670.17	665.58	662.30
(b)	-3,604	-20,251	-22,492	+4,608	+28,202	-27,805	+19,319	-3,177	-11,995	-13,938	-13,336	-9,167
(c)	1,563	525	309	288	439	635	778	1,780	2,049	2,283	2,089	1,860

CAL YR 1974 b -1,116
WTR YR 1975 b -73,636

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

11308900 CALAVERAS RIVER BELOW NEW HOGAN DAM, NEAR VALLEY SPRINGS, CALIF.

LOCATION.--Lat 38°08'53", long 120°49'26", in NW¼NE¼ sec.1, T.3 N., R.10 E., Calaveras County, on right bank at county road bridge, 0.5 mi (0.8 km) upstream from Cosgrove Creek, 0.8 mi (1.3 km) downstream from New Hogan Dam, and 3.0 mi (4.8 km) south of Valley Springs.

DRAINAGE AREA.--363 mi² (940 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 519.8 ft (158.44 m) above mean sea level (levels by Corps of Engineers). Auxiliary nonrecording gage 300 ft (91 m) downstream at different datum used May 1, 1962, to Jan. 26, 1963.

AVERAGE DISCHARGE (adjusted for change in contents in and evaporation from New Hogan Lake).--14 years, 241 ft³/s (6.825 m³/s), 174,600 acre-ft/yr (215 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,260 ft³/s (177 m³/s) Mar. 26 (gage height, 7.53 ft or 2.295 m); minimum daily, 13 ft³/s (0.37 m³/s) Apr. 24.
Period of record: Maximum discharge, 7,830 ft³/s (222 m³/s) Jan. 25, 26, 1969 (gage height, 7.46 ft or 2.274 m); no flow many days in 1961-65, 1971.

REMARKS.--Records good. Flow regulated by New Hogan Lake (see sta 11308700). Some seepage of North Fork Stanislaus River water enters basin from diversion canals and reservoirs, normally not over 1.5 ft³/s (0.042 m³/s). Small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	49	444	41	31	33	35	112	230	178	191	204
2	92	50	446	29	35	33	58	114	208	189	191	202
3	92	51	456	29	33	33	70	115	195	202	191	202
4	92	88	456	28	36	33	69	115	180	204	196	201
5	91	193	450	30	36	33	70	115	180	202	228	188
6	90	257	450	31	36	33	70	88	180	190	236	164
7	71	320	444	31	34	41	70	58	180	174	240	146
8	51	382	438	30	34	446	70	158	166	188	216	149
9	51	403	438	30	38	920	72	204	149	219	212	149
10	38	403	438	30	37	919	72	204	151	235	195	149
11	31	403	438	30	36	916	70	204	158	214	177	149
12	31	403	438	30	36	924	70	180	199	212	177	150
13	31	403	432	30	40	938	70	151	203	202	212	153
14	31	403	432	30	37	1130	71	148	180	165	236	153
15	31	403	428	30	37	1340	70	149	169	176	205	153
16	31	403	426	29	37	1680	70	159	147	214	202	129
17	31	403	426	27	37	1880	70	183	164	229	202	95
18	31	402	426	27	37	1880	70	180	197	204	165	90
19	31	401	426	27	38	1870	68	180	224	195	151	82
20	31	422	426	27	39	1870	68	161	219	195	170	100
21	31	450	426	27	284	1890	51	147	204	195	170	100
22	31	456	426	27	507	3600	39	161	204	217	170	100
23	33	456	426	27	501	4100	32	183	204	242	170	100
24	33	456	426	27	347	3780	13	193	191	227	170	100
25	41	456	426	27	202	4710	35	232	180	223	170	100
26	49	456	426	29	100	6380	56	214	205	223	170	100
27	49	456	420	31	32	5080	56	180	205	223	178	100
28	49	456	432	31	32	3330	59	180	205	223	202	100
29	49	456	442	31	---	417	57	190	205	213	202	100
30	49	456	253	31	---	30	85	223	193	201	202	100
31	49	---	93	31	---	30	---	248	---	193	202	---
TOTAL	1533	10796	12954	915	2729	50299	1836	5129	5675	6367	5999	4008
MEAN	49.5	360	418	29.5	97.5	1623	61.2	165	189	205	194	134
MAX	92	456	456	41	507	6380	85	248	230	242	240	204
MIN	31	49	93	27	31	30	13	58	147	165	151	82
AC-FT	3040	21410	25690	1810	5410	99770	3640	10170	11260	12630	11900	7950
MEAN a	16.2	28.2	57.1	109	613	1,180	399	143	22.0	15.9	10.6	10.8
AC-FT a	999	1,680	3,510	6,710	34,050	72,600	23,740	8,770	1,310	975	653	643

CAL YR 1974 TOTAL 82530 MEAN 226 MAX 1500 MIN 19 AC-FT 163700 MEAN a 248 AC-FT a 179900
WTR YR 1975 TOTAL 108240 MEAN 297 MAX 6380 MIN 13 AC-FT 214700 MEAN a 215' AC-FT a 155600

a Adjusted for change in contents and evaporation in New Hogan Lake.

11308900 CALAVERAS RIVER BELOW NEW HOGAN DAM, NEAR VALLEY SPRINGS, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: January 1964 to August 1966. Published as "below Hogan Dam" in 1964.
 Water temperatures: October 1970 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 13.5°C Nov. 20-23, Sept. 29, 30; minimum recorded, 8.5°C on several days during January and April.

Period of record:

Water temperatures: Maximum, 17.0°C Oct. 12, 1971; minimum (1971 to current year), 5.5°C Dec. 17, 1971, Jan. 1, 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.5	12.0	10.5	12.5	12.5	10.0	9.0			---	---
2	11.5	10.5	12.0	10.5	12.5	12.0	9.5	8.5			---	---
3	11.5	10.0	12.0	10.5	12.5	12.0	10.0	8.5			---	---
4	11.5	10.0	12.0	10.5	12.5	12.0	10.0	9.0			---	---
5	11.5	10.0	12.0	11.0	12.5	12.0	9.5	8.5			---	---
6	11.5	10.0	12.0	11.5	12.5	12.0	9.5	9.0			10.5	9.0
7	12.0	10.0	12.0	11.5	12.0	12.0	10.0	9.5			10.5	9.0
8	12.0	10.0	12.5	12.0	12.0	12.0	9.5	9.0			10.0	9.0
9	12.0	10.0	12.5	12.0	12.0	11.5	9.5	8.5			9.5	9.5
10	12.5	10.0	12.5	12.5	12.0	11.5	9.5	9.0			9.5	9.5
11	12.5	10.0	13.0	12.5	11.5	11.5	10.0	9.0			9.5	9.5
12	12.5	10.0	13.0	13.0	11.5	11.5	10.0	8.5			10.0	9.5
13	12.5	10.0	13.0	13.0	11.5	11.5	10.0	8.5			10.0	9.5
14	12.5	10.0	13.0	13.0	11.5	11.0	10.0	8.5			10.0	9.5
15	12.5	10.5	13.0	13.0	11.5	11.0	10.0	8.5			10.0	10.0
16	12.5	10.0	13.0	13.0	11.0	11.0	10.0	8.5			10.0	10.0
17	12.5	10.5	13.0	12.5	11.0	11.0	9.5	8.5			10.0	10.0
18	12.5	10.5	13.0	12.5	11.0	11.0	9.5	9.0			10.0	10.0
19	12.0	10.5	13.0	12.5	11.0	11.0	9.5	9.0			10.5	10.0
20	12.5	10.5	13.5	13.0	11.0	11.0	---	---			10.5	10.0
21	12.5	10.5	13.5	13.0	11.0	11.0	---	---			10.5	10.0
22	12.0	10.0	13.5	13.0	11.0	10.5	---	---			10.5	10.0
23	12.0	10.5	13.5	13.0	11.0	10.5	---	---			10.0	10.0
24	12.0	10.5	13.0	13.0	10.5	10.5	---	---			10.5	10.0
25	12.0	10.5	13.0	12.5	10.5	10.5	---	---			10.5	10.0
26	12.0	10.5	13.0	12.5	10.5	10.5	---	---			10.5	10.0
27	12.0	10.5	12.5	12.5	10.5	10.0	---	---			10.0	10.0
28	11.5	11.0	13.0	12.5	10.0	10.0	---	---			10.0	9.5
29	12.0	10.5	13.0	12.5	10.0	10.0	---	---			11.5	9.5
30	12.0	10.5	12.5	12.0	10.0	9.5	---	---			12.0	9.0
31	12.0	11.0	---	---	10.0	9.0	---	---			11.5	9.0
MONTH	12.5	10.0	13.5	10.5	12.5	9.0	---	---			12.0	9.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	8.5	11.0	9.5	11.0	10.5	11.5	10.5	11.5	10.5	12.0	11.0
2	11.0	8.5	11.0	9.5	11.0	10.5	11.5	10.5	11.5	10.5	12.0	11.0
3	9.5	9.0	10.0	9.5	11.0	10.5	11.5	10.5	11.5	10.5	12.0	11.0
4	10.0	9.0	11.0	9.5	11.0	10.5	11.5	10.5	11.5	10.5	12.0	11.0
5	9.5	9.0	11.0	9.5	11.0	10.5	11.5	10.5	11.5	10.5	12.0	11.0
6	10.0	9.0	11.5	9.5	11.0	10.5	11.5	10.5	11.5	10.5	12.5	11.0
7	9.5	9.0	12.5	9.5	11.0	10.5	11.5	10.5	11.5	10.5	12.5	11.0
8	10.5	9.0	11.0	9.5	11.5	10.5	11.5	10.5	11.5	10.5	12.0	11.0
9	11.0	9.0	10.5	10.0	11.5	10.5	11.5	10.5	11.5	10.5	12.5	11.0
10	11.0	9.0	10.5	10.0	11.5	10.5	11.5	11.0	11.5	10.5	12.5	11.0
11	11.0	9.0	11.0	10.0	11.5	10.5	11.5	11.0	11.5	10.5	12.5	11.0
12	11.0	9.0	11.0	10.0	11.0	10.5	11.5	10.5	11.5	10.5	12.5	11.5
13	10.5	9.0	11.0	10.0	11.5	10.5	11.5	10.5	11.5	10.5	12.5	11.5
14	9.5	9.0	11.0	10.0	11.5	10.5	11.5	10.5	11.5	10.5	12.5	11.5
15	10.0	9.0	11.0	10.0	11.5	10.5	11.0	10.5	11.5	10.5	12.5	11.5
16	10.5	9.0	11.0	10.0	11.5	10.5	11.5	10.5	11.5	10.5	13.0	11.5
17	10.5	9.0	11.0	10.5	11.5	10.5	11.5	10.5	11.5	10.5	13.0	11.5
18	11.0	9.0	11.0	10.5	11.5	10.5	11.5	10.5	11.5	10.5	13.0	11.5
19	11.0	9.0	11.0	10.5	11.5	10.5	11.5	10.5	12.0	10.5	13.0	11.5
20	11.0	9.0	11.0	10.5	11.5	10.5	11.5	10.5	11.5	10.5	13.0	11.5
21	12.0	9.0	11.5	10.5	11.5	10.5	11.5	10.5	11.5	10.5	13.0	11.5
22	11.0	9.0	11.5	10.5	11.5	10.5	11.5	10.5	11.5	10.5	13.0	11.5
23	11.0	9.0	11.5	10.5	11.5	10.5	11.5	10.5	11.5	10.5	13.0	11.5
24	11.0	9.5	11.5	10.5	11.5	10.5	11.5	11.0	11.5	10.5	13.0	11.5
25	11.0	9.0	11.5	10.5	11.5	10.5	11.5	11.0	12.0	10.5	13.0	11.5
26	11.0	9.0	11.5	10.5	11.5	10.5	11.5	11.0	12.0	10.5	13.0	12.0
27	11.5	9.0	11.5	10.5	11.5	10.5	11.5	11.0	12.0	11.0	13.0	12.0
28	11.5	9.0	11.5	10.5	11.5	10.5	11.5	11.0	12.0	11.0	13.0	12.0
29	11.5	9.0	11.5	10.5	11.5	10.5	11.5	10.5	12.0	10.5	13.5	12.0
30	10.5	9.5	11.0	10.5	11.5	10.5	11.5	10.5	12.0	11.0	13.5	12.0
31	---	---	11.0	10.5	---	---	11.5	10.5	12.0	11.0	---	---
MONTH	12.0	8.5	12.5	9.5	11.5	10.5	11.5	10.5	12.0	10.5	13.5	11.0

11312000 BEAR CREEK NEAR LOCKEFORD, CALIF.

LOCATION.--Lat 38°09'10", long 121°08'17", in NW¼SE¼ sec.31, T.4 N., R.8 E., San Joaquin County, on right bank 15 ft (5 m) downstream from county road bridge, and 0.8 mi (1.3 km) southeast of Lockeford.

DRAINAGE AREA.--47.6 mi² (123.3 km²).

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1315-A. October 1926 to November 1930 at site 3 mi (5 km) downstream; records not equivalent.

GAGE.--Water-stage recorder and low-water concrete control. Datum of gage is 80.68 ft (24.591 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--45 years, 11.8 ft³/s (0.334 m³/s), 8,550 acre-ft/yr (10.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 758 ft³/s (21.5 m³/s) Feb. 9 (gage height, 13.99 ft or 4.264 m); no flow Oct. 8, 9.

Period of record: Maximum discharge, 2,930 ft³/s (83.0 m³/s) Apr. 3, 1958 (gage height, 15.13 ft or 4.612 m); no flow for several months in most years.

REMARKS.--Records fair. No storage or diversion above station. Occasionally water is released from East Bay Municipal Utility District aqueduct into Bear Creek above station. Summer discharge influenced by return flows from irrigated areas.

REVISIONS.--WSP 1635: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	2.5	.14	.47	.75	1.1	5.1	2.1	2.2	1.4	.82	.96
2	1.8	2.4	.30	.32	29	.91	3.6	2.6	.70	.55	.88	.25
3	1.4	2.0	6.2	.25	17	.81	2.7	3.1	.38	1.2	.32	.29
4	.66	1.5	9.6	.22	15	.65	2.6	1.6	1.4	1.9	.06	.23
5	.15	.76	5.1	.19	19	.65	17	.61	.19	1.8	.18	.31
6	.05	.55	2.5	.36	7.7	2.2	24	.91	.62	1.8	.59	.20
7	.01	.51	1.6	.40	6.5	2.7	26	1.1	1.9	1.9	1.2	.10
8	0	.22	1.1	1.7	14	64	15	.46	.53	1.1	.46	.10
9	0	.43	.79	2.1	434	61	11	.16	.04	2.1	.12	.71
10	.20	.76	.55	1.7	192	21	8.0	1.2	1.2	1.7	.19	.83
11	.13	.54	.41	1.2	43	23	5.9	.28	1.2	.84	.42	.23
12	.02	.35	.36	.88	18	14	4.5	.40	.45	1.8	.76	.11
13	.01	.25	.30	.65	359	81	3.4	1.2	1.4	.28	1.4	.94
14	.01	.18	.26	.50	101	251	2.7	.92	1.6	1.1	.26	.86
15	.09	.15	.25	.44	30	46	2.6	.30	1.9	.38	.12	1.1
16	1.8	.12	.43	.39	17	119	2.6	.29	.91	.13	.29	.66
17	.47	.11	.67	.40	9.9	51	3.2	4.1	.22	1.3	.32	.23
18	.13	.09	.39	.38	6.5	24	2.8	3.1	1.3	.38	.37	.58
19	.15	.09	.29	.42	4.6	15	2.9	1.9	.91	1.2	.79	.39
20	.07	.13	.25	.41	6.6	11	2.1	2.4	1.7	.59	1.2	.12
21	.04	.25	.25	.43	6.3	13	1.6	1.3	.19	.07	1.2	.07
22	.36	.15	.22	.41	3.4	194	.36	1.6	1.1	.56	.87	.09
23	.34	.18	.20	.39	2.4	66	2.0	1.6	1.2	1.1	.43	.15
24	2.3	.42	.16	.36	2.0	38	2.5	1.0	.28	.70	.32	.12
25	.54	.88	.16	.39	1.7	124	2.2	.11	.02	.38	.15	.12
26	.15	.68	.16	.34	1.5	65	1.7	.25	.80	.10	.09	.15
27	.15	.44	.23	.31	1.2	28	1.5	.22	.11	1.3	.06	.20
28	.27	.33	.39	.29	1.1	17	1.5	1.7	1.2	1.7	.03	.16
29	.15	.25	.54	.27	---	11	2.2	1.3	2.2	1.1	.12	.15
30	.14	.21	.98	.25	---	8.3	1.6	1.5	.49	.58	.38	.20
31	1.7	---	.70	.33	---	5.9	---	.95	---	.98	.85	---
TOTAL	13.91	17.43	35.48	17.15	1350.15	1360.22	164.86	40.26	28.34	32.02	15.25	10.61
MEAN	.45	.58	1.14	.55	48.2	43.9	5.50	1.30	.94	1.03	.49	.35
MAX	2.3	2.5	9.6	2.1	434	251	26	4.1	2.2	2.1	1.4	1.1
MIN	0	.09	.14	.19	.75	.65	.36	.11	.02	.07	.03	.07
AC-FT	28	35	70	34	2680	2700	327	80	56	64	30	21
CAL YR 1974 TOTAL	2759.00											
WTR YR 1975 TOTAL	3085.68											
MEAN 7.56	MAX 390											
MEAN 8.45	MAX 434											
MIN 0	AC-FT 5470											
MIN 0	AC-FT 6120											

Peak discharge (base, 500 ft³/s).--Feb. 9 (1230) 758 ft³/s (13.99 ft); Feb. 13 (1200) 582 ft³/s (12.86 ft).

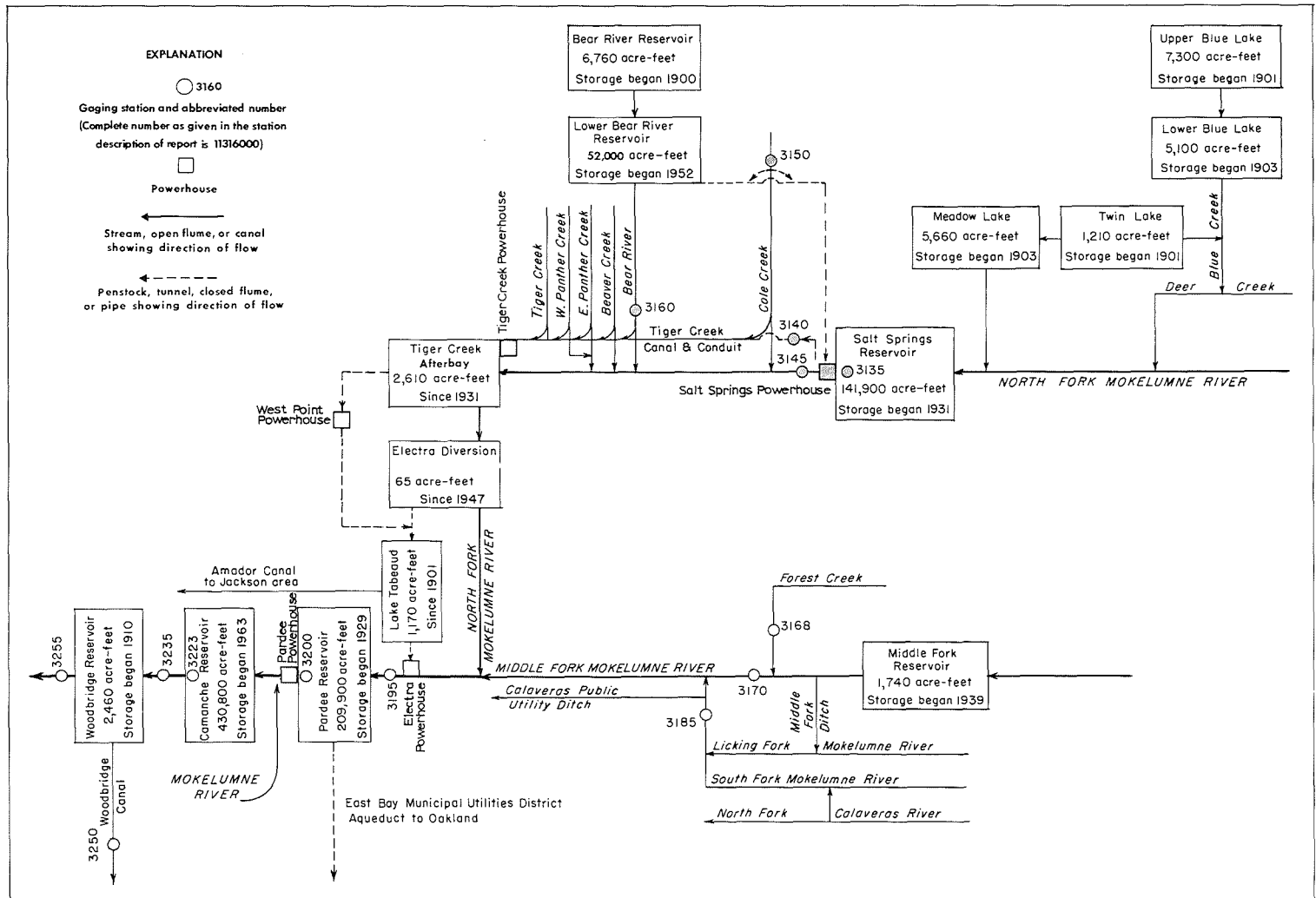


FIGURE 11.--Schematic diagram showing diversions and storage in Mokelumne River basin.

SAN JOAQUIN RIVER BASIN

11313000 DELTA-MENDOTA CANAL AT TRACY PUMPING PLANT, NEAR TRACY, CALIF.

LOCATION.--Lat 37°47'49", long 121°35'03", in SW¼SW¼ sec.31, T.1 S., R.4 E., Alameda County, at Tracy pumping plant at intake to canal, 6 mi (10 km) southeast of Byron, and 10 mi (16 km) northwest of Tracy.

PERIOD OF RECORD.--June 1951 to current year. Prior to October 1959, published as "near Tracy."

GAGE.--Water-stage recorder on forebay, pressure gages on pump discharge lines, and operating time of pumps. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--24 years, 2,011 ft³/s (56.95 m³/s), 1,457,000 acre-ft/yr (1,800 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 4,935 ft³/s (140 m³/s) Aug. 11, 1969; no flow many days in most years.

REMARKS.--Discharge computed from records of operation of pumps. Water is diverted from Sacramento-San Joaquin Delta by way of Old River and a dredged channel to the Tracy pumping plant where it is lifted 200 ft (61 m) into canal. Water, less intermediate diversions, flows into Mendota Pool on San Joaquin River to replace water diverted at Friant Dam. The canal is a part of the Central Valley Project.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4330		0	0	4500	4790	4160	4720	3320	4630	4590	4440
2	4450		0	0	4530	4780	4790	4720	3690	4640	4580	4040
3	4350		0	0	4510	4780	4750	4730	4050	4630	4570	3940
4	4340		0	0	4360	4750	4740	4710	4060	4640	4540	3970
5	4330		0	0	4490	4770	4750	4700	4080	4650	4580	3970
6	4360		0	0	4500	4760	4720	4700	4080	4680	4570	3970
7	4360		0	1070	4490	4720	4720	4630	4070	4630	4570	3970
8	4360		0	1680	4380	4110	4740	4760	4070	4640	4190	3980
9	4370		0	2310	4470	4120	4740	4760	4050	4670	4590	3970
10	4350		0	2720	4510	4110	4320	4760	4050	4640	4580	3980
11	4350		0	2640	4670	4120	3860	4740	4020	4640	4580	3970
12	4350		0	3200	4710	4090	3740	4760	4050	4640	4620	3980
13	4350		0	3210	4740	4130	3710	4290	4030	4640	4620	3970
14	4360		0	3240	4250	3680	3540	4140	4040	4640	4610	3960
15	4370		0	3190	3940	2830	3240	3580	4060	4630	4590	3980
16	4300		0	3250	3940	2460	3230	3390	4010	4630	4600	3980
17	3920		0	3400	3930	2450	3230	3360	4030	4630	4540	3970
18	3860		0	3490	3930	2460	3230	3370	4020	4580	4490	3970
19	3880		92	3490	3930	2950	3220	3370	4040	4580	4350	3860
20	3870		224	3480	3960	3380	3220	3370	4030	4530	4380	3760
21	3870		0	3480	3950	3370	3470	3340	3960	4520	4370	3750
22	3400		0	3480	3920	3370	4450	3380	3920	4530	4390	3760
23	2700		0	3510	3930	3390	4740	3380	3940	4580	4380	3760
24	2440		0	3490	3420	3360	4730	3340	4010	4600	4350	3730
25	2470		0	3950	3230	3400	4750	3360	3950	4560	4380	2810
26	1870		0	3950	3300	3380	4730	3350	4010	4610	4400	2390
27	1660		0	3940	4210	3380	4730	3370	3990	4620	4420	2400
28	1680		0	3940	4590	3370	4720	3370	4000	4600	4410	2300
29	1080		0	4130	---	3410	4730	3340	4010	4590	4420	2300
30	243		0	4490	---	4040	4730	3340	4250	4590	4490	2310
31	0	---	0	4570	---	4090	---	3330	---	4570	4460	---
TOTAL	106623	0	316	83300	117290	116550	126430	122460	119890	142960	139210	109140
MEAN	3439	0	10.2	2687	4189	3760	4214	3950	3996	4612	4491	3638
MAX	4450	0	224	4570	4740	4790	4790	4760	4250	4680	4620	4440
MIN	0	0	0	0	3230	2450	3220	3330	3320	4520	4190	2300
AC-FT	211500	0	627	165200	232600	231200	250800	242900	237800	283600	276100	216500
CAL YR 1974	TOTAL	1097561	MEAN	3007	MAX	4640	MIN	0	AC-FT	2177000		
WTR YR 1975	TOTAL	1184169	MEAN	3244	MAX	4790	MIN	0	AC-FT	2349000		

11313500 SALT SPRINGS RESERVOIR NEAR WEST POINT, CALIF.

LOCATION.--Lat 38°30'00", long 120°12'55", in SE¼ sec.33, T.8 N., R.16 E., Calaveras County, Eldorado National Forest, at right end of Salt Springs Dam on North Fork Mokelumne River, 2 mi (3 km) upstream from Cole Creek, and 18 mi (29 km) northeast of West Point.

DRAINAGE AREA.--169 mi² (438 km²).

PERIOD OF RECORD.--March 1931 to current year. Prior to October 1964, records published as usable contents.

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.).

EXTREMES (at 1700).--Current year: Maximum contents observed, 141,900 acre-ft (175 hm³) June 21 to July 7, July 10 (elevation, 3,958.0 ft or 1,206.40 m); minimum, 3,140 acre-ft (3.87 hm³) Apr. 21 (elevation, 3,717.4 ft or 1,133.06 m).

Period of record: Maximum contents observed, 141,900 acre-ft (175 hm³) for several days in June or July each year 1948-54, 1956-58, 1960, 1962-63, 1965, 1967, 1969-75 (elevation, 3,958.0 ft or 1,206.40 m); no contents at times in 1932-33, 1945, 1962.

REMARKS.--Reservoir is formed by concrete-faced, rockfill dam, completed in 1931; storage began in March 1931. Capacity, 141,900 acre-ft (175 hm³) between elevations 3,667.75 ft (1,117.930 m), outlet drain and 3,958.0 ft (1,206.40 m), top of radial gates, above mean sea level. Storage of 1,860 acre-ft (2.29 hm³) available for release to river only. Water is released through powerhouse just below dam and discharged into Tiger Creek powerhouse conduit (see sta 11314000). Figures given herein represent total contents. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

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

3,667.75	45	3,740.0	7,320
3,700.0	1,250	3,750.0	9,800
3,705.0	1,680	3,760.0	12,700
3,710.0	2,200	3,780.0	19,600
3,715.0	2,810	3,800.0	28,000
3,720.0	3,520	3,850.0	54,900
3,725.0	4,320	3,900.0	90,800
3,730.0	5,230	3,958.0	141,900
3,735.0	6,230		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76571	56434	34135	11985	3829	5229	6853	6875	109547	141857	126457	96185
2	75979	55481	33937	11334	3941	5402	6964	7393	116461	141857	125452	95289
3	75536	54726	33987	10452	3990	5559	6875	8389	121824	141857	124541	94478
4	75021	53853	34382	9640	4006	5461	6766	9403	127466	141857	123633	93751
5	74580	53234	33642	8863	4023	5364	6592	10204	132749	141857	122546	93106
6	74141	52618	32716	8267	4039	5920	6335	10620	137270	141857	121643	92223
7	73702	52007	31753	8389	4155	6002	6105	11074	138506	141857	120744	91663
8	73047	51399	30754	8170	4410	6209	5718	12015	138506	141761	119846	90786
9	72684	50674	30002	7788	4674	6442	5422	13191	138506	141665	118862	90230
10	72104	49895	29304	7324	5229	6126	5229	15295	139269	141857	117793	89439
11	71238	49064	28474	6831	5422	6085	4497	18391	139173	141665	116727	88571
12	70520	48416	27790	6357	5618	5982	4105	21588	139269	141472	115576	88020
13	69449	47423	27114	5982	5658	5961	3909	25610	139364	141088	114694	87237
14	68667	46845	26490	5982	5738	5778	3893	29862	139555	140512	113640	86456
15	68031	46042	25785	5961	5500	5267	3893	34930	138887	139746	112502	85600
16	67537	44908	25262	5941	5040	4674	3703	38773	138792	139173	111455	84748
17	66906	43846	24360	5941	4984	4585	3489	43017	139078	138696	110500	83900
18	66416	42962	23556	5941	4782	4497	3429	48006	139651	137935	109461	82979
19	65443	41978	22602	5941	4674	4324	3225	53853	140033	137270	108771	82061
20	64407	41058	21708	5941	4728	4427	3182	59023	141088	136606	107996	81224
21	63653	40308	20715	5941	4674	4324	3139	61280	141857	136039	107053	80164
22	63107	39299	19670	6023	4532	4256	3672	62563	141857	135378	106113	79259
23	62563	39036	18614	5819	4480	4497	4155	64407	141857	134719	105092	78434
24	62021	38720	17912	5618	4445	4728	4324	67889	141857	133873	104160	77017
25	61348	38250	17007	5229	4532	5819	5077	72539	141857	133029	103232	76053
26	60345	37885	16228	4728	4620	6897	5718	78135	141857	132188	102224	75094
27	59286	36495	15466	4375	4674	7370	5920	82749	141857	131350	101136	73921
28	58369	35431	14622	4324	4892	7416	6023	87393	141857	130420	100054	72829
29	57396	34531	13639	4222	---	7075	6272	92945	141857	129494	99142	71743
30	57074	34333	12876	4056	---	6766	6399	97007	141857	128386	98317	70664
31	56753	---	12227	3941	---	6657	---	102559	---	127466	97248	---
MAX	76571	56434	34382	11985	5738	7416	6964	102559	141857	141857	126457	96185
MIN	56753	34333	12227	3941	3829	4256	3139	6875	109547	127466	97248	70664
(a)	3,853.0	3,813.3	3,758.5	3,722.7	3,728.2	3,737.0	3,735.8	3,914.4	3,958.0	3,942.7	3,908.0	3,873.4
(b)	-20,400	-22,400	-22,100	-8,290	+951	+1,770	-258	+96,200	+39,300	-14,400	-30,200	-26,600

CAL YR 1974 b -58,400
WTR YR 1975 b -6,500

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet, rounded to Geological Survey standards.

11314000 TIGER CREEK POWERHOUSE CONDUIT BELOW SALT SPRINGS DAM, CALIF.

LOCATION.--Lat 38°29'47", long 120°13'04", in SW¼ sec.33, T.8 N., R.16 E., Amador County, Eldorado National Forest, on left bank 1,000 ft (305 m) downstream from Salt Springs Dam and powerhouse.

PERIOD OF RECORD.--June 1931 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,620 ft (1,103 m), from topographic map. Auxiliary nonrecording gages in stilling wells upstream and downstream from control.

AVERAGE DISCHARGE.--44 years, 352 ft³/s (9.969 m³/s), 255,000 acre-ft/yr (314 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 577 ft³/s (16.3 m³/s) June 22, 1945; no flow at times in some years.

REMARKS.--Conduit conveys water of North Fork Mokelumne River from tailrace of Salt Springs powerhouse to forebay of Tiger Creek powerhouse. Since December 1952, records include Bear River diversion to Salt Springs powerhouse. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	540	305	91	404	91	189	443	431	502	539	539	528
2	540	533	91	440	91	190	475	66	502	539	538	530
3	538	543	97	437	88	393	514	.01	523	540	538	529
4	539	542	219	435	84	485	511	0	541	539	540	523
5	540	542	492	436	84	363	501	0	541	540	540	523
6	541	541	491	312	85	359	501	0	541	540	539	520
7	540	543	491	264	85	366	502	0	541	540	538	522
8	541	543	491	339	86	198	515	0	541	541	541	525
9	542	373	489	339	154	334	516	0	540	541	541	525
10	540	382	356	338	214	441	502	0	540	541	540	525
11	540	375	491	338	227	387	487	0	540	541	537	525
12	540	396	443	338	227	411	475	0	539	541	534	524
13	541	543	414	304	328	406	464	0	541	542	536	525
14	542	405	374	312	393	429	462	0	540	542	535	527
15	543	471	369	256	390	384	461	0	540	541	538	531
16	542	541	475	223	339	368	455	381	539	541	535	526
17	542	541	535	229	306	379	445	472	540	541	537	531
18	545	543	535	227	272	422	435	471	540	533	536	531
19	543	518	534	225	257	438	426	471	539	528	534	531
20	544	540	531	225	258	306	422	472	539	529	536	531
21	440	540	532	228	232	389	386	475	539	520	535	527
22	358	428	538	305	185	305	383	480	539	536	538	531
23	543	188	540	378	185	299	430	480	539	536	539	531
24	542	191	522	356	185	271	414	479	540	534	538	531
25	538	385	486	357	125	204	289	482	541	529	537	534
26	540	490	489	355	187	201	305	483	540	529	536	537
27	541	490	489	211	189	272	432	481	540	529	534	539
28	521	493	489	123	188	351	444	487	539	533	534	540
29	341	366	487	113	---	417	443	489	539	542	533	538
30	322	92	426	89	---	439	443	490	539	542	532	541
31	306	---	302	90	---	442	---	499	---	542	529	---
TOTAL	15815	13383	13309	9026	5535	10838	13481	8089.01	16104	16651	16637	15881
MEAN	510	446	429	291	198	350	449	261	537	537	537	529
MAX	545	543	540	440	393	485	516	499	541	542	541	541
MIN	306	92	91	89	84	189	289	0	502	520	529	520
AC-FT	31370	26550	26400	17900	10980	21500	26740	16040	31940	33030	33000	31500
CAL YR 1974	TOTAL	177897.54	MEAN	487	MAX	551	MIN	0	AC-FT	352900		
WTR YR 1975	TOTAL	154749.01	MEAN	424	MAX	545	MIN	0	AC-FT	306900		

11314500 NORTH FORK MOKELUMNE RIVER BELOW SALT SPRINGS DAM, CALIF.

LOCATION.--Lat 38°29'37", long 120°13'12", in NE¼NW¼ sec.4, T.7 N., R.16 E., Calaveras County, Stanislaus National Forest, on left bank 0.3 mi (0.5 km) downstream from Salt Springs Dam, and 1.3 mi (2.1 km) upstream from Cole Creek.

