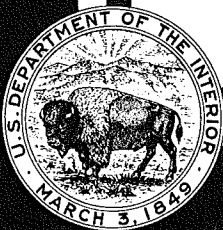


1971

*Rodger J. Ferreira* *lit.*

# Water Resources Data for California

## Part 2. Water Quality Records



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

# CALENDAR FOR WATER YEAR 1971

## OCTOBER 1970

S	M	T	W	T	F	S
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## AUGUST 1971

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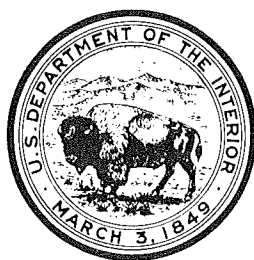
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1971

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## Part 2. Water Quality Records



UNITED STATES  
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District  
San Diego County  
San Bernardino Valley Municipal Water District  
San Luis Obispo County Flood Control and Water Conservation  
District  
San Mateo County  
Santa Clara County Flood Control and Water District  
Santa Cruz County Flood Control and Water Conservation  
District  
Siskiyou County Flood Control and Water Conservation District  
United Water Conservation District  
University of California  
Ventura County Flood Control District

Water-resources records, 1971, for California are  
in the following reports of the U.S. Geological Survey:

1. Water Resources Data for California  
Part 1: Surface Water Records  
Volume 1: Colorado River Basin, Southern Great  
Basin, and Pacific Slope Basins  
excluding Central Valley
2. Water Resources Data for California  
Part 1: Surface Water Records  
Volume 2: Northern Great Basin and Central Valley
3. Water Resources Data for California  
Part 2: Water Quality Records

Copies of these reports may be obtained from  
District Chief, Water Resources Division  
U.S. Geological Survey  
855 Oak Grove Avenue  
Menlo Park, California 94025



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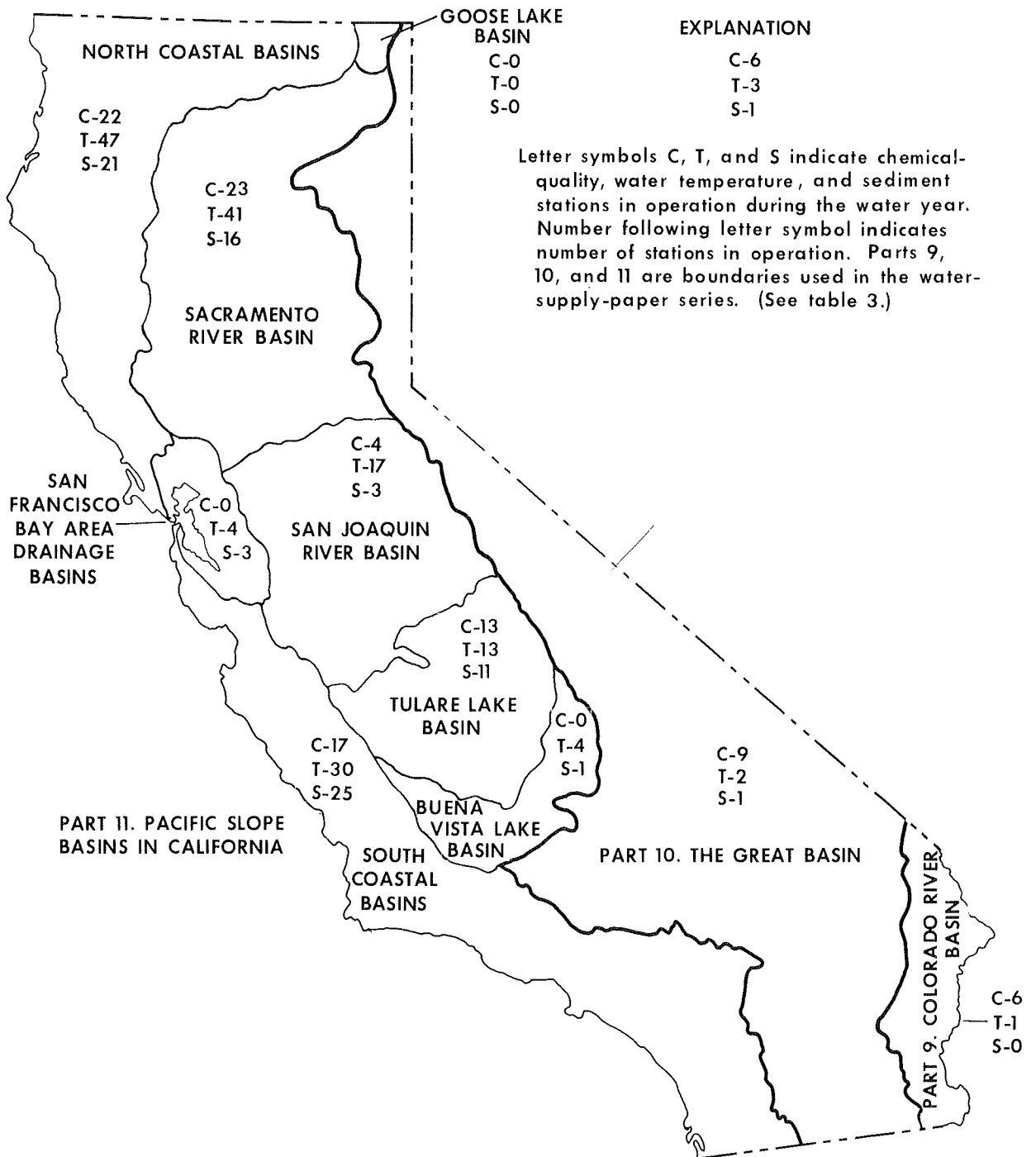


FIGURE 1.--Drainage-basin boundaries and number and distribution of water-quality stations.

# WATER RESOURCES DATA FOR CALIFORNIA, 1971

## Part 2. Water Quality Records

### INTRODUCTION

Water-resources data for the 1971 water year for California include records of data for the chemical and physical characteristics of surface water. The distribution, type, and number of stations in each river or drainage basin are shown in figure 1. A few pertinent stations in bordering States are also included. The records were compiled by the Water Resources Division of the U.S. Geological Survey under the direction of R. Stanley Lord, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in California.

The Geological Survey has published records of chemical quality, water temperatures, and sediment since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Beginning with the 1964 water year, water-quality records have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year. These records will be published later in Geological Survey water-supply papers.

## COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

California Department of Water Resources  
California Department of Fish and Game  
California Department of Navigation and Ocean Development  
Imperial Irrigation District  
Monterey County Flood Control and Water Conservation District  
Orange County Water District  
Riverside County Flood Control and Water Conservation District  
San Diego County  
San Bernardino Valley Municipal Water District  
San Luis Obispo County Flood Control and Water Conservation District  
San Mateo County  
Santa Clara County Flood Control and Water District  
Santa Cruz County Flood Control and Water Conservation District  
Siskiyou County Flood Control and Water Conservation District  
United Water Conservation District  
University of California  
Ventura County Flood Control District

Assistance in the form of funds was given by the Bureau of Reclamation, and the National Park Service, U.S. Department of the Interior; the Department of Housing and Urban Development; the Corps of Engineers, U.S. Army; and the Forest Service, U.S. Department of Agriculture.

Agencies furnishing assistance were:

Alameda County Water District  
Kings River Water Association  
Metropolitan Water District of Southern California  
Pacific Gas and Electric Company  
Sierra Pacific Power Company  
Southern California Edison Company  
Yuba County Water Agency

## DEFINITION OF TERMS

Terms related to water-quality and hydrologic data, as used in this report are defined as follows:

Acre-foot (AC-FT, ac-ft) is a 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.

Bed material is the shifting portion of fragmented alluvial material of which the streambed is composed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons.

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.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 milliliters is determined by the immediate or delayed incubation membrane filter method.

Cubic foot per second (cfs, CFS) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

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 mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the column in the tables is "Discharge (cfs)."

Dissolved solids is the residue on evaporation after drying at 180°C for 1 hour. For some water samples, particularly those containing moderately large quantities of soluble salts, the value reported is calculated from the quantities of the various determined constituents using the carbonate equivalent of the reported bicarbonate. The calculated sum of the constituents may be given instead of or in addition to the residue.

Drainage area of a stream at a specified location is that area, measured in horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point.

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.

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 attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ( $\text{CaCO}_3$ ).

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

Milligrams per liter (mg/l, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter 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, page 6. Concentration of suspended sediment also is expressed in mg/l, 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 the factors in table 2, p. 6.

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

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling) (Guy, 1969).

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

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969).

Plankton is the floating (or weakly swimming) animal or plant life in a body of water consisting chiefly of minute plants (as diatoms and blue-green algae) and of minute animals (as protozoan, entomostracans, and various larvae).

## WATER QUALITY RECORDS, 1971

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

<u>Ion</u>	<u>Multi- ply by</u>	<u>Ion</u>	<u>Multi- ply by</u>
Aluminum (Al <sup>+3</sup> )*...	0.11119	Iodide (I <sup>-1</sup> ).....	0.00788
Ammonia as NH <sub>4</sub> <sup>+1</sup> ...	.05544	Iron (Fe <sup>+3</sup> )*.....	.05372
Barium (Ba <sup>+2</sup> ).....	.01456	Lead (Pb <sup>+2</sup> )*.....	.00965
Bicarbonate (HCO <sub>3</sub> <sup>-1</sup> )	.01639	Lithium (Li <sup>+1</sup> )*...	.14411
Bromide (Br <sup>-1</sup> ).....	.01251	Magnesium (Mg <sup>+2</sup> )..	.08226
Calcium (Ca <sup>+2</sup> ).....	.04990	Manganese (Mn <sup>+2</sup> )*.	.03640
Carbonate (CO <sub>3</sub> <sup>-2</sup> )..	.03333	Nickel (Ni <sup>+2</sup> )*....	.03406
Chloride (Cl <sup>-1</sup> )....	.02821	Nitrate (NO <sub>3</sub> <sup>-1</sup> )...	.01613
Chromium (Cr <sup>+6</sup> )*...	.11539	Nitrite (NO <sub>2</sub> <sup>-1</sup> )...	.02174
Cobalt (Co <sup>+2</sup> )*.....	.03394	Phosphate (PO <sub>4</sub> <sup>-3</sup> )..	.03159
Copper (Cu <sup>+2</sup> )*.....	.03143	Potassium (K <sup>+1</sup> )...	.02557
Cyanide (CN <sup>-1</sup> ) ....	.03844	Sodium (Na <sup>+1</sup> ).....	.04350
Fluoride (F <sup>-1</sup> ).....	.05264	Strontium (Sr <sup>+2</sup> )*.	.02283
Hydrogen (H <sup>+1</sup> ).....	.99209	Sulfate (SO <sub>4</sub> <sup>-2</sup> )...	.02082
Hydroxide (OH <sup>-1</sup> )...	.05880	Zinc (Zn <sup>+2</sup> )*.....	.03060

\*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million\*  
(All values calculated to three significant figures)

<u>Range of concen- tration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concen- tration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concen- tration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concen- tration in 1000 mg/l</u>	<u>Di- vide by</u>
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		

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



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.

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.

Total sediment discharge or total sediment load is the sum of the 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 (Colby and Hembree, 1955).

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 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.

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. This ratio should be known especially for water used for irrigating farmland.

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, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may even vary in the same source with changes in the composition of the water.

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

Thermograph is a thermometer that continuously and automatically records, in a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or the digital mechanism that automatically records water temperature in 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 years.

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.

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).

## 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.

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and the general distribution of water in the principal river basins of the conterminous United States and Alaska.

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 of 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."

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.

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 radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

## 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 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 water-quality station, gaging 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 in 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 in this report are Part 9 (Colorado River basin), Part 10 (The Great Basin), and Part 11 (Pacific Coast basins).

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.

## 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 sediment loads. Discharge records for streams in California have been released in the report, "Water

Resources Data for California, 1971, Part 1. Surface Water Records, Volumes 1 and 2."

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 location, drainage area, 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.

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 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 ( $^{\circ}\text{F}$ ). In October 1967, the U.S. Geological Survey began to use the metric system. Data for chemical constituents are now reported in milligrams per liter (mg/l) or in micrograms per liter ( $\mu\text{g/l}$ ) and concentrations of suspended sediment are reported in milligrams per liter. Water temperatures are given in degrees Celsius (centigrade,  $^{\circ}\text{C}$ ). 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. To convert temperature in degrees Celsius to degrees Fahrenheit, see table 3, p. 12.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)\*  
(Temperature reported to nearest 0.5°C)

<u>°C</u>	<u>°F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>	<u>°F</u>
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

\*C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

### Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and the mixing of the stream. Some must be sampled at several verticals across the channel to determine accurately the solute load.

At chemical quality stations where monitors are installed, the records consist of daily maximum, minimum, and mean values for each constituent measured. More

detailed records (hourly values) may be obtained from the district office of the U.S. Geological Survey at the address given on page II of this report.

### Temperature

Water temperatures are measured at most of the water-quality 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 some stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and the monthly averages.

### Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided 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 sub-divided 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 some stations, suspended-sediment samples were collected periodically at many verticals in the stream cross

section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of 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, 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 employed. 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 ppm (parts per million) as  $\text{SiO}_2$  from July 1966 to September 1968, and in mg/l (milligrams per liter) as  $\text{SiO}_2$  from October 1968 to September 1970, were measured with a model 1860 Hach Turbidimeter which is optically similar to the model 2100 Hach Turbidimeter used since October 1970. Scales are available for those instruments providing a readout in either mg/l or in JTU. Hence, conversion of data for the period July 1966 through September 1970, from ppm or mg/l of silica to JTU can be made by use of table 4 below:

Table 4.--Conversion of turbidity values, measured by Hach Turbidimeters Model 1860 or 2100 from ppm or mg/l of silica to Jackson turbidity units.

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



## WATER-SUPPLY PAPERS

Table 5 below shows 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.

Table 5.--Water-supply papers containing records for parts 9-11, water years 1941-70

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	A2148, A2149
1950	1189	1960	1745	1970	A2158, A2159

A In preparation.

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- 1941, Methods of analyzing sediment samples: Rept. 4, 203 p.
- 1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10, 115 p.
- 1957, The development and calibration of visual accumulation tube: Rept. 11, 109 p.

U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis Minn.

- 1957, Some fundamentals of particle size analysis:  
Rpt. 12, 55 p.
- 1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA, 38 p.
- 1961, The single stage sampler for suspended sediment: Rept. 13, 105 p.
- 1963, Determinations of fluvial sediment discharge:  
Rept. 14, 151 p.

WATER-QUALITY RECORDS  
PART 9. COLORADO RIVER BASIN

COLORADO RIVER MAIN STEM

09421500 COLORADO RIVER BELOW HOOVER DAM, ARIZ.-NEV.  
(Irrigation network station)

LOCATION.--Lat 36°00'55", long 114°44'16", in NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec.3, T.30 N., R.23 W., Gila and Salt River meridian, Mohave County, Ariz., or in SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.29, T.22 S., R.65 E., Mount Diablo meridian, Clark County, Nev., 0.3 mile downstream from gaging station in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--167,800 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1939 to September 1971.

Water temperatures: October 1941 to September 1965.

Published as "below Boulder Dam" in 1940-45.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 SODIUM PLUS POTAS- SIUM (MG/L)
OCT. 19...	1230	7560	15.0	9.4	--	96	27	109	--
NOV. 23...	1330	5760	17.5	12	--	96	28	--	127
DEC. 14...	1315	10000	16.0	12	480	95	29	120	--
JAN. 12...	1130	13200	13.0	10	110	94	35	120	--
FEB. 08...	1310	18100	12.5	10	90	89	34	110	--
MAR. 09...	1450	19500	12.0	9.0	140	88	32	120	--
APR. 19...	1330	18700	13.0	9.7	30	93	31	110	--
MAY 10...	1330	24000	13.5	9.0	10	95	33	110	--
JUNE 14...	1400	18400	12.0	9.1	10	88	33	110	--
JULY 20...	1105	16200	13.0	9.1	10	90	34	97	--
AUG. 16...	1510	19600	13.0	9.7	10	88	30	110	--
SEP. 20...	1450	15900	13.0	9.2	10	91	29	110	--

COLORADO RIVER MAIN STEM

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09421500 COLORADO RIVER BELOW HOOVER DAM, ARIZ.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO- RIDE (CL) (MG/L)	DIS-SOLVED FLUO- RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED ORTHO PHOS- PHATE (PO4) (MG/L)
OCT.									
19...	4.8	165	0	320	93	.6	.90	4.0	--
NOV.									
23...	--	166	0	332	104	--	.56	2.5	--
DEC.									
14...	5.9	161	0	360	95	.6	1.1	--	.00
JAN.									
12...	6.1	156	0	360	95	.4	1.0	--	.00
FEB.									
08...	5.2	160	0	300	100	.4	1.0	--	.05
MAR.									
09...	5.4	168	0	310	96	.4	.00	--	.03
APR.									
19...	5.1	198	0	330	94	.4	.50	--	.03
MAY									
10...	5.0	163	0	330	110	.3	.70	--	.09
JUNE									
14...	4.7	166	0	310	94	.4	.67	--	.06
JULY									
20...	4.5	197	0	300	85	.3	.69	--	.00
AUG.									
16...	4.9	165	0	310	88	.1	.70	--	.03
SEP.									
20...	4.7	174	0	310	93	.5	.72	--	.03

DATE	DIS-SOLVED ORTHO PHOS- PHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/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)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
OCT.										
19...	--	180	747	745	1.02	352	217	2.5	1150	8.0
NOV.										
23...	--	--	786	784	1.07	354	218	2.9	1210	7.9
DEC.										
14...	--	210	--	800	1.09	360	228	2.8	1170	7.7
JAN.										
12...	--	160	--	800	1.09	380	252	2.7	1160	7.7
FEB.										
08...	--	160	--	730	.99	360	229	2.5	1160	7.7
MAR.										
09...	--	160	760	740	1.03	350	212	2.8	1160	8.2
APR.										
19...	.010	150	768	773	1.04	360	200	2.5	1160	8.0
MAY										
10...	.030	150	776	776	1.06	370	240	2.5	1170	8.0
JUNE										
14...	.020	100	758	734	1.03	360	220	2.5	1160	7.8
JULY										
20...	.000	210	760	720	1.03	360	200	2.2	1150	6.9
AUG.										
16...	.010	150	756	725	1.03	340	210	2.6	1130	7.8
SEP.										
20...	.010	150	760	736	1.03	350	200	2.6	1170	7.8

## COLORADO RIVER MAIN STEM

09424150 COLORADO RIVER AQUEDUCT NEAR PARKER DAM, ARIZ.-CALIF.

LOCATION.--Lat 34°18'58", long 114°09'23", in NW¼SW¼ sec.28, T.3 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, at gaging station at intake pumping plant of Metropolitan Water District of Southern California on Lake Havasu, 1.8 miles upstream from Parker Dam, and 154 miles downstream from Hoover Dam.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1971.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SILICA (SI02) (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)
OCT. 07...	0930	1780	22.0	7.6	82	34	111	5.0
NOV. 08...	--	1910	--	9.4	86	33	115	5.0
DEC. 08...	--	1770	--	8.7	87	34	114	5.0
JAN. 06...	--	1830	--	8.5	88	34	112	5.0
FEB. 08...	--	1360	11.0	8.5	91	32	109	5.0
MAR. 08...	--	1730	13.0	6.6	85	34	111	5.0
APR. 10...	--	1760	18.0	7.6	92	33	112	5.0
MAY 08...	--	1750	--	6.2	91	33	112	5.0
JUNE 08...	--	1710	23.5	5.4	82	34	112	5.0
JULY 07...	--	1720	27.0	10	89	34	111	5.0
AUG. 08...	--	1770	29.0	5.9	82	32	115	5.0
SEP. 08...	--	1770	--	5.4	72	33	107	5.0

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (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)
OCT. 07...	129	2	327	98	.4	.5	732	1.00	3520
NOV. 08...	137	4	330	99	.4	.9	751	1.02	3870
DEC. 08...	142	2	333	100	.4	1.0	756	1.03	3610
JAN. 06...	154	0	327	99	.4	1.0	752	1.02	3720
FEB. 08...	148	4	328	96	.4	1.7	750	1.02	2750
MAR. 08...	138	1	328	96	.5	1.2	737	1.00	3440
APR. 10...	148	4	332	97	.4	1.2	758	1.03	3600
MAY 08...	151	2	334	96	.5	1.4	757	1.03	3580
JUNE 08...	129	2	330	95	.5	.7	731	.99	3380
JULY 07...	149	1	330	99	.4	1.1	755	1.03	3510
AUG. 08...	128	2	334	100	.4	.3	741	1.01	3540
SEP. 08...	--	4	324	96	.4	.2	696	.95	3330

09424150 COLORADO RIVER AQUEDUCT NEAR PARKER DAM, ARIZ.-CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (JTU)
OCT.								
07...	343	234	109	41	2.6	1150	8.5	1
NOV.								
08...	351	232	119	41	2.7	1170	8.4	1
DEC.								
08...	355	235	120	41	2.6	1150	8.5	0
JAN.								
06...	360	234	126	40	2.6	1160	8.1	1
FEB.								
08...	361	233	128	39	2.5	1170	8.5	1
MAR.								
08...	350	235	115	40	2.6	1150	8.4	1
APR.								
10...	365	237	128	40	2.5	1160	8.4	0
MAY								
08...	363	236	127	40	2.6	1150	8.5	--
JUNE								
08...	343	234	109	41	2.6	1150	8.4	1
JULY								
07...	362	238	124	40	2.5	1150	8.4	0
AUG.								
08...	338	230	108	42	2.7	1130	8.5	1
SEP.								
08...	316	--	--	42	2.6	1110	8.6	1

## COLORADO RIVER MAIN STEM

09427520 COLORADO RIVER BELOW PARKER DAM, ARIZ.-CALIF.

LOCATION.--Lat 34°17'44", long 114°08'22", in NW¼NW¼ sec.3, T.2 N., R.27 E., San Bernardino meridian, San Bernardino County, Calif., at gaging station at Parker Dam, 13 miles northeast of Parker, Ariz., and 14 miles upstream from Headgate Rock Dam.

DRAINAGE AREA.--178,800 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1971. Prior to 1969 water year, published as sta 09428000.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SILICA (SIU2) (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 SODIUM PLUS POTAS- SIUM (MG/L)
OCT.									
05...	1530	13900	--	8.0	--	86	31	--	121
20...	1000	4510	21.5	9.0	--	96	28	114	--
NOV.									
02...	1520	9100	--	9.0	--	86	33	--	121
24...	1015	5310	16.0	9.2	--	95	26	--	125
DEC.									
07...	0810	5000	--	8.0	--	85	34	--	125
15...	1030	4670	14.0	10	50	91	33	120	--
JAN.									
14...	--	--	--	9.0	140	87	39	120	--
FEB.									
01...	0830	14300	--	8.8	160	76	34	120	--
MAR.									
01...	1020	14100	--	8.7	20	91	33	110	--
APR.									
07...	1020	15100	--	8.7	10	91	34	120	--
MAY									
05...	1020	6000	--	7.3	40	92	33	120	--
JUNE									
09...	1030	13300	--	7.6	10	88	33	100	--
AUG.									
16...	1030	14000	--	9.9	10	88	33	110	--
SEP.									
07...	1330	13900	--	9.8	10	83	31	110	--



## COLORADO RIVER MAIN STEM

09427520 COLORADO RIVER BELOW PARKER DAM, ARIZ.--CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED PO-TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO- RIDE (CL) (MG/L)	DIS-SOLVED FLUO- RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED ORTHO PHOS- PHATE (PO4) (MG/L)
OCT.									
05...	--	144	0	340	94	--	--	--	--
20...	5.1	146	0	333	101	.4	.34	1.5	--
NOV.									
02...	--	146	0	345	95	--	--	--	--
24...	--	153	0	334	101	--	.20	.9	--
DEC.									
07...	--	150	0	350	95	--	--	--	--
15...	6.1	153	0	380	95	.4	.70	--	--
JAN.									
14...	5.3	167	0	320	140	.4	.60	--	.01
FEB.									
01...	5.6	165	0	340	100	.5	.20	--	--
MAR.									
01...	5.0	168	0	340	80	.6	.40	--	--
APR.									
07...	5.3	164	0	340	100	.3	.80	--	--
MAY									
05...	5.2	166	0	330	110	.3	.40	--	--
JUNE									
09...	5.2	165	0	320	100	.3	.40	--	--
AUG.									
16...	5.1	160	0	330	100	.7	.37	--	--
SEP.									
07...	5.2	163	0	320	96	.4	.30	--	--

DATE	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (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	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
OCT.									
05...	--	792	752	1.08	340	222	2.8	1170	8.1
20...	190	760	760	1.03	354	234	2.6	1160	8.0
NOV.									
02...	--	788	762	1.07	350	230	2.8	1190	8.1
24...	--	765	766	1.04	344	218	2.9	1170	8.1
DEC.									
07...	--	780	772	1.06	350	227	2.9	1190	8.1
15...	170	--	800	1.09	340	214	2.7	1170	7.8
JAN.									
14...	160	808	800	1.10	380	243	2.7	1180	8.2
FEB.									
01...	150	752	770	1.02	330	195	2.9	1190	8.4
MAR.									
01...	140	788	753	1.07	360	230	2.5	1130	8.4
APR.									
07...	110	800	784	1.09	370	230	2.7	1190	8.0
MAY									
05...	150	804	781	1.09	370	230	2.7	1180	8.1
JUNE									
09...	160	790	737	1.07	360	220	2.3	1180	8.1
AUG.									
16...	150	766	757	1.04	360	220	2.5	1170	7.9
SEP.									
07...	140	736	737	1.00	330	200	2.6	1140	7.5

## COLORADO RIVER MAIN STEM

09429500 COLORADO RIVER AT IMPERIAL DAM, ARIZ.-CALIF.  
(Irrigation network and pesticide station)

LOCATION.--Lat 32°53'29", long 114°27'57", in NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.9, T.15 S., R.24 E., San Bernardino meridian, Imperial County, Calif., at gaging station near All-American Canal headworks at west end of Imperial Dam, 5 miles upstream from Laguna Dam, 15 miles northeast of Yuma, Ariz., 90 miles downstream from Palo Verde Dam, and 147 miles downstream from Parker Dam.

DRAINAGE AREA.--184,600 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: August 1969 to September 1971.

EXTREMES.--1970-71:

Specific conductance: Maximum daily, 1,650 micromhos Dec. 3; minimum daily, 1,250 micromhos Aug. 22.

Period of record:

Specific conductance: Maximum daily, 1,880 micromhos Nov. 21, 1969; minimum daily, 1,250 micromhos Aug. 22, 1971.

REMARKS.--Daily specific conductance record furnished by U.S. Bureau of Reclamation. Prior to Jan. 1, 1971, daily specific conductance measurements were taken in the P.M. After Jan. 1, 1971, reported daily specific conductance measurements are mean daily values.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
OCT.									
05...	1230	--	9.0	--	94	33	--	158	--
22...	1400	22.0	--	--	100	36	160	--	5.8
NOV.									
02...	1230	18.5	10	--	100	34	--	157	--
27...	1100	16.0	--	--	100	26	160	--	5.9
DEC.									
07...	1230	--	9.0	--	102	35	--	175	--
JAN.									
18...	--	--	11	100	100	40	160	--	5.8
FEB.									
01...	--	--	12	140	93	37	170	--	6.1
MAR.									
01...	--	--	11	10	96	36	150	--	5.3
APR.									
05...	--	--	10	10	100	36	140	--	5.2
MAY									
05...	--	--	8.9	40	95	36	160	--	5.6
JUNE									
09...	--	--	8.8	20	96	35	140	--	5.4
JULY									
07...	--	--	9.4	10	93	35	130	--	4.8
AUG.									
18...	--	--	13	5	98	35	150	--	5.4
SEP.									
08...	--	--	11	10	91	34	140	--	5.6

DATE	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)
OCT.									
05...	162	0	380	131	--	--	--	--	--
22...	182	0	380	150	--	--	--	--	--
NOV.									
02...	174	0	380	138	--	--	--	--	--
27...	188	0	390	150	--	--	--	--	--
DEC.									
07...	182	0	405	150	--	--	--	--	--
JAN.									
18...	194	0	380	150	.5	.60	.02	--	210
FEB.									
01...	184	0	390	160	.6	.10	.00	--	230
MAR.									
01...	186	0	390	130	1.1	.40	.00	.000	500
APR.									
05...	174	0	360	130	.5	.40	.00	.000	140
MAY									
05...	173	0	340	160	.3	.40	.03	.010	210
JUNE									
09...	187	0	360	140	.3	.32	.03	.010	200
JULY									
07...	174	0	360	130	.4	.40	.06	.020	190
AUG.									
18...	180	0	350	150	.6	.26	.03	.010	200
SEP.									
08...	188	0	360	110	.4	.23	.03	.010	240

## COLORADO RIVER MAIN STEM

09429500 COLORADO RIVER AT IMPERIAL DAM, ARIZ.-CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (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	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
OCT.								
05...	908	886	1.23	370	237	3.6	1380	8.1
22...	982	--	1.34	400	250	5.3	1480	8.2
NOV.								
02...	956	906	1.30	390	248	3.5	1410	8.2
27...	990	--	1.35	400	250	3.5	1490	8.1
DEC.								
07...	1020	967	1.39	400	251	2.5	1530	8.2
JAN.								
18...	980	946	1.29	420	261	3.4	1440	7.8
FEB.								
01...	948	960	1.29	380	229	3.8	1460	8.3
MAR.								
01...	928	913	1.26	390	240	3.3	1330	8.3
APR.								
05...	900	869	1.22	400	260	3.1	1340	8.1
MAY								
05...	940	893	1.28	390	240	3.5	1380	8.1
JUNE								
09...	932	879	1.27	380	230	3.1	1370	8.3
JULY								
07...	880	850	1.20	380	230	2.9	1320	7.6
AUG.								
18...	892	892	1.21	390	240	3.3	1370	8.0
SEP.								
08...	872	846	1.19	370	210	3.2	1330	7.9

DATE	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DOD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
OCT.									
27...	.00	.0	.00	.00	.00	.00	.00	.00	.00
NOV.									
10...	.00	.0	.00	.00	.00	.00	.00	.00	.00
DEC.									
01...	.00	.0	.00	.00	.01	.00	.00	.00	.00
JAN.									
05...	.00	.0	.00	.00	.00	.00	.00	.00	.00
FEB.									
02...	.00	.0	.00	.00	.00	.00	.00	.00	.00
APR.									
06...	.00	.0	.00	.00	.00	.00	.00	.00	.00
MAY									
04...	.00	.0	.00	.00	.00	.00	.00	.00	.00
JUNE									
01...	.00	.0	.00	.00	.00	.00	.00	.00	.00
JULY									
06...	.00	.0	.00	.00	.00	.00	.00	.00	.00
AUG.									
03...	.00	.0	.00	.00	.00	.00	.00	.00	.00
SEP.									
07...	.00	.0	.00	.00	.00	.00	.00	.00	.00

## COLORADO RIVER MAIN STEM

09429500 COLORADO RIVER AT IMPERIAL DAM, ARIZ.-CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT.								
27...	.00	.00	.00	.00	.00	.00	.00	.00
NOV.								
10...	.00	.00	.00	.00	.00	.00	.00	.00
DEC.								
01...	.00	.00	.00	.00	.00	.00	.00	.00
JAN.								
05...	.00	.00	.00	.00	.00	.00	.00	.00
FEB.								
02...	.00	.00	.00	.00	.00	.00	.00	.00
APR.								
06...	.00	.00	.00	.00	.00	.00	.00	.00
MAY								
04...	.00	.00	.00	.00	.00	.00	.00	.00
JUNE								
01...	.00	.00	.00	.00	.00	.00	.00	.00
JULY								
06...	.00	.00	.00	.00	.00	.00	.00	.00
AUG.								
03...	.00	.00	.00	.00	.00	.00	.00	.00
SEP.								
07...	.00	.00	.00	.00	.00	.00	.00	.00

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	1460	1610	1520	1460	1390	1320	1400	1360	1340	1320	1380
2	1350	1400	1590	1520	1410	1360	1340	1410	1340	1340	1310	1400
3	1310	1400	1650	1540	1380	1370	1370	1390	1360	1350	1330	1400
4	1390	1460	1600	1500	1420	1380	1360	1390	1380	1350	1320	1400
5	1360	1430	1510	1480	1390	1340	1340	1390	1390	1320	1340	1400
6	1350	1450	1510	1470	1430	1330	1350	1420	1390	1340	1340	1380
7	1380	1480	1510	1420	1420	1350	1340	1430	1380	1340	1360	1380
8	1380	1510	1480	1380	1350	1320	1340	1440	1380	1320	1340	1360
9	1420	1480	1420	1370	1340	1330	1360	1440	1370	1320	1360	1340
10	1420	1440	1440	1400	1330	1330	1360	1380	1360	1330	1320	1330
11	1460	1440	1440	1430	1340	1320	1370	1350	1380	1330	1310	1330
12	1460	1400	1400	1440	1360	1320	1350	1350	1380	1290	1320	1360
13	1420	1420	1470	1460	1360	1350	1330	1360	1360	1310	1310	1350
14	1400	1470	1440	1480	1390	1330	1340	1380	1340	1310	1350	1340
15	1400	1500	1420	1490	1340	1320	1350	1410	1330	1330	1360	1360
16	1440	1500	1380	1500	1340	1320	1350	1420	1340	1330	1360	1390
17	1440	1480	1360	1520	1340	1320	1400	1400	1340	1330	1350	1390
18	1450	1440	1360	1460	1350	1340	1400	1360	1360	1320	1370	1390
19	1400	1390	1410	1480	1360	1340	1370	1370	1370	1320	1350	1410
20	1380	1380	1470	1460	1380	1340	1390	1350	1360	1330	1320	1380
21	1380	1410	1480	1450	1410	1340	1410	1380	1340	1330	1300	1370
22	1440	1480	1410	1440	1420	1320	1380	1410	1300	1370	1250	1330
23	1460	1410	1420	1440	1400	1320	1390	1420	1320	1340	1360	1320
24	1480	1410	1510	1460	1380	1320	1400	1380	1320	1340	1340	1340
25	1460	1430	1600	1470	1340	1320	1360	1360	1350	1320	1360	1340
26	1420	1490	1580	1440	1380	1370	1330	1350	1330	1300	1380	1380
27	1400	1560	1480	1440	1420	1360	1360	1380	1320	1310	1400	1360
28	1390	1620	1480	1440	1420	1380	1360	1410	1320	1320	1350	1330
29	1390	1640	1430	1430	---	1340	1370	1410	1320	1320	1360	1330
30	1400	1620	1420	1440	---	1340	1380	1420	1320	1330	1340	1320
31	1420	---	1470	1460	---	1320	---	1380	---	1320	1370	---
MONTH	1410	1470	1480	1460	1380	1340	1360	1390	1350	1330	1340	1360

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

27

09522500 GILA GRAVITY MAIN CANAL AT IMPERIAL DAM, ARIZ.-CALIF.

LOCATION.--Lat 32°52'34", long 114°27'18", in SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec.30, T.6 S., R.21 W., Gila and Salt River meridian, Yuma County, Ariz., at gaging station 0.6 mile downstream from intake at east end of Imperial Dam.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1971 (partial-record station).  
Water temperatures: January 1956 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 32.0°C on several days during August and September; minimum, 7.0°C Jan. 4-7.

Period of record:

Water temperatures: Maximum, 33.0°C Aug. 29-31, 1970; minimum, 7.0°C on several days in 1964 and 1971.

REMARKS.--Temperature probe above water surface Nov. 26 to Dec. 4. Unpublished chemical analyses (partial-record) for water years 1965-67 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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)
DEC. 31...	0920	500	10.0	10	--	98	38	--
JAN. 13...	1340	908	9.0	8.0	--	95	40	--
APR. 14...	1245	1740	20.0	7.0	--	86	43	--
JULY 14...	1030	2070	30.0	9.9	10	98	33	130

DATE	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORDN (B) (UG/L)
DEC. 31...	163	--	176	--	390	145	--	--	--
JAN. 13...	157	--	178	0	380	142	--	--	--
APR. 14...	143	--	172	0	375	121	--	--	--
JULY 14...	--	5.4	186	0	330	130	.5	.30	190

DATE	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)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
DEC. 31...	964	932	1.31	400	256	3.5	1470	8.3
JAN. 13...	984	911	1.34	400	254	3.4	1460	8.2
APR. 14...	918	861	1.25	390	249	3.1	1360	8.2
JULY 14...	900	830	1.22	380	230	2.9	1320	8.0

## DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

09522500 GILA GRAVITY MAIN CANAL AT IMPERIAL DAM, ARIZ.-CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	24.0	18.0	16.0	---	---	10.0	9.0	12.0	12.0	12.0	12.0
2	25.0	25.0	18.0	18.0	---	---	9.0	9.0	12.0	12.0	12.0	11.0
3	25.0	25.0	18.0	18.0	---	---	9.0	8.0	12.0	12.0	11.0	11.0
4	26.0	25.0	18.0	18.0	---	---	8.0	7.0	12.0	12.0	11.0	11.0
5	26.0	25.0	19.0	18.0	13.0	12.0	7.0	7.0	12.0	11.0	13.0	11.0
6	26.0	25.0	18.0	18.0	13.0	12.0	7.0	7.0	12.0	11.0	13.0	13.0
7	25.0	23.0	18.0	18.0	13.0	13.0	8.0	7.0	12.0	11.0	13.0	13.0
8	23.0	22.0	18.0	17.0	13.0	13.0	8.0	8.0	12.0	11.0	13.0	13.0
9	22.0	22.0	17.0	17.0	13.0	13.0	8.0	8.0	12.0	12.0	14.0	13.0
10	22.0	21.0	17.0	17.0	13.0	13.0	8.0	8.0	12.0	12.0	14.0	14.0
11	22.0	21.0	17.0	17.0	13.0	13.0	9.0	8.0	12.0	12.0	15.0	14.0
12	22.0	21.0	17.0	17.0	13.0	12.0	9.0	9.0	13.0	12.0	16.0	15.0
13	22.0	22.0	17.0	16.0	12.0	12.0	9.0	9.0	13.0	12.0	16.0	16.0
14	23.0	22.0	16.0	16.0	12.0	12.0	9.0	9.0	14.0	13.0	16.0	16.0
15	23.0	22.0	16.0	16.0	12.0	12.0	9.0	9.0	14.0	14.0	16.0	15.0
16	23.0	22.0	16.0	16.0	12.0	12.0	9.0	9.0	14.0	14.0	15.0	15.0
17	22.0	22.0	16.0	15.0	12.0	12.0	9.0	9.0	14.0	13.0	16.0	15.0
18	22.0	21.0	15.0	15.0	12.0	12.0	10.0	9.0	14.0	13.0	16.0	15.0
19	22.0	21.0	15.0	15.0	12.0	12.0	12.0	10.0	14.0	13.0	15.0	15.0
20	22.0	21.0	15.0	15.0	12.0	12.0	12.0	11.0	14.0	13.0	15.0	15.0
21	22.0	21.0	15.0	15.0	12.0	12.0	13.0	12.0	13.0	13.0	16.0	15.0
22	22.0	21.0	15.0	15.0	12.0	11.0	12.0	12.0	13.0	13.0	16.0	16.0
23	21.0	21.0	15.0	15.0	11.0	11.0	12.0	12.0	13.0	12.0	17.0	16.0
24	21.0	21.0	15.0	15.0	11.0	11.0	12.0	12.0	12.0	12.0	17.0	17.0
25	21.0	21.0	15.0	15.0	11.0	10.0	12.0	11.0	12.0	12.0	18.0	17.0
26	21.0	20.0	---	---	10.0	9.0	11.0	11.0	12.0	12.0	19.0	18.0
27	20.0	18.0	---	---	10.0	9.0	12.0	11.0	12.0	12.0	19.0	18.0
28	18.0	17.0	---	---	10.0	10.0	12.0	11.0	12.0	12.0	20.0	19.0
29	17.0	17.0	---	---	10.0	10.0	12.0	12.0	---	---	20.0	19.0
30	17.0	16.0	---	---	10.0	10.0	12.0	12.0	---	---	20.0	19.0
31	17.0	16.0	---	---	10.0	10.0	12.0	12.0	---	---	19.0	19.0
MONTH	26.0	16.0	19.0	15.0	13.0	9.0	13.0	7.0	14.0	11.0	20.0	11.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	18.0	22.0	21.0	22.0	21.0	27.0	26.0	30.0	29.0	30.0	30.0
2	18.0	18.0	22.0	21.0	22.0	21.0	27.0	27.0	30.0	29.0	30.0	30.0
3	18.0	18.0	22.0	21.0	22.0	21.0	28.0	27.0	30.0	30.0	30.0	29.0
4	18.0	18.0	21.0	20.0	23.0	22.0	28.0	27.0	30.0	29.0	30.0	29.0
5	19.0	18.0	21.0	20.0	23.0	22.0	28.0	27.0	30.0	29.0	30.0	29.0
6	19.0	18.0	20.0	20.0	24.0	23.0	27.0	27.0	30.0	30.0	30.0	30.0
7	19.0	19.0	20.0	19.0	24.0	23.0	27.0	27.0	30.0	30.0	30.0	30.0
8	20.0	19.0	20.0	19.0	24.0	24.0	28.0	27.0	31.0	30.0	30.0	30.0
9	20.0	19.0	21.0	20.0	24.0	24.0	28.0	27.0	31.0	30.0	31.0	30.0
10	21.0	20.0	22.0	21.0	24.0	23.0	28.0	27.0	30.0	30.0	31.0	30.0
11	21.0	20.0	23.0	22.0	24.0	23.0	29.0	28.0	30.0	29.0	32.0	30.0
12	21.0	20.0	23.0	23.0	25.0	24.0	29.0	28.0	30.0	29.0	32.0	30.0
13	21.0	20.0	24.0	23.0	26.0	24.0	29.0	28.0	30.0	29.0	32.0	30.0
14	21.0	20.0	24.0	23.0	26.0	25.0	29.0	28.0	30.0	29.0	30.0	30.0
15	20.0	18.0	26.0	23.0	27.0	26.0	29.0	28.0	30.0	29.0	30.0	30.0
16	19.0	18.0	26.0	24.0	27.0	26.0	28.0	28.0	30.0	30.0	30.0	30.0
17	19.0	19.0	24.0	23.0	28.0	26.0	28.0	28.0	30.0	30.0	30.0	29.0
18	19.0	17.0	23.0	22.0	27.0	27.0	29.0	28.0	30.0	30.0	29.0	26.0
19	17.0	17.0	22.0	21.0	27.0	26.0	29.0	28.0	30.0	30.0	26.0	24.0
20	18.0	17.0	22.0	21.0	28.0	27.0	30.0	28.0	30.0	30.0	24.0	24.0
21	18.0	17.0	22.0	22.0	28.0	27.0	30.0	29.0	30.0	29.0	24.0	24.0
22	18.0	17.0	22.0	21.0	28.0	27.0	29.0	29.0	29.0	28.0	24.0	24.0
23	19.0	18.0	22.0	21.0	28.0	27.0	29.0	28.0	30.0	29.0	24.0	24.0
24	19.0	18.0	23.0	22.0	28.0	27.0	29.0	28.0	30.0	30.0	24.0	24.0
25	19.0	18.0	24.0	23.0	27.0	27.0	29.0	28.0	30.0	30.0	24.0	24.0
26	18.0	17.0	24.0	23.0	27.0	26.0	29.0	28.0	31.0	30.0	24.0	24.0
27	18.0	17.0	24.0	22.0	27.0	26.0	29.0	28.0	32.0	30.0	24.0	24.0
28	19.0	18.0	22.0	21.0	27.0	26.0	29.0	28.0	31.0	30.0	24.0	23.0
29	20.0	19.0	21.0	19.0	26.0	25.0	29.0	28.0	32.0	31.0	23.0	22.0
30	21.0	20.0	21.0	20.0	27.0	25.0	29.0	28.0	32.0	31.0	22.0	20.0
31	---	---	21.0	21.0	---	---	29.0	29.0	31.0	30.0	---	---
MONTH	21.0	17.0	26.0	19.0	28.0	21.0	30.0	26.0	32.0	28.0	32.0	20.0

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

29

09523000 ALL-AMERICAN CANAL NEAR IMPERIAL DAM, ARIZ.-CALIF.

LOCATION.--Lat 32°52'17", long 114°28'47", in SE1/4 sec.17, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, at gaging station on left bank, 6,000 ft downstream from intake at west end of Imperial Dam, and 13.7 miles upstream from turnout to Yuma Main Canal.

PERIOD OF RECORD.--Chemical analyses: August 1969 to May 1971 (discontinued).

CHEMICAL ANALYSES, OCTOBER 1970 TO MAY 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
OCT. 20...	1050	5260	--	.16	.37	.16	.11
NOV. 17...	1105	3620	--	--	--	--	--
DEC. 16...	1000	5210	12.0	--	--	--	--
JAN. 13...	1030	3780	--	.56	.90	.56	.03
MAR. 03...	1035	7820	10.5	.68	--	--	.03
APR. 14...	1030	--	--	.23	--	--	.03
MAY 12...	1030	6710	--	.34	--	--	.00

DATE	DIS- SOLVED AMMONIA (NH4) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
OCT. 20...	--	.8	.19	.01	932	1370
NOV. 17...	--	.1	.03	.01	984	1530
DEC. 16...	--	1.0	.06	--	886	1360
JAN. 13...	.00	1.3	.09	.01	976	1450
MAR. 03...	2.1	--	.31	.09	892	1350
APR. 14...	.06	--	.09	.06	928	1390
MAY 12...	.23	--	.12	.06	940	1410

## PART 10. THE GREAT BASIN

## SALTON SEA BASIN

10254450 EAST HIGHLINE CANAL NEAR NILAND, CALIF.

LOCATION.--Lat 33°16'42", long 115°31'32", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.21, T.10 S., R.14 E., Imperial County, at gaging station 2.8 miles northwest of Niland.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1971 (discontinued).

REMARKS.--Records of discharge furnished by Imperial Irrigation District.

## CHEMICAL ANALYSES, OCTOBER 1970 TO JUNE 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
OCT. 15...	0745	36	--	.13	.29	.13	.08
NOV. 17...	1600	.01	17.5	.15	.64	.15	.14
DEC. 28...	1600	9.6	12.5	1.0	1.3	1.0	.02
JAN. 18...	1630	48	13.0	.72	1.1	.74	.03
MAR. 24...	1300	17	18.5	.36	--	--	.00
APR. 20...	1345	--	20.0	.00	--	--	.00
MAY 18...	1040	--	21.0	.25	--	--	.00
JUNE 15...	1045	--	28.0	--	--	--	.07

DATE	DIS- SOLVED AMMONIA (NH4) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
OCT. 15...	--	.6	.23	.01	928	1470
NOV. 17...	--	2.0	.08	.01	972	1500
DEC. 28...	.00	1.2	.07	.00	1120	1680
JAN. 18...	.03	1.6	.10	.04	1040	1540
MAR. 24...	1.4	--	.31	.12	970	1200
APR. 20...	.33	--	.28	.00	942	1470
MAY 18...	.22	--	.15	.03	984	1440
JUNE 15...	.08	--	.21	.03	922	1410



CHEMICAL ANALYSES, OCTOBER 1970 TO JUNE 1971

[illegible]

## SALTON SEA BASIN

10254580 ALAMO RIVER AT INTERNATIONAL BOUNDARY, NEAR CALEXICO, CALIF.

LOCATION.--Lat 32°40'26", long 115°22'12", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec.18, T.17 S., R.15 E., Imperial County, at gaging station at International Boundary and 6.5 miles east of Calexico.

PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1971 (discontinued).