DRAINAGE AREA.--170 mi² (440 km²).

PERIOD OF RECORD.--September 1926 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "above Moore Creek" 1926-30.

GAGE.--Water-stage recorder. Altitude of gage is 3,590 ft (1,094 m), from topographic map. Prior to Sept. 12, 1928, at site 100 ft (30 m) upstream and Sept. 12, 1928, to Sept. 23, 1940, at present site at datum 2.0 ft (0.61 m) higher.

AVERAGE DISCHARGE (combined flow of North Fork Mokelumne River and Tiger Creek powerhouse conduit minus Bear River-Cole Creek diversion).--49 years, 475 ft³/s (13.45 m³/s), 344,100 acre-ft/yr (424 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,260 ft³/s (92.3 m³/s) June 14 (gage height, 9.09 ft or 2.771 m); minimum daily, 4.2 ft³/s (0.12 m³/s) Mar. 2.

Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s), Nov. 21, 1950 (gage height, 17.20 ft or 5.243 m), from rating curve extended above 3,900 ft³/s (110 m³/s) on basis of computations of flow over dam and discharge through powerhouse; minimum daily, 0.3 ft³/s (0.008 m³/s) Mar. 31, Apr. 1, 1931.

REMARKS.--Flow regulated by Salt Springs Reservoir 0.3 mi (0.5 km) upstream since 1931 (see sta 11313500). Diversion from Bear River and Cole Creek to Salt Springs powerhouse averaged 138 ft³/s (3.91 m³/s) during current year. Diversion above station through Tiger Creek powerhouse conduit (see sta 11314000). See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	6.9	6.1	5.7	4.3	5.0	11	402	641	286	278
2	12	6.9	6.9	6.3	6.8	4.2	4.8	294	415	708	284	279
3	12	6.6	7.9	5.0	6.0	5.0	4.8	381	404	624	286	280
4	12	6.6	8.4	4.9	6.1	6.2	4.8	291	395	589	291	273
5	12	6.3	8.2	5.4	5.9	5.8	5.0	405	588	630	287	281
6	11	6.2	8.1	7.9	6.1	5.4	4.8	451	2240	668	284	282
7	11	6.1	8.0	8.1	8.0	7.0	19	459	3190	621	279	280
8	11	6.0	8.0	8.9	7.9	6.8	22	469	2930	420	278	289
9	12	5.7	46	7.5	16	6.6	4.8	377	2280	520	278	292
10	12	5.6	7.3	6.9	13	6.6	5.0	325	2220	439	281	290
11	12	5.6	7.5	6.8	9.5	5.8	5.3	327	2730	394	284	289
12	11	5.6	7.4	6.5	8.6	5.6	5.5	273	2720	394	283	286
13	11	5.8	7.2	6.1	13	5.8	5.3	400	2310	394	288	284
14	12	5.5	7.1	6.0	11	6.1	5.5	633	2800	378	289	281
15	13	5.4	7.2	6.0	8.7	6.0	5.5	665	2950	274	287	308
16	12	5.5	8.5	6.1	7.9	6.4	5.3	306	2320	202	288	328
17	12	5.5	9.1	6.0	7.5	6.1	5.0	240	1900	333	289	320
18	14	5.5	4.9	6.0	6.9	6.3	5.3	268	1000	339	278	308
19	12	5.4	4.9	6.3	7.6	6.5	5.5	296	592	306	244	298
20	12	5.3	4.9	6.6	8.1	6.4	4.6	309	420	304	263	293
21	12	6.0	5.4	6.6	7.4	7.8	4.6	313	1060	267	288	275
22	12	5.6	5.8	6.8	6.9	7.8	4.6	312	1250	269	281	282
23	14	5.0	5.8	6.4	6.9	7.3	4.6	319	1330	288	278	277
24	12	5.0	5.6	6.3	6.4	7.6	5.5	331	1290	298	278	275
25	11	5.2	5.5	6.3	5.6	14	6.9	342	882	281	276	271
26	13	5.2	5.6	6.3	6.9	8.8	5.8	354	667	277	275	274
27	14	5.3	5.7	5.8	5.4	7.1	5.5	367	498	275	273	277
28	12	5.8	5.9	5.4	4.6	8.8	5.3	372	884	317	273	276
29	13	5.8	5.7	5.4	---	5.5	5.2	370	889	332	271	278
30	14	5.7	5.7	5.3	---	5.3	6.6	389	905	310	272	276
31	13	---	5.7	5.3	---	5.3	---	392	---	287	276	---
TOTAL	377	175.7	246.8	195.3	220.4	204.2	187.4	11041	44461	12379	8668	8580
MEAN	12.2	5.86	7.96	6.30	7.87	6.59	6.25	356	1482	399	280	286
MAX	14	10	46	8.9	16	14	22	665	3190	708	291	328
MIN	11	5.0	4.9	4.9	4.6	4.2	4.6	11	395	202	244	271
AC-FT	748	349	490	387	437	405	372	21900	88190	24550	17190	17020
CAL YR 1974	TOTAL	123498.7	MEAN 338	MAX 2970	MIN 4.9	AC-FT 245000						
WTR YR 1975	TOTAL	86735.8	MEAN 238	MAX 3190	MIN 4.2	AC-FT 172000						

SAN JOAQUIN RIVER BASIN

11315000 COLE CREEK NEAR SALT SPRINGS DAM, CALIF.

LOCATION.--Lat $38^{\circ}31'26''$, Long $120^{\circ}12'28''$, in $SE\frac{1}{4}$ Sec. 21, T.8 N., R.16 E., Amador County, Eldorado National Forest, on right bank 4.8 mi (7.8 km) north of Salt Springs Dam, 4.4 mi (7.1 km) upstream from mouth, and 6.3 mi (10.1 km) southwest of Mokelumne Peak. *Prior to Oct. 30, 1974, at site 0.4 mi (0.6 km) upstream.*

DRAINAGE AREA.--20.4 mi² (52.8 km²).

PERIOD OF RECORD.--July 1927 to November 1942, October 1943 to current year. Prior to October 1958, published as Cold Creek near Mokelumne Peak. October 1958 to September 1960, published as "near Mokelumne Peak."

GAGE.--Water-stage recorder. *Concrete control since Oct. 30, 1974.* Altitude of gage is 5,970 ft (1,820 m), from topographic map. *Prior to Oct. 30, 1974, at site 0.4 mi (0.6 km) upstream at different datum.*

AVERAGE DISCHARGE.--47 years, 64.9 ft³/s (1,838 m³/s), 47,020 acre-ft/yr (58.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,270 ft³/s (64.3 m³/s) June 1 (gage height, 4.00 ft or 1.219 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Oct. 1, 23-28.

Period of record: Maximum discharge, 6,140 ft³/s (174 m³/s) Dec. 23, 1964 (gage height, 10.21 ft or 3.112 m), from rating curve extended above 900 ft³/s (25.5 m³/s) on basis of slope-area measurement at gage height 9.69 ft (2.954 m); no flow many days in some years.

REMARKS.--Occasional pumping for domestic use in summer-home tract began in September 1961. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1515: 1928, 1930-31, 1938(M), 1944, 1947. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.73	2.3	2.9	13	51	52	61	1090	90	2.8	1.4
2	.11	.74	2.0	2.6	15	57	47	80	725	87	2.6	1.3
3	.13	.70	2.0	2.5	19	47	42	109	668	83	2.4	1.2
4	.19	.64	3.7	2.9	17	46	38	70	717	81	2.2	1.1
5	.29	.60	5.9	3.2	16	46	34	56	801	78	2.0	1.0
6	.19	.59	5.8	5.5	15	42	31	51	822	76	1.9	.90
7	.16	.59	5.6	10	14	33	29	70	614	68	1.8	.80
8	.20	.61	6.1	13	18	28	26	151	512	62	1.7	.70
9	.28	.65	5.9	12	88	24	25	216	457	54	1.6	.70
10	.33	.69	5.4	11	94	22	25	291	448	50	1.5	.60
11	.30	.69	5.0	11	44	21	25	329	499	43	1.5	.60
12	.28	.69	5.6	11	27	21	26	394	445	39	1.4	.60
13	.26	.66	14	13	21	21	29	534	487	32	1.4	.50
14	.23	.64	14	15	17	21	38	671	462	28	1.3	.50
15	.21	.64	10	18	16	21	43	478	398	24	1.3	.50
16	.18	.70	11	20	15	19	36	479	326	22	1.2	.50
17	.17	.74	13	21	15	20	37	704	209	20	1.2	.40
18	.16	.78	12	23	14	19	31	784	149	18	1.2	.40
19	.15	.87	9.5	26	14	20	29	691	116	16	2.3	.40
20	.14	.94	8.0	27	14	21	29	376	123	14	4.6	.40
21	.13	1.0	6.8	29	14	21	36	179	144	13	5.3	.30
22	.11	1.5	5.6	29	13	22	51	236	165	11	4.8	.30
23	.10	3.0	6.8	29	13	34	60	441	157	9.6	4.1	.30
24	.10	4.0	4.8	29	15	25	55	659	132	8.2	3.4	.24
25	.10	4.4	4.2	29	25	154	52	683	106	7.0	2.9	.22
26	.10	3.9	3.8	29	40	107	46	677	108	6.0	2.5	.21
27	.10	3.6	3.5	26	35	76	37	618	106	5.2	2.2	.20
28	.10	3.7	3.3	24	40	63	41	618	106	4.4	1.9	.19
29	.25	3.0	3.2	18	---	47	49	661	105	3.9	1.8	.19
30	.64	2.8	3.2	19	---	40	69	711	95	3.4	1.6	.19
31	.66	---	3.0	15	---	47	---	976	---	3.1	1.5	---
TOTAL	6.45	44.79	195.0	526.6	701	1236	1168	13054	11292	1059.8	69.9	16.84
MEAN	.21	1.49	6.29	17.0	25.0	39.9	38.9	421	376	34.2	2.25	.56
MAX	.66	4.4	14	29	94	154	69	976	1090	90	5.3	1.4
MIN	.10	.59	2.0	2.5	13	19	25	51	95	3.1	1.2	.19
AC-FT	13	89	387	1040	1390	2450	2320	25890	22400	2100	139	33
CAL YR 1974	TOTAL	27937.21	MEAN 76.5	MAX 496	MIN .10	AC-FT 55410						
WTR YR 1975	TOTAL	29370.38	MEAN 80.5	MAX 1090	MIN .10	AC-FT 58260						

Peak discharge (base, 500 ft ³ /s)							
Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
5-10	2045	3.03	512	6-1	1915	4.00	2,270
5-14	1915	3.63	1,350	6-6	1915	3.80	1,720
5-18	1945	3.72	1,540	6-13	1915	3.44	1,010
5-24	1930	3.67	1,430				

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LOCATION.--Lat 38°29'37", long 120°17'18", in NE¼NW¼ sec.2, T.7 N., R.15 E., Amador County, Eldorado National Forest, on right bank 200 ft (61 m) upstream from diversion to Tiger Creek powerhouse conduit and highway bridge, 1.5 mi (2.4 km) upstream from mouth, and 4 mi (6 km) west of Salt Springs Dam.

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

GAGE.--Water-stage recorder and broad-crested weir. Altitude of gage is 3,710 ft (1,131 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 950 ft³/s (26.9 m³/s) June 7 (gage height, 3.58 ft or 1.091 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Nov. 14-17.

Period of record: Maximum discharge, 11,000 ft³/s (312 m³/s) Dec. 24, 1964 (gage height, 10.11 ft or 3.082 m in gage well, 11.8 ft or 3.60 m, from flood profile), from rating curve extended above 560 ft³/s (15.9 m³/s) on basis of slope-area measurements of maximum flow; minimum daily, 1.0 ft³/s (0.028 m³/s) Aug. 23-28, 1961.

Flood in November 1950 reached a stage of 11.2 ft (3.41 m), from floodmarks (discharge, 10,000 ft³/s or 283 m³/s).

REMARKS.--Flow regulated by Bear River Reservoir since 1900, capacity, 6,760 acre-ft (8.34 hm³) and Lower Bear River Reservoir 4 mi (6 km) upstream since December 1952, capacity, 49,100 acre-ft (60.5 hm³). Water diverted for power from Lower Bear River Reservoir through tunnel to Salt Springs powerhouse on North Fork Mokelumne River since December 1952. Water diverted occasionally from Cole Creek into Lower Bear River Reservoir. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	5.5	2.2	3.0	6.7	28	46	68	57	11	5.6	5.0
2	4.3	2.7	2.2	3.1	6.8	29	43	76	351	11	5.5	4.9
3	4.3	2.3	8.2	2.8	6.5	28	42	92	678	11	5.5	4.8
4	6.0	2.2	16	4.1	6.7	28	38	82	660	11	5.3	4.8
5	4.8	2.1	6.0	3.5	6.2	32	36	69	690	10	5.5	4.6
6	4.4	2.1	4.8	36	6.4	31	32	66	741	10	5.5	4.6
7	4.3	2.6	4.1	23	8.9	41	28	73	899	9.7	5.5	4.6
8	4.8	4.7	3.6	31	13	39	27	86	874	9.5	5.4	4.6
9	4.6	2.9	3.3	13	33	30	27	101	796	9.3	5.4	4.6
10	4.4	2.4	3.1	11	18	26	26	117	555	9.1	5.4	6.0
11	4.3	2.3	3.1	9.9	14	23	27	125	339	8.6	5.3	5.4
12	4.3	2.2	4.5	9.7	13	21	28	134	711	8.1	5.2	5.0
13	4.2	2.1	5.1	9.2	22	22	31	146	713	7.6	5.2	4.7
14	4.2	2.0	3.9	9.0	16	22	36	157	654	7.3	5.2	4.8
15	4.2	2.0	3.9	9.0	14	21	31	151	513	8.0	5.1	5.5
16	4.1	2.0	3.4	8.7	13	21	27	144	502	8.4	5.1	5.5
17	4.1	2.0	3.2	8.7	12	18	27	151	362	7.6	5.1	5.5
18	4.1	3.1	3.1	9.7	12	20	26	156	162	7.1	6.8	5.5
19	4.0	2.9	3.0	9.7	18	22	27	154	221	6.9	11	5.4
20	4.0	2.6	2.9	9.7	18	21	30	131	14	6.8	6.9	5.7
21	4.0	9.6	3.2	9.5	14	21	38	106	53	6.6	6.2	5.4
22	4.0	7.3	3.7	9.3	13	21	44	96	338	6.4	5.7	4.7
23	4.0	4.4	2.6	9.1	14	19	44	96	302	6.3	5.5	4.6
24	4.0	3.6	2.7	9.0	15	52	65	101	290	6.1	5.4	4.6
25	4.0	3.3	2.9	8.8	16	141	72	100	183	6.1	5.3	4.5
26	4.0	2.8	2.8	8.4	17	76	56	96	52	6.0	5.5	4.5
27	4.2	2.4	3.1	7.1	20	58	53	89	12	5.9	5.9	4.4
28	12	2.3	3.8	6.7	24	49	55	83	12	5.8	5.9	4.4
29	6.9	2.3	3.0	6.5	---	47	61	75	12	5.7	5.5	4.4
30	5.3	2.2	2.9	6.4	---	51	69	67	11	5.7	5.0	4.4
31	8.1	---	3.3	6.1	---	51	---	63	---	5.7	5.0	---
TOTAL	148.1	92.9	123.6	310.7	397.2	1109	1192	3251	11757	244.3	176.4	147.4
MEAN	4.78	3.10	3.99	10.0	14.2	35.8	39.7	105	392	7.88	5.69	4.91
MAX	12	9.6	16	36	33	141	72	157	899	11	11	6.0
MIN	4.0	2.0	2.2	2.8	6.2	18	26	63	11	5.7	5.0	4.4
AC-FT	294	184	245	616	788	2200	2360	6450	23320	485	350	292
CAL YR 1974	TOTAL	23921.3	MEAN	65.5	MAX	761	MIN	2.0	AC-FT	47450		
WTR YR 1974	TOTAL	18949.6	MEAN	51.9	MAX	899	MIN	2.0	AC-FT	37590		

11316800 FOREST CREEK NEAR WILSEYVILLE, CALIF.

LOCATION.--Lat 38°24'12", long 120°26'45", in SW¼NW¼ sec.4, T.6 N., R.14 E., Calaveras County, on left bank 1.0 mi (1.6 km) downstream from Lion Creek, 1.8 mi (2.9 km) upstream from mouth, and 4 mi (6 km) northeast of Wilseyville.

DRAINAGE AREA.--20.8 mi² (53.9 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,950 ft (899 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 24.2 ft³/s (0.685 m³/s), 17,530 acre-ft/yr (21.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,110 ft³/s (31.4 m³/s) Mar. 25 (gage height, 6.69 ft or 2.039 m); minimum daily, 2.9 ft³/s (0.082 m³/s) Sept. 19, 26, 28.

Period of record: Maximum discharge, 1,770 ft³/s (50.1 m³/s) Dec. 24, 1964 (gage height, 7.68 ft or 2.341 m), from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of slope-area measurement at gage height 7.41 ft (2.259 m); minimum, 0.6 ft³/s (0.17 m³/s) Aug. 24, 25, 1961.

REMARKS.--Records good. No regulation. Minor diversions above station for irrigation and domestic use. See schematic diagram of Mokelumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	7.2	5.2	11	8.9	23	58	69	45	11	5.8	4.7
2	3.8	6.1	5.2	11	16	23	55	69	43	12	6.1	4.6
3	3.8	5.9	17	6.6	15	24	54	79	40	12	6.1	4.9
4	3.9	5.5	35	6.6	17	23	53	79	36	11	5.8	4.6
5	3.9	5.4	15	6.0	16	25	52	69	34	11	5.7	4.0
6	4.0	5.4	12	29	16	30	49	66	33	9.5	5.1	3.1
7	4.0	7.0	9.2	26	20	49	45	66	31	9.5	5.2	3.7
8	4.1	8.9	6.5	50	25	56	47	68	29	8.9	5.5	4.4
9	4.1	7.2	6.1	25	86	47	49	72	27	8.9	5.2	4.6
10	4.1	6.6	5.8	18	67	41	50	76	25	8.9	5.4	4.2
11	4.3	6.3	5.5	15	34	36	51	81	24	9.1	5.6	4.5
12	4.3	6.3	6.2	13	24	32	53	85	23	9.2	5.5	4.9
13	4.2	4.6	7.1	12	58	32	55	91	22	8.8	5.4	4.4
14	4.2	4.6	5.9	11	45	35	55	97	21	9.2	5.4	4.4
15	4.2	4.6	5.6	10	31	35	52	95	20	9.4	5.3	4.1
16	3.9	4.6	5.4	9.6	25	39	50	88	19	10	5.3	4.0
17	3.9	4.6	5.2	9.1	21	33	49	86	19	9.5	5.1	4.2
18	3.9	5.5	5.0	8.9	18	37	48	88	18	9.2	6.9	3.4
19	4.1	5.4	5.0	8.9	32	41	48	86	15	8.7	15	2.9
20	4.2	5.0	5.0	8.6	43	44	51	79	16	7.8	9.6	3.3
21	4.2	15	5.0	8.4	29	42	52	67	15	7.3	7.8	3.6
22	4.2	13	5.3	8.4	25	45	53	61	15	7.3	7.1	3.6
23	4.3	8.1	4.3	8.4	23	44	63	57	15	6.8	6.6	3.2
24	4.6	7.1	8.2	8.4	22	96	92	57	18	6.8	6.1	3.1
25	4.6	6.9	5.0	8.4	21	549	72	56	16	6.8	5.9	3.2
26	4.6	6.3	5.2	8.5	21	111	68	55	15	6.3	5.7	2.9
27	4.8	5.9	4.9	7.9	21	80	67	53	14	5.9	5.5	3.3
28	17	5.6	5.6	8.0	22	69	67	52	14	5.9	5.4	2.9
29	8.4	5.4	4.7	8.2	---	63	68	51	13	5.9	4.9	3.2
30	6.4	5.4	4.7	10	---	63	68	50	13	6.3	4.4	3.3
31	7.4	---	4.9	9.6	---	61	---	48	---	6.5	4.7	---
TOTAL	151.2	195.4	230.7	389.5	801.9	1928	1694	2196	688	265.4	189.1	115.2
MEAN	4.88	6.51	7.44	12.6	28.6	62.2	56.5	70.8	22.9	8.56	6.10	3.84
MAX	17	15	35	50	86	549	92	97	45	12	15	4.9
MIN	3.8	4.6	4.3	6.0	8.9	23	45	48	13	5.9	4.4	2.9
AC-FT	300	388	458	773	1590	3820	3360	4360	1360	526	375	228
CAL YR 1974	TOTAL	9994.1	MEAN 27.4	MAX 400	MIN 2.6	AC-FT 19820						
WTR YR 1975	TOTAL	8844.4	MEAN 24.2	MAX 549	MIN 2.9	AC-FT 17540						

Date	Time	Peak discharge (base, 120 ft ³ /s)	Date	Time	G.H.	Discharge	
2-9	0900	4.35	123	4-23	2330	4.41	138
3-25	0430	6.69	1,110				

11317000 MIDDLE FORK MOKELUMNE RIVER AT WEST POINT, CALIF.

LOCATION.--Lat 38°23'23", long 120°31'32", in SE&NE& sec.10, T.6 N., R.13 E., Calaveras County, on right bank 200 ft (61 m) downstream from highway bridge, 0.6 mi (1.0 km) south of West Point, and 4.5 mi (7.2 km) upstream from South Fork Mokelumne River.

DRAINAGE AREA.--68.4 mi² (177.2 km²).

PERIOD OF RECORD.--October 1911 to current year. Monthly discharge only for October 1911, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 2,450 ft (747 m), from topographic map. Prior to Oct. 6, 1926, nonrecording gage at site 1,200 ft (366 m) upstream at different datum. Oct. 6, 1926, to Aug. 18, 1928, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--64 years, 61.5 ft³/s (1.742 m³/s), 44,560 acre-ft/yr (54.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,060 ft³/s (30.0 m³/s) Mar. 25 (gage height, 5.03 ft or 1.533 m); minimum daily, 5.9 ft³/s (0.167 m³/s) Nov. 4, 5.
Period of record: Maximum discharge, 4,320 ft³/s (122 m³/s) Dec. 23, 1955 (gage height, 8.98 ft or 2.737 m); no flow Aug. 23 to Sept. 14, 1931, Sept. 9, 1934.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Flow slightly regulated by Middle Fork Reservoir, capacity, 1,740 acre-ft (2.15 hm³), 6 mi (10 km) above station, since January 1940. Several small diversions above station. At times water diverted 4 mi (6 km) above station to South Fork Mokelumne River via Middle Fork ditch, capacity, 15 ft³/s (0.42 m³/s) and Licking Fork Mokelumne River. See schematic diagram of Mokelumne River basin.

REVISIONS (WATER YEARS).--WSP 1515: 1919-20, 1927-28(M), 1936(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	7.8	6.5	18	38	66	170	191	156	39	19	14
2	11	6.7	6.7	14	117	68	158	193	148	39	19	14
3	10	6.4	50	13	76	68	154	223	136	38	19	14
4	11	5.9	120	13	93	68	149	244	126	37	18	14
5	14	5.9	46	15	71	73	161	205	121	36	18	13
6	11	6.0	27	102	63	99	152	191	117	35	17	11
7	10	7.6	20	114	65	172	141	189	111	35	17	8.7
8	11	11	18	149	75	217	141	198	102	34	17	7.2
9	12	8.6	16	96	265	158	153	214	93	33	16	8.2
10	12	8.2	14	60	291	130	157	230	85	32	16	8.0
11	11	8.6	14	50	129	113	154	251	79	32	16	8.6
12	11	9.2	14	37	86	101	152	265	72	31	16	9.3
13	11	8.8	17	32	196	107	152	288	68	30	16	8.5
14	10	8.5	13	28	168	112	154	309	66	29	16	7.2
15	10	8.2	13	24	100	116	159	308	62	29	16	7.3
16	10	7.8	13	22	78	140	155	273	60	28	16	7.4
17	10	7.5	13	21	65	125	148	279	58	27	16	7.7
18	10	7.3	13	21	58	124	144	291	56	27	22	7.6
19	9.8	7.2	14	19	77	132	141	290	54	26	42	7.1
20	9.8	7.3	14	18	122	138	138	260	52	26	35	7.4
21	10	11	15	18	83	165	145	214	50	25	30	10
22	11	20	15	21	67	225	153	190	49	24	26	14
23	11	13	9.6	23	64	163	156	181	50	24	23	15
24	10	9.5	8.5	23	61	199	193	183	52	23	20	14
25	9.1	8.3	14	24	59	828	310	186	54	23	18	14
26	7.4	8.0	13	25	58	443	231	185	52	22	17	13
27	8.3	7.7	15	24	58	303	206	182	50	22	16	13
28	27	7.4	23	19	62	242	199	175	47	21	16	11
29	14	7.0	15	21	---	209	197	166	44	21	16	11
30	7.0	6.7	15	20	---	198	194	161	42	20	15	12
31	7.7	---	14	20	---	195	---	157	---	20	15	---
TOTAL	336.2	253.1	619.3	1104	2745	5497	5017	6872	2312	888	599	317.2
MEAN	10.8	8.44	20.0	35.6	98.0	177	167	222	77.1	28.6	19.3	10.6
MAX	27	20	120	149	291	828	310	309	156	39	42	15
MIN	7.0	5.9	6.5	13	38	66	138	157	42	20	15	7.1
AC-FT	667	502	1230	2190	5440	10900	9950	13630	4590	1760	1190	629
CAL YR 1974 TOTAL	30248.6											
WTR YR 1975 TOTAL	26559.8											
MEAN 82.9												
MAX 844												
MIN 5.9												
AC-FT 60000												
AC-FT 52680												

Peak discharge (base, 400 ft³/s).--Feb. 10 (0030) 441 ft³/s (3.40 ft); Mar. 25 (0830) 1,060 ft³/s (5.03 ft).

NOTE.--No gage-height record Nov. 13 to Dec. 17, June 13 to Sept. 3.

SAN JOAQUIN RIVER BASIN

11318500 SOUTH FORK MOKELUMNE RIVER NEAR WEST POINT, CALIF.

LOCATION.--Lat 38°22'06", long 120°32'40", in SEkSEk sec.16, T.6 N., R.13 E., Calaveras County, on right bank 500 ft (152 m) upstream from highway bridge, 2.4 mi (3.9 km) southwest of West Point, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--75.1 mi² (194.5 km²).

PERIOD OF RECORD.--October 1933 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (594 m), from topographic map. October 1933 to Sept. 19, 1957, at site 1,100 ft (335 m) downstream at different datum.

AVERAGE DISCHARGE.--42 years, 84.1 ft³/s (2.382 m³/s), 60,930 acre-ft/yr (75.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,580 ft³/s (44.7 m³/s) Mar. 25 (gage height, 6.86 ft or 2.091 m); minimum daily, 2.8 ft³/s (0.079 m³/s) Oct. 2.

Period of record: Maximum discharge, 6,920 ft³/s (196 m³/s) Dec. 23, 1955 (gage height, 14.8 ft or 4.51 m, from floodmarks, site and datum then in use), from rating curve extended above 2,700 ft³/s (76.5 m³/s) on basis of slope-area measurement of maximum flow; no flow Aug. 6, 7, Aug. 12 to Sept. 26, 1934.

REMARKS.--Records good. Several small diversions above station for domestic use and for irrigation of about 100 acres (405,000 m²). Diversions into South Fork Mokelumne River basin above station at times from North Fork Calaveras River and from Middle Fork Mokelumne River for use below station. See schematic diagram of Mokelumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1934(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	23	12	15	55	85	191	224	120	35	19	12
2	2.8	19	12	17	200	87	174	231	112	35	15	12
3	3.9	17	64	17	90	87	168	268	103	34	15	11
4	5.7	17	150	20	114	85	161	281	96	33	15	11
5	15	17	47	19	77	95	190	241	90	31	16	11
6	13	17	29	66	61	121	174	226	85	30	15	11
7	11	19	23	74	58	258	159	226	79	30	16	11
8	11	27	20	156	63	310	160	238	74	30	16	11
9	14	20	18	92	299	234	167	258	70	29	14	13
10	14	19	16	58	347	193	176	282	67	28	14	12
11	12	18	16	48	155	165	172	304	64	28	14	13
12	12	17	16	42	107	142	169	330	62	26	14	12
13	11	16	21	38	230	151	177	363	60	26	13	12
14	11	16	16	36	196	148	187	376	57	25	13	11
15	9.4	16	15	34	130	149	188	355	55	26	12	11
16	9.3	16	15	33	102	215	174	324	55	28	12	10
17	9.0	16	14	31	83	174	161	322	55	27	11	12
18	9.2	17	14	30	70	151	153	323	54	24	17	11
19	8.6	15	13	30	83	158	149	309	53	23	39	10
20	8.7	12	13	29	138	172	149	277	52	23	28	11
21	8.9	33	13	29	102	250	161	228	51	23	25	10
22	9.0	48	14	28	87	399	171	204	48	23	22	9.3
23	8.9	25	12	27	79	238	174	195	47	21	18	9.3
24	10	21	10	27	76	234	218	191	52	20	16	9.0
25	11	17	12	26	75	1130	338	186	50	20	15	8.8
26	10	15	12	27	74	577	260	177	46	19	15	7.6
27	11	15	15	26	75	380	233	166	44	18	14	7.5
28	44	13	27	23	79	291	228	157	42	18	13	8.4
29	31	13	20	26	---	242	227	144	37	18	14	8.6
30	20	12	17	24	---	220	227	134	36	18	12	9.7
31	22	---	16	24	---	211	---	127	---	17	13	---
TOTAL	379.4	566	712	1172	3305	7352	5636	7667	1916	786	505	316.2
MEAN	12.2	18.9	23.0	37.8	118	237	188	247	63.9	25.4	16.3	10.5
MAX	44	48	150	156	347	1130	338	376	120	35	39	13
MIN	2.8	12	10	15	55	85	149	127	36	17	11	7.5
AC-FT	753	1120	1410	2320	6560	14580	11180	15210	3800	1560	1000	627
CAL YR 1974	TOTAL	33623.9	MEAN 92.1	MAX 1300	MIN 2.8	AC-FT 66690						
WTR YR 1975	TOTAL	30312.6	MEAN 83.0	MAX 1130	MIN 2.8	AC-FT 60130						

Peak discharge (base, 500 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-10	0130	5.12	574	3-21	2330	5.63	815
3-7	1730	4.97	513	3-25	0700	6.86	1,580

11319500 MOKELUMNE RIVER NEAR MOKELUMNE HILL, CALIF.

LOCATION.--Lat 38°18'46", long 120°43'09", in SW¼SW¼ sec.1, T.5 N., R.11 E., Calaveras County, on downstream side of bridge 1.2 mi (1.9 km) northwest of Mokelumne Hill, and 8 mi (13 km) downstream from confluence of North and South Forks of Mokelumne River.

DRAINAGE AREA.--544 mi² (1,409 km²).

PERIOD OF RECORD.--January to June 1901, May 1903 to December 1904, October 1927 to current year. Yearly estimate only for water year 1928 (incomplete), published in WSP 1315-A. Published as "at Electra" 1901, 1903-4.

GAGE.--Water-stage recorder. Datum of gage is 589.88 ft (179.796 m) above mean sea level (levels by California Division of Highways). Jan. 1 to June 30, 1901, and May 11, 1903, to Dec. 31, 1904, nonrecording gage at site 3 mi (5 km) upstream at different datum. Nov. 10, 1927, to Aug. 26, 1952, water-stage recorder at site 40 ft (12 m) upstream at present datum.

AVERAGE DISCHARGE.--49 years (1903-4, 1927-75), 984 ft³/s (27.87 m³/s), 712,900 acre-ft/yr (879 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,090 ft³/s (172 m³/s) June 7 (gage height, 7.95 ft or 2.423 m); minimum daily, 143 ft³/s (4.05 m³/s) Dec. 2.
Period of record: Maximum discharge, 33,700 ft³/s (954 m³/s) Dec. 3, 1950 (gage height, 18.5 ft or 5.64 m); minimum observed, 5 ft³/s (0.14 m³/s) Aug. 13-15, 17, 18, 1904.

REMARKS.--Records excellent. Flow regulated by Salt Springs Reservoir beginning in 1931 (see sta 11313500), several smaller reservoirs, and four powerplants. Diversion above station for irrigation and domestic use. See schematic diagram of Mokelumne River basin.

REVISIONS (WATER YEARS).--WSP 1445: 1903-4, 1928(M), 1936(M), 1938(M), 1940(M), 1943(M), 1945(M).
WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	580	349	192	383	298	662	1250	1310	1900	1400	890	878
2	511	506	143	557	775	589	1210	1330	2070	1460	909	904
3	672	554	285	501	484	632	1170	1400	2650	1370	883	883
4	538	594	490	489	485	721	1180	1500	2410	1400	826	853
5	548	594	727	480	575	845	1330	1410	2480	1300	870	906
6	611	606	645	577	416	931	1270	1320	3840	1400	870	881
7	635	588	536	817	362	1220	1220	1350	5620	1390	914	857
8	653	620	566	767	353	1410	1210	1380	5350	1190	916	866
9	518	424	605	794	938	1260	1250	1430	4750	1210	907	863
10	626	392	398	639	1440	1040	1170	1450	4040	1200	857	870
11	617	524	508	517	915	1010	1100	1440	4080	1060	903	857
12	502	452	499	501	705	969	1160	1540	4660	1040	895	877
13	561	501	605	415	1010	999	1140	1600	4340	1070	798	844
14	671	501	377	533	1240	937	1200	2370	4620	1090	851	936
15	470	509	529	476	907	844	1260	2410	4780	1090	891	905
16	641	560	492	245	669	1180	1090	1980	3960	901	889	871
17	570	579	650	237	696	1060	1200	2150	3540	937	881	787
18	614	624	584	343	649	1060	1190	2530	2170	1010	911	905
19	516	590	608	310	557	984	1080	2460	1980	949	920	909
20	667	524	553	383	890	1000	1080	2110	1270	924	949	875
21	505	619	684	404	744	1050	1050	1920	1630	935	953	842
22	414	635	539	261	593	1640	955	1620	2310	912	977	845
23	486	306	667	543	497	1190	1110	1740	2530	889	900	858
24	531	291	562	495	319	1190	1210	1710	2530	1060	897	884
25	646	374	535	512	464	3680	1680	1900	2060	919	873	864
26	549	568	529	482	522	2260	1460	1980	1560	892	903	862
27	586	543	564	343	532	1730	1340	2040	1330	930	868	870
28	652	542	674	209	392	1430	1370	1810	1470	882	887	886
29	662	414	601	310	---	1320	1340	1700	1680	914	863	868
30	374	188	449	157	---	1340	1370	1780	1750	911	891	864
31	453	---	361	208	---	1280	---	1780	---	930	800	---
TOTAL	17579	15071	16157	13888	18427	37463	36645	54450	89360	33565	27542	26170
MEAN	567	502	521	448	658	1208	1222	1756	2979	1083	888	872
MAX	672	635	727	817	1440	3680	1680	2530	5620	1460	977	936
MIN	374	188	143	157	298	589	955	1310	1270	882	798	787
AC-FT	34870	29890	32050	27550	36550	74310	72690	108000	177200	66580	54630	51910
CAL YR 1974 TOTAL	462704			1268	MAX 5000	MIN 143	AC-FT 917800					
WTR YR 1975 TOTAL	386317			1058	MAX 5620	MIN 143	AC-FT 766300					

SAN JOAQUIN RIVER BASIN

11319500 MOKELUMNE RIVER NEAR MOKELUMNE HILL, CALIF.--Continued

PERIOD OF RECORD.--Water temperatures: February 1961 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 18.0°C Oct. 15; minimum, 3.0°C Jan. 2, 3.