REMARKS.--Records of discharge furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, OCTOBER 1970 TO JUNE 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	OIS- SOLVED NITRITE (NO2) (MG/L)
NOV. 18...	0900	2.8	17.0	.30	.59	.30	.89
DEC. 29...	0915	2.4	14.5	.65	1.3	.73	.11
JAN. 19...	0830	1.5	16.0	.74	1.5	.82	.14
MAR. 23...	1515	1.7	22.0	.56	--	--	.10
APR. 20...	1615	--	21.0	.12	--	--	.10
MAY 18...	1225	--	23.0	.42	--	--	.03
JUNE 15...	1250	--	26.0	--	--	--	.79

DATE	DIS- SOLVED AMMONIA (NH4) (MG/L)	OIS- SOLVED NITRATE (NO3) (MG/L)	PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED ORTHOPHOS- PHATE (PO4) (MG/L)	OIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
NOV. 18...	--	.1	.31	.01	2090	3270
DEC. 29...	.10	2.3	.24	.01	2170	3200
JAN. 19...	.10	3.0	.22	.01	2700	3930
MAR. 23...	1.2	--	.46	.31	2210	2800
APR. 20...	.44	--	.40	.15	2800	4270
MAY 18...	.54	--	.61	.15	2580	3780
JUNE 15...	.15	--	.37	.12	1900	2910

10254580 ALAMO RIVER AT INTERNATIONAL BOUNDARY, NEAR CALEXICO, CALIF.--Continued

## CHEMICAL ANALYSES, OCTOBER 1970 TO JUNE 1971

DATE	TIME	TEMP- ERATURE (DEG C)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)
NOV. 18...	0900	17.0	.00	.0	.00	.00	.00	.00	.00
DEC. 29...	0915	14.5	.00	.0	.01	.00	.00	.00	.00
JAN. 19...	0830	16.0	.00	.0	.00	.00	.00	.00	.00
FEB. 17...	0930	16.5	.00	.0	.00	.00	.00	.00	.00
APR. 20...	1615	21.0	.00	.0	.00	.00	.00	.00	.00
MAY 18...	1225	23.0	.00	.0	.00	.00	.00	.00	.00
JUNE 15...	1250	26.0	.00	.0	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
NOV. 18...	.00	.00	.00	.00	.00	.00	.00	.00	.00
DEC. 29...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JAN. 19...	.00	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 17...	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR. 20...	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAY 18...	.00	.00	.00	.00	.00	.00	.81	.00	.00
JUNE 15...	.00	.00	.00	.00	.00	.00	.18	.00	.00

## SALTON SEA BASIN

10254730 ALAMO RIVER NEAR NILAND, CALIF.

LOCATION.--Lat 33°12'03", long 115°36'07", in NE<sup>1</sup>SW<sup>1</sup>NE<sup>1</sup> sec.22, T.11 S., R.13 E., Imperial County, at gaging station on left bank, 0.6 mile upstream from mouth, and 5.8 miles southwest of Niland.

PERIOD OF RECORD.--Chemical analyses (revised): October 1963 to September 1964, water year 1967 (partial-record station), August 1969 to June 1971 (discontinued).

REMARKS.--Records of discharge furnished by Imperial Irrigation District.

## CHEMICAL ANALYSES, OCTOBER 1970 TO JUNE 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
OCT. 15...	0825	1030	--	1.2	6.6	1.4	.11
NOV. 17...	1445	829	15.0	1.5	18	3.5	37
DEC. 28...	1530	587	13.5	.34	14	6.8	2.0
JAN. 18...	1600	790	13.0	.60	11	3.5	1.4
MAR. 24...	1145	1290	18.5	1.2	--	--	1.2
APR. 20...	1230	--	18.0	.00	--	--	1.3
MAY 18...	1005	--	22.5	.75	--	--	1.6
JUNE 15...	0930	--	26.5	--	--	--	.00

DATE	DIS- SOLVED AMMONIA (NH4) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
OCT. 15...	--	23	4.2	.66	2550	3580
NOV. 17...	--	15	4.3	.91	2620	3830
DEC. 28...	8.2	28	1.5	.64	3080	4460
JAN. 18...	3.7	29	1.9	.26	2600	3830
MAR. 24...	2.8	--	2.4	1.2	2270	2650
APR. 20...	3.5	--	2.1	1.8	2420	3650
MAY 18...	6.2	--	4.0	2.2	2470	3610
JUNE 15...	.82	--	2.1	.67	2250	3360

10254730 ALAMO RIVER NEAR NILAND, CALIF.--Continued

## CHEMICAL ANALYSES, OCTOBER 1970 TO JUNE 1971

DATE	TIME	TEMP- ERATURE (DEG C)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)
OCT. 15...	0815	--	.00	.0	.02	.03	--	.03	.02
NOV. 17...	1445	15.0	.00	.0	.02	.03	.00	.00	.00
DEC. 28...	1530	--	--	--	--	--	.00	--	--
JAN. 18...	1600	13.0	.00	.0	.03	.03	.18	.02	.00
FEB. 17...	1330	16.0	.00	.0	.02	.04	.00	.02	.01
APR. 20...	1230	18.0	.00	.0	.02	.01	.05	.02	.00
MAY 18...	1002	22.5	.00	.0	.01	.02	.02	.02	.01
JUNE 15...	0930	26.5	.00	.0	.00	.00	.00	.02	.00

DATE	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 15...	.00	.00	.00	.16	.47	.00	.00	.00	.02
NOV. 17...	.00	.00	.00	--	.29	.00	.06	.00	.02
DEC. 28...	--	--	.00	.00	.00	--	.11	.00	.01
JAN. 18...	.00	.00	.00	.00	.00	.00	.21	.00	.04
FEB. 17...	.00	.00	.00	.07	.32	.00	.84	.20	9.6
APR. 20...	.00	.00	.00	.00	.00	.00	.00	.00	.27
MAY 18...	.00	.00	.00	.00	.00	.00	.25	.00	.15
JUNE 15...	.00	.00	.00	.00	.00	.00	2.8	.00	.17

## SALTON SEA BASIN

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CALIF.

LOCATION.--Lat 32°39'57", long 115°30'08", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec.14, T.17 S., R.14 E., Imperial County, at gaging station at Second Street bridge, 0.2 mile downstream from international boundary, and 0.2 mile west of Calexico.

PERIOD OF RECORD.--Chemical analyses: August 1969 to July 1971 (discontinued).

REMARKS.--Records of discharge furnished by Imperial Irrigation District.

## CHEMICAL ANALYSES, OCTOBER 1970 TO JULY 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
OCT.							
14...	1430	124	--	2.5	9.0	6.6	.03
22...	--	--	--	--	--	--	--
NOV.							
18...	0830	100	14.5	4.0	6.9	4.2	.03
DEC.							
29...	0830	132	10.5	1.4	4.5	4.0	.49
JAN.							
19...	0800	141	12.5	1.5	4.2	3.8	.51
21...	--	--	--	--	--	--	--
MAR.							
18...	--	--	--	--	--	--	--
23...	1445	189	23.0	.88	--	--	.00
APR.							
20...	1530	--	22.0	.00	--	--	.56
MAY							
18...	1240	--	24.5	.55	--	--	.13
JUNE							
15...	1200	--	29.0	--	--	--	.00
JULY							
20...	--	--	--	--	--	--	--

DATE	DIS- SOLVED AMMONIA (NH4) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
OCT.						
14...	--	1.1	8.3	4.3	3990	6370
22...	--	--	--	--	4070	6450
NOV.						
18...	--	1.2	4.9	.92	4290	6780
DEC.						
29...	3.3	1.6	1.6	1.3	4700	7350
JAN.						
19...	3.0	.9	1.5	.18	4470	7000
21...	--	--	--	--	4580	7180
MAR.						
18...	--	--	--	--	4220	6580
23...	4.9	--	4.6	4.0	4750	7430
APR.						
20...	3.7	--	4.3	3.4	4090	6590
MAY						
18...	4.9	--	4.3	3.1	4420	6720
JUNE						
15...	3.9	--	--	3.1	4380	6970
JULY						
20...	--	--	--	--	4270	6440

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CALIF.--Continued

## CHEMICAL ANALYSES, OCTOBER 1970 TO JULY 1971

DATE	TIME	TEMP- ERATURE (DEG C)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)
OCT. 14...	1430	--	.00	.0	.13	.12	--	.06	.00
NOV. 18...	0830	14.5	.00	.0	.09	.04	.12	.01	.00
DEC. 29...	0830	10.5	.00	.0	.02	.03	.00	.01	.00
JAN. 19...	0800	12.5	.00	.0	.02	.03	.08	.01	.00
FEB. 17...	0830	16.0	.00	.0	.02	.03	--	.01	.00
APR. 20...	1530	22.0	.00	.0	.07	.36	.38	.03	.00
MAY 18...	1240	24.5	.00	.0	.11	.07	--	.02	.00
JUNE 15...	1200	29.0	.00	.0	.07	.06	.09	.01	.00

DATE	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 14...	.00	.00	.00	.00	.00	.04	.00	.00	.00
NOV. 18...	.00	.00	.17	.00	.00	.00	.06	.00	.00
DEC. 29...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JAN. 19...	.00	.00	.00	.00	.00	.00	.08	.00	.00
FEB. 17...	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR. 20...	.00	.00	.00	.00	.00	.02	.00	.00	.00
MAY 18...	.00	.00	--	--	--	.02	.00	.00	.00
JUNE 15...	.00	.00	.00	.00	.00	.01	.00	.00	.00

## SALTON SEA BASIN

10255550 NEW RIVER NEAR WESTMORLAND, CALIF.

LOCATION.--Lat 33°06'17", long 115°39'49", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.19, T.12 S., R.13 E., Imperial County, at gaging station on right bank, 3.5 miles upstream from mouth, and 5.2 miles northwest of Westmorland.

PERIOD OF RECORD.--Chemical analyses (revised): October 1963 to September 1964, water year 1967 (partial-record station), August 1969 to June 1971 (discontinued).

REMARKS.--Records of discharge furnished by Imperial Irrigation District.

## CHEMICAL ANALYSES, OCTOBER 1970 TO JUNE 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
OCT.							
15...	0945	538	--	.65	3.4	.65	.17
NOV.							
17...	1300	536	15.5	1.3	7.7	2.4	9.3
DEC.							
28...	1500	483	14.0	1.6	7.3	2.9	1.6
JAN.							
18...	1530	553	14.0	1.7	6.3	3.0	--
MAR.							
24...	0830	760	17.5	1.3	--	--	1.1
APR.							
20...	1115	--	18.0	.09	--	--	.00
MAY							
18...	0915	--	21.0	.42	--	--	.26
JUNE							
15...	0830	--	25.5	--	--	--	.03

DATE	DIS- SOLVED AMMONIA (NH4) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
OCT.						
15...	--	12	3.8	1.0	3360	5280
NOV.						
17...	--	11	3.5	.79	3590	5470
DEC.						
28...	1.7	17	1.4	.44	3880	5920
JAN.						
18...	1.7	13	1.6	.58	3470	5290
MAR.						
24...	3.1	--	2.4	1.5	2970	3750
APR.						
20...	1.9	--	1.5	.92	3080	4880
MAY						
18...	2.4	--	1.8	.92	3210	4890
JUNE						
15...	.39	--	3.1	1.2	3390	5320



10255550 NEW RIVER NEAR WESTMORLAND, CALIF.--Continued

## CHEMICAL ANALYSES, OCTOBER 1970 TO JUNE 1971

DATE	TIME	TEMP- ERATURE (DEG C)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELORIN (UG/L)	ENDRIN (UG/L)
OCT. 15...	0930	--	.00	.0	.02	.01	--	.03	.01
NOV. 17...	1300	15.5	.00	.0	.02	.01	.74	.01	.00
DEC. 28...	1500	14.0	.00	.0	.03	.01	.00	.01	.00
JAN. 18...	1530	14.0	.00	.0	.03	.02	.50	.02	.00
FEB. 17...	1100	15.5	.00	.0	.02	.01	.00	.01	.00
APR. 20...	1115	18.0	.00	.0	.01	.02	.04	.01	.00
MAY 18...	0916	--	.00	.0	.02	.01	.04	.02	.00
JUNE 15...	0830	25.5	.00	.0	.02	.01	.03	.01	.00

DATE	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 15...	.00	.00	.00	.18	.35	.00	.15	.00	.01
NOV. 17...	.00	.00	.05	.03	.07	.00	.09	.00	.00
DEC. 28...	.00	.00	.00	.00	.00	.00	.30	.00	.01
JAN. 18...	.00	.00	.00	.00	.00	.00	.44	.00	.02
FEB. 17...	.00	.00	.00	.00	.02	.00	1.0	.01	.79
APR. 20...	.00	.00	.00	.00	.00	.00	.21	.00	.14
MAY 18...	.00	.00	.00	.00	.00	.00	.15	.00	.08
JUNE 15...	.00	.00	.00	.00	.00	.00	1.2	.00	.03

## ANTELOPE VALLEY

10263500 BIG ROCK CREEK NEAR VALYERMO, CALIF.

LOCATION.--Lat 34°25'15", long 117°50'19", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.20, T.4 N., R.9 W., Los Angeles County, temperature recorder at gaging station on left bank, 0.1 mile upstream from Punchbowl Canyon, and 1.9 miles southeast of Valyermo.

DRAINAGE AREA.--22.9 sq mi.

PERIOD OF RECORD.--Water temperatures: January 1962 to September 1971.

EXTREMES.--June to September 1970:

Water temperatures: Maximum, 24.0°C Aug. 19, 26.

1970-71:

Water temperatures: Maximum, 21.5°C on several days during July and August.

Period of record:

Water temperatures: Maximum, 24.0°C Aug. 19, 26, 1970; minimum (1962-69), 1.0°C Feb. 1-4, 1969.

REMARKS.--No record available Feb. 10, 1969, to June 5, 1970; temperature probe destroyed in flood Feb. 10.

No record available Nov. 29, 1970, to Jan. 10, 1971; temperature probe buried during storm on Nov. 29.

## TEMPERATURE (°C) OF WATER, JUNE TO SEPTEMBER 1970

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	20.5	11.5	22.9	13.5	22.0	13.0
2	---	---	---	---	---	---	21.0	12.0	22.0	14.5	22.0	12.5
3	---	---	---	---	---	---	19.0	13.5	22.5	14.0	21.5	12.5
4	---	---	---	---	---	---	19.0	13.5	22.0	14.0	20.5	12.5
5	---	---	---	---	19.0	12.5	19.5	13.5	23.0	14.5	20.0	12.5
6	---	---	---	---	19.5	11.5	21.5	13.5	22.5	14.0	20.0	12.5
7	---	---	---	---	19.0	11.5	20.5	13.5	23.5	15.0	21.0	13.5
8	---	---	---	---	18.0	12.0	21.0	14.0	23.5	15.5	22.0	14.0
9	---	---	---	---	18.5	11.5	20.5	14.0	23.0	14.0	22.0	14.0
10	---	---	---	---	18.0	11.0	20.5	13.5	23.0	14.5	22.5	14.5
11	---	---	---	---	18.5	10.0	20.0	13.0	23.0	15.0	22.5	14.5
12	---	---	---	---	18.5	10.0	21.5	13.0	22.0	16.0	22.0	14.0
13	---	---	---	---	17.5	10.0	22.0	13.0	23.5	15.5	20.5	13.0
14	---	---	---	---	18.5	10.0	22.0	13.0	23.0	15.5	20.0	11.5
15	---	---	---	---	18.5	10.5	22.0	13.5	22.0	16.0	20.0	11.5
16	---	---	---	---	18.5	10.5	22.0	13.0	21.0	16.0	20.0	12.5
17	---	---	---	---	19.0	10.5	22.0	14.0	22.0	16.0	20.5	12.5
18	---	---	---	---	19.5	11.0	20.5	14.5	23.5	15.5	21.0	13.0
19	---	---	---	---	19.0	11.5	22.0	14.5	24.0	15.5	19.5	12.5
20	---	---	---	---	20.5	11.5	22.0	14.5	23.5	15.0	19.5	12.5
21	---	---	---	---	20.5	12.0	21.5	14.5	22.5	14.5	19.5	12.0
22	---	---	---	---	20.5	12.0	22.0	14.0	23.0	14.0	19.0	12.5
23	---	---	---	---	20.5	12.0	21.5	12.5	22.5	15.0	19.5	11.5
24	---	---	---	---	20.5	12.0	21.5	13.5	22.0	15.0	20.0	12.5
25	---	---	---	---	21.0	13.0	22.0	14.0	23.0	15.5	18.0	12.0
26	---	---	---	---	21.0	13.0	21.0	14.5	24.0	15.5	18.5	10.5
27	---	---	---	---	20.0	12.0	22.0	14.0	21.0	16.0	19.0	11.5
28	---	---	---	---	20.0	12.0	23.0	14.0	23.5	15.5	19.0	12.0
29	---	---	---	---	19.0	11.0	22.5	15.5	23.0	14.5	19.5	12.0
30	---	---	---	---	19.5	10.5	22.5	14.5	23.0	14.5	19.5	13.0
31	---	---	---	---	---	---	22.0	13.0	22.5	14.5	---	---
AVERAGE	---	---	---	---	19.3	11.3	21.3	13.6	22.8	14.9	20.3	12.6

10263500 BIC ROCK CREEK NEAR VALYERMO, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	12.5	14.5	10.5	---	---	---	---	11.0	8.0	9.0	6.5
2	19.0	12.0	15.0	10.5	---	---	---	---	11.0	8.0	10.0	6.0
3	16.5	13.5	15.0	10.0	---	---	---	---	10.5	7.5	11.0	6.5
4	18.5	13.0	14.5	11.5	---	---	---	---	10.5	7.0	12.0	8.0
5	19.5	13.0	16.0	11.5	---	---	---	---	11.0	8.0	11.0	7.0
6	18.5	12.5	15.5	12.0	---	---	---	---	11.0	7.5	11.0	7.0
7	16.5	11.5	14.5	11.0	---	---	---	---	11.0	7.5	11.5	7.5
8	16.5	10.0	15.0	10.0	---	---	---	---	11.0	7.5	12.0	8.0
9	18.0	10.5	15.0	10.5	---	---	---	---	11.0	7.5	12.5	8.0
10	18.0	11.5	15.5	11.0	---	---	---	---	11.5	7.5	12.0	8.0
11	18.0	11.5	15.5	11.0	---	---	10.5	8.0	12.0	8.5	12.0	8.0
12	18.0	12.0	14.5	10.5	---	---	9.0	6.5	12.0	8.5	12.5	8.0
13	18.0	11.0	13.5	10.0	---	---	9.5	6.5	12.0	8.5	10.5	8.0
14	17.5	11.5	13.5	10.0	---	---	10.0	7.0	12.0	8.5	12.0	7.5
15	17.0	11.5	13.5	9.5	---	---	10.0	7.0	11.5	8.5	13.0	8.0
16	16.5	11.5	14.0	9.0	---	---	10.5	7.5	10.0	8.0	12.5	8.0
17	16.5	11.0	13.5	9.5	---	---	11.0	8.5	11.0	7.0	13.0	8.5
18	16.5	11.0	14.0	10.0	---	---	11.5	8.0	11.5	8.0	12.0	8.0
19	16.5	12.0	13.5	9.5	---	---	11.0	8.0	11.0	7.5	10.5	8.0
20	16.0	12.0	13.5	9.5	---	---	10.5	8.0	10.5	7.0	13.0	7.5
21	15.5	11.0	13.5	9.0	---	---	10.0	7.0	11.0	7.0	13.0	8.0
22	15.5	11.0	13.5	9.0	---	---	9.5	6.5	10.5	7.5	14.0	9.0
23	16.5	11.0	13.0	9.5	---	---	9.5	6.5	10.0	7.0	13.0	9.0
24	15.0	11.0	13.5	9.0	---	---	9.5	6.5	11.0	7.5	13.5	9.0
25	15.0	10.0	14.0	9.0	---	---	10.0	6.5	11.0	7.5	14.0	9.0
26	15.0	9.5	12.5	9.0	---	---	10.5	7.0	10.5	7.0	14.5	10.0
27	13.5	9.5	12.0	8.5	---	---	10.5	7.5	10.5	6.5	13.0	9.0
28	13.5	8.5	12.5	8.5	---	---	10.0	7.5	10.0	7.0	14.0	8.5
29	14.0	9.0	---	---	---	---	11.0	7.5	---	---	14.0	9.0
30	14.0	9.5	---	---	---	---	11.0	7.5	---	---	14.5	9.5
31	15.0	10.0	---	---	---	---	10.0	8.0	---	---	13.5	8.5
AVERAGE	16.5	11.1	14.0	9.9	---	---	---	---	10.9	7.6	12.3	8.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	8.5	15.5	10.0	16.0	11.5	19.0	13.0	21.0	15.5	20.5	14.0
2	13.5	8.5	15.0	10.0	14.5	12.0	19.0	13.0	21.0	15.5	20.5	13.5
3	13.5	8.5	14.0	9.5	16.0	11.5	19.0	13.0	21.5	15.5	20.5	14.0
4	14.0	9.0	15.0	10.0	16.0	12.0	19.0	13.0	20.5	15.5	20.5	14.0
5	14.0	9.5	15.0	10.0	16.5	12.0	19.5	13.0	20.5	15.5	20.5	14.5
6	14.0	9.0	14.0	10.0	16.5	13.0	19.5	13.0	20.0	15.0	18.5	15.0
7	14.0	9.0	12.5	10.0	17.0	13.0	19.0	13.0	21.0	15.0	21.0	15.0
8	14.0	9.0	14.5	9.5	17.0	13.5	19.0	13.0	21.0	15.0	19.5	15.0
9	14.5	9.0	15.0	10.0	16.5	13.5	19.5	13.0	21.0	15.0	20.0	15.5
10	14.5	9.0	15.0	10.5	16.0	13.0	19.5	13.0	21.5	15.5	21.0	15.5
11	15.0	9.0	14.0	10.5	17.5	13.0	19.5	13.0	21.0	16.0	20.0	15.0
12	15.0	9.5	15.0	11.0	17.5	13.0	19.5	14.0	21.5	16.0	20.0	15.0
13	15.0	10.0	15.5	10.5	18.0	14.0	20.0	14.0	21.0	15.5	20.5	15.5
14	12.0	10.0	16.5	10.5	18.0	14.5	20.0	14.5	21.0	15.5	20.0	15.0
15	15.0	9.5	16.5	11.0	18.0	14.5	18.5	14.5	21.0	15.5	21.0	15.0
16	15.0	9.5	15.5	11.0	18.0	15.0	19.0	14.5	19.0	15.5	20.5	15.0
17	12.0	9.0	15.5	10.0	18.5	15.0	19.5	15.0	20.5	15.0	20.0	14.5
18	12.5	9.0	15.5	10.0	18.0	12.5	20.0	14.5	20.5	15.0	18.0	14.0
19	14.0	8.5	15.5	10.5	18.0	12.5	20.5	14.5	20.5	15.0	16.5	12.5
20	13.5	9.0	16.0	10.5	18.5	12.5	20.5	14.5	20.5	15.0	18.5	13.0
21	13.5	9.0	15.5	11.0	19.0	12.5	18.0	15.0	20.5	15.0	18.5	13.5
22	14.0	8.5	16.0	10.5	19.0	13.0	19.0	14.5	20.0	14.5	18.5	13.0
23	14.5	9.0	16.5	11.0	19.0	12.5	20.0	14.5	20.0	14.5	18.5	12.5
24	14.5	9.0	16.5	11.5	19.0	12.5	20.5	14.0	19.0	15.5	18.5	13.5
25	12.5	9.0	17.0	12.0	19.0	13.0	21.0	14.5	21.5	14.5	18.0	12.5
26	13.5	9.0	16.5	12.5	19.0	13.0	21.0	15.0	21.5	14.5	17.5	12.0
27	13.0	9.5	15.0	11.5	19.0	13.0	21.0	15.0	21.0	14.5	17.0	12.0
28	15.0	9.5	13.5	12.0	18.5	13.0	21.5	15.0	20.5	15.0	17.0	11.5
29	14.0	9.5	15.5	11.5	18.5	12.0	21.0	15.5	21.0	15.0	17.0	12.0
30	15.5	10.0	16.0	11.0	18.5	13.0	20.5	15.5	20.5	14.5	16.5	12.0
31	---	---	15.5	11.0	---	---	21.0	15.0	20.5	13.5	---	---
AVERAGE	13.9	9.1	15.3	10.6	17.6	12.9	19.7	14.0	20.6	15.0	19.1	13.8

## OWENS LAKE BASIN

10278300 LOS ANGELES AQUEDUCT AT OUTLET, AT SAN FERNANDO, CALIF.

LOCATION.--Lat 34°18'46", long 118°29'32", (unsurveyed), Los Angeles County, in Mission de San Fernando substation at Los Angeles Aqueduct outlet at upper end of Van Norman Lake, at San Fernando.

PERIOD OF RECORD.--Chemical analyses (revised): Water year 1967 (partial-record station), October 1967 to September 1971.

REMARKS.--Records furnished by California Department of Water Resources. Records of discharge furnished by Los Angeles Department of Water and Power.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	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)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.											
26...	556	--	9.2	23	40	29	7.3	35	3.7	32	16
NOV.											
17...	772	14.0	10.4	28	100	29	7.3	37	3.8	32	16
DEC.											
15...	751	9.5	11.6	20	100	25	5.5	35	3.7	30	15
JAN.											
19...	762	7.0	12.4	21	30	25	6.0	36	3.7	30	15
FEB.											
16...	712	--	--	20	30	26	4.5	36	3.7	30	16
MAR.											
10...	708	10.0	11.2	23	40	26	6.8	38	3.6	32	16
APR.											
20...	492	12.5	10.2	22	100	26	5.8	41	3.5	35	17
MAY											
18...	164	16.5	8.8	23	150	26	5.8	38	4.9	33	17
JUNE											
22...	510	21.0	8.6	20	60	24	5.6	36	4.3	30	15
JULY											
20...	545	23.0	7.8	19	20	23	4.6	33	3.7	29	14
AUG.											
17...	669	24.0	8.4	21	<10	22	4.4	32	3.6	27	13
SEP.											
21...	816	22.0	8.4	20	20	23	4.6	31	3.8	23	14

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	HARD- NESS (CA,MG) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)
OCT.											
26...	.6	.9	.090	510	103	42	1.5	362	8.2	9	40
NOV.											
17...	.6	1.2	.080	600	103	43	1.6	360	8.1	12	20
DEC.											
15...	.6	.5	.060	610	85	46	1.7	336	8.2	8	30
JAN.											
19...	.5	.6	.060	450	87	46	1.7	335	8.2	6	30
FEB.											
16...	.5	.6	.040	390	84	47	1.7	351	8.2	6	20
MAR.											
10...	.6	.8	.040	320	92	46	1.7	358	8.3	6	30
APR.											
20...	.6	.9	.070	440	90	49	1.9	360	8.3	11	20
MAY											
18...	.6	1.0	.040	430	88	47	1.8	350	8.2	5	30
JUNE											
22...	.6	.6	.060	500	83	47	1.7	340	8.3	8	20
JULY											
20...	.6	1.0	.070	520	76	47	1.6	304	8.2	5	30
AUG.											
17...	.5	1.1	.090	460	72	47	1.6	300	8.3	6	<10
SEP.											
21...	.6	.8	.080	450	76	45	1.5	302	8.2	5	30

10343500 SAGEHEN CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°25'54", long 120°14'07", in NE 1/4 sec. 7, T.18 N., R.16 E., Nevada County, at gaging station on left bank, 2.2 miles upstream from bridge on State Highway 89 and 7.5 miles north of Truckee.

DRAINAGE AREA.--10.8 sq mi.

PERIOD OF RECORD.--Chemical analyses: May 1968 to September 1971.

Sediment records: Water years 1968-71 (partial-record station).

REMARKS.--Additional cooperative studies with University of California, Berkeley, Calif., are being conducted. These include biological sampling of streambed biota and periodic photographic log of stream channel. Data available in district office at Menlo Park, Calif.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS- SIUM (K) (MG/L)	
MAY 25...	1100	70	6.5	9.6	21	80	5.0	1.6	2.2	.7	
DATE	TIME	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)
MAY 25...	29	0	.0	.5	.0	.21	.06	.01	.050	.030	
DATE	TIME	DIS-SOLVED BORON (B) (UG/L)	HARD-NESS (CA,MG) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	FECAL COLI-FORM (COL. PER 100 ML)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	
MAY 25...	10	19	24	19	.2	46	7.3	0	112		

TEMPERATURE (°C) OF WATER AND SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C),  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENTS)

DATE	TIME	TEMP- ERATURE (DEG C)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
OCT.			
05...	0640	5.0	128
12...	1525	10.0	127
20...	1230	5.0	133
21...	1200	4.5	--
26...	1035	3.0	121
NOV.			
02...	1400	6.0	119
09...	1315	6.0	103
16...	1645	5.0	110
24...	1145	5.0	111
24...	1540	4.5	--
DEC.			
09...	1130	1.0	98
14...	1030	2.0	103
28...	1015	2.0	107
JAN.			
01...	1325	2.0	94
18...	1325	2.0	--
20...	1230	3.0	--
25...	1040	2.0	101
FEB.			
01...	0930	1.0	103
08...	0925	1.0	105
15...	0950	3.0	99
22...	0920	1.0	--
MAR.			
01...	0925	.0	--
08...	0925	2.0	107
15...	0945	2.0	111
21...	0900	2.0	--
22...	0900	2.0	106
22...	1130	3.5	--
29...	0920	2.0	84

## PYRAMID AND WINNEMUCCA LAKES BASIN

10343500 SAGEHEN CREEK NEAR TRUCKEE, CALIF.--Continued

TEMPERATURE (°C) OF WATER AND SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C),  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued  
(ONCE-DAILY MEASUREMENTS)

DATE	TIME	TEMP- ERATURE (DEG C)	SPECI- FIC CONO- DUCTANCE (MICRO- MHOS)
APR.			
05...	1545	4.0	73
12...	0915	3.0	68
13...	0915	3.0	--
19...	0905	2.0	64
27...	0700	2.0	69
MAY			
03...	0810	4.0	53
10...	0810	3.0	--
10...	1035	3.5	--
12...	0800	3.0	48
17...	0810	2.0	--
17...	0812	2.0	54
24...	0815	5.0	--
25...	1100	6.5	46
31...	0905	4.0	--
JUNE			
06...	0645	5.0	54
07...	0645	5.0	--
21...	1015	8.0	--
23...	1435	15.0	59
30...	1435	15.0	--
JULY			
05...	1145	12.0	62
07...	1030	10.0	77
12...	1030	10.0	--
26...	0715	10.0	91
AUG.			
02...	0715	10.0	99
06...	1340	16.5	--
09...	0730	11.0	108
16...	0730	8.0	111
23...	0715	7.0	119
30...	0630	8.0	125
SEP.			
03...	1145	9.0	--
20...	1430	12.0	124
27...	0815	4.0	--
27...	0915	4.0	118

## SUSPENDED SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY)	DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY)
OCT.						APR.					
05...	0640	5.0	3.0	4	.03	05...	1545	4.0	23	6	.37
12...	1525	10.0	3.3	2	.02	13...	0915	3.0	27	3	.22
20...	1230	5.0	4.6	10	.12	19...	0905	2.0	27	3	.22
21...	1200	4.5	3.6	3	.03	27...	0700	2.0	19	2	.10
26...	1035	3.0	3.9	3	.03	MAY					
NOV.						03...	0810	4.0	51	4	.55
02...	1400	6.0	4.2	2	.02	10...	0810	3.0	64	3	.52
09...	1315	6.0	7.0	5	.09	10...	1035	3.5	64	5	.86
16...	1645	5.0	5.7	2	.03	17...	0810	2.0	79	6	1.3
24...	1145	5.0	4.6	3	.04	24...	0815	5.0	76	3	.62
24...	1540	4.5	4.6	1	.01	25...	1140	--	76	2	.41
DEC.						31...	0905	4.0	56	2	.30
09...	1130	1.0	7.6	8	.16	JUNE					
14...	1030	2.0	5.9	3	.05	07...	0645	5.0	60	2	.32
28...	1015	2.0	5.2	4	.06	21...	1015	8.0	52	3	.42
JAN.						30...	1435	15.0	32	5	.43
18...	1325	2.0	9.9	4	.11	JULY					
20...	1230	3.0	8.7	2	.05	05...	1145	12.0	26	4	.28
25...	1040	2.0	6.5	4	.07	12...	1030	10.0	17	4	.18
FEB.						26...	0715	10.0	10	3	.08
01...	0930	1.0	6.5	3	.05	AUG.					
08...	0925	1.0	5.7	3	.05	02...	0715	10.0	9.3	2	.05
15...	0950	3.0	7.5	2	.04	06...	1340	16.5	5.9	3	.05
22...	0920	1.0	6.1	2	.03	09...	0730	11.0	6.1	11	.18
MAR.						16...	0730	8.0	5.2	2	.03
01...	0925	.0	5.9	2	.03	23...	0715	7.0	4.4	3	.04
08...	0925	2.0	5.0	2	.03	30...	0630	8.0	4.4	3	.04
15...	0945	2.0	5.0	4	.05	SEP.					
21...	0900	2.0	6.5	3	.05	03...	1145	9.0	4.4	3	.04
22...	1130	3.5	6.5	2	.04	20...	1430	12.0	4.1	4	.04
29...	0920	2.0	16	3	.13	27...	0815	4.0	4.2	3	.03

## PYRAMID AND WINNEMUCCA LAKES BASIN

45

10345900 TRUCKEE RIVER AT FLORISTON, CALIF.  
(Irrigation network station)

LOCATION.--Lat 39°23'40", long 120°01'25", in NW¼SW¼ sec.30, T.18 N., R.18 E., Nevada County, at bridge at Floriston, 0.2 mile upstream from flume diversion, 2.5 miles upstream from gage at Farad, and 1.8 miles upstream from Farad.

DRAINAGE AREA.--932 sq mi (at gaging station).

PERIOD OF RECORD.--Chemical analyses: January 1964 to September 1971. Prior to October 1965 published as "at Farad".  
Water temperatures: January 1964 to September 1971.

EXTREMES.--1970-71:

Specific conductance: Maximum daily, 117 micromhos Mar. 17; minimum daily, 53 micromhos Dec. 10.

Water temperatures: Maximum, 21.0°C Aug. 2, 6; minimum, freezing point on Mar. 2, and probably sometime during period of no record in December and January.

Period of record:

Specific conductance (1964-66, 1967-69, 1970-71): 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.--Records of discharge given for Truckee River at Farad, Calif. (sta. 10348000).

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.												
23...	1500	685	8.0	--	--	7.6	2.4	5.1	1.5	43	0	3.0
NOV.												
24...	1445	420	8.0	18	10	10	3.1	6.4	--	60	0	2.0
DEC.												
31...	1220	489	1.5	18	--	9.0	3.1	5.9	1.8	54	0	--
FEB.												
09...	0950	873	2.0	15	--	9.0	2.8	5.0	--	53	0	--
MAR.												
11...	1410	509	6.0	18	--	9.5	3.0	6.2	--	61	0	--
APR.												
16...	1505	1250	8.0	18	--	7.7	2.7	4.1	1.3	45	--	5.0
MAY												
25...	1230	1860	9.0	--	--	7.0	2.0	3.2	--	38	0	--
JUNE												
24...	1600	2190	13.5	--	--	--	--	--	--	--	--	--
JULY												
22...	1525	625	19.5	18	--	7.1	2.1	3.8	1.3	40	0	1.5
AUG.												
23...	1600	652	18.0	--	--	8.4	2.4	4.9	--	59	0	--
SEP.												
21...	1535	873	12.0	--	--	7.7	1.9	4.1	--	45	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)
OCT.											
23...	1.9	--	.15	--	.15	--	.00	.00	.050	.050	30
NOV.											
24...	--	.0	--	--	--	.00	--	--	--	.010	--
DEC.											
31...	3.8	--	--	--	--	.00	--	--	--	.000	--
FEB.											
09...	3.5	.2	--	--	--	.00	--	--	--	.000	--
MAR.											
11...	3.6	--	--	--	--	.00	--	--	--	.010	--
APR.											
16...	2.9	.0	--	--	--	.10	.01	.10	.030	.020	--
MAY											
25...	1.6	--	--	--	--	.04	--	.04	--	.020	--
JUNE											
24...	--	--	--	--	--	.01	--	.01	--	.030	--
JULY											
22...	1.5	.0	.00	.13	.10	.01	.12	.01	.070	--	--
AUG.											
23...	1.4	--	--	--	--	.03	--	.03	--	.010	--
SEP.											
21...	1.4	--	--	--	--	.01	--	.01	--	.030	--

## PYRAMID AND WINNEMUCCA LAKES BASIN

10345900 TRUCKEE RIVER AT FLORISTON, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS- SOLVED SOLIDS (RESIDUE 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)	ALKA- LITY AS CACD3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
OCT. 23...	61	--	.08	113	29	0	35	27	.4	85	7.0
NOV. 24...	--	--	---	--	38	0	49	25	.5	104	7.3
DEC. 31...	59	--	.08	77.9	36	0	44	25	.4	102	8.4
FEB. 09...	60	--	.08	141	34	0	43	24	.4	100	8.1
MAR. 11...	61	--	.08	83.8	36	0	50	27	.4	106	7.8
APR. 16...	--	64	.09	216	30	0	37	22	.3	81	8.1
MAY 25...	--	--	--	--	26	0	31	--	.3	67	7.8
JUNE 24...	--	--	--	--	--	--	--	--	--	--	--
JULY 22...	--	62	.08	105	26	0	33	23	.3	77	7.5
AUG. 23...	70	--	.10	123	31	0	48	26	.4	88	7.2
SEP. 21...	55	--	.07	130	27	0	37	--	.3	78	7.6

## SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	95	70	---	100	103	86	87	76	78	87	104
2	94	97	61	---	99	103	102	87	80	79	84	103
3	94	97	57	---	99	105	92	87	80	79	---	103
4	94	98	97	---	98	103	86	86	79	80	85	99
5	94	96	98	---	97	103	88	85	79	---	86	98
6	94	96	61	---	98	104	83	82	76	80	86	98
7	93	96	61	---	98	102	84	84	72	---	85	88
8	93	96	84	---	98	112	81	78	68	71	85	89
9	94	95	85	---	97	104	81	76	68	70	84	83
10	93	100	53	---	98	105	84	---	71	70	85	90
11	92	100	61	95	98	104	83	---	71	72	85	84
12	91	103	75	96	---	114	80	69	71	72	85	84
13	94	100	80	96	98	114	---	67	70	73	89	---
14	84	99	64	96	97	110	79	67	---	72	88	83
15	85	99	---	56	101	---	78	64	72	72	90	80
16	93	100	---	96	98	113	76	---	75	72	88	80
17	92	101	---	96	102	117	78	---	72	73	90	79
18	93	101	---	96	103	113	80	66	72	---	90	79
19	94	99	---	96	99	---	81	66	76	73	90	---
20	96	99	84	96	100	109	87	---	73	73	90	---
21	98	100	---	95	104	109	88	69	75	73	90	78
22	---	100	---	96	100	114	88	69	74	76	90	---
23	85	100	---	98	102	106	84	69	75	77	89	77
24	---	95	---	95	103	---	85	---	76	77	91	76
25	---	95	---	98	103	102	85	62	---	77	90	76
26	---	94	---	99	103	105	85	---	74	86	98	76
27	90	94	---	98	102	91	90	78	71	86	85	75
28	90	95	---	100	101	93	86	72	78	88	102	75
29	94	100	---	101	---	91	88	73	---	86	102	75
30	94	100	---	99	---	87	81	73	80	86	102	73
31	95	---	102	98	---	---	---	78	---	86	102	---
AVE	96	98	---	---	99	104	84	---	74	77	89	85



10345900 TRUCKEE RIVER AT FLORISTON, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	8.0	0.5	--	5.5	1.5	6.0	5.5	6.5	12.0	19.0	14.0
2	12.0	8.0	1.0	--	3.5	0.0	7.0	5.5	4.0	12.0	21.0	14.5
3	12.0	8.0	1.0	--	2.5	3.5	7.0	6.0	8.0	11.5	--	12.0
4	12.0	8.0	1.5	--	2.5	2.5	5.5	5.5	8.0	11.5	17.5	13.5
5	11.5	8.0	1.0	--	5.0	2.0	6.0	6.0	8.5	--	17.5	14.5
6	12.5	8.0	1.5	--	5.5	3.0	5.0	5.0	9.0	12.5	21.0	15.0
7	11.5	8.0	1.0	--	4.5	2.0	4.5	6.0	8.5	--	17.0	16.0
8	11.5	8.0	1.0	--	4.0	4.0	4.5	6.5	9.0	14.5	17.5	16.0
9	11.5	8.0	1.0	--	3.0	5.0	5.0	6.0	8.5	14.0	18.5	15.0
10	10.5	7.5	1.0	--	5.5	5.0	6.0	--	10.5	14.5	18.0	15.0
11	11.0	7.0	2.0	1.5	5.5	6.0	7.0	--	9.5	12.0	18.0	14.0
12	13.0	7.5	2.0	1.5	--	3.0	6.0	7.0	11.0	11.5	17.0	16.0
13	--	6.0	1.5	1.5	6.0	2.5	--	8.5	11.0	14.0	17.5	--
14	10.5	6.0	1.5	1.5	6.0	2.5	8.0	9.0	--	14.5	17.0	15.0
15	8.5	6.0	--	1.5	5.0	--	8.5	8.0	10.5	15.0	17.5	12.0
16	10.0	5.0	--	1.5	4.0	8.0	8.0	--	10.5	--	17.0	12.0
17	11.0	5.0	--	2.0	4.0	6.0	4.5	--	10.5	16.0	17.5	12.5
18	10.5	5.0	--	2.0	4.5	3.5	4.5	8.5	--	17.0	18.0	10.5
19	8.0	4.0	--	2.5	3.0	--	--	9.5	10.5	16.5	16.5	--
20	8.0	4.0	1.5	2.5	2.5	--	4.5	--	9.5	17.0	16.0	--
21	8.0	6.0	--	2.5	1.5	5.5	4.5	7.5	13.5	17.5	16.0	--
22	--	7.5	--	3.5	2.5	7.0	4.5	8.0	10.5	15.5	15.5	--
23	--	4.0	--	3.0	3.0	5.5	6.0	8.0	--	17.0	17.0	14.0
24	--	3.5	--	3.0	2.5	--	5.0	--	11.0	17.0	17.0	11.5
25	--	3.5	--	4.5	3.0	5.0	5.5	--	--	17.0	16.5	11.0
26	--	3.0	--	5.0	1.0	2.5	5.0	--	9.0	17.5	19.0	10.0
27	8.0	8.5	--	4.5	2.0	3.0	5.5	8.0	8.5	18.0	17.0	9.5
28	8.0	3.0	--	3.5	1.5	3.0	7.0	7.5	11.0	18.0	16.0	10.0
29	8.0	3.0	--	3.5	--	5.0	6.5	6.5	--	18.0	16.0	10.0
30	8.0	3.5	--	3.0	--	5.0	6.5	7.5	11.5	18.0	16.5	10.0
31	--	--	--	5.0	--	4.0	--	7.0	--	18.0	17.0	--
AVE	--	6.0	--	--	3.7	3.9	5.8	--	9.5	15.3	17.4	12.9

## HONEY LAKE BASIN

10356500 SUSAN RIVER AT SUSANVILLE, CALIF.

LOCATION.--Lat 40°25'03", long 120°40'15", in SW¼NE¼ sec.31, T.30 N., R.12 E., Lassen County, at gaging station 0.5 mile west of Susanville, and 1.1 miles upstream from Piute Creek.

DRAINAGE AREA.--184 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1952-58 (partial-record station), October 1958 to September 1971.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 07...	1415	9.0	11.0	10.5	14	12	6.2	1.9	111	0	.0
NOV. 17...	1540	21	5.0	11.5	--	--	5.3	--	81	0	--
DEC. 15...	1610	40	2.0	12.3	--	--	5.1	--	79	0	--
JAN. 14...	1015	55	.5	12.7	--	--	3.8	--	73	0	--
FEB. 18...	1150	87	1.0	12.9	--	--	4.0	--	66	0	--
MAR. 16...	1415	116	5.5	11.2	--	--	4.3	--	64	0	--
APR. 14...	1050	281	6.0	10.9	--	--	2.4	--	51	0	--
MAY 11...	1445	559	12.5	10.3	--	--	2.2	--	35	0	--
JUNE 04...	1115	322	10.0	10.8	--	--	2.5	--	43	0	--
JULY 07...	1620	72	21.0	8.2	9.3	4.1	3.2	1.2	57	0	.5
AUG. 06...	1130	91	20.0	8.5	--	--	2.3	--	41	0	--
SEP. 22...	1545	14	14.0	9.8	--	--	5.8	--	99	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TOMS PER AC-FT)	DIS- SOLVED SOLIDS (TOMS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT. 07...	1.9	.0	0	122	.17	2.96	83	0	91	13
NOV. 17...	1.2	--	0	--	--	--	67	1	66	--
DEC. 15...	1.3	--	0	--	--	--	60	0	65	--
JAN. 14...	3.5	--	0	--	--	--	65	5	60	--
FEB. 18...	2.4	--	0	--	--	--	49	0	54	--
MAR. 16...	1.5	--	--	--	--	--	48	0	52	--
APR. 14...	.5	--	0	--	--	--	39	0	42	--
MAY 11...	.0	--	0	--	--	--	26	0	29	--
JUNE 04...	.0	--	0	--	--	--	31	0	35	--
JULY 07...	.1	.1	0	67	.09	13.0	40	0	47	14
AUG. 06...	.6	--	0	--	--	--	31	0	34	--
SEP. 22...	1.0	--	0	--	--	--	73	0	81	--

10356500 SUSAN RIVER AT SUSANVILLE, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT.										
07...	.3	174	8.3	5	--	--	--	--	--	--
NOV.										
17...	.3	152	8.0	4	--	--	--	--	--	--
DEC.										
15...	.3	134	7.6	3	--	--	--	--	--	--
JAN.										
14...	.2	130	8.1	7	--	--	--	--	--	--
FEB.										
18...	.2	113	7.8	5	--	--	--	--	--	--
MAR.										
16...	.3	111	7.7	10	--	--	--	--	--	--
APR.										
14...	.2	86	7.7	8	--	--	--	--	--	--
MAY										
11...	.2	63	7.6	9	0	0	0	0	.0	0
JUNE										
04...	.2	73	7.3	7	--	--	--	--	--	--
JULY										
07...	.2	99	7.9	1	--	--	--	--	--	--
AUG.										
06...	.2	70	7.1	7	--	--	--	--	--	--
SEP.										
22...	.3	160	7.8	2	--	--	--	--	--	--

11013500 TIJUANA RIVER NEAR NESTOR, CALIF.

DRAINAGE AREA.--1,690 sq mi, of which 1,236 sq mi are in Mexico.

EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 4,190 mg/l Dec. 21, 1970; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 50 tons Mar. 1, 1970; minimum daily, 0 tons on many days each year.

TEMPERATURE (°C) OF WATER AND SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

TEMPERATURE (°C)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
12.0	2.9	4190	47
10.0	3.0	1540	19
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	0	0	0
--	5.9	--	66
TOTAL DISCHARGE FOR YEAR (CFS-DAYS)			5.9
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)			66

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED	BED	BED	BED	BED	BED	BED
				MAT. SIEVE DIAM.	MAT. SIEVE DIAM.	MAT. SIEVE DIAM.	MAT. SIEVE DIAM.	MAT. SIEVE DIAM.	MAT. SIEVE DIAM.	MAT. SIEVE DIAM.
				% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM
JULY 29...	1300	3	.00	1	5	21	59	88	98	100

LOCATION.--Lat 32°49'29", long 117°03'17", in Ex Mission San Diego Grant, San Diego County, at gaging station in Mission Gorge, 0.2 mile upstream from left tributary, and 6 miles west of Santee.

PERIOD OF RECORD.--Water temperatures: October 1970 to September 1971.  
Sediment records: October 1969 to September 1971.

Sediment concentrations: Maximum daily, 472 mg/l Dec. 19; minimum daily, 10 mg/l on many days.  
Sediment discharge: Maximum daily, 338 tons Dec. 21; minimum daily, 0 tons Oct. 1, 2.

Sediment concentrations: Maximum daily, 512 mg/l Mar. 1, 1970; minimum daily, 10 mg/l on many days in 1971.  
Sediment discharge: Maximum daily, 338 tons Dec. 21, 1970; minimum daily, 0 tons on many days in 1969 and 1970.