Period of record:

Water temperatures: Maximum, 24.5°C Aug. 5, 1967; minimum (1961-65, 1966 to current year), 1.0°C Jan. 31, Feb. 1, 1968.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	15.5	14.0	13.0	11.0	9.5	5.5	4.0	5.5	5.0	9.0	7.5
2	17.5	16.5	14.0	12.0	10.5	10.0	5.0	3.0	6.0	5.5	9.5	7.5
3	17.0	16.0	14.0	12.0	10.5	9.5	5.0	3.0	7.0	5.0	9.5	8.0
4	17.0	16.0	14.5	12.0	10.5	9.0	5.0	4.0	7.0	5.0	9.0	8.0
5	17.0	15.0	15.0	12.0	10.0	8.5	5.0	4.0	6.5	4.5	9.0	8.0
6	17.0	15.0	14.5	12.0	9.5	8.0	5.0	4.5	7.0	4.5	8.5	7.5
7	16.5	15.0	13.5	12.5	9.5	8.0	6.0	5.0	8.0	5.0	9.5	7.5
8	16.5	15.5	13.0	11.5	10.0	7.5	7.0	5.5	10.0	5.5	9.0	8.0
9	16.5	15.0	13.0	11.5	10.0	7.5	6.0	5.0	10.0	7.0	9.0	8.0
10	16.5	15.0	13.5	11.0	9.5	8.5	5.5	5.0	9.0	6.5	8.5	7.5
11	16.5	15.0	13.0	11.0	9.5	8.0	6.0	4.5	7.5	6.0	9.0	8.0
12	16.5	14.5	13.5	11.0	9.5	8.5	5.5	4.5	7.0	6.0	8.5	7.5
13	16.0	14.5	14.0	11.5	9.5	9.0	5.5	4.0	8.0	6.0	8.5	7.0
14	16.5	15.0	14.0	12.0	9.5	8.5	5.5	4.0	8.0	6.0	7.0	6.5
15	18.0	15.0	13.5	12.0	9.5	8.0	5.5	4.0	6.0	5.0	7.5	6.5
16	16.5	15.0	13.5	12.0	9.0	8.0	6.5	4.5	6.0	5.0	8.0	6.5
17	16.0	14.5	13.5	12.5	9.0	8.0	6.5	4.5	6.0	4.5	7.5	6.5
18	16.5	14.5	13.5	12.5	9.0	7.0	6.5	4.5	5.5	4.5	9.0	7.0
19	16.0	14.5	13.5	12.0	8.5	8.0	6.0	4.5	6.5	4.5	9.0	7.5
20	16.5	14.5	13.0	11.5	8.5	7.5	5.5	4.5	7.0	5.0	9.0	7.5
21	16.5	14.5	13.0	12.0	8.5	7.0	5.5	4.5	6.0	5.0	8.0	7.0
22	16.5	14.5	12.5	10.5	8.0	6.5	7.0	4.5	6.0	4.5	7.5	7.0
23	16.5	14.0	11.5	10.5	8.0	6.5	5.5	4.5	7.0	5.0	7.5	6.5
24	16.0	14.0	11.5	10.0	7.5	5.0	6.0	5.0	7.5	5.5	9.0	7.0
25	16.0	14.0	11.5	10.5	7.0	4.5	6.5	5.0	8.0	5.5	9.5	7.5
26	15.5	14.0	11.5	10.0	7.0	4.5	6.5	5.0	9.0	5.5	8.0	6.5
27	16.0	14.5	11.5	9.5	6.5	6.0	6.5	4.5	9.0	6.5	7.5	6.0
28	16.0	15.0	11.5	9.0	7.0	6.0	6.0	4.0	12.0	7.0	7.5	6.0
29	15.5	14.0	11.5	8.5	6.5	5.0	6.0	4.5	---	---	7.5	6.0
30	15.5	13.0	11.0	9.0	6.5	5.0	5.5	3.5	---	---	8.5	7.0
31	14.5	13.5	---	---	6.0	4.0	5.0	4.0	---	---	8.5	7.5
MONTH	18.0	13.0	15.0	8.5	11.0	4.0	7.0	3.0	12.0	4.5	9.5	6.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.0	11.0	9.5	14.5	12.0	14.0	12.5	14.0	12.5	14.0	12.5
2	8.0	6.5	11.5	10.0	13.5	12.0	14.5	12.0	14.0	12.5	14.0	12.5
3	8.5	7.0	11.0	10.0	13.5	11.5	14.5	12.5	14.5	13.0	14.0	13.0
4	7.0	6.5	10.0	8.5	14.0	12.0	14.5	12.5	14.5	13.0	14.5	13.0
5	6.5	5.5	9.0	7.5	14.5	12.5	14.5	12.5	14.5	13.0	14.5	13.0
6	5.5	4.5	9.5	8.0	14.0	13.0	15.5	13.0	14.5	13.0	15.0	13.5
7	5.0	4.5	11.0	8.5	14.0	12.0	15.5	13.5	15.0	13.0	15.0	14.0
8	6.0	5.0	12.0	10.0	14.0	11.5	15.5	14.0	14.5	12.5	15.0	14.0
9	7.0	5.5	12.5	10.5	14.0	13.0	15.5	14.0	14.5	12.5	15.0	14.0
10	7.5	6.5	12.5	11.0	14.5	13.0	15.0	14.0	14.0	12.5	15.0	14.0
11	9.0	6.5	12.5	11.0	14.5	13.0	15.5	14.0	14.0	13.0	15.5	14.0
12	8.0	6.5	13.0	11.5	14.0	12.5	15.5	13.5	14.5	13.0	15.5	14.0
13	9.0	7.5	13.5	12.0	14.5	12.5	15.5	14.0	14.5	13.0	16.0	14.5
14	9.5	8.0	14.0	11.5	15.0	13.0	15.5	13.5	14.5	13.0	16.0	14.5
15	8.0	7.0	12.0	10.5	15.0	12.5	14.5	13.0	14.0	13.0	16.0	14.5
16	7.5	7.0	12.5	10.0	15.0	12.5	17.5	12.5	14.5	12.5	16.0	14.5
17	7.5	6.0	13.5	11.0	14.5	12.5	14.5	12.5	14.0	12.5	16.0	15.0
18	8.0	6.5	13.5	11.5	13.5	12.0	14.5	13.0	14.0	12.5	16.0	15.0
19	9.0	7.5	13.0	11.0	13.5	11.5	14.5	13.0	14.0	12.0	16.0	15.0
20	9.0	8.0	12.0	10.0	13.5	11.5	15.0	13.5	14.0	12.5	16.5	15.0
21	10.5	8.5	11.5	9.0	14.0	12.0	15.0	13.5	14.0	12.0	16.5	15.5
22	10.5	9.0	11.5	9.0	14.5	12.0	15.0	13.5	13.5	12.0	16.5	15.0
23	10.5	9.5	12.5	9.5	14.0	13.0	15.5	13.5	13.5	12.0	16.5	15.0
24	10.5	9.5	13.5	11.0	13.5	11.5	15.0	13.5	14.0	12.5	16.0	15.0
25	9.5	8.0	13.5	11.5	12.5	11.0	15.0	13.5	14.5	13.0	16.0	15.0
26	8.5	7.0	13.5	11.5	13.5	11.0	15.0	13.5	14.5	13.0	16.0	15.0
27	8.5	7.5	13.5	11.0	13.5	11.5	15.0	14.0	14.5	13.0	16.0	14.5
28	9.5	7.5	13.5	11.0	14.5	12.0	15.0	14.0	14.0	13.0	16.0	14.5
29	10.0	8.5	14.0	11.5	15.0	12.0	15.0	13.5	14.0	12.5	15.5	14.5
30	10.5	9.0	14.0	11.5	14.5	12.5	14.5	13.0	14.0	12.5	15.5	14.5
31	---	---	14.5	12.0	---	---	14.0	13.0	14.0	12.5	---	---
MONTH	10.5	4.5	14.5	7.5	15.0	11.0	17.5	12.0	15.0	12.0	16.5	12.5

11320000 PARDEE RESERVOIR NEAR VALLEY SPRINGS, CALIF.

LOCATION.--Lat 38°15'25", long 120°50'59", in NW¼SW¼ sec.26, T.5 N., R.10 E., Amador County, at Pardee Dam on the Mokelumne River, 4.5 mi (7.2 km) north of Valley Springs.

DRAINAGE AREA.--578 mi² (1,497 km²).

PERIOD OF RECORD.--March 1929 to September 1930 (lake elevation only), October 1930 to September 1933, published in reports of the Geological Survey. October 1933 to September 1961 in files of East Bay Municipal Utility District. October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by East Bay Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 211,800 acre-ft (261 hm³) June 23, 24 (elevation, 568.47 ft or 173.270 m); minimum, 179,600 acre-ft (221 hm³) Mar. 6 (elevation, 553.47 ft or 168.698 m).

Period of record: Maximum contents, 219,300 acre-ft (270 hm³) Dec. 23, 1955 (elevation, 571.72 ft or 174.260 m); minimum, 49,000 acre-ft (60.4 hm³) Aug. 31, 1931 (elevation, 457.6 ft or 139.48 m).

REMARKS.--Reservoir is formed by a curved concrete gravity dam, completed in 1929; storage began Mar. 9, 1929. Usable capacity, 194,100 acre-ft (239 hm³) between elevations 393.50 ft (119.939 m), diversion tunnel invert and 567.65 ft (173.020 m), spillway crest, above mean sea level. Dead storage, 15,800 acre-ft (19.5 hm³).

Water is released from reservoir for municipal use in the area on the east side of San Francisco Bay. Small intermittent diversions are made to Jackson Valley Irrigation District. Records represent total contents at 2400 hours. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records furnished by East Bay Municipal Utility District.

REVISIONS.--WSP 1930: Drainage area.

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

523	125,100
530	136,500
540	153,800
550	172,700
560	193,200
570	215,300
580	239,100

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193700	190500	188200	193700	186300	180400	200300	191500	181000	210700	202800	203100
2	193400	190800	187400	192600	187200	181100	200200	191200	180900	210700	202200	202800
3	193400	191300	187200	192600	187400	180800	199800	191600	181100	210600	201500	202500
4	193000	191100	187100	192900	187600	180200	199500	191600	181400	210600	201300	202100
5	193500	191000	187500	193400	188100	179900	199600	191400	183200	210500	201400	201900
6	194000	190900	187700	193600	188200	179600	199500	190600	184500	210600	201500	202100
7	194000	190800	188200	194300	188100	180400	199200	189400	185900	210600	201300	202200
8	193900	190700	188700	194800	188100	181900	198900	188300	186600	210400	200700	202200
9	193700	190900	188800	195300	189600	184000	198600	187300	188700	210300	201700	201800
10	193800	191100	188600	195600	191600	184600	198200	186300	190800	210200	202500	201400
11	193900	190800	188600	196000	192200	184600	197600	185300	192600	209900	202300	201100
12	193900	190400	188500	196400	191600	184400	197100	18500	196500	209600	202300	200800
13	194700	190000	188700	195800	192100	184600	196500	183800	200500	209300	202000	200100
14	194700	189700	188800	195500	192600	184500	196200	184600	204500	209000	201800	201500
15	194300	189300	189200	195000	192400	184200	196000	184200	208400	208800	201700	201200
16	194200	189800	189200	194100	191700	184700	195300	182400	211100	208200	202600	200600
17	194100	190300	189400	193200	191000	184800	194900	182100	211700	207700	203500	200000
18	193900	190300	189500	193300	190300	184900	194500	182300	211400	207300	203700	199500
19	193600	190200	189700	193200	189400	184800	193900	182000	211300	206800	203700	199100
20	194300	189900	189800	192600	189200	184700	193200	181000	210700	206200	203700	199700
21	193700	189900	190400	191900	188600	184900	192400	180400	211000	205700	203800	200700
22	192700	189900	190900	191100	187800	186300	191400	180400	211600	205200	203900	201800
23	192100	189800	191100	190700	186800	186700	191400	180700	211800	204500	203800	202700
24	191500	189800	191200	190300	185400	187100	191800	181100	211800	204100	203700	203000
25	191200	189200	191700	190600	184200	192700	192600	180900	211400	203500	203600	203300
26	191000	188900	191700	190900	183200	195500	192600	180800	211000	204500	203700	203100
27	191600	188700	191800	190200	182100	197000	192500	181000	210600	205400	203300	202600
28	192400	189100	192500	189200	180800	197900	192300	180700	210800	205100	203400	202200
29	192000	188600	193100	188400	---	198600	192100	180600	210900	204500	203500	201700
30	191300	188400	193500	187300	---	199300	191900	180700	211100	204000	203300	201100
31	191100	---	193800	186300	---	199800	---	180400	---	203400	202800	---
MAX	194700	191300	193800	196400	192600	199800	200300	191600	211800	210700	203900	203300
MIN	191000	188400	187100	186300	180800	179600	191400	180400	180900	203400	200700	199100
(a)	559.05	557.75	560.30	556.75	554.07	563.08	559.40	553.88	568.14	564.73	564.44	563.69
(b)	-2,800	-2,700	+5,400	-7,500	-5,500	+19,000	-7,900	-11,500	+30,700	-7,700	-600	-1,700
(c)	588	168	222	220	238	392	464	1,111	1,385	1,502	1,275	930
(d)	16,443	18,032	18,566	18,559	14,145	14,668	11,736	18,215	22,656	23,605	24,867	21,258
CAL YR 1974	b -5,200											
WTR YR 1975	b +7,200											

a Elevation, in feet, at end of month.

b Change in contents, in acre-feet.

c Evaporation, in acre-feet.

d Diversion, in acre-feet, from Pardee Reservoir to East Bay Utility District and to Jackson Valley Irrigation District.

SAN JOAQUIN RIVER BASIN

11322300 CAMANCHE RESERVOIR NEAR CLEMENTS, CALIF.

LOCATION.--Lat 38°13'31", long 121°01'17", in NE¼SE¼ sec.6, T.4 N., R.9 E., San Joaquin County, at Camanche Dam on the Mokelumne River, 4.3 mi (6.9 km) northeast of Clements.

DRAINAGE AREA.--621 mi² (1,608 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by East Bay Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 399,900 acre-ft (493 hm³) June 25 (elevation, 231.36 ft or 70.519 m); minimum, 286,600 acre-ft (353 hm³) Jan. 1, 2, 5 (elevation, 214.62 ft or 65.416 m).

Period of record: Maximum contents, 425,700 acre-ft (525 hm³) July 14, 1967 (elevation, 234.82 ft or 71.573 m); minimum since initial season of operation, 68,700 acre-ft (84.7 hm³) Sept. 5, 11, 18, 1966 (elevation, 164.97 ft or 50.283 m).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 18, 1963. Usable capacity, 430,300 acre-ft (531 hm³) between elevations 104.00 ft (31.699 m), invert of emergency valve release and 235.50 ft (71.780 m), spillway crest above mean sea level. Dead storage, 534 acre-ft (658,000 m³). Camanche Reservoir provides holdover storage to meet downstream water requirements and flood control on the Mokelumne River. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records furnished by East Bay Municipal Utility District.

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

120	4,970	170	82,600
130	13,600	190	156,200
140	25,000	220	320,900
150	38,900	235.5	430,900
160	57,100		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	335000	303400	290400	286600	294000	323600	335100	334500	355000	399600	387700	359100
2	333900	302100	290200	286600	294200	323500	335300	334100	356200	399600	387400	358500
3	333000	300700	290900	287000	294600	324100	335600	333200	358200	399000	387100	357900
4	332100	300000	290800	286700	295000	325600	336300	333000	359800	399000	386200	357400
5	331100	299400	290700	286600	295100	327300	337200	332700	359800	399000	385100	356800
6	328800	299200	290800	287000	295100	328700	337900	332700	362400	399000	383800	355900
7	327700	298900	290300	287400	295700	330500	338500	333500	369500	398800	383100	354800
8	326800	298400	289900	287500	295900	332100	339200	334600	376400	398700	382800	353800
9	325700	297800	289800	287600	297700	331900	339800	335700	380600	398400	381100	352200
10	324700	296800	289800	287600	297900	332600	340300	336900	383300	398200	379200	352600
11	323600	296600	289800	287500	298300	334100	340600	338000	386300	397800	378400	352100
12	322600	296400	289900	287300	300200	335500	341100	339200	388600	397600	377400	351700
13	320900	296300	289900	287800	302100	337400	341600	340300	390400	397300	376500	350600
14	320100	296200	289600	288200	303300	338800	342000	341300	392800	396800	375700	349300
15	319500	296000	289200	288500	304800	340200	342200	343400	395500	396500	374700	348800
16	318700	295200	289100	289100	305900	341300	342000	346000	397000	396300	373000	348500
17	317900	294300	289300	289500	307300	341800	341400	347500	399000	395900	371000	348200
18	317100	294300	289100	289300	308800	341800	341000	349300	399300	395600	370900	348000
19	315900	294100	289100	289100	310300	341400	340600	351100	399000	395400	370300	347700
20	313500	294100	289100	289500	311700	341200	340300	353000	398000	394900	369400	346600
21	313300	294100	288700	290000	312900	341600	339900	354000	397100	394700	368500	344900
22	312600	294100	288300	290600	314400	342200	339300	353500	397200	394500	367700	343000
23	311800	293500	288100	291300	315600	342600	338500	353000	398200	394200	367100	341400
24	311100	292800	288100	292000	317100	342800	337300	352400	399100	393900	366300	340300
25	310300	292800	287800	291900	318300	342600	336600	352600	399900	393600	365400	339200
26	309300	292700	287800	291600	319700	341500	336300	353000	399600	391700	364400	338600
27	307700	292500	288000	291900	321200	339500	336000	353300	399200	389800	363700	338300
28	306400	291700	287500	292600	322400	337900	335600	353600	399000	389000	362700	337900
29	305800	291700	287100	292900	---	337000	335300	353800	399100	388600	361600	337600
30	305000	291100	287100	293500	---	336100	334900	354100	399300	388300	360800	337300
31	304300	---	287000	294400	---	335400	---	355000	---	387900	360300	---
MAX	335000	303400	290900	294400	322400	342800	342200	355000	399900	399600	387700	359100
MIN	304300	291100	287000	286600	294000	323500	334900	332700	355000	387900	360300	337300
(a)	217.43	215.34	214.69	215.88	220.23	222.18	222.10	225.05	231.27	229.71	225.82	222.46
(b)	-31,700	-13,200	-4,100	+7,400	+28,000	+13,000	-500	+20,100	+44,300	-11,400	-27,600	-23,000
(c)	2,751	793	778	681	1,161	1,793	2,213	4,590	5,511	5,879	5,098	4,139

CAL YR 1974 b +17,800
WTR YR 1975 b +1,300

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

11323500 MOKELUNNE RIVER BELOW CAMANCHE DAM, CALIF.

LOCATION.--Lat 38°13'14", long 121°02'19", in NW¼NW¼ sec.7, T.4 N., R.9 E., San Joaquin County, on left bank 0.7 mi (1.1 km) downstream from Murphy Creek, 1.0 mi (1.6 km) downstream from Camanche Dam, and 3.4 mi (5.5 km) northeast of Clements.

DRAINAGE AREA.--627 mi² (1,624 km²).

PERIOD OF RECORD.--October 1904 to current year. Monthly discharge only for some periods, published in WSP 1315-A, and 1735. Prior to October 1961, published as "near Clements."

GAGE.--Water-stage recorder. Datum of gage is 82.71 ft (25.210 m) above mean sea level. Oct. 28, 1904, to Apr. 18, 1926, nonrecording gage at bridge 3.3 mi (5.3 km) downstream at datum 13.62 ft (4.151 m) lower. Apr. 19, 1926, to Apr. 8, 1931, water-stage recorder, 75 ft (23 m) downstream from bridge at datum 15.62 ft (4.761 m) lower. Apr. 9, 1931, to Sept. 30, 1961, 700 ft (213 m) upstream from bridge at datum 15.55 ft (4.740 m) lower.

AVERAGE DISCHARGE.--24 years (1904-28), 1,111 ft³/s (31.47 m³/s), 804,300 acre-ft/yr (992 hm³/yr); 46 years (1929-75), 832 ft³/s (23.56 m³/s), 602,800 acre-ft/yr (743 hm³/yr), adjusted for change in contents of and evaporation from Camanche Reservoir since 1963. Storage and diversion by East Bay Municipal Utility District began in March 1929.

EXTREMES.--Current year: Maximum discharge, 1,930 ft³/s (54.7 m³/s) Mar. 26 (gage height, 6.57 ft or 2.003 m); minimum daily, 74 ft³/s (2.10 m³/s) Feb. 6.

Period of record: Maximum discharge, 28,800 ft³/s (816 m³/s) Nov. 21, 1950 (gage height, 24.40 ft or 7.437 m, site and datum then in use); no flow July 9, Aug. 15, 20-23, 1924.

REMARKS.--Records good. Flow regulated by Camanche Reservoir 1 mi (1.6 km) upstream beginning December 1963 (see sta 11322300), Salt Springs Reservoir beginning March 1931 (see sta 11313500), Pardee Reservoir beginning March 1929 (see sta 11320000), several small reservoirs, and four powerplants. East Bay Municipal Utility District aqueducts are the largest of several diversions above the station. Maximum capacity is 511 ft³/s (14.5 m³/s) with Pardee Reservoir full. See schematic diagram of Mokelumne River basin.

COOPERATION.--Two discharge measurements furnished by the East Bay Municipal Utility District.

REVISIONS (WATER YEARS).--WSP 751: Drainage area. WSP 881: 1905-9 (yearly summaries only). WSP 1445: 1911, 1917(M), 1925(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	818	751	361	211	94	114	941	1420	1120	980	908	891
2	791	705	359	151	103	112	940	1430	1130	913	906	891
3	767	705	280	111	94	112	939	1420	1130	912	907	853
4	765	705	212	117	86	110	940	1420	1130	912	911	860
5	769	630	208	117	76	111	945	1440	1130	912	911	859
6	770	573	208	119	74	114	945	1450	1130	913	911	859
7	764	575	208	114	76	116	944	1230	1130	913	911	858
8	795	519	208	111	76	116	946	1060	1140	912	911	851
9	817	477	208	110	277	115	948	1050	1130	912	910	851
10	816	477	208	112	112	116	948	1050	1130	912	909	851
11	815	477	208	112	85	116	948	1050	1130	911	910	856
12	813	442	208	112	80	117	948	1050	1130	909	908	849
13	813	405	208	112	175	141	948	1050	1010	910	907	850
14	818	405	208	114	123	193	950	1050	896	904	904	850
15	839	405	208	114	140	313	1170	1160	897	897	904	843
16	872	405	208	114	135	319	1410	1240	1340	897	904	842
17	871	405	208	114	135	658	1410	1240	1780	896	904	842
18	870	405	208	114	130	950	1400	1240	1780	897	905	843
19	870	405	208	117	123	918	1410	1240	1780	896	904	828
20	877	405	208	117	122	917	1410	1250	1640	896	901	824
21	876	408	208	117	119	814	1410	1390	1460	905	899	824
22	876	406	208	90	119	724	1410	1560	1460	911	898	848
23	876	405	208	78	116	707	1420	1500	1450	910	898	877
24	876	405	208	89	117	819	1410	1440	1460	911	898	877
25	853	405	211	89	117	933	1410	1440	1460	911	898	877
26	832	394	211	89	114	1340	1420	1430	1460	912	893	871
27	833	380	211	88	114	1910	1410	1440	1250	911	891	871
28	839	380	212	88	114	1590	1420	1440	1070	911	891	871
29	841	370	211	88	---	1220	1410	1260	1070	910	891	871
30	830	361	211	89	---	1220	1410	1130	1080	911	891	864
31	800	---	211	90	---	1070	---	1130	---	911	891	---
TOTAL	25662	14190	6850	3408	3246	18125	35570	39700	37903	28218	27985	25702
MEAN	828	473	221	110	116	585	1186	1281	1263	910	903	857
MAX	877	751	361	211	277	1910	1420	1560	1780	980	911	891
MIN	764	361	208	78	74	110	939	1050	896	896	891	824
AC-FT	50900	28150	13590	6760	6440	35950	70550	78740	75180	55970	55510	50980
MEAN a	357	265	167	241	641	825	1,214	1,682	2,101	820	537	540
AC-FT a	21,950	15,740	10,270	14,840	35,600	50,740	72,260	103,400	125,000	50,450	33,010	32,120
CAL YR 1974 TOTAL	356803				2950	204	AC-FT 707700		MEAN a 1,051		AC-FT a 760,600	
WTR YR 1975 TOTAL	266559				1910	74	AC-FT 528700		MEAN a 781		AC-FT a 565,400	

a Adjusted for change in contents of and evaporation from Camanche Reservoir.

SAN JOAQUIN RIVER BASIN

11323500 MOKELUMNE RIVER BELOW CAMANCHE DAM, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: January to December 1906, water years 1965-66 (partial-record station).

Published as "at Clements" in 1906.

Water temperatures: October 1961 to September 1968, October 1969 to current year.

Sediment records: Water years 1956-70 (partial-record station). Prior to 1962 water year published as "near Clements."

EXTREMES.--Current year:

Water temperatures: Maximum, 16.0°C Sept. 1.

Period of record:

Water temperatures (1961-63, 1964-68, 1970 to current year): Maximum (1961-63, 1964-65, 1970 to current year), 22.0°C Aug. 9, 10, 1971; minimum (1961-63, 1965-68, 1970-74), 7.0°C Jan. 22-26, 1962.

REMARKS.--Temperature record furnished by East Bay Municipal Utility District and reviewed by Geological Survey.

Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975																		
DAY	OCT			NOV			DEC			JAN			FEB			MAR		
	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN
1	--	--	--	15.0	--	14.5	--	--	--	12.0	--	12.0	12.0	--	11.5	--	--	--
2	--	--	--	15.0	--	14.5	--	--	--	12.0	--	12.0	13.0	--	12.0	--	--	--
3	--	--	--	14.5	--	14.5	--	--	--	12.0	--	12.0	13.0	--	12.0	--	--	--
4	--	--	--	14.5	--	14.5	--	--	--	12.0	--	12.0	13.0	--	12.0	--	--	--
5	--	--	--	14.5	--	14.5	--	--	--	12.0	--	12.0	13.0	--	12.0	--	--	--
6	--	--	--	14.5	--	14.5	--	--	--	12.0	--	12.0	13.0	--	12.0	--	--	--
7	--	--	--	15.0	--	14.5	--	--	--	12.0	--	12.0	13.5	--	13.0	--	--	--
8	--	--	--	15.0	--	14.5	--	--	--	12.0	--	12.0	14.0	--	13.0	--	--	--
9	--	--	--	14.5	--	14.5	--	--	--	12.0	--	12.0	13.5	--	13.0	--	--	--
10	--	--	--	14.5	--	14.5	--	--	--	12.0	--	12.0	13.5	--	13.5	--	--	--
11	--	--	--	14.5	--	14.5	--	--	--	12.0	--	12.0	13.5	--	13.0	--	--	--
12	--	--	--	14.5	--	14.5	--	--	--	12.0	--	12.0	13.5	--	13.0	--	--	--
13	--	--	--	14.5	--	14.5	--	--	--	12.0	--	12.0	13.5	--	13.5	--	--	--
14	--	--	--	15.0	--	14.5	--	--	--	12.0	--	12.0	13.5	--	13.5	--	--	--
15	--	--	--	15.0	--	14.5	--	--	--	12.0	--	11.5	13.5	--	13.0	--	--	--
16	--	--	--	15.0	--	14.5	--	--	--	12.0	--	11.5	13.5	--	13.0	--	--	--
17	--	--	--	15.0	--	14.5	--	--	--	12.0	--	11.5	13.0	--	13.0	--	--	--
18	--	--	--	15.0	--	14.5	--	--	--	12.0	--	11.5	13.0	--	13.0	--	--	--
19	--	--	--	14.5	--	14.5	--	--	--	12.0	--	11.5	13.5	--	13.0	--	--	--
20	--	--	--	15.0	--	14.5	--	--	--	12.0	--	11.5	13.5	--	13.0	--	--	--
21	--	--	--	15.0	--	14.5	--	--	--	12.0	--	11.5	--	--	--	--	--	--
22	--	--	--	15.0	--	14.5	--	--	--	12.0	--	11.5	--	--	--	--	--	--
23	--	--	--	14.5	--	14.0	--	--	--	12.0	--	12.0	--	--	--	--	--	--
24	--	--	--	14.5	--	14.0	--	--	--	12.0	--	12.0	--	--	--	--	--	--
25	--	--	--	14.5	--	14.0	--	--	--	13.0	--	12.0	--	--	--	--	--	--
26	--	--	--	14.5	--	14.0	--	--	--	13.0	--	12.0	--	--	--	--	--	--
27	--	--	--	14.5	--	14.0	--	--	--	12.0	--	11.5	--	--	--	--	--	--
28	--	--	--	14.0	--	14.0	--	--	--	11.5	--	11.0	13.5	--	13.5	--	--	--
29	--	--	--	14.0	--	14.0	--	--	--	11.5	--	11.5	--	--	--	--	--	--
30	--	--	--	14.0	--	14.0	--	--	--	11.5	--	11.0	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	11.5	--	11.0	--	--	--	--	--	--
MONTH	--	--	--	15.0	--	14.0	--	--	--	13.0	--	11.0	--	--	--	--	--	--

SAN JOAQUIN RIVER BASIN

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11323500 MOKELUMNE RIVER BELOW CAMANCHE DAM, CALIF.--Continued

TEMPERATURE (DEC. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MAX	APR DAILY	MIN	MAX	MAY DAILY	MIN	MAX	JUN DAILY	MIN	MAX	JUL DAILY	MIN	MAX	AUG DAILY	MIN	MAX	SEP DAILY	MIN
1	--	--	--	10.5	--	10.5	13.5	--	13.5	--	14.0	--	--	15.5	--	--	16.0	--
2	--	--	--	10.5	--	10.5	14.0	--	13.5	--	14.0	--	--	15.5	--	--	15.5	--
3	--	--	--	10.5	--	10.5	14.0	--	13.5	--	14.5	--	--	15.5	--	--	15.5	--
4	--	--	--	10.5	--	10.5	14.0	--	13.5	--	15.0	--	--	15.5	--	--	14.5	--
5	--	--	--	11.0	--	10.5	14.0	--	13.5	--	15.0	--	--	15.5	--	--	14.0	--
6	--	--	--	11.0	--	11.0	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
7	--	--	--	11.5	--	11.0	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
8	--	--	--	12.0	--	11.5	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
9	--	--	--	12.0	--	12.0	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
10	--	--	--	12.0	--	12.0	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
11	--	--	--	12.0	--	12.0	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
12	--	--	--	13.0	--	12.0	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
13	--	--	--	13.5	--	13.0	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
14	--	--	--	13.0	--	13.0	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
15	--	--	--	13.5	--	13.0	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
16	--	--	--	13.0	--	13.0	14.0	--	14.0	--	15.0	--	--	15.5	--	--	14.0	--
17	--	--	--	13.0	--	13.0	13.5	--	13.0	--	15.5	--	--	15.5	--	--	14.0	--
18	--	--	--	13.5	--	13.0	13.5	--	13.0	--	15.5	--	--	15.5	--	--	14.5	--
19	--	--	--	13.0	--	13.0	13.5	--	13.5	--	15.5	--	--	15.5	--	--	14.5	--
20	--	--	--	13.0	--	12.0	13.5	--	13.0	--	15.5	--	--	15.5	--	--	14.5	--
21	--	--	--	12.0	--	12.0	13.5	--	13.5	--	15.5	--	--	15.5	--	--	14.5	--
22	--	--	--	12.0	--	12.0	13.5	--	13.5	--	15.5	--	--	15.5	--	--	--	--
23	--	--	--	12.0	--	12.0	13.5	--	13.5	--	15.5	--	--	15.5	--	--	--	--
24	--	--	--	13.0	--	12.0	13.5	--	13.5	--	15.5	--	--	15.5	--	--	--	--
25	--	--	--	13.0	--	13.0	13.5	--	13.5	--	15.5	--	--	15.5	--	--	--	--
26	--	--	--	13.0	--	13.0	13.5	--	13.5	--	15.5	--	--	15.5	--	--	--	--
27	--	--	--	13.0	--	13.0	14.0	--	13.5	--	15.5	--	--	15.5	--	--	--	--
28	--	--	--	13.0	--	12.0	14.0	--	14.0	--	15.5	--	--	15.5	--	--	--	--
29	--	--	--	13.0	--	12.0	14.0	--	14.0	--	15.5	--	--	15.5	--	--	--	--
30	--	--	--	13.5	--	13.0	14.5	--	14.0	--	15.5	--	--	15.5	--	--	--	--
31	--	--	--	--	--	--	14.5	--	14.0	--	15.5	--	--	15.5	--	--	--	--
MONTH	--	--	--	13.5	--	10.5	14.5	--	13.0	--	15.2	--	--	15.5	--	--	--	--

SAN JOAQUIN RIVER BASIN

11325000 WOODBRIDGE CANAL AT WOODBRIDGE, CALIF.

LOCATION.--Lat 38°09'07", long 121°18'00", in NE¼SE¼ sec.34, T.4 N., R.6 E., San Joaquin County, on right bank at Woodbridge, at point of diversion from Woodbridge Reservoir.

PERIOD OF RECORD.--April 1926 to current year.

GAGE.--Water-stage recorder and gate-opening recorder. Datum of gage is 32.18 ft (9.808 m) above mean sea level (levels by East Bay Municipal Utility District). Prior to Mar. 15, 1931, water-stage recorder at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--49 years, 138 ft³/s (3.908 m³/s), 99,980 acre-ft/yr (123 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 482 ft³/s (13.6 m³/s) July 8, 1953; no flow at times in each year.

REMARKS.--Records good. Discharge computed from records of gate openings and effective head as shown by recorder. Canal diverts from Woodbridge Reservoir on Mokelumne River for irrigation south and west of Woodbridge. See schematic diagram of Mokelumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171					0	29	248	289	329	345	238
2	166					0	35	253	290	329	347	233
3	168					0	34	259	288	330	336	237
4	162					0	32	261	282	335	344	251
5	160					0	34	261	284	326	347	259
6	150					0	35	269	284	316	338	263
7	150					0	35	288	291	325	337	262
8	153					0	32	295	295	333	341	253
9	142					0	29	300	289	341	348	245
10	138					0	29	291	292	343	344	222
11	137					0	29	288	290	340	345	203
12	135					0	24	290	296	338	339	164
13	133					0	20	293	316	332	339	193
14	134					0	37	296	317	338	331	190
15	143					0	50	276	309	351	331	172
16	152					0	49	279	297	342	326	166
17	147					0	48	276	316	331	324	172
18	144					46	48	280	327	328	309	184
19	144					32	56	280	332	316	292	198
20	144					14	63	278	344	312	287	190
21	136					10	78	277	351	308	271	185
22	130					24	89	283	338	318	270	177
23	133					34	133	277	337	324	269	175
24	131					40	159	268	335	333	262	171
25	122					22	149	258	335	334	262	165
26	121					20	146	256	332	324	271	162
27	114					10	136	271	332	312	269	147
28	90					17	136	279	331	313	277	137
29	86				---	27	163	284	324	311	278	132
30	33				---	22	214	286	324	319	270	119
31	0	---			---	27	---	289	---	333	250	---
TOTAL	4069	0	0	0	0	345	2151	8589	9367	10164	9599	5865
MEAN	131	0	0	0	0	11.1	71.7	277	312	328	310	196
MAX	171	0	0	0	0	46	214	300	351	351	348	263
MIN	0	0	0	0	0	0	20	248	282	308	250	119
AC-FT	8070	0	0	0	0	684	4270	17040	18580	20160	19040	11630
CAL YR 1974	TOTAL	52844.00	MEAN 145	MAX 375	MIN 0	AC-FT	104800					
WTR YR 1975	TOTAL	50149.00	MEAN 137	MAX 351	MIN 0	AC-FT	99470					

SAN JOAQUIN RIVER BASIN

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11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.
(National stream-quality accounting network station)

LOCATION.--Lat 38°09'31", long 121°18'09", in NW¼NE¼ sec.34, T.4 N., R.6 E., San Joaquin County, on right bank at Woodbridge, 0.4 mi (0.6 km) downstream from county highway bridge, and 0.5 mi (0.8 km) downstream from dam and canal intake of Woodbridge Irrigation District.

DRAINAGE AREA.--661 mi² (1,712 km²).

PERIOD OF RECORD.--May 1924 to current year (low-water records only 1924-25).

GAGE.--Water-stage recorder. Datum of gage is 14.9 ft (4.54 m) above mean sea level (levels by East Bay Municipal Utility District). May 1924 to July 1928, 0.4 mi (0.6 km) upstream and 100 ft (30 m) downstream from bridge at datum 4 ft (1.2 m) higher; July 1928 to March 1931, 0.4 mi (0.6 km) upstream and 400 ft (120 m) downstream from bridge at same datum; March 1931 to July 25, 1968, 125 ft (38 m) downstream at same datum.

AVERAGE DISCHARGE (since start of diversion through East Bay Municipal Utility District aqueduct).--46 years (1929-75), 609 ft³/s (17.25 m³/s), 441,200 acre-ft/yr (544 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,630 ft³/s (46.2 m³/s) Mar. 28 (gage height, 13.05 ft or 3.978 m); minimum daily, 33 ft³/s (0.93 m³/s) Feb. 6.

Period of record: Maximum discharge, 27,000 ft³/s (765 m³/s) Nov. 22, 1950 (gage height, 29.58 ft or 9.016 m), from rating curve extended above 6,200 ft³/s (176 m³/s) on basis of contracted-opening measurement of maximum flow; minimum daily, 1.4 ft³/s (0.04 m³/s) Sept. 19, 20, 22, 1927.

REMARKS.--Records fair. Concerning regulation and diversions see REMARKS for Mokelumne River below Camanche Dam; between Woodbridge and Camanche Dam there are many additional diversions for irrigation, including Woodbridge Canal (see sta 11325000). Nearest diversion is 0.5 mi (0.8 km) upstream. See schematic diagram of Mokelumne River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	558	762	311	156	72	78	898	1040	724	557	389	551
2	570	686	316	156	75	77	795	1050	723	420	375	522
3	545	653	351	117	59	76	825	1050	720	424	387	517
4	531	652	223	97	49	77	832	1060	719	432	381	476
5	526	649	177	97	41	79	858	1060	718	433	380	470
6	535	551	170	99	33	78	851	1070	716	439	386	477
7	543	541	168	96	38	83	843	1020	720	437	372	480
8	538	537	168	95	36	82	847	738	723	415	364	488
9	615	459	169	90	82	79	853	695	731	410	383	514
10	595	439	169	89	168	95	854	689	705	400	389	535
11	585	434	168	88	86	82	858	697	698	392	403	570
12	589	429	168	88	68	76	861	694	669	387	391	557
13	595	384	165	88	90	93	864	690	646	409	391	559
14	596	366	166	88	106	89	863	675	459	419	405	564
15	601	361	167	87	85	69	877	684	444	399	411	596
16	619	360	167	87	88	169	1150	824	580	396	401	576
17	643	359	167	87	86	84	1230	862	1020	396	406	567
18	674	359	167	87	86	319	1230	867	1160	402	483	548
19	656	358	167	87	86	757	1240	865	1170	409	480	542
20	652	358	166	87	83	796	1240	860	1150	421	502	533
21	665	367	165	87	80	821	1240	865	974	423	496	545
22	667	363	165	86	79	712	1240	1070	922	425	488	560
23	648	360	166	76	76	649	1170	1120	916	409	507	606
24	669	358	167	67	76	650	1150	1060	914	402	505	639
25	708	359	167	70	78	803	1160	1060	915	418	505	630
26	656	357	168	70	78	895	1160	1050	915	411	477	626
27	655	341	170	68	77	1410	1170	1040	907	417	474	649
28	696	333	178	69	78	1600	1170	1020	603	425	474	655
29	744	331	159	67	---	1220	1150	960	576	413	471	674
30	1060	318	157	65	---	1090	1070	734	580	407	479	675
31	880	---	156	69	---	1080	---	724	---	398	494	---
TOTAL	19814	13184	5708	2760	2139	14268	30549	27893	23417	12945	13449	16901
MEAN	639	439	184	89.0	76.4	460	1018	900	781	418	434	563
MAX	1060	762	351	156	168	1600	1240	1120	1170	557	507	675
MIN	526	318	156	65	33	69	795	675	444	387	364	470
AC-FT	39300	26150	11320	5470	4240	28300	60590	55330	46450	25680	26680	33520

CAL YR 1974 TOTAL 269954 MEAN 740 MAX 2400 MIN 156 AC-FT 535500
WTR YR 1975 TOTAL 183027 MEAN 501 MAX 1600 MIN 33 AC-FT 363000

11325500 MOSELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: March 1951 to September 1963, water years 1964-66, 1968-74 (partial-record station), October 1974 to September 1975.

Specific conductance: October 1974 to September 1975.

Water temperatures: March 1951 to September 1958, November 1960 to current year.

EXTREMES.--Current year:

Specific conductance: Maximum daily, 76 micromhos Feb. 12; minimum daily, 41 micromhos on many days.

Water temperatures: Maximum, 21.0°C July 26, 27; minimum, 5.5°C Jan. 30, 31.

Period of record:

Specific conductance: Maximum daily, 76 micromhos Feb. 12, 1975; minimum daily, 41 micromhos on many days in 1974 and 1975.

Water temperatures: Maximum (1951-54, 1956-58, 1960 to current year), 28.5°C July 9, 1951; minimum (1951-55, 1956-58, 1961-73, 1974 to current year), 1.5°C Jan. 29, 30, 1954.

REMARKS.--The letter "A" following a date indicates chemical-quality data furnished by California Department of Water Resources. Specific conductance records furnished by California Department of Water Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT. 22...	1115	672	12	190	10	280	280	0	4.7	.9	2.4
NOV. 07...	1030	535	--	--	--	--	--	--	--	--	--
DEC. 10...	0930	169	--	--	--	--	--	--	--	--	--
JAN. 14...	1030	88	9.4	260	40	20	20	0	4.8	1.4	2.4
FEB. 13...	0930	106	--	--	--	--	--	--	--	--	--
MAR. 11...	1000	82	--	--	--	--	--	--	--	--	--
20...A	1015	791	--	--	--	--	--	--	4.1	--	2.3
APR. 15...	0930	848	9.8	320	40	10	10	0	4.5	1.3	2.5
MAY 14...	1000	675	--	--	--	--	--	--	--	--	--
JUNE 10...	1000	706	--	--	--	--	--	--	--	--	--
JULY 15...	1000	402	10	260	50	20	20	0	4.8	1.4	2.3
AUG. 12...	1000	396	--	--	--	--	--	--	--	--	--
SEP. 12...A	1430	555	--	--	--	--	--	--	4.5	--	2.6
16...	1000	578	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
OCT. 22...	.8	24	--	20	2.4	1.7	.0	.00	.17	.17
NOV. 07...	--	--	--	--	--	--	--	.04	.12	.16
DEC. 10...	--	--	--	--	--	--	--	.00	.23	.23
JAN. 14...	.9	22	--	18	2.1	1.9	.0	.00	.52	.52
FEB. 13...	--	--	--	--	--	--	--	.38	.79	1.2
MAR. 11...	--	--	--	--	--	--	--	.01	.22	.23
20...	--	19	0	16	--	1.9	--	--	--	--
APR. 15...	.7	22	0	18	2.8	2.2	.0	.03	.06	.09
MAY 14...	--	--	--	--	--	--	--	.02	.09	.11
JUNE 10...	--	--	--	--	--	--	--	.02	.09	.11
JULY 15...	.7	28	0	23	3.0	1.9	.1	.05	.62	.67
AUG. 12...	--	--	--	--	--	--	--	.02	.16	.18
SEP. 12...	--	22	0	18	--	2.7	--	--	--	--
16...	--	--	--	--	--	--	--	.04	.04	.08

SAN JOAQUIN RIVER BASIN

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11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.										
22...	.00	35	37	.05	63.5	15	0	24	.3	2.7
NOV.										
07...	.04	--	--	--	--	--	--	--	--	--
DEC.										
10...	.00	--	--	--	--	--	--	--	--	--
JAN.										
14...	.01	34	34	.05	8.08	18	0	22	.2	3.0
FEB.										
13...	.04	--	--	--	--	--	--	--	--	--
MAR.										
11...	.02	--	--	--	--	--	--	--	--	--
20...	--	25	--	.03	53.4	15	0	--	--	--
APR.										
15...	.01	34	35	.05	77.8	17	0	24	.3	2.4
MAY										
14...	.02	--	--	--	--	--	--	--	--	--
JUNE										
10...	.04	--	--	--	--	--	--	--	--	--
JULY										
15...	.05	34	38	.05	36.9	18	0	21	.2	1.7
AUG.										
12...	.02	--	--	--	--	--	--	--	--	--
SEP.										
12...	--	29	--	.04	43.5	17	0	--	--	--
16...	.01	--	--	--	--	--	--	--	--	--

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.										
21... A	1330	663	44	7.1	15.5	--	9.9	--	--	--
22...	1115	672	43	7.1	14.0	1	--	250	817	816
NOV.										
07...	1030	535	38	7.3	14.0	--	--	560	33	40
12... A	1310	431	42	7.1	15.0	--	10.0	--	--	--
DEC.										
04... A	1450	208	41	7.0	14.0	--	9.9	--	--	--
10...	0930	169	45	7.6	11.0	--	--	650	63	46
JAN.										
14...	1030	88	49	7.2	8.5	2	--	880	55	24
16... A	1530	87	43	7.1	9.0	--	11.9	--	--	--
FEB.										
05... A	1400	40	46	7.1	10.0	--	11.6	--	--	--
13...	0930	106	58	7.1	11.0	--	--	1200	81400	85700
MAR.										
11...	1000	82	--	7.1	12.0	--	--	4200	39	22
20... A	1015	791	41	7.1	10.0	1	11.1	--	--	--
APR.										
15...	0930	848	43	6.9	10.5	5	--	380	12	23
21... A	1230	1230	47	7.2	12.0	--	10.7	--	--	--
MAY										
14...	1000	675	--	6.8	15.5	--	--	580	817	40
15... A	1300	679	46	7.2	15.0	--	9.8	--	--	--
JUNE										
09... A	1300	744	47	7.2	18.0	--	9.5	--	--	--
10...	1000	706	55	6.8	16.5	--	--	530	38	81
JULY										
09... A	1415	415	47	7.2	19.5	--	9.6	--	--	--
15...	1000	402	46	6.7	18.0	2	--	1100	290	82500
AUG.										
08... A	1145	353	47	7.2	19.5	--	9.1	--	--	--
12...	1000	396	39	6.8	19.0	--	--	1100	8840	8150
SEP.										
12... A	1430	555	47	7.3	16.5	0	9.5	--	--	--
16...	1000	578	43	6.8	15.0	--	--	360	48	59

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

SAN JOAQUIN RIVER BASIN

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		PHYTOPLANKTON		
DATE	PHYLUM .CLASS ..ORDER ...FAMILY ....GENUS .....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
OCT 22	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	...CENTRALES	CENTRIC		
	....ANULACEAE			
	....TERPSINOE			4
	...COSCONODISCACEAE			4
	....CYCLOTELLA			9
	....MELOSIRA			
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			17
	....ACHNANTHES			
	...CYMBELLACEAE			13
	....CYMBELLA			
	...NAVICULACEAE	NAVICULOID		17
	....NAVICULA			
	...NITZSCHACEAE			35
	....NITZSCHIA			
	TOTAL PHYTOPLANKTON		250	
NOV 7	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	...CENTRALES	CENTRIC		
	....COSCONODISCACEAE			5
	....CYCLOTELLA			11
	....MELOSIRA			
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			12
	....RHOICOSPHEMIA			1
	...CYMBELLACEAE			9
	....AMPHORA			
	...DIATOMACEAE			1
	....DIATOMA			
	...FRAGILARIACEAE			34
	....FRAGILARIA			12
	....SYNEDRA			
	...NAVICULACEAE	NAVICULOID		10
	....NAVICULA			1
	...PINNULARIA			
	...NITZSCHACEAE			4
	....NITZSCHIA			
	TOTAL PHYTOPLANKTON		560	
DEC 10	CHLOROPHYTA	GREEN ALGAE		
	..CHLOROPHYCEAE			
	...CHLOROCOCCALES			
	...SCENEDESMACEAE			3
	....SCENEDESMUS			
	...ZYGNEMATALES			
	...DESMIDIACEAE			1
	....EUASTRUM			
	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	...CENTRALES	CENTRIC		
	....COSCONODISCACEAE			9
	....CYCLOTELLA			16
	....MELOSIRA			
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			27
	...CYMBELLACEAE			
	....CYMBELLA			16
	...EUNOTIACEAE			
	....EUNOTIA			3
	...GOMPHONEMACEAE			
	....GOMPHONEMA			3
	...NAVICULACEAE	NAVICULOID		1
	....NAVICULA			
	...NITZSCHACEAE			21
	....NITZSCHIA			
	TOTAL PHYTOPLANKTON		650	

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHYTOPLANKTON			
	PHYLUM	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
	.CLASS			
	...ORDER			
	...FAMILY			
	...GENUS			
	.....SPECIES			
JAN 14	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...SCENEDESMACEAE			6
	....CRUCIGENIA			
	...VOLVOCALES			
	...VOLVOCAEAE			
	...PANDORINA			25
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....MELOSIRA			22
	..PENNALES	PENNATE		
	...CYMBELLACEAE			6
	....CYMBELLA			
	...FRAGILARIACEAE			
	....FRAGILARIA			9
	...SYNEDRA			16
	...GOMPHONEMATACEAE			
	....GOMPHONEMA			5
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			5
	...NITZSCHACEAE			
	....NITZSCHIA			6
	TOTAL PHYTOPLANKTON		880	
FEB 13	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..VOLVOCALES			
	...CHLAMYDOMONADACEAE			6
	....CHLAMYDOMONAS			
	...ZYGNEMALES			
	...ZYGNEMATACEAE			1
	....MOUGEOTIA			
	CHRYSOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA			3
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			6
	....ACHNANTHES			
	...CYMBELLACEAE			3
	....CYMBELLA			
	...DIATOMACEAE			
	....DIATOMA			2
	...EUNOTIACEAE			
	....EUNOTIA			26
	...FRAGILARIACEAE			
	....FRAGILARIA			13
	...GOMPHONEMATACEAE			
	....GOMPHONEMA			2
	...NAVICULACEAE	NAVICULOID		
	....PINNULARIA			1
	...STAURONEIS			1
	...NITZSCHACEAE			
	....NITZSCHIA			24
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...NOSTOCACEAE			
	....ANABAENA			13
	TOTAL PHYTOPLANKTON		1200	

SAN JOAQUIN RIVER BASIN

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		PHYTOPLANKTON		
DATE	PHYLUM	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
	.CLASS ..ORDER ...FAMILY....GENUS.....SPECIES			
MAR 11	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OOCYSTACEAE			
	....ANKISTRODESMUS			2
	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSGINODISCACEAE			
	....CYCLOTELLA			63
	....MELOSIRA			6
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			6
	....RHOIOCOSPHEINIA			2
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			8
	...NITZSCHACEAE			
	....NITZSCHIA			13
	TOTAL PHYTOPLANKTON		4200	
APR 15	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSGINODISCACEAE			
	....CYCLOTELLA			7
	....MELOSIRA			17
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			10
	...CYMBELLACEAE			
	....CYMBELLA			17
	...GOMPHONEMACEAE			
	....GOMPHONEMA			3
	...FRAGILARIACEAE			
	....SYNEDRA			40
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA			7
	TOTAL PHYTOPLANKTON		380	
MAY 14	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..ZYGNEMATALES			
	...DESMIDIACEAE			
	....STAUROSTRUM			2
	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSGINODISCACEAE			
	....MELOSIRA			2
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			6
	...CYMBELLACEAE			
	....CYMBELLA			20
	...FRAGILARIACEAE			
	....FRAGILARIA			45
	....SYNEDRA			4
	...GOMPHONEMACEAE			
	....GOMPHONEMA			6
	...NITZSCHACEAE			
	....NITZSCHIA			16
	TOTAL PHYTOPLANKTON		580	
JUNE 10	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES			57
	...CYMBELLACEAE			
	....CYMBELLA			19
	...FRAGILARIACEAE			
	....ASTERIONELLA			5
	....SYNEDRA			14
	...GOMPHONEMACEAE			
	....GOMPHONEMA			5
	TOTAL PHYTOPLANKTON		530	

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHYTOPLANKTON			
	PHYLUM .CLASS ..ORDER ...FAMILY....GENUS.....SPECIES	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
JULY 15	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...NITZSCHIAEAE			
	....NITZSCHIA		160	15
	...TABELLARIAEAE			
	....TABELLARIA		13	1
	.CHRYSTOPHYCEAE			
	..CHRYSONOMADALES			
	...MALLONOMADAEEAE			
	....MALLONONAS		13	1
	...OCHROMONADAEEAE			
	....DINOBYRON		13	1
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..CHROOCOCCALES			
AUG 12	...CHROOCOCCACEAE		170	16
	....ANACYSTIS			
	...OSCILLATORIALES	FILAMENTOUS		
	...HORMOGONALES			
	....LYNGBYA		110	11
	TOTAL PHYTOPLANKTON		1100	
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...HYDRODICTYACEAE			
	....PEDIASTRUM			1
	...OOCYSTACEAE			
	....QUADRIGULA		15	1
	...SCENEDESMACEAE			
	....SCENEDESMUS		31	3
	...TETRASPORALES			
	...COCCOMYXACEAE			
	....DISPORA		240	21
	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....MELOSIRA		110	10
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		85	7
	...CYMBELLACEAE			
	....CYMBELLA		62	5
	...FRAGILARIAEAE			
	....ASTERIONELLA		85	7
	...SYNEDRA		7	1
	...NAVICULACEAE	NAVICULOID		
	....FRUSTULIA			1
	...NAVICULA		54	5
	....PINNULARIA		7	1
	...NITZSCHIAEAE			
	....NITZSCHIA		100	9
	.CHRYSTOPHYCEAE			
	..CHRYSONOMADALES			
	...OCHROMONADAEEAE			
	....DINOBYRON			1
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..CHROOCOCCALES			
	...CHROOCOCCACEAE			
	....ANACYSTIS		62	5
	TOTAL PHYTOPLANKTON		1100	

SAN JOAQUIN RIVER BASIN

11325500 NOXELUNNE RIVER AT WOODBRIDGE, CALIF.--Continued

BIOLOGICAL ANALYSIS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHYTOPLANKTON			
	PHYLUM	COMMON NAME	COUNT (CELLS/ML)	PERCENT OF TOTAL
	..CLASS			
	...ORDER			
	....FAMILY			
	.....GENUS			
	.....SPECIES			
SEP 19	CHLOROPHYTA	GREEN ALGAE		
	..CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OOCYSTACEAE			
	....SELENASTRUM			1
	..ZYGNEATALES			
	...DESMIDIACEAE			
	....PENIUM			1
	CHRYSTOPHYTA	YELLOW-GREEN ALGAE		
	..BACILLARIOPHYCEAE	DIATOMS		
	...CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		58	16
	....MELOSIRA		66	18
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		16	5
	...CYMBELLACEAE			
	....AMPHORA			1
	....CYMBELLA		33	9
	...FRAGILARIACEAE			
	....FRAGILARIA		58	16
	....SYNEDRA		24	7
	...GOMPHONEMACEAE			
	....GOMPHONEMA			1
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		33	9
	...NITZSCHIACEAE			
	....NITZSCHIA		41	11
	...SURIPELLACEAE			
	....SURIPELLA		16	5
	...TABELLARIACEAE			
	....TABELLARIA		8	2
	..CHRYSTOPHYCEAE			
	...CHRYSOMONADALES			
	....MALLOMONADACEAE			
	.....MALLOMONAS		8	2
	TOTAL PHYTOPLANKTON		360	

DATE	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M
JAN. 14 TO FEB. 13...	10.0	27.0	1.10	6.00
APR. 15 TO MAY 14...	5.20	8.50	.300	1.80
JULY 15 TO AUG. 12...	3.40	5.80	.500	1.80

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE D ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE D CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE D CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)
OCT. 22...	1115	0	0	0	<10	<10	0	0	0	0
JAN. 14...	1030	0	0	0	30	30	0	10	10	0
APR. 15...	0930	1	0	1	<10	<9	1	0	0	0
JULY 15...	1000	0	0	0	<10	<9	1	20	10	10

DATE	TOTAL COBALT (CO) (UG/L)	SUS- PENDE D COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE D COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDE D LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)
OCT. 22...	<50	<50	0	<10	<4	6	100	77	23
JAN. 14...	<50	<50	0	0	0	5	<100	<96	4
APR. 15...	<50	<50	0	10	6	4	<100	<97	3
JULY 15...	<50	<50	0	40	39	1	100	93	7

DATE	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE D MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE D SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE D ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 22...	.0	.0	.1	0	0	0	100	60	40
JAN. 14...	.3	.3	.0	0	0	0	30	20	10
APR. 15...	--	--	.0	0	0	0	40	0	40
JULY 15...	.0	.0	.0	0	0	0	50	40	10

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	43	41	---	46	45	42	46	48	48	47	45
2	46	43	41	43	46	45	42	46	48	47	47	45
3	46	43	41	43	46	45	42	46	48	47	47	45
4	46	43	41	43	46	44	42	46	47	47	47	45
5	46	43	41	43	46	45	43	46	47	47	47	45
6	46	42	41	43	51	46	43	46	47	46	47	46
7	46	42	41	43	51	46	43	46	47	46	47	46
8	45	42	41	43	48	46	43	46	47	46	47	46
9	45	42	41	43	47	46	45	46	47	46	47	46
10	45	42	41	43	55	46	45	46	47	46	47	46
11	45	42	42	43	74	45	45	46	47	46	47	47
12	45	42	42	43	76	45	45	46	47	46	47	47
13	45	42	42	43	66	44	45	46	47	46	46	47
14	45	42	42	43	54	43	46	46	47	46	46	47
15	44	42	42	43	59	43	46	46	48	46	46	47
16	44	42	42	43	71	50	46	46	48	46	46	47
17	44	42	42	43	56	44	46	46	48	46	46	47
18	44	42	---	43	49	43	46	46	48	46	46	47
19	44	42	---	43	46	41	46	46	48	46	46	46
20	44	42	---	43	46	41	46	47	49	46	46	46
21	44	42	---	43	45	41	46	47	49	46	46	46
22	44	41	---	43	45	41	46	47	49	46	45	46
23	44	41	---	43	45	42	46	47	49	46	45	46
24	44	41	---	43	46	42	46	47	49	46	45	46
25	43	41	---	43	46	42	46	48	49	46	45	46
26	43	41	---	46	46	42	46	48	49	46	44	46
27	43	41	---	46	46	42	46	48	49	46	44	46
28	43	41	---	46	45	42	46	48	48	46	44	46
29	43	41	---	46	---	42	46	48	48	46	44	46
30	43	41	---	46	---	42	46	48	48	46	44	46
31	43	---	---	46	---	42	---	48	---	46	---	---
MONTH	44	42	---	44	52	44	45	47	48	46	46	46

SAN JOAQUIN RIVER BASIN

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	17.5	15.5	13.5	13.0	11.0	9.5	8.0	8.0	6.0	15.0	13.5
2	19.5	18.0	15.0	13.0	13.0	11.5	9.5	8.0	9.5	7.5	14.5	12.5
3	19.0	17.5	15.0	13.5	13.5	11.0	9.5	8.0	10.0	8.5	15.0	11.5
4	17.5	15.5	15.0	13.5	14.0	11.5	10.0	8.0	10.0	8.5	15.0	12.5
5	17.0	15.5	15.0	13.5	13.0	11.0	10.0	8.5	10.5	9.5	14.0	13.0
6	16.5	15.0	15.5	13.5	12.5	10.5	11.0	9.0	11.0	10.0	13.5	12.5
7	16.5	14.5	15.0	13.5	12.5	10.0	11.0	10.0	11.5	10.5	13.0	12.5
8	16.5	15.0	15.0	13.0	12.0	10.5	12.5	10.5	13.0	11.0	13.5	12.0
9	16.5	15.0	15.0	12.5	12.0	10.5	12.0	9.5	14.0	12.5	13.5	12.0
10	16.0	14.5	15.5	13.0	11.5	10.0	9.5	8.5	13.5	11.5	13.0	12.0
11	16.0	14.0	15.5	13.0	13.0	9.5	9.5	8.0	13.0	11.5	14.0	11.5
12	16.0	14.0	15.5	13.0	13.5	12.0	9.5	8.0	12.5	11.5	14.5	11.5
13	16.0	14.0	15.5	13.5	14.0	12.5	9.0	8.0	12.0	11.0	13.5	11.0
14	16.0	14.0	15.5	13.5	13.5	12.0	8.5	8.0	11.5	10.5	11.0	9.5
15	16.0	14.5	15.0	13.0	13.5	12.0	8.5	8.0	11.0	9.5	11.5	10.0
16	16.0	14.5	15.0	13.0	13.0	11.5	9.0	8.0	10.5	9.5	11.5	10.0
17	16.0	14.5	15.0	13.5	13.5	12.0	9.0	8.5	9.5	8.5	12.0	11.0
18	16.0	14.0	15.5	13.0	13.0	11.5	8.5	8.0	10.0	8.0	11.5	11.0
19	16.0	14.5	15.0	13.0	12.5	11.0	8.5	8.0	10.0	9.0	11.5	10.5
20	15.5	14.0	15.0	12.5	12.5	11.0	8.5	7.5	10.5	9.0	11.0	10.0
21	15.5	14.0	15.0	13.5	13.0	11.5	8.5	8.0	10.0	8.0	10.5	9.5
22	15.0	13.5	14.5	12.0	12.5	10.5	8.5	8.0	10.0	8.0	10.5	9.0
23	15.5	13.5	14.0	11.5	11.0	9.0	8.5	8.0	11.0	8.0	11.5	10.0
24	15.5	14.0	14.0	11.5	10.0	8.0	9.5	8.0	12.0	9.0	12.0	11.0
25	15.5	14.0	14.5	12.0	10.0	8.5	10.0	8.0	13.0	10.0	11.5	11.0
26	16.0	14.0	14.0	12.0	10.5	8.5	10.0	8.5	14.0	11.0	10.5	10.0
27	15.5	14.5	13.5	11.5	10.5	9.5	9.0	7.5	15.0	12.0	11.0	9.5
28	15.5	14.0	13.0	11.0	11.0	9.5	7.5	6.5	16.0	13.0	10.5	9.5
29	15.5	13.5	13.5	11.0	10.0	8.5	7.5	6.0	---	---	11.0	10.0
30	15.5	13.5	13.0	11.0	10.5	8.5	7.5	5.5	---	---	11.5	10.5
31	15.5	14.0	---	---	9.5	8.0	6.0	5.5	---	---	11.5	11.0
MONTH	19.5	13.5	15.5	11.0	14.0	8.0	12.5	5.5	16.0	6.0	15.0	9.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	10.0	12.5	11.5	17.0	13.5	17.5	16.5	20.0	18.5	19.5	17.5
2	11.5	10.5	12.5	12.0	16.0	14.5	18.0	16.5	20.5	18.5	19.5	18.0
3	11.5	10.5	12.0	11.0	16.5	14.5	18.5	17.0	20.5	18.5	19.5	18.0
4	11.0	10.0	11.5	10.5	17.0	15.5	18.5	17.0	20.5	18.5	20.0	18.0
5	11.0	10.5	12.0	11.0	17.5	16.0	19.0	16.5	20.5	18.5	18.5	16.0
6	11.0	10.5	12.5	11.5	17.5	16.0	19.5	17.0	20.0	18.5	17.0	15.5
7	10.5	10.0	12.5	12.5	17.0	16.0	19.5	17.5	20.0	18.0	17.0	15.5
8	10.5	10.0	14.0	13.0	17.5	16.0	19.5	18.0	20.0	18.0	16.0	15.0
9	12.0	10.5	14.5	13.5	17.5	16.0	19.5	18.0	20.5	18.5	16.5	14.5
10	12.5	11.0	15.0	14.0	17.5	16.0	19.5	18.0	20.5	19.0	16.0	15.5
11	12.5	11.5	15.5	14.0	17.5	16.5	19.5	18.0	20.5	18.5	16.0	14.5
12	13.0	11.5	16.0	14.5	17.0	16.0	20.0	18.0	20.0	18.5	16.5	15.0
13	13.0	12.0	17.0	15.0	17.5	16.0	20.0	18.0	20.0	18.0	16.5	15.0
14	12.5	11.5	16.5	15.5	18.5	16.5	20.0	18.0	19.5	18.0	16.5	15.0
15	11.5	10.5	15.5	14.0	18.5	17.0	19.0	18.0	20.0	18.0	16.5	15.0
16	11.0	10.5	15.0	14.0	18.5	16.5	19.0	15.5	19.5	18.5	16.5	15.0
17	11.5	10.5	16.0	14.5	17.5	15.0	20.0	18.0	19.5	18.0	16.5	15.0
18	12.0	11.0	16.0	13.5	15.5	14.5	20.0	18.5	19.0	18.0	16.0	15.0
19	12.0	11.5	16.0	14.5	15.5	14.0	20.0	18.0	18.5	17.0	16.0	15.0
20	12.0	11.5	15.0	11.0	15.0	14.0	20.0	18.0	19.5	18.0	16.5	14.5
21	12.0	11.5	14.0	13.0	16.0	15.0	20.0	18.5	20.0	18.5	16.5	15.0
22	12.0	11.0	14.5	13.5	16.0	15.0	20.0	18.0	20.0	18.5	16.5	15.0
23	11.5	11.0	15.0	14.0	16.0	15.5	20.5	18.5	20.0	18.5	16.0	15.0
24	11.5	11.0	15.5	12.5	16.0	15.5	20.5	18.5	20.5	18.5	16.0	15.0
25	11.0	10.5	15.5	12.5	15.5	15.0	20.5	18.5	20.5	19.0	16.0	15.0
26	11.5	11.0	15.0	12.0	16.0	15.5	21.0	19.0	20.0	18.5	16.0	15.0
27	12.0	11.0	15.5	14.5	16.0	15.5	21.0	19.0	19.0	18.0	16.0	14.5
28	12.0	11.5	15.5	13.0	17.0	16.0	20.5	18.5	19.0	17.5	15.5	14.5
29	12.0	11.5	16.0	15.0	18.0	16.5	20.0	18.5	19.5	18.0	15.5	14.0
30	12.5	11.5	16.5	15.5	18.0	17.0	20.0	18.0	19.5	18.0	15.5	14.5
31	---	---	16.5	16.0	---	---	20.0	18.0	19.5	18.0	---	---
MONTH	13.0	10.0	17.0	10.5	18.5	13.5	21.0	15.5	20.5	17.0	20.0	14.0

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DFG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
JAN. 14...	1030	8.5	88	4	.95	ND
FEB. 13...	0930	11.0	106	25	7.2	94
MAR. 11...	1000	12.0	82	7	1.5	ND
APR. 15...	0930	10.5	848	3	6.9	E79
MAY 14...	1000	15.5	675	3	5.5	E84
JUNE 10...	1000	16.5	706	5	9.5	ND
JULY 15...	1000	18.0	402	7	7.6	ND
AUG. 12...	1000	19.0	396	4	4.3	91

ND Material specifically analyzed for but not found.

E Estimated.

11327000 SUTTER CREEK NEAR SUTTER CREEK, CALIF.

LOCATION.--Lat 38°23'45", long 120°46'49", in SE¼SE¼ sec.5, T.6 N., R.11 E., Amador County, on left bank 1.3 mi (2.1 km) east of town of Sutter Creek.

DRAINAGE AREA.--48.1 mi² (124.6 km²).

PERIOD OF RECORD.--October 1935 to December 1941, March 1960 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 1,220 ft (372 m), from topographic map. Prior to Oct. 29, 1937, nonrecording gage 15 ft (5 m) downstream at datum 4.00 ft (1.219 m) lower. Oct. 29, 1937, to Dec. 7, 1938, nonrecording gage at present site at datum 4.00 ft (1.219 m) lower.

AVERAGE DISCHARGE.--21 years (1935-41, 1960-75), 32.4 ft³/s (0.918 m³/s), 23,470 acre-ft/yr (28.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,480 ft³/s (37.1 m³/s) Mar. 25 (gage height, 4.01 ft or 1.222 m); no flow Sept. 28, 29.

Period of record: Maximum discharge, 5,770 ft³/s (163 m³/s) Jan. 31, 1963 (gage height, 6.27 ft or 1.911 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-area measurement at gage height 4.77 ft (1.454 m); no flow at times in each year except 1938, 1941.

REMARKS.--Small diversion above station for irrigation.