[illegible]

## SAN DIEGO RIVER BASIN

11022500 SAN DIEGO RIVER NEAR SANTEE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.05	15	0	1.5	15	.06	13	110	3.9
2	.07	15	0	1.8	15	.07	9.1	75	1.8
3	.14	15	.01	1.7	15	.07	8.2	65	1.4
4	.73	15	.03	1.5	15	.06	8.2	65	1.4
5	1.4	15	.06	1.3	15	.05	7.0	60	1.1
6	1.2	15	.05	1.0	15	.04	6.5	55	.97
7	1.1	15	.04	.90	15	.04	6.3	55	.94
8	.92	15	.04	.94	15	.04	6.1	50	.82
9	.61	15	.02	1.3	15	.05	12	70	2.3
10	.46	15	.02	1.3	15	.05	10	60	1.6
11	.58	15	.02	1.3	15	.05	6.8	50	.92
12	.60	15	.02	1.5	15	.06	5.7	45	.69
13	.62	15	.03	1.6	15	.06	5.5	40	.59
14	.45	15	.02	1.3	15	.05	5.3	40	.57
15	.47	15	.02	1.3	15	.05	5.0	36	.49
16	.79	15	.03	1.4	15	.06	5.0	35	.47
17	.96	15	.04	1.5	15	.06	9.2	60	1.5
18	1.2	15	.05	1.5	15	.06	15	80	3.2
19	1.3	15	.05	1.4	15	.06	100	472	183
20	1.3	15	.05	1.6	15	.06	23	200	12
21	1.4	15	.06	1.8	20	.10	175	397	338
22	1.5	15	.06	1.9	20	.10	42	64	12
23	1.5	15	.06	2.1	20	.11	10	30	.81
24	1.5	15	.06	2.4	25	.16	7.5	40	.81
25	1.3	15	.05	2.4	25	.16	6.6	45	.80
26	1.2	15	.05	25	87	11	5.9	40	.64
27	1.2	15	.05	12	70	2.3	5.6	40	.60
28	1.0	15	.04	7.4	45	.90	5.2	40	.56
29	1.0	15	.04	80	317	245	3.6	45	.44
30	1.2	15	.05	106	403	161	3.2	50	.43
31	1.3	15	.05	--	--	--	3.2	55	.48
TOTAL	29.05	--	1.17	268.64	--	421.93	534.7	--	575.23

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.0	61	.49	4.2	30	.34	4.8	20	.26
2	24	143	16	3.7	30	.30	4.6	15	.19
3	6.6	45	.80	3.5	30	.28	4.1	15	.17
4	3.6	30	.29	3.6	30	.29	4.1	15	.17
5	3.9	30	.32	4.0	30	.32	4.2	15	.17
6	4.0	30	.32	4.0	30	.32	4.8	15	.19
7	3.7	30	.30	5.1	35	.48	4.6	15	.19
8	3.6	30	.29	6.5	40	.70	5.3	15	.21
9	3.2	25	.22	5.9	40	.64	4.5	15	.18
10	3.1	25	.21	5.4	40	.58	4.0	15	.16
11	3.0	25	.20	4.6	35	.43	4.4	15	.18
12	2.8	25	.19	4.3	30	.35	5.3	15	.21
13	11	63	2.4	4.1	30	.33	20	30	1.6
14	4.5	35	.43	4.3	25	.29	7.1	20	.38
15	3.9	30	.32	5.3	27	.39	5.9	10	.16
16	4.0	30	.32	5.2	25	.35	6.9	20	.37
17	4.0	30	.32	44	94	13	7.0	25	.47
18	4.2	30	.34	37	76	8.4	6.5	20	.35
19	5.0	35	.47	11	35	1.0	5.7	20	.31
20	5.3	35	.50	16	45	1.9	5.7	20	.31
21	5.2	35	.49	7.8	30	.63	5.6	25	.38
22	5.0	35	.47	7.8	30	.63	6.1	30	.49
23	4.5	35	.43	60	48	10	6.7	45	.81
24	4.5	35	.43	29	35	2.7	6.0	40	.65
25	3.9	30	.32	12	24	.78	5.8	40	.63
26	3.4	30	.28	9.3	29	.73	5.4	45	.66
27	3.5	30	.28	5.9	32	.51	5.4	50	.73
28	3.6	30	.29	5.3	25	.36	5.4	55	.80
29	3.7	30	.30	--	--	--	5.5	60	.89
30	3.8	30	.31	--	--	--	5.8	65	1.0
31	4.0	30	.32	--	--	--	5.4	70	1.0
TOTAL	151.5	--	28.65	318.8	--	47.03	182.6	--	14.27

11022500 SAN DIEGO RIVER NEAR SANTEE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.1	75	1.0	3.0	10	.08	1.8	10	.05
2	4.6	70	.87	3.2	10	.09	2.0	10	.05
3	4.7	70	.89	2.7	10	.07	2.2	10	.06
4	4.3	65	.75	2.5	10	.07	2.4	10	.06
5	3.8	60	.62	2.8	10	.08	2.2	10	.06
6	3.2	55	.48	9.8	19	.62	2.4	10	.06
7	3.4	55	.50	7.6	17	.38	2.6	10	.07
8	3.1	50	.42	75	126	.45	2.0	10	.05
9	3.0	50	.41	9.3	20	.50	1.7	10	.05
10	2.8	45	.34	7.1	15	.29	2.0	10	.05
11	3.0	45	.36	6.5	15	.26	2.0	10	.05
12	3.4	45	.41	5.7	10	.15	1.8	10	.05
13	2.9	40	.31	5.2	10	.14	1.6	10	.04
14	35	78	12	4.5	10	.12	1.6	10	.04
15	16	69	3.5	4.3	10	.12	1.7	10	.05
16	5.8	15	.23	4.3	10	.12	1.6	10	.04
17	4.9	12	.16	4.2	10	.11	1.6	10	.04
18	8.8	15	.36	3.7	10	.10	1.4	10	.04
19	5.7	11	.17	3.0	10	.08	1.7	10	.05
20	4.5	10	.12	3.0	10	.08	1.6	10	.04
21	3.6	10	.10	3.0	10	.08	1.9	10	.05
22	3.7	10	.10	2.9	10	.08	1.6	10	.04
23	3.2	10	.09	2.7	10	.07	1.6	10	.04
24	3.3	10	.09	2.3	10	.06	1.7	10	.05
25	5.0	13	.19	1.8	10	.05	1.8	10	.05
26	7.2	20	.39	1.5	10	.04	1.7	10	.05
27	5.0	15	.20	2.0	10	.05	1.8	10	.05
28	3.9	10	.11	11	22	1.8	2.0	15	.08
29	3.5	10	.09	9.5	18	.68	1.4	15	.06
30	3.4	10	.09	3.0	10	.08	1.4	15	.06
31	--	--	--	2.3	10	.06	--	--	--
TOTAL	169.8	--	25.35	209.4	--	51.51	54.8	--	1.53

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.5	14	.06	1.4	15	.06	.73	20	.04
2	1.5	15	.06	1.5	15	.06	.97	30	.08
3	1.2	15	.05	1.4	15	.06	1.5	45	.18
4	1.5	15	.06	1.1	15	.04	1.6	50	.22
5	1.9	15	.08	1.0	10	.03	1.6	50	.22
6	1.5	15	.06	1.1	10	.03	1.6	50	.22
7	1.1	15	.04	1.1	10	.03	1.6	50	.22
8	.72	10	.02	1.0	10	.03	1.4	55	.21
9	.48	10	.01	1.3	10	.04	1.0	55	.15
10	.36	10	.01	1.2	10	.03	.97	55	.14
11	1.2	20	.06	1.0	10	.03	.96	60	.16
12	1.6	30	.13	.97	10	.03	.85	60	.14
13	1.3	28	.10	.82	10	.02	1.1	60	.18
14	1.3	27	.09	.63	10	.02	.67	65	.12
15	1.2	25	.08	.52	10	.01	.48	65	.08
16	.83	20	.04	.78	10	.02	.58	65	.10
17	.70	20	.04	.66	10	.02	.58	65	.10
18	.88	20	.05	.86	10	.02	1.3	65	.23
19	1.3	20	.07	1.3	10	.04	1.6	65	.28
20	.93	15	.04	1.3	10	.04	1.6	65	.28
21	1.0	15	.04	1.2	10	.03	1.6	65	.28
22	.67	15	.03	1.3	10	.04	1.4	65	.25
23	.71	15	.03	1.4	10	.04	1.1	65	.19
24	.90	15	.04	.85	10	.02	1.1	65	.19
25	1.3	15	.05	.72	10	.02	1.3	65	.23
26	1.5	15	.06	.84	10	.02	3.2	70	.60
27	1.4	15	.06	.74	10	.02	1.6	70	.30
28	1.2	15	.05	.60	10	.02	1.6	70	.30
29	1.3	15	.05	.83	10	.02	1.5	69	.28
30	1.4	15	.06	1.3	10	.04	1.4	68	.26
31	1.4	15	.06	.90	10	.02	--	--	--
TOTAL	35.78	--	1.68	31.62	--	.95	38.49	--	6.23

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)  
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

2025.18  
 1175.53

LOCATION.--Lat 33°12'48", long 117°22'33", in SW<sub>1</sub>SE<sub>1</sub>SW<sub>1</sub> sec.14, T.11 S., R.5 W., San Diego County, at gaging station 0.7 mile upstream from bridge on U.S. Highway 101, 1.1 miles upstream from mouth, and 1.2 miles north of Ocean-side.

PERIOD OF RECORD.--Water temperatures: October 1970 to September 1971.  
Sediment records: October 1968 to September 1971.

Sediment concentrations: Maximum daily, 57 mg/l Dec. 20; minimum daily, 5 mg/l on many days.  
Sediment discharge: Maximum daily, 3.1 tons Dec. 20; minimum daily, 0.04 ton on many days.

Sediment concentrations (1969-71): Maximum daily, 1,220 mg/l Mar. 2, 1970; minimum daily, 5 mg/l on many days in 1971.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

[illegible]



11042000 SAN LUIS REY RIVER AT OCEANSIDE, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.3	10	.09	4.2	16	.18	10	25	.68
2	3.3	10	.09	4.2	15	.17	9.0	20	.49
3	3.3	10	.09	4.2	15	.17	8.0	20	.43
4	3.3	10	.09	3.5	15	.14	7.2	20	.39
5	3.3	10	.09	3.7	15	.15	6.4	20	.35
6	3.3	10	.09	4.0	15	.16	5.7	20	.31
7	3.3	10	.09	3.8	15	.15	5.5	20	.30
8	3.3	10	.09	3.7	15	.15	5.3	20	.29
9	3.3	10	.09	3.5	15	.14	5.5	20	.30
10	3.3	10	.09	4.0	20	.22	5.5	20	.30
11	3.2	10	.09	4.4	20	.24	5.7	20	.31
12	3.3	10	.09	4.2	20	.23	5.5	20	.30
13	3.5	15	.14	4.6	20	.25	5.1	20	.28
14	3.7	15	.15	3.8	20	.21	4.9	20	.26
15	3.7	15	.15	3.2	20	.17	4.7	20	.25
16	3.8	15	.15	3.5	20	.19	4.9	21	.28
17	4.0	15	.16	3.5	20	.19	6.6	25	.45
18	4.2	15	.17	3.5	20	.19	7.7	30	.62
19	4.4	16	.19	3.5	20	.19	17	43	2.0
20	4.4	15	.18	3.5	20	.19	20	57	3.1
21	4.4	15	.18	3.5	20	.19	19	50	2.6
22	4.6	15	.19	3.5	20	.19	20	30	1.6
23	4.6	15	.19	3.6	20	.19	24	30	1.9
24	4.4	15	.18	3.6	20	.19	18	30	1.5
25	4.2	15	.17	4.3	20	.23	13	30	1.1
26	4.2	15	.17	5.7	20	.31	10	30	.81
27	4.0	15	.16	4.9	15	.20	9.0	30	.73
28	4.2	15	.17	4.3	15	.17	8.2	30	.66
29	4.4	15	.18	8.9	21	.56	8.0	30	.65
30	4.4	15	.18	6.9	15	.28	7.7	25	.52
31	4.0	15	.16	--	--	--	7.2	25	.49
TOTAL	118.6	--	4.30	125.7	--	6.19	294.3	--	24.25

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	7.5	30	.61	7.0	30	.57	6.2	20	.33
2	7.5	29	.59	7.0	30	.57	5.5	20	.30
3	7.7	30	.62	6.8	30	.55	5.5	20	.30
4	7.7	30	.62	6.8	30	.55	5.9	20	.32
5	6.6	25	.45	6.8	30	.55	5.7	20	.31
6	6.2	25	.42	6.7	25	.45	5.7	20	.31
7	5.9	25	.40	6.6	25	.45	5.7	20	.31
8	6.4	25	.43	6.6	25	.45	5.7	20	.31
9	6.6	25	.45	5.9	25	.40	5.5	20	.30
10	6.4	25	.43	6.2	25	.42	5.1	15	.21
11	6.2	25	.42	6.6	25	.45	4.9	15	.20
12	6.6	25	.45	6.6	25	.45	4.9	15	.20
13	6.8	25	.46	6.4	25	.43	5.1	15	.21
14	6.8	25	.46	6.4	25	.43	5.5	20	.30
15	7.0	25	.47	6.2	25	.42	5.9	20	.32
16	7.5	30	.61	6.4	25	.43	6.2	20	.33
17	7.7	30	.62	9.0	30	.73	5.9	20	.32
18	8.0	35	.76	10	35	.95	5.9	20	.32
19	7.6	30	.62	9.3	30	.75	5.7	20	.31
20	7.4	30	.60	8.2	25	.55	5.5	20	.30
21	7.4	30	.60	7.5	20	.41	5.1	15	.21
22	7.2	30	.58	7.2	20	.39	4.7	15	.19
23	7.2	30	.58	8.0	22	.48	4.9	15	.20
24	7.0	30	.57	7.2	20	.39	5.5	20	.30
25	7.0	30	.57	7.0	20	.38	5.9	20	.32
26	7.0	30	.57	6.8	20	.37	5.7	20	.31
27	7.0	30	.57	6.6	20	.36	5.3	15	.21
28	7.0	30	.57	6.2	20	.33	5.3	15	.21
29	7.0	30	.57	--	--	--	5.3	15	.21
30	7.0	30	.57	--	--	--	5.3	15	.21
31	7.0	30	.57	--	--	--	5.1	15	.21
TOTAL	217.9	--	16.81	198.0	--	13.66	170.1	--	8.39

## SAN LUIS REY RIVER BASIN

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.7	15	.19	5.3	35	.50	4.9	20	.26
2	4.7	15	.19	5.1	35	.48	4.7	20	.25
3	4.9	15	.20	4.9	35	.46	4.4	20	.24
4	4.6	15	.19	4.9	35	.46	4.2	20	.23
5	4.6	15	.19	5.3	35	.50	4.2	20	.23
6	4.6	15	.19	5.7	35	.54	4.4	20	.24
7	4.6	15	.19	5.9	35	.56	4.4	20	.24
8	4.6	15	.19	6.2	35	.59	4.6	20	.25
9	4.7	15	.19	7.2	35	.68	4.9	20	.26
10	4.4	15	.18	6.6	30	.53	5.3	20	.29
11	4.9	15	.20	6.2	30	.50	5.3	20	.29
12	5.1	15	.21	6.2	30	.50	5.1	20	.28
13	4.9	15	.20	6.4	30	.52	5.1	20	.28
14	6.6	20	.36	6.2	30	.50	5.1	20	.28
15	8.0	30	.65	5.7	25	.38	4.9	20	.26
16	8.0	35	.76	5.7	25	.38	4.7	20	.25
17	6.8	35	.64	5.7	25	.38	4.9	20	.26
18	5.9	30	.48	4.6	25	.31	4.9	20	.26
19	5.3	30	.43	4.6	25	.31	4.9	20	.26
20	6.6	35	.62	5.1	25	.34	4.9	20	.26
21	6.6	35	.62	5.3	25	.36	4.9	20	.26
22	5.7	35	.54	5.3	25	.36	4.9	20	.26
23	5.1	35	.48	5.1	25	.34	4.7	15	.19
24	5.1	35	.48	5.1	25	.34	4.4	15	.18
25	5.1	35	.48	5.1	25	.34	4.6	15	.19
26	5.1	35	.48	5.1	25	.34	4.6	15	.19
27	5.1	35	.48	5.1	25	.34	4.4	15	.18
28	5.1	35	.48	5.1	25	.34	4.4	15	.18
29	5.1	35	.48	5.5	25	.37	4.4	15	.18
30	5.1	35	.48	5.7	25	.38	4.4	15	.18
31	--	--	--	5.5	25	.37	--	--	--
TOTAL	161.6	--	11.45	171.4	--	13.30	141.5	--	7.16

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	4.4	15	.18	4.2	10	.11	3.3	5	.04
2	4.4	15	.18	4.2	10	.11	3.3	5	.04
3	4.4	15	.18	4.2	10	.11	3.3	10	.09
4	4.4	15	.18	4.2	10	.11	3.2	10	.09
5	4.4	15	.18	4.4	10	.12	2.9	10	.08
6	4.0	10	.11	4.6	10	.12	2.9	10	.08
7	3.8	10	.10	3.8	5	.05	2.9	10	.08
8	3.8	10	.10	3.5	5	.05	2.9	10	.08
9	3.8	10	.10	3.3	5	.04	3.0	10	.08
10	3.8	10	.10	3.5	5	.05	3.3	10	.09
11	3.7	10	.10	3.3	5	.04	3.5	10	.09
12	3.5	10	.09	3.3	5	.04	3.3	10	.09
13	3.3	10	.09	3.3	5	.04	3.2	5	.04
14	3.3	10	.09	3.3	5	.04	3.2	5	.04
15	3.7	10	.10	3.3	5	.04	3.2	5	.04
16	3.3	10	.09	3.3	5	.04	3.2	5	.04
17	3.7	10	.10	3.3	5	.04	3.5	5	.05
18	3.7	10	.10	3.3	5	.04	3.5	5	.05
19	4.0	10	.11	3.3	5	.04	3.3	5	.04
20	3.8	10	.10	3.3	5	.04	3.2	5	.04
21	3.7	10	.10	3.3	5	.04	3.3	5	.04
22	3.3	10	.09	3.3	5	.04	3.7	5	.05
23	3.3	10	.09	3.5	5	.05	3.7	5	.05
24	3.7	10	.10	3.2	5	.04	3.7	5	.05
25	3.8	10	.10	3.7	5	.05	3.7	5	.05
26	4.0	10	.11	3.5	5	.05	3.5	5	.05
27	3.7	10	.10	3.5	5	.05	3.3	5	.04
28	3.8	10	.10	3.3	5	.04	3.5	5	.05
29	3.7	10	.10	3.3	5	.04	3.8	5	.05
30	3.7	10	.10	3.0	5	.04	3.8	5	.05
31	4.0	10	.11	3.3	5	.04	--	--	--
TOTAL	117.9	--	3.48	109.8	--	1.75	100.1	--	1.75

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

1926.9

112.49

11046000 SANTA MARGARITA RIVER AT YSIDORA, CALIF.

LOCATION.--Lat 33°14'13", long 117°23'14", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.10, T.11 S., R.5 W., San Diego County, on Camp Joseph H. Pendleton Naval Reservation, at gaging station 1.7 miles upstream from mouth, and 2.0 miles southwest of Ysidora.

DRAINAGE AREA.--740 sq mi (revised).

PERIOD OF RECORD.--Water temperatures: October 1968 to September 1971.  
Sediment records: October 1967 to September 1971.

EXTREMES.--1970-71:

Sediment concentrations: No flow during year.  
Sediment discharge: No flow during year.

Period of record:

Sediment concentrations: Maximum daily, 13,000 mg/l Feb. 24, 1969; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 534,000 tons Feb. 24, 1969; minimum daily, 0 tons on many days each year.

REMARKS.--No flow during entire water year. Prior to Feb. 25, 1970, at site 0.8 mile upstream.

## SAN JUAN CREEK BASIN

11046500 SAN JUAN CREEK NEAR SAN JUAN CAPISTRANO, CALIF.

LOCATION.--Lat 33°29'30", long 117°39'44", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.12, T.8 S., R.8 W., Orange County, at gaging station at Camino Capistrano bridge, 0.2 mile upstream from Arroyo Trabuco, and 0.6 mile south of San Juan Capistrano.

DRAINAGE AREA.--117 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1968, October 1970 to September 1971.  
Sediment records: October 1966 to September 1968, October 1970 to September 1971.

EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 3,070 mg/l Dec. 19; minimum daily, no flow Nov. 27, May 5, July 31, Sept. 30.

Sediment discharge: Maximum daily, 481 tons Dec. 19; minimum daily, 0 tons on many days.

Period of record:

Sediment concentrations: Maximum daily, 10,600 mg/l Dec. 6, 1966; minimum daily, no flow for many days in 1966, 1968, 1970-71.

Sediment discharge: Maximum daily, 110,000 tons Dec. 6, 1966; minimum daily, 0 tons on many days each year.

REMARKS.--Prior to 1971 water year, sampling site was 2.8 miles upstream. No flow Nov. 27, May 5, July 31, Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	12.0	--	--	7.5	--	--	--	--	--	--
2	--	--	--	13.5	--	--	--	--	--	--	--	--
3	--	--	--	5.0	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	21.5	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--
9	--	15.5	--	--	--	20.0	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	12.5	--	--	--	18.0	--	--	--	--
13	--	--	--	9.5	--	16.0	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	15.0	--	--	--	--	--	--	--	--	22.0
17	--	--	14.0	--	15.0	--	--	--	--	--	--	--
18	--	--	9.0	--	12.0	--	--	--	--	--	--	--
19	--	--	13.5	--	--	--	--	--	--	--	--	--
20	--	--	12.5	--	--	--	--	--	--	--	--	--
21	--	--	14.5	--	--	--	--	--	--	--	--	--
22	--	--	13.5	--	--	--	--	--	--	--	--	--
23	--	--	10.5	--	--	--	--	--	--	--	--	--
24	--	--	11.0	--	--	--	--	--	--	--	--	--
25	--	--	--	14.0	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	23.0	--	--
27	--	17.0	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	14.5	--	--	--	--	--	--	--	--	--	--
30	--	14.5	--	--	--	20.0	--	--	--	--	--	--
31	--	--	9.5	12.0	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	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	SUS. SED. FALL DIAM. % FINER THAN .062 MM
NOV. 29...	1605	13.5	67	7640	1380	64	73	87	96	99	100

## 11046500 SAN JUAN CREEK NEAR SAN JUAN CAPISTRANO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.60	80	.13	.09	15	0	.08	28	.01
2	.70	90	.17	.08	10	0	.82	65	.14
3	.63	85	.14	.08	10	0	.58	55	.09
4	.25	45	.03	.07	10	0	.47	50	.06
5	.26	45	.03	.06	10	0	.28	40	.03
6	.29	50	.04	.15	15	.01	.25	40	.03
7	.40	60	.06	.35	20	.02	.25	40	.03
8	.15	35	.01	.28	20	.02	.25	35	.02
9	.15	35	.01	.22	20	.01	.35	40	.04
10	.14	35	.01	.25	20	.01	.27	40	.03
11	.14	35	.01	.29	20	.02	.27	35	.03
12	.13	35	.01	.59	40	.06	.27	35	.03
13	.13	30	.01	.60	40	.06	.27	35	.03
14	.13	30	.01	.70	50	.09	.43	50	.06
15	.13	30	.01	.54	45	.07	.38	45	.05
16	.13	30	.01	1.3	70	.25	1.1	44	.13
17	.12	25	.01	.70	60	.11	7.6	101	3.4
18	.09	25	.01	.29	30	.02	5.7	63	7.6
19	.01	10	0	.22	30	.02	44	3070	481
20	.08	20	0	.07	15	0	12	191	7.4
21	.19	25	.01	.12	15	0	24	1380	110
22	.14	20	.01	.21	20	.01	38	916	127
23	.50	40	.05	.18	20	.01	13	65	2.3
24	.41	30	.03	.15	15	.01	9.1	35	.86
25	.09	15	0	.13	15	.01	7.8	30	.63
26	.10	15	0	.54	40	.06	6.7	30	.54
27	.05	10	0	0	0	0	6.5	25	.44
28	.06	10	0	5.2	95	4.9	6.1	25	.41
29	.14	15	.01	26	2400	372	5.4	20	.29
30	.11	15	0	1.9	90	.46	5.1	20	.28
31	.10	15	0	--	--	--	4.8	20	.26
TOTAL	6.55	--	.82	41.36	--	378.23	202.12	--	743.22

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	5.1	20	.28	4.2	15	.17	4.2	40	.45
2	15	211	11	3.2	15	.13	3.3	35	.31
3	8.1	70	1.5	2.6	15	.11	3.5	35	.33
4	6.3	55	.94	2.6	15	.11	3.8	35	.36
5	5.3	50	.72	2.6	15	.11	3.2	30	.26
6	4.8	45	.58	2.8	15	.11	3.0	30	.24
7	4.7	40	.51	3.0	20	.16	3.3	30	.27
8	4.9	35	.46	3.0	20	.16	3.0	25	.20
9	4.9	30	.40	2.8	15	.11	2.8	25	.19
10	5.1	25	.34	2.8	15	.11	1.9	25	.13
11	5.1	20	.28	3.0	15	.12	1.8	20	.10
12	7.2	40	.78	3.0	20	.16	2.1	15	.09
13	7.3	35	.69	3.2	20	.17	5.6	36	1.0
14	5.8	25	.39	3.2	20	.17	3.7	10	.10
15	4.9	20	.26	3.4	20	.18	3.7	10	.10
16	9.7	55	1.4	3.9	25	.26	3.7	9	.09
17	10	60	1.6	7.0	60	1.7	3.7	9	.09
18	9.9	55	1.5	3.2	18	.16	3.2	8	.07
19	8.8	45	1.1	3.1	17	.14	3.0	8	.06
20	7.5	35	.71	2.6	16	.11	2.6	8	.06
21	6.4	30	.52	2.5	15	.10	2.6	7	.05
22	4.9	25	.33	3.0	20	.16	2.6	7	.05
23	3.7	20	.20	3.4	25	.23	1.9	7	.04
24	3.9	20	.21	2.7	20	.15	1.9	6	.03
25	4.3	25	.29	3.0	25	.20	1.8	6	.03
26	4.4	25	.30	2.8	25	.19	1.8	6	.03
27	4.0	25	.27	3.4	30	.28	1.6	6	.03
28	4.4	20	.24	4.0	35	.38	1.6	5	.02
29	4.2	20	.23	--	--	--	1.8	6	.03
30	4.3	20	.23	--	--	--	1.9	7	.04
31	4.2	15	.17	--	--	--	1.9	7	.04
TOTAL	189.1	--	28.43	90.0	--	6.14	86.5	--	4.89

## SAN JUAN CREEK BASIN

11046500 SAN JUAN CREEK NEAR SAN JUAN CAPISTRANO, CALIF.--Continued  
SUSPENDED--SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.6	6	.03	.51	10	.01	.53	9	.01
2	1.6	6	.03	.47	9	.01	.87	10	.02
3	1.9	7	.04	.06	6	0	.82	10	.02
4	2.1	7	.04	.06	3	0	.97	15	.04
5	1.6	6	.03	0	0	0	.99	15	.04
6	1.4	6	.02	.16	5	0	.99	15	.04
7	.31	5	0	.21	6	0	1.1	15	.04
8	.36	4	0	.24	7	0	.42	10	.01
9	.56	6	.01	.20	7	0	.65	10	.02
10	.47	6	.01	.17	6	0	.74	10	.02
11	.44	6	.01	.17	6	0	.48	8	.01
12	.50	5	.01	.57	10	.02	.48	8	.01
13	.50	5	.01	.47	10	.01	.34	6	.01
14	.50	5	.01	.90	15	.04	.36	6	.01
15	.50	4	.01	1.4	20	.08	.42	6	.01
16	.50	4	.01	1.4	20	.08	.40	6	.01
17	.50	4	.01	1.1	15	.04	.33	5	0
18	.46	3	0	.90	15	.04	.27	5	0
19	.44	3	0	.56	10	.02	.25	5	0
20	.40	3	0	.51	10	.01	.19	4	0
21	.40	3	0	.35	9	.01	.16	4	0
22	.50	4	.01	.33	9	.01	.13	4	0
23	.46	4	0	.37	8	.01	.10	4	0
24	.89	15	.04	.28	7	.01	.09	4	0
25	.90	15	.04	.16	5	0	.08	4	0
26	.32	10	.01	.20	5	0	.08	3	0
27	.29	9	.01	.26	6	0	.07	3	0
28	.26	8	.01	.70	10	.02	.07	3	0
29	.25	7	0	.32	8	.01	.07	3	0
30	.25	6	0	.43	8	.01	.07	3	0
31	--	--	--	.41	8	.01	--	--	--
TOTAL	21.16	--	.40	13.87	--	.45	12.52	--	.32

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.07	3	0	.03	3	0	.13	3	0
2	.09	3	0	.07	3	0	.12	3	0
3	.12	4	0	.12	4	0	.12	2	0
4	.15	4	0	.07	4	0	.11	2	0
5	.15	5	0	.10	4	0	.11	2	0
6	.15	5	0	.05	4	0	.11	2	0
7	.15	5	0	.12	5	0	.11	2	0
8	.15	6	0	.13	5	0	.10	2	0
9	.19	6	0	.18	6	0	.10	2	0
10	.21	7	0	.18	6	0	.10	2	0
11	.66	10	.02	.19	6	0	.09	2	0
12	.31	8	.01	.19	6	0	.09	2	0
13	.05	6	0	.20	7	0	.08	2	0
14	.06	4	0	.23	7	0	.08	2	0
15	.26	10	.01	.21	6	0	.08	2	0
16	.10	8	0	.21	6	0	.07	2	0
17	.19	8	0	.20	5	0	.07	2	0
18	.11	7	0	.20	5	0	.08	2	0
19	.12	7	0	.19	5	0	.09	2	0
20	.14	6	0	.18	4	0	.10	2	0
21	.16	6	0	.17	4	0	.01	2	0
22	.08	5	0	.17	4	0	.19	4	0
23	.10	5	0	.16	3	0	.11	4	0
24	.08	5	0	.16	3	0	.38	5	.01
25	.06	4	0	.15	3	0	.40	5	.01
26	.05	4	0	.15	3	0	.25	4	0
27	.03	3	0	.14	3	0	.26	4	0
28	.09	4	0	.14	3	0	.20	3	0
29	.06	3	0	.13	3	0	.47	5	.01
30	.05	3	0	.13	3	0	0	0	0
31	0	0	0	.13	3	0	--	--	--
TOTAL	4.19	--	.04	4.68	--	0	4.21	--	.03

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)  
TOTAL SUSPENDED--SEDIMENT DISCHARGE FOR YEAR (TONS)

676.26  
1162.97

REMARKS.--No flow Oct. 1 to Nov. 27, Dec. 1 to Dec. 16, Apr. 20-25, Apr. 28 to May 5, 18-27, May 30 to Sept. 30. Records of discharge furnished by Orange County Flood Control District. Sediment table omitted for period of no flow during July to September.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

[illegible]

## SAN JUAN CREEK BASIN

11047300 ARROYO TRABUCO AT SAN JUAN CAPISTRANO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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				0	0	0	0	0	0
2				0	0	0	0	0	0
3				0	0	0	0	0	0
4				0	0	0	0	0	0
5				0	0	0	0	0	0
6				0	0	0	0	0	0
7				0	0	0	0	0	0
8				0	0	0	0	0	0
9				0	0	0	0	0	0
10				0	0	0	0	0	0
11				0	0	0	0	0	0
12				0	0	0	0	0	0
13				0	0	0	0	0	0
14				0	0	0	0	0	0
15				0	0	0	0	0	0
16				0	0	0	0	0	0
17				0	0	0	1.0	1190	3.2
18				0	0	0	.10	500	.14
19				0	0	0	53	6740	964
20				0	0	0	.10	95	.03
21				0	0	0	70	6340	1200
22				0	0	0	25	1600	108
23				0	0	0	8.4	420	9.5
24				0	0	0	3.5	50	.47
25				0	0	0	2.3	40	.25
26				0	0	0	2.3	30	.19
27				0	0	0	2.1	25	.14
28				.30	130	.11	2.1	20	.11
29				33	6130	546	2.1	15	.09
30				2.5	1500	10	2.3	10	.06
31				--	--	--	2.3	5	.03
TOTAL	0	--	0	35.80	--	556.11	176.60	--	2286.21

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	2.3	5	.03	1.1	80	.24	.70	20	.04
2	15	3370	136	1.1	75	.22	.80	30	.06
3	2.9	60	.47	1.1	70	.21	.60	20	.03
4	1.6	55	.24	1.1	65	.19	.60	15	.02
5	1.5	50	.20	1.1	60	.18	.60	15	.02
6	1.4	45	.17	1.1	55	.16	.50	10	.01
7	1.5	40	.16	1.1	40	.12	.50	10	.01
8	.90	30	.07	1.2	50	.16	.40	10	.01
9	1.0	20	.05	1.1	45	.13	.40	5	.01
10	1.0	15	.04	1.1	40	.12	.30	5	0
11	1.3	10	.04	1.7	160	.73	.30	5	0
12	8.3	1700	38	1.5	150	.61	.30	5	0
13	.90	150	.36	1.8	170	.83	5.5	1970	29
14	.80	140	.30	1.4	160	.60	2.3	150	.93
15	.70	130	.25	1.4	150	.57	2.1	90	.51
16	.60	120	.19	3.3	738	6.6	2.0	40	.22
17	.60	110	.18	3.2	1260	11	1.4	35	.13
18	.80	120	.26	1.1	70	.21	1.5	40	.16
19	.80	110	.24	1.4	200	.76	1.1	40	.12
20	.70	100	.19	1.4	160	.60	.90	35	.09
21	.60	90	.15	1.4	120	.45	.90	35	.09
22	.60	80	.13	1.2	100	.32	.90	30	.07
23	.60	70	.11	1.2	80	.26	.90	30	.07
24	.60	60	.10	1.2	70	.23	.90	25	.06
25	.50	50	.07	.70	60	.11	.90	25	.06
26	.60	40	.06	.70	50	.09	1.0	30	.08
27	.60	30	.05	.70	40	.08	1.0	30	.08
28	1.2	150	.49	.70	30	.06	.90	25	.06
29	1.2	130	.42	--	--	--	.90	20	.05
30	.90	110	.27	--	--	--	.70	15	.03
31	1.2	90	.29	--	--	--	.50	10	.01
TOTAL	53.20	--	179.58	37.10	--	25.84	32.30	--	32.03



## 11047300 ARROYO TRABUCO AT SAN JUAN CAPISTRANO, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.50	10	.01	0	0	0			
2	.60	15	.02	0	0	0			
3	.90	20	.05	0	0	0			
4	.40	15	.02	0	0	0			
5	.40	15	.02	0	0	0			
6	.30	15	.01	.80	200	.43			
7	.20	10	.01	2.0	800	4.3			
8	.20	10	.01	1.2	400	1.3			
9	.20	10	.01	1.0	250	.68			
10	.20	5	0	.90	200	.49			
11	.50	15	.02	.90	150	.36			
12	.30	10	.01	.90	130	.32			
13	.10	5	0	.90	110	.27			
14	3.5	1770	17	.60	50	.08			
15	1.3	500	1.8	.40	20	.02			
16	.40	230	.25	.20	10	.01			
17	.30	150	.12	.10	5	0			
18	.30	130	.11	0	0	0			
19	.20	100	.05	0	0	0			
20	0	0	0	0	0	0			
21	0	0	0	0	0	0			
22	0	0	0	0	0	0			
23	0	0	0	0	0	0			
24	0	0	0	0	0	0			
25	0	0	0	0	0	0			
26	.10	5	0	0	0	0			
27	.10	5	0	0	0	0			
28	0	0	0	1.7	450	2.1			
29	0	0	0	.20	100	.05			
30	0	0	0	0	0	0			
31	--	--	--	0	0	0			
TOTAL	11.00	--	19.52	11.80	--	10.41	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

357.80

3109.70

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT 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	
NOV. 29...	1550	14.5	200	19000	10300	43	50	58	
DEC. 21...	1150	13.5	125	11300	3810	47	50	56	
DATE		SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL 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 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
NOV. 29...	68	77	81	84	93	99	100	--	
DEC. 21...	66	76	82	84	88	93	99	100	

## SANTA ANA RIVER BASIN

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CALIF.

LOCATION.--Lat 34°04'05", long 117°17'36", in San Bernardino Grant, San Bernardino County, at gaging station on downstream side of E Street bridge, 0.8 mile downstream from San Timoteo Creek, 1 mile upstream from Warm Creek, and 3 miles south of San Bernardino.

DRAINAGE AREA.--532 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): Water year 1969 (partial-record station), February 1970 to September 1971.

Specific conductance: October 1967 to September 1971.

EXTREMES.--1970-71:

Specific conductance: Maximum recorded, 1,200 micromhos Apr. 12, 13; minimum recorded, 703 micromhos Feb. 22.

Period of record:

Specific conductance: Maximum recorded, 1,280 micromhos Oct. 25, 1968; minimum recorded, 250 micromhos Oct. 6, 1969.

REMARKS.--Twelve chemical-quality analyses furnished by California Department of Water Resources. Recorder malfunction Oct. 25 to Nov. 5, Nov. 27 to Dec. 2, Feb. 1-3, 23-28, May 1-16. Specific conductance collected at effluent pipe from City of San Bernardino Water Quality Control Plant. Values reported are for periods of main channel river flow of less than 1.5 cfs and are representative of more than 90 percent of total flow at E Street bridge.

## CHEMICAL ANALYSES, FEBRUARY TO SEPTEMBER 1970

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED CHLO- RIDE (CL) (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)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
FEB.								
24...	1110	25	21.0	--	480	.65	32.4	824
MAR.								
02...	1115	350	--	--	200	.27	189	312
30...	1500	20	21.5	60	552	.75	29.8	1110
APR.								
13...	1600	--	22.0	--	538	.73	--	1040
MAY								
10...	1415	22	25.5	--	552	.75	32.8	1110
28...	--	21	26.0	--	516	.70	30.2	1020
JUNE								
18...	1030	19	26.0	--	464	.63	23.8	908
30...	1000	19	27.0	--	572	.78	29.3	879
JULY								
13...	1000	19	29.0	--	496	.67	25.4	980
21...	1315	18	29.0	--	490	.67	23.8	994
28...	1445	18	29.0	--	506	.69	24.6	1030
31...	1000	19	29.0	--	484	.66	24.8	946
AUG.								
03...	0950	19	29.0	--	484	.66	24.8	981
14...	1140	19	30.0	--	498	.68	25.5	978
20...	1230	18	--	--	522	.71	25.4	1020
25...	1010	18	30.0	--	518	.70	25.2	966
SEP.								
04...	0945	19	28.0	--	444	.60	22.8	847
11...	1100	19	30.0	--	474	.64	24.3	922
18...	1345	18	28.0	--	480	.65	23.3	992
25...	1035	18	28.0	--	486	.66	23.6	886

SANTA ANA RIVER BASIN  
11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.										
01...	1610	18	28.0	--	--	--	--	--	--	--
08...	1200	18	27.5	--	--	--	--	--	--	--
14...	1145	19	27.0	--	--	--	--	--	--	--
19...	1500	19	27.0	--	--	--	--	--	--	--
26...	1130	19	26.5	--	--	--	--	--	--	--
28...	1300	14	26.5	40	21	91	11	358	0	71
NOV.										
06...	1315	19	26.0	--	--	--	--	--	--	--
12...	1400	18	24.0	--	--	--	--	--	--	--
19...	1330	18	25.0	--	--	--	--	--	--	--
23...	1245	15	25.5	36	24	91	13	376	0	75
25...	0930	19	25.0	--	--	--	--	--	--	--
29...	1200	--	13.0	--	--	--	--	--	--	--
DEC.										
02...	1130	20	23.0	--	--	--	--	--	--	--
03...	1130	18	13.0	--	--	--	--	--	--	--
17...	1430	25	20.0	38	16	80	10	326	0	72
22...	1230	19	21.0	--	--	--	--	--	--	--
JAN.										
04...	1315	19	20.0	--	--	--	--	--	--	--
09...	1115	19	20.5	--	--	--	--	--	--	--
13...	1250	20	20.0	--	--	--	--	--	--	--
20...	1525	19	24.0	--	--	--	--	--	--	--
25...	1230	13	22.0	35	24	95	13	386	0	83
28...	1300	19	21.0	--	--	--	--	--	--	--
FEB.										
01...	1250	20	21.5	--	--	--	--	--	--	--
04...	1240	18	21.5	--	--	--	--	--	--	--
10...	1215	19	22.0	--	--	--	--	--	--	--
17...	1130	18	21.5	--	--	--	--	--	--	--
25...	1245	12	23.0	39	21	94	13	375	0	77
25...	1440	20	22.0	--	--	--	--	--	--	--
MAR.										
01...	1440	17	21.0	--	--	--	--	--	--	--
08...	1030	18	--	--	--	--	--	--	--	--
16...	1130	19	--	--	--	--	--	--	--	--
24...	1050	18	22.5	--	--	--	--	--	--	--
25...	1230	14	21.5	41	18	90	11	373	0	71
APR.										
01...	1100	19	23.5	--	--	--	--	--	--	--
09...	1010	19	24.0	--	--	--	--	--	--	--
23...	1145	18	24.0	--	--	--	--	--	--	--
26...	1115	14	22.0	32	24	85	14	395	0	61
30...	0900	18	24.0	--	--	--	--	--	--	--
MAY										
17...	1230	18	24.0	--	--	--	--	--	--	--
24...	1345	20	25.5	--	--	--	--	--	--	--
27...	1230	50	25.0	47	15	89	11	371	0	77
JUNE										
01...	1530	18	--	--	--	--	--	--	--	--
07...	0930	14	25.0	--	--	--	--	--	--	--
14...	1130	14	25.0	--	--	--	--	--	--	--
17...	1200	13	28.0	41	21	93	10	200	0	81
21...	1115	14	26.5	--	--	--	--	--	--	--
28...	1100	13	26.5	--	--	--	--	--	--	--
JULY										
01...	--	12	--	--	--	--	--	--	--	--
09...	--	13	--	--	--	--	--	--	--	--
13...	--	13	--	--	--	--	--	--	--	--
15...	1245	13	29.0	39	23	91	10	142	0	79
19...	--	13	29.0	--	--	--	--	--	--	--
26...	--	13	29.0	--	--	--	--	--	--	--
AUG.										
02...	1430	18	30.0	--	--	--	--	--	--	--
09...	1030	19	29.5	--	--	--	--	--	--	--
16...	1300	19	30.5	--	--	--	--	--	--	--
26...	1200	12	30.5	41	21	92	12	394	0	85
26...	1330	18	--	--	--	--	--	--	--	--
SEP.										
03...	0945	19	--	--	--	--	--	--	--	--
14...	1420	19	29.5	--	--	--	--	--	--	--
20...	1225	18	29.0	--	--	--	--	--	--	--
22...	1245	12	29.5	41	20	90	12	369	0	84
27...	1340	19	28.5	--	--	--	--	--	--	--

## SANTA ANA RIVER BASIN

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
OCT.										
01...	--	--	--	--	518	.70	25.2	--	--	1010
08...	--	--	--	--	502	.68	24.4	--	--	960
14...	--	--	--	--	508	.69	26.1	--	--	1000
19...	--	--	--	--	506	.69	26.0	--	--	1030
26...	--	--	--	--	512	.70	26.3	--	--	998
28...	81	1.3	3.1	560	516	.70	19.5	187	0	991
NOV.										
06...	--	--	--	--	520	.71	26.7	--	--	1030
12...	--	--	--	--	522	.71	25.4	--	--	1040
19...	--	--	--	--	516	.70	25.1	--	--	964
23...	72	.9	2.5	750	480	.65	19.4	189	0	992
25...	--	--	--	--	472	.64	24.2	--	--	966
29...	--	--	--	--	319	.43	--	--	--	479
DEC.										
02...	--	--	--	--	596	.81	32.2	--	--	952
03...	--	--	--	--	520	.71	25.3	--	--	985
17...	68	.9	5.6	500	439	.60	29.6	161	0	904
22...	--	--	--	--	490	.67	25.1	--	--	923
JAN.										
04...	--	--	--	--	538	.73	27.6	--	--	1050
09...	--	--	--	--	536	.73	27.5	--	--	991
13...	--	--	--	--	516	.70	27.9	--	--	971
20...	--	--	--	--	572	.78	29.3	--	--	1040
25...	76	1.2	1.9	600	502	.68	17.6	186	0	1010
28...	--	--	--	--	540	.73	27.7	--	--	1030
FEB.										
01...	--	--	--	--	540	.73	29.2	--	--	1060
04...	--	--	--	--	492	.67	23.9	--	--	971
10...	--	--	--	--	514	.70	26.4	--	--	1010
17...	--	--	--	--	438	.60	21.3	--	--	893
25...	76	1.0	1.9	590	525	.71	17.0	184	0	964
25...	--	--	--	--	510	.69	27.5	--	--	1020
MAR.										
01...	--	--	--	--	500	.68	22.9	--	--	1050
08...	--	--	--	--	490	--	--	--	--	962
16...	--	--	--	--	486	--	--	--	--	993
24...	--	--	--	--	508	--	--	--	--	992
25...	66	.8	6.2	570	476	.65	18.0	177	0	946
APR.										
01...	--	--	--	--	518	--	--	--	--	989
09...	--	--	--	--	578	--	--	--	--	999
23...	--	--	--	--	588	--	--	--	--	1030
26...	61	1.0	1.2	670	509	.69	19.2	179	0	863
30...	--	--	--	--	528	--	--	--	--	960
MAY										
17...	--	--	--	--	586	.80	28.5	--	--	1130
24...	--	--	--	--	458	.62	24.7	--	--	1050
27...	69	.8	5.6	590	479	.65	64.7	179	0	880
JUNE										
01...	--	--	--	--	542	.74	26.3	--	--	1020
07...	--	--	--	--	492	.67	18.6	--	--	1000
14...	--	--	--	--	498	.68	18.8	--	--	965
17...	73	.8	86	610	502	.68	17.6	185	21	863
21...	--	--	--	--	470	.64	17.8	--	--	954
28...	--	--	--	--	486	.66	17.1	--	--	941
JULY										
01...	--	--	--	--	514	.70	16.7	--	--	995
09...	--	--	--	--	550	.75	19.3	--	--	1010
13...	--	--	--	--	526	.72	18.5	--	--	1020
15...	67	1.0	130	560	486	.66	17.1	192	76	851
19...	--	--	--	--	518	.70	18.2	--	--	1010
26...	--	--	--	--	532	.72	18.7	--	--	992
AUG.										
02...	--	--	--	--	576	.78	28.0	--	--	1080
09...	--	--	--	--	488	.66	25.0	--	--	993
16...	--	--	--	--	510	.69	26.2	--	--	993
26...	68	1.1	1.9	660	514	.70	16.7	189	0	949
26...	--	--	--	--	486	.66	23.6	--	--	1010
SEP.										
03...	--	--	--	--	522	.71	26.8	--	--	960
14...	--	--	--	--	484	.66	24.8	--	--	988
20...	--	--	--	--	484	.66	23.5	--	--	966
22...	67	1.0	1.9	600	490	.67	15.9	185	0	946
27...	--	--	--	--	512	.70	26.3	--	--	1010

CHEMICAL ANALYSES. WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	PH	DIS- SOLVED AMMONIA (NH4) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
DATE	(UNITS)								
OCT.									
01...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
28...	7.5	38	27	8.0	30	4.1	294	50	2.9
NOV.									
06...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
23...	7.1	38	--	7.9	150	--	308	49	2.9
25...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
DEC.									
02...	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--
17...	7.4	38	26	--	525	--	267	50	2.7
22...	--	--	--	--	--	--	--	--	--
JAN.									
04...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
25...	7.3	44	46	7.3	30	3.4	317	50	3.0
28...	--	--	--	--	--	--	--	--	--
FEB.									
01...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
25...	7.5	39	--	7.5	<25	--	308	51	3.0
25...	--	--	--	--	--	--	--	--	--
MAR.									
01...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
25...	8.0	39	--	7.5	35	--	306	51	2.9
APR.									
01...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
26...	7.5	43	53	7.0	56	4.6	324	48	2.8
30...	--	--	--	--	--	--	--	--	--
MAY									
17...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
27...	7.7	40	--	7.4	140	--	304	50	2.9
JUNE									
01...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
17...	7.0	11	--	7.3	35	--	164	50	2.9
21...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
JULY									
01...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
15...	6.4	8.8	34	7.0	60	5.4	116	49	2.9
19...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
AUG.									
02...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
26...	7.4	41	--	6.7	57	--	323	50	2.9
26...	--	--	--	--	--	--	--	--	--
SEP.									
03...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
22...	7.6	39	--	7.5	<25	--	303	49	2.9
27...	--	--	--	--	--	--	--	--	--