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

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	9.7	6.6	9.0	16	24	80	41	15	6.8	1.2	1.5
2	.90	6.3	6.6	8.5	132	23	73	39	15	6.0	1.0	1.4
3	1.0	5.1	30	8.4	82	21	68	44	15	5.9	1.0	1.1
4	1.1	4.7	56	9.1	113	20	69	48	14	5.9	1.0	.90
5	1.3	4.4	24	10	86	24	96	40	14	5.7	1.1	.80
6	1.4	4.4	15	42	64	32	98	37	14	5.0	1.0	.70
7	1.4	5.1	12	58	52	200	95	34	13	5.0	1.0	.50
8	1.3	12	11	123	54	408	94	33	13	4.4	.80	.40
9	1.5	7.8	9.6	62	339	167	101	31	12	4.2	.60	.50
10	1.7	6.2	9.0	37	275	117	101	30	11	4.1	.60	.50
11	1.7	5.6	8.6	28	120	91	91	29	11	3.9	.60	.70
12	1.6	5.4	8.3	23	85	74	84	28	11	3.8	.60	.70
13	1.4	5.4	9.7	20	189	80	78	28	11	3.7	.60	.70
14	1.4	5.2	8.8	18	135	86	75	27	10	3.5	.80	.60
15	1.4	5.2	8.4	16	94	87	83	26	9.7	3.4	.70	.70
16	1.4	4.9	8.7	15	76	185	77	26	9.5	4.1	.50	.70
17	1.4	4.8	8.4	14	62	129	71	25	9.5	3.9	.50	.80
18	1.4	4.9	8.1	13	50	101	65	24	9.2	3.6	1.9	.70
19	1.4	5.2	8.1	12	55	100	58	23	9.3	3.4	4.5	.60
20	1.6	5.2	7.7	12	81	105	54	22	9.4	3.2	3.5	.60
21	1.8	15	7.7	11	58	147	51	22	9.0	3.2	3.1	.50
22	2.0	26	8.3	10	49	341	48	21	8.5	2.9	2.8	.40
23	2.1	11	8.1	9.9	43	194	46	20	8.2	2.6	2.3	.50
24	2.3	8.5	7.6	9.9	38	187	62	20	9.0	2.3	1.8	.80
25	2.5	8.6	7.6	9.5	34	850	80	20	9.4	2.1	1.4	.70
26	2.4	8.4	7.6	9.5	31	324	64	19	8.4	1.9	1.1	.40
27	2.5	7.7	8.2	9.9	27	202	53	18	7.9	1.7	1.3	.10
28	16	7.3	15	9.4	26	151	48	18	7.7	1.7	1.5	0
29	19	7.0	13	9.3	---	121	44	17	7.2	1.5	1.5	0
30	6.3	6.7	11	9.3	---	104	43	16	6.9	1.2	1.6	.40
31	6.8	---	9.5	9.4	---	91	---	16	---	1.2	1.5	---
TOTAL	90.90	223.7	368.2	645.1	2466	4786	2150	842	317.8	111.8	43.40	18.90
MEAN	2.93	7.46	11.9	20.8	88.1	154	71.7	27.2	10.6	3.61	1.40	.63
MAX	19	26	56	123	339	850	101	48	15	6.8	4.5	1.5
MIN	.90	4.4	6.6	8.4	16	20	43	16	6.9	1.2	.50	0
AC-FT	180	444	730	1280	4890	9490	4260	1670	630	222	86	37
CAL YR 1974	TOTAL	13158.30	MEAN	36.1	MAX	562	MIN	.50	AC-FT	26100		
WTR YR 1975	TOTAL	12063.80	MEAN	33.1	MAX	850	MIN	0	AC-FT	23930		

11329500 DRY CREEK NEAR GALT, CALIF.

LOCATION.--Lat 38°14'53", long 121°13'33", in NE¼NE¼ sec.32, T.5 N., R.7 E., San Joaquin County, on left bank of main channel 35 ft (11 m) downstream from county road bridge, 2 mi (3 km) downstream from Coyote Creek, and 4 mi (6 km) east of Galt.

DRAINAGE AREA.--329 mi² (852 km²).

PERIOD OF RECORD.--October 1926 to September 1933, October 1944 to current year. Monthly figures only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 52.83 ft (16.103 m) above mean sea level (levels by East Bay Municipal Utility District). Dec. 4, 1926, to Sept. 30, 1933, at site 4 mi (6 km) downstream at different datum. Oct. 1, 1944, to Sept. 30, 1945, on right bank at datum 3.00 ft (0.914 m) higher. Oct. 1, 1945, to June 15, 1966, on right bank at same datum.

AVERAGE DISCHARGE.--38 years, 117 ft³/s (3.313 m³/s), 84,770 acre-ft/yr (105 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,280 ft³/s (206 m³/s) Feb. 10 (gage height, 14.22 ft or 4.334 m); no flow for many days.
Period of record: Maximum discharge, 24,000 ft³/s (680 m³/s) Apr. 3, 1958 (gage height, 15.28 ft or 4.657 m); no flow for many days in each year.

REMARKS.--Records good. Many small diversions above station for irrigation. Total storage of many small reservoirs, 1,000 acre-ft (1.23 hm³) and approximately a total of 500 acres (2.0 km²) irrigated.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		7.9	2.8	7.0	12	102	264	111	11	0	0	.01
2		7.2	2.5	6.4	272	102	234	99	13	0	0	0
3		4.1	16	5.3	323	91	213	96	14	0	0	0
4		1.8	66	5.2	325	83	206	114	14	0	0	0
5		.18	76	5.2	342	86	461	105	12	0	0	0
6		0	39	7.1	202	140	697	95	11	2.3	0	0
7		0	25	67	168	146	564	89	6.3	6.8	0	0
8		0	19	138	198	1580	422	88	5.1	9.0	0	0
9		3.1	16	211	2840	1030	384	81	3.2	4.4	0	.24
10		6.9	13	100	3810	562	331	76	4.6	2.1	0	4.0
11		3.3	11	62	997	417	289	73	2.4	1.7	0	11
12		2.0	10	44	519	310	258	69	0	.07	0	4.6
13		2.3	9.1	37	2190	415	234	65	0	0	0	3.0
14		3.8	10	32	1650	1030	218	53	0	0	0	2.0
15		8.2	10	28	668	646	217	51	0	0	0	2.3
16		1.3	9.0	24	425	1090	213	48	0	0	0	.50
17		.13	8.1	21	314	809	196	43	0	0	0	0
18		0	7.1	20	250	521	175	38	0	0	0	0
19		0	5.5	18	223	388	161	34	0	0	5.2	0
20		0	5.3	16	389	381	153	34	0	0	4.0	0
21		0	5.6	13	282	340	145	31	0	0	4.3	0
22		0	4.4	11	213	2050	134	31	0	0	1.0	0
23		16	4.5	10	185	1160	124	32	0	0	1.6	0
24		13	3.0	9.3	168	833	128	30	0	0	0	0
25		7.9	1.2	8.6	146	2400	217	31	0	0	0	0
26		6.5	.04	8.8	131	2030	183	31	0	0	0	0
27		4.8	0	8.3	122	987	149	34	7.0	0	4.3	0
28		4.2	.72	7.7	108	661	129	26	1.0	0	7.1	0
29		3.3	13	7.2	---	494	120	18	.72	0	4.5	0
30		2.7	17	6.8	---	396	119	14	0	0	3.9	1.8
31		---	12	6.4	---	327	---	10	---	0	1.4	---
TOTAL	0	110.61	421.86	951.3	17472	21607	7338	1750	105.32	26.37	37.3	29.45
MEAN	0	3.69	13.6	30.7	624	697	245	56.5	3.51	.85	1.20	.98
MAX	0	16	76	211	3810	2400	697	114	14	9.0	7.1	11
MIN	0	0	0	5.2	12	83	119	10	0	0	0	0
AC-FT	0	219	837	1890	34660	42860	14550	3470	209	52	74	58
CAL YR 1974	TOTAL	52706.11	MEAN 144	MAX 2970	MIN 0	AC-FT 104500						
WTR YR 1975	TOTAL	49849.21	MEAN 137	MAX 3810	MIN 0	AC-FT 98880						

Peak discharge (base, 2,000 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-10	0200	14.22	7,280	3-22	1000	12.79	2,830
2-13	1900	13.43	3,690	3-25	1800	13.59	4,170

11333000 CAMP CREEK NEAR SOMERSET, CALIF.

LOCATION.--Lat 38°39'26", long 120°39'46", in SW¼SW¼ sec.4, T.9 N., R.12 E., El Dorado County, on right bank 0.2 mi (0.3 km) upstream from mouth, 1.3 mi (2.1 km) northeast of Somerset, and 5.6 mi (9.0 km) south of Camino.

DRAINAGE AREA.--62.6 mi² (162.1 km²).

PERIOD OF RECORD.--February to May 1924 (published as "near Pleasant Valley"), October 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,820 ft (555 m), from topographic map. Feb. 1 to May 31, 1924, nonrecording gage at site 0.2 mi (0.3 km) upstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents, evaporation, and diversion from Jenkinson Lake).--21 years (1954-75), 82.3 ft³/s (2.331 m³/s), 59,630 acre-ft/yr (73.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 630 ft³/s (17.8 m³/s) Mar. 25 (gage height, 5.60 ft or 1.707 m); minimum daily, 4.6 ft³/s (0.130 m³/s) Nov. 5, 6, 14.

Period of record: Maximum discharge, 6,040 ft³/s (171 m³/s) Dec. 23, 1964 (gage height, 12.50 ft or 3.810 m); minimum, 0.5 ft³/s (0.014 m³/s) Aug. 1-3, 1961.

REMARKS.--Records good. Flow partly regulated since January 1955 by Jenkinson Lake, usable capacity, 40,570 acre-ft (50.0 hm³). Water is released from Jenkinson Lake through Camino conduit for irrigation and domestic supply in North Fork Cosumnes and South Fork American River basins. Some water is released from Jenkinson Lake down Camp Creek for irrigation downstream from station.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	14	5.1	4.9	7.9	12	279	259	161	8.8	15	11
2	6.6	9.0	5.1	4.8	33	12	227	254	149	31	14	11
3	6.8	5.3	7.5	5.0	26	11	210	293	128	31	14	8.9
4	6.9	4.8	19	6.0	33	11	212	318	109	30	14	8.6
5	7.1	4.6	9.7	6.0	26	12	241	282	96	29	13	8.4
6	7.3	4.6	6.9	30	21	12	221	256	94	28	13	8.1
7	7.6	5.1	6.1	27	22	34	182	246	89	27	13	8.4
8	7.7	8.5	5.7	51	28	61	165	252	76	26	13	8.1
9	8.3	6.3	5.4	24	200	55	157	273	61	25	13	8.1
10	8.8	5.3	5.1	15	120	40	155	251	50	25	12	8.0
11	8.6	4.9	5.1	11	57	32	152	261	39	24	12	7.9
12	8.4	4.8	5.6	9.0	35	26	157	337	31	23	12	7.9
13	8.0	4.7	6.5	7.9	44	28	168	361	26	22	12	7.7
14	8.0	4.6	5.8	7.2	38	29	185	389	22	22	13	7.5
15	7.8	7.2	5.4	6.8	30	31	201	401	17	22	13	7.7
16	7.7	7.2	5.2	6.4	25	46	187	362	12	23	13	7.5
17	7.7	5.1	5.1	6.1	21	37	172	349	8.4	22	12	7.3
18	7.7	5.4	5.1	5.8	18	32	159	358	7.1	21	18	7.2
19	7.5	5.5	4.9	5.6	25	36	154	360	6.8	20	26	7.0
20	7.5	5.0	4.8	5.5	34	46	151	325	6.8	20	24	7.0
21	7.5	7.5	5.0	5.3	26	54	157	252	6.6	19	20	7.0
22	7.5	11	6.1	5.2	22	84	169	210	6.4	18	21	6.7
23	7.6	6.7	5.3	5.1	20	64	184	194	6.1	17	20	6.5
24	7.8	5.8	4.9	4.9	17	87	239	198	7.4	17	17	6.5
25	8.0	7.1	4.9	4.8	16	427	406	210	11	16	16	6.3
26	8.0	6.5	4.8	5.3	14	174	366	215	10	16	16	6.3
27	8.2	5.8	5.2	5.6	13	344	323	203	9.6	15	15	6.2
28	23	5.6	7.3	5.0	13	373	298	189	9.4	15	13	6.0
29	24	5.3	6.5	4.9	---	311	282	175	9.1	15	12	6.0
30	14	5.1	5.7	4.8	---	276	276	164	8.9	15	12	6.1
31	14	---	5.2	4.9	---	270	---	158	---	15	11	---
TOTAL	282.1	188.3	190.0	300.8	984.9	3067	6435	8355	1273.6	657.8	462	226.9
MEAN	9.10	6.28	6.13	9.70	35.2	98.9	215	270	42.5	21.2	14.9	7.56
MAX	24	14	19	51	200	427	406	401	161	31	26	11
MIN	6.5	4.6	4.8	4.8	7.9	11	151	158	6.1	8.8	11	6.0
AC-FT	560	373	377	597	1950	6080	12760	16570	2530	1300	916	450
(a)	-2,096	+316	+330	+1,110	+4,982	+9,807	-142	+201	-1,101	-4,934	-4,624	-4,022
(b)	117	32	19	25	30	94	85	250	306	305	259	206
(c)	1,956	920	708	799	539	243	272	1,417	4,380	4,939	4,484	3,841
MEAN d	8.73	17.0	23.3	41.2	135	264	218	300	103	26.2	16.8	7.98
AC-FT d	537	1,009	1,434	2,531	7,501	16,224	12,975	18,438	6,115	1,610	1,035	475

CAL YR 1974 TOTAL 33096.8 MEAN 90.7 MAX 964 MIN 4.6 AC-FT 65650 MEAN d 114 AC-FT d 82,820
WTR YR 1975 TOTAL 22423.4 MEAN 61.4 MAX 427 MIN 4.6 AC-FT 44480 MEAN d 96.6 AC-FT d 69,900

a Change in contents, in acre-feet, in Jenkinson Lake, furnished by Bureau of Reclamation.

b Evaporation, in acre-feet, from Jenkinson Lake, furnished by Bureau of Reclamation.

c Diversion, in acre-feet, from Jenkinson Lake, furnished by Bureau of Reclamation.

d Adjusted for change in contents, evaporation, and diversion from Jenkinson Lake.

11333500 NORTH FORK COSUMNES RIVER NEAR EL DORADO, CALIF.

LOCATION.--Lat 38°35'20", long 120°50'38", in NE¼SW¼ sec.35, T.9 N., R.10 E., El Dorado County, on downstream side of left abutment of county road bridge, 0.8 mi (1.3 km) north of Nashville, 2.6 mi (4.2 km) upstream from mouth, and 6 mi (10 km) south of El Dorado.

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--August 1911 to December 1941, October 1948 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 840 ft (256 m), from topographic map. Prior to October 1933, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. October 1933 to December 1941, water-stage recorder at site 1,000 ft (305 m) upstream at different datum.

AVERAGE DISCHARGE.--57 years, 203 ft³/s (5.749 m³/s), 147,100 acre-ft/yr (181 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,310 ft³/s (122 m³/s) Mar. 25 (gage height, 8.78 ft or 2.676 m); minimum daily, 9.9 ft³/s (0.28 m³/s) Oct. 1.

Period of record: Maximum discharge, 15,800 ft³/s (447 m³/s) Dec. 23, 1955 (gage height, 14.8 ft or 4.51 m), from rating curve extended above 7,500 ft³/s (212 m³/s) on basis of slope-area measurement of maximum flow; no flow for part of 1924, 1926, 1931, 1933-34.

REMARKS.--Records good except those for summer months, which are fair. Flow partly regulated since January 1955 by Jenkinson Lake, usable capacity, 40,570 acre-ft (50.0 hm³). Camino conduit above the station diverts water out of the basin (see REMARKS for sta 11333000 Camp Creek near Somerset). Numerous small diversions above station for irrigation and domestic use.

REVISIONS (WATER YEARS).--WSP 1315-A: 1914(M), 1925(M), 1928(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	42	25	26	57	163	650	593	455	92	32	14
2	10	37	24	25	218	173	547	574	435	104	30	14
3	11	26	35	26	197	177	506	657	396	113	30	16
4	12	22	128	33	250	174	526	788	364	110	31	17
5	15	25	103	33	182	180	731	656	338	105	34	17
6	17	25	58	93	138	214	759	587	331	100	33	19
7	18	22	45	221	122	363	639	560	324	95	30	16
8	18	35	38	352	166	804	542	571	300	91	32	15
9	21	38	34	206	1490	573	500	623	274	86	30	15
10	27	28	31	122	1130	422	476	687	254	79	30	16
11	25	25	29	95	414	347	442	675	239	76	28	18
12	24	23	30	79	274	288	430	837	233	73	31	19
13	22	23	34	69	589	281	434	924	221	70	31	19
14	21	27	37	63	432	311	447	1030	209	68	30	17
15	21	28	32	59	293	319	482	1090	199	66	32	17
16	21	34	30	58	237	492	450	947	186	70	32	17
17	20	31	29	57	201	343	426	901	174	70	33	15
18	20	30	32	50	175	281	401	946	158	67	42	15
19	20	34	30	49	193	271	381	959	145	72	56	15
20	21	39	25	49	327	347	372	854	139	67	61	15
21	21	39	25	52	235	348	379	653	129	61	51	15
22	22	89	28	46	199	848	404	555	122	58	50	15
23	24	56	29	45	180	468	428	515	118	55	46	15
24	25	38	22	45	167	516	499	522	120	64	44	15
25	28	37	22	46	158	3000	1070	544	129	55	37	14
26	28	43	25	46	157	1610	852	554	117	52	33	14
27	27	34	28	48	155	1220	720	534	109	45	31	13
28	62	30	39	48	156	1080	651	506	103	35	28	13
29	102	28	41	43	---	845	617	485	98	34	22	13
30	46	29	32	42	---	713	610	464	95	33	19	13
31	36	---	30	39	---	655	---	447	---	33	15	---
TOTAL	794.9	1017	1150	2265	8492	17826	16371	21238	6514	2199	1064	466
MEAN	25.6	33.9	37.1	73.1	303	575	546	685	217	70.9	34.3	15.5
MAX	102	89	128	352	1490	3000	1070	1090	455	113	61	19
MIN	9.9	22	22	25	57	163	372	447	95	33	15	13
AC-FT	1580	2020	2280	4490	16840	35360	32470	42130	12920	4360	2110	924
CAL YR 1974 TOTAL	101681.6											
WTR YR 1975 TOTAL	79396.9											
MEAN 279	218											
MAX 2670	3000											
MIN 7.0	9.9											
AC-FT 201700	157500											

Peak discharge (base, 1,800 ft³/s).--Feb. 9 (1600) 2,830 ft³/s (7.51 ft); Mar. 25 (0930) 4,310 ft³/s (8.78 ft).

SAN JOAQUIN RIVER BASIN

11334300 SOUTH FORK COSUMNES RIVER NEAR RIVER PINES, CALIF.

LOCATION.--Lat 38°33'25", long 120°47'32", in SE&SW¼ sec.8, T.8 N., R.11 E., Amador County, on left bank 2.4 mi (3.9 km) upstream from mouth, and 2.7 mi (4.3 km) west of River Pines.

DRAINAGE AREA.--64.3 mi² (166.5 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,220 ft (372 m), from topographic map.

AVERAGE DISCHARGE.--18 years, 47.2 ft³/s (1.337 m³/s), 34,200 acre-ft/yr (42.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,730 ft³/s (77.3 m³/s) Feb. 9, Mar. 25 (gage height, 7.03 ft or 2.143 m); minimum daily, 0.70 ft³/s (0.020 m³/s) Sept. 26-30.

Period of record: Maximum discharge, 5,540 ft³/s (157 m³/s) Feb. 1, 1963 (gage height, 10.90 ft or 3.322 m), from rating curve extended above 1,900 ft³/s (53.8 m³/s) on basis of slope-area measurement at gage height 9.90 ft (3.018 m); no flow at times in most years.

REMARKS.--No storage or known diversion above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	9.9	7.9	9.9	19	48	142	87	27	12	2.8	2.9
2	.90	7.8	7.9	9.3	241	46	124	81	27	12	2.7	3.2
3	1.1	6.4	16	9.7	115	44	115	87	27	12	2.4	2.6
4	1.1	5.8	58	12	171	43	118	95	26	12	2.2	2.3
5	1.4	5.5	32	11	111	44	176	80	25	12	2.1	2.0
6	1.6	5.3	21	29	76	53	188	74	24	11	1.9	1.7
7	1.4	5.6	17	51	68	288	158	70	23	10	1.9	1.6
8	1.3	11	14	140	74	616	147	67	23	9.7	1.9	1.5
9	1.3	9.9	13	75	1280	290	150	64	22	8.9	1.8	1.6
10	1.5	7.6	11	43	553	198	152	61	21	8.5	1.6	1.6
11	1.6	6.8	11	33	219	155	144	57	21	8.2	1.7	1.9
12	1.5	6.2	11	27	132	121	139	55	20	7.9	1.6	2.0
13	1.3	6.0	12	24	314	120	138	52	19	7.6	1.6	1.8
14	1.3	6.0	11	22	224	137	136	49	17	7.1	1.6	1.7
15	1.2	5.8	11	20	146	146	140	48	17	7.1	1.6	1.5
16	1.1	5.7	10	18	112	305	137	47	17	9.3	1.7	1.4
17	1.1	5.7	10	17	89	182	129	44	17	9.7	1.6	1.3
18	1.0	5.7	9.8	16	76	146	119	41	17	8.3	2.8	1.2
19	1.0	6.0	9.7	15	89	150	111	41	17	7.5	8.0	1.2
20	1.1	6.2	9.5	15	130	177	107	40	17	6.7	8.4	1.3
21	1.1	8.7	9.5	14	93	276	102	39	16	6.2	7.3	1.2
22	1.2	24	10	13	78	460	97	38	15	5.6	7.0	1.2
23	1.3	16	9.6	13	70	257	95	37	14	4.9	5.6	1.1
24	1.5	12	8.4	13	65	277	117	35	15	4.5	4.4	1.0
25	1.7	11	9.4	13	60	1680	177	33	17	3.9	3.8	.90
26	1.8	11	9.2	13	55	625	135	33	16	3.7	3.3	.70
27	2.0	9.6	9.8	13	51	386	119	32	14	3.2	3.5	.70
28	8.7	9.1	15	12	49	278	108	31	13	2.7	3.7	.70
29	18	8.5	15	12	---	218	100	29	13	2.8	3.5	.70
30	9.2	8.2	13	11	---	185	94	28	12	2.9	3.3	.70
31	7.7	---	11	12	---	163	---	27	---	2.9	2.9	---
TOTAL	78.90	253.0	422.7	735.9	4760	8114	3914	1602	569	230.8	100.2	45.20
MEAN	2.55	8.43	13.6	23.7	170	262	130	51.7	19.0	7.45	3.23	1.51
MAX	18	24	58	140	1280	1680	188	95	27	12	8.4	3.2
MIN	.90	5.3	7.9	9.3	19	43	94	27	12	2.7	1.6	.70
AC-FT	156	502	838	1460	9440	16090	7760	3180	1130	458	199	90
CAL YR 1974 TOTAL	22066.60			MEAN 60.5	MAX 1070	MIN .80	AC-FT 43770					
WTR YR 1975 TOTAL	20825.70			MEAN 57.1	MAX 1680	MIN .70	AC-FT 41310					

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.

LOCATION.--Lat 38°30'01", long 121°02'39", in NW¼SE¼ sec.36, T.8 N., R.8 E., Sacramento County, on downstream side of midstream pier of highway bridge at Michigan Bar, 5.5 mi (8.8 km) southwest of Latrobe, and 12 mi (19 km) downstream from confluence of North and Middle Forks of Cosumnes River.

DRAINAGE AREA.--536 mi² (1,388 km²).

PERIOD OF RECORD.--October 1907 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 168.09 ft (51.234 m) above mean sea level. Prior to July 10, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--68 years, 487 ft³/s (13.792 m³/s), 352,800 acre-ft/yr (435 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,000 ft³/s (312 m³/s) Mar. 25 (gage height, 8.53 ft or 2.600 m); minimum daily, 21 ft³/s (0.59 m³/s) Sept. 28-30.

Period of record: Maximum discharge, 42,000 ft³/s (1,190 m³/s) Dec. 23, 1955 (gage height, 14.59 ft or 4.447 m); no flow at times in many years.

Flood in March 1907 reached a stage of 16.3 ft (4.97 m), discharge unknown.

REMARKS.--Records good. Flow partly regulated since January 1955 by Jenkinson Lake, usable capacity, 40,570 acre-ft (50.0 hm³/yr). Camino conduit above the station diverts water out of the basin (see REMARKS for sta 11333000). Numerous small diversions above station for irrigation and domestic use.

REVISIONS (WATER YEARS).--WSP 331: 1911-12. WSP 1315-A: 1908-9, 1911(N). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	77	54	75	135	436	1350	1210	1010	168	56	42
2	22	82	50	67	936	465	1200	1170	990	163	54	44
3	25	64	72	65	780	474	1120	1240	884	179	52	40
4	24	50	237	76	988	466	1140	1520	807	172	51	38
5	24	44	294	90	684	479	1760	1330	761	167	48	39
6	25	46	161	124	457	602	1840	1210	745	159	44	35
7	27	46	122	506	400	880	1620	1150	726	151	43	33
8	28	54	101	803	487	2420	1360	1150	659	144	41	31
9	28	77	89	636	4530	1710	1250	1230	590	135	40	30
10	29	61	83	335	3200	1270	1150	1360	540	132	39	30
11	34	51	78	255	1360	1070	1070	1400	500	123	41	30
12	34	47	76	208	908	876	1020	1570	485	115	42	33
13	32	44	79	181	2220	987	998	1690	452	107	40	34
14	28	43	94	165	1600	1180	1010	1830	428	105	38	32
15	27	43	85	154	1000	1120	1090	1910	407	102	37	31
16	27	43	78	146	758	1820	1030	1740	379	103	36	30
17	27	46	77	143	612	1240	974	1680	349	112	36	29
18	26	44	76	135	513	967	920	1760	315	108	39	28
19	26	45	75	131	541	870	870	1780	291	100	72	26
20	26	50	72	129	937	1070	846	1650	270	96	119	26
21	26	60	67	131	691	1110	844	1360	253	93	102	26
22	26	113	68	126	572	2800	881	1160	234	86	84	26
23	27	142	74	121	505	1580	930	1090	223	80	81	25
24	29	88	68	119	461	1530	992	1100	222	74	71	24
25	30	74	53	117	433	7000	1810	1160	243	77	64	23
26	33	78	64	117	418	3870	1620	1180	221	67	57	23
27	33	70	71	117	414	2530	1440	1150	207	64	52	22
28	53	61	98	113	413	2100	1310	1090	193	58	50	21
29	155	56	115	101	---	1770	1240	1050	182	57	48	21
30	122	53	96	107	---	1550	1210	1010	175	55	44	21
31	80	---	82	99	---	1430	---	980	---	56	42	---
TOTAL	1155	1852	2909	5692	26953	47672	35895	41910	13741	3408	1663	893
MEAN	37.3	61.7	93.8	184	963	1538	1197	1352	458	110	53.6	29.8
MAX	155	142	294	803	4530	7000	1840	1910	1010	179	119	44
MIN	22	43	50	65	135	436	844	980	175	55	36	21
AC-FT	2290	3670	5770	11290	53460	94560	71200	83130	27260	6760	3300	1770

CAL YR 1974 TOTAL 232905 MEAN 638 MAX 6530 MIN 21 AC-FT 462000
WTR YR 1975 TOTAL 183743 MEAN 503 MAX 7000 MIN 21 AC-FT 364500

Peak discharge (base, 4,000 ft³/s)
Date Time G.H. Discharge Date Time G.H. Discharge
2-9 1400 7.79 8,070 3-25 1030 8.53 11,000
3-22 0400 6.67 4,500

SAN JOAQUIN RIVER BASIN

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1953 (partial-record station), October 1953 to September 1963, water years 1964-74 (partial-record station), October 1974 to current year.
 Water temperatures: October 1962 to current year.
 Sediment records: Water years 1958-62 (partial-record station), October 1962 to September 1970, water years 1971-74 (partial-record station).

EXTREMES.--Current year:

Water temperatures: Maximum, 29.5°C July 26; minimum, 2.5°C Dec. 26, Jan. 2, 3.

Period of record:

Water temperatures: Maximum (1965 to current year), 30.0°C Aug. 26, 27, 1967; minimum (1963 to current year), 1.5°C on several days in 1965, 1968, and 1973.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
DEC. 05...	1100	295	6.7	--	4.7	--	43	0	35	--
APR. 25...	1100	2080	4.4	2.7	2.8	.9	32	0	26	2.3
JUNE 20...	1230	267	--	--	2.5	--	24	0	20	--
SEP. 15...	1140	31	6.4	2.7	3.6	.9	36	0	30	3.0

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	DIS-SOLVED BORON (B) (UG/L)
DEC. 05...	1.8	--	71	.10	56.6	34	0	--	--
APR. 25...	.0	.04	48	.07	270	22	0	.3	200
JUNE 20...	--	--	46	.06	33.2	20	0	.2	--
SEP. 15...	1.0	.02	60	.08	5.02	27	0	.3	0

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
OCT. 09...	1230	22	77	7.7	21.5	--	9.2
NOV. 15...	1300	44	88	7.3	13.5	--	10.6
DEC. 05...	1100	295	83	7.2	9.0	6	10.8
JAN. 21...	1045	132	98	7.3	6.5	--	12.3
MAR. 21...	0830	920	84	7.3	8.5	--	11.5
APR. 25...	1100	2080	59	7.2	10.0	21	11.4
MAY 12...	0845	1640	46	7.2	14.5	--	9.8
29...	1315	1130	40	7.2	18.5	--	9.2
JUNE 20...	1230	267	48	7.4	20.5	--	9.4
JULY 17...	1215	111	58	7.4	26.0	--	8.8
AUG. 07...	1400	42	63	7.9	26.5	0	8.6
SEP. 15...	1140	31	79	7.6	24.0	0	8.2

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	18.0	14.0	13.0	8.0	7.0	4.5	3.0	6.0	4.5	11.5	10.0
2	23.0	19.5	13.5	12.0	8.0	7.0	3.5	2.5	7.5	6.0	11.0	9.0
3	23.0	19.0	13.5	11.5	9.5	8.0	3.0	2.5	8.0	6.5	11.0	9.0
4	23.0	19.0	13.5	12.0	10.0	9.0	4.0	3.5	8.5	7.5	11.0	9.5
5	22.5	18.0	13.5	11.5	9.0	8.0	4.5	3.5	7.5	7.0	10.5	9.5
6	22.0	17.5	13.5	11.5	8.5	7.5	6.5	4.5	8.0	7.0	10.5	9.0
7	21.5	17.0	12.5	11.5	8.0	7.5	7.5	6.5	9.5	8.0	10.0	9.5
8	22.0	18.5	13.0	11.0	7.5	6.5	8.5	7.5	11.5	9.5	10.0	9.0
9	22.0	18.0	12.0	10.5	7.5	6.0	8.0	6.5	12.0	9.0	10.0	9.0
10	21.5	17.5	12.5	10.0	7.0	6.5	6.5	6.0	9.5	8.0	9.5	8.5
11	21.0	17.0	12.0	10.5	7.0	6.5	6.5	5.5	9.5	8.0	11.0	8.5
12	21.0	17.0	12.5	10.5	7.5	6.5	6.0	5.0	8.5	8.0	11.0	9.0
13	20.5	16.5	13.5	11.0	9.0	7.5	6.0	4.5	10.5	8.5	10.0	7.5
14	20.5	16.0	13.5	11.5	8.5	7.5	5.5	4.5	10.0	9.0	8.0	6.5
15	20.5	16.0	13.0	11.5	8.0	7.5	5.5	4.5	8.5	6.5	9.0	7.5
16	20.5	16.0	12.5	12.0	8.0	7.0	6.5	5.0	7.5	5.5	10.0	8.5
17	19.5	16.0	13.0	12.0	9.5	8.0	6.5	5.5	6.5	5.0	9.5	8.0
18	19.5	16.0	13.5	11.5	8.5	7.0	6.5	5.5	6.5	5.0	11.0	8.5
19	19.0	16.0	12.5	10.5	8.5	7.0	6.5	5.5	8.0	6.0	10.5	10.0
20	19.0	15.5	12.0	10.5	7.0	6.5	6.5	6.0	9.0	7.0	11.0	9.0
21	19.0	15.0	12.0	11.0	7.0	6.5	6.5	6.0	8.0	6.0	10.0	8.0
22	18.0	14.0	12.0	10.0	7.5	6.0	6.5	5.0	7.0	4.5	9.0	8.0
23	17.5	13.5	10.5	9.5	6.0	4.5	6.5	5.5	7.5	5.0	9.5	8.0
24	17.0	13.5	10.5	8.5	5.0	3.5	7.5	5.5	8.5	6.0	11.0	9.5
25	17.5	14.0	10.5	8.5	5.0	3.0	8.0	6.0	9.5	7.0	11.0	9.5
26	17.5	14.5	10.0	8.5	4.0	2.5	8.5	6.5	10.0	7.5	9.0	7.5
27	17.0	14.5	10.0	8.0	5.0	3.5	7.0	5.5	11.0	8.5	9.5	7.5
28	17.0	15.0	9.0	7.5	6.0	5.0	5.5	4.5	11.5	9.5	9.0	7.0
29	15.5	14.5	8.5	7.5	5.5	4.5	6.0	4.5	---	---	10.0	7.0
30	14.5	13.5	8.5	7.0	6.0	4.0	5.0	3.5	---	---	11.5	9.0
31	14.5	13.5	---	---	5.0	3.5	4.5	3.0	---	---	12.5	10.5
MONTH	23.0	13.5	14.0	7.0	10.0	2.5	8.5	2.5	12.0	4.5	12.5	6.5

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.5	13.5	10.5	19.0	17.0	22.5	19.5	26.5	23.5	25.5	21.0
2	11.0	8.5	14.0	11.5	18.5	16.5	22.5	19.5	27.5	23.5	25.0	21.0
3	11.0	10.0	13.0	10.5	18.5	16.0	22.5	19.5	28.0	24.0	25.5	21.5
4	9.5	8.5	11.0	8.5	19.5	17.0	22.0	20.0	28.0	24.0	26.0	21.5
5	9.0	7.5	10.5	7.5	20.5	18.0	23.0	19.5	28.0	24.0	26.5	22.5
6	8.0	6.5	12.5	9.0	20.5	18.5	24.5	21.0	27.5	23.0	27.0	22.5
7	8.0	7.5	13.5	10.0	20.0	18.0	25.0	22.0	27.0	22.0	27.5	22.0
8	9.5	7.5	14.5	11.5	20.0	18.0	25.5	22.0	27.0	22.0	26.5	22.0
9	11.0	7.5	15.0	12.0	20.5	18.5	26.0	23.0	27.5	22.5	27.0	23.0
10	11.5	9.0	14.5	12.0	21.5	18.5	26.0	23.5	28.0	22.5	26.0	22.0
11	12.0	10.0	15.0	12.5	21.5	19.0	27.0	23.0	28.0	23.0	25.5	21.0
12	12.5	10.0	15.5	12.0	22.0	19.0	27.0	23.0	28.0	23.0	26.0	21.0
13	13.5	11.0	16.0	13.5	23.0	20.0	27.0	23.0	27.5	23.0	26.5	21.0
14	13.0	10.5	15.0	13.5	23.5	20.5	27.0	23.0	27.0	22.0	26.0	20.5
15	10.5	9.0	14.0	12.5	23.0	21.0	24.5	22.5	27.5	22.0	26.0	20.5
16	10.0	7.5	14.5	11.5	22.5	20.5	25.5	22.0	27.5	22.0	26.0	20.5
17	10.5	7.5	16.0	13.0	22.0	20.0	26.5	23.0	27.0	22.0	26.5	21.5
18	11.5	9.0	16.5	14.0	22.0	19.5	26.5	23.0	24.0	21.5	26.0	22.0
19	13.0	10.5	16.0	13.5	20.0	19.0	26.5	22.5	25.0	21.5	26.0	21.0
20	13.0	11.0	14.5	12.5	21.0	18.0	27.0	23.0	25.0	21.5	25.5	20.0
21	14.0	12.0	14.0	11.0	22.0	19.0	27.0	23.0	24.5	23.0	26.0	21.0
22	13.0	11.0	15.0	11.5	23.0	20.0	27.5	23.0	25.0	21.5	26.0	20.5
23	12.0	10.0	16.5	13.0	22.0	20.0	28.0	24.0	26.0	22.0	25.5	20.0
24	12.0	11.0	17.5	14.5	21.0	19.0	28.5	24.5	26.5	23.0	25.5	20.5
25	10.5	9.5	17.5	15.0	20.5	17.5	29.0	25.0	27.0	24.0	25.0	20.5
26	9.5	7.0	17.5	14.5	21.5	18.0	29.5	25.5	26.5	23.5	25.0	19.5
27	11.5	8.0	17.5	14.5	22.0	19.0	29.0	25.5	25.5	22.5	24.0	18.5
28	12.5	9.5	18.0	15.0	23.0	19.5	28.0	25.0	25.5	22.0	23.5	18.0
29	13.0	10.0	18.0	15.0	23.5	20.5	27.5	24.5	25.5	22.0	23.0	17.5
30	13.0	10.5	18.5	15.5	23.0	20.5	26.5	23.0	25.5	21.5	22.5	17.5
31	---	---	19.0	16.5	---	---	26.0	22.5	25.5	21.5	---	---
MONTH	14.0	6.5	19.0	7.5	23.5	16.0	29.5	19.5	28.0	21.5	27.5	17.5

SAN JOAQUIN RIVER BASIN

11335700 DEER CREEK NEAR SLOUGHHOUSE, CALIF.

LOCATION.--Lat 38°33'06", long 121°06'30", in NW¼NW¼ sec.16, T.8 N., R.8 E., Sacramento County, on right bank 0.2 mi (0.3 km) upstream from Scott Road, 0.4 mi (0.6 km) upstream from Little Deer Creek, and 5.9 mi (9.5 km) northeast of Sloughhouse.

DRAINAGE AREA.--46.0 mi² (119.1 km²).

PERIOD OF RECORD.--November 1959 to September 1966, October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft (49 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 28.6 ft³/s (0.81 m³/s), 20,720 acre-ft/yr (25.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,340 ft³/s (37.9 m³/s) Feb. 13 (gage height, 9.45 ft or 2.880 m); no flow for several months.

Period of record: Maximum discharge, 6,560 ft³/s (186 m³/s) Oct. 13, 1962 (gage height, 12.86 ft or 3.920 m, from floodmarks), from rating curve extended above 2,200 ft³/s (62.3 m³/s); no flow for several months in each year.

REMARKS.--No known regulation or diversion above station.

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

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1.5	5.3	22	9.4	29	11	.30			
2		3.1	1.5	4.7	352	11	25	11	.30			
3		2.8	6.4	4.7	165	9.3	24	10	.40			
4		2.1	25	4.7	323	8.5	26	14	.30			
5		1.6	11	5.1	94	12	89	12	.30			
6		1.4	6.1	22	51	25	89	9.7	.30			
7		1.6	5.8	79	58	30	52	9.9	.10			
8		2.3	5.3	165	93	71	39	9.0	.10			
9		4.9	4.7	51	522	38	34	7.4	0			
10		2.8	4.3	31	304	31	30	6.3	0			
11		2.0	4.3	22	148	30	29	5.7	0			
12		1.7	4.7	16	150	24	26	5.8	0			
13		1.5	5.3	13	776	139	24	5.5	0			
14		1.3	5.8	11	152	161	23	4.7	0			
15		1.3	5.3	10	49	102	28	4.4	0			
16		1.3	4.7	8.4	34	174	26	4.5	0			
17		1.3	4.7	7.3	27	63	26	4.6	0			
18		1.4	4.3	6.6	21	46	17	3.8	0			
19		1.5	4.3	6.4	49	39	15	3.2	0			
20		1.7	4.3	6.3	72	40	14	2.8	0			
21		3.8	4.3	6.4	32	175	14	2.7	0			
22		25	4.3	6.4	23	329	13	2.4	0			
23		8.0	4.7	6.1	18	88	13	2.0	0			
24		4.4	3.8	5.8	15	127	16	1.9	0			
25		3.4	3.4	5.8	14	497	43	1.7	0			
26		3.2	4.3	5.8	12	144	25	1.6	0			
27		2.5	4.7	5.6	10	63	19	1.4	0			
28		2.1	5.8	5.3	9.3	45	15	1.1	0			
29		1.9	6.4	5.1	---	38	13	.80	0			
30		1.8	5.8	4.8	---	34	12	.50	0			
31		---	5.3	5.5	---	31	---	.40	---			---
TOTAL	0	93.7	172.1	542.1	3595.3	2634.2	848	161.80	2.10	0	0	0
MEAN	0	3.12	5.55	17.5	128	85.0	28.3	5.22	.070	0	0	0
MAX	0	25	25	165	776	497	89	14	.40	0	0	0
MIN	0	0	1.5	4.7	9.3	8.5	12	.40	0	0	0	0
AC-FT	0	186	341	1080	7130	5220	1680	321	4.2	0	0	0

CAL YR 1974 TOTAL 11403.20 MEAN 31.2 MAX 861 MIN 0 AC-FT 22620
WTR YR 1975 TOTAL 8049.30 MEAN 22.1 MAX 776 MIN 0 AC-FT 15970

11336000 COSUMNES RIVER AT McCONNELL, CALIF.

LOCATION.--Lat 38°21'29", long 121°20'34", in NE¼NE¼ sec.20, T.6 N., R.6 E., Sacramento County, on downstream side of bridge on U.S. Highway 99, 0.2 mi (0.3 km) south of McConnell, 1 mi (2 km) downstream from Deer Creek, and 7 mi (11 km) north of Galt.

DRAINAGE AREA.--724 mi² (1,875 km²).

PERIOD OF RECORD.--October 1941 to current year. Monthly figures only for some periods, published in WSP 1315-A. Gage heights only during high-water periods 1931-40, in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 3.34 ft (1.018 m) below mean sea level.

AVERAGE DISCHARGE.--34 years, 553 ft³/s (15.66 m³/s), 400,600 acre-ft/yr (494 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,600 ft³/s (215 m³/s) Mar. 26 (gage height, 42.79 ft or 13.042 m); no flow for many days.

Period of record (1943 to current year): Maximum discharge, 54,000 ft³/s (1,530 m³/s) Dec. 23, 1955 (gage height, 46.26 ft or 14.100 m), from rating curve extended above 36,000 ft³/s (1,020 m³/s); no flow for parts of each year.

Flood of Feb. 23, 24, 1936, reached a stage of 45.94 ft (14.003 m), discharge unknown.

REMARKS.--Records good except those for the summer months, which are poor. Diversions for irrigation of 2,100 acres (8.50 km²) between stations at Michigan Bar and at McConnell.

REVISIONS (WATER YEARS).--WSP 1315-A: 1947(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	59	39	52	92	426	1410	1110	931	104	2.0	.70
2	0	59	39	44	402	450	1260	1070	925	105	1.9	.40
3	0	56	46	40	1580	459	1140	1090	841	104	1.9	.23
4	0	42	60	38	1130	458	1120	1350	757	122	1.9	.06
5	0	30	306	49	1490	456	1570	1260	692	113	1.9	.74
6	0	25	191	58	692	539	1960	1130	664	100	1.9	1.6
7	0	28	119	229	499	601	1860	1050	650	93	1.9	1.3
8	0	32	90	516	634	2200	1460	1020	602	87	1.9	.58
9	0	36	73	855	2270	2270	1310	1080	533	78	1.9	.30
10	0	52	64	471	5270	1460	1190	1180	468	69	1.9	.17
11	0	39	57	306	2280	1190	1090	1250	432	60	1.9	.01
12	0	32	52	239	1220	965	1010	1390	416	54	1.9	.23
13	0	28	51	195	2270	887	962	1510	393	64	1.9	.49
14	0	25	54	168	3280	1930	942	1650	365	55	1.9	.21
15	0	23	64	152	1570	1580	1010	1780	350	45	1.9	0
16	0	24	56	138	979	1830	990	1670	331	46	1.9	0
17	0	25	49	131	754	1710	937	1570	307	47	1.9	0
18	0	28	48	127	606	1160	882	1610	282	51	1.9	0
19	0	24	47	118	530	968	825	1660	248	45	48	0
20	0	25	46	114	952	1070	788	1590	223	40	103	0
21	0	33	42	111	910	1020	772	1370	201	36	84	0
22	0	46	40	112	655	3200	796	1110	194	29	55	0
23	0	120	42	104	557	2570	838	1010	177	14	26	0
24	0	96	45	101	503	1730	891	1010	167	13	22	0
25	0	65	39	98	466	4100	1520	1050	170	10	17	0
26	0	56	30	97	441	6340	1630	1080	98	8.1	8.2	0
27	0	58	39	98	430	3270	1410	1070	152	2.8	4.0	0
28	0	50	54	100	417	2510	1260	1020	64	2.6	3.0	.01
29	45	44	75	93	---	2010	1170	980	79	2.5	2.2	.24
30	122	41	74	82	---	1690	1120	943	106	2.3	1.6	.32
31	87	---	58	87	---	1510	---	918	---	2.1	1.0	---
TOTAL	254	1301	2089	5123	32879	52559	35123	38581	11818	1604.4	409.3	7.59
MEAN	8.19	43.4	67.4	165	1174	1695	1171	1245	394	51.8	13.2	.25
MAX	122	120	306	855	5270	6340	1960	1780	931	122	103	1.6
MIN	0	23	30	38	92	426	772	918	64	2.1	1.0	0
AC-FT	504	2580	4140	10160	65220	104300	69670	76530	23440	3180	812	15
CAL YR 1974	TOTAL	240226.20	MEAN	658	MAX	7120	MIN	0	AC-FT	476500		
WTR YR 1975	TOTAL	181748.29	MEAN	498	MAX	6340	MIN	0	AC-FT	360500		

Peak discharge (base, 3,600 ft³/s)

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-10	0430	41.90	6,440	3-26	0730	42.79	7,600
3-22	1400	39.91	4,380				

11336580 MORRISON CREEK NEAR SACRAMENTO, CALIF.

LOCATION.--Lat 38°29'55", long 121°27'06", in SW¼SE¼ sec.32, T.8 N., R.5 E., Sacramento County, on right bank 750 ft (229 m) upstream from Florin Road, 1.6 mi (2.6 km) upstream from Elder Creek, and 2 mi (3.2 km) south of Sacramento city limits.

DRAINAGE AREA.--53.4 mi² (138.3 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 7.60 ft (2.316 m) above mean sea level. Prior to June 29, 1960, at site 650 ft (198 m) downstream at datum 1.55 ft (0.472 m) higher. June 29, 1960, to Sept. 12, 1965, at site 475 ft (144.8 m) upstream at datum 2.71 ft (0.826 m) higher.

AVERAGE DISCHARGE.--16 years, 18.6 ft³/s (0.527 m³/s), 13,480 acre-ft/yr (16.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 946 ft³/s (26.8 m³/s) Feb. 13 (gage height, 6.02 ft or 1.835 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Sept. 14.
Period of record: Maximum discharge, 1,610 ft³/s (45.6 m³/s) Jan. 26, 1969 (gage height, 8.53 ft or 2.600 m); no flow at times in 1960, 1962, 1965.

REMARKS.--Records fair. No regulation or diversion above station. Summer flow is sustained by waste water from domestic and industrial use.

REVISIONS.--WRD Calif. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	8.5	2.6	2.4	70	3.0	2.3	4.9	5.8	8.7	6.6	4.4
2	7.4	5.4	11	1.6	174	2.2	2.3	4.0	7.0	7.5	5.0	6.4
3	6.4	3.9	110	3.1	66	2.6	2.1	3.8	8.3	7.3	3.6	6.9
4	6.7	5.0	42	2.2	117	2.8	2.6	3.9	9.3	4.1	6.2	6.7
5	6.4	4.7	12	1.6	39	22	70	4.6	9.6	3.5	6.8	8.3
6	5.9	4.2	7.7	15	23	15	102	5.4	9.7	4.1	7.1	6.9
7	6.8	22	4.8	7.4	47	40	43	5.8	7.5	5.8	7.7	4.3
8	6.8	8.3	3.5	8.4	93	138	21	6.1	5.7	7.2	10	6.0
9	6.5	7.2	5.0	5.7	285	43	12	6.4	6.6	6.1	7.1	6.6
10	7.6	5.1	6.0	5.4	104	39	9.4	4.7	8.3	5.5	6.4	5.3
11	7.6	5.1	6.5	2.6	41	31	6.9	4.3	8.1	5.4	10	4.0
12	4.2	6.7	6.2	2.0	130	20	4.6	5.2	9.3	4.2	16	4.3
13	3.9	4.6	6.5	4.4	523	159	4.7	5.4	8.4	3.8	15	2.2
14	2.9	4.5	4.3	5.4	158	70	5.7	4.6	6.2	5.0	17	1.2
15	5.0	4.4	4.0	5.2	37	21	6.4	4.4	6.2	5.7	16	2.3
16	5.2	2.6	6.1	5.7	17	52	9.3	5.7	6.3	4.8	7.7	3.4
17	5.0	1.6	6.5	5.1	10	25	6.7	4.7	6.3	5.0	4.2	4.1
18	5.2	5.5	6.6	2.1	8.4	15	4.8	4.7	6.6	4.0	45	4.9
19	3.3	5.1	6.7	1.8	33	12	3.7	5.1	4.3	3.1	26	4.2
20	2.0	5.2	5.2	4.1	25	11	3.7	4.5	5.2	2.8	22	2.8
21	5.1	37	3.5	5.1	14	118	3.9	5.0	4.0	4.2	12	1.8
22	5.7	12	3.0	5.3	7.0	160	4.0	4.6	3.5	3.5	11	3.9
23	5.3	6.0	3.2	5.5	4.7	10	4.8	5.1	5.6	4.2	6.6	5.1
24	5.5	4.1	3.1	5.1	4.5	40	11	5.4	9.2	5.7	6.4	6.6
25	6.6	8.5	2.6	2.9	3.9	133	5.0	4.4	10	4.8	11	6.5
26	6.0	6.9	2.8	2.1	3.3	10	3.8	3.8	8.8	3.3	12	6.4
27	35	6.5	48	3.8	3.3	2.5	3.9	6.0	9.1	2.2	12	3.8
28	37	4.0	150	10	3.4	2.3	4.2	5.9	7.2	2.9	13	3.3
29	11	2.7	20	6.1	---	2.3	4.9	6.3	6.8	3.6	11	5.7
30	7.2	2.5	4.5	4.6	---	2.3	5.1	7.1	8.3	5.0	6.4	5.6
31	26	---	2.4	32	---	2.2	---	6.6	---	6.1	4.8	---
TOTAL	262.6	209.8	506.3	173.7	2044.5	1206.2	373.8	158.4	217.2	149.1	351.6	143.9
MEAN	8.47	6.99	16.3	5.60	73.0	38.9	12.5	5.11	7.24	4.81	11.3	4.80
MAX	37	37	150	32	523	160	102	7.1	10	8.7	45	8.3
MIN	2.0	1.6	2.4	1.6	3.3	2.2	2.1	3.8	3.5	2.2	3.6	1.2
AC-FT	521	416	1000	345	4060	2390	741	314	431	296	697	285
CAL YR 1974	TOTAL	6020.55	MEAN	16.5	MAX	234	MIN	.79	AC-FT	11940		
WTR YR 1975	TOTAL	5797.10	MEAN	15.9	MAX	523	MIN	1.2	AC-FT	11500		

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
12-28	0500	3.67	364	3-13	1500	4.05	442
2-2	0300	4.02	435	3-22	unknown	--	unknown
2-9	0100	4.73	610	3-25	unknown	5.39	773
2-13	0730	6.02	946				

11337000 CONTRA COSTA CANAL NEAR OAKLEY, CALIF.

LOCATION.--Lat 37°59'44", long 121°42'03", in NW¼NE¼ sec.25, T.2 N., R.2 E., Contra Costa County, at pumping plant No. 1, 0.7 mi (1.1 km) east of Oakley, and 2.6 mi (4.2 km) northwest of Knightsen.

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

GAGE.--Recording flowmeters on pumps. Prior to Jan. 1, 1953, water-stage recorder at site 3.2 mi (5.1 km) downstream at datum 121.72 ft (37.100 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--25 years, 93.7 ft³/s (2.654 m³/s), 67,890 acre-ft/yr (83.7 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 255 ft³/s (7.22 m³/s) June 23, 1972; minimum daily, 4.0 ft³/s (0.11 m³/s) Jan. 20, 1970.

REMARKS.--Water is diverted from Sacramento-San Joaquin Delta by way of Old River, Rock Slough, and a dredged channel. A series of four pumping plants lifts the water 115 ft (35.1 m) into the canal. Water is used for municipal, agricultural, and industrial purposes. The canal is a part of the Central Valley Project.

COOPERATION.--Records of daily discharge furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	123	66	59	98	73	82	94	136	144	184	146
2	91	97	63	62	91	71	80	88	133	146	185	146
3	91	81	58	63	94	80	82	85	130	159	186	154
4	83	80	58	60	99	81	79	87	130	163	177	150
5	86	78	59	59	103	79	82	100	168	159	170	156
6	84	76	58	61	103	74	91	92	183	160	169	157
7	86	74	61	61	84	73	93	89	175	166	174	155
8	89	71	60	61	81	68	88	99	179	175	174	153
9	87	70	58	63	79	67	90	99	205	179	178	145
10	83	68	62	64	93	75	92	103	217	181	178	143
11	80	71	61	57	86	89	85	114	209	185	180	138
12	85	72	63	58	84	98	82	123	234	184	182	129
13	81	69	61	65	80	75	83	117	178	182	183	127
14	106	75	60	61	78	72	87	114	204	170	176	126
15	116	63	58	67	76	70	92	112	200	173	181	125
16	116	67	60	67	70	76	92	112	201	167	167	134
17	112	65	60	67	74	71	86	116	182	183	168	136
18	110	64	62	68	75	69	89	127	148	177	162	136
19	121	69	61	66	78	70	82	122	157	171	160	138
20	93	69	60	63	76	68	84	113	159	174	165	129
21	91	68	53	67	76	68	102	115	153	177	166	127
22	94	66	58	65	72	61	109	112	150	189	167	132
23	94	62	61	63	74	59	103	112	151	182	168	133
24	93	63	57	63	82	66	116	124	144	185	170	136
25	111	64	55	62	79	74	102	122	143	190	166	134
26	93	63	60	60	78	70	112	125	143	190	167	139
27	111	63	58	66	78	72	126	125	149	187	166	138
28	108	63	56	86	79	76	152	122	150	183	164	124
29	124	60	57	97	---	71	152	130	151	178	158	122
30	122	61	60	104	---	72	113	137	144	178	157	101
31	112	---	56	101	---	82	---	136	---	180	155	---
TOTAL	3043	2135	1840	2086	2320	2270	2908	3466	5006	5417	5303	4109
MEAN	98.2	71.2	59.4	67.3	82.9	73.2	96.9	112	167	175	171	137
MAX	124	123	66	104	103	98	152	137	234	190	186	157
MIN	80	60	53	57	70	59	79	85	130	144	155	101
AC-FT	6040	4230	3650	4140	4600	4500	5770	6870	9930	10740	10520	8150
CAL YR 1974	TOTAL	39549	MEAN 108	MAX 223	MIN 38	AC-FT	78450					
WTR YR 1975	TOTAL	39903	MEAN 109	MAX 234	MIN 53	AC-FT	79150					

11337500 MARSH CREEK NEAR BYRON, CALIF.

LOCATION.--Lat 37°52'24", long 121°43'34", in Los Meganos Grant, Contra Costa County, on right bank 40 ft (12 m) downstream from highway bridge on Marsh Creek Road, 1.2 mi (1.9 km) upstream from Marsh Creek Dam, and 5.0 mi (8.0 km) west of Byron.

DRAINAGE AREA.--42.6 mi² (110.3 km²).

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

GAGE.--Water-stage recorder and concrete control (control ineffective since 1972 due to gravel fill). Datum of gage is 177.87 ft (54.215 m) above mean sea level.

AVERAGE DISCHARGE.--22 years, 8.56 ft³/s (0.242 m³/s), 6,200 acre-ft/yr (7.64 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 465 ft³/s (13.2 m³/s) Mar. 21 (gage height, 5.87 ft or 1.789 m); no flow for long periods.

Period of record: Maximum discharge, 3,880 ft³/s (110 m³/s) Jan. 31, 1963 (gage height, 11.62 ft or 3.542 m), from rating curve extended above 880 ft³/s (24.9 m³/s) on basis of slope-area measurement at gage height 10.90 ft (3.322 m); maximum gage height, 12.98 ft (3.956 m) Dec. 23, 1955; no flow for long periods in each year.

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

REVISIONS (WATER YEARS).--WSP 1635: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	1.5	16	7.8				
2					2.2	1.4	14	6.6				
3					2.2	1.3	13	5.9				
4					7.0	1.1	17	5.7				
5					3.9	1.1	46	5.5				
6					2.5	2.8	39	5.2				
7					2.3	8.3	26	4.9				
8					3.0	16	67	4.7				
9					30	9.7	36	4.5				
10					45	18	29	4.2				
11					21	16	25	4.0				
12					13	10	21	3.7				
13					72	59	20	3.5				
14					37	40	19	2.5				
15					19	26	17	2.5				
16					14	59	17	2.6				
17					9.6	25	19	2.3				
18					7.3	20	15	2.1				
19					6.3	17	13	1.8				
20					9.0	13	13	1.3				
21					5.8	56	12	1.6				
22					4.2	141	11	1.3				
23					3.6	50	11	1.3				
24					3.3	39	11	1.1				
25					2.8	131	13	1.3				
26					2.3	55	11	.92				
27					2.0	38	9.6	.72				
28					1.8	29	9.1	.24				
29					---	23	8.9	0				
30					---	20	8.6	0				
31		---			---	18	---	0	---			---
TOTAL	0	0	0	0	332.1	946.2	587.2	89.78	0	0	0	0
MEAN	0	0	0	0	11.9	30.5	19.6	2.90	0	0	0	0
MAX	0	0	0	0	72	141	67	7.8	0	0	0	0
MIN	0	0	0	0	0	1.1	8.6	0	0	0	0	0
AC-FT	0	0	0	0	659	1880	1160	178	0	0	0	0
CAL YR 1974	TOTAL	2793.14	MEAN 7.65	MAX 173	MIN 0	AC-FT 5540						
WTR YR 1975	TOTAL	1955.28	MEAN 5.36	MAX 141	MIN 0	AC-FT 3880						

Date	Time	G.H.	Discharge	Date	Time	G.H.	Discharge
2-13	1215	4.53	144	3-21	2400	5.87	465
3-13	1345	4.82	198	3-25	0700	5.37	325

Peak discharge (base, 140 ft³/s)

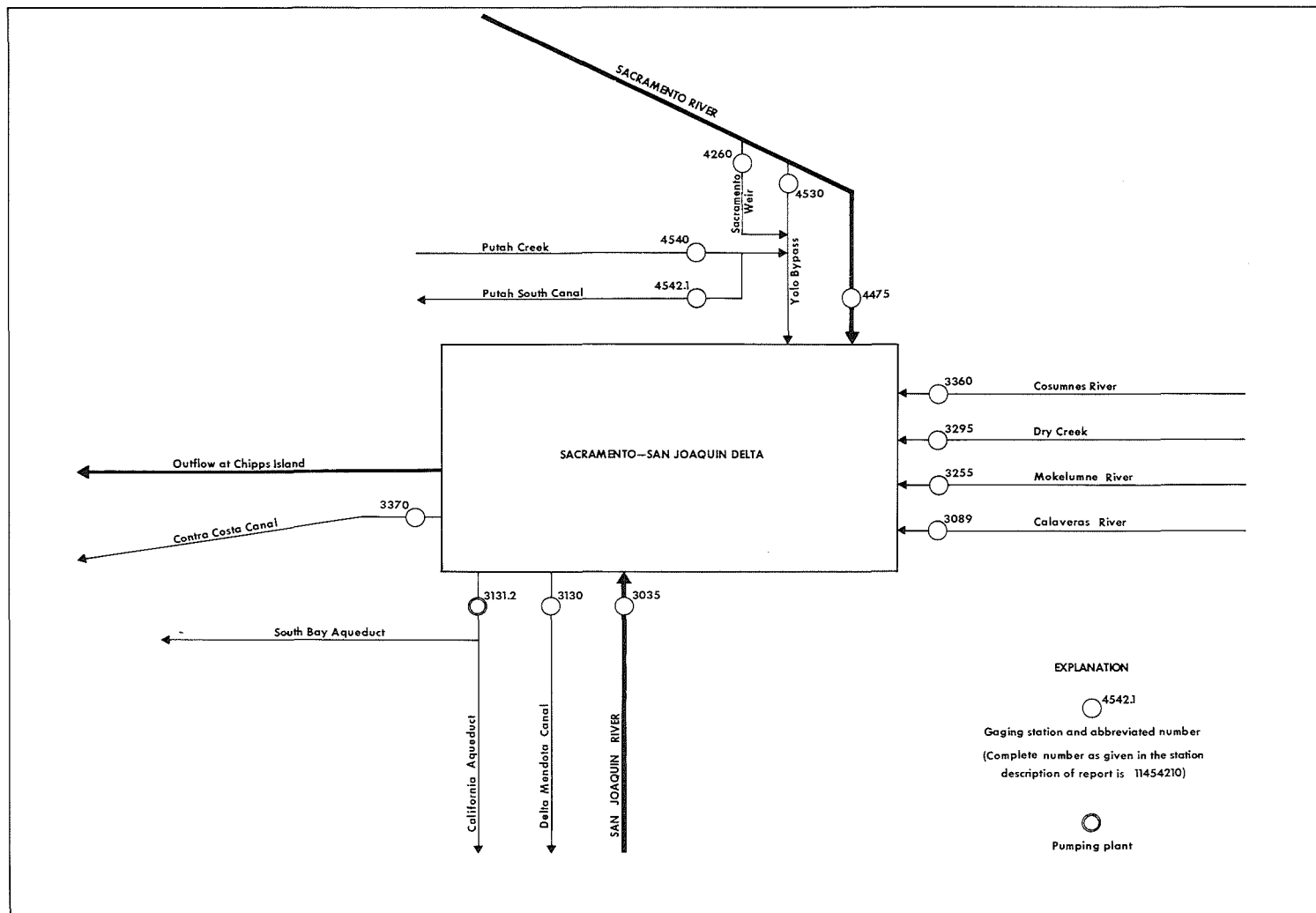


FIGURE 12.--Schematic diagram showing principal inflows and diversions, Sacramento-San Joaquin Delta.

LOCATION.--See schematic diagram of inflows and diversions, Sacramento-San Joaquin Delta.

DRAINAGE AREA.--Total drainage area of inflow streams tabulated below is 39,699 mi² (102,820 km²).

PERIOD OF RECORD.--October 1971 to current year. Data for periods prior to October 1971, can be obtained from published records for stations tabulated below.

COOPERATION.--Records for Delta-Mendota, Contra Costa, and Putah South Canals furnished by Bureau of Reclamation, California Aqueduct by California Department of Water Resources.

SUMMARY OF PRINCIPAL INFLOWS AND DIVERSIONS IN THE
SACRAMENTO-SAN JOAQUIN DELTA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Inflows, in thousands of acre-feet												
Month												Water year
Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
11303500 SAN JOAQUIN RIVER NEAR VERNALIS												
215.0	231.5	255.9	231.6	345.0	349.5	235.5	244.2	339.6	105.7	103.3	157.8	2,815
11308900 CALAVERAS RIVER BELOW NEW HOGAN DAM												
3.04	21.41	25.69	1.81	5.41	99.77	3.64	10.17	11.26	12.63	11.90	7.95	214.7
11325500 MOKELUMNE RIVER AT WOODBRIDGE												
39.30	26.15	11.32	5.47	4.24	28.30	60.59	55.33	46.45	25.68	26.68	33.52	363.0
11329500 DRY CREEK NEAR GALT												
0	.22	.84	1.89	34.66	42.86	14.55	3.47	.21	.05	.07	.06	98.88
11336000 COSUMNES RIVER AT McCONNELL												
.50	2.58	4.14	10.16	65.22	104.3	69.67	76.53	23.44	3.48	6.80	.02	366.8
11426000 SACRAMENTO WEIR SPILL												
0	0	0	0	.68	1.98	0	0	0	0	0	0	2.66
11447500 SACRAMENTO RIVER AT SACRAMENTO												
1,237	1,309	1,577	1,195	2,639	3,132	1,974	1,861	1,411	1,124	1,199	1,213	19,870
11453000 YOLO BYPASS NEAR WOODLAND												
.71	.37	6.70	1.07	211.2	503.0	77.35	15.11	.49	.20	.07	6.33	822.6
11454000 PUTAH CREEK NEAR WINTERS												
16.55	4.10	2.91	3.27	3.25	65.42	39.29	41.88	44.72	44.90	41.89	28.51	336.7
Total	1,512	1,595	1,884	1,450	3,309	4,327	2,475	2,308	1,877	1,317	1,390	24,890

Diversions, in thousands of acre-feet													
Month													Water year
Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
11313000 DELTA-MENDOTA CANAL													
211.5	0	.63	165.2	232.6	231.2	250.8	242.9	237.8	283.6	276.1	216.5	2,349	
11313120 CALIFORNIA AQUEDUCT (DELTA PUMPING PLANT)													
62.16	111.0	170.8	166.9	135.4	137.0	117.5	93.43	12.29	16.50	253.5	233.4	1,510	
11337000 CONTRA COSTA CANAL													
6.04	4.23	3.65	4.14	4.60	4.50	5.77	6.87	9.93	10.74	10.52	8.15	79.14	
11454210 PUTAH SOUTH CANAL													
14.30	2.20	1.56	1.73	1.22	3.41	18.40	38.30	40.36	38.40	36.85	25.80	222.5	
Total	294.0	117.4	176.6	338.0	373.8	376.11	392.5	381.5	300.4	349.2	577.0	483.8	4,161

NOTE.--Minor inflow streams and diversions are not included.