## SANTA ANA RIVER BASIN

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1010	982	995	---	---	---	---	---	---	---	---	---
2	1010	924	968	---	---	---	---	---	---	---	---	---
3	994	921	959	---	---	---	1010	941	978	---	---	---
4	1020	946	993	---	---	---	1020	952	988	---	---	---
5	1010	935	976	---	---	---	1030	929	986	---	---	---
6	985	927	955	1050	1020	1040	1020	942	977	---	---	---
7	991	924	968	1050	765	1010	1040	944	1000	---	---	---
8	1010	935	979	1060	988	1030	1030	955	988	---	---	---
9	1010	946	978	1040	929	998	990	933	971	---	---	---
10	---	---	---	1030	959	1010	1040	949	993	---	---	---
11	1000	924	962	1040	968	1010	1050	972	1020	---	---	---
12	1010	913	976	1040	992	1020	1070	984	1020	---	---	---
13	1010	952	984	1050	981	1020	1060	970	1010	---	---	---
14	1010	915	965	1020	969	993	1040	895	994	---	---	---
15	944	888	918	998	934	960	1020	959	989	---	---	---
16	976	888	942	992	933	962	1010	940	977	---	---	---
17	1010	944	982	1010	952	991	995	904	971	---	---	---
18	1010	946	979	1020	954	994	1010	951	988	1080	976	1030
19	1030	946	996	1010	933	969	981	902	950	1100	1000	1040
20	1000	959	982	974	923	949	1010	930	963	1080	952	1010
21	1030	958	1010	971	920	952	962	873	924	982	935	958
22	1030	949	990	1030	806	981	---	---	---	994	932	968
23	1000	932	982	991	936	969	---	---	---	1030	952	982
24	1100	985	1030	989	920	953	---	---	---	1030	944	985
25	---	---	---	1020	923	991	---	---	---	1050	958	1010
26	---	---	---	1010	958	981	---	---	---	1040	961	1000
27	---	---	---	---	---	---	---	---	---	1030	952	996
28	---	---	---	---	---	---	---	---	---	1040	949	1010
29	---	---	---	---	---	---	---	---	---	1040	921	993
30	---	---	---	---	---	---	---	---	---	1020	944	974
31	---	---	---	---	---	---	---	---	---	1030	946	981
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1060	982	1020	1070	981	1020	---	---	---
2	---	---	---	1030	954	982	1080	970	1020	---	---	---
3	---	---	---	1040	946	981	1090	994	1020	---	---	---
4	997	952	982	1050	953	986	1080	954	1010	---	---	---
5	1030	935	981	1060	954	987	1090	939	999	---	---	---
6	1040	946	984	1050	950	986	1070	994	1030	---	---	---
7	1010	935	966	1070	959	988	1060	984	1000	---	---	---
8	1060	958	1000	1070	951	997	1080	1000	1020	---	---	---
9	1060	964	982	1100	998	1030	1070	988	1020	---	---	---
10	1040	960	978	---	---	---	1110	988	1030	---	---	---
11	1050	927	970	1070	965	1020	1110	971	1020	---	---	---
12	1010	927	961	1070	984	1020	1200	1030	1090	---	---	---
13	1040	946	982	---	---	---	1200	1060	1110	---	---	---
14	1070	946	994	---	---	---	---	---	---	---	---	---
15	1030	946	986	---	---	---	---	---	---	---	---	---
16	---	---	---	1090	965	1020	---	---	---	---	---	---
17	---	---	---	997	937	970	---	---	---	1140	1020	1070
18	---	---	---	1010	933	973	---	---	---	1080	978	1020
19	932	875	903	1020	949	971	---	---	---	1080	970	1010
20	991	932	961	1070	966	1010	1060	989	1030	1110	930	1020
21	1030	938	976	1060	977	1010	1020	982	995	965	903	930
22	1030	703	810	1090	989	1030	1050	993	1010	950	892	914
23	---	---	---	1060	1010	1020	1090	989	1020	1000	892	931
24	---	---	---	1100	982	1030	1050	991	1010	1050	909	964
25	---	---	---	1070	946	1010	1000	964	983	1060	960	994
26	---	---	---	1080	988	1020	1090	963	1000	1030	947	984
27	---	---	---	1080	987	1020	1070	980	1010	---	---	---
28	---	---	---	1080	985	1010	1040	971	994	---	---	---
29	---	---	---	1090	972	1010	1080	976	1010	---	---	---
30	---	---	---	1050	959	1000	1050	958	1000	---	---	---
31	---	---	---	1050	943	1000	---	---	---	---	---	---
MONTH	---	---	---	1100	933	1000	---	---	---	---	---	---

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1010	941	1000	1020	923	960	980	911	955
2	---	---	---	988	985	986	1110	970	1010	999	960	981
3	1040	1000	1020	985	971	976	1050	985	1010	1020	958	990
4	1070	981	1010	994	965	975	1010	956	979	992	917	959
5	1050	960	991	1010	974	986	1020	950	976	996	922	950
6	1060	963	993	1030	994	1020	1040	944	987	1020	919	953
7	1100	972	1020	1040	994	1010	1060	983	1010	992	914	944
8	1060	997	1020	1020	987	1000	1050	966	994	1010	908	941
9	1090	993	1040	1010	1000	1010	1080	978	1010	992	908	940
10	1040	972	1010	1010	945	992	1070	980	1010	973	911	938
11	1090	972	1010	1010	948	979	1060	970	1000	989	911	942
12	1110	997	1030	1040	983	1010	1050	963	998	992	916	950
13	1060	963	1000	1070	977	1010	1080	969	1010	1030	922	973
14	1060	957	1000	1050	1020	1040	1040	947	991	992	940	968
15	1070	963	1020	1050	850	1030	1060	979	1020	1000	925	950
16	1040	937	984	1020	973	996	1050	963	996	999	908	950
17	1030	860	962	981	961	969	1010	945	976	999	928	957
18	1020	934	962	1020	951	978	997	931	956	1000	943	976
19	1010	920	955	1010	965	990	1010	919	957	964	905	938
20	963	903	929	982	960	979	1030	939	976	983	902	936
21	1030	937	979	967	956	959	998	931	962	986	915	950
22	1080	972	1020	984	961	974	992	939	966	977	937	953
23	1070	970	1030	977	974	974	1030	948	984	1000	931	959
24	1050	966	1000	985	977	982	1000	942	968	920	915	970
25	1040	966	992	995	995	995	993	927	958	986	928	956
26	1050	946	990	1000	980	990	1040	930	976	960	908	934
27	1030	954	982	1060	1000	1020	1040	939	976	1020	937	972
28	1030	931	969	1060	1010	1030	1060	957	992	1020	964	986
29	1010	954	980	1060	1010	1030	1020	936	968	980	919	955
30	1010	937	971	1020	1020	1020	1010	933	963	970	914	946
31	---	---	---	1020	1010	1010	1020	939	964	---	---	---
MONTH	1110	860	995	1070	850	997	1110	919	984	1030	902	956

## SANTA ANA RIVER BASIN

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CALIF.

LOCATION.--Lat 33°58'04", Long 117°26'46", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec.30, T.2 S., R.5 W., Riverside County, at gaging station on left bank, 300 ft upstream from MWD Crossing, 0.7 mile downstream from Union Pacific Railroad bridge, 1.2 miles upstream from bridge on Van Buren Boulevard, and 3.3 miles north of Arlington.

DRAINAGE AREA.--854 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1971.  
Specific conductance: October 1969 to September 1971.

EXTREMES.--1970-71:

Specific conductance: Maximum, 1,280 micromhos May 26; minimum, 95 micromhos Nov. 27.

Period of record:

Specific conductance: Maximum recorded, 1,320 micromhos Nov. 4, 1969; minimum, 95 micromhos Nov. 27, 1970.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
OCT.							
01...	1740	20	28.0	702	.95	37.9	1120
08...	1300	22	25.0	696	.95	41.3	1080
14...	1400	22	25.0	716	.97	42.5	1090
19...	1400	24	22.0	722	.98	46.8	1110
26...	1110	26	22.0	706	.96	49.6	1090
NOV.							
02...	1320	26	22.0	712	.97	50.0	1110
06...	1130	24	20.0	728	.99	47.2	1110
12...	1230	23	21.0	756	1.03	46.9	1120
18...	1400	23	19.5	730	.99	45.3	1120
25...	1110	25	17.0	736	1.00	49.7	1100
DEC.							
01...	1515	27	17.0	720	.98	52.5	1060
08...	1040	21	18.0	724	.98	41.1	1120
16...	0950	16	15.5	718	.98	31.0	1120
17...	1320	70	--	380	.52	71.8	605
18...	0915	41	--	268	.36	29.7	387
19...	1040	199	10.0	292	.40	157	470
23...	1315	42	18.0	598	.81	67.8	918
30...	1100	24	20.0	710	.97	46.0	1100
JAN.							
04...	1020	25	11.0	692	.94	46.7	1100
09...	0830	35	10.0	730	.99	69.0	1120
13...	0930	35	13.0	504	.69	47.6	790
21...	1100	31	16.0	684	.93	57.3	1110
28...	1200	27	27.0	720	.98	52.5	1150
FEB.							
01...	0900	26	14.0	728	.99	51.1	1120
04...	1410	28	20.5	684	.93	52.4	1120
10...	1035	28	21.0	690	.94	52.9	1090
17...	1330	30	18.0	570	.78	46.2	888
25...	1335	27	22.0	700	.95	52.5	1110
MAR.							
01...	1300	26	17.0	682	.93	48.8	1120
08...	1100	25	17.0	682	--	--	1110
12...	1000	26	16.0	690	--	--	1100
16...	1240	26	26.5	700	--	--	1130
24...	1300	25	19.0	684	--	--	1090
APR.							
01...	1240	21	25.5	666	--	--	1140
09...	1045	26	23.0	744	--	--	1120
15...	1200	25	27.0	736	--	--	1110
23...	1110	27	24.5	756	--	--	1100
30...	1240	24	26.5	704	--	--	1100
MAY							
03...	1100	26	27.0	704	--	--	1100
10...	1500	27	22.0	742	1.01	54.1	1120
17...	1315	28	27.0	730	.99	55.2	1100
24...	1415	25	29.0	770	1.05	52.4	1140
JUNE							
01...	1445	25	27.0	714	.97	48.8	1100
07...	1010	23	18.5	758	1.03	47.1	1110
14...	1045	20	23.0	736	1.00	39.7	1080
21...	1045	23	27.5	720	.98	44.7	1080
28...	1140	24	26.5	718	.98	46.5	1100
JULY							
01...	--	24	--	810	1.10	52.5	1100
08...	--	20	27.0	712	.97	38.4	1100
13...	--	19	--	756	1.03	38.8	1120
19...	--	21	30.0	720	.98	40.8	1080
26...	--	22	31.0	732	1.00	43.5	1130
AUG.							
02...	1330	22	31.0	728	.99	43.2	1120
09...	1145	22	29.0	732	1.00	43.5	1130
16...	1215	23	29.0	780	1.06	48.4	1100
26...	1400	21	--	720	.98	40.8	1120
SEP.							
03...	1030	21	--	720	.98	40.8	1120
14...	1300	20	29.5	692	.94	37.4	1120
20...	1230	21	24.0	672	.91	38.1	1120
27...	1400	20	26.0	672	.91	36.3	1110
30...	1430	21	23.5	688	.94	39.0	1080



11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1140	1120	1140	1110	1080	1100	---	---	---	1120	1070	1120
2	1130	1100	1120	1110	1080	1100	1110	1060	1080	1070	431	838
3	1130	1100	1110	1110	1080	1090	1110	1080	1090	1110	988	1070
4	1120	1090	1110	1100	1080	1090	1110	1090	1100	1130	1060	1090
5	1120	1090	1100	1110	1100	1100	1110	1080	1100	1130	1110	1120
6	1130	1100	1110	1130	1090	1110	1120	1040	1090	1140	1120	1120
7	1120	1090	1110	1120	1120	1120	1120	1030	1090	1160	1120	1130
8	1140	1080	1110	---	---	---	1150	1060	1120	1160	1120	1140
9	1150	1100	1120	1130	1120	1120	1140	890	1050	1130	1120	1130
10	1100	1040	1090	1130	1110	1120	1140	1050	1110	1140	1110	1130
11	1140	1100	1110	1120	1110	1110	1150	1110	1130	1120	1100	1110
12	1150	1110	1130	1120	1090	1100	1160	1100	1120	1120	368	950
13	1130	1090	1110	1110	1090	1100	1120	1080	1100	1080	468	821
14	1140	1090	1110	1120	1100	1100	---	---	---	1130	1080	1110
15	1120	1080	1100	1120	1090	1110	---	---	---	1120	1070	1090
16	1120	1080	1100	1140	1110	1120	1160	740	1070	1100	1070	1080
17	1120	1060	1100	1120	1100	1110	919	341	561	1100	1050	1080
18	1120	1100	1110	1130	1100	1110	450	360	425	1100	959	1020
19	1140	1110	1130	1110	1100	1100	614	164	409	989	952	970
20	1130	1100	1110	1110	1100	1100	745	613	688	996	946	967
21	1110	1080	1100	1110	1100	1100	751	200	418	1130	949	1050
22	1120	1080	1090	1100	1090	1090	863	221	459	1150	1120	1130
23	1110	1080	1100	1110	1080	1090	970	851	923	1150	1110	1130
24	1120	1070	1100	1110	1080	1090	1080	822	969	1140	1120	1130
25	---	---	---	1110	1080	1090	1120	1030	1100	1150	1120	1130
26	1130	1060	1100	1060	736	922	1130	1100	1120	1160	1120	1140
27	1140	1100	1130	747	95	260	1130	1110	1120	1150	1100	1120
28	1110	1060	1090	167	112	147	1130	1090	1120	1160	1110	1130
29	1130	1070	1100	384	116	235	1140	1100	1130	1150	1110	1130
30	---	---	---	---	---	---	1130	1100	1120	1140	1110	1120
31	---	---	---	---	---	---	1140	1100	1120	1150	1030	1090
MONTH	1150	1040	1110	1140	95	1000	1160	164	961	1160	368	1080
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1140	1060	1110	1120	1040	1080	1160	1070	1110	1110	1080	1090
2	1150	1120	1130	1120	1070	1100	1160	1110	1130	1110	1060	1080
3	1150	1120	1130	1120	1100	1110	1190	1090	1130	1120	1060	1090
4	1140	1100	1120	1120	1070	1100	1170	1100	1120	1130	1090	1110
5	1110	1090	1110	1140	1080	1110	1140	1100	1110	1110	1080	1090
6	1120	1090	1100	1110	1080	1090	1120	1100	1110	1110	904	1080
7	1110	1070	1090	1130	1090	1110	1130	1080	1110	945	595	710
8	1130	1090	1110	1160	1090	1120	1150	1120	1130	762	697	730
9	1120	1070	1100	1140	1110	1130	1170	1110	1140	812	754	780
10	1090	1050	1070	1130	1100	1120	1170	1120	1140	1130	787	928
11	1090	1050	1070	1140	1090	1110	1130	1100	1120	1050	871	988
12	1110	1090	1080	1110	1070	1090	1150	1080	1110	1120	1040	1080
13	1090	1060	1080	1130	403	921	1130	1100	1110	1110	1050	1080
14	1090	1070	1080	908	779	869	1100	756	1030	1150	1090	1110
15	1100	1070	1080	1010	952	984	1170	1100	1130	1130	1070	1100
16	1120	1070	1100	1160	869	1000	1140	1120	1130	1130	1070	1100
17	1110	398	923	1160	1100	1120	1130	1050	1110	1150	1090	1110
18	1130	827	958	1150	1090	1110	1130	889	1070	1170	1090	1130
19	---	---	---	1120	1070	1100	1140	1110	1120	1150	1110	1130
20	---	---	---	1140	1070	1100	1110	1080	1100	1170	1120	1140
21	---	---	---	1110	1080	1090	1120	1060	1100	1140	1110	1130
22	---	---	---	1100	1070	1080	1110	1080	1090	1160	1110	1130
23	---	---	---	1110	1070	1080	1130	1070	1100	1150	1100	1120
24	---	---	---	1110	1070	1090	1140	1090	1110	1170	1090	1130
25	---	---	---	1120	1090	1100	1100	722	973	1150	1100	1130
26	1160	1130	1150	1120	1090	1110	1130	1050	1080	1280	1090	1130
27	1140	1120	1120	1130	1100	1110	1110	1060	1080	1190	942	1070
28	1140	1090	1130	1140	1090	1110	1110	1070	1090	986	756	907
29	---	---	---	1160	1090	1120	1110	1080	1090	1030	910	970
30	---	---	---	1150	1110	1120	1110	1070	1080	1180	1030	1090
31	---	---	---	1150	946	1080	---	---	---	1200	1010	1110
MONTH	---	---	---	1160	403	1080	1190	722	1100	1280	595	1050

## SANTA ANA RIVER BASIN

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MTN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1230	1090	1160	1150	1090	1120	1100	1060	1080	1170	1120	1150
2	1110	1080	1090	1150	1080	1110	1140	1060	1090	1150	1130	1140
3	1120	1050	1090	1160	1090	1120	1120	1100	1110	1140	1120	1130
4	1170	1080	1120	1140	1080	1110	1120	1080	1090	1140	1080	1120
5	1140	1080	1120	1140	1070	1110	1140	1090	1120	1150	1100	1120
6	1150	1070	1110	1160	1090	1120	1140	1080	1110	1140	1100	1120
7	1150	1110	1130	1140	1080	1120	1130	1100	1110	1150	1110	1130
8	1110	1080	1100	1130	1080	1100	1130	1100	1110	1200	1120	1160
9	1090	1070	1080	1130	1080	1110	1130	1100	1110	1200	1070	1140
10	1090	1040	1060	1130	1080	1100	1130	1100	1110	1120	1080	1100
11	1090	1040	1070	1140	1090	1110	1130	1100	1110	1120	1070	1090
12	1100	1040	1070	1160	1100	1130	1120	1080	1100	1120	1080	1110
13	1100	1040	1070	1140	1100	1120	1120	1100	1100	1130	1090	1110
14	1110	1050	1080	1120	1100	1110	1120	1100	1110	1120	1090	1110
15	1130	1080	1100	1120	1030	1110	1120	1100	1110	1120	1100	1110
16	1120	1070	1090	1120	1080	1100	1140	1090	1120	1120	1090	1110
17	1130	1060	1090	1120	1080	1100	1130	1110	1120	1120	1090	1110
18	1150	1060	1110	1120	1080	1100	1140	1100	1110	1130	1110	1120
19	1120	1080	1100	1110	1070	1090	1140	1100	1120	1160	1110	1130
20	1130	1080	1100	1110	1070	1090	1160	1100	1130	1180	1120	1160
21	1130	1070	1090	1110	1070	1090	1140	1100	1130	1180	1110	1140
22	1120	1070	1100	1110	1060	1090	1120	1070	1100	1120	1080	1100
23	1140	1060	1090	1120	1080	1100	1110	1080	1090	1200	1090	1130
24	1130	1060	1090	1130	1090	1100	1160	1090	1130	1180	1090	1130
25	1120	1060	1090	1140	1100	1110	1160	1100	1130	1170	1090	1140
26	1100	1070	1080	1130	1050	1110	1150	1090	1130	1150	1070	1120
27	1090	1060	1070	1120	1100	1110	1140	1090	1120	1140	1090	1110
28	1120	1060	1080	1130	1090	1110	1140	1080	1100	1140	1070	1110
29	1120	1060	1090	1130	1070	1110	1150	1100	1120	1120	1080	1100
30	1110	1060	1090	1140	1090	1110	1150	1110	1130	1120	1080	1100
31	---	---	---	1130	1100	1120	1160	1100	1130	---	---	---
MONTH	1230	1040	1090	1160	1030	1110	1160	1060	1110	1200	1070	1120

## 11066480 RIVERSIDE WATER QUALITY CONTROL PLANT AT RIVERSIDE NARROWS, NEAR ARLINGTON, CALIF.

LOCATION.--Lat 33°57'53", long 117°27'26", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.25, T.2 S., R.6 W., Riverside County, 300 feet downstream from gaging station, on discharge pipe of Riverside Water Quality Control Plant on left bank of Santa Ana River, 0.4 mile upstream from Van Buren Boulevard, and 3.1 miles northwest of Arlington.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1971.

Specific conductance: October 1969 to September 1971.

EXTREMES.--1970-71:

Specific conductance: Maximum, 1,450 micromhos Dec. 7, 8; minimum, 672 micromhos May 5.

Period of record:

Specific conductance: Maximum, 1,590 micromhos Nov. 19, 1969; minimum, 672 micromhos Dec. 26, 1969.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
OCT.							
01...	1525	32	28.0	638	.87	55.1	1050
08...	1315	33	26.0	612	.83	54.5	1000
14...	1430	32	27.0	670	.91	57.9	1090
19...	1410	34	26.0	644	.88	59.1	1040
26...	1100	41	26.0	668	.91	73.9	1070
NOV.							
02...	1400	34	25.0	668	.91	61.3	1120
06...	1115	36	26.0	616	.84	59.9	1040
12...	1305	31	25.0	628	.85	52.6	1060
18...	1020	30	24.0	702	.95	56.9	1140
25...	1140	35	24.0	724	.98	68.4	1110
DEC.							
01...	1600	32	23.0	692	.94	59.8	1170
08...	1125	33	23.0	776	1.06	69.1	1260
16...	1100	32	23.0	644	.88	55.6	1050
22...	1435	32	22.0	630	.86	54.4	1040
28...	1230	37	21.0	626	.85	62.5	1050
JAN.							
04...	1135	34	17.0	618	.84	56.7	1080
09...	1000	32	20.0	652	.89	56.3	1050
13...	1000	31	21.0	660	.90	55.2	1060
21...	1030	34	22.0	630	.86	57.8	1080
28...	1200	36	21.5	660	.90	64.2	1060
FEB.							
01...	1120	35	21.0	700	.95	66.1	1060
04...	1430	31	22.0	556	.76	46.5	1050
10...	1120	36	23.0	536	.73	52.1	1030
17...	1330	30	22.0	536	.73	43.4	1070
25...	1325	33	22.0	572	.78	51.0	1080
MAR.							
01...	1400	35	20.0	582	.79	55.0	1030
08...	1125	38	--	586	--	--	1140
12...	1045	34	22.0	590	--	--	1020
16...	1300	31	22.5	646	--	--	1110
24...	1430	30	23.5	622	--	--	1150
APR.							
01...	1335	30	23.0	610	--	--	1080
09...	1055	37	25.0	630	--	--	1020
15...	1220	35	24.0	604	--	--	995
23...	1100	37	23.0	632	--	--	1080
30...	1355	32	24.5	616	--	--	1060
MAY							
03...	1215	37	25.0	606	--	--	1040
10...	--	33	24.0	656	.89	58.8	1060
17...	1325	32	24.0	620	.84	53.6	1030
24...	1430	33	25.5	640	.87	57.2	1080
JUNE							
01...	1405	33	25.0	597	.81	54.0	1040
07...	1030	26	24.0	640	.87	44.9	1060
14...	1035	26	24.0	620	.84	43.5	1040
21...	1030	27	--	638	.87	46.5	1020
28...	1145	26	26.5	642	.87	45.1	1070
JULY							
01...	--	25	--	627	.85	42.3	1050
08...	--	26	25.0	676	.92	47.5	1090
13...	--	27	--	694	.94	50.6	1180
19...	--	27	27.5	732	1.00	53.4	1030
26...	--	27	28.0	664	.90	48.4	1100
AUG.							
02...	1300	27	28.5	700	.95	51.0	1120
09...	1200	28	28.0	704	.96	53.2	1140
16...	1200	27	27.5	680	.92	49.6	1070
26...	1445	30	27.0	668	.91	54.1	1150
SEP.							
03...	1100	32	--	684	.93	59.1	1090
14...	1345	31	28.5	676	.92	56.6	1190
20...	1200	29	27.0	604	.82	47.3	1020
27...	1430	32	27.0	612	.83	52.9	1080
30...	1450	29	23.5	580	.79	45.4	1060

## SANTA ANA RIVER BASIN

11066480 RIVERSIDE WATER QUALITY CONTROL PLANT AT RIVERSIDE NARROWS, NEAR ARLINGTON, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1080	980	1030	1130	1050	1090	1200	1100	1160	1040	993	1020
2	1120	990	1040	1160	1030	1090	1270	1200	1230	1020	954	989
3	1020	934	991	1160	1040	1120	1280	1240	1260	1090	984	1030
4	1030	957	1010	1150	1040	1090	1340	1260	1300	1160	1050	1130
5	1050	954	1000	1100	1050	1070	1290	1230	1260	1170	1080	1120
6	1070	963	1020	1120	1030	1070	1300	1220	1250	1180	1050	1100
7	1110	984	1030	1100	1010	1060	1450	1280	1360	1140	1050	1100
8	1070	966	1020	1090	978	1040	1450	1250	1320	1160	1040	1080
9	1130	1040	1090	1120	1050	1090	1360	1260	1310	1080	1050	1070
10	1140	1050	1100	1150	1070	1110	1310	1240	1260	1140	1040	1080
11	1120	1020	1080	1190	1110	1140	1350	1160	1250	1160	1080	1130
12	1140	1030	1100	1130	1050	1090	1190	1140	1160	1150	1070	1110
13	1160	1080	1130	1180	1070	1120	1190	1060	1130	1240	1060	1120
14	1200	1080	1130	1150	1070	1100	1210	1100	1150	1150	1030	1090
15	1140	1040	1090	1170	1020	1080	1130	1060	1090	1130	1040	1080
16	1160	1060	1120	1400	1180	1290	1130	1050	1090	1120	1010	1070
17	1140	1060	1090	1390	1230	1300	1160	1060	1100	1130	1060	1100
18	1080	1020	1060	1240	1100	1170	1140	1050	1100	1180	1130	1160
19	1110	1030	1070	1120	1050	1090	1130	955	1030	1200	1140	1170
20	1090	1020	1050	1130	1050	1090	1160	987	1060	1200	1090	1150
21	1120	1040	1070	1070	1010	1040	1180	1030	1100	1150	1070	1110
22	1120	1050	1070	1090	1000	1040	1130	1020	1060	1200	1060	1120
23	1150	1030	1090	1110	1060	1090	1170	1100	1130	1060	986	1030
24	1080	1010	1040	1110	1080	1090	1140	1080	1100	1030	973	1010
25	1110	1010	1060	1160	1070	1120	1080	1020	1060	1160	1040	1100
26	1140	1050	1110	1170	1060	1100	1090	1030	1060	1100	1010	1050
27	1130	1030	1080	1150	996	1070	1070	1000	1050	1090	1030	1060
28	1160	1030	1080	1170	1040	1100	1140	1030	1090	1090	1040	1070
29	1110	1030	1070	1050	915	976	1170	1090	1130	1150	1020	1090
30	1140	1060	1090	1110	918	1010	1160	1080	1120	1120	1030	1080
31	1110	1060	1090	---	---	---	1100	1050	1080	1150	1020	1090
MONTH	1200	934	1070	1400	915	1100	1450	955	1160	1240	954	1090
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1140	1060	1130	1160	1030	1110	1170	1050	1130	1170	1090	1140
2	1130	1010	1070	1140	1010	1100	1240	1050	1140	1160	1040	1090
3	1090	964	1030	1140	1010	1090	1190	1080	1130	1140	1010	1080
4	1060	924	1010	1230	1000	1110	1140	1010	1090	1210	1120	1170
5	1170	1030	1100	1300	1130	1210	1340	1100	1180	1240	672	1100
6	1130	1040	1080	1200	1030	1110	1320	1120	1220	1170	1060	1120
7	1080	979	1030	1140	1000	1080	1320	1160	1220	1180	1040	1100
8	1130	988	1070	1250	1120	1190	1190	1080	1120	1070	980	1030
9	1190	1010	1100	1200	1060	1150	1130	1010	1050	1050	957	1020
10	1110	1010	1070	1170	1030	1100	1040	976	1010	1120	990	1070
11	1110	988	1060	1100	990	1070	1090	971	1020	1160	1040	1110
12	1140	1030	1090	1120	1010	1070	1250	1030	1110	1150	1030	1090
13	1100	994	1050	1070	978	1040	1180	1080	1140	1150	1030	1100
14	1100	991	1050	1110	974	1040	1200	1030	1090	1190	1050	1130
15	1120	1010	1080	1170	1030	1130	1070	979	1030	1150	1040	1110
16	1140	1020	1090	1190	1050	1140	1070	993	1040	1140	1050	1100
17	1140	997	1080	1220	1120	1160	1070	983	1020	1140	990	1080
18	1090	952	1040	1210	1040	1140	1010	958	993	1220	1060	1140
19	1120	1000	1050	1240	1070	1160	1080	998	1050	1210	1110	1170
20	1080	946	1020	1150	1050	1120	1210	1050	1100	1150	1050	1120
21	1060	982	1020	1190	1090	1150	1210	1060	1120	1150	1050	1110
22	1100	988	1060	1250	1090	1190	1180	1020	1100	1080	990	1050
23	1140	985	1050	1260	1070	1180	1180	1080	1130	1080	971	1030
24	1100	991	1070	1250	1120	1190	1130	1040	1080	1110	989	1060
25	1140	1020	1090	1160	1040	1090	1070	993	1030	1180	1050	1120
26	1180	1020	1090	1170	1090	1120	1090	981	1060	1210	1090	1180
27	1060	949	1020	1120	990	1050	1090	990	1050	1160	1010	1080
28	1080	949	1010	1100	980	1040	1120	1050	1090	1150	998	1070
29	---	---	---	1170	1140	1150	1170	1040	1120	1050	998	1040
30	---	---	---	1230	1100	1160	1140	1050	1090	1060	980	1020
31	---	---	---	1320	1130	1200	---	---	---	1020	963	1000
MONTH	1190	924	1060	1320	974	1120	1340	958	1090	1240	672	1090

11066480 RIVERSIDE WATER QUALITY CONTROL PLANT AT RIVERSIDE NARROWS, NEAR ARLINGTON, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1160	954	1050	1180	1050	1140	1150	1040	1110	1130	1020	1080
2	1150	1050	1100	1250	1130	1180	1170	1080	1110	1120	995	1070
3	1070	988	1040	1150	1030	1080	1200	1070	1120	1160	1040	1120
4	1140	991	1050	1060	986	1030	1230	1090	1170	1130	1010	1080
5	1120	1020	1070	1120	1010	1050	1220	1160	1200	1080	981	1040
6	1110	1020	1060	1110	1030	1080	---	---	---	1070	991	1090
7	1200	1050	1130	1120	1020	1080	---	---	---	1080	1030	1000
8	1160	1030	1110	1140	1050	1100	---	---	---	1160	1020	1110
9	1120	1030	1080	1210	1110	1160	1250	1120	1190	1240	1110	1170
10	1080	969	1040	1170	1080	1140	1250	1120	1190	1180	1080	1150
11	1100	1040	1060	1120	1030	1070	1260	1160	1210	1190	1070	1140
12	1100	993	1050	1200	1030	1120	1210	1110	1170	1130	1050	1090
13	1110	1020	1070	1240	1080	1160	1190	1100	1160	1180	1020	1110
14	1180	1040	1120	1260	1130	1210	1190	1110	1150	1240	1020	1100
15	1170	1070	1140	1250	1100	1180	1110	1040	1080	1260	1130	1200
16	1140	1050	1110	1260	1110	1190	1220	1030	1110	1240	1100	1180
17	1150	1050	1120	1260	1110	1180	1230	1100	1170	1260	1080	1180
18	1210	1080	1160	1100	1030	1060	1190	1100	1150	1220	1030	1130
19	1210	1090	1150	1130	1010	1080	1220	1090	1160	1120	986	1050
20	1120	1040	1080	1180	1050	1120	1230	1120	1170	1130	992	1080
21	1160	1020	1100	1180	1110	1160	1140	1010	1080	1160	1060	1120
22	1190	1090	1160	1200	1090	1150	1050	979	1020	1160	1020	1070
23	1200	1070	1150	1180	1090	1140	1090	956	1030	1120	989	1070
24	1160	1060	1120	1160	1070	1120	1210	1060	1120	1160	1030	1110
25	1200	1080	1160	1120	1050	1090	1220	1090	1160	1140	1030	1100
26	1170	1060	1130	1180	1030	1110	1170	1050	1120	1130	1020	1090
27	1130	1030	1100	1190	1080	1140	1210	1060	1140	1120	1020	1090
28	1170	1040	1120	1180	1080	1150	1180	1050	1120	1180	1020	1110
29	1160	1050	1130	1190	1070	1150	1140	1020	1090	1180	1040	1110
30	1170	1070	1140	1180	1090	1150	1160	1010	1100	1100	1000	1050
31	---	---	---	1170	1020	1120	1200	1050	1130	---	---	---
MONTH	1210	954	1100	1260	986	1130	1260	956	1130	1260	981	1100

## SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CALIF.

LOCATION.--Lat 33°53'00", long 117°38'40", in La Sierra Grant, Riverside County, at gaging station at outlet channel, 2,500 ft downstream from axis of Prado Dam, and 4.5 miles west of Corona.

DRAINAGE AREA.--1,490 sq mi, not including 768 sq mi upstream from Lake Elsinore.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1971.

Chloride: October 1970 to September 1971.

Specific conductance: October 1969 to September 1971.

Water temperatures: October 1969 to September 1971.

EXTREMES.--1970-71:

Specific conductance: Maximum, 1,830 micromhos Apr. 30; minimum, 350 micromhos Mar. 17.

Water temperatures: Maximum, 35.0°C July 11; minimum, 3.5°C Jan. 7.

Period of record:

Specific conductance: Maximum, 1,830 micromhos Apr. 30, 1971; minimum, 350 micromhos Mar. 17, 1971.

Water temperatures: Maximum, 35.0°C July 11, 1971; minimum, 2.5°C Dec. 30, 1969.

REMARKS.--Twelve chemical analyses furnished by California Department of Water Resources.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED CHLO- RIDE (CL) (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)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT.										
01...	0930	35	15.0	--	788	1.07	74.5	1240	--	--
03...	0955	39	--	141	751	1.02	79.1	1230	--	107
08...	1500	33	22.5	--	834	1.13	74.3	1240	--	--
11...	0915	45	--	143	781	1.06	94.9	1250	--	111
14...	1030	47	18.0	--	820	1.12	104	1270	--	--
19...	1300	57	19.0	--	814	1.11	125	1280	--	--
21...	0730	45	14.5	--	812	1.10	98.7	1260	--	--
28...	1545	37	19.5	147	786	1.07	78.5	1260	9.1	111
31...	1045	54	--	141	774	1.05	113	1250	--	113
NOV.										
06...	1000	62	13.0	--	864	1.18	145	1300	--	--
12...	1030	60	11.0	--	842	1.15	136	1300	--	--
18...	1105	71	12.0	--	864	1.18	166	1320	--	--
23...	1530	60	16.5	155	807	1.10	131	1310	9.1	116
26...	1035	88	15.0	--	1020	1.39	242	1580	--	--
DEC.										
01...	0720	245	9.0	--	400	.54	265	587	--	--
02...	0940	215	12.0	--	430	.58	250	654	--	--
05...	0935	239	12.0	--	496	.67	320	771	--	--
08...	1035	202	12.0	--	606	.82	331	897	--	--
09...	0825	202	12.0	--	626	.85	341	998	--	--
11...	1230	195	13.0	--	664	.90	350	1050	--	--
12...	1145	190	12.0	--	696	.95	357	1080	--	--
14...	1000	182	--	126	712	.97	350	1230	--	104
16...	0740	182	11.0	--	762	1.04	374	1180	--	--
17...	1230	175	13.0	--	770	1.05	364	1200	--	--
17...	1545	172	12.0	165	851	1.16	395	1270	8.1	124
19...	1350	180	12.0	--	730	.99	355	1150	--	--
21...	0825	182	9.5	--	640	.87	314	1020	--	--
22...	0825	198	9.5	--	432	.59	231	693	--	--
23...	1500	252	10.0	--	386	.52	263	622	--	--
26...	1750	270	10.0	--	368	.50	268	577	--	--
29...	0825	308	9.0	--	444	.60	369	731	--	--
30...	0825	259	9.5	--	514	.70	359	848	--	--
31...	0835	252	10.0	--	560	.76	381	889	--	--
JAN.										
04...	1500	239	8.0	--	676	.92	436	1080	--	--
06...	0725	200	5.0	--	820	1.12	443	1300	--	--
12...	0725	97	11.0	--	814	1.11	213	1270	--	--
13...	0725	142	9.0	--	676	.92	259	1020	--	--

## SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED CHLO- RIDE (CL) (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)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
JAN										
14...	0725	119	9.0	--	788	1.07	253	1220	--	--
19...	1530	81	21.5	--	848	1.15	185	1310	--	--
25...	1515	92	18.5	146	781	1.06	194	1270	9.2	114
27...	1430	88	18.5	--	812	1.10	193	1280	--	--
FEB										
01...	1500	88	15.5	--	818	1.11	194	1310	--	--
08...	1515	92	18.0	--	772	1.05	193	1260	--	--
16...	1515	71	15.0	--	812	1.10	156	1280	--	--
17...	1520	142	13.0	--	552	.75	212	900	--	--
18...	1140	147	12.5	--	656	.89	260	1040	--	--
19...	1505	147	15.0	--	836	1.14	332	1320	--	--
22...	1500	95	12.0	--	786	1.07	203	1270	--	--
25...	1430	84	20.0	145	751	1.02	170	1260	8.4	112
MAR										
01...	1050	94	10.0	--	780	1.06	198	1250	--	--
08...	1530	74	20.0	--	760	--	--	1230	--	--
12...	1535	92	20.0	--	820	--	--	1320	--	--
15...	0720	129	12.5	--	698	--	--	1100	--	--
16...	0725	103	13.0	--	778	--	--	1260	--	--
16...	1440	92	23.5	--	788	--	--	1300	--	--
22...	0720	95	12.0	--	776	--	--	1200	--	--
25...	1400	68	18.0	143	764	1.04	140	1260	8.9	112
26...	1430	82	24.0	--	784	--	--	1260	--	--
29...	0715	82	14.0	--	720	--	--	1180	--	--
APR										
01...	1700	62	25.0	--	784	--	--	1270	--	--
07...	0730	64	12.0	--	812	--	--	1240	--	--
13...	1100	74	20.0	--	818	--	--	1240	--	--
20...	0715	76	13.0	--	790	--	--	1220	--	--
26...	1345	68	17.0	123	699	.95	128	1130	--	99
28...	0720	72	11.0	--	692	--	--	1190	--	--
MAY										
03...	1440	62	23.0	--	772	--	--	1160	--	--
11...	0715	72	16.0	--	766	1.04	150	1210	--	--
19...	1400	45	26.5	--	792	1.08	96.2	1240	--	--
27...	0715	52	13.5	--	788	1.07	111	1240	--	--
27...	1615	35	19.5	137	785	1.07	74.2	1230	8.8	113
JUNE										
01...	1000	60	15.0	--	762	1.04	123	1220	--	--
06...	1015	60	18.0	--	780	1.06	126	1180	--	--
10...	1200	68	17.0	--	796	1.08	146	1210	--	--
17...	1400	39	29.0	133	751	1.02	79.1	1190	7.0	106
21...	0900	39	19.5	--	762	1.04	80.2	1180	--	--
JULY										
01...	--	31	26.0	--	796	1.08	66.6	1250	--	--
08...	--	31	16.5	--	768	1.04	64.3	1220	--	--
13...	--	11	25.0	--	952	1.29	28.3	1400	--	--
15...	1500	28	29.0	150	800	1.09	60.5	1260	6.9	115
19...	--	20	22.0	--	966	1.31	52.2	1520	--	--
26...	--	27	25.0	--	884	1.20	64.4	1390	--	--
AUG										
02...	1000	25	23.0	--	906	1.23	61.2	1430	--	--
09...	1430	30	25.5	--	928	1.26	75.2	1460	--	--
16...	1040	40	22.0	--	864	1.18	93.3	1390	--	--
24...	1100	36	21.0	--	864	1.18	84.0	1380	--	--
26...	1400	30	29.5	170	866	1.18	70.1	1330	8.6	123
SEP										
03...	1300	35	--	--	888	1.21	83.9	1370	--	--
09...	1030	33	22.0	--	828	1.13	73.8	1340	--	--
14...	1300	28	23.0	--	852	1.16	64.4	1370	--	--
20...	1050	15	19.0	--	900	1.22	36.5	1440	--	--
22...	1000	22	20.5	162	850	1.16	50.5	1380	8.4	128
27...	1500	27	19.0	--	844	1.15	61.5	1400	--	--
30...	1000	39	20.5	--	856	1.16	90.1	1400	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	HARD- NESS (CA+MG) (MG/L)
DATE	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(UG/L)	(MG/L)
OCT.										
01...	--	--	--	--	--	--	--	--	--	--
03...	26	117	8.0	318	0	131	--	30	--	374
08...	--	--	--	--	--	--	--	--	--	--
11...	27	116	7.0	332	0	134	--	31	--	388
14...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
28...	31	117	7.0	337	0	147	1.0	28	420	405
31...	29	118	6.1	332	0	140	--	34	--	--
NOV.										
06...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
23...	33	123	8.0	351	0	158	.8	28	420	425
26...	--	--	--	--	--	--	--	--	--	--
DEC.										
01...	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
14...	25	97	14	326	0	120	--	1.4	--	362
16...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	32	119	12	358	0	161	.7	18	350	441
19...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
JAN.										
04...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
25...	31	118	10	363	0	139	.8	40	340	412
27...	--	--	--	--	--	--	--	--	--	--
FEB.										
01...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
25...	31	117	9.0	351	0	139	.7	34	400	407
MAR.										
01...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
25...	31	116	8.0	351	0	139	.8	35	460	407
26...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
APR.										
01...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
26...	28	106	9.0	362	0	116	.8	5.0	450	362
28...	--	--	--	--	--	--	--	--	--	--
MAY										
03...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
27...	30	116	6.0	345	0	147	.6	34	400	406
JUNE										
01...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--



CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

## SANTA ANA RIVER BASIN

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11074000 SANTA ANA RIVER BELOW PRADO DAM, CALIF.--Continued

CHLORIDE (CL), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(DAILY MEAN VALUES)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	---	---	---	---	---	---	140	---	---	190	---
2	120	---	---	---	---	---	---	140	---	---	180	160
3	120	---	---	---	---	---	---	---	---	---	170	170
4	130	---	---	---	---	---	---	---	---	---	---	170
5	120	---	---	---	---	---	---	---	---	---	---	170
6	---	---	---	---	---	---	---	---	---	---	180	170
7	---	---	---	---	---	---	---	---	---	120	180	180
8	---	---	---	---	---	---	---	---	---	120	180	170
9	---	---	---	---	---	---	---	---	---	140	---	---
10	110	---	---	---	---	---	---	---	---	---	---	---
11	110	---	---	---	---	---	---	---	---	---	180	190
12	110	---	---	---	---	---	---	---	---	---	170	200
13	110	---	---	---	---	---	---	140	---	---	160	230
14	120	---	---	---	---	---	---	140	---	---	160	200
15	130	---	---	---	---	---	---	150	---	---	160	180
16	130	---	---	---	---	---	---	140	---	---	160	180
17	120	---	---	---	---	---	---	140	---	---	180	190
18	120	---	---	---	---	---	---	---	---	150	180	220
19	110	---	---	---	---	---	---	---	---	---	190	230
20	---	---	---	---	---	---	---	140	---	140	190	180
21	---	---	---	---	---	---	---	---	---	140	190	190
22	---	---	---	---	---	---	---	---	170	140	180	180
23	---	---	---	---	---	---	---	---	---	140	---	180
24	---	---	---	---	---	---	---	---	---	130	140	180
25	---	---	---	---	---	---	---	---	170	140	---	---
26	---	---	---	---	---	---	---	---	180	130	---	---
27	---	---	---	---	---	---	---	---	170	130	---	---
28	---	---	---	---	---	---	140	---	180	150	---	200
29	---	---	---	---	---	---	150	---	170	180	---	190
30	---	---	---	---	---	---	150	---	170	180	---	190
31	---	---	---	---	---	---	---	---	---	180	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	190

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1310	1230	1260	1330	1270	1300	610	574	587	1060	830	980
2	1290	1220	1250	1320	1250	1280	707	610	668	1080	930	1010
3	1290	1210	1240	1300	1270	1280	744	696	711	1040	946	980
4	1260	1210	1230	1320	1280	1290	777	699	731	1160	936	1090
5	1280	1230	1250	1320	1290	1300	830	718	786	1340	1140	1240
6	1280	1240	1260	1320	1290	1300	885	819	861	1360	1260	1320
7	1300	1280	1290	1310	1200	1290	990	864	911	1490	1290	1390
8	1310	1240	1280	1320	1270	1290	1020	897	957	1390	1320	1360
9	1310	1240	1280	1320	1220	1280	1010	954	981	1360	1300	1340
10	1280	1250	1260	1300	1170	1260	1030	902	969	1350	1270	1320
11	1300	1230	1260	1300	1160	1270	1200	780	1030	1340	1230	1310
12	1290	1250	1260	1320	1270	1290	1240	1080	1150	1350	1260	1310
13	1280	1260	1270	1330	1290	1310	1230	1110	1150	1190	1010	1090
14	1320	1260	1280	1330	1240	1290	1230	1080	1130	1310	1050	1240
15	1310	1260	1280	1310	1240	1290	1190	1130	1150	1560	1230	1300
16	1320	1260	1280	1320	1190	1300	1290	1160	1210	1320	1220	1280
17	1300	1270	1280	1350	1300	1330	1340	1200	1290	---	---	---
18	1320	1260	1280	1330	1310	1320	1260	1220	1240	1300	1210	1250
19	1310	1260	1280	1330	1300	1320	1240	980	1160	1320	1270	1290
20	1280	1250	1270	1320	1280	1300	968	904	937	1620	1270	1300
21	1300	1250	1280	1300	1270	1290	1060	800	907	1330	1270	1290
22	1310	1250	1280	1300	1270	1280	790	620	690	1310	1090	1250
23	1310	1280	1290	1310	1260	1270	652	548	621	1300	1210	1260
24	1310	1280	1290	1320	1290	1300	640	564	593	1300	1030	1250
25	1300	1250	1280	1360	1300	1320	586	528	566	1270	1200	1240
26	1310	1070	1270	1580	1360	1500	602	544	572	1280	1180	1210
27	1300	1280	1290	1560	1260	1380	690	598	641	1290	1180	1250
28	1300	1210	1260	1540	1300	1350	744	680	703	1300	1240	1270
29	1280	1210	1250	1730	759	1170	798	714	743	1290	1220	1270
30	1290	1240	1270	914	564	736	906	774	850	1310	1180	1250
31	1300	1240	1280	---	---	---	1010	886	923	---	---	---
MONTH	1320	1070	1270	1730	564	1280	1340	528	884	1620	830	1240

## SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1320	1280	1290	1260	1190	1210	1290	1140	1230	1350	1190	1250
2	1320	1280	1300	1270	1170	1240	1270	1060	1240	1250	1210	1220
3	1320	1280	1300	1360	1180	1260	1250	1190	1230	1220	1160	1180
4	1310	1220	1270	1300	1260	1280	1230	1030	1170	1240	1210	1220
5	1310	1220	1270	1300	1270	1290	1240	1140	1220	1210	950	1160
6	1310	1240	1290	1320	1260	1290	1290	1220	1250	1270	960	1180
7	1340	1270	1300	1250	1210	1230	1260	1180	1230	1210	960	1090
8	1320	1240	1280	1250	1220	1230	1280	1050	1220	1120	1010	1080
9	1320	1250	1290	1290	1260	1270	1270	1180	1240	1210	800	1060
10	1320	1270	1290	1320	1280	1300	1270	1190	1230	1230	1150	1180
11	1310	1270	1290	1310	1260	1290	1690	1180	1230	1230	1160	1180
12	1330	1240	1290	1320	980	1280	1250	1130	1210	1210	1130	1200
13	1370	1250	1300	1300	768	1080	1700	1210	1280	1250	1170	1200
14	1320	1280	1300	1090	800	940	1270	1170	1220	1590	1120	1230
15	1280	1240	1260	1790	370	1110	1240	1130	1200	---	---	---
16	1300	1230	1270	1350	1230	1270	1260	1150	1190	---	---	---
17	---	---	---	1280	350	1180	---	---	---	1240	1150	1190
18	---	---	---	1290	1180	1260	---	---	---	1240	1040	1180
19	1360	1290	1320	1280	1220	1250	---	---	---	1240	1120	1210
20	1290	1140	1250	1250	360	1190	1300	1210	1260	1250	1160	1220
21	1280	1220	1260	1240	1190	1210	1320	1200	1250	1270	1220	1240
22	1280	1230	1250	1240	1190	1210	1250	1130	1210	---	---	---
23	1300	1240	1270	1700	1160	1260	1240	1150	1210	---	---	---
24	1300	1240	1260	1270	1200	1230	---	---	---	1240	1210	1230
25	1280	1220	1260	1270	1170	1220	1360	1130	1190	1240	1180	1220
26	1310	799	1240	1260	1200	1220	1220	1110	1170	1250	1210	1240
27	1260	1170	1220	---	---	---	1260	1180	1220	1260	1220	1240
28	1260	1190	1230	---	---	---	1240	1160	1210	1210	1180	1190
29	---	---	---	1240	950	1180	1230	1200	1220	---	---	---
30	---	---	---	1270	1200	1230	1830	1050	1270	---	---	---
31	---	---	---	1270	1140	1230	---	---	---	1240	1200	1210
MONTH	1370	799	1270	1790	350	1220	1830	1030	1220	1590	800	1190
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1270	1170	1220	---	---	---	1390	1310	1340	1620	1250	1400
2	1250	1200	1230	---	---	---	1450	1320	1370	1400	1280	1350
3	1210	1170	1190	---	---	---	1450	1350	1390	1380	1260	1340
4	1190	1150	1170	---	---	---	1440	1350	1380	1380	1270	1340
5	---	---	---	---	---	---	1440	1360	1390	1380	1300	1340
6	---	---	---	1280	1250	1270	1440	1360	1390	1370	1300	1330
7	1210	1180	1200	1280	1250	1260	1440	1380	1410	1370	1230	1310
8	1200	1180	1190	1270	1220	1250	1500	1390	1430	1360	1300	1320
9	1210	1190	1200	1280	1210	1250	1470	1390	1420	1350	1300	1320
10	1220	1180	1200	1270	1250	1260	1480	1370	1400	1360	1310	1330
11	1220	1180	1200	---	---	---	1420	1370	1390	1380	1320	1350
12	1210	1180	1190	1400	1280	1370	1410	1360	1390	1380	1310	1350
13	1210	1170	1190	1690	1390	1470	1410	1360	1380	1390	1310	1350
14	1220	1180	1200	1610	1420	1530	1410	1360	1380	1380	1320	1350
15	1240	1200	1220	1410	1260	1330	1420	1360	1390	1400	1340	1380
16	1240	1140	1220	1390	1280	1300	1410	1340	1370	1410	1380	1400
17	1220	1190	1200	1590	1300	1510	1380	1340	1360	1420	1400	1410
18	1220	1190	1200	1570	1500	1540	1390	1350	1370	1420	1360	1390
19	1230	1190	1210	1530	1460	1500	1390	1360	1380	1410	1360	1380
20	---	---	---	1520	1470	1500	1410	1360	1380	1470	1360	1410
21	1230	1180	1210	1520	1480	1500	1410	1360	1380	1420	1360	1380
22	1240	1200	1220	1510	1470	1480	1410	1350	1380	1420	1360	1390
23	1240	1210	1230	1480	1450	1470	1420	1350	1380	1480	1360	1410
24	1240	1180	1220	1470	1420	1440	1400	1350	1370	1420	1340	1370
25	1240	1200	1220	1440	1390	1410	1400	1350	1370	---	---	---
26	1260	1210	1230	1430	1380	1400	1520	1320	1400	1490	1360	1400
27	1250	1210	1230	1420	1390	1400	1430	1330	1380	1430	1350	1380
28	1250	1210	1230	1420	1390	1400	1390	1330	1360	1420	1360	1390
29	1250	1210	1230	1410	1360	1390	1380	1320	1350	1420	1360	1390
30	1250	1210	1230	1420	1350	1380	1380	1330	1350	1480	1400	1430
31	---	---	---	1430	1350	1380	1400	1340	1360	---	---	---
MONTH	1270	1140	1210	1690	1210	1400	1520	1310	1380	1620	1230	1370

11074000 SANTA ANA RIVER BELOW PRADO DAM, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	12.5	18.5	9.0	12.0	9.0	9.5	9.0	16.5	11.5	17.5	7.5
2	24.5	13.0	19.5	11.0	12.0	11.5	10.0	9.0	15.0	10.5	16.0	5.0
3	25.0	17.5	18.5	13.0	12.0	11.0	9.0	7.0	18.0	9.5	20.5	5.0
4	26.5	16.0	18.5	12.5	12.0	11.0	8.0	5.5	17.0	8.0	20.5	8.0
5	24.5	15.5	19.5	12.5	12.0	11.0	6.0	4.5	16.5	7.5	22.0	10.0
6	---	---	20.5	12.5	12.5	11.5	5.5	4.0	17.5	8.5	21.5	8.0
7	---	---	20.0	14.5	12.5	11.5	8.5	3.5	17.5	9.5	22.0	8.0
8	---	---	19.0	10.5	12.5	11.5	13.0	4.0	18.0	11.0	20.5	8.5
9	---	---	18.5	10.5	12.5	12.0	12.5	5.5	20.0	9.5	21.0	11.5
10	22.5	11.0	18.5	10.5	13.0	11.5	14.5	7.5	21.5	7.5	18.5	11.5
11	23.5	12.5	18.0	11.0	13.0	12.0	13.5	7.5	24.0	10.0	21.5	11.5
12	23.5	14.5	19.0	11.0	12.5	11.5	15.0	10.0	22.0	10.5	20.5	11.0
13	23.0	16.0	15.5	10.5	12.0	11.0	14.0	8.5	23.0	10.5	20.0	12.0
14	23.0	13.5	16.0	10.0	12.0	11.0	16.0	8.5	20.5	11.0	17.0	10.5
15	22.0	12.5	17.5	10.0	12.0	11.5	24.5	6.5	17.5	13.0	20.0	11.5
16	21.5	13.0	16.5	8.0	11.5	11.0	17.5	5.0	15.0	11.5	24.5	10.5
17	21.5	12.0	16.0	8.0	13.0	11.0	27.5	10.5	18.0	11.0	23.5	11.5
18	21.5	12.5	15.5	8.5	11.0	10.5	22.0	11.0	16.5	8.5	22.5	11.0
19	21.0	13.5	16.0	9.0	12.0	9.5	22.0	12.5	15.5	10.0	24.5	10.0
20	22.0	16.0	16.0	12.0	9.5	9.5	20.0	12.5	16.5	6.5	22.5	11.5
21	21.0	13.5	16.5	11.5	9.5	9.0	15.0	12.0	20.5	8.0	23.5	12.5
22	20.0	12.0	15.5	10.0	10.0	9.0	18.5	11.5	21.5	10.0	23.5	11.5
23	19.0	13.5	16.5	9.5	10.0	9.0	17.5	11.5	17.0	9.0	22.0	12.0
24	20.0	13.0	15.5	9.5	10.0	9.5	13.5	10.5	20.0	7.0	20.0	14.0
25	20.5	13.0	15.0	12.5	10.0	9.0	18.5	10.0	20.0	7.5	20.0	13.0
26	19.0	10.0	16.5	13.5	10.0	9.0	19.5	8.0	17.5	8.5	25.0	14.5
27	16.5	10.0	14.5	10.5	9.5	9.0	19.5	10.0	18.0	5.0	25.0	15.0
28	19.5	8.5	14.5	11.5	9.5	9.0	19.0	9.0	17.0	6.0	27.5	13.0
29	18.5	7.5	13.5	12.5	9.5	8.5	20.5	9.0	---	---	28.0	12.5
30	17.0	8.5	12.5	11.5	10.0	9.0	19.5	8.5	---	---	25.0	11.5
31	17.5	8.5	---	---	10.5	9.5	14.5	9.0	---	---	27.0	12.5
MONTH	26.5	7.5	20.5	8.0	13.0	8.5	27.5	3.5	24.0	5.0	28.0	5.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	26.0	16.0	22.5	13.5	26.0	11.5	29.0	16.0	26.0	20.0	21.0	17.0
2	27.0	11.0	24.0	11.0	19.5	14.5	27.5	17.5	26.5	20.5	21.0	18.0
3	26.0	11.0	23.0	14.0	25.0	13.5	27.5	18.0	26.5	20.5	21.0	17.0
4	30.5	12.0	24.5	13.0	27.0	13.0	29.0	19.0	26.5	20.5	21.0	17.0
5	28.0	12.0	18.5	13.5	25.5	15.5	29.5	19.0	27.0	21.5	22.0	17.0
6	25.0	11.5	21.0	13.5	25.5	16.5	29.0	18.0	26.0	20.0	22.0	17.0
7	25.0	11.5	22.5	13.5	26.5	16.0	29.5	17.5	26.0	19.5	23.0	19.0
8	25.5	11.0	28.0	11.0	25.5	16.5	30.0	16.0	26.5	19.0	23.0	19.0
9	26.0	12.0	27.0	13.0	19.5	16.0	30.5	16.0	26.0	19.5	24.0	19.0
10	26.5	11.5	25.5	13.5	17.0	15.0	32.0	17.0	26.0	19.5	24.0	19.0
11	27.0	12.0	26.0	15.5	27.0	15.0	35.0	20.0	26.0	20.5	24.0	19.0
12	27.0	12.0	26.0	16.5	29.0	15.0	29.5	20.0	26.0	20.5	24.0	19.0
13	25.5	12.5	27.0	15.5	29.5	17.5	27.0	18.0	25.0	20.5	25.0	19.0
14	19.5	14.5	27.0	15.5	30.5	16.0	25.5	18.0	25.0	20.0	24.0	19.0
15	27.0	12.5	27.0	16.0	30.5	16.5	28.0	18.5	25.0	20.0	24.0	20.0
16	22.0	15.5	27.5	17.0	29.5	16.0	28.5	19.0	25.0	19.5	22.0	19.0
17	20.0	12.5	28.0	12.5	29.0	16.0	25.5	18.5	25.0	20.0	21.0	20.0
18	21.0	9.5	29.0	13.5	30.0	17.5	26.0	19.0	24.5	19.5	22.0	19.0
19	20.5	8.5	27.5	12.5	31.0	17.0	26.0	18.5	24.0	19.5	22.0	17.0
20	17.5	11.5	27.0	13.0	31.5	18.5	25.0	19.0	24.0	18.5	21.0	16.0
21	20.0	11.5	25.0	14.5	30.5	19.5	25.5	20.0	24.0	19.0	21.0	18.0
22	23.5	8.5	24.0	13.5	30.5	17.5	25.5	20.5	24.0	19.5	21.0	17.0
23	23.5	10.0	24.5	14.0	30.5	17.0	25.0	20.0	23.5	18.5	20.0	16.0
24	22.0	11.5	27.5	14.0	29.5	18.0	24.5	20.0	23.5	19.0	19.0	15.0
25	22.5	13.5	28.0	15.5	29.5	18.5	25.0	20.0	23.5	19.0	---	---
26	17.0	9.5	26.0	15.5	29.5	19.0	25.0	19.5	29.5	18.5	---	---
27	22.5	10.5	19.5	13.5	29.0	18.5	24.5	19.5	22.5	18.0	---	---
28	21.5	10.5	17.5	13.5	29.5	18.5	24.0	19.0	23.5	18.5	17.0	14.0
29	23.5	13.0	21.0	14.5	29.5	16.0	25.0	19.5	23.5	18.5	17.0	13.0
30	25.0	11.5	19.5	15.5	29.0	16.0	25.5	19.5	23.0	17.5	15.0	10.5
31	---	---	25.5	14.0	---	---	25.0	19.5	21.5	16.5	---	---
MONTH	30.5	8.5	29.0	11.0	31.5	11.5	35.0	16.0	29.5	16.5	25.0	10.5



11078000 SANTA ANA RIVER AT SANTA ANA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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				0	0	0	48	2400	311
2				0	0	0	88	2550	867
3				0	0	0	13	438	29
4				0	0	0	8.4	460	14
5				0	0	0	11	500	15
6				0	0	0	14	250	9.5
7				0	0	0	16	300	13
8				0	0	0	7.0	140	2.6
9				0	0	0	10	190	5.1
10				0	0	0	7.4	150	3.0
11				0	0	0	7.0	140	2.6
12				0	0	0	11	210	6.2
13				0	0	0	10	200	5.4
14				0	0	0	15	280	11
15				0	0	0	16	300	13
16				0	0	0	17	320	15
17				0	0	0	38	1000	103
18				0	0	0	31	694	176
19				0	0	0	235	4730	4430
20				0	0	0	16	300	13
21				0	0	0	171	3740	2710
22				0	0	0	38	1000	103
23				0	0	0	13	250	8.8
24				0	0	0	9.1	170	4.2
25				0	0	0	23	480	30
26				9.9	1480	46	30	700	57
27				.87	100	.23	41	1100	122
28				70	1950	824	55	1800	267
29				225	3560	3240	55	1800	267
30				69	3370	639	50	1400	189
31				--	--	--	43	1200	139
TOTAL	0	--	0	374.77	--	4749.23	1146.9	--	9941.4

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	70	2000	378	0	0	0	0	0	0
2	114	2360	1130	0	0	0	0	0	0
3	43	1200	139	0	0	0	0	0	0
4	43	1000	116	0	0	0	0	0	0
5	50	850	115	0	0	0	0	0	0
6	48	800	104	0	0	0	0	0	0
7	43	750	87	0	0	0	0	0	0
8	43	700	81	0	0	0	0	0	0
9	33	650	58	0	0	0	0	0	0
10	1.8	40	.19	0	0	0	0	0	0
11	.51	20	.03	0	0	0	0	0	0
12	1.0	20	.05	0	0	0	0	0	0
13	1.5	30	.12	0	0	0	5.7	217	10
14	2.4	50	.32	0	0	0	0	0	0
15	.33	30	.03	0	0	0	0	0	0
16	.03	30	0	8.0	216	24	0	0	0
17	.02	30	0	23	577	103	0	0	0
18	.01	30	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0
29	0	0	0	--	--	--	0	0	0
30	0	0	0	--	--	--	0	0	0
31	0	0	0	--	--	--	0	0	0
TOTAL	494.60	--	2208.74	31.0	--	127	5.7	--	10

## SANTA ANA RIVER BASIN

11078000 SANTA ANA RIVER AT SANTA ANA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0						
2	0	0	0						
3	0	0	0						
4	0	0	0						
5	0	0	0						
6	0	0	0						
7	0	0	0						
8	0	0	0						
9	0	0	0						
10	0	0	0						
11	0	0	0						
12	0	0	0						
13	0	0	0						
14	11	294	30						
15	0	0	0						
16	0	0	0						
17	0	0	0						
18	0	0	0						
19	0	0	0						
20	0	0	0						
21	0	0	0						
22	0	0	0						
23	0	0	0						
24	0	0	0						
25	0	0	0						
26	0	0	0						
27	0	0	0						
28	0	0	0						
29	0	0	0						
30	0	0	0						
31	--	--	--						
TOTAL	11	--	30	0	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

2063.97

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

17066.37

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED 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
NOV. 29...	1345	15.0	840	9980	22600	8	8	11
	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL 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 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
NOV. 29...	16	24	38	44	65	85	99	100

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
JULY 29...	1500	3	0	2	15	59	90	98	100



11082800 SAN GABRIEL RIVER AT AZUSA POWERHOUSE, AT AZUSA, CALIF.

LOCATION.--Lat 34°09'18", long 117°54'26", in NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.22, T.1 N., R.10 W., Los Angeles County, at tailrace of Azusa Powerhouse, and 1 mile north of Azusa.

PERIOD OF RECORD.--Chemical analyses (revised): December 1907 to December 1908, October 1966 to September 1971.

REMARKS.--Records of discharge furnished by Los Angeles County Flood Control District. Chemical-quality records furnished by California Department of Water Resources.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)
OCT.									
29...	1300	1.0	18.5	8.8	51	13	11	4.0	211
NOV.									
24...	1245	1.0	15.5	10.8	50	14	11	4.0	211
DEC.									
18...	1145	.40	14.0	11.0	46	12	10	4.0	192
JAN.									
26...	1245	72	11.5	12.3	43	11	9.0	3.0	170
FEB.									
26...	1200	75	11.5	10.9	44	12	9.0	3.0	179
MAR.									
26...	1200	75	12.0	10.9	46	12	10	3.0	183
APR.									
27...	1130	69	14.5	10.1	49	11	10	3.0	188
MAY									
18...	1400	40	15.0	9.0	47	12	10	3.0	193
JUNE									
18...	1200	41	18.5	9.3	39	12	11	3.0	167
JULY									
22...	1115	45	23.5	8.3	42	13	11	4.0	181
AUG.									
27...	1145	44	27.0	--	41	12	12	4.0	182
SEP.									
20...	1515	46	23.5	8.3	44	13	12	4.0	195

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)
OCT.									
29...	0	23	5.0	.4	.5	60	198	.27	.53
NOV.									
24...	0	25	4.0	.4	1.2	90	207	.28	.56
DEC.									
18...	0	21	5.0	.3	2.8	70	204	.28	.22
JAN.									
26...	0	22	4.0	.4	2.6	60	183	.25	35.6
FEB.									
26...	0	21	4.0	.3	2.0	60	182	.25	36.9
MAR.									
26...	0	27	4.0	.4	1.6	50	189	.26	38.3
APR.									
27...	0	26	3.0	.4	.9	30	196	.27	36.5
MAY									
18...	0	27	5.0	.3	.7	60	209	.28	22.6
JUNE									
18...	0	28	3.0	.3	.7	70	169	.23	18.7
JULY									
22...	0	30	4.0	.4	.5	80	193	.26	23.4
AUG.									
27...	0	30	5.0	.4	.0	80	198	.27	23.5
SEP.									
20...	0	29	4.0	.4	.4	70	205	.28	25.5

## SAN GABRIEL RIVER BASIN

11082800 SAN GABRIEL RIVER AT AZUSA POWERHOUSE, AT AZUSA, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)
OCT. 29...	181	8	173	11	.4	390	8.1	<25
NOV. 24...	183	10	173	11	.4	384	8.1	<25
DEC. 18...	165	7	157	11	.3	332	7.8	<25
JAN. 26...	153	14	139	11	.3	323	8.1	--
FEB. 26...	160	13	147	11	.3	335	8.2	<25
MAR. 26...	165	15	150	11	.3	344	8.1	<25
APR. 27...	168	14	154	11	.3	351	8.3	<25
MAY 18...	167	9	158	11	.3	347	8.2	<25
JUNE 18...	147	10	137	14	.4	325	8.0	<25
JULY 22...	159	11	148	13	.4	340	8.1	<25
AUG. 27...	152	3	149	14	.4	333	8.1	--
SEP. 20...	164	4	160	13	.4	355	7.9	<25

## 11087040 SAN GABRIEL RIVER AT WHITTIER NARROWS, CALIF.

LOCATION.--Lat 34°01'25", long 118°03'11", in sec.5, T.2 S., R.11 W., Los Angeles County, 200 ft from end of San Gabriel Boulevard (Siphon Road), upstream from Whittier Narrows Dam, and 2.5 miles northeast of Montebello.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1971.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Records of discharge are given for San Gabriel River above Whittier Narrows Dam (sta 11087020).

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)
OCT. 29...	1200	90	17.0	11.5	89	34	117	7.0	153
NOV. 24...	1145	97	15.5	10.7	85	31	112	7.0	160
DEC. 18...	1100	18	13.0	7.3	61	17	65	9.0	162
JAN. 26...	1145	122	15.0	10.5	57	21	49	5.0	192
FEB. 26...	1100	162	14.5	13.9	90	32	109	6.0	179
MAR. 26...	1100	184	15.5	13.1	88	33	113	6.0	171
APR. 27...	1030	14	19.0	14.2	95	26	93	9.0	275
SEP. 20...	1415	106	26.0	10.8	84	33	113	6.0	165

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)
OCT. 29...	8	311	107	.6	8.3	220	761	1.03	185
NOV. 24...	0	288	101	.6	18	270	715	.97	187
DEC. 18...	0	131	69	.5	19	290	456	.62	22.2
JAN. 26...	0	98	46	.5	14	220	372	.51	123
FEB. 26...	0	282	100	.5	11	190	719	.98	314
MAR. 26...	0	300	101	.5	11	180	752	1.02	374
APR. 27...	0	178	90	.7	26	380	662	.90	25.0
SEP. 20...	0	299	99	.4	5.1	190	730	.99	209

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINIT- Y AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)
OCT. 29...	362	223	139	41	2.7	1180	8.4	<25
NOV. 24...	340	209	131	41	2.6	1120	7.4	<25
DEC. 18...	222	89	133	38	1.9	711	7.1	75
JAN. 26...	229	71	157	31	1.4	644	7.4	--
FEB. 26...	356	209	147	39	2.5	1140	8.1	<25
MAR. 26...	355	215	140	40	2.6	1140	7.9	<25
APR. 27...	344	118	226	36	2.2	1060	8.3	<25
SEP. 20...	345	210	135	41	2.6	1120	7.8	<25

## LOS ANGELES RIVER BASIN

11097500 LOS ANGELES RIVER AT LOS ANGELES, CALIF.

LOCATION.--Lat 34°04'52", long 118°13'36", (unsurveyed), Los Angeles County, at gaging station near Figueroa Street, Los Angeles, and 800 ft upstream from Arroyo Seco.

DRAINAGE AREA.--514 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1971.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Records of discharge furnished by Los Angeles County Flood Control District.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (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)
OCT. 07...	1110	6.4	17.0	6.3	97	31	140	--	203
NOV. 04...	1045	28	11.5	7.6	90	29	124	--	157
JAN. 06...	1130	20	2.0	11.2	80	28	110	--	201
FEB. 03...	1130	12	12.0	17.0	76	28	116	--	174
MAY 29...	1315	25	20.0	12.4	63	21	73	7.0	171
SEP. 20...	1200	14	25.0	11.6	82	25	146	10	166

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)
OCT. 07...	0	308	113	--	19	--	945	1.29	16.3
NOV. 04...	0	283	103	--	19	--	835	1.14	63.1
JAN. 06...	0	219	93	--	21	--	740	1.01	40.0
FEB. 03...	8	230	100	--	14	--	720	.98	23.3
MAY 29...	0	153	60	.8	21	460	538	.73	36.3
SEP. 20...	0	283	124	.7	22	500	787	1.07	29.7

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)
OCT. 07...	368	201	167	--	3.2	--	8.1	--
NOV. 04...	345	216	129	--	2.9	--	7.9	--
JAN. 06...	315	150	165	--	2.7	--	8.0	--
FEB. 03...	305	149	156	--	2.9	--	8.6	--
MAY 29...	244	104	140	39	2.0	776	7.7	27
SEP. 20...	308	172	136	50	3.6	1220	7.5	<25

## 11102000 MISSION CREEK NEAR MONTEBELLO, CALIF.

LOCATION.--Lat 34°01'45", long 118°04'07", in La Merced Grant, Los Angeles County, at gaging station on San Gabriel Boulevard Bridge, 2 miles northeast of Montebello.

DRAINAGE AREA.--4.16 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1971.

REMARKS.--Prior to October 1969, sampled at Mission Creek below Whittier Narrows Dam (sta 11102250). Chemical quality records furnished by California Department of Water Resources. Records of discharge furnished by Los Angeles County Flood Control District.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	MEAN DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
OCT.									
29...	1045	2.2	18.5	9.2	99	40	26	3.0	296
NOV.									
24...	1045	2.4	17.0	9.1	118	30	26	3.0	292
DEC.									
18...	1000	6.0	14.5	8.4	105	25	23	3.0	231
JAN.									
26...	1045	5.2	16.5	8.1	111	27	25	3.0	247
FEB.									
26...	1015	4.1	16.0	8.3	113	29	25	1.0	250
MAR.									
26...	1015	3.2	18.0	8.5	113	29	26	3.0	265
APR.									
27...	0945	2.7	18.5	9.2	115	29	26	3.0	277
MAY									
29...	1430	1.9	21.0	11.8	111	23	27	2.0	235
JUNE									
18...	1000	1.7	23.0	10.1	106	27	26	2.0	254
JULY									
22...	0945	.80	24.0	8.6	97	30	26	3.0	223
AUG.									
27...	1030	.30	26.0	9.1	120	29	27	3.0	298
SEP.									
20...	1315	.10	30.5	10.6	108	31	28	4.0	268

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)
OCT.									
29...	0	173	31	.6	11	90	547	.74	3.25
NOV.									
24...	0	171	31	.6	11	150	543	.74	3.52
DEC.									
18...	0	164	35	.4	7.8	120	502	.68	8.13
JAN.									
26...	0	175	36	.5	9.2	120	524	.71	7.36
FEB.									
26...	0	178	37	.4	9.2	110	533	.72	5.90
MAR.									
26...	0	174	34	.5	9.7	90	532	.72	4.60
APR.									
27...	0	171	33	.5	9.9	100	536	.73	3.91
MAY									
29...	0	172	32	.4	10	130	529	.72	2.71
JUNE									
18...	0	170	32	.4	9.5	110	520	.71	2.39
JULY									
22...	0	177	31	.4	9.9	130	533	.72	1.15
AUG.									
27...	0	173	34	.4	6.3	110	576	.78	.47
SEP.									
20...	0	182	36	.5	2.9	120	544	.74	.15

## LOS ANGELES RIVER BASIN

11102000 MISSION CREEK NEAR MONTEBELLO, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINIT- Y AS CAC03 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)
OCT. 29...	412	169	243	12	.6	847	7.9	<25
NOV. 24...	418	178	239	12	.6	836	7.9	<25
DEC. 18...	365	176	189	12	.5	711	7.5	<25
JAN. 26...	388	185	203	12	.6	805	7.6	<25
FEB. 26...	401	196	205	12	.5	818	8.0	<25
MAR. 26...	401	184	217	12	.6	815	8.0	<25
APR. 27...	406	179	227	12	.6	836	8.0	<25
MAY 29...	372	179	193	14	.6	768	7.9	<25
JUNE 18...	376	168	208	13	.6	749	7.9	<25
JULY 22...	366	183	183	13	.6	766	7.3	<25
AUG. 27...	419	175	244	12	.6	825	8.0	<25
SEP. 20...	397	177	220	13	.6	805	7.8	<25

LOCATION.--Lat 34°16'41", long 118°47'43", on line between secs.7 and 8, T.2 N., R.18 W., Ventura County, at gaging station on bridge on Los Angeles Avenue, 0.5 mile upstream from Brea Canyon, and 1.1 miles northwest of Simi.

PERIOD OF RECORD.--Water temperatures: October 1970 to September 1971.  
Sediment records: October 1968 to September 1971.

Sediment concentrations: Maximum daily, 29,000 mg/l Nov. 29; minimum daily, no flow for many days.  
Sediment discharge: Maximum daily, 166,000 tons Nov. 29; minimum daily, 0 tons on many days.

Sediment concentrations: Maximum daily, 29,000 mg/l Nov. 29, 1970; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 169,000 tons Feb. 25, 1969; minimum daily, 0 tons on many days each year.

REMARKS.--No flow Nov. 23, 24, Dec. 31 to Jan. 1, 3-9, 15-31, June 14-24, July 5, 6.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			14.0									
2	--	--		--	--	--	--	--	--	--	--	--
3	--			--		--			--		--	--
4	--			--	--		--		--		--	--
5	--	18.0	--	--	--	--	--		--		--	--
6	--	--	--	--		--	--	--	--		--	--
7	--	--		--	--				--	--		--
8	--	--	--	--		--		--	--		--	--
9	--		--	--	--		--		--		--	--
10	--	--		--	--	--	--	--	--		--	--
11	--	--	--	--	--	--		--	--		--	--
12	--	--		11.0	--		--		--	--		--
13	--	--	13.0	10.0				--	--		--	--
14	--	--	--		--		13.0	--	--		--	--
15	--	--	--	--	--	--	--	--	--		--	--
16	--	--	--	--		--	--	--	--	--		--
17	--	--		--	22.0		--	--	--	--		--
18	--	--	15.5	--			--	--	--	--		--
19	--	--	13.0	--	--	--	--	--	--	--		--
20	--	--	--	--	--	--	--	--	--	--		--
21	--	--	12.0	--	--	--	--	--	--	--		--
22	--			--					--		--	--
23	--	--	--	--	--	--			--	--		--
24	--	--	--	--	--	--	--	--	--	--		--
25	--	--	--	--	--	--	--		--	--		--
26	--	16.0	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--		--			--	--	--	--
28	--	14.0	--	--	--		--		--	--	--	--
29	--	15.0	--	--	--	--			--	--	--	--
30	--		--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--		--	--	--	--	--	--

## CALLEGUAS CREEK BASIN

11105850 ARROYO SIMI NEAR SIMI, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.02	30	0	.02	30	0	.70	500	.95
2	.02	30	0	.02	30	0	2.0	977	13
3	.02	30	0	.02	30	0	.03	50	0
4	.02	30	0	.02	30	0	.02	30	0
5	.02	30	0	.10	100	.03	.02	30	0
6	.02	30	0	2.4	1100	7.1	.02	30	0
7	.02	30	0	.05	100	.01	.02	30	0
8	.02	30	0	.02	80	0	.02	30	0
9	.02	30	0	.02	40	0	27	9840	1510
10	.02	30	0	.02	30	0	.03	30	0
11	.02	30	0	.02	30	0	.03	30	0
12	.02	30	0	.02	30	0	.02	30	0
13	.02	30	0	.02	30	0	1.2	271	7.6
14	.02	30	0	.02	30	0	3.2	749	18
15	.02	30	0	.02	30	0	.02	30	0
16	.02	30	0	.02	30	0	2.1	601	8.3
17	.02	30	0	.02	30	0	17	2100	255
18	.02	30	0	.02	30	0	737	15000	109000
19	.02	30	0	.02	30	0	386	11900	40300
20	.02	30	0	.02	30	0	16	1720	220
21	.02	30	0	.02	30	0	404	13500	33200
22	.02	30	0	.02	30	0	6.1	1700	28
23	.02	30	0	0	0	0	.32	250	.22
24	.02	30	0	0	0	0	.15	150	.06
25	.02	30	0	2.2	905	21	.09	100	.02
26	.02	30	0	1.7	700	8.7	.09	90	.02
27	.02	30	0	.02	30	0	.09	80	.02
28	.02	30	0	219	16400	26200	.05	70	.01
29	.02	30	0	1200	29000	166000	.30	300	.24
30	.02	30	0	22	1740	137	.01	20	0
31	.02	30	0	--	--	--	0	0	0
TOTAL	.62	--	0	1447.85	--	192373.84	1603.63	--	184561.44

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	0	0	0	.02	30	0	1.0	650	1.8
2	5.5	861	58	.02	30	0	.60	420	.68
3	0	0	0	.02	30	0	.40	300	.32
4	0	0	0	.02	30	0	.32	200	.17
5	0	0	0	.02	30	0	.22	150	.09
6	0	0	0	.02	30	0	.15	130	.05
7	0	0	0	.02	30	0	.09	90	.02
8	0	0	0	.02	30	0	.15	130	.05
9	0	0	0	.02	30	0	.15	130	.05
10	.02	30	0	.02	30	0	.22	150	.09
11	.02	30	0	.02	30	0	.22	150	.09
12	5.0	1360	38	.02	30	0	1.1	800	2.4
13	14	2620	156	.02	30	0	46	5220	1460
14	.22	150	.09	.02	30	0	.30	240	.19
15	0	0	0	.02	30	0	.10	100	.03
16	0	0	0	9.5	3730	416	.02	30	0
17	0	0	0	33	8130	1730	.02	30	0
18	0	0	0	.40	300	.32	.02	30	0
19	0	0	0	.35	230	.22	.02	30	0
20	0	0	0	.30	180	.15	.02	30	0
21	0	0	0	.25	140	.09	.02	30	0
22	0	0	0	.20	120	.06	.02	30	0
23	0	0	0	.20	120	.06	.02	30	0
24	0	0	0	.30	180	.15	.02	30	0
25	0	0	0	.40	300	.32	.02	30	0
26	0	0	0	.60	420	.68	.02	30	0
27	0	0	0	.80	550	1.2	.02	30	0
28	0	0	0	1.0	650	1.8	.02	30	0
29	0	0	0	--	--	--	.02	30	0
30	0	0	0	--	--	--	.02	30	0
31	0	0	0	--	--	--	.02	30	0
TOTAL	24.76	--	252.09	47.60	--	2151.05	51.34	--	1466.03



11105850 ARROYO SIMI NEAR SIMI, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.02	30	0	.05	50	.01	.02	20	0
2	.02	30	0	.05	40	.01	.02	20	0
3	.02	30	0	.05	40	.01	.02	20	0
4	.02	30	0	.05	40	.01	.02	20	0
5	.02	30	0	.05	40	.01	.02	20	0
6	.02	30	0	.05	40	.01	.02	20	0
7	.02	30	0	.05	40	.01	.02	20	0
8	.02	30	0	.05	40	.01	.02	20	0
9	.02	30	0	.05	30	0	.02	20	0
10	.27	200	.15	.05	30	0	.02	20	0
11	.02	30	0	.04	30	0	.02	20	0
12	.02	30	0	.04	30	0	.02	20	0
13	.30	178	.44	.04	30	0	.02	20	0
14	61	3800	1500	.04	30	0	0	0	0
15	.10	200	.05	.04	30	0	0	0	0
16	.08	100	.02	.03	30	0	0	0	0
17	.08	90	.02	.03	30	0	0	0	0
18	.05	70	.01	.03	20	0	0	0	0
19	.05	60	.01	.03	20	0	0	0	0
20	.05	50	.01	.02	20	0	0	0	0
21	.05	50	.01	.02	20	0	0	0	0
22	.05	50	.01	.02	20	0	0	0	0
23	.05	50	.01	.02	20	0	0	0	0
24	.05	50	.01	.02	20	0	0	0	0
25	.05	50	.01	.02	20	0	.02	20	0
26	.05	50	.01	.02	20	0	.02	20	0
27	.05	50	.01	.02	20	0	.02	20	0
28	.05	50	.01	.02	20	0	.02	20	0
29	.05	50	.01	.02	20	0	.02	20	0
30	.05	50	.01	.02	20	0	.02	20	0
31	--	--	--	.02	20	0	--	--	--
TOTAL	62.70	--	1500.81	1.06	--	.08	.38	--	0

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.02	20	0	.02	20	0	.02	20	0
2	.02	20	0	.02	20	0	.02	20	0
3	.02	20	0	.02	20	0	.02	20	0
4	.02	20	0	.02	20	0	.02	20	0
5	0	0	0	.02	20	0	.02	20	0
6	0	0	0	.02	20	0	4.2	1300	15
7	.02	20	0	.02	20	0	.02	20	0
8	.02	20	0	.02	20	0	.02	20	0
9	.02	20	0	.02	20	0	.02	20	0
10	.02	20	0	.02	20	0	.02	20	0
11	.02	20	0	.02	20	0	.02	20	0
12	.02	20	0	.02	20	0	.02	20	0
13	.02	20	0	.02	20	0	.02	20	0
14	.02	20	0	.02	20	0	.02	20	0
15	.02	20	0	.02	20	0	.02	20	0
16	.02	20	0	.02	20	0	.02	20	0
17	.02	20	0	.02	20	0	.02	20	0
18	.02	20	0	.02	20	0	.02	20	0
19	.02	20	0	.02	20	0	.02	20	0
20	.02	20	0	.02	20	0	.02	20	0
21	.02	20	0	.02	20	0	.02	20	0
22	.02	20	0	.02	20	0	.02	20	0
23	.02	20	0	.02	20	0	.02	20	0
24	.02	20	0	.02	20	0	.02	20	0
25	.02	20	0	.02	20	0	.02	20	0
26	.02	20	0	.02	20	0	.02	20	0
27	.02	20	0	.02	20	0	.02	20	0
28	.02	20	0	.02	20	0	.02	20	0
29	.02	20	0	.02	20	0	.02	20	0
30	.02	20	0	.02	20	0	.02	20	0
31	.02	20	0	.02	20	0	--	--	--
TOTAL	.58	--	0	.62	--	0	4.78	--	15

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)  
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

3245.92  
382320.34

## CALLEGUAS CREEK BASIN

11105850 ARROYO SIMI NEAR SIMI, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	SUS- PENDE- SEDIMENT CHARGE (MG/L)	SUS- PENDE- SEDIMENT 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
NOV.									
28...	2330	1010	A30400	82900	29	41	55	74	89
29...	0140	1640	A52100	231000	24	31	41	62	76
29...	0340	2600	A47000	330000	26	35	41	63	81
29...	0730	3020	A43900	358000	23	31	41	57	74
29...	0800	1770	58800	281000	15	22	30	41	53
29...	0920	3720	A47100	473000	21	30	36	53	67
29...	0930	4460	A54000	650000	22	24	37	50	69
29...	0935	5210	A40200	565000	20	29	40	55	70
DEC.									
18...	2015	3720	A62000	623000	13	18	23	34	44
18...	2035	4460	A66000	795000	17	19	23	35	49

DATE	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL 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
NOV.									
28...	98	--	99	--	100	--	--	--	--
29...	85	--	96	--	100	--	--	--	--
29...	92	--	97	--	100	--	--	--	--
29...	85	--	94	--	99	--	100	--	--
29...	--	68	--	89	--	99	--	100	--
29...	77	--	91	--	98	--	100	--	--
29...	80	--	90	--	99	--	100	--	--
29...	81	--	88	--	98	--	100	--	--
DEC.									
18...	55	--	78	--	95	--	100	--	--
18...	60	--	79	--	96	--	99	--	100

A Single-stage sample.

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NUMBER OF SAMPLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG.											
03...	3	.02	1	4	24	64	81	87	92	95	100

LOCATION.--Lat 34°10'46", long 119°02'20", in Guadaluca Grant, Ventura County, at gaging station on county bridge, 1.0 mile northeast of Camarillo State Hospital, and 1.4 miles downstream from Conejo Creek.

PERIOD OF RECORD.--Water temperatures: October 1970 to September 1971.  
Sediment records: October 1968 to September 1971.

Sediment concentrations: Maximum daily, 19,400 mg/l Nov. 29; minimum daily, no flow for several days.  
Sediment discharge: Maximum daily, 277,000 tons Nov. 29; minimum daily, 0 tons on many days.

Sediment concentrations: Maximum daily, 62,900 mg/l Jan. 25, 1969; minimum daily, no flow for many days in 1970 and 1971.  
Sediment discharge: Maximum daily, 1,700,000 tons Jan. 25, 1969; minimum daily, 0 tons on many days in 1970 and 1971.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

[illegible]

## CALLEGUAS CREEK BASIN

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.90	40	.10	.90	30	.07	39	544	71
2	1.3	40	.14	.81	30	.07	35	509	152
3	2.5	40	.27	1.7	35	.16	17	631	54
4	.81	40	.09	2.1	35	.20	11	200	5.9
5	1.3	40	.14	2.5	40	.27	9.8	170	4.5
6	.72	40	.08	3.4	40	.37	9.8	170	4.5
7	.90	40	.10	3.0	40	.32	8.2	160	3.5
8	2.5	40	.27	2.1	35	.20	8.2	160	3.5
9	2.5	40	.27	1.7	35	.16	19	13700	1170
10	2.5	40	.27	1.3	35	.12	4.6	90	1.1
11	2.5	40	.27	2.1	35	.20	3.8	75	.77
12	2.1	40	.23	2.1	35	.20	3.4	70	.64
13	2.1	40	.23	1.3	30	.11	2.1	45	.26
14	2.5	40	.27	1.7	30	.14	1.7	35	.16
15	2.5	40	.27	1.3	30	.11	3.8	75	.77
16	2.5	40	.27	1.3	30	.11	8.2	155	3.4
17	2.5	40	.27	1.3	30	.11	37	7380	1180
18	2.5	40	.27	.90	30	.07	720	9440	88900
19	3.4	40	.37	.90	30	.07	1770	17600	205000
20	4.2	40	.45	1.4	30	.11	76	1100	226
21	5.0	40	.54	1.4	30	.11	1360	12000	97800
22	1.7	35	.16	1.4	30	.11	26	700	49
23	1.7	35	.16	1.4	30	.11	11	200	5.9
24	.81	30	.07	1.4	30	.11	11	200	5.9
25	.72	30	.06	1.4	30	.11	7.4	100	2.0
26	.63	30	.05	1.4	30	.11	3.8	75	.77
27	.63	30	.05	1.4	30	.11	3.8	75	.77
28	.54	30	.04	3.3	65	.58	3.8	75	.77
29	.54	30	.04	3380	19400	277000	3.8	75	.77
30	.81	30	.07	148	3550	1950	3.8	75	.77
31	.90	30	.07	--	--	--	3.8	75	.77
TOTAL	56.71	--	5.94	3574.91	--	278954.52	4225.8	--	394649.42

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	3.8	75	.77	4.6	90	1.1	4.6	90	1.1
2	9.8	170	4.5	3.8	75	.77	4.2	80	.91
3	3.8	75	.77	4.6	90	1.1	5.8	110	1.7
4	3.8	75	.77	3.8	80	.82	4.6	90	1.1
5	3.8	75	.77	3.8	80	.82	5.0	90	1.2
6	3.8	75	.77	3.8	80	.82	4.6	90	1.1
7	3.8	75	.77	4.2	80	.91	5.0	90	1.2
8	3.8	75	.77	4.2	80	.91	5.8	110	1.7
9	3.8	75	.77	3.8	80	.82	3.0	60	.49
10	3.8	75	.77	3.4	80	.73	3.0	60	.49
11	3.8	75	.77	3.4	80	.73	3.8	75	.77
12	8.2	207	7.9	4.2	80	.91	4.2	80	.91
13	9.0	349	10	4.2	80	.91	21	366	28
14	4.2	180	2.0	3.8	80	.82	14	240	9.1
15	4.6	90	1.1	4.2	80	.91	9.8	170	4.5
16	3.4	80	.73	5.8	110	1.7	8.2	150	3.3
17	3.4	70	.64	36	606	72	5.0	100	1.4
18	3.4	70	.64	5.0	95	1.3	4.6	90	1.1
19	3.4	70	.64	4.6	95	1.2	5.0	90	1.2
20	3.4	70	.64	5.0	95	1.3	6.6	120	2.1
21	3.4	70	.64	4.6	95	1.2	7.4	135	2.7
22	4.6	90	1.1	5.8	110	1.7	7.4	135	2.7
23	6.6	120	2.1	5.8	110	1.7	5.8	110	1.7
24	4.6	90	1.1	5.0	100	1.4	3.4	75	.69
25	4.2	80	.91	5.8	90	1.4	5.8	110	1.7
26	4.2	80	.91	5.0	90	1.2	7.4	130	2.6
27	4.2	80	.91	4.2	90	1.0	8.2	150	3.3
28	3.8	80	.82	4.6	90	1.1	5.8	110	1.7
29	3.8	80	.82	--	--	--	7.4	130	2.6
30	4.2	80	.91	--	--	--	9.0	160	3.9
31	4.6	90	1.1	--	--	--	9.0	160	3.9
TOTAL	139.0	--	47.81	157.0	--	101.28	204.4	--	90.86

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.2	150	3.3	5.8	40	.63	3.0	35	.28
2	7.4	140	2.8	5.8	50	.78	1.7	30	.14
3	5.8	110	1.7	6.6	55	.98	.45	15	.02
4	8.2	150	3.3	6.6	55	.98	.90	20	.05
5	5.8	110	1.7	7.4	60	1.2	.90	20	.05
6	6.6	120	2.1	5.8	50	.78	.18	10	0
7	4.6	90	1.1	3.4	40	.37	.36	15	.01
8	2.5	50	.34	7.4	60	1.2	.72	20	.04
9	4.2	80	.91	5.8	50	.78	.81	20	.04
10	4.6	90	1.1	4.6	45	.56	1.7	30	.14
11	4.6	90	1.1	.81	20	.04	.81	25	.05
12	5.8	110	1.7	4.2	40	.45	.90	25	.06
13	4.6	100	1.2	2.5	35	.24	.72	20	.04
14	5.5	1300	502	.63	25	.04	.36	15	.01
15	5.0	95	1.3	.63	25	.04	.81	20	.04
16	3.4	60	.55	.72	25	.05	.63	15	.03
17	5.0	70	.95	1.3	25	.09	.45	10	.01
18	4.2	60	.68	.72	25	.05	.90	20	.05
19	4.6	60	.75	.18	10	0	2.5	35	.24
20	3.8	50	.51	.18	10	0	3.4	45	.41
21	3.8	50	.51	.18	10	0	3.4	45	.41
22	4.2	50	.57	.18	10	0	3.4	45	.41
23	6.6	55	.98	.54	20	.03	2.1	30	.17
24	5.8	50	.78	4.2	40	.45	.63	20	.03
25	5.0	50	.68	2.1	30	.17	1.7	30	.14
26	7.4	60	1.2	2.1	30	.17	.90	20	.05
27	8.2	70	1.5	.81	20	.04	.81	20	.04
28	4.6	40	.50	3.0	35	.28	.45	10	.01
29	7.4	60	1.2	4.6	40	.50	0	0	0
30	5.0	40	.54	4.2	40	.45	.27	10	.01
31	--	--	--	2.5	35	.24	--	--	--
TOTAL	211.9	--	537.55	95.48	--	11.59	35.86	--	2.98

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.09	10	0	6.6	20	.36	.72	7	.01
2	.27	15	.01	4.2	10	.11	1.3	8	.03
3	.54	20	.03	1.7	8	.04	.90	8	.02
4	.54	20	.03	3.0	10	.08	.90	8	.02
5	.36	15	.01	1.7	8	.04	1.3	8	.03
6	.72	25	.05	0	0	0	.63	8	.01
7	.81	25	.05	0	0	0	1.7	8	.04
8	.18	10	0	.45	7	.01	3.4	10	.09
9	.63	20	.03	.54	7	.01	.90	8	.02
10	.81	25	.05	0	0	0	2.1	8	.05
11	.63	20	.03	.21	7	0	.90	8	.02
12	.27	15	.01	.02	7	0	2.5	8	.05
13	0	0	0	0	0	0	1.3	8	.03
14	.38	15	.02	0	0	0	.72	8	.02
15	.63	20	.03	.18	7	0	2.5	10	.07
16	.27	15	.01	.18	7	0	3.8	15	.15
17	0	0	0	0	0	0	4.2	20	.23
18	0	0	0	.72	7	.01	3.8	15	.15
19	.33	15	.01	.63	7	.01	2.5	10	.07
20	1.2	25	.08	.54	7	.01	3.0	10	.08
21	0	0	0	.45	7	.01	3.4	10	.09
22	.09	10	0	.63	7	.01	3.8	10	.10
23	.45	15	.02	1.3	8	.03	3.8	10	.10
24	1.3	25	.09	2.5	10	.07	3.8	10	.10
25	.72	20	.04	2.1	10	.06	3.8	10	.10
26	.36	20	.02	1.3	8	.03	4.6	10	.12
27	.63	25	.04	.45	7	.01	4.2	10	.11
28	.27	15	.01	.18	7	0	4.2	10	.11
29	0	0	0	.63	7	.01	4.2	10	.11
30	0	0	0	.63	7	.01	3.0	10	.08
31	2.1	10	.06	.90	8	.02	--	--	--
TOTAL	14.58	--	.73	31.74	--	.94	77.87	--	2.21

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

8825.25  
674405.83

## CALLEGUAS CREEK BASIN

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDEO SEDI- MENT (MG/L)	SUS- PENDEO 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
NOV.									
29...	0120	--	430	A 3630	4210	47	53	65	75
29...	0315	--	1150	A 10500	32800	41	54	65	77
29...	0340	--	1760	A 22800	108000	38	49	69	85
29...	0410	--	2500	A 27300	184000	40	43	56	71
29...	1200	16.0	8640	43900	1020000	26	35	45	60
DEC.									
18...	2010	--	645	A 14900	25900	25	33	40	52
18...	2045	--	1800	A 25700	125000	32	37	43	55
18...	2145	--	4700	A 36700	466000	28	34	40	55
21...	0720	--	7500	A 33300	674000	30	33	46	58
21...	0800	10.5	4090	30800	340000	35	43	48	65
DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDEO SEDI- MENT (MG/L)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM
NOV.									
29...	80	86	--	93	--	99	--	100	--
29...	88	94	--	97	--	99	--	100	--
29...	96	--	99	--	100	--	--	--	--
29...	84	92	--	95	--	100	--	--	--
29...	74	--	86	--	96	--	99	--	100
DEC.									
18...	72	88	--	94	--	99	--	100	--
18...	75	93	--	97	--	100	--	--	--
18...	75	90	--	98	--	100	--	--	--
21...	72	88	--	96	--	100	--	--	--
21...	78	90	--	99	--	100	--	--	--

A Single-stage sample.

## 11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CALIF.

LOCATION.--Lat 34°23'59", long 118°42'14", in San Francisco Grant, Ventura County, at gaging station on old diversion weir, 0.8 mile west of Los Angeles-Ventura County Line.

DRAINAGE AREA.--644 sq mi.

PERIOD OF RECORD.--Chloride: June to September 1969.

Specific conductance: June to September 1969, October 1970 to September 1971.

pH: June to September 1969.

Water temperatures: October 1968 to September 1971.

Sediment records: October 1968 to September 1971.

EXTREMES.--1970-71:

Specific conductance: Maximum, 3,600 micromhos Mar. 31; minimum, 990 micromhos Feb. 17.

Sediment concentrations: Maximum daily, 27,400 mg/l Nov. 29; minimum daily, 20 mg/l on several days during August and September.

Sediment discharge: Maximum daily, 238,000 tons Nov. 29; minimum daily, 0.38 ton Sept. 1-3.

Period of record:

Specific conductance (1970-71): Maximum, 3,600 micromhos Mar. 31, 1971; minimum, 990 micromhos Feb. 17, 1971.

Sediment concentrations: Maximum daily (1969-71), 27,400 mg/l Nov. 29, 1970; minimum daily, 20 mg/l on several days in 1969 and 1971.

Sediment discharge: Maximum daily, 3,300,000 tons (estimated) Feb. 25, 1969; minimum daily, 0.05 ton Jan. 7, 1969.

REMARKS.--Miscellaneous samples of chemical data published for water year 1969.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(DAILY MEAN VALUES)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	---	---	---	1920	1620	1880	1580	1420	2280	2780	1510
2	1410	---	---	---	1910	1670	2910	1720	1600	2730	2970	1460
3	1420	1310	---	---	1920	1680	3020	1950	1630	2710	2930	1680
4	1440	1390	---	---	1950	1750	2820	2140	1530	2480	2760	1880
5	1440	1410	---	---	1920	1810	---	2520	1530	2470	2820	1890
6	1500	1450	---	1730	1900	1830	---	2170	1610	2560	2960	1780
7	1440	1440	---	1730	1910	1850	---	1630	1690	2720	2180	1740
8	1400	1430	---	1760	1920	1870	---	1840	1670	2350	1860	1660
9	1520	1390	---	1810	1870	1900	---	1860	1650	2460	1770	1650
10	1490	1360	1900	1810	1620	1910	1720	1750	1710	2770	1560	1650
11	1510	1420	1880	1830	1600	1930	1750	1780	1920	2750	1330	1640
12	1560	1430	1850	1700	1510	1950	1610	1810	1950	2760	1180	1690
13	1620	1650	---	1790	1510	1930	1500	1900	1810	2920	1200	1690
14	1550	1600	---	1770	1530	1900	1370	1790	1810	2840	1290	1640
15	1640	1580	---	1770	1550	1860	1630	1630	1780	2660	1360	1650
16	1640	1580	---	1750	1560	1920	1780	1780	2370	2390	1390	1650
17	1670	1650	---	1690	990	1870	1790	1710	2700	2290	1460	1640
18	1680	1620	---	1650	1030	1990	1920	1880	3230	2640	1550	1670
19	1690	1570	---	1660	1080	2140	1950	1810	3260	2400	1570	1710
20	1690	1590	---	1700	1150	2240	1940	1700	2380	1780	1640	1670
21	1660	1670	---	1710	1230	2330	1900	1640	2450	1480	1700	1640
22	1600	1670	---	1730	1290	2360	1880	1720	2800	1960	1770	1620
23	1500	1650	---	1750	1340	2510	1840	1930	2690	1590	1790	1620
24	1370	1630	---	1860	1410	2660	1860	1830	2510	1900	1850	1600
25	1390	1680	---	1830	1450	2830	1880	1770	2330	2470	1860	1590
26	1370	1720	---	1820	1490	3000	2030	1500	2500	2140	1860	1600
27	1340	1710	---	1860	1520	3150	---	1580	2590	2570	1850	1590
28	1270	---	---	1820	1570	3100	1920	1670	3390	3060	1870	1580
29	---	---	---	1880	---	3240	1920	1420	2230	2900	1780	1570
30	---	---	---	1910	---	3450	1350	1500	2300	2960	1720	1560
31	---	---	---	1940	---	3600	---	1410	---	2780	1600	---
MONTH	1510	1540	---	1780	1560	2250	1920	1770	2170	2470	1880	1650

## SANTA CLARA RIVER BASIN

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.5	--	14.5	3.5	14.0	--	--	--	--	--	--	--
2	--	--	12.5	--	--	11.5	--	--	--	--	30.0	--
3	--	17.0	14.5	--	--	--	--	18.5	--	--	--	30.0
4	--	--	16.0	--	--	--	--	--	--	--	--	--
5	23.0	--	--	6.5	--	--	21.0	--	--	25.0	--	--
6	--	18.5	--	--	--	--	--	--	--	--	--	24.5
7	--	--	--	--	--	--	--	--	23.0	--	--	--
8	14.5	--	16.0	--	16.0	16.0	--	--	--	--	--	--
9	--	18.5	16.5	--	--	24.0	--	--	--	--	--	--
10	--	--	--	14.0	--	--	--	23.0	--	--	33.0	33.5
11	--	--	--	--	21.0	--	--	--	--	--	--	--
12	22.0	--	--	--	--	--	21.0	--	--	32.0	--	--
13	--	12.5	--	10.0	--	--	--	27.5	--	30.0	--	29.0
14	--	--	13.0	13.5	--	--	--	--	28.5	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--
16	--	16.0	--	--	13.0	19.0	--	--	--	--	--	--
17	--	--	10.0	--	--	23.0	--	22.0	--	--	28.0	--
18	--	--	--	19.0	--	--	--	--	--	--	--	--
19	21.5	--	7.0	--	--	--	16.0	--	--	27.0	--	--
20	--	15.0	8.0	--	--	--	--	--	--	--	--	22.5
21	--	--	10.0	--	--	--	--	--	28.0	--	--	--
22	16.0	--	11.0	--	--	--	--	--	--	--	--	21.0
23	--	--	7.5	--	14.0	16.5	--	--	--	--	--	--
24	--	16.0	11.5	--	--	--	--	--	--	--	--	--
25	--	--	12.0	12.0	--	--	--	--	--	--	30.0	30.0
26	20.0	--	12.5	--	--	--	--	16.0	--	--	--	--
27	--	--	--	--	--	--	23.0	--	--	27.0	--	--
28	19.0	--	--	17.5	16.5	--	--	--	25.0	25.0	--	--
29	--	12.5	--	--	--	--	--	--	18.5	--	--	--
30	--	13.0	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	21.5	--	21.5	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE 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
NOV.										
29...	1210	13.0	9000	42100	1020000	20	27	36	54	69
29...	1430	12.5	4820	47500	618000	21	29	41	54	67
DEC.										
21...	0740	7.0	2220	34600	207000	23	31	39	52	64
21...	1655	10.0	870	10300	24200	27	35	45	59	72
DATE										
NOV.										
29...		--	79	--	83	--	95	--	100	--
29...		--	74	--	77	--	84	--	99	--
DEC.										
21...		--	74	--	87	--	97	--	99	--
21...		84	--	93	--	98	--	99	--	100



## 11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	12	1000	32	15	1300	53	90	3800	923
2	11	800	24	17	1800	83	52	1300	183
3	10	600	16	18	2100	102	50	1200	162
4	10	500	14	18	2200	107	46	1300	161
5	12	400	13	18	2300	112	45	1200	146
6	14	500	19	18	2400	117	44	1100	131
7	13	600	21	16	2200	95	42	1000	113
8	13	700	25	16	2200	95	40	800	86
9	14	800	30	18	2800	136	38	600	62
10	13	1000	35	19	3000	154	38	600	62
11	13	1000	35	18	3000	146	40	650	70
12	15	1500	61	18	3100	151	40	650	70
13	16	1500	65	18	3200	156	40	650	70
14	17	1500	69	15	3300	134	40	650	70
15	17	1500	69	15	3400	138	40	650	70
16	18	1500	73	16	3500	151	42	700	79
17	16	1300	56	17	3600	165	80	1700	367
18	17	1400	64	16	3500	151	150	3500	1420
19	19	1600	82	16	3200	138	200	4800	2590
20	20	1650	89	16	2900	125	150	5400	2190
21	21	1700	96	15	2500	101	900	13800	50100
22	20	1650	89	14	2000	76	70	1550	293
23	20	1650	89	15	1500	61	69	1550	289
24	21	1700	96	15	1000	41	67	1600	289
25	21	1700	96	17	1300	60	54	2000	292
26	23	1750	109	18	1500	73	57	2000	308
27	21	1700	96	16	900	39	51	1800	248
28	18	1600	78	27	1810	259	49	1600	212
29	16	1500	65	2370	27400	238000	51	1500	207
30	15	1300	53	486	14000	18400	48	1400	181
31	14	1200	45	--	--	--	45	1300	158
TOTAL	500	--	1804	3331	--	259619	2768	--	61602

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	42	1200	136	30	1050	85	27	1400	102
2	42	1100	125	30	1100	89	27	1400	102
3	37	800	80	30	1100	89	27	1400	102
4	35	600	57	30	1100	89	27	1400	102
5	38	900	92	30	1100	89	26	1300	91
6	40	800	86	30	1100	89	26	1300	91
7	40	700	76	30	1100	89	26	1300	91
8	41	600	66	30	1100	89	25	1200	81
9	40	500	54	30	1100	89	24	1400	91
10	36	400	39	29	1050	12	23	1500	93
11	37	500	50	29	1050	82	22	1700	101
12	42	2000	227	29	1050	82	22	1800	107
13	35	1000	95	29	1100	86	22	1900	113
14	33	1000	89	29	1150	90	22	2000	119
15	32	1000	86	29	1200	94	21	2100	119
16	34	1050	96	29	1200	94	21	2200	125
17	36	1100	107	29	1200	94	20	2100	113
18	37	1100	110	29	1200	94	20	2000	108
19	38	1100	113	29	1200	94	20	2000	108
20	39	1150	121	29	1200	94	19	1900	97
21	36	1050	102	29	1200	94	19	1900	97
22	33	1000	89	28	1200	91	18	1800	87
23	31	950	80	28	1200	91	18	1800	87
24	31	950	80	28	1300	98	17	1500	69
25	31	950	80	28	1400	106	17	1500	69
26	31	1000	84	28	1500	113	17	1500	69
27	31	1000	84	28	1600	121	16	1300	56
28	31	1000	84	28	1700	129	16	1300	56
29	30	1000	81	--	--	--	16	1300	56
30	30	1000	81	--	--	--	16	1300	56
31	30	1000	81	--	--	--	15	1100	45
TOTAL	1099	--	2831	814	--	2626	652	--	2803

## SANTA CLARA RIVER BASIN

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	15	1000	41	17	600	28	15	350	14
2	15	900	36	17	500	23	15	350	14
3	15	800	32	17	500	23	14	350	13
4	15	700	28	17	500	23	14	350	13
5	15	650	26	17	550	25	14	350	13
6	15	650	26	17	550	25	13	300	11
7	15	650	26	17	550	25	13	300	11
8	15	650	26	16	600	26	12	300	9.7
9	15	650	26	16	600	26	12	300	9.7
10	15	650	26	16	600	26	11	300	8.9
11	15	650	26	16	600	26	11	300	8.9
12	15	650	26	16	600	26	11	300	8.9
13	25	2000	135	16	550	24	10	300	8.1
14	23	1900	118	16	550	24	9.7	300	7.9
15	22	1800	107	16	550	24	9.8	250	6.6
16	21	1700	96	16	500	22	9.9	250	6.7
17	21	1700	96	16	500	22	10	200	5.4
18	20	1600	86	16	500	22	10	200	5.4
19	20	1500	81	16	500	22	10	200	5.4
20	20	1500	81	16	450	19	10	150	4.1
21	19	1300	67	16	450	19	11	150	4.5
22	19	1300	67	16	400	17	12	150	4.9
23	18	1200	58	16	400	17	13	150	5.3
24	18	1200	58	16	350	15	14	200	7.6
25	18	1200	58	16	350	15	14	200	7.6
26	18	1200	58	16	300	13	15	250	10
27	17	1000	46	16	300	13	15	250	10
28	17	900	41	16	300	13	14	200	7.6
29	17	800	37	16	300	13	14	200	7.6
30	17	700	32	16	350	15	14	200	7.6
31	--	--	--	15	350	14	--	--	--
TOTAL	530	--	1667	502	--	645	370.4	--	257.4

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	14	200	7.6	9.9	270	7.2	7.0	20	.38
2	14	210	7.9	9.8	280	7.4	7.0	20	.38
3	13	220	7.7	9.6	250	6.5	7.0	20	.38
4	13	220	7.7	9.4	220	5.6	7.0	30	.57
5	12	230	7.5	9.0	190	4.6	7.0	40	.76
6	11	230	6.8	9.0	170	4.1	7.0	40	.76
7	11	230	6.8	8.9	150	3.6	7.0	40	.76
8	11	230	6.8	8.8	130	3.1	7.0	40	.76
9	11	230	6.8	8.7	100	2.3	7.1	40	.77
10	10	230	6.2	8.6	80	1.9	7.2	40	.78
11	9.9	230	6.1	8.6	80	1.9	7.3	45	.89
12	9.8	230	6.1	8.6	80	1.9	7.4	45	.90
13	10	200	5.4	8.5	85	2.0	7.4	45	.90
14	11	190	5.6	8.4	85	1.9	7.6	45	.92
15	11	190	5.6	8.3	85	1.9	7.8	45	.95
16	11	180	5.3	8.2	85	1.9	8.0	45	.97
17	11	170	5.0	8.1	85	1.9	8.1	45	.98
18	11	160	4.8	8.0	80	1.7	8.4	40	.91
19	11	160	4.8	8.0	70	1.5	8.6	40	.93
20	11	170	5.0	7.8	60	1.3	8.8	40	.95
21	11	180	5.3	7.8	50	1.1	8.9	40	.96
22	11	190	5.6	7.6	40	.82	9.0	40	.97
23	11	200	5.9	7.5	30	.61	9.1	40	.98
24	11	210	6.2	7.4	20	.40	9.2	35	.87
25	11	220	6.5	7.4	20	.40	9.4	35	.89
26	11	230	6.8	7.4	20	.40	9.6	35	.91
27	11	230	6.8	7.4	20	.40	9.8	30	.79
28	11	230	6.8	7.4	20	.40	10	30	.81
29	11	240	7.1	7.3	20	.39	11	30	.89
30	11	250	7.4	7.2	20	.39	11	30	.89
31	10	260	7.0	7.2	20	.39	--	--	--
TOTAL	346.7	--	196.9	255.8	--	69.90	246.7	--	24.56

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

11415.6

334145.76

## SANTA CLARA RIVER BASIN

105

11109600 PIRU CREEK ABOVE LAKE PIRU, CALIF.

LOCATION.--Lat 34°31'40", long 118°45'21", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec.10, T.5 N., R.18 W., Ventura County, at gaging station on right bank at Blue Point, 1.0 mile downstream from Agua Blanca Creek, 4.6 miles upstream from Santa Felecia Dam, and 8.0 miles northeast of Piru.

DRAINAGE AREA.--372 sq mi.

PERIOD OF RECORD.--Specific conductance: March to September 1971.

REMARKS.--Periods of missing record due to recorder malfunction June 15 to July 26; during low flow periods, the stream meandering from probe.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(DAILY MEAN VALUES)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	965	966	---	---	1290	---
2	---	---	---	---	---	---	967	974	---	---	1300	---
3	---	---	---	---	---	---	970	976	---	---	1330	---
4	---	---	---	---	---	---	965	1010	---	---	1350	---
5	---	---	---	---	---	992	962	990	---	---	1350	---
6	---	---	---	---	---	988	954	1000	---	---	1380	1070
7	---	---	---	---	---	1030	949	1030	---	---	1410	1010
8	---	---	---	---	---	1050	954	1060	963	---	1440	---
9	---	---	---	---	---	1060	961	1050	972	---	1470	---
10	---	---	---	---	---	1060	959	1060	976	---	1480	---
11	---	---	---	---	---	1060	952	1080	989	---	---	---
12	---	---	---	---	---	1060	941	1080	1000	---	---	---
13	---	---	---	---	---	1010	929	---	1020	---	---	---
14	---	---	---	---	---	1010	939	---	1050	---	---	---
15	---	---	---	---	---	1020	1020	---	---	---	---	1120
16	---	---	---	---	---	1030	1030	---	---	---	---	1210
17	---	---	---	---	---	1030	1020	---	---	---	---	1220
18	---	---	---	---	---	1020	1030	---	---	---	---	1240
19	---	---	---	---	---	1020	1010	---	---	---	---	1200
20	---	---	---	---	---	1030	998	---	---	---	---	1230
21	---	---	---	---	---	1040	1000	---	---	---	---	1260
22	---	---	---	---	---	1050	993	---	---	---	---	1250
23	---	---	---	---	---	1030	982	---	---	---	---	1250
24	---	---	---	---	---	1030	973	1010	---	---	---	1250
25	---	---	---	---	---	1040	963	1010	---	---	---	1250
26	---	---	---	---	---	1040	955	998	---	---	---	1250
27	---	---	---	---	---	1040	952	980	---	1200	---	1250
28	---	---	---	---	---	1050	941	980	---	1200	---	1250
29	---	---	---	---	---	1040	950	---	---	1230	---	1250
30	---	---	---	---	---	1010	955	---	---	1240	---	1250
31	---	---	---	---	---	965	---	---	---	1260	---	---
MONTH	---	---	---	---	---	1030	972	---	---	---	---	---

## SANTA CLARA RIVER BASIN

11110000 PIRU CREEK NEAR PIRU, CALIF.

LOCATION.--Lat 34°25'30", long 118°45'40", in southern part of Temescal Grant, Ventura County, at gaging station on right bank, 1.8 miles northeast of Piru, and 2 miles upstream from mouth.

DRAINAGE AREA.--437 sq mi.

PERIOD OF RECORD.--Specific conductance: October 1969 to September 1971.  
Water temperatures: October 1969 to September 1970.

EXTREMES.--1970-71:

Specific conductance: Maximum, 2,200 micromhos Jan. 5, 6; minimum, 852 micromhos Aug. 16.

Period of record:

Specific conductance: Maximum, 2,550 micromhos Jan. 29, 1970; minimum, 852 micromhos Aug. 16, 1971.

REMARKS.--Periods of missing record are due to recorder malfunction Nov. 28 to Dec. 25; during low flow periods, the stream meandering from probe.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(DAILY MEAN VALUES)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	953	1110	---	1660	1330	1390	1220	1340	1120	1140	1250	1300
2	957	1130	---	1770	1330	1370	1220	1370	1110	1180	1240	1310
3	998	1140	---	1980	1300	1400	---	1460	1120	1180	1260	1290
4	1050	1150	---	2130	1280	1430	---	1330	1170	1130	1160	1300
5	1080	1120	---	2200	1260	1440	---	1240	1120	1040	1150	1330
6	1110	1220	---	2200	1230	1450	---	1270	1160	1040	1140	---
7	1120	1440	---	2080	1240	1460	---	1320	1120	1080	1150	---
8	1140	1480	---	1700	1220	1480	---	1350	1140	1080	1180	1240
9	1150	1500	---	1530	1260	1490	---	1340	1140	1080	1200	1230
10	1140	1480	---	1510	1280	1470	---	1280	1240	1100	1180	1220
11	1120	1490	---	1540	1320	1430	---	1280	1150	1060	1120	1190
12	1120	1500	---	1500	1410	1420	---	1320	1130	1160	1030	1180
13	1110	1520	---	---	1550	1420	---	1550	1080	1130	940	1160
14	1100	1460	---	---	1680	1380	---	1410	1080	---	871	1110
15	1090	1450	---	---	1610	1370	1240	1250	1070	---	855	1090
16	1100	1430	---	1310	1670	1350	1260	1230	967	---	852	1090
17	1110	1450	---	1320	1350	1360	1240	1100	990	---	889	1110
18	1120	1510	---	1390	1190	1420	1230	1090	1020	---	951	1120
19	1130	1550	---	1460	1170	1410	1210	1060	1040	---	984	1130
20	1140	1570	---	1500	1150	1390	1210	956	1020	---	1030	1170
21	1140	1590	---	1540	---	1430	1190	1010	1000	---	1060	1190
22	1110	1600	---	1550	---	---	1190	1050	1000	---	1110	1230
23	1100	1620	---	1510	---	---	1190	1080	1060	---	1150	1240
24	1110	1660	---	1410	1330	1330	1150	1130	1090	---	1190	1250
25	1110	1660	---	1320	---	1340	1200	1160	1090	---	1300	1330
26	1110	1760	1530	1280	---	1310	1220	1130	979	---	1330	1310
27	1100	1730	1510	1270	---	1290	1210	1150	1010	1170	1260	1310
28	1100	---	1500	1290	---	1290	1290	1100	1110	1200	1240	1290
29	1100	---	1530	1340	---	1290	1260	1150	1190	1230	1240	1340
30	1110	---	1630	1330	---	1300	1320	1140	1120	1240	1270	1340
31	1110	---	1660	1340	---	1240	---	1120	---	1260	1280	---
MONTH	1100	1460	---	1570	---	1380	---	1220	1090	---	1120	1230

## 1111500 SESPE CREEK NEAR WHEELER SPRINGS, CALIF.

LOCATION.--Lat 34°34'40", long 119°15'25", in SE¼NW¼SW¼ sec.30, T.6 N., R.22 W., Ventura County, temperature recorder at gaging station at Sespe Gorge, 1.6 miles upstream from Tule Creek, 5 miles upstream from Cold Springs dam-site, and 5 miles northeast of Wheeler Springs.

DRAINAGE AREA.--49.5 sq mi.

PERIOD OF RECORD.--Water temperatures: February 1962 to September 1971.  
Sediment records: Water year 1956 (partial-record station).

## EXTREMES.--1970-71:

Water temperatures: Maximum, 27.0°C Sept. 15; minimum, freezing point on several days during December and January.

Period of record:

Water temperatures: Maximum, 29.0°C Aug. 11, 1964; minimum, freezing point on several days in 1970 and 1971.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	13.0	10.5	6.5	8.0	6.0	4.5	3.0	6.5	3.5	6.5	3.5
2	17.0	10.5	10.5	7.0	9.0	7.5	3.0	2.0	6.5	3.0	8.5	3.0
3	16.5	12.0	10.0	6.0	7.0	5.0	2.0	0.0	5.5	3.5	10.0	4.5
4	16.5	11.5	10.0	8.0	6.5	4.5	2.0	0.0	5.5	3.5	11.0	8.0
5	18.0	12.0	12.0	10.0	7.0	5.0	2.0	0.0	6.0	3.0	10.0	6.0
6	18.0	12.0	13.0	11.0	7.0	5.0	2.0	0.5	6.5	4.0	10.0	4.5
7	15.0	9.5	11.5	9.5	7.0	5.5	2.0	0.0	6.5	3.5	11.0	5.5
8	13.5	7.0	10.5	8.5	8.0	5.0	3.5	1.0	6.0	3.5	11.5	7.0
9	13.5	8.0	10.5	8.5	7.0	5.5	4.0	2.0	6.5	3.0	11.0	6.0
10	15.5	10.0	11.0	9.0	5.5	4.0	4.5	2.0	8.0	4.0	11.0	8.0
11	15.5	9.0	10.5	8.0	5.0	3.5	4.0	2.0	8.0	4.5	12.0	8.0
12	13.5	8.5	10.5	8.5	4.5	3.0	5.0	4.0	8.0	4.5	12.0	8.0
13	14.0	9.0	8.5	6.0	4.5	2.0	4.5	3.5	8.5	4.5	11.0	8.0
14	13.0	8.0	9.0	6.0	4.5	3.5	4.5	3.0	8.5	4.0	10.5	6.0
15	14.0	8.5	8.5	5.5	5.5	3.5	4.5	1.5	8.5	6.0	12.0	8.0
16	13.5	8.0	8.0	5.5	5.5	4.5	4.0	1.5	7.0	5.0	11.0	7.0
17	13.0	8.0	8.5	5.5	5.5	4.0	5.5	3.0	6.5	0.5	13.0	8.5
18	10.5	7.0	9.5	7.0	4.0	1.0	6.5	3.0	8.5	3.5	12.0	8.0
19	12.0	9.0	8.5	6.0	1.0	0.0	7.0	3.5	8.0	4.0	11.0	6.5
20	11.5	8.5	8.0	5.5	2.0	0.0	7.0	4.0	5.0	1.0	13.0	6.0
21	12.0	8.5	8.0	5.5	0.5	0.0	6.5	4.0	6.5	1.5	13.5	8.0
22	12.5	8.0	8.0	5.0	3.0	0.5	6.0	2.0	6.5	3.5	13.5	9.0
23	11.5	8.5	8.0	5.5	3.5	1.5	5.5	2.0	7.0	4.0	12.0	9.0
24	11.5	9.5	8.5	6.0	3.5	1.5	5.5	2.0	9.0	3.0	13.0	9.0
25	10.0	7.0	10.0	6.5	3.5	1.5	5.5	2.0	9.0	6.0	14.0	8.5
26	10.5	6.5	10.0	8.5	4.0	3.0	5.5	2.0	7.0	3.5	14.0	10.0
27	9.0	5.5	8.5	6.0	4.0	3.5	6.0	3.0	7.0	3.5	13.5	9.5
28	8.0	4.0	8.0	6.5	4.5	2.0	6.0	1.0	6.5	3.5	13.5	8.0
29	8.0	4.0	8.0	6.0	4.5	2.0	6.0	2.0	--	--	14.0	8.0
30	10.0	5.5	8.5	6.0	4.5	2.5	6.0	3.0	--	--	14.0	9.0
31	9.5	6.0	--	--	5.0	3.5	5.5	3.0	--	--	13.0	8.0
AVE	13.0	8.5	9.5	7.0	5.0	3.2	4.7	2.1	7.1	3.6	11.8	7.3
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	6.0	15.0	9.0	15.5	10.0	21.0	14.5	25.0	16.0	20.5	12.0
2	13.5	7.0	14.0	9.0	14.5	10.5	21.0	14.5	24.5	16.5	21.0	13.0
3	14.0	8.5	13.0	8.5	16.5	11.0	21.0	14.0	22.0	15.5	20.5	13.0
4	14.5	8.5	15.5	9.0	17.0	11.0	21.5	14.0	24.0	14.5	19.0	11.0
5	14.5	8.5	16.0	10.5	18.5	11.5	21.0	14.5	24.5	15.0	19.5	11.0
6	13.0	8.5	14.0	10.5	17.0	12.0	21.0	14.5	25.0	16.5	17.0	10.5
7	13.5	8.0	13.0	9.5	19.5	13.0	21.5	14.5	24.5	15.5	24.0	10.5
8	14.0	8.5	14.0	9.0	19.5	13.0	23.0	15.0	25.0	15.0	23.5	11.0
9	14.0	8.5	15.5	10.0	18.0	13.5	23.5	15.0	26.0	14.5	24.5	13.0
10	14.0	9.0	15.5	10.5	16.5	13.0	23.5	15.0	24.0	16.5	25.5	13.0
11	14.5	9.0	16.5	10.5	19.0	12.0	21.5	13.0	23.5	15.0	25.5	12.0
12	15.0	9.0	18.0	11.5	19.5	13.5	22.0	13.5	23.5	15.5	25.0	10.5
13	14.0	9.5	18.5	13.0	20.0	13.5	23.0	14.5	23.0	16.0	25.0	13.5
14	11.5	9.5	19.0	13.0	20.5	13.5	23.0	15.5	23.0	15.0	25.0	13.0
15	14.5	9.0	19.0	13.0	21.0	13.5	24.5	16.5	23.5	15.5	27.0	14.5
16	15.0	10.0	16.5	11.5	21.0	14.5	24.0	16.5	23.5	14.5	26.0	13.5
17	14.5	9.5	15.0	8.0	21.5	15.0	24.0	17.0	23.5	15.0	26.5	13.0
18	10.5	6.0	15.5	9.0	21.5	14.5	25.5	17.0	23.0	15.0	23.5	10.0
19	12.0	6.5	16.5	10.0	21.5	15.0	25.0	17.0	21.0	12.0	20.0	6.0
20	12.0	9.5	17.0	11.0	21.5	14.5	25.5	18.0	22.0	13.5	21.0	6.5
21	11.0	6.5	16.0	10.0	21.5	14.5	25.5	18.0	21.0	13.0	20.5	8.0
22	12.0	6.0	15.5	10.0	21.5	14.5	26.0	18.0	22.0	13.5	20.5	6.0
23	14.0	8.0	18.0	10.5	23.0	15.0	25.5	16.0	21.0	13.0	19.5	5.5
24	13.5	8.5	18.5	11.5	22.0	14.0	24.0	15.5	21.0	14.0	19.5	5.5
25	11.0	8.0	18.5	12.0	21.5	14.5	24.0	14.5	23.0	14.5	17.0	6.5
26	12.0	7.0	17.0	11.5	21.5	15.0	23.5	15.0	21.5	13.5	17.0	5.5
27	14.0	8.0	14.5	11.0	21.5	15.0	23.5	15.5	22.0	14.0	17.0	6.0
28	14.0	9.5	12.0	10.0	21.0	14.5	23.5	15.0	22.0	14.5	16.5	5.5
29	15.0	9.0	15.5	9.5	20.5	13.5	24.0	16.0	23.0	14.5	18.0	6.0
30	15.0	9.5	16.5	11.5	20.5	13.5	23.5	16.0	20.0	11.5	16.5	6.0
31	--	--	14.5	10.5	--	--	24.0	15.5	21.0	13.0	--	--
AVE	13.4	8.3	15.9	10.5	19.8	13.4	23.3	15.5	23.0	14.6	21.4	9.7

## SANTA CLARA RIVER BASIN

11113000 SESPE CREEK NEAR FILLMORE, CALIF.

LOCATION.--Lat 34°27'03", long 118°55'30", in NE¼NW¼NE¼ sec.12, T.4 N., R.20 W., Ventura County, at gaging station 0.1 mile downstream from Little Sespe Creek, and 3.5 miles north of Fillmore.

DRAINAGE AREA.--251 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1971.

Specific conductance: October 1969 to September 1971.

Water temperatures: October 1966 to September 1971.

Sediment records: Water years 1956-1962 (partial-record station), October 1966 to September 1971.

EXTREMES.--1970-71:

Specific conductance: Maximum, 1,220 micromhos June 26; minimum, 526 micromhos Jan. 19.

Sediment concentrations: Maximum daily, 17,100 mg/l Nov. 29; minimum daily, 4 mg/l on several days in October.

Sediment discharge: Maximum daily, 496,000 tons Nov. 29; minimum daily, 0.01 ton Oct. 24-28.

Period of record:

Specific conductance: Maximum, 1,360 micromhos July 27, 1970; minimum (1970-71), 526 micromhos Jan. 19, 1971.

Water temperatures (1969-70): Maximum, 29.5°C July 4, 18, 20, 1970; minimum, 4.5°C Jan. 4, 1970.

Sediment concentrations: Maximum daily, 31,800 mg/l Jan. 25, 1969; minimum daily, 1 mg/l on many days in

1966-69.

Sediment discharge: Maximum daily, 2,950,000 tons Jan. 25, 1969; minimum daily, 0 tons on many days in 1968 and 1969.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)
NOV. 05...	1445	14	19.0	11.0	131	30	89	3.0	196
DEC. 02...	1400	242	--	--	88	22	37	--	160
21...	1000	1170	--	--	45	8.0	12	--	96
JAN. 21...	1400	318	13.0	11.1	81	22	29	2.0	176
MAR. 15...	1045	67	--	--	106	27	56	--	218
APR. 20...	1330	43	13.0	10.2	108	30	64	2.0	184
JULY 13...	1245	3.7	27.0	8.9	101	25	79	3.0	170

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)
NOV. 05...	0	319	103	1.1	.5	1400	817	1.11	30.9
DEC. 02...	0	223	23	.7	--	550	537	.73	351
21...	0	80	11	.4	9.0	320	303	.41	958
JAN. 21...	0	185	10	.6	.6	240	411	.56	353
MAR. 15...	0	269	29	.9	.0	650	600	.82	109
APR. 20...	12	294	35	1.0	.1	880	663	.90	77.0
JULY 13...	0	285	60	1.0	.8	1550	635	.86	6.34

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINIT AS CAC03 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)
NOV. 05...	451	290	161	30	1.8	1190	8.1	<25
DEC. 02...	310	179	131	--	.9	761	8.0	--
21...	144	65	79	--	.4	399	7.8	--
JAN. 21...	293	149	144	18	.7	649	8.2	--
MAR. 15...	--	--	179	--	1.3	914	7.7	--
APR. 20...	393	222	171	26	1.4	939	8.4	<25
JULY 13...	355	216	139	32	1.8	893	7.5	<25



## SANTA CLARA RIVER BASIN

11113000 SESPE CREEK NEAR FILLMORE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.76	10	.02	6.8	6	.11	484	230	308
2	.76	20	.04	6.8	6	.11	255	200	138
3	.76	32	.07	7.3	8	.16	242	120	78
4	3.1	35	.29	7.3	8	.16	131	55	19
5	6.8	40	.73	10	10	.27	92	38	9.4
6	7.8	45	.95	13	10	.35	76	30	6.2
7	8.2	45	1.0	14	8	.30	71	25	4.8
8	7.8	40	.84	12	10	.32	67	25	4.5
9	7.3	35	.69	12	10	.32	64	20	3.5
10	7.3	30	.59	12	10	.32	60	20	3.2
11	6.8	25	.46	11	10	.30	56	15	2.3
12	5.2	20	.28	11	10	.30	53	15	2.1
13	4.3	15	.17	11	10	.30	48	12	1.6
14	4.9	10	.13	11	10	.30	52	10	1.4
15	5.5	10	.15	11	10	.30	44	10	1.2
16	6.0	8	.13	12	10	.32	56	110	17
17	6.0	8	.13	11	10	.30	64	160	28
18	6.0	6	.10	6.0	10	.16	219	700	892
19	6.0	6	.10	2.5	10	.07	430	1250	1510
20	6.0	4	.06	1.8	10	.05	344	966	1050
21	6.0	4	.06	1.8	10	.05	1200	6360	27600
22	2.8	4	.03	1.8	10	.05	345	290	270
23	1.4	4	.02	1.4	10	.04	278	140	105
24	1.1	4	.01	1.3	10	.04	252	105	71
25	.99	4	.01	6.7	45	.81	234	85	54
26	.99	4	.01	21	140	7.9	248	95	64
27	.99	4	.01	19	70	3.6	318	230	197
28	.85	4	.01	230	1010	3000	268	120	87
29	3.6	6	.06	8730	17100	496000	244	85	56
30	6.8	6	.11	1740	2140	17500	264	115	82
31	6.8	6	.11	--	--	--	322	240	209
TOTAL	139.60	--	7.37	10942.5	--	516517.31	6881	--	32875.2

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	350	350	331	102	15	4.1	69	17	3.2
2	350	350	331	98	15	4.0	67	17	3.1
3	300	190	154	92	15	3.7	66	16	2.9
4	252	95	65	86	15	3.5	64	16	2.8
5	234	70	44	80	15	3.2	62	16	2.7
6	192	30	16	76	15	3.1	59	16	2.5
7	175	25	12	73	15	3.0	58	15	2.3
8	166	20	9.0	67	15	2.7	56	15	2.3
9	159	15	6.4	67	15	2.7	54	15	2.2
10	153	14	5.8	69	15	2.8	52	15	2.1
11	148	14	5.6	67	15	2.7	50	15	2.0
12	211	210	144	62	15	2.5	52	34	5.6
13	264	81	58	59	15	2.4	114	332	132
14	238	28	18	59	15	2.4	78	47	9.9
15	213	25	14	59	15	2.4	67	30	5.4
16	202	60	33	79	34	11	64	25	4.3
17	342	210	212	308	607	547	62	20	3.3
18	585	388	627	183	155	77	60	20	3.2
19	472	210	268	145	45	18	56	15	2.3
20	400	137	148	122	21	6.9	54	14	2.0
21	318	120	103	110	20	5.9	53	13	1.9
22	238	95	61	98	19	5.0	53	13	1.9
23	199	90	48	92	19	4.7	53	13	1.9
24	185	85	42	86	18	4.2	53	13	1.9
25	179	82	40	80	18	3.9	53	13	1.9
26	172	75	35	74	17	3.4	53	13	1.9
27	163	65	29	71	17	3.3	53	12	1.7
28	145	45	18	69	17	3.2	52	11	1.5
29	133	30	11	--	--	--	48	15	1.9
30	120	15	4.9	--	--	--	47	20	2.5
31	110	15	4.5	--	--	--	44	24	2.9
TOTAL	7368	--	2898.2	2633	--	738.7	1826	--	218.0



SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	6.4	8	.14	2.0	10	.05	1.5	15	.06
2	6.8	8	.15	2.1	10	.06	1.4	15	.06
3	8.2	10	.22	2.6	12	.08	1.4	15	.06
4	8.2	10	.22	2.3	10	.06	1.5	20	.08
5	8.2	10	.22	2.2	10	.06	1.3	25	.09
6	8.2	10	.22	1.6	10	.04	1.5	30	.12
7	8.2	10	.22	1.5	10	.04	1.4	25	.09
8	7.8	10	.21	1.4	10	.04	1.4	25	.09
9	6.4	10	.17	1.4	10	.04	1.4	25	.09
10	5.2	10	.14	1.6	10	.04	1.4	20	.08
11	3.7	10	.10	2.6	15	.11	1.4	20	.08
12	2.8	10	.08	2.0	15	.08	1.2	20	.06
13	3.4	10	.09	1.8	15	.07	1.5	25	.10
14	3.7	10	.10	1.7	15	.07	1.5	25	.10
15	3.1	10	.08	1.5	15	.06	1.6	25	.11
16	3.1	10	.08	1.5	15	.06	1.2	20	.06
17	3.4	10	.09	1.6	15	.06	1.1	20	.06
18	2.8	10	.08	1.8	20	.10	.95	15	.04
19	1.1	10	.03	1.7	20	.09	1.2	15	.05
20	1.3	10	.04	1.8	20	.10	1.1	15	.04
21	1.6	10	.04	1.6	15	.06	1.2	15	.05
22	2.0	15	.08	1.4	15	.06	1.2	15	.05
23	1.8	15	.07	1.4	15	.06	1.4	15	.06
24	2.3	15	.09	1.6	15	.06	1.4	15	.06
25	3.1	18	.15	1.8	20	.10	1.4	15	.06
26	2.8	17	.13	2.1	20	.11	1.4	15	.06
27	2.8	16	.12	1.7	20	.09	1.5	15	.06
28	13	40	1.4	1.5	15	.06	1.6	15	.06
29	2.1	30	.17	1.5	15	.06	1.7	15	.07
30	2.0	20	.11	1.4	15	.06	1.7	15	.07
31	2.0	15	.08	1.4	15	.06	--	--	--
TOTAL	137.5	--	5.12	54.1	--	2.09	41.45	--	2.12

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)  
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

32253.65  
553363.33

## SANTA CLARA RIVER BASIN

11113000 SESPE CREEK NEAR FILLMORE, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (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
NOV. 29...	0810	13.0	8000	17600	380000	13	17	23	36	47
DEC. 21...	0730	5.0	1610	10800	46800	20	25	30	42	52
22...	1230	7.0	350	275	260	33	50	63	75	84

DATE	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL 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 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
NOV. 29...	57	--	72	--	88	--	98	100	--
DEC. 21...	59	--	63	--	72	--	84	99	100
22...	--	91	--	92	--	100	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED	BED	BED	BED	BED
			MAT. SIEVE DIAM. % FINER THAN .062 MM	MAT. SIEVE DIAM. % FINER THAN .125 MM	MAT. SIEVE DIAM. % FINER THAN .250 MM	MAT. SIEVE DIAM. % FINER THAN .500 MM	MAT. SIEVE DIAM. % FINER THAN 1.00 MM
AUG. 03...	5	2.6	4	9	19	31	39

11113300 SANTA CLARA RIVER NEAR SANTA PAULA, CALIF.

LOCATION.--Lat 34°21'14", long 119°01'38", in sec.12, T.3 N., R.21 W., Ventura County, 1.5 miles upstream from Santa Paula bridge, and 1.8 miles east of Santa Paula.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1971.

REMARKS.--Records furnished by California Department of Water Resources. No discharge records available.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
NOV. 05...	1415	18.5	10.1	162	61	102	6.0	252	0	560	46	1.0
DEC. 02...	1330	--	--	133	40	72	--	202	0	408	35	.8
JAN. 21...	1315	14.5	10.5	82	24	41	2.0	181	0	210	16	.5
MAR. 15...	1000	--	--	163	48	97	--	312	0	480	46	.9
APR. 20...	1300	15.0	10.1	117	42	84	3.0	237	0	377	36	.7
JULY 13...	1200	25.0	12.8	130	59	118	5.0	207	0	550	51	.8

DATE	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)
NOV. 05...	12	720	1160	1.58	655	448	207	25	1.7	1490	8.2	<25
DEC. 02...	15	590	862	1.17	495	329	166	--	1.4	1210	7.9	--
JAN. 21...	3.0	270	452	.61	303	155	148	23	1.0	716	8.2	--
MAR. 15...	7.0	600	990	1.35	--	--	256	--	1.7	1370	7.6	--
APR. 20...	6.0	570	836	1.14	465	271	194	28	1.7	1130	8.0	120
JULY 13...	11	760	1120	1.52	567	397	170	31	2.2	1460	8.0	<25

## SANTA CLARA RIVER BASIN

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CALIF.

LOCATION.--Lat 34°23'44", long 119°04'32", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.27, T.4 N., R.21 W., Ventura County, at gaging station on right bank, 15 ft upstream from Santa Paula Water Works diversion dam, 200 ft upstream from Mud Creek, and 3 miles north of Santa Paula.

DRAINAGE AREA.--40.0 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1971.

Specific conductance: April 1969 to September 1971.

Water temperatures: April 1969 to September 1970.

EXTREMES.--1970-71:

Specific conductance: Maximum, 1,090 micromhos Nov. 5, 6, 14, 26, 27; minimum recorded, 477 micromhos Jan. 23.

Period of record:

Specific conductance: Maximum, 1,090 micromhos Nov. 5, 6, 14, 26, 27, 1970; minimum recorded, 477 micromhos Jan. 23, 1971.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	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)
NOV.									
05...	1345	3.7	19.0	95	35	96	3.0	240	0
DEC.									
02...	1145	A 85	--	96	26	44	--	190	0
21...	0900	A 280	--	62	17	29	--	113	0
JAN.									
21...	1245	A 106	13.5	57	14	22	1.0	142	0
MAR.									
15...	0900	14	--	98	22	46	--	229	0
APR.									
20...	1130	12	13.5	96	26	52	2.0	242	0
JULY									
13...	1130	6.6	26.5	66	27	61	2.0	164	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA+MG) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
NOV.									
05...	274	73	.6	3.5	430	746	381	1120	8.0
DEC.									
02...	240	25	.4	7.0	220	550	346	840	8.0
21...	164	16	.4	11	290	380	223	592	7.7
JAN.									
21...	113	9.0	.4	1.5	110	294	200	467	8.1
MAR.									
15...	213	23	.5	.0	150	508	--	833	7.9
APR.									
20...	208	25	.5	.2	200	547	347	825	8.2
JULY									
13...	218	32	.5	.5	300	495	276	766	7.4

DATE	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	ALKA- LINITY AS CACO3 (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
NOV.								
05...	9.1	<25	7.45	1.01	197	184	35	2.1
DEC.								
02...	--	--	126	.75	156	190	--	1.0
21...	--	--	287	.52	93	130	--	.8
JAN.								
21...	10.8	<25	84.1	.40	116	84	19	.7
MAR.								
15...	--	--	19.2	.69	188	--	--	1.1
APR.								
20...	10.4	<25	17.7	.74	198	148	24	1.2
JULY								
13...	8.6	<25	8.82	.67	135	141	32	1.6

A Daily mean discharge.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(DAILY MEAN VALUES)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	905	1030	---	---	624	789	800	802	790	909	773	872
2	930	1020	---	---	633	790	841	807	800	900	783	861
3	939	1020	---	---	636	790	826	800	800	890	782	853
4	954	1060	---	---	653	780	821	779	810	890	782	847
5	981	1090	---	---	677	800	817	783	810	890	791	843
6	1020	1090	---	---	666	825	831	788	820	890	798	844
7	1030	1070	---	---	679	830	808	784	820	890	810	841
8	1060	1070	---	---	688	840	797	792	830	880	828	890
9	1060	1050	---	---	694	850	785	794	840	880	845	909
10	1070	1050	---	660	712	850	782	798	840	900	861	922
11	1060	1040	---	680	726	860	779	803	850	880	852	937
12	1050	1060	---	690	740	860	771	790	860	820	853	931
13	1080	1040	---	---	741	860	766	806	860	872	860	985
14	1080	1090	---	---	745	860	740	802	850	868	865	979
15	1080	1060	930	580	751	870	716	801	850	863	855	953
16	1070	1060	905	649	767	890	725	793	850	865	852	952
17	1060	1050	910	524	760	880	725	828	850	856	857	938
18	1050	1060	---	576	750	860	735	807	850	850	847	943
19	1030	1060	---	661	751	850	738	777	855	837	839	968
20	1040	1050	---	665	751	840	752	789	860	817	827	974
21	1030	1060	---	664	759	830	750	767	851	806	833	984
22	1020	1050	---	517	764	820	761	753	853	786	847	998
23	990	1050	---	477	766	820	769	742	853	775	839	1000
24	947	1050	---	508	772	810	778	726	852	772	823	1020
25	968	1080	---	534	771	810	783	711	851	776	809	1020
26	1000	1090	---	552	771	810	788	726	850	773	822	1020
27	1040	1090	---	568	761	800	790	720	859	772	800	1010
28	1060	---	---	577	773	800	796	730	870	781	911	1010
29	1040	---	700	590	---	800	781	740	880	760	913	1010
30	1030	---	690	602	---	800	787	750	880	774	898	1010
31	1020	---	651	617	---	800	---	770	---	778	883	---
MONTH	1020	1060	---	---	724	828	778	776	843	839	837	944

## SANTA CLARA RIVER BASIN

11113900 SATICOY DIVERSION NEAR SATICOY, CALIF.

LOCATION.--Lat 34°17'06", long 119°07'14", in Santa Paula Y Saticoy Grant, Ventura County, at gaging station on diversion ditch, 0.7 mile downstream from Santa Clara River, and 1.5 miles east of Saticoy.

PERIOD OF RECORD.--Specific conductance: April 1969 to September 1971.

Water temperatures: April 1969 to September 1970.

EXTREMES.--1970-71:

Specific conductance: Maximum, 1,920 micromhos Nov. 16; minimum, 825 micromhos Jan. 19.