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. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same or practically the same site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
PYRAMID AND WINNEMUCCA LAKE BASINS						
10336615	Glenn Alpine Creek near Meyers, Nevada	SE¼SW¼ sec.14, T.12 N., R.17 E., El Dorado County, Eldorado National Forest, on downstream side of road bridge 500 ft (152 m) above mouth, 3.5 mi (5.6 km) northwest of Meyers, and 4.1 mi (6.6 km) southwest of Camp Richardson.	10.8	1974-75	7-8-74	a 45.2
					7-24-74	a 25.3
					9-3-74	a 1.82
					10-2-74	.81
					11-6-74	1.20
					3-27-75	14.9
					6-11-75	171
10336760	Edgewood Creek at Stateline, Nevada	NE¼NE¼ sec.27, T.13 N., R.18 E., Douglas County, on upstream side of culvert on U.S. High- way 50 and 0.5 mi (0.8 km) northeast of Stateline.	5.5	1967-74b 1975	12-10-74	4.25
					1-23-75	4.86
					3-21-75	5.44
					5-19-75	16.2
					6-20-75	5.16
					7-25-75	c 3.77
					9-17-75	c 2.76
SAN JOAQUIN RIVER BASIN						
11264700	Porcupine Creek at Porcupine Flat Campgrounds, near Yosemite Village	NE¼SW¼ sec.33, T.1 S., R.22 E., Mariposa County, in Yosemite National Park, at Porcupine Flat Campgrounds, 1,500 ft (457 m) downstream from high- way bridge, and 4.1 mi (6.6 km) northeast of Yosemite Village.	3.60	1970-75	8-29-75	c .37
					9-19-75	c .30
11265000	Tenaya Creek near Yosemite	Unsurveyed, Mariposa County, in Yosemite National Park, at bridge 0.7 mi (1.1 km) upstream from mouth and 1.7 mi (2.7 km) east of Yosemite National Park headquarters.	47	1904-9d 1912-58d 1961 1966-71 1974-75	9-29-75	c 1.78
11265700	Yosemite Creek at Yosemite Creek Campgrounds, near Yosemite Village	SW¼NE¼ sec.30, T.1 S., R.22 E., Mariposa County, in Yosemite National Park, at Yosemite Creek Campgrounds and 5.6 mi (9.0 km) north of Yosemite Village.	18.5	1970-75	8-29-75	c 1.00
					9-19-75	c .24
11266200	Sentinel Creek near Yosemite Village	Unsurveyed, T.2 S., R.22 E., Mariposa County, in Yosemite National Park, 200 ft (61 m) downstream from Deer Meadows, 1.3 mi (2.1 km) southeast of Glacier Point Hotel, and 2.3 mi (3.7 km) south of Yosemite Village.	1.40	1971-75	7-29-75	0
11266600	Cascade Creek near El Portal	NW¼SW¼ sec.19, T.2 S., R.21 E., Mariposa County, in Yosemite National Park, 200 ft (61 m) upstream from unnamed trib- utary, 6.2 mi (10.0 km) north- east of El Portal, and 6.5 mi (10.5 km) west of Yosemite Village.	10.3	1971-75	8-29-75	c .55
					9-19-75	c .22

See footnotes at end of table.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
SAN JOAQUIN RIVER BASIN--Continued						
11266700	Tamarack Creek at Tamarack Flat Campground, near El Portal	NE¼NW¼ sec.23, T.2 S., R.20 E., Mariposa County, in Yosemite National Park, at culvert on Big Oak Flat Road at Tamarack Flat Campground, 5.7 mi (9.2 km) northeast of El Portal, and 8.2 mi (13.2 km) west of Yosemite Village.	4.31	1970-75	8-29-75 9-19-75	c 1.33 c .83
11266800	Wildcat Creek near El Portal	SE¼SW¼ sec.25, T.2 S., R.20 E., Mariposa County, in Yosemite National Park, upstream from highway bridge and 4.9 mi (7.9 km) northeast of El Portal.	1.24	1971-75	8-28-75 9-22-75	c .18 c .11
11266900	Crane Creek above diversion dam, near El Portal	SE¼SW¼ sec.34, T.2 S., R.20 E., Mariposa County, in Yosemite National Park, 40 ft (12 m) upstream from head of diver- sion ditch and 2.8 mi (4.5 km) northeast of El Portal.	8.10	1964-75e	8-28-75 9-22-75	c 1.89 c 1.28
11267000	Little Crane Creek near El Portal	NW¼NE¼ sec.32, T.2 S., R.20 E., Mariposa County, Stanislaus National Forest, on left bank 80 ft (24 m) upstream from Little Nellie Falls and 3.2 mi (5.1 km) north of El Portal.	1.31	1971-73 1975	8-20-75 9-22-75	c .39 c .23
11267100	Moss Creek near El Portal	SE¼NW¼ sec.25, T.2 S., R.19 E., Mariposa County, in Stanislaus National Forest, 120 ft (37 m) downstream from road crossing, 300 ft (91 m) downstream from unnamed tributary, and 4.7 mi (7.6 km) northwest of El Portal.	4.45	1971-75	8-20-75 9-22-75	c 1.44 c .64
11279400	Smoky Jack Creek at Smoky Jack Campground, near Yosemite Village	NW¼NW¼ sec.31, T.1 S., R.21 E., Tuolumne County, in Yosemite National Park, 12 ft (4 m) downstream from culvert on Tioga Road, 8.5 mi (13.7 km) northeast of Yosemite Village, and 10.6 mi (17.1 km) northeast of El Portal.	4.15	1970-75	8-29-75 9-19-75	c .16 c .16

a Not previously published.

b Published in Water Resources Data for Nevada.

c Base flow.

d Operated as a continuous-record gaging station.

e Published as miscellaneous measurements 1964-70.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for the current water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been obtained.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
BUENA VISTA LAKE BASIN							
11185300	Golden Trout Creek near Cartago	NW¼SW¼ sec.10, T.18 S., R.34 E., Tulare County, Inyo National Forest, 0.5 mi (0.8 km) upstream from Tunnel Ranger Station and 15 mi (24 km) west of Cartago.	23.6	1956-67a 1969a 1970 1972-75	5-13-75	2.85	120
11185350	Kern River near Quaking Aspen Camp	SW¼SW¼ sec.32, T.20 S., R.33 E., Tulare County, Sequoia National Forest, 0.4 mi (0.6 km) upstream from Little Kern River and 6.8 mi (10.9 km) east of Quaking Aspen Camp.	530	1960-74a 1975	5-13-75	6.67	2,990
11185400	Little Kern River near Quaking Aspen Camp	SE¼SE¼ sec.31, T.20 S., R.33 E., Tulare County, Sequoia National Forest, 600 ft (183 m) upstream from mouth and 5 mi (8 km) east of Quaking Aspen Camp.	132	1957-68a 1969a 1970 1972-75	5-13-75	5.30	1,170
11188200	South Fork Kern River near Olancho	NW¼SW¼ sec.18, T.20 S., R.36 E., Tulare County, Sequoia National Forest, 2.0 mi (3.2 km) downstream from Snake Creek and 9.7 mi (15.6 km) southwest of Olancho.	146	1956-67a 1969a 1970 1973-75	5-13-75	4.22	624
11195510	Pleito Creek near Lakeview	NW¼NE¼ sec.13, T.11 N., R.21 W., Kern County, at overshoot on California Aqueduct, 3.8 mi (6.1 km) southeast of Lakeview, and 5.9 mi (9.5 km) west of Mettler.	39.7	1975	12-4-74	1.34	47
11195520	Cuddy Creek at Lake of the Woods, near Frazier Park	NE¼SE¼ sec.33, T.9 N., R.20 W., Kern County, at culvert on the Lakewood Drive, 500 ft (152 m) downstream from the Lake of the Woods, at the village of Lake of the Woods, and 2.8 mi (4.5 km) west of Frazier Park.	25.1	1975	12-4-74	5.70	47
11195610	Pastoria Creek near Grapevine	Unsurveyed, T.10 N., R.18 W., Kern County, on left bank 4,000 ft (1,219 m) upstream from California Aqueduct and 4.9 mi (7.9 km) east of Grapevine.	31.1	1975	3-10-75	9.22	32
11195900	El Paso Creek near Wheeler Ridge	SE¼NW¼ sec.24, T.11 N., R.18 W., Kern County, on left bank 0.2 mi (0.4 km) downstream from old Tejon Ranch headquarters, 11.2 mi (18.0 km) east of Wheeler Ridge, and 12.7 mi (20.4 km) southeast of Mettler.	32.9	1975	3-22-75	1.54	59
11196010	Tejon Creek near Arvin	SW¼NE¼ sec.33, T.12 N., R.18 E., Kern County, on left bank 0.8 mi (1.3 km) east of Commanche Oil Field headquarters, 8.7 mi (14.0 km) southeast of Arvin, and 9.9 mi (15.9 km) east of Mettler.	110	1975	3-22-75	2.30	20
11196200	Sycamore Creek near Keene	SE¼SE¼ sec.5, T.32 S., R.31 E., Kern County, on right bank at west boundary of Bear Valley Springs development, 6.5 mi (10.5 km) southwest of Keene, and 9.4 mi (15.1 km) south-east of Arvin.	15.0	1975	3-22-75	5.46	76

See footnotes at end of table.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--Continued

Station No.	Station name	Location	Drain- age area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
BUENA VISTA LAKE BASIN--Continued							
11196210	Sycamore Creek near Arvin	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.34, T.31 S., R.30 E., Kern County, on right bank 1.8 mi (2.9 km) upstream from Arvin-Edison Canal, 5.1 mi (8.2 km) southeast of Arvin, and 10.1 mi (16.3 km) south- west of Keene.	28.3	1975	3-22-75	5.00	118
TULARE LAKE BASIN							
11197360	Franciscan Creek at Kecks Corner, near Lost Hills	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.13, T.26 S., R.17 E., Kern County, on left bank 0.35 mi (0.56 km) south of Kecks Corner, 0.9 mi (1.4 km) downstream from Barrel Valley Creek, and 25 mi (40 km) north- west of Lost Hills.	20.4	1969b 1974-75	12-4-74	--	c 4.0
11197370	Bitterwater Creek near Lost Hills	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.21, T.27 S., R.18 E., Kern County, 0.2 mi (0.3 km) downstream from Cedar Canyon, 21 mi (34 km) west of Lost Hills.	76.4	1962-75	12-4-74	--	c 30
11205680	Frazier Creek near Strathmore	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.32, T.20 S., R.28 E., Tulare County, at culvert on County Road No. J28, 5.9 mi (9.5 km) east of Strathmore.	3.05	1974-75	2-10-75	--	c 17
11205690	Lewis Creek near Lindsay	NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.13, T.20 S., R.27 E., Tulare County, at culvert on Road 258, 0.25 mi (0.40 km) downstream from unnamed tributary, and 7.0 mi (11.3 km) southeast of Lindsay.	21.5	1969b 1974-75	2-10-75	8.60	67
11210970	Antelope Creek at Woodlake	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.25, T.17 S., R.26 E., Tulare County, at culvert on State Highway 216 and 0.6 mi (1.0 km) west of town of Woodlake.	19.2	1969b 1974-75	--	5.27	d 16
11216800	Rock Creek at Dinkey Creek	NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.10 S., R.26 E., Fresno County, 0.4 mi (0.6 km) northwest of town of Dinkey Creek and 0.5 mi (0.8 km) upstream from mouth.	7.6	1960-70a 1971-75	3-22-75	5.60	385
11220000	Big Creek above Pine Flat Lake, near Trimmer	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.4, T.12 S., R.25 E., Fresno County, on right bank 2.4 mi (3.9 km) upstream from mouth and 2.7 mi (4.3 km) northeast of Trimmer.	70.0	1953-73a 1974-75	3-22-75	4.30	670
SAN JOAQUIN RIVER BASIN							
11267300	South Fork Merced River at Wawona	SW $\frac{1}{4}$ sec.34, T.4 S., R.21 E., Mariposa County, 1,000 ft (305 m) downstream from highway bridge at Wawona and 1,200 ft (366 m) upstream from Big Creek.	100	1958-68a 1970-75	6-2-75	7.13	3,800
11304000	Corral Hollow Creek near Tracy	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.24, T.3 S., R.4 E., San Joaquin County, just upstream from highway bridge, 0.8 mi (1.3 km) downstream from Elk Ravine, and 6.3 mi (10.1 km) southwest of Tracy.	61.6	1959-65a 1967 1972-75	3-7-75	2.79	196
11305500	San Antonio Creek near San Andreas	NE $\frac{1}{4}$ sec.10, T.3 N., R.12 E., Calaveras County, 800 ft (244 m) downstream from highway bridge, 1.9 mi (3.1 km) upstream from mouth, and 5 mi (8 km) southeast of San Andreas.	48.0	1950-59a 1962-75	3-25-75	4.52	1,530
11309000	Cosgrove Creek near Valley Springs	SE $\frac{1}{4}$ sec.35, T.4 N., R.10 E., Calaveras County, 0.4 mi (0.6 km) upstream from mouth and 2.7 mi (4.3 km) south of Valley Springs.	21.1	1930-69a 1970-71 1973-75	3-25-75	6.04	1,160

See footnotes at end of table.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--Continued

ANNUAL MAXIMUM DISCHARGE AT CREST STAGE PARTIAL RECORD STATIONS DURING WATER YEAR 1975								CONTINUED
Station No.	Station name	Location	Drain- age area (mi ²)	Period of record	Annual maximum			
					Date	Gage height (feet)	Discharge (ft ³ /s)	
SAN JOAQUIN RIVER BASIN--Continued								
11334200	Middle Fork Cosumnes River near Somerset	NW¼NW¼ sec.19, T.9 N., R.12 E., El Dorado County, 1,000 ft (305 m) downstream from county road bridge and 1.8 mi (2.9 km) southwest of Somerset.	107	1957-71a 1973-75	3-25-75	8.08	1,150	
11336030	Badger Creek at Riley Road, near Galt	Lat 38°20'21", long 121°17'48", in San Jon De Los Moquelumnes Land Grant, T.6 N., R.6 E., Sacramento County, at bridge on Riley Road, 2.3 mi (3.7 km) upstream from U.S. Highway 99, and 5.9 mi (9.5 km) north of Galt.	13.0	1972-75	12-25-71 1-17-73 1-7-74 2-10-75	37.80 39.27 37.91 37.92	e 130 e 650 e 155 190	
11336040	North Fork Badger Creek at Riley Road, near Galt	Lat 38°21'06", long 121°17'48", in San Jon De Los Moquelumnes Land Grant, T.6 N., R.6 E., Sacramento County, at bridge on Riley Road 2.4 mi (3.9 km) upstream from U.S. Highway 99, and 6.8 mi (10.9 km) north of Galt.	12.6	1972-75	12-25-71 1-17-73 1-7-74 2-10-75	37.58 39.30 38.31 37.68	e 91 e 490 e 230 130	
11336050	Willow Creek at McKenzie Road, near Galt	Lat 39°19'08", long 121°18'01", in San Jon De Los Moquelumnes Land Grant, T.5 N., R.6 E., Sacramento County, at bridge on McKenzie Road, 1.5 mi (2.4 km) upstream from U.S. Highway 99, and 4.5 mi (7.2 km) north of Galt.	2.95	1972-75	12-25-71 1-17-73 1-7-74 2-10-75	37.46 38.24 37.79 35.57	e 48 e 103 e 68 14	
11336070	Cosumnes River at Highway 104, near Galt	Lat 38°17'27", long 121°22'45", in San Jon De Los Moquelumnes Land Grant, T.5 N., R.5 E., Sacramento County, at State Highway 104 crossing and 5.0 mi (8.0 km) northwest of Galt.	Not determined	1972-75	12-25-71 1-17-73 3-3-74 3-26-75	16.82 20.18 17.77 18.65	e -- e -- e -- --	
11336530	Laguna Creek at McKenzie Road, near Galt	Lat 38°18'46", long 121°18'01", in San Jon De Los Moquelumnes Land Grant, T.5 N., R.6 E., Sacramento County, at bridge on McKenzie Road, 1.2 mi (1.9 km) upstream from U.S. Highway 99, and 4.1 mi (6.6 km) north of Galt.	117	1972-75	2-6-72 2-12-73 1-7-74 2-10-75	34.93 37.58 36.42 36.36	e 1,040 e 4,350 e 1,320 2,050	
11336550	Skunk Creek at McKenzie Road, near Galt	Lat 38°17'57", long 121°18'01", in San Jon De Los Moquelumnes Land Grant, T.5 N., R.6 E., Sacramento County, at bridge on McKenzie Road, 1.6 mi (2.6 km) upstream from U.S. Highway 99, and 3.1 mi (5.0 km) north of Galt.	11.7	1972-75	12-25-71 1-17-73 1-7-74 2-10-75	37.26 37.86 37.32 37.68	e 47 e 107 e 51 88	
11336555	Laguna Creek at Highway 104, near Galt	Lat 38°17'27", long 121°22'29", in San Jon De Los Moquelumnes Land Grant, T.5 N., R.5 E., Sacramento County, at bridge on State Highway 104, 4.8 mi (7.7 km) northwest of Galt.	Not determined	1972-75	12-25-71 1-17-73 1-7-74 3-26-75	15.61 18.28 17.31 17.21	e -- e -- e -- --	
11336560	Deadman Gulch at Christenson Road, near Galt	Lat 38°16'44", long 121°21'11", in San Jon De Los Moquelumnes Land Grant, T.5 N., R.6 E., Sacramento County, at bridge on Christenson Road, 2.6 mi (4.2 km) downstream from U.S. Highway 99, and 2.6 mi (4.2 km) northwest of Galt.	8.82	1972-75	12-25-71 1-7-73 1-7-74 2-10-75	22.93 24.20 23.28 23.34	e 32 e 240 e 64 115	

a Operated as a continuous-record gaging station.

b Published as miscellaneous measurement.

c Estimated.

d Estimated. Date unknown; probably occurred from canal wastewater.

e Not previously published.

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1975

Stream and/or name and No.	Tributary to	Location	Drain- age area (mi ²)	Measured pre- viously (water year)	Measurements	
					Date	Discharge (ft ³ /s)
PYRAMID AND WINNEMUCCA LAKES BASIN						
First Creek near Crystal Bay, Nevada (10336688)	Lake Tahoe	NE¼SW¼ sec.17, T.16 N., R.18 E., Washoe County, at culvert on State Highway 28 and 1.7 mi (2.7 km) northeast of Crystal Bay.	1.09	1970-74a	1-23-75	0.57
Wood Creek near Crystal Bay, Nevada (10336693)	Lake Tahoe	SE¼SE¼ sec.9, T.16 N., R.18 E., Washoe County, at culvert on State Highway 27 and 3.5 mi (5.6 km) northeast of Crystal Bay.	1.69	1967-74a	3-8-74 6-26-74 9-16-74 5-13-75 7-28-75 9-15-75	b 1.55 b 3.16 b 1.34 8.33 c 1.49 c 1.67
BUENA VISTA LAKE BASIN						
Golden Trout Creek near Cartago (11185300)	Kern River	NW¼SW¼ sec.10, T.18 S., R.34 E., Tulare County, 0.5 mi (0.8 km) upstream from Tunnel Ranger Station and 15 mi (24 km) west of Cartago.	23.6	1956-67d 1969d 1970-74	9-18-75	c 12.7
Kern River near Quaking Aspen Camp (11185350)	Buena Vista Lake	SW¼SW¼ sec.32, T.20 S., R.33 E., Tulare County, Sequoia National Forest, 0.4 mi (0.6 km) upstream from Little Kern River, and 6.8 mi (10.9 km) east of Quaking Aspen Camp.	530	1960-74d	9-18-75	c 198
Little Kern River near Quaking Aspen Camp (11185400)	Kern River	SE¼SE¼ sec.31, T.20 S., R.33 E., Tulare County, 600 ft (183 m) upstream from mouth and 5 mi (8 km) east of Quaking Aspen Camp.	132	1957-69d 1970-74	9-18-75	c 20.6
South Fork Kern River near Olancha (11188200)	Kern River	NW¼SW¼ sec.18, T.20 S., R.36 E., Tulare County, 2.0 mi (3.2 km) downstream from Snake Creek and 9.7 mi (15.6 km) south- west of Olancha.	146	1956-67d 1969d 1970-74	9-18-75	c 14.7
Kelso Creek near Weldon (11189700)	South Fork Kern River	NW¼ sec.20, T.27 S., R.35 E., Kern County, 0.5 mi (0.8 km) upstream from Woolstaff Creek and 7 mi (11 km) southeast of Weldon.	101	1958-66d 1968-74	9-11-75	c 1.84
TULARE LAKE BASIN						
South Fork Kings River near Cedar Grove (11212500)	Kings River	NW¼ sec.8, T.13 S., R.30 E., Fresno County, 0.3 mi (0.5 km) downstream from Grizzly Creek and 4.5 mi (7.2 km) west of Cedar Grove.	408	1950-57d 1959-61 1963-66 1968 1970-74	9-30-75	c 104
Copper 1/ Creek	South Fork Kings River	S¼ sec.11, T.13 S., R.31 E., Fresno County, 0.5 mi (0.8 km) upstream from South Fork Kings River and 5.9 mi (9.5 km) northeast of Cedar Grove.	--	1965-68 1970-74	9-18-75	c 1.40
Sheep Creek	South Fork Kings River	SE¼ sec.14, T.13 S., R.30 E., Fresno County, 0.7 mi (1.1 km) upstream from South Fork Kings River and 0.7 mi (1.1 km) southwest of Cedar Grove.	--	1965-68 1970-74	9-18-75	c 1.60
Lewis Creek	South Fork Kings River	SW¼ sec.11, T.13 S., R.30 E., Fresno County, 0.3 mi (0.5 km) upstream from South Fork Kings River and 1.5 mi (2.4 km) north- west of Cedar Grove.	--	1965-68 1970-74	9-18-75	c 2.92
Rock Creek at Dinkey Creek (11216800)	Dinkey Creek	NE¼SW¼ sec.5, T.10 S., R.26 E., Fresno County, 0.4 mi (0.6 km) northwest of town of Dinkey Creek and 0.5 mi (0.8 km) upstream from mouth.	7.60	1961-70d 1971-74	9-19-75	c .52

See footnotes at end of table.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1975--Continued

Stream and/or name and No.	Tributary to	Location	Drain- age area (mi ²)	Measured pre- viously (water year)	Measurements	
					Date	Discharge (ft ³ /s)
TULARE LAKE BASIN--Continued						
Dinkey Creek at mouth (11218000)	North Fork Kings River	Sec.3, T.12 S., R.26 E., Fresno County, 0.5 mi (0.8 km) upstream from mouth and 0.5 mi (0.8 km) northwest of Balch Camp.	132	1920-37d 1959 1961-68 1970-74	9-28-75	c 18.1
SAN JOAQUIN RIVER BASIN						
Yosemite Creek at Yosemite (11266000)	Merced River	Lat 37°44'45", long 119°35'40", Mariposa County, in Yosemite National Park, 0.3 mi (0.5 km) upstream from mouth, and 0.7 mi (1.1 km) west of Yosemite National Park headquarters.	42.7	1904-9d 1912-26d 1960 1966-69 1971-74	9-29-75	0
South Fork Merced River at Wawona (11267300)	Merced River	SW¼ sec.34, T.4 S., R.21 E., Mariposa County, in Yosemite National Park, 1,000 ft (305 m) downstream from highway bridge at Wawona, and 1,200 ft (366 m) upstream from Big Creek.	100	1958-68d 1969-71 1974	9-15-75	c 6.67
Hunter Creek	North Fork Tuolumne River	SW¼NE¼ sec.19, T.1 N., R.20 E., Tuolumne County, at road ford, 5.5 mi (8.8 km) southeast of Tuolumne.	--	1911 1964 1967-74	8-25-75	c 1.32

1. Published as Cooper Creek 1966-68.

a Published as a low-flow partial-record station or miscellaneous site in Water Resources Data for Nevada.

b Not previously published.

c Base flow.

d Operated as a continuous-record gaging station.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(Analyses for previous water years not published prior to this report)

WATER QUALITY DATA, OCTOBER 1972 to September 1975

WALKER LAKE BASIN
10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CALIF.^{1/}

LOCATION.--Lat 38°19'40", long 119°12'50", in SW¼NE¼ sec.34, T.6 N., R.25 E., Mono County.
DRAINAGE AREA.--359 mi² (930 km²).

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1963, water years 1964 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
MAY, 1975											
08...	1500	300	22	--	17	--	116	0	95	3.5	151
SEP.											
23...	1215	115	23	--	10	--	109	0	89	.0	138

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	DIS-SOLVED BORON (B) (UG/L)
MAY , 1975											
08...	.21	122	76	0	--	225	8.1	9.0	3	9.2	--
SEP.											
23...	.19	42.8	76	0	--	183	7.5	16.5	21	6.3	--

10296000 WEST WALKER RIVER BELOW LITTLE WALKER RIVER, NEAR COLEVILLE, CALIF.^{1/}

LOCATION.--Lat 38°22'47", long 119°26'57", in NE¼SE¼ sec.9, T.6 N., R.23 E., Mono County.
DRAINAGE AREA.--180 mi² (466 km²).

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1963, water years 1964-66, 1969 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
APR., 1973											
19...	1530	230	11	2.1	5.8	--	53	0	43	.8	--
SEP.											
25...	1200	64	15	4.3	12	--	79	0	65	2.2	79
APR., 1974											
29...	1345	250	9.4	2.1	4.1	.7	45	0	37	.0	55
SEP.											
18...	1300	80	14	2.2	23	1.9	91	0	75	4.8	127
MAY, 1975											
08...	1345	289	17	--	15	--	90	0	74	5.2	119
SEP.											
23...	1130	86	17	--	12	--	91	0	75	1.5	112

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	DIS-SOLVED BORON (B) (UG/L)
APR., 1973											
19...	--	--	36	0	.4	96	7.9	9.0	0	10.0	--
SEP.											
25...	.11	13.7	55	0	.7	135	7.8	9.5	0	10.0	--
APR., 1974											
29...	.07	37.1	32	0	.3	83	7.7	9.5	1	10.1	0
SEP.											
18...	.17	27.4	44	0	1.5	199	8.3	11.5	1	8.5	200
MAY , 1975											
08...	.16	92.9	58	0	--	180	8.3	11.0	1	8.7	--
SEP.											
23...	.15	26.0	60	0	--	164	8.0	13.5	5	8.8	--

^{1/} Records furnished by California Department of Water Resources.

WATER QUALITY DATA, OCTOBER 1972 TO SEPTEMBER 1975

CARSON RIVER BASIN
10305500 EAST FORK CARSON RIVER NEAR MARKLEEVILLE, CALIF.^{1/}

LOCATION.--Lat 38°41'20", long 119°45'52", in NW¼NE¼ sec.27, T.10 N., R.20 E., Alpine County.
PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1963, water years 1964 to current year
(partial-record station). Published as 10308200 in 1966-68, 1970.

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
APR., 1973											
19...	1130	E75	12	4.1	8.2	--	62	0	51	2.1	--
SEP.											
25...	1030	E40	12	3.6	9.4	--	65	0	53	7.0	82
APR., 1974											
29...	1145	--	11	3.0	6.5	1.1	56	0	46	.0	93
SEP.											
18...	1100	--	12	3.6	6.8	1.2	64	0	52	.5	88
MAY, 1975											
08...	1045	561	12	--	7.9	--	62	0	51	1.2	86
SEP.											
23...	0945	85	12	--	7.0	--	63	0	52	1.0	89

DATE	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED BORON (B) (UG/L)
APR., 1973											
19...	--	--	47	0	.5	125	7.7	4.5	3	11.2	--
SEP.											
25...	.11	--	45	0	.6	118	7.7	9.0	0	10.0	--
APR., 1974											
29...	.13	--	40	0	.4	109	7.7	6.0	2	11.3	100
SEP.											
18...	.12	--	45	0	.4	121	8.3	10.5	0	9.3	100
MAY, 1975											
08...	.12	130	46	0	--	121	7.7	--	7	10.1	--
SEP.											
23...	.12	20.4	43	0	--	107	7.8	11.5	0	8.8	--

CARSON RIVER BASIN
10310000 WEST FORK CARSON RIVER AT WOODFORDS, CALIF.^{1/}

LOCATION.--Lat 38°46'10", long 119°49'55", in NW¼SE¼ sec.34, T.11 N., R.19 E., Alpine County.
DRAINAGE AREA.--65.6 mi² (169.9 km²).
PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1963, water years 1964 to current year (partial-record station).

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
MAY, 1975											
08...	0945	139	6.2	--	2.6	--	30	0	25	.4	50
SEP.											
23...	0920	22	8.4	--	3.8	--	44	0	36	.0	70

DATE	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED BORON (B) (UG/L)
MAY, 1975											
08...	.07	18.8	22	0	--	58	7.3	3.0	0	10.4	--
SEP.											
23...	.10	4.16	30	0	--	74	7.5	10.0	0	8.5	--

^{1/} Records furnished by California Department of Water Resources.
E Estimated.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PYRAMID AND WINNEMUCCA LAKES BASIN
10336673 WARD CREEK LOOP ROAD TRIBUTARY NEAR TAHOE PINES, CALIF.

LOCATION.--Lat 39°08'28", long 120°13'05", in SE¼SW¼ sec.16, T.15 N., R.16 E., Placer County, Tahoe National Forest.

PERIOD OF RECORD.--Sediment records: April 1973 to current year (partial-record station).

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT DIS- CHARGE (MG/L)	SUS- PENDE SEDI- MENT (T/DAY)
MAY					
14...	1600	1.0	10	26	.70
15...	1620	1.5	6.6	3	.05
17...	1130	2.5	6.6	4	.07
18...	0750	1.0	8.8	7	.17
19...	1700	1.0	18	30	1.5
20...	1635	2.5	6.6	7	.12
21...	1130	2.0	3.9	6	.06
23...	0010	1.0	7.0	3	.06
23...	1745	--	14	26	.98
24...	1715	1.5	20	50	2.7
25...	1615	1.5	13	40	1.4
26...	1805	1.0	21	48	2.7
27...	1955	1.0	20	19	1.0
28...	1140	2.0	9.6	4	.10
29...	1710	1.0	22	34	2.0
30...	1220	2.0	9.2	5	.12
30...	1500	2.0	16	22	.95
30...	1625	2.0	21	41	2.3
30...	1755	1.0	22	57	3.4
30...	2010	1.5	21	54	3.1
30...	2200	1.5	19	25	1.3
30...	2350	1.5	18	21	1.0
31...	0210	1.5	16	14	.60
31...	0600	2.0	14	9	.34
31...	1010	2.0	12	6	.19
31...	1200	2.5	13	11	.39
JUNE					
01...	1810	--	22	76	4.5
02...	1805	1.5	21	56	3.2
03...	1550	2.0	20	52	2.8
04...	1550	2.0	20	62	3.3
05...	1040	2.5	10	5	.13
06...	1330	--	21	44	2.5
07...	1635	2.5	26	54	3.8
08...	1630	2.5	22	63	3.7
09...	1550	2.0	19	50	2.6
10...	1510	3.0	18	29	1.4
11...	1750	3.0	24	52	3.4
12...	1650	3.0	24	53	3.4
13...	1715	2.5	24	98	6.4
14...	1755	4.0	24	44	2.9
15...	1640	--	26	58	4.1
16...	1635	4.5	21	30	1.7
17...	1615	4.0	16	6	.26
21...	1330	--	8.8	8	.19
25...	1805	5.5	8.1	2	.04
30...	1755	6.0	5.6	1	.02
JULY					
03...	1810	8.0	4.1	1	.01
10...	1050	9.5	1.1	1	.00

10339380 MARTIS CREEK LAKE NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°19'38", long 120°06'48", in NE¼NW¼ sec.17, T.17 N., R.17 E., Nevada County.

DRAINAGE AREA.--40.0 mi² (103.6 km²).

PERIOD OF RECORD.--Chemical analyses: Water year 1975 (partial-record station).

Sediment records: Water year 1975 (partial-record station).

DATE	TIME	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)
MAY											
28...	1140	.01	.00	.03	.36	.40	.07	.02	66	6.5	12
MAY											
28...		TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS- SOLVED MANGANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE SEDI- MENT (MG/L)
28...		<10	0	650	130	<100	4	10	10	80	30 8

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

TULARE LAKE BASIN
BARTON PEAK CREEK NEAR CEDAR GROVE, CALIF.

LOCATION.--Lat 36°42'47", long 118°35'22" (unsurveyed), Tulare County, Kings Canyon National Park.
DRAINAGE AREA.--0.58 mi² (1.50 km²).
PERIOD OF RECORD.--Chemical analyses: Water year 1974 (partial-record station).

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	ALKA- LITY AS CACO ₃ (MG/L)
AUG. 15...	1300	.25	19	10	4.7	.9	3.3	1.1	25	21

DATE	TIME	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)
AUG. 15...	1.0	.9	.01	.00	.07	.01	.08	.09	.03	.00	

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
AUG. 15...	43	.06	.03	15	0	30	.4	33	7.4	11.0

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

BENTHIC INVERTEBRATES

DATE	PHYLUM ..CLASS ..ORDER ...FAMILY....GENUS.....SPECIES	METAMORPHIC STAGE	TOTAL ORGANISM COUNT	PERCENT OF TOTAL	DIVERSITY INDEX	SAMPLING METHOD
AUG 15	ARTHROPODA					SURBER SAMPLER
	..INSECTA					
	...DIPTERA					
	....CHIRONOMIDAE	LARVA	4	7		
	....PENTANEURA	LARVA	1	2		
	....SIMULIIDAE					
	....SIMULIUM	LARVA	6	11		
	..EPHEMEROPTERA					
	...BAETIDEA					
	....BAETIS	NYMPH	4	7		
	....CENTROPTILUM	NYMPH	7	12		
	....HEPTAGENIIDAE					
	....IRONODES	NYMPH	4	7		
	..PLECOPTERA					
	...CHLOROPERLIDAE					
	....HASTAPERLA	NYMPH	8	14		
	....NEMOURIDAE					
	....NEMOURA	NYMPH	11	20		
	...PELTOPERLIDAE					
	....PELTOPERA	NYMPH	1	2		
	...PERLIDAE					
	....ACRONEURIA	NYMPH	2	4		
	...TRICHOPTERA					
	....HYDROPSYCHIDAE					
	....PARAPSYCHE	LARVA	2	4		
	....LEPIDOSTOMATIDAE					
	....LEPIDOSTOMA	LARVA	4	7		
	....RHYACOPHILIDAE					
	....ATOPSYCHE	LARVA	2	4		
	TOTAL		56		3.39	

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

TULARE LAKE BASIN--Continued
DEADMAN CANYON CREEK NEAR CEDAR GROVE, CALIF.

LOCATION.--Lat 36°42'03", long 118°34'50" (unsurveyed), Tulare County, Kings Canyon National Park.
DRAINAGE AREA.--15.9 mi² (41.2 km²).

PERIOD OF RECORD.--Chemical analyses: Water year 1974 (partial-record station).

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	ALKA- LINIT- Y AS CACO3 (MG/L)
AUG. 15...	1545	20	3.5	50	3.8	.0	.8	.2	7	6

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)
AUG. 15...	1.6	.9	.01	.01	.05	.08	.13	.14	.02	.00

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
AUG. 15...	14	.02	.76	10	4	15	.1	9	6.5	15.0

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

BENTHIC INVERTEBRATES

DATE	PHYLUM ..CLASS ...ORDER....FAMILY.....GENUS.....SPECIES	METAMORPHIC STAGE	TOTAL ORGANISM COUNT	PERCENT OF TOTAL	DIVERSITY INDEX	SAMPLING METHOD
AUG 15	ARTHROPODA					SURBER SAMPLER
	..INSECTA					
	...DIPTERA					
	....BLEPHAROCERIDAE					
	.....BIBIOCEPHALA	LARVA	1	1		
	....CHIRONOMIDAE	LARVA	7	9		
	....PENTANEURA	LARVA	2	3		
	....SIMULIIDAE					
	....SIMULIUM	LARVA	11	14		
	..EPHEMEROPTERA					
	...BAETIDEA					
	....BAETIS	NYMPH	14	18		
	....CENTROPTILUM	NYMPH	1	1		
	....EPHEMERELLA	NYMPH	4	5		
	....HEPTAGENIIDAE					
	....IRONOPSIS	NYMPH	26	34		
	..PLECOPTERA					
	...PERLIDAE					
	....ACRONEURIA	NYMPH	5	7		
	..TRICHOPTERA					
	....HYDROPSYCHIDAE					
	....ARCTOPSYCHE	NYMPH	1	1		
	....PSYCHOMYIIDAE	NYMPH	4	5		
	TOTAL		76		2.83	

TULARE LAKE BASIN--Continued
ROARING RIVER AT RANGER STATION, NEAR CEDAR GROVE, CALIF.

PERIOD OF RECORD.--Chemical analyses: Water years 1974-75 (partial-record station).

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRITE PLUS NITRATE ¹ (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAY										
08...	1.3	.1	--	.03	.07	.08	.15	--	.01	11
29...	1.8	5.0	--	.07	.03	.53	.56	--	.03	10
JUNE										
18...	.8	.5	--	.04	.10	.15	.25	--	.01	9
JULY										
16...	2.2	1.5	.01	--	.03	.00	.00	.01	.00	15

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
MAY 08...	.01	--	4	0	24	.1	10	6.8	4.0
29...	.01	24.3	3	0	31	.2	9	6.4	2.5
JUNE 18...	.01	13.4	3	0	38	.2	7	6.6	10.5
JULY 16...	.00	1.90	5	0	26	.2	10	6.6	13.0

BENTHIC INVERTEBRATES

DATE	PHYLUM ..CLASS ...ORDER ...FAMILY....GENUS.....SPECIES	METAMORPHIC STAGE	TOTAL ORGANISM COUNT	PERCENT OF TOTAL	DIVERSITY INDEX	SAMPLING METHOD
OCT 11	ARTHROPODA					SURBER SAMPLER
	..INSECTA					
	...DIPTERA					
	....RHAGIONIDAE	LARVA	2	2		
	....ATHERIX					
	....TIPULIDAE	LARVA	1	1		
	....ANTOCHA					
	..EPHEMEROPTERA					
	...BAETIDEA					
	....BAETIS	NYMPH	5	6		
	....EPHEMERELLA	NYMPH	14	16		
	....HEPTAGENIIDAE					
	....IRONOPSIS	NYMPH	34	40		
	....RHITHROGENA	NYMPH	4	5		
	..PLECOPTERA					
	...PERLIDAE					
	....ACRONEURIA	NYMPH	1	1		
	..TRICHOPTERA					
	...HYDROPSYCHIDAE					
	....ARCTOPSYCHE	LARVA	22	26		
	....PHILOPOTAMIDAE					
	....SORTOSA	LARVA	1	1		
	....PSYCHOMYIIDAE	LARVA				
	TOTAL		85		2.48	
E	Estimated.					