Period of record:

Specific conductance: Maximum, 1,920 micromhos Nov. 16, 1970; minimum, 825 micromhos Jan. 19, 1971.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(DAILY MEAN VALUES)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1440	---	965	1060	1290	1400	1490	1510	1600	1610	1770
2	1470	1420	---	945	1030	1320	1360	1470	1540	1590	1630	1800
3	1440	1420	---	980	1050	1300	1390	1450	1540	1590	1650	1790
4	---	1490	---	1060	1080	1300	---	1440	1540	1590	1650	1820
5	---	1480	---	1120	1090	1320	---	1480	1520	1570	1650	1810
6	1520	1400	1340	1190	1100	1360	---	1510	1560	1580	1660	1840
7	1510	1460	1320	1240	1120	1360	---	1480	1570	1570	1660	1820
8	1550	1510	1350	1270	1140	1390	---	1450	1580	1570	1660	1720
9	1580	1600	1360	1280	1160	---	---	1460	1580	1590	1650	1860
10	1570	1630	1420	1300	1190	---	---	1460	1580	1600	1640	1860
11	1530	1640	1530	1310	1190	---	---	1500	1580	1610	1650	1860
12	1470	1700	1480	1260	1220	1390	---	1500	1550	1630	1690	1840
13	1470	1680	1500	1160	1240	1360	---	1510	1600	1690	1700	1820
14	1480	1890	1440	1200	1250	1350	1250	1530	1520	1680	1690	1900
15	1560	1880	1500	1120	1260	1360	1240	1540	1530	1680	1700	1850
16	1510	1920	1510	1050	1260	1400	1260	1530	1550	1660	1710	1800
17	1440	1860	1480	960	1140	1400	1320	1530	1550	1640	1710	1770
18	1410	1840	---	870	1110	1430	1330	1550	1450	1570	1710	1770
19	1350	1840	---	825	1130	---	1270	1590	1490	1540	1720	1770
20	1310	1750	---	870	1230	---	1280	1590	1480	1570	1730	1770
21	1300	1760	---	910	1240	---	1280	1580	1500	1550	1720	1750
22	1300	1780	---	970	1250	---	1290	1570	1530	1540	1710	1750
23	1350	1790	---	945	1260	1380	1290	1550	1550	1540	1670	1800
24	1390	1730	---	920	1260	1370	1290	1520	1550	1530	1670	1780
25	1430	1680	1240	950	---	1380	1300	1530	1570	1530	1500	1780
26	1490	1620	1230	975	1270	1380	1290	1550	1570	1520	1700	1780
27	---	1660	1060	990	1320	1360	1300	1550	1580	1540	1720	1770
28	---	1710	1040	1030	1300	1360	---	1530	1550	1550	1730	1780
29	1450	---	1010	1050	---	1350	---	1510	1660	1600	1740	1790
30	1330	---	1000	1080	---	1370	1460	1530	1600	1570	1780	1780
31	1380	---	1070	1060	---	1370	---	1510	---	1580	1760	---
MONTH	1450	1660	---	1060	1180	---	---	1520	1550	1590	1680	1800

LOCATION.--Lat 34°14'31", long 119°11'21", in San Miguel Grant, Ventura County, at gaging station on southbound bridge on U.S. Highway 101, and 0.9 mile southeast of Montalvo.

PERIOD OF RECORD.--Water temperatures: October 1967 to September 1969, October 1970 to September 1971.  
Sediment records: October 1967 to September 1971.  
Prior to October 1969, published as "at Saticoy" (sta 11113920).

Sediment concentrations: Maximum daily, 36,100 mg/l Nov. 29; minimum daily, no flow for several days during November.

Sediment discharge: Maximum daily, 1,680,000 tons Nov. 29; minimum daily, 0 tons on many days.

Sediment concentrations: Maximum daily, 69,200 mg/l Feb. 25, 1969; minimum daily, no flow for many days in 1967-70.

Sediment discharge: Maximum daily, 20,400,000 tons Feb. 25, 1969; minimum daily, 0 tons on many days each year.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

[illegible]

## SANTA CLARA RIVER BASIN

11114000 SANTA CLARA RIVER AT MONTALVO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970-TO SEPTEMBER 1971

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	.11	10	0	0	0	0	565	3000	4580
2	.12	10	0	0	0	0	513	5000	6930
3	.10	10	0	0	0	0	390	4000	4210
4	.08	10	0	0	0	0	272	2600	1910
5	.05	10	0	0	0	0	230	2200	1370
6	.04	10	0	0	0	0	25	180	12
7	.03	10	0	0	0	0	1.0	175	.47
8	.03	10	0	0	0	0	.90	35	.08
9	.03	10	0	0	0	0	.80	30	.07
10	.03	10	0	0	0	0	.80	25	.05
11	.03	10	0	0	0	0	.80	25	.05
12	.03	10	0	0	0	0	.80	25	.05
13	.03	10	0	0	0	0	.80	25	.05
14	.03	10	0	0	0	0	.80	25	.05
15	.03	10	0	0	0	0	.90	25	.06
16	.04	10	0	0	0	0	3.0	25	.20
17	.04	10	0	0	0	0	100	370	100
18	.04	10	0	0	0	0	1170	5810	72600
19	.04	10	0	.10	5	0	2720	19700	182000
20	.04	10	0	.10	5	0	678	3500	6410
21	.04	10	0	.10	5	0	3890	27700	339000
22	.04	10	0	.10	5	0	923	6700	16700
23	.04	10	0	.10	5	0	300	2000	1620
24	.04	10	0	.10	5	0	100	1300	351
25	.04	10	0	.10	5	0	60	900	146
26	.04	10	0	.10	5	0	30	400	32
27	.04	10	0	.10	5	0	20	300	16
28	.04	10	0	209	2000	1130	15	135	5.5
29	.04	10	0	14300	36100	1680000	12	40	1.3
30	.04	10	0	2660	7680	72800	9.0	25	.61
31	.04	10	0	--	--	--	7.0	25	.47
TOTAL	1.41	--	0	17169.90	--	1753930	12039.60	--	637996.01

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	6.0	470	7.6	14	5	.19	150	60	24
2	5.0	430	5.8	14	20	.76	130	30	11
3	4.0	230	2.5	9.0	40	.97	80	4	.86
4	3.5	120	1.1	5.0	50	.68	50	3	.41
5	3.0	10	.08	3.5	40	.38	30	3	.24
6	2.5	75	.51	3.0	30	.24	20	2	.11
7	2.1	50	.28	2.0	20	.11	10	2	.05
8	1.9	50	.26	1.7	10	.05	7.0	4	.08
9	1.9	50	.26	1.4	10	.04	4.0	6	.06
10	1.9	50	.26	1.2	10	.03	2.5	7	.05
11	2.5	200	1.4	1.0	10	.03	1.8	7	.03
12	3.1	570	4.8	1.0	10	.03	11	1300	39
13	70	1300	246	1.0	10	.03	10	2100	57
14	57	540	83	1.1	15	.04	9.5	1900	49
15	50	330	45	1.2	20	.06	9.0	1630	40
16	45	200	24	30	400	32	8.0	600	13
17	100	1000	270	170	1500	689	7.0	460	8.7
18	450	5400	6560	38	420	43	5.0	3	.04
19	400	4000	4320	35	250	24	4.0	12	.13
20	350	3500	3310	31	200	17	3.0	15	.12
21	200	1900	1030	32	200	17	2.7	15	.11
22	160	1500	648	40	100	11	2.5	20	.14
23	70	450	85	100	340	92	2.4	20	.13
24	40	240	26	180	450	219	2.3	25	.16
25	30	200	16	190	1010	518	2.2	25	.15
26	20	150	8.1	190	450	231	2.2	25	.15
27	15	250	10	180	250	122	2.1	25	.14
28	11	400	12	170	125	57	2.1	25	.14
29	12	200	6.5	--	--	--	2.1	25	.14
30	12	100	3.2	--	--	--	2.1	25	.14
31	13	50	1.8	--	--	--	2.1	30	.17
TOTAL	2142.4	--	16729.45	1446.1	--	2075.64	576.6	--	245.45



## 11114000 SANTA CLARA RIVER AT MONTALVO, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.1	30	.17	.31	15	.01	.29	4	0
2	2.1	30	.17	.29	10	.01	.29	4	0
3	2.1	30	.17	.29	10	.01	.28	4	0
4	2.0	30	.16	.30	10	.01	.28	4	0
5	1.5	30	.12	.40	15	.02	.28	4	0
6	1.0	30	.08	.56	20	.03	.28	4	0
7	.80	30	.06	.57	20	.03	.28	4	0
8	.53	30	.04	.56	20	.03	.28	4	0
9	.52	30	.04	.55	20	.03	.28	3	0
10	.60	30	.05	.52	20	.03	.28	3	0
11	.90	30	.07	.50	20	.03	.28	3	0
12	1.5	4	.02	.48	20	.03	.28	3	0
13	10	150	4.1	.46	20	.02	.28	3	0
14	58	450	70	.44	15	.02	.28	3	0
15	40	400	43	.42	15	.02	.28	3	0
16	30	320	26	.40	15	.02	.28	3	0
17	20	240	13	.38	15	.02	.29	3	0
18	12	150	4.9	.37	15	.01	.30	3	0
19	9.0	125	3.0	.36	10	.01	.31	2	0
20	6.0	90	1.5	.35	10	.01	.32	2	0
21	4.0	75	.81	.35	10	.01	.33	2	0
22	2.8	50	.38	.34	10	.01	.35	2	0
23	2.2	40	.24	.33	10	.01	.36	2	0
24	1.9	40	.21	.33	10	.01	.37	2	0
25	1.5	35	.14	.32	5	0	.37	2	0
26	1.3	35	.12	.32	5	0	.37	2	0
27	1.1	30	.09	.32	5	0	.37	2	0
28	1.0	30	.08	.31	5	0	.36	2	0
29	.60	25	.04	.31	5	0	.35	4	0
30	.40	20	.02	.30	5	0	.33	4	0
31	--	--	--	.30	5	0	--	--	--
TOTAL	217.45	--	168.78	12.04	--	.44	9.28	--	0

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.30	4	0	.04	15	0	.04	10	0
2	.27	4	0	.04	15	0	.04	10	0
3	.24	6	0	.04	15	0	.04	10	0
4	.21	6	0	.04	15	0	.04	10	0
5	.18	6	0	.04	15	0	.04	10	0
6	.16	6	0	.04	15	0	.04	10	0
7	.14	8	0	.04	15	0	.04	10	0
8	.12	8	0	.04	15	0	.04	10	0
9	.10	8	0	.04	15	0	.04	10	0
10	.09	10	0	.04	15	0	.04	10	0
11	.08	10	0	.04	15	0	.04	10	0
12	.08	10	0	.03	15	0	.04	10	0
13	.08	10	0	.03	15	0	.04	10	0
14	.08	10	0	.03	15	0	.04	10	0
15	.08	10	0	.03	15	0	.04	10	0
16	.07	10	0	.03	15	0	.04	10	0
17	.06	10	0	.03	15	0	.04	10	0
18	.06	10	0	.03	15	0	.04	10	0
19	.06	10	0	.03	15	0	.04	10	0
20	.06	10	0	.03	15	0	.04	10	0
21	.06	10	0	.03	15	0	.04	10	0
22	.06	10	0	.03	15	0	.04	10	0
23	.06	15	0	.03	15	0	.04	10	0
24	.06	15	0	.03	15	0	.04	10	0
25	.06	15	0	.03	15	0	.04	10	0
26	.05	15	0	.03	15	0	.04	10	0
27	.05	15	0	.03	10	0	.04	10	0
28	.05	15	0	.04	10	0	.04	10	0
29	.05	15	0	.04	10	0	.04	10	0
30	.05	15	0	.04	10	0	.04	10	0
31	.05	15	0	.04	10	0	--	--	--
TOTAL	3.12	--	0	1.08	--	0	1.20	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)  
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

33620.18  
 2411145.77

## SANTA CLARA RIVER BASIN

11114000 SANTA CLARA RIVER AT MONTALVO, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (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
DEC. 21...	0700	15.0	6100	45900	756000	22	30	36	50	63
21...	1200	15.0	5400	36600	534000	26	33	40	60	74
JAN. 04...	0700	14.0	3.5	1150	11	9	13	17	20	22

DATE	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
DEC. 21...	--	74	--	82	--	92	--	98	--	100
21...	--	83	--	90	--	96	--	98	--	100
JAN. 04...	24	--	28	--	55	--	96	--	100	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	NUMBER OF SAM- PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
AUG. 02...	1045	25.5	.04	3	1	4	16

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
AUG. 02...	30	48	64	80	93	98	100

## 11118500 VENTURA RIVER NEAR VENTURA, CALIF.

LOCATION.--Lat 34°21'08", long 119°18'27", in southeast corner of Santa Ana Grant, Ventura County, at gaging station 50 ft downstream from county road bridge at Foster Memorial Park, 0.2 mile downstream from Coyote Creek, and 5 miles north of Ventura.

DRAINAGE AREA.--188 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): December 1907 to December 1908, October 1966 to September 1968, water years 1969-71 (partial-record station).

Water temperatures: October 1968 to September 1969, October 1970 to September 1971.

Sediment records: October 1968 to September 1971.

## EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 3,800 mg/l Nov. 29; minimum daily, no flow for many days.

Sediment discharge: Maximum daily, 14,500 tons Nov. 29; minimum daily, 0 tons on many days.

Period of record:

Sediment concentrations: Maximum daily, 32,000 mg/l (estimated) Jan. 25, 1969; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 2,220,000 tons (estimated) Jan. 25, 1969; minimum daily, 0 tons on many days each year.

REMARKS.--Prior to June 1969, at site 450 ft downstream. Chemical-quality records furnished by California Department of Water Resources. No flow Oct. 10-22, Nov. 4, 13-26, Sept. 14, 16-30.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (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)
NOV. 04...	0900	.01	14.0	8.3	129	39	77	2.0	310
JAN. 20...	1200	21	16.0	11.6	107	35	58	2.0	206
APR. 19...	1030	15	15.5	11.8	121	32	56	2.0	263
JULY 12...	1800	3.1	23.0	8.9	104	35	57	3.0	217

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)
NOV. 04...	0	280	66	.6	1.2	600	792	1.08	.02
JAN. 20...	0	273	50	.5	13	440	664	.90	37.6
APR. 19...	0	260	44	.6	14	420	699	.95	28.3
JULY 12...	0	265	44	.5	9.4	460	663	.90	5.55

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)
NOV. 04...	483	229	254	26	1.5	1160	7.6	<25
JAN. 20...	411	242	169	23	1.2	972	8.0	<25
APR. 19...	434	218	216	22	1.2	998	8.1	<25
JULY 12...	404	226	178	23	1.2	938	7.5	<25

## VENTURA RIVER BASIN

11118500 VENTURA RIVER NEAR VENTURA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	--	15.0	--	--	14.5	--	--	19.5	--	--	--
2	--	--	15.0	--	--	--	20.0	--	--	--	21.0	--
3	22.0	--	--	--	--	--	--	--	20.0	--	--	21.0
4	--	--	--	--	15.0	--	--	--	--	--	--	--
5	--	16.0	--	--	--	--	--	--	--	--	--	--
6	--	16.0	--	--	--	17.0	--	17.0	--	--	23.0	--
7	--	--	--	--	--	--	--	14.0	--	21.0	--	--
8	--	--	--	--	--	--	19.0	--	--	--	--	--
9	--	--	15.0	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	9.5	19.0	18.0	--	--	--	--	--	--
12	--	--	--	12.0	--	--	--	--	--	--	--	--
13	--	--	--	10.5	--	13.0	--	20.0	--	--	--	--
14	--	--	15.0	10.0	--	11.0	15.0	--	--	--	--	--
15	--	--	--	9.0	--	--	--	--	--	--	--	--
16	--	13.0	--	--	14.0	--	--	--	25.0	--	--	--
17	19.0	--	--	--	11.0	--	--	--	--	--	--	21.0
18	--	--	--	--	11.0	14.0	--	--	--	--	--	--
19	--	--	9.0	--	--	--	--	--	--	--	--	--
20	--	--	13.0	--	--	--	--	20.0	--	--	--	--
21	--	--	11.0	14.0	--	--	--	--	--	22.0	22.0	--
22	--	--	10.0	--	--	--	18.0	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	15.0	15.0	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	17.5	--
27	15.5	--	--	12.5	--	--	19.5	--	--	18.5	--	--
28	--	12.0	8.0	17.0	--	--	--	15.0	--	--	--	--
29	--	13.0	--	--	--	22.5	17.0	--	--	--	--	--
30	--	13.0	--	--	--	--	--	--	20.5	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.02	60	0	.07	70	.01	7.2	20	.39
2	.02	55	0	.06	70	.01	11	15	.45
3	.02	50	0	.03	70	.01	8.6	10	.23
4	.02	50	0	0	0	0	7.2	10	.19
5	.04	50	.01	.01	35	0	5.9	10	.16
6	.27	50	.04	.41	35	.04	6.0	10	.16
7	.31	50	.04	.70	35	.07	6.0	10	.16
8	.49	50	.07	.83	35	.08	6.1	10	.16
9	.04	50	.01	.68	35	.06	16	31	1.5
10	0	0	0	.37	35	.03	8.2	15	.33
11	0	0	0	.12	35	.01	4.7	10	.13
12	0	0	0	.01	35	0	3.3	8	.07
13	0	0	0	0	0	0	3.4	6	.06
14	0	0	0	0	0	0	4.1	3	.03
15	0	0	0	0	0	0	3.8	2	.02
16	0	0	0	0	0	0	7.2	10	.19
17	0	0	0	0	0	0	7.2	15	.29
18	0	0	0	0	0	0	518	1440	6740
19	0	0	0	0	0	0	438	1980	4020
20	0	0	0	0	0	0	62	185	41
21	0	0	0	0	0	0	821	3260	11700
22	0	0	0	0	0	0	90	180	44
23	.04	50	.01	0	0	0	36	55	5.3
24	.04	50	.01	0	0	0	27	40	2.9
25	.06	55	.01	0	0	0	24	35	2.3
26	.08	55	.01	0	0	0	24	35	2.3
27	.09	55	.01	.43	15	.02	23	35	2.2
28	.09	60	.01	1.2	15	.05	20	30	1.6
29	.16	60	.03	870	3800	14500	18	25	1.2
30	.13	60	.02	50	190	35	19	25	1.3
31	.09	65	.02	--	--	--	18	25	1.2
TOTAL	2.01	--	.30	924.92	--	14535.39	2253.9	--	22569.82

## 11118500 VENTURA RIVER NEAR VENTURA, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	17	20	.92	12	10	.32	14	5	.19
2	19	25	1.3	12	9	.29	16	6	.26
3	17	25	1.1	13	8	.28	18	8	.39
4	18	25	1.2	12	6	.19	19	9	.46
5	18	25	1.2	13	8	.28	18	8	.39
6	16	20	.86	15	10	.41	19	8	.41
7	16	20	.86	13	15	.53	16	7	.30
8	15	20	.81	11	20	.59	15	6	.24
9	15	20	.81	11	20	.59	15	5	.20
10	15	20	.81	12	25	.81	16	4	.17
11	21	60	3.4	12	25	.81	15	3	.12
12	33	42	4.1	12	20	.65	17	4	.18
13	58	107	23	7.4	15	.30	39	48	6.4
14	27	40	2.9	9.3	20	.50	21	7	.40
15	19	25	1.3	11	20	.59	16	6	.26
16	16	20	.86	17	25	1.1	14	5	.19
17	17	20	.92	47	184	32	16	5	.22
18	16	20	.86	18	25	1.2	14	4	.15
19	18	15	.73	13	20	.70	14	4	.15
20	21	15	.85	10	15	.41	14	4	.15
21	22	15	.89	12	15	.49	16	3	.13
22	22	15	.89	12	10	.32	15	3	.12
23	19	15	.77	12	10	.32	15	3	.12
24	18	15	.73	10	8	.22	15	3	.12
25	19	20	1.0	12	7	.23	15	3	.12
26	20	25	1.4	11	6	.18	15	5	.20
27	17	20	.92	11	5	.15	17	20	.92
28	14	20	.76	11	4	.12	17	18	.83
29	13	15	.53	--	--	--	14	16	.60
30	13	15	.53	--	--	--	12	10	.32
31	12	15	.49	--	--	--	14	8	.30
TOTAL	601	--	57.70	371.7	--	44.58	511	--	15.01

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	15	6	.24	12	10	.32	12	15	.49
2	15	5	.20	10	10	.27	11	15	.45
3	13	5	.18	11	10	.30	8.8	15	.36
4	13	4	.14	11	10	.30	5.8	10	.16
5	11	4	.12	8.3	10	.22	10	15	.41
6	8.5	3	.07	11	10	.30	14	15	.57
7	8.7	5	.12	15	10	.41	9.6	15	.39
8	10	8	.22	13	10	.35	7.7	15	.31
9	9.3	8	.20	17	15	.69	7.6	15	.31
10	5.0	6	.08	15	15	.61	4.1	10	.11
11	9.8	8	.21	13	10	.35	8.1	15	.33
12	9.0	7	.17	15	10	.41	7.6	15	.31
13	7.3	6	.12	16	15	.65	7.0	15	.28
14	17	15	.69	14	15	.57	7.0	15	.28
15	14	10	.38	19	20	1.0	7.0	15	.28
16	13	10	.35	14	15	.57	6.0	15	.24
17	14	10	.38	11	10	.30	6.0	15	.24
18	12	9	.29	6.9	8	.15	6.0	15	.24
19	14	8	.30	7.3	8	.16	6.0	15	.24
20	10	6	.16	8.6	10	.23	6.0	15	.24
21	7.2	5	.10	8.0	9	.19	6.0	15	.24
22	11	3	.09	8.8	8	.19	6.0	15	.24
23	9.3	3	.08	9.9	7	.19	5.0	15	.20
24	7.0	3	.06	13	10	.35	5.0	20	.27
25	8.1	4	.09	12	8	.26	5.0	20	.27
26	10	8	.22	8.1	6	.13	5.0	20	.27
27	12	10	.32	7.7	3	.06	4.0	20	.22
28	12	10	.32	13	6	.21	4.0	20	.22
29	9.1	9	.22	17	10	.46	3.0	20	.16
30	10	10	.27	20	20	1.1	3.0	20	.16
31	--	--	--	18	15	.73	--	--	--
TOTAL	324.3	--	6.39	383.6	--	12.03	203.3	--	8.49

## VENTURA RIVER BASIN

11118500 VENTURA RIVER NEAR VENTURA, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.4	20	.13	1.8	10	.05	.69	50	.09
2	2.5	20	.14	1.9	10	.05	.77	50	.10
3	2.7	20	.15	2.1	20	.11	1.1	55	.16
4	2.4	20	.13	2.5	40	.27	1.0	55	.15
5	3.9	20	.21	2.7	60	.44	.91	50	.12
6	2.3	20	.12	2.8	85	.64	.75	50	.10
7	2.1	20	.11	2.5	85	.57	.74	45	.09
8	1.8	20	.10	2.5	80	.54	.92	45	.11
9	2.6	20	.14	2.7	80	.58	1.1	50	.15
10	3.0	20	.16	2.2	75	.45	1.2	55	.18
11	2.5	20	.14	1.0	55	.15	.81	50	.11
12	2.5	20	.14	.75	45	.09	.47	45	.06
13	2.9	20	.16	1.3	55	.19	.02	45	0
14	2.4	20	.13	1.8	65	.32	0	0	0
15	3.2	20	.17	2.0	70	.38	.01	45	0
16	2.3	20	.12	1.9	70	.36	0	0	0
17	.58	20	.03	1.7	65	.30	0	0	0
18	1.2	25	.08	1.7	65	.30	0	0	0
19	2.0	25	.14	1.8	65	.32	0	0	0
20	3.1	30	.25	1.8	65	.32	0	0	0
21	2.8	30	.23	1.6	65	.28	0	0	0
22	3.2	30	.26	1.7	65	.30	0	0	0
23	1.4	25	.09	1.4	60	.23	0	0	0
24	1.1	25	.07	1.2	50	.16	0	0	0
25	1.1	25	.07	.13	30	.01	0	0	0
26	2.2	25	.15	.47	40	.05	0	0	0
27	2.0	20	.11	.60	45	.07	0	0	0
28	1.6	20	.09	.74	50	.10	0	0	0
29	1.5	20	.08	.82	50	.11	0	0	0
30	1.7	15	.07	.77	50	.10	0	0	0
31	1.7	15	.07	.69	45	.08	--	--	--
TOTAL	68.68	--	4.04	49.57	--	7.92	10.49	--	1.42

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

5704.47

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

37263.09

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT 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
NOV.									
29...	0800	13.0	2640	8580	61200	36	48	57	77
29...	1340	15.0	1160	3780	11800	42	54	72	88
DEC.									
21...	1540	11.0	500	1480	2000	34	49	60	80
DATE									
		SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL 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
NOV.									
29...	91	97	--	98	--	99	--	99	100
29...	97	--	100	--	--	--	--	--	--
DEC.									
21...	90	--	97	--	99	--	100	--	--

## 11141000 SANTA MARIA RIVER AT GUADALUPE, CALIF.

LOCATION.--Lat 34°58'35", long 120°34'15", in Guadalupe Grant, Santa Barbara County, at gaging station on bridge on State Highway 1, 0.5 mile north of Guadalupe, and 4.5 miles upstream from mouth.

DRAINAGE AREA.--1,741 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1968 to September 1971 (discontinued).  
Sediment records: October 1968 to September 1971 (discontinued).

## EXTREMES.--1970-71:

Sediment concentrations: No flow during year.  
Sediment discharge: No flow during year.

## Period of record:

Sediment concentrations: Maximum daily, 59,200 mg/l Feb. 25, 1969; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 2,030,000 tons Feb. 25, 1969; minimum daily, 0 tons on many days each year.

REMARKS.--No flow during entire water year.

## ARROYO GRANDE BASIN

11141150 ARROYO GRANDE ABOVE PHOENIX CREEK, NEAR ARROYO GRANDE, CALIF.

LOCATION.--Lat 35°11'03", long 120°26'11", in Arroyo Grande Grant, San Luis Obispo County, at gaging station at county road bridge, 100 ft upstream from Phoenix Creek, and 8.8 miles northeast of Arroyo Grande.

DRAINAGE AREA.--13.5 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1967 to September 1971.

Sediment records: Water year 1967 (partial-record station), October 1967 to September 1971.

EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 3,130 mg/l Nov. 29; minimum daily, 2 mg/l July 17, 18, Sept. 26-28.

Sediment discharge: Maximum daily, 45 tons Dec. 21; minimum daily, 0 tons on many days.

Period of record:

Sediment concentrations: Maximum daily, 49,300 mg/l Jan. 25, 1969; minimum daily, 1 mg/l on several days in 1967 and 1968.

Sediment discharge: Maximum daily, 69,700 tons Jan. 25, 1969; minimum daily, 0 tons on many days in 1967-68, 1970-71.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

[illegible]



11141150 ARROYO GRANDE ABOVE PHOENIX CREEK, NEAR ARROYO GRANDE, CALIF.--Continued

## TOTAL SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.61	20	.03	1.3	17	.06	3.2	326	2.8
2	2.2	500	3.0	1.3	18	.06	4.4	2300	30
3	1.2	450	1.5	1.3	18	.06	3.3	460	4.1
4	1.0	400	1.1	1.6	18	.08	3.2	140	1.2
5	1.2	380	1.2	1.8	200	.97	3.1	73	.61
6	1.2	360	1.2	1.5	260	1.1	2.9	59	.46
7	1.2	340	1.1	1.3	120	.42	2.8	63	.48
8	1.0	320	.86	1.3	83	.29	2.9	58	.45
9	.94	310	.79	1.2	77	.25	2.9	53	.41
10	1.0	305	.82	1.2	100	.32	2.7	49	.36
11	1.0	290	.78	1.2	155	.50	2.7	43	.31
12	1.1	280	.83	1.1	195	.58	2.6	40	.28
13	1.3	267	.94	1.2	200	.65	2.8	40	.30
14	1.3	250	.88	1.3	170	.60	2.8	40	.30
15	1.3	230	.81	1.3	110	.39	2.8	38	.29
16	1.4	210	.79	1.3	93	.33	2.6	564	4.0
17	1.4	200	.76	1.3	95	.33	2.4	310	2.0
18	1.4	180	.68	1.3	98	.34	2.6	470	4.0
19	1.4	154	.58	1.5	100	.41	2.8	270	2.0
20	1.5	200	.81	1.5	100	.41	2.2	210	1.2
21	1.5	360	1.5	1.7	100	.46	6.0	2550	45
22	1.5	170	.69	1.7	100	.46	3.9	410	4.3
23	1.5	80	.32	1.6	105	.45	3.5	200	1.9
24	1.4	43	.16	1.7	100	.46	3.5	200	1.9
25	1.3	44	.15	3.8	2250	34	3.5	200	1.9
26	1.3	45	.16	3.2	1560	15	3.8	427	4.9
27	1.2	44	.14	2.6	350	2.5	3.7	150	1.5
28	1.3	40	.14	2.5	290	2.0	3.5	110	1.0
29	1.3	31	.11	3.6	3130	34	3.4	100	.92
30	1.3	24	.08	3.5	1890	20	3.3	95	.85
31	1.3	16	.06	--	--	--	3.3	85	.76
TOTAL	39.55	--	22.97	52.7	--	117.48	99.1	--	120.48

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	3.4	75	.69	2.2	99	.59	1.7	43	.20
2	3.5	62	.59	2.2	91	.54	1.7	37	.17
3	3.3	47	.42	2.2	71	.42	1.7	35	.16
4	3.3	34	.30	2.2	66	.39	1.7	34	.16
5	3.3	43	.38	2.2	71	.42	1.7	34	.16
6	3.3	50	.45	2.2	85	.50	1.7	34	.16
7	3.3	57	.51	2.2	98	.58	1.7	34	.16
8	3.3	63	.56	2.2	100	.59	1.7	33	.15
9	3.3	68	.61	2.2	105	.62	1.7	31	.14
10	3.3	71	.63	2.2	93	.55	1.7	28	.13
11	3.4	110	1.0	2.1	64	.36	1.7	24	.11
12	4.5	421	5.5	2.0	100	.54	2.3	69	.58
13	4.0	420	4.5	2.0	90	.49	2.4	90	.58
14	3.1	480	4.0	2.0	80	.43	1.9	47	.24
15	2.8	78	.59	2.0	70	.38	1.6	36	.16
16	2.6	59	.41	2.0	65	.35	1.7	34	.16
17	2.6	50	.35	1.9	60	.31	1.5	36	.15
18	2.6	45	.32	1.7	55	.25	1.4	38	.14
19	2.6	44	.31	1.8	55	.27	1.5	39	.16
20	2.5	42	.28	1.7	54	.25	1.5	40	.16
21	2.2	41	.24	1.7	50	.23	1.3	41	.14
22	2.2	40	.24	1.8	44	.21	1.4	42	.16
23	2.2	49	.29	1.7	47	.22	1.5	44	.18
24	2.2	64	.38	1.7	50	.23	1.5	58	.23
25	2.2	70	.42	1.7	53	.24	1.5	69	.28
26	2.2	64	.38	1.7	52	.24	1.8	100	.49
27	2.2	63	.37	1.7	50	.23	1.7	80	.37
28	2.2	67	.40	1.7	47	.22	1.4	70	.26
29	2.2	76	.45	--	--	--	1.5	50	.20
30	2.2	90	.53	--	--	--	1.6	43	.19
31	2.2	97	.58	--	--	--	1.5	46	.19
TOTAL	88.2	--	26.68	54.9	--	10.65	51.2	--	6.72

## ARROYO GRANDE BASIN

11141150 ARROYO GRANDE ABOVE PHOENIX CREEK, NEAR ARROYO GRANDE, CALIF.--Continued

TOTAL SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.7	47	.22	1.8	40	.19	.95	48	.12
2	1.8	48	.23	2.1	28	.16	.89	48	.12
3	1.9	46	.24	1.8	24	.12	.82	48	.11
4	1.8	41	.20	1.7	28	.13	.80	47	.10
5	2.0	35	.19	1.7	48	.22	.77	46	.10
6	2.1	27	.15	1.8	71	.35	.93	45	.11
7	2.1	24	.14	1.8	67	.33	.95	44	.11
8	2.1	30	.17	1.7	56	.26	.90	43	.10
9	2.2	37	.22	1.6	53	.23	.84	42	.10
10	2.0	40	.22	1.6	50	.22	.83	41	.09
11	2.1	42	.24	1.6	51	.22	.81	40	.09
12	1.9	42	.22	1.6	51	.22	.80	39	.08
13	1.5	41	.17	1.7	51	.23	.86	38	.09
14	2.4	134	.98	1.7	51	.23	.81	37	.08
15	1.6	68	.29	1.6	51	.22	.75	36	.07
16	1.5	72	.29	1.6	50	.22	.74	35	.07
17	1.9	72	.37	1.7	50	.23	.73	34	.07
18	1.7	66	.30	1.7	50	.23	.68	33	.06
19	1.6	58	.25	2.0	50	.27	.61	32	.05
20	1.6	53	.23	1.8	50	.24	.70	31	.06
21	1.6	48	.21	1.7	49	.22	.63	30	.05
22	1.6	47	.20	1.7	49	.22	.64	29	.05
23	1.7	51	.23	1.6	49	.21	.61	28	.05
24	1.9	59	.30	1.6	49	.21	.61	27	.04
25	1.7	65	.30	1.6	49	.21	.61	26	.04
26	1.7	67	.31	1.5	48	.19	.61	25	.04
27	1.7	65	.30	1.7	48	.22	.75	24	.05
28	1.6	64	.28	2.1	48	.27	.74	23	.05
29	1.6	60	.26	1.3	48	.17	.76	22	.05
30	1.6	52	.22	1.1	48	.14	.79	21	.04
31	--	--	--	.98	48	.13	--	--	--
TOTAL	54.2	--	7.93	51.48	--	6.71	22.92	--	2.24

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.78	20	.04	.19	4	0	.50	8	.01
2	.77	19	.04	.19	4	0	.48	8	.01
3	.75	18	.04	.20	7	0	.46	8	.01
4	.87	17	.04	.21	18	.01	.43	8	.01
5	.85	16	.04	.18	11	.01	.48	8	.01
6	.86	15	.03	.18	10	0	.54	8	.01
7	.91	15	.04	.17	13	.01	.43	8	.01
8	.92	11	.03	.17	17	.01	.43	7	.01
9	.88	9	.02	.16	17	.01	.45	6	.01
10	.84	8	.02	.24	14	.01	.32	6	.01
11	.79	7	.01	.26	19	.01	.25	5	0
12	.79	7	.01	.27	34	.02	.29	5	0
13	.83	7	.02	.26	24	.02	.26	5	0
14	.84	7	.02	.27	13	.01	.29	7	.01
15	.75	6	.01	.29	13	.01	.32	10	.01
16	.76	3	.01	.29	22	.02	.35	8	.01
17	.74	2	0	1.3	40	.14	.42	6	.01
18	.73	2	0	1.0	26	.07	.45	4	0
19	.55	11	.02	.70	24	.05	.40	3	0
20	.30	10	.01	.81	18	.04	.44	3	0
21	.26	8	.01	.75	21	.04	.49	4	.01
22	.26	7	0	.72	22	.04	.46	4	0
23	.33	7	.01	.70	22	.04	.47	3	0
24	.29	6	0	.74	21	.04	.37	3	0
25	.29	5	0	.78	16	.03	.42	3	0
26	.31	4	0	.83	12	.03	.43	2	0
27	.29	4	0	.81	11	.02	.45	2	0
28	.31	4	0	.76	10	.02	.43	2	0
29	.24	5	0	.74	9	.02	.45	3	0
30	.23	5	0	.90	8	.02	.69	3	.01
31	.21	4	0	.84	8	.02	--	--	--
TOTAL	18.53	--	.47	15.91	--	.77	12.65	--	.16

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL--SEDIMENT DISCHARGE FOR YEAR (TONS)

561.34

323.26

11141150 ARROYO GRANDE ABOVE PHOENIX CREEK, NEAR ARROYO GRANDE, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF TOTAL SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	TOTAL SEDI- MENT (MG/L)	TOTAL SEDI- MENT DIS- CHARGE (T/DAY)	FALL DIAM. % FINER THAN .002 MM	FALL DIAM. % FINER THAN .004 MM	FALL DIAM. % FINER THAN .008 MM	FALL DIAM. % FINER THAN .016 MM	FALL DIAM. % FINER THAN .031 MM	FALL DIAM. % FINER THAN .062 MM
OCT.											
08...	1545	18.0	1.0	324	.87	--	--	--	--	--	--
NOV.											
05...	1710	16.0	3.1	454	3.8	21	26	31	36	44	52
25...	1620	10.0	7.0	6460	122	8	9	11	12	14	15
DEC.											
02...	1505	12.0	3.7	1990	20	--	--	--	--	--	--
02...	1510	12.0	3.7	1880	19	--	--	--	--	--	--
16...	1605	12.5	2.5	629	4.2	--	--	--	--	--	--
JAN.											
14...	1115	10.0	3.1	481	4.0	--	--	--	--	--	--
FEB.											
11...	1525	16.0	2.1	49	.28	--	--	--	--	--	--

DATE	SIEVE DIAM. % FINER THAN .062 MM	FALL DIAM. % FINER THAN .125 MM	SIEVE DIAM. % FINER THAN .125 MM	FALL DIAM. % FINER THAN .250 MM	SIEVE DIAM. % FINER THAN .250 MM	FALL DIAM. % FINER THAN .500 MM	SIEVE DIAM. % FINER THAN .500 MM	FALL DIAM. % FINER THAN 1.00 MM	SIEVE DIAM. % FINER THAN 1.00 MM	FALL DIAM. % FINER THAN 2.00 MM	SIEVE DIAM. % FINER THAN 2.00 MM
OCT.											
08...	7	--	8	--	10	--	34	--	56	--	100
NOV.											
05...	--	64	--	80	--	89	--	96	--	100	--
25...	--	25	--	66	--	83	--	99	--	100	--
DEC.											
02...	2	--	3	--	16	--	42	--	60	--	100
02...	3	--	4	--	18	--	35	--	58	--	90
16...	6	--	8	--	19	--	36	--	60	--	86
JAN.											
14...	5	--	7	--	16	--	42	--	56	--	89
FEB.											
11...	15	--	17	--	25	--	34	--	53	--	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
DEC.												
16...	1520	12.5	1	2.5	--	9	43	78	97	99	100	--
16...	1530	12.5	1	2.5	--	4	27	63	93	98	100	--
22...	1535	12.0	1	4.0	--	6	29	60	91	97	99	100
22...	1550	12.0	1	4.0	--	2	9	43	89	99	100	--
22...	1600	12.0	1	4.0	--	2	20	63	93	98	99	100
JAN.												
14...	1030	10.0	1	3.1	--	4	24	64	96	99	100	--
14...	1040	10.0	1	3.1	1	16	36	64	92	96	99	100
14...	1050	10.0	1	3.1	--	10	35	55	85	91	94	100
FEB.												
11...	1455	16.0	1	2.1	3	15	50	94	98	99	100	--
11...	1510	16.0	1	2.1	--	11	40	63	77	82	90	100



## 11141280 LOPEZ CREEK NEAR ARROYO GRANDE, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	1.9	4	.02	3.5	8	.08	17	51	2.9
2	1.9	4	.02	3.7	3	.03	43	124	19
3	1.9	4	.02	3.7	2	.02	12	24	.78
4	6.0	40	.65	5.3	40	.69	7.6	14	.29
5	2.9	10	.08	7.7	42	1.1	6.2	14	.23
6	2.7	11	.08	6.2	28	.47	5.4	14	.20
7	2.7	12	.09	3.1	11	.09	5.2	14	.20
8	2.5	13	.09	3.7	11	.16	4.9	14	.19
9	2.5	8	.05	3.1	3	.03	4.9	14	.19
10	2.5	4	.03	2.9	3	.02	4.7	14	.18
11	2.7	3	.02	2.9	5	.04	4.7	14	.18
12	2.9	15	.12	2.7	5	.04	4.7	13	.16
13	3.1	28	.23	2.7	6	.04	4.7	12	.15
14	3.1	13	.11	2.7	7	.05	4.7	11	.14
15	3.1	7	.06	2.9	5	.04	4.7	10	.13
16	3.3	4	.04	2.9	4	.03	5.8	5	.08
17	3.5	2	.02	3.1	4	.03	7.0	13	.25
18	3.5	2	.02	3.1	4	.03	8.8	20	1.1
19	3.5	3	.03	3.1	7	.06	22	50	3.3
20	4.0	3	.03	3.7	10	.10	14	7	.26
21	4.2	2	.02	4.4	13	.15	72	200	50
22	4.2	2	.02	4.4	16	.19	28	47	3.6
23	4.4	2	.02	4.4	15	.18	21	28	1.6
24	4.2	2	.02	4.4	10	.12	18	21	1.0
25	4.0	2	.02	12	33	1.5	16	14	.60
26	4.0	2	.02	16	58	2.8	18	24	1.3
27	3.7	2	.02	7.0	17	.32	24	32	2.1
28	3.5	2	.02	5.7	12	.18	21	14	.79
29	3.5	2	.02	9.8	37	1.2	18	10	.49
30	3.5	2	.02	17	40	1.8	17	10	.46
31	3.5	3	.03	--	--	--	16	8	.35
TOTAL	102.9	--	2.04	157.8	--	11.59	461.0	--	92.20

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	15	8	.32	6.7	2	.04	4.7	5	.06
2	15	6	.24	6.7	2	.04	4.7	4	.05
3	15	6	.24	6.7	9	.16	4.7	12	.15
4	14	5	.19	6.2	9	.15	4.7	8	.10
5	14	5	.19	6.2	4	.07	4.7	4	.05
6	14	4	.15	6.2	4	.07	4.2	10	.11
7	13	4	.14	6.2	21	.35	4.2	12	.14
8	13	3	.11	6.2	8	.13	4.2	6	.07
9	13	3	.11	6.2	2	.03	4.2	4	.05
10	13	2	.07	6.2	2	.03	4.2	4	.05
11	14	5	.19	5.7	2	.03	4.2	5	.06
12	35	95	11	5.7	13	.20	4.9	7	.09
13	67	137	29	5.7	19	.29	5.7	7	.11
14	38	38	3.9	5.7	12	.18	4.9	7	.09
15	24	23	1.5	5.7	7	.11	4.7	7	.09
16	18	19	.92	5.4	9	.13	4.4	6	.07
17	14	16	.60	5.4	16	.23	4.4	3	.04
18	12	14	.45	5.4	13	.19	4.2	2	.02
19	12	11	.36	5.2	9	.13	4.4	2	.02
20	11	9	.27	5.2	9	.13	4.4	4	.05
21	10	8	.22	5.2	10	.14	4.4	5	.06
22	9.4	7	.18	5.2	8	.11	4.4	4	.05
23	9.1	6	.15	5.2	6	.08	4.4	3	.04
24	8.5	5	.11	4.9	5	.07	4.4	2	.02
25	8.5	4	.09	4.7	2	.03	4.4	2	.02
26	8.5	4	.09	4.7	1	.01	5.2	5	.07
27	7.9	3	.06	4.7	4	.05	4.9	2	.03
28	7.9	4	.09	4.7	9	.11	4.4	2	.02
29	7.3	4	.08	--	--	--	4.4	2	.02
30	7.3	7	.14	--	--	--	4.4	2	.02
31	7.3	6	.12	--	--	--	4.2	6	.07
TOTAL	475.7	--	51.28	157.9	--	3.29	140.2	--	1.89

## ARROYO GRANDE BASIN

11141280 LOPEZ CREEK NEAR ARROYO GRANDE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.2	7	.08	3.7	8	.08	3.5	8	.08
2	4.2	4	.05	4.2	6	.07	3.5	6	.06
3	4.2	3	.03	4.0	5	.05	3.5	11	.10
4	4.4	5	.06	4.0	5	.05	3.5	12	.11
5	4.4	9	.11	3.7	6	.06	3.3	19	.17
6	4.4	8	.10	3.7	7	.07	3.5	20	.19
7	4.4	3	.04	3.7	4	.04	3.5	22	.21
8	4.4	2	.02	3.7	2	.02	3.3	21	.19
9	4.4	4	.05	3.7	3	.03	3.3	21	.19
10	4.2	6	.07	3.7	4	.04	3.3	15	.13
11	4.4	7	.08	3.7	4	.04	3.3	7	.06
12	4.2	6	.07	3.5	4	.04	3.3	5	.04
13	4.3	10	.12	3.5	4	.04	3.3	3	.03
14	5.7	8	.12	3.5	3	.03	3.3	3	.03
15	4.7	5	.06	3.5	3	.03	3.1	3	.03
16	4.2	4	.05	3.5	3	.03	3.1	4	.03
17	4.7	8	.10	3.5	3	.03	3.1	5	.04
18	4.4	5	.06	3.5	3	.03	2.9	6	.05
19	4.4	3	.04	3.5	3	.03	2.9	8	.06
20	4.2	4	.05	3.5	3	.03	3.1	5	.04
21	4.2	5	.06	3.5	4	.04	2.9	2	.02
22	4.2	3	.03	3.5	4	.04	3.1	3	.03
23	4.2	2	.02	3.5	5	.05	2.9	4	.03
24	4.0	3	.03	3.5	7	.07	2.9	3	.02
25	4.0	5	.05	3.3	6	.05	2.9	1	.01
26	4.0	5	.05	3.3	5	.04	2.9	2	.02
27	3.7	5	.05	3.7	7	.07	2.9	2	.02
28	3.7	6	.06	4.4	9	.11	2.9	2	.02
29	3.7	7	.06	3.7	10	.10	2.9	1	.01
30	4.0	7	.08	3.7	11	.11	2.9	2	.02
31	--	--	--	3.5	9	.09	--	--	--
TOTAL	128.1	--	1.85	112.9	--	1.61	94.8	--	2.04

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.9	2	.02	1.3	3	.01	1.1	8	.02
2	2.9	2	.02	1.3	3	.01	1.4	8	.03
3	2.7	2	.01	1.2	3	.01	1.6	8	.03
4	2.1	2	.01	1.2	4	.01	1.7	8	.04
5	2.1	1	.01	1.3	24	.08	1.7	8	.04
6	2.3	2	.01	1.3	15	.05	1.6	8	.03
7	2.1	3	.02	1.3	14	.05	1.5	8	.03
8	2.1	5	.03	1.3	14	.05	1.3	8	.03
9	2.1	59	.33	1.2	17	.06	1.1	8	.02
10	1.9	60	.31	1.2	21	.07	.93	7	.02
11	1.9	66	.34	1.2	21	.07	.79	7	.01
12	2.1	40	.23	1.2	21	.07	.65	7	.01
13	2.1	38	.22	1.2	22	.07	.65	7	.01
14	1.9	30	.15	1.3	22	.08	.65	7	.01
15	2.1	18	.10	1.3	25	.09	.65	7	.01
16	2.1	30	.17	1.2	28	.09	.79	7	.01
17	2.1	39	.22	1.1	26	.08	.92	7	.02
18	1.9	20	.10	1.2	25	.08	1.1	7	.02
19	1.9	10	.05	1.2	20	.06	.92	7	.02
20	1.9	15	.08	1.1	14	.04	.79	7	.01
21	1.9	21	.11	1.1	25	.07	1.1	8	.02
22	1.7	15	.07	1.1	32	.10	1.1	8	.02
23	1.7	11	.05	1.1	25	.07	1.1	8	.02
24	1.9	7	.04	1.1	20	.06	1.2	8	.03
25	1.9	4	.02	1.1	15	.04	1.3	8	.03
26	1.7	4	.02	1.1	10	.03	1.3	8	.03
27	1.7	4	.02	1.1	10	.03	1.3	8	.03
28	1.6	5	.02	.92	9	.02	1.2	8	.03
29	1.6	7	.03	1.1	9	.03	1.3	8	.03
30	1.5	5	.02	.92	9	.02	1.3	8	.03
31	1.3	3	.01	.93	9	.02	--	--	--
TOTAL	61.7	--	2.84	36.17	--	1.62	34.04	--	.69

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

1963.21

172.94

11141280 LOPEZ CREEK NEAR ARROYO GRANDE, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SED- IMENT CHARGE (MG/L)	SUS- PENDE SED- IMENT 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
DEC.										
02...	1055	10.5	54	126	18	90	90	92	97	100
02...	1205	10.5	50	79	11	93	93	95	100	--
JAN.										
13...	1540	8.0	78	83	17	76	77	80	91	100

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
OCT.							
08...	1105	17.0	1	2.6	--	1	3
08...	1110	17.0	1	2.6	--	1	2
08...	1115	17.0	1	2.6	1	1	4
JAN.							
13...	1455	8.0	1	78	--	--	1
13...	1500	8.0	1	78	--	1	5
13...	1505	8.0	1	78	--	--	2

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
OCT.							
08...	4	6	11	20	39	72	100
08...	7	14	22	35	66	100	--
08...	9	20	37	56	74	100	--
JAN.							
13...	4	12	26	52	73	100	--
13...	10	20	35	54	72	93	100
13...	8	28	52	77	89	100	--

## BIG SUR RIVER BASIN

11143000 BIG SUR RIVER NEAR BIG SUR, CALIF.

LOCATION.--Lat 36°14'45", long 121°46'20", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.29, T.19 S., R.2 E., Monterey County, temperature recorder at gaging station on right bank at downstream side of bridge, 0.4 mile upstream from Post Creek, and 2.6 miles southeast of town of Big Sur.