E Estimated.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

TULARE LAKE BASIN--Continued
UPPER SUGARLOAF CREEK NEAR CEDAR GROVE, CALIF.

LOCATION.--Lat 36°14'51", long 118°42'15" (unsurveyed), Tulare County, Kings Canyon National Park.
DRAINAGE AREA.--2.63 mi² (6.81 km²).
PERIOD OF RECORD.--Chemical analyses: Water year 1974 (partial-record station).

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
AUG. 13...	1800	.28	8.0	50	3.7	.0	1.6	.4

DATE	BICAR- BONATE (HCO ₃) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
AUG. 13...	14	11	1.0	9	0	26	.2

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

BENTHIC INVERTEBRATES

DATE	PHYLUM ..CLASS ...ORDER....FAMILY.....GENUS.....SPECIES	METAMORPHIC STAGE	TOTAL ORGANISM COUNT	PERCENT OF TOTAL	DIVERSITY INDEX	SAMPLING METHOD
AUG 13	ARTHROPODA					SURBER SAMPLER
	..INSECTA					
	...DIPTERA					
	....CHIRONOMIDAE	LARVA	3	7		
	....METRICNEMUS	LARVA	1	2		
	....PENTANEURA	LARVA	5	12		
	....SIMULIIDAE					
	....SIMULIUM	LARVA	2	5		
	....HELEIDAE					
	....PALPOMYIA	LARVA	1	2		
	..EPHEMEROPTERA					
	...BAETIDAE					
	....BAETIS	NYPH	3	7		
	....EPHEMERELLA	NYPH	7	17		
	..PLECOPTERA					
	....CHLOROPERLIDAE					
	....PARAPERLA	NYPH	1	2		
	....PERLIDAE					
	....ACRONEURIA	NYPH	1	2		
	....PERLODIDAE					
	....ISOGENUS	NYPH	9	22		
	..TRICHOPTERA					
	...PSYCHOMYIIDAE	LARVA	1	2		
	MOLLUSCA					
	..PELECYPODA					
	..HETERODERA					
	....SPHAEROMIDAE					
	....PSIDIUM		7	17		
	TOTAL		41		3.29	

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

TULARE LAKE BASIN--Continued
SOUTH FORK SUGARLOAF CREEK NEAR CEDAR GROVE, CALIF.

LOCATION.--Lat 36°40'00", long 118°40'45" (unsurveyed), Tulare County, Kings Canyon National Park.

DRAINAGE AREA. -- 3.56 mi² (9.22 km²).

PERIOD OF RECORD.--Chemical analyses: Water year 1974 (partial-record station).

DATE	TIME	INSTANTANEOUS UIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED TAS- SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	ALKA- LINIT- AS CACOS (MG/L)
AUG. 13...	0915	1.3	2.6	50	.6	.0	.8	.1	4	3

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS-SOLVED ORTHOPHOS- PHORUS (P) (MG/L)
AUG. 13...	.5	1.0	.01	.00	.04	.07	.11	.12	.02	.01

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
AUG. 13...	8	.01	.03	2	0	52	.3	4	6.5	11.0

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

BENTHIC INVERTEBRATES

DATE	PHYLUM ..CLASS ...ORDER....FAMILY.....GENUS.....SPECIES	METAMORPHIC STAGE	TOTAL ORGANISM COUNT	PERCENT OF TOTAL	DIVERSITY INDEX	SAMPLING METHOD
AUG 15	ARTHROPODA					
	..INSECTA					SURBER SAMPLER
	...DIPTERA					
	....CHIRONOMIDAE					
	....HYDROBAENINAE	LARVA	12	13		
	....SIMULIIDAE					
	....SIMULIUM	LARVA	30	33		
	....TENDIPEDINAE	LARVA	3	3		
	..EPHEMEROPTERA					
	...BAETIDEA					
	....AMELETUS	NYMPH	2	2		
	....BAETIS	NYMPH	36	40		
	....HEPTAGENIIDAE					
	....RHITHROGENA	NYMPH	1	1		
	..PLECOPTERA					
	...PERLODIDAE					
	....ISOGENUS	NYMPH	6	7		
	TOTAL		90		2.38	

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

TULARE LAKE BASIN--Continued
NORTH LOST LAKE CREEK NEAR CEDAR GROVE, CALIF.

LOCATION.--Lat 36°41'01", long 118°41'24" (unsurveyed), Tulare County, Kings Canyon National Park.

DRAINAGE AREA.--0.74 mi², (1.92 km²).

PERIOD OF RECORD.--Chemical analyses: Water year 1974 (partial-record station).

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)
AUG. 13...	1515	.09	15	230	4.4	.0	2.4	.2	16	13

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)
AUG. 13...	1.4	1.1	.00	.00	.20	.07	.27	.27	.05	.02

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
AUG. 13...	33	.04	.01	11	0	32	.3	22	6.6	15.0

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

BENTHIC INVERTEBRATES

DATE	PHYLUM .CLASS ..ORDER ...FAMILY....GENUS.....SPECIES	METAMORPHIC STAGE	TOTAL ORGANISM COUNT	PERCENT OF TOTAL	DIVERSITY INDEX	SAMPLING METHOD
AUG 13	ARTHROPODA					SURBER SAMPLER
	..INSECTA					
	...DIPTERA					
	....CHIRONOMIDAE	LARVA	2	3		
	....SIMULIIDAE	LARVA	3	5		
	....SIMULIUM					
	...EPHEMEROPTERA					
	....BAETIDEA					
	....AMELETUS	NYMPH	3	5		
	....BAETIS	NYMPH	21	34		
	...HEMIPTERA					
	...NOTONECTIDAE					
	....NOTONECTA		1	2		
	...NEUROPTERA					
	....SIALIDAE	LARVA	2	3		
	....SIALIS					
	...PLECOPTERA					
	....CHLOROPERLIDAE					
	....HASTAPERLA	NYMPH	4	7		
	....NEMOURIDAE					
	....NEMOURA	NYMPH	2	3		
	...PELTOPERLIDAE					
	....PELTOPERA	NYMPH	6	10		
	...PERLIDAE					
	....ACRONEURIA	NYMPH	1	2		
	....PERLODIDAE					
	....ISOGENUS	NYMPH	16	26		
	TOTAL		61		3.09	

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

TULARE LAKE BASIN--Continued
SUGARLOAF CREEK TRIBUTARY AT MOUTH, NEAR CEDAR GROVE, CALIF.

LOCATION.--Lat 36°44'06", long 118°38'22" (unsurveyed), Tulare County, Kings Canyon National Park.
DRAINAGE AREA.--1.59 mi² (4.12 km²).
PERIOD OF RECORD.--Chemical analyses: Water years 1974-75 (partial-record station).

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	ALKA- LITY AS CAC03 (MG/L)
MAY										
08...	1530	1.3	27	60	5.6	1.1	5.1	1.7	33	27
29...	1230	1.3	27	50	5.7	1.1	5.4	1.6	35	34
JUNE										
18...	1300	1.4	29	50	6.1	1.3	5.6	1.8	40	33
JULY										
16...	1205	.42	30	60	8.7	1.3	5.7	1.8	44	42

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAY										
08...	4.1	.8	--	.03	.04	.19	.23	--	.06	62
29...	3.6	1.0	--	.04	.02	.59	.61	--	.08	63
JUNE										
18...	2.2	.7	--	.04	.35	--	.29	--	.05	67
JULY										
16...	2.8	1.7	.00	--	.06	.00	.00	.00	.04	74

DATE	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
MAY									
08...	.08	.22	19	0	35	.5	65	7.1	12.0
29...	.09	.22	19	0	36	.5	64	7.2	11.0
JUNE									
18...	.09	.25	21	0	35	.5	62	7.2	14.0
JULY									
16...	.08	.07	27	0	30	.5	66	7.4	13.0

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

BENTHIC INVERTEBRATES

DATE	PHYLUM .CLASS ..ORDER ...FAMILY....GENUS.....SPECIES	METAMORPHIC STAGE	TOTAL ORGANISM COUNT	PERCENT OF TOTAL	DIVERSITY INDEX	SAMPLING METHOD
OCT 10	ARTHROPODA .INSECTA ..DIPTERA ...CHIRONOMIDAE....PENTANEURA.....DIXIIDAE.....DIXA ...SIMULIIDAE....SIMULIUM ..EPHEMEROPTERA ...BAETIDEA....BAETIS ...PLECOPTERA ...CHLOROPERLIDAE....HASTAPERLA ...NEMOURIDAE....NEMOURA ...PERLIDAE....ACRONEURIA ...PERLODIDAE....ARCYNOPTERYX	LARVA LARVA LARVA LARVA NYMPH NYMPH NYMPH	2 1 1 3 8 4 1 1 1	9 5 5 14 36 18 5 5 5	2.70	SURBER METHOD
	TOTAL		22			

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

TULARE LAKE BASIN--Continued
FERGUSON CREEK AT MOUTH, NEAR CEDAR GROVE, CALIF.LOCATION.--Lat 36°44'27", long 118°37'39" (unsurveyed), Tulare County, Kings Canyon National Park.
DRAINAGE AREA.--13.1 mi² (33.9 km²).

PERIOD OF RECORD.--Chemical analyses: Water year 1974 (partial-record station).

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	ALKA- LITY AS CACO ₃ (MG/L)
MAY 29...	1115	135	5.2	30	1.2	.1	.8	.5	7	5
JUNE 18...	1130	E53	5.9	70	1.3	.1	1.1	.4	8	7
JULY 16...	1000	18	5.8	50	4.6	.5	.8	.5	10	8

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAY 29...	1.5	.1	--	.04	.03	.56	.59	--	.03	13
JUNE 18...	.6	.3	--	.07	.13	.39	.52	--	.00	14
JULY 16...	1.4	1.5	.00	--	.04	.00	.00	.00	.00	20

DATE	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
MAY 29...	.02	4.74	3	0	30	.2	10	6.4	4.5
JUNE 18...	.02	2.00	4	0	36	.3	14	6.8	9.0
JULY 16...	.01	.39	14	5	11	.1	14	6.7	9.5

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

BENTHIC INVERTEBRATES

DATE	PHYLUM ..CLASS ..ORDER ...FAMILY....GENUS.....SPECIES	METAMORPHIC STAGE	TOTAL ORGANISM COUNT	PERCENT OF TOTAL	DIVERSITY INDEX	SAMPLING METHOD
OCT 10	ARTHROPODA ..INSECTA ...DIPTERA....CHIRONOMIDAE.....PENTANEURA.....TIPULIDAE.....RHAGIONIDAE....EPHEMEROPTERA.....BAETIDEA.....BAETIS EPHEMERELLA....HEPTAGENIIDAE....RHITHROGENA....TRICHOPTERA....PSYCHOMYIIDAE....RHYACOPHILIDAE....ATOPSYCHE	LARVA LARVA ADULT NYMPH ADULT NYMPH NYMPH LARVA LARVA	1 2 2 1 1 2 1 1 1	8 17 17 17 8 8 8		SURBER SAMPLER
	TOTAL		12		2.92	

E Estimated.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

TULARE LAKE BASIN--Continued
ROARING RIVER AT ROARING RIVER FALLS, NEAR CEDAR GROVE, CALIF.LOCATION.--Lat 36°46'59", long 118°37'21" (unsurveyed), Fresno County, Kings Canyon National Park.
DRAINAGE AREA.--115 mi² (298 km²).

PERIOD OF RECORD.--Chemical analyses: Water years 1974-75 (partial-record station).

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	ALKA- LITY AS CAC03 (MG/L)
MAY										
07...	1630	E420	7.8	60	1.6	.2	1.1	.5	9	7
28...	1645	E1500	5.1	20	2.3	.2	.9	.7	7	4
JUNE										
18...	0945	E700	4.9	20	1.6	.1	1.3	.4	7	6
JULY										
16...	1400	E300	2.7	20	1.8	.3	.5	.3	9	9

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAY										
07...	1.3	.5	--	.02	.04	.16	.20	--	.01	18
28...	1.3	.1	--	.02	.04	.55	.59	--	.03	14
JUNE										
18...	1.6	.2	--	.03	.12	.17	.29	--	.01	14
JULY										
16...	1.3	1.1	.01	--	.03	.00	.00	.01	.00	12

DATE	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
MAY									
07...	.02	--	5	0	30	.2	16	7.0	9.0
28...	.02	--	7	1	21	.2	11	6.4	11.0
JUNE									
18...	.02	--	4	0	37	.3	11	6.4	7.5
JULY									
16...	.01	4.86	6	0	15	.1	14	6.2	13.0

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

BENTHIC INVERTEBRATES

DATE	PHYLUM ..CLASS ...ORDER ...FAMILY ...GENUS ...SPECIES	METAMORPHIC STAGE	TOTAL ORGANISM COUNT	PERCENT OF TOTAL	DIVERSITY INDEX	SAMPLING METHOD
OCT 9	ARTHROPODA ..INSECTA ...EPHEMEROPTERA ...BAETIDEA ...AMELETUS ...BAETIS ...EPHEMERELLA ...PARALEPTOPHLEBIA ...PLECOPTERA ...PERLIDAE ...ACRONEURIA ...TRICHOPTERA ...GLOSSOSOMATIDAE ...HYDROPSYCHIDAE ...ARCTOPSYCHE ...HYDROPSYCHE ...PHILOPOTAMIDAE ...SORTOSA ...RHYACOPHILIDAE ...ATOPSYCHE	NYPH NYPH NYPH NYPH LARVA LARVA LARVA LARVA LARVA	2 3 7 1 2 1 2 3 1	7 10 24 3 7 3 7 10 3	2.97	SURBER SAMPLER
	TOTAL		29			

E Estimated.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

TULARE LAKE BASIN

11222700 KINGS RIVER AT PEOPLES WEIR, NEAR KINGSBURG, CALIF.^{1/}

LOCATION.--Lat 36°29'06", long 119°32'22", in NW¼NE¼ sec.1, T.17 S., R.22 E., Kings County.
 PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1967, water years 1958 to current year (partial-record station).

DATE	TIME	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
DEC. 16...	1005	21	--	17	116	0	95	15
MAR. 04...	0930	4.8	1.4	3.5	22	0	18	3.1
MAY 27...	0930	4.1	1.7	3.4	30	0	25	.0

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED BORON (B) (UG/L)
DEC. 16...	7.9	150	.20	90	0	--	0
MAR. 04...	2.5	35	.05	18	0	.4	100
MAY 27...	2.4	57	.08	17	0	.4	0

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
DEC. 16...	1005	175	7.3	10.0	10.7
MAR. 04...	0930	38	7.0	11.5	11.0
MAY 27...	0930	95	7.8	17.0	9.9

^{1/} Records furnished by California Department of Water Resources.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SAN JOAQUIN RIVER BASIN

11266750 MERCED RIVER AT BIG OAK FLAT, NEAR EL PORTAL, CALIF.

LOCATION.--Lat 37°43'18", long 119°42'45", in NW¼NE¼ sec.36, T.2 S., R.20 E., Mariposa County, Yosemite National Park.

DRAINAGE AREA.--345 mi² (894 km²).

PERIOD OF RECORD.--Chemical analyses: Water year 1975 (partial-record station).

DATE	TIME	DIS- CHARGE (CFS)	ALKA- LITY AS CAC03 (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)
JULY 23...	1500	E441	--	.08	.08	.00	.08
AUG. 28...	0930	88	14	.44	.42	.00	.02
SEP. 23...	1400	--	11	--	--	--	--
23...	1700	--	12	--	--	--	--
23...	1900	--	11	--	--	--	--
23...	2300	--	13	--	--	--	--
24...	0200	--	13	--	--	--	--
24...	0530	--	13	--	--	--	--
24...	0830	--	13	--	--	--	--
24...	1130	59	13	.22	.22	.00	.18

DATE	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
JULY 23...	.16	.03	.03	17	6.4	19.0	8.2
AUG. 28...	.46	.07	.06	30	6.9	15.5	8.6
SEP. 23...	--	--	--	33	6.6	17.0	7.7
23...	--	--	--	30	6.5	17.5	8.6
23...	--	--	--	33	6.5	16.5	8.0
23...	--	--	--	34	6.5	16.0	7.9
24...	--	--	--	34	6.7	16.0	7.9
24...	--	--	--	36	6.6	15.0	8.0
24...	--	--	--	33	6.7	14.5	8.4
24...	.40	.06	.05	34	6.5	15.5	8.5

DATE	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
AUG. 27 TO SEP. 24...	.120	.200
SEP. 24 TO OCT. 25	.040	.140

E Estimated.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SAN JOAQUIN RIVER BASIN--Continued
11267050 MERCED RIVER AT RANCHERIA FLAT, NEAR EL PORTAL, CALIF.

LOCATION.--Lat 37°40'10", long 119°48'25", in SE¼SW¼ sec.18, T.3 S., R.20 E., Mariposa County, Stanislaus National Forest.

DRAINAGE AREA.--393 mi² (1,018 km²).

PERIOD OF RECORD.--Chemical analyses: October 1973 to September 1974, water year 1975 (partial-record station).

DATE	TIME	DIS- CHARGE (CFS)	ALKA- LINITY AS CaCO ₃ (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)
JULY 23...	1130	E502	--	.15	.08	.00	.47
AUG. 28...	1300	E100	16	.15	.15	.00	.21
SEP. 25...	1315	E64	--	.14	.14	.00	.18

DATE	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
JULY 23...	.62	.03	.03	17	6.9	20.5	9.0
AUG. 28...	.36	.02	.02	34	7.6	20.5	8.7
SEP. 25...	.32	.05	.04	--	7.8	19.0	--

11268000 SOUTH FORK MERCED RIVER NEAR EL PORTAL, CALIF.

LOCATION.--Lat 37°39'05", long 119°53'04", in NW¼NE¼ sec.29, T.3 S., R.19 E., Mariposa County.

DRAINAGE AREA.--241 mi² (624 km²).

PERIOD OF RECORD.--Chemical analyses: October 1973 to September 1974, water year 1975 (partial-record station).

DATE	TIME	DIS- CHARGE (CFS)	ALKA- LINITY AS CaCO ₃ (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)
JULY 24...	0950	109	--	.02	.01	.00	.08
AUG. 27...	1800	32	32	.01	.01	.00	.12
SEP. 25...	1100	17	--	.01	.01	.00	.08

DATE	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
JULY 24...	.10	.01	.01	35	6.9	21.0	7.6
AUG. 27...	.13	.01	.01	66	7.2	24.0	7.4
SEP. 25...	.09	.00	.01	--	7.3	20.0	--

E Estimated.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SAN JOAQUIN RIVER BASIN
11268100 MERCED RIVER BELOW SOUTH FORK, NEAR BRICEBURG, CALIF.

LOCATION.--Lat 37°39'25", long 119°53'29" (unsurveyed), Mariposa County, Stanislaus National Forest.
DRAINAGE AREA.--660 mi² (1,709 km²).
PERIOD OF RECORD.--Chemical analyses: Water year 1975 (partial-record station).

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)
JULY 24...	1145	E585	.06	.00	.16	.16	.02	.02	20	6.9	8.2
AUG. 27...	1600	E128	.13	.00	.16	.16	.04	.02	42	7.4	7.2
SEP. 25...	0930	E81	.11	.00	.07	.07	.03	.02	--	7.1	--

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)
JULY 24...	0815	E612	.04	.00	.08	.08	.07	.02	22	6.9	8.0
AUG. 27...	1300	E134	.11	.00	.25	.25	.02	.01	42	7.2	7.8
SEP. 25...	0800	85	.14	.00	.23	.23	.03	.02	--	7.2	--

DATE	TIME	ALKA- LINITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
SEP. 23...	1330	19	52	7.5	21.0	8.3
23...	1630	20	49	7.5	22.0	8.4
23...	1930	20	50	7.0	21.0	8.2
23...	2230	21	50	7.1	21.0	8.2
24...	0130	18	52	7.1	20.0	8.3
24...	0500	18	56	7.1	19.0	8.0
24...	0800	21	49	7.1	18.5	8.6
24...	1100	20	50	7.2	19.5	9.2

DATE	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
AUG. 27 TO SEP. 25	.040	.100
SEP. 25 TO OCT. 24	.680	1.30

E Estimated.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SAN JOAQUIN RIVER BASIN--Continued
11268200 MERCED RIVER NEAR BRICEBURG, CALIF.

LOCATION.--Lat 37°38'09", long 119°55'56", in NW¼NE¼ sec.36, T.3 S., R.18 E., Mariposa County.

DRAINAGE AREA.--691 mi² (1,790 km²).

PERIOD OF RECORD.--Chemical analyses: October 1973 to September 1974, water year 1975 (partial-record station).

DATE	TIME	ALKA- LINITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
SEP.						
23...	1230	21	52	7.3	20.5	9.0
23...	1600	21	54	8.0	23.0	8.9
23...	1900	21	53	7.7	22.0	8.4
23...	2200	23	52	7.2	21.0	8.2
24...	0100	18	54	7.1	20.5	8.2
24...	0430	21	56	7.1	20.0	8.3
24...	0730	23	55	7.2	19.5	8.5
24...	1030	21	54	7.2	19.5	8.8

DATE	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M
JULY		
24 TO		
AUG.		
27...	.010	.100
AUG.		
27 TO		
SEP. 25	.030	.140
SEP.		
25 TO		
OCT. 24	.520	.850

Kern County

Antelope Valley-Willow Springs Area

345636118182001. Local number 10N/13W-19 M1 S. Dewey Butler. About 4.5 mi (7.2 km) north of Willow Springs. Drilled unused water-table well in alluvium of Pleistocene age, diam 16 in (41 cm), depth 770 ft (235 m), cased with steel. Lsd 2,905 ft (885 m) above msl. Highest water level 291.61 ft (88.94 m) below lsd, Jan. 20, 1953; lowest 319.38 ft (97.41 m) below lsd, Sept. 18, 1969. Records available: 1953-75.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 22, 1974	315.67	FEB. 5, 1975	316.31				

Fremont Valley-Koehn Lake Area

352052117483001. Local number 30S/39E-8A1 M. Owner unknown. About 3 mi (5 km) east of Koehn Lake. Drilled unused water-table well in alluvium of Pleistocene age, diam 12 in (30 cm), depth 268 ft (82 m), cased with steel. Lsd 2,075 ft (633 m) above msl. Highest water level 136.55 ft (41.65 m) below lsd, Mar. 2, 1955; lowest 142.82 ft (43.56 m) below lsd, Apr. 12, 1967. Records available: 1953-75.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB. 6, 1975	140.50						

351104117590401. Local number 31S/37E-35N1 M. M. and R. Conklin Ranch. About 4 mi (6 km) north of California City. Drilled unused water-table well in alluvium of Pleistocene age, diam 16 in (41 cm), depth 429.2 ft (130.9 m), previously reported 439 ft (134 m), cased with steel. Lsd 2,320 ft (708 m) above msl. Highest water level 230.79 ft (70.39 m) below lsd, Jan. 22, 1953; lowest 267.04 ft (81.45 m) below lsd, Apr. 15, 1969. Records available: 1953, 1958-75.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 23, 1974	253.18	FEB. 5, 1975	251.40				

Indian Wells Valley

353828117401301. Local number 26S/40E-28J1 M. Drummond Medical Center. In Ridgecrest. Drilled standby water-table well in alluvium of Pleistocene(?) age, diam 14 in (36 cm), depth and casing information not available. Lsd 2,288.8 ft (698.1 m) above msl. Highest water level 98.3 ft (30.0 m) below lsd, Dec. 30, 1948; lowest 117.95 ft (35.97 m) below lsd, Aug. 23, 1972. Records available: 1948, 1952-69, 1971-74.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 24, 1974	115.73						

San Joaquin County

Mokelumne River Basin

380656121204901. Local number 3N/6E-17D11 M. Arthur Ripken. About 4.5 mi (7.2 km) southwest of Lodi. Drilled irrigation water-table well in Victor Formation of Pleistocene age, diam 12 in (30.42 cm), depth 49.3 ft or 15.0 m (previously reported 93 ft or 28.3 m), casing information not available. Lsd 23.9 ft or 7.3 m (previously reported 35.68 ft or 10.88 m) above msl. MP 1.18 ft (0.36 m) above lsd. Highest water level 7.46 ft (2.27 m), May 1, 1952; lowest 45.45 ft (13.85 m) below lsd, Sept. 1, 1966. Records available: 1949-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 2, 1974	31.4	FEB. 3, 1975	27.08	MAY 2, 1975	26.55	AUG. 1, 1975	36.52
NOV. 4	30.2	MAR. 4	26.66	JUNE 2	29.45	SEP. 2	33.08
JAN. 2, 1975	27.89	APR. 1	26.41	JULY 1	31.84		

San Joaquin County--Continued

Mokelumne River Basin--Continued

380328121153601. Local number 3N/6E-36R2 M. Leland W. Bunch. About 5.5 mi (8.9 km) south of Lodi. Drilled domestic water-table in Victor Formation of Pleistocene age, diam 8 in (20.32 cm), depth 85 ft (25.9 m), casing information not available. Lsd 37.97 ft (11.57 m) above msl. MP 7.63 ft (2.33 m) below lsd. Highest water level 11.72 ft (3.57 m) below lsd, Apr. 8, 1938; lowest 56.80 ft (17.31 m) below lsd, July 1, 1965. Records available: 1926-29, 1935-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 3, 1974	46.3	JAN. 6, 1975	46.39	APR. 2, 1975	46.35	JULY 1, 1975	50.69
NOV. 4	45.8	FEB. 4	46.51	MAY 2	46.70	AUG. 4	50.28
DEC. 5	45.6	MAR. 3	46.79	JUNE 3	48.56	SEP. 3	50.17

380717121114602. Local number 3N/7E-10L4 M. Alfred Preszler. Formerly Edward Preszler. About 4 mi (6 km) east of Lodi. Drilled observation water-table well in Victor Formation of Pleistocene age, Arroyo Seco Gravel of Pleistocene age, and Laguna Formation of Pliocene(?) age, diam 12 in (30.48 cm) to 10 in (25.4 cm), depth 183 ft or 55.8 m (previously reported 190 ft or 57.9 m), cased. Lsd 72.37 ft (22.06 m) above msl. MP 0.44 ft (0.13 m) above lsd. Highest water level 35.13 ft (10.71 m) below lsd, Jan. 12, 1939; lowest 86.8 ft (26.46 m) below lsd, Aug. 2, 1972. Records available: 1935-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 7, 1974	78.1	JAN. 7, 1975	74.28	APR. 2, 1975	72.01	JULY 1, 1975	83.50
NOV. 4	76.6	FEB. 4	73.10	MAY 2	75.62	SEP. 3	79.02
DEC. 5	76.4	MAR. 3	72.45	JUNE 3	79.72		

380611121153001. Local number 3N/7E-18N12 M. Joe Garner. About 2.5 mi (4.0 km) south of Lodi. Drilled domestic water-table well in Victor Formation of Pleistocene age, diam 6 in (15.24 cm), depth 78 ft (23.8 m), casing information not available. Lsd 47.44 ft (14.46 m). MP 0.34 ft (0.10 m) above lsd. Highest water level 29.86 ft (9.10 m) below lsd, Feb. 2, 1953; lowest, dry, Aug. 4, 1965, July 5, Aug. 1, Sept. 1, 1966, Aug. 1, 1968, Aug. 2, Sept. 4, 1974, July 1, Aug. 4, Sept. 3, 1975. Records available: 1946-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 3, 1974	56.6	FEB. 4, 1975	54.56	MAY 2, 1975	52.10	AUG. 4, 1975	F
NOV. 4	54.1	MAR. 3	52.79	JUNE 3	55.60	SEP. 3	F
JAN. 6, 1975	54.28	APR. 2	49.94	JULY 1	F		

380605121115201. Local number 3N/7E-22C11 M. John Nietschke. About 4.6 mi (7.4 km) southeast of Lodi. Drilled domestic water-table well in Victor Formation of Pleistocene age and probably Arroyo Seco Gravel of Pleistocene age and Laguna Formation of Pliocene(?) age, diam 8 in (20.32 cm), depth 135 ft or 41.1 m (previously reported 137 ft or 41.8 m), casing information not available. Lsd 66.43 ft (20.25 m) above msl. MP 0.83 ft (0.25 m) above lsd. Highest water level 50.21 ft (15.30 m) below lsd, Mar. 2, 1953; lowest 90.6 ft (27.61 m) below lsd, Aug. 2, 1972. Records available: 1952-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 7, 1974	81.2	JAN. 1, 1975	75.75	APR. 2, 1975	73.70	JULY 1, 1975	81.19
NOV. 4	79.3	FEB. 4	74.94	MAY 2	76.49	SEP. 3	82.97
DEC. 5	77.9	MAR. 3	74.10	JUNE 3	86.87		

381215121154601. Local number 4N/6E-12R11 M. Fred Fromm. Formerly A. T. Carlson. About 4.5 mi (7.2 km) north of Lodi. Drilled domestic and irrigation water-table well in Victor, Arroyo Seco, and Laguna Formations, diam 8 in (20.32 cm), depth 90 ft or 27.4 m (previously reported 150 ft or 45.7 m), casing information not available. Lsd 57.95 ft (17.66 m) above msl. MP 0.55 ft (0.17 m) above lsd. Highest water level 38.84 ft (11.84 m) below lsd, May 1, 1952; lowest, dry Sept. 3, 1966, Aug. 4, Sept. 3, 1975. Records available: 1948-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 3, 1974	81.5	JAN. 6, 1975	74.14	APR. 2, 1975	70.68	AUG. 4, 1975	F
NOV. 4	78.2	FEB. 3	72.81	MAY 2	73.26	SEP. 3	F
DEC. 5	76.2	MAR. 4	71.54	JUNE 2	77.74		

F Dry.

San Joaquin County--Continued

Mokelumne River Basin--Continued

380933121163502. Local number 4N/6E-36D2 M. S. Wortley. About 1.6 mi (2.6 km) north of Lodi. Drilled irrigation water-table well in Victor Formation of Pleistocene age, diam 10 in (25.4 cm), depth 52 ft (15.8 m), casing information not available. Lsd 49.11 ft (14.97 m) above msl. MP 0.61 ft (0.19 m) above lsd. Highest water level 26.84 ft (8.18 m) below lsd, Apr. 1, 1963; lowest 36.3 ft (11.06 m) below lsd, Aug. 1, 1972. Records available: 1962-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 2, 1974	31.4	JAN. 3, 1975	32.21	APR. 2, 1975	31.00	AUG. 4, 1975	34.79
NOV. 4	31.5	FEB. 3	32.23	MAY 2	32.16	SEP. 3	33.08
DEC. 5	32.0	MAR. 4	31.83	JULY 1	33.55		

381032121114702. Local number 4N/7E-22Q5 M. Adolphus Eddleman. About 4.9 mi (7.9 km) northeast of Lodi. Drilled observation water-table well in Victor, Arroyo Seco, and Laguna Formations, diam 10 in (25.4 cm), depth 130 ft or 39.6 m (previously reported 266 ft or 81.1 m), casing information not available. Lsd 83.6 ft or 25.48 m (previously reported 83.83 ft or 25.55 m and 83.95 ft or 25.59 m). MP 0.55 ft (0.17 m) above lsd. Highest water level 36.34 ft (11.08 m) below lsd, Mar. 31, 1943; lowest 89.92 ft (27.41 m) below lsd Aug. 4, 1975. Records available: 1935-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 7, 1974	82.6	JAN. 8, 1975	77.79	APR. 2, 1975	76.83	JULY 1, 1975	87.79
NOV. 4	84.7	FEB. 4	77.37	MAY 5	82.29	AUG. 4	89.92
DEC. 5	79.7	MAR. 4	78.17	JUNE 3	81.67	SEP. 3	85.69

380940121114601. Local number 4N/7E-27P1 M. Frank H. and Leonard W. Buck. About 4.4 mi (7.1 km) northeast of Lodi. Drilled observation water-table well in Victor Formation of Pleistocene age, diam 10 in (25.4 cm), depth 48 ft or 14.6 m (previously reported 49 ft or 14.9 m), cased to 48 ft (14.6 m), perforated 39-48 ft (11.9-14.6 m). Lsd 81.5 ft or 24.84 m (previously reported 81.20 ft or 24.75 m) above msl. MP 0.60 ft (0.18 m) above lsd. Highest water level 24.60 ft (7.50 m) below lsd, June 3, 1938; lowest 43.4 ft (13.23 m) below lsd Jan. 5, 1973. Records available: 1935-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 1, 1974	40.9	JAN. 8, 1975	42.34	APR. 2, 1975	42.54	JULY 1, 1975	39.79
NOV. 4	41.1	FEB. 4	42.74	MAY 5	40.59	AUG. 4	40.72
DEC. 5	41.6	MAR. 4	42.44	JUNE 3	39.49	SEP. 3	41.21

3810071211153601. Local number 4N/7E-30E4 M. Charles Weber. About 2.5 mi (4.0 km) north of Lodi. Drilled unused water-table well in Victor Formation of Pleistocene age, diam 6 in (15.24 cm), depth 76 ft (23.2 m), casing information not available. Lsd 57.18 ft (17.43 m) above msl. MP 0.42 ft (0.13 m) above lsd. Highest water level 26.35 ft (8.03 m) below lsd, Jan. 4, 1944; lowest 60.5 ft (18.44 m) below lsd, Aug. 1, 1972. Records available: 1941-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 3, 1974	52.9	JAN. 6, 1975	49.84	APR. 2, 1975	48.38	JULY 1, 1975	55.98
NOV. 4	51.9	FEB. 3	49.26	MAY 2	52.39	AUG. 4	57.27
DEC. 5	50.9	MAR. 4	50.57	JUNE 2	51.08	SEP. 3	56.82

380911121114801. Local number 4N/7E-34F11 M. John J. Schmiedt. About 4.2 mi (6.8 km) east of Lodi. Drilled observation water-table well in alluvium, diam 4 in (10.16 cm), depth 23 ft or 7.0 m (previously reported 24 ft or 7.3 m), casing information not available. Lsd 61.76 ft (18.82 m) above msl. MP 1.35 ft (0.41 m) above msl. Highest water level 6.09 ft (1.86 m) below lsd, Jan. 6, 1956; lowest 21.0 ft (6.40 m) below lsd, Dec. 5, 1972. Records available: 1952-68, 1971-75. Measured by East Bay Municipal Utility District.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 7, 1974	17.9	JAN. 7, 1975	19.74	APR. 2, 1975	17.89	JULY 1, 1975	17.75
NOV. 4	17.8	FEB. 4	20.41	MAY 2	16.72	AUG. 4	18.44
DEC. 5	18.7	MAR. 4	20.37	JUNE 3	17.55	SEP. 3	18.46

Note.--Measurements were discontinued in 1974 for the following well:

San Joaquin County, Mokelumne River Basin - 380808121181501. - Local number 3N/6E-3K11 M.

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