DRAINAGE AREA.--46.5 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 21.0°C Aug. 9-11; minimum, 6.0°C Jan. 4-7.

Period of record:

Water temperatures: Maximum (1965-67, 1968-71), 21.0°C Aug. 9-11, 1971; minimum (1965-66, 1967-71), 5.0°C Dec. 15, 1967.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	12.5	11.0	10.5	11.5	11.0	9.5	9.0	9.5	9.0	8.5	8.0
2	13.5	13.0	11.0	11.0	11.5	10.0	9.5	8.0	9.5	9.0	8.0	7.0
3	13.5	13.0	11.0	10.5	10.5	9.0	8.0	6.5	9.5	7.5	8.5	6.5
4	13.0	12.5	12.0	11.0	12.0	10.5	6.5	6.0	8.5	7.0	9.0	8.0
5	13.0	13.0	13.0	12.0	11.5	10.5	6.5	6.0	8.0	7.0	9.0	8.0
6	13.0	12.5	13.0	12.0	10.5	10.0	7.0	6.0	9.5	8.0	8.5	7.5
7	13.0	12.0	12.5	12.0	10.5	10.5	7.0	6.0	9.0	8.5	9.0	7.5
8	12.5	11.0	12.0	11.0	12.0	11.0	7.0	6.5	9.0	8.0	9.5	8.5
9	12.5	11.5	12.0	11.5	12.0	10.0	8.0	7.0	8.5	7.5	10.0	9.0
10	13.0	12.0	12.0	12.0	10.0	8.5	8.5	7.5	10.0	8.0	10.0	9.0
11	12.5	12.0	12.0	11.5	9.0	9.0	9.0	8.5	11.0	10.0	10.0	9.5
12	12.5	12.0	12.0	11.5	9.5	9.0	9.5	8.5	11.0	10.0	10.0	9.5
13	12.5	12.5	11.5	10.5	9.0	8.5	8.5	8.0	10.5	9.0	9.5	8.0
14	12.5	12.5	10.5	10.0	9.0	9.0	8.5	8.0	11.0	10.0	8.5	7.5
15	12.5	11.5	10.5	9.5	9.5	9.0	9.0	8.0	11.0	10.0	9.5	8.0
16	12.0	11.5	9.5	9.0	10.0	9.0	9.5	8.5	10.0	8.5	10.0	9.0
17	12.0	11.5	9.5	9.0	10.0	9.0	11.5	9.5	9.5	8.0	10.0	9.0
18	12.0	11.5	9.5	9.0	9.0	8.0	12.0	11.5	9.0	8.5	10.0	8.5
19	12.0	12.0	9.5	9.0	9.0	8.0	12.0	11.5	9.0	8.5	10.0	8.0
20	12.0	11.5	10.0	9.0	9.0	8.5	12.0	11.0	8.5	7.0	10.0	9.0
21	12.0	11.5	10.0	9.0	10.0	8.5	11.0	10.0	8.0	7.0	10.5	9.0
22	12.5	11.5	10.0	10.0	10.0	9.0	9.5	8.5	8.5	7.0	10.5	9.5
23	13.0	12.5	10.0	8.0	10.0	9.0	9.5	9.0	9.0	8.0	11.0	10.5
24	12.5	11.5	10.0	9.0	9.5	8.0	9.0	7.5	9.0	8.0	11.5	10.5
25	12.0	11.0	11.0	10.0	9.0	8.0	9.0	7.5	9.0	8.0	11.5	11.5
26	11.5	11.0	11.0	10.5	10.0	9.0	8.5	7.5	8.0	7.0	11.5	10.5
27	11.0	10.0	10.5	8.5	10.0	9.5	9.0	8.5	7.0	6.5	10.5	9.5
28	10.0	9.0	11.5	9.5	10.0	8.0	9.0	8.5	9.0	8.0	10.5	9.5
29	9.5	9.0	11.5	10.5	10.0	9.0	9.0	8.0	--	--	11.5	9.5
30	10.0	9.5	11.0	11.0	10.0	9.0	9.0	7.5	--	--	11.5	10.5
31	10.5	10.0	--	--	9.5	9.0	9.0	8.5	--	--	10.5	9.5
AVE	12.2	11.5	11.0	10.3	10.1	9.2	9.0	8.1	9.3	8.2	10.0	8.9
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	8.5	12.5	11.5	14.5	13.0	18.0	16.5	20.5	19.0	18.0	17.0
2	10.5	9.0	13.0	11.5	14.5	13.5	18.0	17.0	20.5	19.5	18.5	17.5
3	11.5	9.5	13.0	11.5	14.5	13.5	18.0	16.5	20.5	19.0	18.0	17.0
4	11.5	10.0	12.5	11.5	15.0	13.5	17.5	16.0	20.0	19.0	18.0	17.0
5	11.5	10.0	12.5	11.5	16.5	14.5	17.5	15.5	20.5	19.0	18.0	17.5
6	11.0	10.5	12.0	11.0	16.5	15.0	17.5	16.0	20.5	19.0	17.5	16.5
7	11.0	10.0	11.0	10.0	16.5	15.5	18.0	16.5	20.0	19.0	17.0	15.5
8	10.5	9.0	13.5	12.0	16.5	15.5	18.0	16.5	20.0	19.0	16.5	16.0
9	11.0	9.5	14.0	12.0	16.5	15.0	18.5	16.5	21.0	19.5	17.5	17.0
10	11.5	10.0	14.5	12.5	16.0	15.5	19.0	17.5	21.0	19.5	17.5	17.0
11	11.5	10.0	14.5	13.5	17.0	15.5	19.0	17.0	21.0	20.0	18.0	17.5
12	11.5	10.0	15.0	13.5	17.0	15.5	19.5	17.5	20.5	19.5	18.0	17.0
13	11.5	10.5	15.0	13.5	17.0	15.5	19.5	18.0	20.0	19.0	18.5	18.0
14	12.0	11.0	15.5	14.0	17.5	16.0	19.5	18.0	19.5	18.5	19.0	18.5
15	12.0	10.5	15.5	13.5	18.0	17.0	19.0	17.5	19.0	18.0	19.0	18.5
16	12.0	10.5	15.0	13.5	19.0	18.0	18.5	17.5	19.0	18.0	19.5	19.0
17	11.5	10.5	15.0	13.5	19.5	18.0	19.0	17.5	19.5	18.5	19.0	18.0
18	10.5	9.5	15.0	13.0	19.5	18.0	20.0	18.5	19.0	18.0	18.0	17.5
19	10.5	9.0	15.5	12.5	20.0	18.0	20.0	19.0	18.5	17.5	17.5	16.5
20	10.5	9.5	15.0	14.0	19.5	18.0	20.0	19.0	18.0	17.0	17.0	16.5
21	10.0	8.5	15.5	14.0	19.5	18.0	20.0	19.0	18.5	17.0	17.0	16.0
22	10.0	8.0	15.5	14.0	20.0	18.0	20.0	19.0	19.0	18.0	16.5	16.0
23	10.5	9.0	16.0	14.0	19.5	17.5	20.0	19.0	19.0	18.0	16.0	15.5
24	10.5	9.0	16.5	15.0	19.5	18.0	19.5	18.5	19.0	18.5	16.0	15.5
25	10.5	8.5	17.0	15.0	19.5	17.0	19.0	18.0	19.0	18.0	16.0	15.5
26	11.5	10.0	16.5	15.5	19.5	17.5	19.0	18.0	19.0	18.5	16.0	15.0
27	12.0	10.0	16.0	14.5	20.0	18.5	19.0	18.0	19.0	17.5	15.5	14.5
28	12.0	11.0	16.0	14.0	19.5	17.5	19.0	18.0	18.5	17.0	15.0	14.0
29	12.5	11.0	15.0	14.5	18.5	17.5	19.0	18.0	18.0	17.0	14.5	14.0
30	12.5	11.0	15.0	14.0	18.0	16.5	19.5	18.0	18.0	17.0	14.5	14.0
31	--	--	15.5	14.0	--	--	20.0	18.5	18.0	17.0	--	--
AVE	11.2	9.8	14.6	13.2	17.8	16.3	19.0	17.6	19.5	18.4	17.2	16.5



## 11147040 SANTA RITA CREEK TRIBUTARY NEAR TEMPLETON, CALIF.

LOCATION.--Lat 35°32'03", long 120°50'47", in Asuncion Grant, San Luis Obispo County, at gaging station at highway bridge, 0.2 mile downstream from small left-bank tributary, and 8.6 miles west of Templeton.

DRAINAGE AREA.--2.95 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1967 to September 1971.

Sediment records: October 1967 to September 1971.

EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 2,520 mg/l Nov. 5; minimum daily, no flow for many days.

Sediment discharge: Maximum daily, 556 tons Dec. 21; minimum daily, 0 tons on many days.

Period of record:

Sediment concentrations: Maximum daily, 5,710 mg/l Jan. 19, 1969; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 9,770 tons Jan. 19, 1969; minimum daily, 0 tons on many days each year.

REMARKS.--No flow Oct. 1 to Nov. 2, Nov. 6-24, May 25, 26, 31, June 10 to Sept. 30. Sediment table omitted for period July 1 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	11.0	--	--	--	--	--	--	--	--	--
2	--	--	10.5	--	--	--	--	--	--	--	--	--
3	--	13.0	9.5	--	--	--	--	--	17.5	--	--	--
4	--	13.0	11.0	5.0	--	--	--	11.0	--	--	--	--
5	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	12.0	--	--	--	--	--	--
9	--	--	10.5	--	--	--	--	--	--	--	--	--
10	--	--	--	7.5	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	7.5	--	--	--	--	--	--	--	--
13	--	--	--	7.5	--	--	--	--	--	--	--	--
14	--	--	--	9.0	--	--	--	--	--	--	--	--
15	--	--	--	7.0	--	--	--	--	--	--	--	--
16	--	--	9.0	--	--	--	--	--	--	--	--	--
17	--	--	8.0	12.0	--	--	--	--	--	--	--	--
18	--	--	7.0	--	--	--	--	--	--	--	--	--
19	--	--	8.0	--	--	--	--	--	--	--	--	--
20	--	--	9.0	--	--	--	--	--	--	--	--	--
21	--	--	9.0	--	--	--	--	--	--	--	--	--
22	--	--	8.0	--	--	--	--	--	--	--	--	--
23	--	--	7.0	--	--	--	--	--	--	--	--	--
24	--	--	7.5	--	--	--	--	--	--	--	--	--
25	--	13.0	6.5	--	--	--	--	--	--	--	--	--
26	--	12.0	--	--	--	13.0	--	--	--	--	--	--
27	--	--	10.0	--	--	10.0	--	--	--	--	--	--
28	--	11.0	--	--	--	14.0	--	--	--	--	--	--
29	--	11.5	--	--	--	--	--	--	--	--	--	--
30	--	11.0	9.0	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAMPLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN
				.062 MM	.125 MM	.250 MM	.500 MM	
OCT.								
08...	1250	1	.00	--	1	5	26	
08...	1255	1	.00	--	--	1	3	
08...	1300	1	.00	21	39	67	93	
DATE		BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN
		1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM
OCT.								
08...	42	55	69	80	88	91	100	
08...	8	23	34	43	55	67	100	
08...	98	100	--	--	--	--	--	

## SALINAS RIVER BASIN

11147040 SANTA RITA CREEK TRIBUTARY NEAR TEMPLETON, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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				0	0	0	39	426	60
2				0	0	0	126	592	322
3				.19	2050	2.4	11	30	.89
4				4.6	1670	37	6.0	10	.16
5				5.4	2520	65	3.3	10	.09
6				0	0	0	2.2	10	.06
7				0	0	0	1.5	10	.04
8				0	0	0	2.1	33	.39
9				0	0	0	2.1	24	.19
10				0	0	0	.91	5	.01
11				0	0	0	.52	5	.01
12				0	0	0	.37	5	0
13				0	0	0	.25	4	0
14				0	0	0	.23	4	0
15				0	0	0	.23	4	0
16				0	0	0	6.2	72	2.0
17				0	0	0	5.8	44	.83
18				0	0	0	95	424	157
19				0	0	0	51	127	22
20				0	0	0	50	245	170
21				0	0	0	139	823	556
22				0	0	0	21	54	3.7
23				0	0	0	12	13	.42
24				0	0	0	8.5	12	.28
25				33	456	265	6.5	13	.23
26				26	671	148	7.7	20	.54
27				.08	40	.01	11	55	1.8
28				77	588	249	6.9	20	.37
29				123	745	467	5.9	15	.24
30				14	70	2.6	5.3	11	.16
31				--	--	--	5.0	10	.14
TOTAL	0	--	0	283.27	--	1236.01	632.51	--	1299.55

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	3.6	8	.08	.83	3	.01	.28	12	.01
2	3.6	6	.06	.76	3	.01	.26	12	.01
3	2.6	4	.03	.71	3	.01	.26	11	.01
4	2.5	3	.02	.61	3	0	.28	11	.01
5	2.4	3	.02	.61	3	0	.26	11	.01
6	2.2	3	.02	.56	3	0	.23	11	.01
7	2.0	3	.02	.56	3	0	.23	10	.01
8	2.0	3	.02	.51	3	0	.26	10	.01
9	1.8	3	.01	.51	3	0	.23	9	.01
10	1.6	3	.01	.56	3	0	.23	9	.01
11	15	59	11	.81	15	.03	.26	9	.01
12	36	125	18	.56	15	.02	1.1	15	.04
13	24	116	8.9	.56	15	.02	1.8	20	.10
14	13	23	.81	.51	15	.02	.56	10	.02
15	8.5	9	.21	.46	15	.02	.42	9	.01
16	6.9	7	.13	.61	14	.02	.38	8	.01
17	5.9	5	.08	.66	14	.02	.38	7	.01
18	5.3	5	.07	.46	14	.02	.28	6	0
19	4.1	5	.06	.42	14	.02	.26	6	0
20	3.2	5	.04	.42	14	.02	.26	6	0
21	2.6	5	.04	.38	13	.01	.23	5	0
22	2.4	4	.03	.38	13	.01	.20	5	0
23	2.0	4	.02	.38	13	.01	.20	4	0
24	1.9	4	.02	.34	13	.01	.20	4	0
25	1.5	4	.02	.32	13	.01	.20	3	0
26	1.3	4	.01	.28	12	.01	4.9	75	.99
27	1.1	4	.01	.28	12	.01	1.9	25	.13
28	1.0	4	.01	.28	12	.01	.97	6	.02
29	.90	4	.01	--	--	--	.76	5	.01
30	.90	3	.01	--	--	--	.61	4	.01
31	.83	3	.01	--	--	--	.46	4	0
TOTAL	162.63	--	39.78	14.33	--	.32	18.85	--	1.46

11147040 SANTA RITA CREEK TRIBUTARY NEAR TEMPLETON, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.42	4	0	.24	7	0	.01	40	0
2	.42	4	0	.25	6	0	.01	40	0
3	.38	3	0	.25	6	0	.01	42	0
4	.34	3	0	.26	6	0	.01	40	0
5	.28	3	0	.32	10	.01	.01	40	0
6	.28	3	0	.28	10	.01	.01	40	0
7	.26	3	0	.26	10	.01	.01	40	0
8	.26	3	0	.26	9	.01	.01	40	0
9	.23	3	0	.23	9	.01	.01	40	0
10	.20	3	0	.20	8	0	0	0	0
11	.20	3	0	.16	8	0	0	0	0
12	.18	3	0	.16	7	0	0	0	0
13	.20	3	0	.16	7	0	0	0	0
14	.90	15	.04	.13	6	0	0	0	0
15	.38	10	.01	.10	6	0	0	0	0
16	.28	10	.01	.08	5	0	0	0	0
17	.46	25	.03	.06	5	0	0	0	0
18	.46	20	.02	.06	4	0	0	0	0
19	.28	20	.02	.06	4	0	0	0	0
20	.32	20	.02	.05	3	0	0	0	0
21	.26	10	.01	.05	3	0	0	0	0
22	.23	10	.01	.05	3	0	0	0	0
23	.26	10	.01	.03	3	0	0	0	0
24	.23	9	.01	.04	3	0	0	0	0
25	.23	9	.01	0	0	0	0	0	0
26	.23	9	.01	0	0	0	0	0	0
27	.23	8	0	.08	5	0	0	0	0
28	.23	8	0	.23	10	.01	0	0	0
29	.23	8	0	.08	15	0	0	0	0
30	.24	7	0	.05	20	0	0	0	0
31	--	--	--	0	0	0	--	--	--
TOTAL	9.10	--	.21	4.18	--	.06	.09	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

1124.96

2577.39

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS- SED. DIAM.	SUS. SED. DIAM.	SUS. SED. DIAM.	SUS. SED. DIAM.
						% FINER THAN .002 MM	% FINER THAN .004 MM	% FINER THAN .008 MM	% FINER THAN 1.00 MM
NOV.									
03...	1200	13.0	1.0	5770	16	59	74	85	
28...	1400	11.0	188	1350	685	59	66	84	
DEC.									
01...	1530	11.0	21	383	22	52	65	76	
02...	1050	10.0	118	352	112	45	60	72	
18...	1545	8.0	88	286	68	57	73	82	
MAR.									
26...	1715	13.0	10	340	9.2	65	80	90	
DATE						SUS. SED. DIAM.	SUS. SED. DIAM.	SUS. SED. DIAM.	SUS. SED. DIAM.
						% FINER THAN .016 MM	% FINER THAN .031 MM	% FINER THAN .062 MM	% FINER THAN .125 MM
NOV.									
03...		98	98	100	--	--	--	--	--
28...		93	97	99	100	--	--	--	--
DEC.									
01...		86	94	97	98	99	99	100	
02...		83	92	98	99	100	--	--	
18...		89	93	98	99	100	--	--	
MAR.									
26...		95	98	99	100	--	--	--	



## 11147070 SANTA RITA CREEK NEAR TEMPLETON, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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				0	0	0	68	973	225
2				0	0	0	188	1280	901
3				0	0	0	48	57	7.4
4				0	0	0	30	40	3.2
5				0	0	0	24	38	2.5
6				0	0	0	21	34	1.9
7				0	0	0	18	30	1.5
8				0	0	0	18	35	1.7
9				0	0	0	20	40	2.2
10				0	0	0	16	20	.86
11				0	0	0	15	19	.77
12				0	0	0	14	18	.68
13				0	0	0	12	18	.58
14				0	0	0	11	18	.53
15				0	0	0	8.2	18	.40
16				0	0	0	18	103	6.4
17				0	0	0	20	85	4.6
18				0	0	0	97	405	130
19				0	0	0	98	211	65
20				0	0	0	65	112	31
21				0	0	0	270	606	645
22				0	0	0	84	122	28
23				0	0	0	46	96	12
24				0	0	0	31	52	4.4
25				0	0	0	24	40	2.6
26				36	925	109	24	40	2.6
27				3.4	350	3.2	37	100	10
28				25	383	47	26	40	2.8
29				97	1210	480	22	69	4.1
30				22	150	8.9	19	72	3.7
31				--	--	--	17	60	2.8
TOTAL	0	--	0	183.4	--	648.1	1409.2	--	2105.22

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	15	22	.89	6.0	2	.03	2.2	4	.02
2	14	20	.76	5.5	2	.03	2.2	3	.02
3	12	18	.58	5.5	2	.03	2.1	3	.02
4	10	12	.32	5.0	2	.03	2.4	3	.02
5	8.8	17	.40	4.6	2	.02	2.2	3	.02
6	8.2	20	.44	4.6	2	.02	1.9	3	.02
7	6.5	22	.39	4.2	2	.02	2.1	4	.02
8	6.0	22	.36	4.2	3	.03	2.1	4	.02
9	4.3	22	.26	4.2	3	.03	2.1	8	.05
10	.88	22	.05	3.9	2	.02	1.9	8	.04
11	9.0	99	11	3.8	4	.04	1.8	8	.04
12	76	271	71	3.9	6	.06	4.7	15	.43
13	86	214	53	3.4	6	.06	13	48	2.0
14	49	40	5.3	3.4	6	.06	4.0	20	.22
15	31	73	6.1	3.2	6	.05	2.7	19	.14
16	24	23	1.5	3.5	6	.06	2.5	19	.13
17	25	30	2.0	5.1	10	.14	2.5	18	.12
18	21	12	.68	3.3	8	.07	2.1	17	.10
19	18	17	.83	3.2	7	.06	1.8	16	.08
20	16	20	.86	3.0	5	.04	1.8	15	.07
21	14	7	.26	2.7	4	.03	1.8	14	.07
22	12	4	.13	2.8	3	.02	1.8	13	.06
23	12	3	.10	2.7	3	.02	1.8	12	.06
24	10	3	.08	2.6	3	.02	1.8	11	.05
25	9.4	3	.08	2.5	3	.02	1.8	10	.05
26	8.2	3	.07	2.2	3	.02	15	44	2.5
27	7.7	3	.06	2.2	4	.02	11	22	.65
28	7.7	2	.04	2.3	4	.02	4.9	8	.11
29	6.5	2	.04	--	--	--	3.6	6	.06
30	6.0	2	.03	--	--	--	3.3	5	.04
31	6.0	2	.03	--	--	--	2.8	4	.03
TOTAL	540.18	--	157.64	103.5	--	1.07	107.7	--	7.26

## SALINAS RIVER BASIN

11147070 SANTA RITA CREEK NEAR TEMPLETON, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.5	4	.03	1.4	2	.01	.31	7	.01
2	2.6	4	.03	1.5	3	.01	.26	4	0
3	2.7	4	.03	1.6	4	.02	.24	10	.01
4	2.7	4	.03	1.4	5	.02	.21	15	.01
5	4.6	8	.15	1.4	7	.03	.20	20	.01
6	3.8	7	.07	1.4	8	.03	.18	29	.01
7	2.4	3	.02	1.3	9	.03	.18	12	.01
8	1.8	5	.02	1.1	10	.03	.17	5	0
9	1.4	7	.03	.98	11	.03	.17	6	0
10	1.2	9	.03	.95	10	.03	.15	7	0
11	1.2	11	.04	.88	9	.02	.14	8	0
12	1.0	8	.02	.87	9	.02	.13	10	0
13	1.1	6	.02	.82	8	.02	.12	13	0
14	5.2	8	.11	.78	8	.02	.10	16	0
15	3.3	7	.06	.72	8	.02	.09	21	.01
16	2.3	5	.03	.61	7	.01	.09	26	.01
17	3.0	4	.03	.52	7	.01	.08	20	0
18	2.7	4	.03	.45	8	.01	.07	13	0
19	2.2	5	.03	.43	8	.01	.07	14	0
20	1.8	5	.02	.43	9	.01	.06	14	0
21	1.8	6	.03	.47	9	.01	.05	15	0
22	1.6	7	.03	.47	10	.01	.04	15	0
23	1.6	9	.04	.45	10	.01	.02	15	0
24	1.6	11	.05	.37	10	.01	0	0	0
25	1.6	13	.06	.31	11	.01	0	0	0
26	1.5	9	.04	.26	11	.01	0	0	0
27	1.5	6	.02	.33	11	.01	0	0	0
28	1.4	3	.01	.91	11	.03	0	0	0
29	1.4	2	.01	.68	10	.02	0	0	0
30	1.4	2	.01	.53	10	.01	0	0	0
31	--	--	--	.41	10	.01	--	--	--
TOTAL	64.9	--	1.13	24.73	--	.53	3.13	--	.03

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

2436.74

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

2921.03

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

				SUS- PENDED SEDIMENT 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
DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDIMENT (MG/L)				
NOV. 29...	0600	10.0	67	1920	347	47	61	89
DEC.								
01...	0545	9.0	64	2980	515	38	50	62
02...	0900	11.0	310	1050	879	40	45	69
02...	1730	11.0	113	189	58	--	--	--
16...	1035	9.0	37	194	19	60	80	92
21...	0015	7.5	380	858	880	54	72	83
21...	0730	8.0	288	720	560	32	43	54
	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL 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
NOV. 29...	96	--	99	--	99	--	99	--
DEC.								
01...	92	97	--	97	--	99	--	100
02...	79	85	--	86	--	94	--	100
02...	--	--	94	--	95	--	97	--
16...	93	--	94	--	95	--	97	--
21...	93	--	99	--	99	--	100	--
21...	69	81	--	85	--	92	--	100

## 11148800 NACIMIENTO RIVER NEAR BRYSON, CALIF.

LOCATION.--Lat 35°48'06", long 121°06'50", in NW¼ sec.33, T.24 S., R.8 E., Monterey County, at gaging station 0.6 mile upstream from Turtle Creek, 1.6 miles west of Bryson, and 10 miles southwest of Lockwood.

DRAINAGE AREA.--140 sq mi.

PERIOD OF RECORD.--Water temperatures: March 1958 to September 1959, October 1960 to September 1964, March 1965 to September 1971 (discontinued).

Sediment records: March 1958 to September 1959, October 1960 to September 1964, water year 1965 (partial-record station), March 1965 to September 1971 (discontinued).

## EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 1,680 mg/l Nov. 28; minimum daily, no flow for many days.  
Sediment discharge: Maximum daily, 43,800 tons Nov. 28; minimum daily, 0 tons on many days.

## Period of record:

Sediment concentrations: Maximum daily, 6,860 mg/l Nov. 13, 1960; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 242,000 tons Jan. 25, 1969; minimum daily, 0 tons on many days each year.

REMARKS.--No flow Oct. 1 to Nov. 4, July 16 to Sept. 30.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	11.0	--	--	--	--	--	--	--
3	--	--	11.0	--	--	--	--	--	23.0	--	--	--
4	--	--	--	--	10.0	--	15.0	15.0	--	--	--	--
5	--	--	--	--	--	11.0	--	--	--	--	--	--
6	--	--	--	--	10.0	--	--	--	--	--	--	--
7	--	--	--	--	--	11.5	--	16.5	26.0	--	--	--
8	--	--	--	--	10.0	--	--	--	--	26.0	--	--
9	--	--	--	--	--	--	--	--	--	29.0	--	--
10	--	--	--	--	--	12.0	--	--	--	--	--	--
11	--	10.5	--	--	10.5	--	--	20.0	18.0	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	16.5	--	--	--
15	--	--	--	--	--	12.5	18.5	--	--	--	--	--
16	--	--	--	--	--	--	17.0	--	--	--	--	--
17	--	--	--	--	11.0	--	--	--	--	--	--	--
18	--	--	6.5	--	--	--	--	25.0	--	--	--	--
19	--	--	--	--	--	14.5	--	--	--	--	--	--
20	--	--	--	--	--	15.0	16.0	--	--	--	--	--
21	--	--	--	--	11.0	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	17.0	--	--	--	--	--	--
25	--	12.0	--	11.0	--	--	--	--	--	--	--	--
26	--	--	--	--	--	16.0	17.0	--	--	--	--	--
27	--	--	--	9.0	--	--	--	19.0	26.0	--	--	--
28	--	--	--	10.0	10.0	--	--	--	--	--	--	--
29	--	--	--	--	--	--	20.0	20.0	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN
				.125 MM	.250 MM	.500 MM	1.00 MM
OCT.							
08...	0800	1	.00	--	5	18	28
08...	0805	1	.00	--	1	4	12
08...	0810	1	.00	--	2	10	20
08...	0815	1	.00	1	3	7	14
08...	0820	1	.00	1	6	19	25

DATE	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN
	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM
OCT.						
08...	45	62	82	95	100	--
08...	16	21	32	50	70	100
08...	43	52	68	91	100	--
08...	24	31	40	62	100	--
08...	47	73	85	98	100	--

## SALINAS RIVER BASIN

11148800 NACIMIENTO RIVER NEAR BRYSON, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	0	0	1130	61	196
2				0	0	0	2500	499	3830
3				0	0	0	802	52	113
4				0	0	0	385	12	12
5				4.6	8	1.5	225	6	3.6
6				54	72	12	146	5	2.0
7				28	51	4.1	92	4	.99
8				20	14	.76	66	6	1.1
9				11	8	.24	76	5	1.0
10				7.8	6	.13	40	4	.43
11				5.9	5	.08	28	4	.30
12				5.5	4	.06	20	4	.22
13				4.0	3	.03	15	4	.16
14				3.7	2	.02	15	3	.12
15				3.5	1	.01	8.4	3	.07
16				3.1	1	.01	104	12	4.0
17				3.2	1	.01	128	7	2.4
18				3.2	1	.01	1250	233	1090
19				2.8	2	.02	1590	86	438
20				3.2	2	.02	1010	198	1340
21				3.2	2	.02	3300	238	2730
22				3.2	3	.03	1280	50	173
23				3.2	3	.03	766	25	52
24				3.6	3	.03	530	17	24
25				6.5	38	.67	405	11	12
26				448	519	745	365	11	12
27				92	150	37	520	14	20
28				5850	1680	43800	417	9	10
29				4470	867	12700	349	8	7.5
30				1040	80	225	298	7	5.6
31				--	--	--	259	7	4.9
TOTAL	0	--	0	12083.2	--	57526.78	18119.4	--	10086.39

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	229	7	4.3	86	2	.46	36	1	.10
2	216	7	4.1	83	2	.45	36	1	.10
3	179	7	3.4	80	2	.43	35	2	.19
4	161	6	2.6	76	2	.41	36	2	.19
5	149	6	2.4	72	2	.39	36	2	.19
6	140	6	2.3	72	1	.19	35	1	.09
7	128	6	2.1	70	1	.19	35	1	.09
8	119	5	1.6	68	1	.18	35	1	.09
9	113	5	1.5	64	1	.17	36	1	.10
10	107	5	1.4	62	2	.33	36	1	.10
11	113	5	1.5	60	2	.32	36	1	.10
12	210	10	5.7	56	2	.30	190	20	45
13	522	21	32	54	2	.29	437	43	61
14	489	11	15	54	1	.15	177	9	4.3
15	369	8	8.0	52	1	.14	127	3	1.0
16	302	6	4.9	54	1	.15	104	3	.84
17	256	5	3.5	76	1	.21	90	2	.49
18	229	5	3.1	58	1	.16	79	2	.43
19	203	4	2.2	52	1	.14	72	1	.19
20	185	4	2.0	50	1	.14	66	1	.18
21	170	3	1.4	48	1	.13	61	1	.16
22	152	3	1.2	46	1	.12	57	1	.15
23	144	3	1.2	46	1	.12	54	2	.29
24	134	2	.72	44	1	.12	53	3	.43
25	122	2	.66	42	1	.11	51	3	.41
26	113	2	.61	38	1	.10	132	6	2.1
27	109	2	.59	36	1	.10	188	4	2.0
28	104	2	.56	36	1	.10	128	4	1.4
29	98	2	.53	--	--	--	106	4	1.1
30	89	2	.48	--	--	--	94	4	1.0
31	87	2	.47	--	--	--	83	4	.90
TOTAL	5741	--	112.02	1635	--	6.10	2741	--	124.71



11148800 NACIMIENTO RIVER NEAR BRYSON, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	75	3	.61	35	1	.09	18	2	.10
2	69	3	.56	35	1	.09	18	2	.10
3	65	3	.53	36	2	.19	18	2	.10
4	61	3	.49	34	2	.18	17	2	.09
5	57	3	.46	33	2	.18	17	2	.09
6	54	2	.29	32	2	.17	16	2	.09
7	55	2	.30	31	2	.17	15	2	.08
8	51	2	.28	30	2	.16	14	2	.08
9	49	2	.26	29	2	.16	13	3	.11
10	47	2	.25	28	3	.23	13	3	.11
11	46	2	.25	27	3	.22	13	3	.11
12	44	1	.12	26	3	.21	12	3	.10
13	43	1	.12	25	3	.20	11	2	.06
14	68	3	.55	25	3	.20	11	2	.06
15	57	2	.31	24	3	.19	9.5	2	.05
16	48	2	.26	23	4	.25	8.8	2	.05
17	56	3	.45	21	4	.23	8.3	2	.04
18	73	4	.79	21	4	.23	8.1	2	.04
19	57	3	.46	20	4	.22	7.9	2	.04
20	52	3	.42	20	4	.22	7.8	2	.04
21	47	3	.38	19	4	.21	6.2	3	.05
22	45	3	.36	18	4	.19	5.7	3	.05
23	43	3	.35	18	3	.15	5.2	3	.04
24	42	3	.34	18	3	.15	4.8	3	.04
25	40	3	.32	17	3	.14	4.2	3	.03
26	40	3	.32	17	6	.28	3.9	3	.03
27	38	3	.31	17	3	.14	3.9	3	.03
28	38	2	.21	20	3	.16	3.6	3	.03
29	36	2	.19	21	3	.17	3.6	3	.03
30	35	1	.09	20	2	.11	3.1	3	.03
31	--	--	--	19	2	.10	--	--	--
TOTAL	1531	--	10.63	759	--	5.59	300.6	--	1.90

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.1	2	.02						
2	3.0	2	.02						
3	2.3	2	.02						
4	2.6	2	.01						
5	2.3	2	.01						
6	2.0	2	.01						
7	1.6	2	.01						
8	1.5	2	.01						
9	1.2	8	.03						
10	.94	6	.02						
11	.75	6	.01						
12	.64	6	.01						
13	.50	5	.01						
14	.31	5	0						
15	.10	5	0						
16	0	0	0						
17	0	0	0						
18	0	0	0						
19	0	0	0						
20	0	0	0						
21	0	0	0						
22	0	0	0						
23	0	0	0						
24	0	0	0						
25	0	0	0						
26	0	0	0						
27	0	0	0						
28	0	0	0						
29	0	0	0						
30	0	0	0						
31	0	0	0						
TOTAL	23.34	--	.19	0	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

42933.54  
67874.31

## SALINAS RIVER BASIN

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CALIF.

LOCATION.--Lat 35°53'48", long 121°05'14", in Los Ojitos Grant, Monterey County, at gaging station at highway bridge, 0.4 mile upstream from Tule Canyon, and 3.3 miles south of Lockwood.

DRAINAGE AREA.--223 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1965 to September 1971.

Sediment records: October 1965 to September 1971.

EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 782 mg/l Dec. 21; minimum daily, no flow for many days.

Sediment discharge: Maximum daily, 2,870 tons Dec. 21; minimum daily, 0 tons on many days.

Period of record:

Sediment concentrations: Maximum daily, 7,420 mg/l Dec. 6, 1966; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 161,000 tons Dec. 6, 1966; minimum daily, 0 tons on many days each year.

REMARKS.--No flow Oct. 1 to Nov. 27, June 27 to Sept. 30. Sediment table omitted for period July 1 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

[illegible]

## 11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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				0	0	0	83	122	28
2				0	0	0	635	736	1760
3				0	0	0	360	300	292
4				0	0	0	160	100	43
5				0	0	0	100	50	14
6				0	0	0	68	50	9.2
7				0	0	0	55	48	7.1
8				0	0	0	51	42	5.8
9				0	0	0	48	41	5.3
10				0	0	0	51	113	17
11				0	0	0	59	59	9.4
12				0	0	0	55	46	6.8
13				0	0	0	50	43	5.8
14				0	0	0	46	42	5.2
15				0	0	0	41	40	4.4
16				0	0	0	42	38	4.3
17				0	0	0	62	36	6.0
18				0	0	0	97	72	22
19				0	0	0	294	285	252
20				0	0	0	176	75	36
21				0	0	0	1060	782	2870
22				0	0	0	550	200	297
23				0	0	0	331	160	143
24				0	0	0	282	139	106
25				0	0	0	234	110	69
26				0	0	0	228	98	60
27				0	0	0	382	268	291
28				114	260	404	308	120	100
29				559	687	1110	228	80	49
30				163	181	90	190	65	33
31				--	--	--	172	70	33
TOTAL	0	--	0	836	--	1604	6498	--	6584.3

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	158	70	30	73	4	.79	41	25	2.8
2	145	70	27	73	8	1.6	37	25	2.5
3	150	60	24	80	17	3.7	37	25	2.5
4	158	40	17	64	11	1.9	39	25	2.6
5	129	30	10	55	3	.45	44	25	3.0
6	121	29	9.5	57	3	.46	29	25	2.0
7	102	28	7.7	48	4	.52	25	25	1.7
8	102	26	7.2	62	5	.84	30	25	2.0
9	133	25	9.0	62	6	1.0	23	25	1.6
10	97	22	5.8	66	7	1.2	33	25	2.2
11	97	21	5.5	62	22	3.7	30	25	2.0
12	145	70	31	44	24	2.9	36	25	2.4
13	212	91	60	50	24	3.2	176	243	135
14	273	75	55	37	24	2.4	133	108	39
15	223	40	24	41	24	2.7	91	28	6.9
16	176	31	15	42	24	2.7	73	20	3.9
17	158	30	13	50	24	3.2	68	20	3.7
18	150	30	12	41	25	2.8	66	20	3.6
19	141	30	11	53	25	3.6	59	20	3.2
20	121	30	9.8	55	25	3.7	59	19	3.0
21	109	29	8.5	33	25	2.2	46	19	2.4
22	97	27	7.1	39	25	2.6	47	19	2.4
23	97	25	6.5	53	25	3.6	42	19	2.2
24	94	22	5.6	48	25	3.2	53	19	2.7
25	97	20	5.2	34	25	2.3	55	19	2.8
26	109	18	5.3	33	25	2.2	42	19	2.2
27	109	16	4.7	30	25	2.0	53	19	2.7
28	68	14	2.6	41	25	2.8	48	18	2.3
29	62	12	2.0	--	--	--	42	18	2.0
30	77	9	1.9	--	--	--	48	18	2.3
31	77	7	1.5	--	--	--	42	18	2.0
TOTAL	3787	--	434.4	1426	--	64.26	1647	--	251.6

## SALINAS RIVER BASIN

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	46	18	2.2	27	12	.87	9.8	4	.11
2	37	18	1.8	22	12	.71	8.6	3	.07
3	30	18	1.5	22	12	.71	8.6	3	.07
4	34	18	1.7	23	11	.68	8.0	3	.06
5	36	17	1.7	23	11	.68	8.0	3	.06
6	33	17	1.5	30	11	.89	8.0	3	.06
7	33	17	1.5	38	10	1.0	7.6	3	.06
8	36	17	1.7	30	10	.81	7.0	3	.06
9	30	17	1.4	28	10	.76	7.6	3	.06
10	32	17	1.5	25	10	.68	6.6	3	.05
11	32	17	1.5	27	9	.66	6.6	3	.05
12	30	17	1.4	22	9	.53	6.0	3	.05
13	29	16	1.3	23	9	.56	6.0	3	.05
14	39	16	1.7	21	9	.51	5.2	3	.04
15	41	16	1.8	21	8	.45	4.4	3	.04
16	31	16	1.3	18	8	.39	3.3	3	.03
17	30	16	1.3	13	8	.28	2.7	3	.02
18	31	15	1.3	11	8	.24	1.7	3	.01
19	27	15	1.1	13	7	.25	1.3	3	.01
20	27	15	1.1	14	7	.26	.39	3	0
21	28	15	1.1	16	7	.30	.26	3	0
22	21	14	.79	14	7	.26	.15	3	0
23	22	14	.83	14	6	.23	.10	3	0
24	23	14	.87	13	6	.21	.06	3	0
25	23	14	.87	12	6	.19	.04	3	0
26	22	13	.77	13	5	.18	.02	3	0
27	27	13	.95	12	5	.16	0	0	0
28	26	13	.91	11	5	.15	0	0	0
29	23	13	.81	11	4	.12	0	0	0
30	25	12	.81	10	4	.11	0	0	0
31	--	--	--	9.8	4	.11	--	--	--
TOTAL	904	--	39.01	586.8	--	13.94	118.02	--	.96

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

16002.82

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

8992.47

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDIMENT (MG/L)	SUS- PENDED SEDIMENT 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
DEC.											
02...	1015	10.5	1420	1310	5020	15	22	29	41	55	64
03...	1702	12.0	362	202	197	--	--	--	--	--	--
19...	0850	7.5	368	338	336	--	--	--	--	--	31
21...	1630	9.0	1050	375	1060	--	--	--	--	--	31
24...	1430	14.5	280	139	105	--	--	--	--	--	9

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
DEC.										
02...	--	67	--	87	--	99	--	100	--	--
03...	28	--	36	--	66	--	89	--	96	100
19...	--	33	--	66	--	94	--	100	--	--
21...	--	36	--	75	--	100	--	--	--	--
24...	--	12	--	52	--	98	--	100	--	--

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
DEC.							
21...	1555	9.0	3	1140	1	10	50
24...	1515	14.5	3	265	--	3	18
JAN.							
11...	1530	12.5	3	60	--	2	24
MAR.							
15...	1350	19.5	3	93	--	1	22
APR.							
15...	1300	23.5	3	47	--	1	22
MAY							
05...	1625	22.0	3	22	--	1	23
JUNE							
02...	1645	22.5	2	8.6	--	1	28

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
DEC.							
21...	75	86	91	94	97	99	100
24...	48	77	90	97	99	100	--
JAN.							
11...	62	87	95	99	100	--	--
MAR.							
15...	61	86	95	98	100	--	--
APR.							
15...	72	97	100	--	--	--	--
MAY							
05...	82	97	99	100	--	--	--
JUNE							
02...	77	97	99	100	--	--	--



## 11151870 ARROYO SECO NEAR GREENFIELD, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.4	1	0	6.4	2	.03	458	8	9.9
2	1.4	1	0	6.6	2	.04	1540	113	623
3	1.4	1	0	6.6	3	.05	610	7	12
4	1.4	2	.01	17	3	.15	378	4	4.1
5	1.4	2	.01	36	4	.50	257	3	2.1
6	1.4	8	.03	32	2	.17	192	2	1.0
7	1.4	4	.02	30	2	.21	152	3	1.2
8	1.4	1	0	22	1	.06	139	8	3.2
9	1.4	1	0	17	2	.09	132	3	1.1
10	1.4	1	0	15	0	0	106	2	.57
11	1.4	4	.02	13	0	0	94	2	.51
12	1.4	2	.01	12	0	0	84	2	.45
13	2.2	1	.01	12	2	.06	75	2	.41
14	2.6	0	0	12	1	.03	72	2	.39
15	2.7	0	0	11	1	.03	62	2	.33
16	3.0	0	0	11	2	.06	128	6	2.0
17	3.0	0	0	11	2	.06	158	7	3.1
18	3.3	2	.02	11	1	.03	179	3	1.4
19	3.3	1	.01	11	5	.15	213	2	1.2
20	4.2	1	.01	11	4	.12	276	5	7.7
21	6.3	1	.02	11	4	.12	970	22	66
22	7.0	0	0	11	4	.12	542	5	7.3
23	7.5	0	0	12	2	.06	371	4	4.0
24	7.0	0	0	12	2	.06	283	4	3.1
25	6.6	0	0	19	5	.38	225	4	2.4
26	6.4	0	0	144	15	6.6	222	4	2.4
27	5.9	0	0	46	4	.50	271	3	2.2
28	5.9	0	0	1970	163	1130	232	2	1.3
29	5.9	1	.02	2010	258	1660	206	1	.56
30	5.9	2	.03	503	44	69	188	1	.51
31	5.9	2	.03	--	--	--	171	1	.46
TOTAL	111.6	--	.25	5041.6	--	2868.68	8986	--	765.89

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	156	1	.42	86	1	.23	45	1	.12
2	148	1	.40	85	1	.23	44	1	.12
3	129	1	.35	82	1	.22	44	2	.24
4	116	2	.63	78	1	.21	43	1	.12
5	106	1	.29	77	1	.21	42	1	.11
6	98	1	.76	76	2	.41	41	1	.11
7	92	2	.50	75	2	.41	40	1	.11
8	85	2	.46	74	2	.40	38	5	.51
9	81	1	.22	72	2	.39	38	3	.31
10	76	1	.71	69	5	.93	38	2	.21
11	77	1	.71	67	4	.72	38	2	.21
12	160	5	2.2	66	2	.36	243	11	20
13	155	10	9.7	64	1	.17	269	7	5.9
14	110	5	4.2	62	1	.17	141	4	1.5
15	251	3	2.0	61	1	.16	118	2	.64
16	215	2	1.2	62	1	.17	102	2	.55
17	215	2	1.2	73	1	.20	92	2	.50
18	226	2	1.2	61	1	.16	84	2	.45
19	218	1	.59	61	1	.16	81	2	.44
20	197	1	.53	58	1	.16	77	2	.42
21	173	1	.47	55	1	.15	72	2	.39
22	152	1	.41	54	1	.15	67	2	.36
23	144	1	.39	54	1	.15	64	2	.35
24	133	1	.36	52	1	.14	63	2	.34
25	121	1	.33	51	1	.14	61	2	.33
26	115	1	.31	48	1	.13	160	12	6.4
27	109	1	.29	46	1	.12	139	3	1.1
28	103	1	.28	47	1	.13	105	3	.85
29	98	1	.26	--	--	--	93	3	.75
30	93	1	.25	--	--	--	87	3	.70
31	90	1	.24	--	--	--	81	2	.44
TOTAL	4644	--	30.36	1816	--	7.18	2650	--	44.58

## SALINAS RIVER BASIN

11151870 ARROYO SECO NEAR GREENFIELD, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	75	1	.20	40	1	.11	30	8	.65
2	72	1	.19	43	1	.12	30	10	.81
3	67	1	.18	42	8	.91	28	4	.30
4	63	1	.17	41	2	.22	27	2	.15
5	59	1	.16	40	2	.22	25	2	.14
6	57	1	.15	40	2	.22	24	3	.19
7	62	1	.17	40	2	.22	23	4	.25
8	56	1	.15	40	1	.11	22	4	.24
9	54	1	.15	38	1	.10	20	4	.22
10	52	1	.14	36	1	.10	21	4	.23
11	50	3	.41	34	1	.09	21	4	.23
12	48	1	.13	34	1	.09	20	5	.27
13	47	1	.13	33	1	.09	19	5	.26
14	67	1	.18	30	1	.08	18	5	.24
15	56	1	.15	31	1	.08	17	4	.18
16	49	1	.13	30	1	.08	16	4	.17
17	69	1	.19	28	1	.08	15	4	.16
18	67	1	.18	29	1	.08	15	4	.16
19	58	1	.16	29	1	.08	14	3	.11
20	54	1	.15	27	1	.07	14	3	.11
21	53	3	.43	26	1	.07	13	2	.07
22	51	2	.28	29	5	.39	12	1	.03
23	49	2	.26	29	2	.16	12	1	.03
24	45	2	.24	28	1	.08	12	1	.03
25	46	2	.25	25	1	.07	11	1	.03
26	45	1	.12	26	1	.07	11	1	.03
27	45	1	.12	29	1	.08	11	1	.03
28	44	1	.12	33	1	.09	11	1	.03
29	42	1	.11	31	1	.08	11	1	.03
30	41	1	.11	30	1	.08	10	1	.03
31	--	--	--	29	6	.47	--	--	--
TOTAL	1643	--	5.51	1020	--	4.79	533	--	5.41

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	9.3	2	.05	1.5	2	.01	1.2	1	0
2	9.5	2	.05	1.5	2	.01	1.4	1	0
3	8.8	2	.05	1.4	2	.01	1.4	1	0
4	8.0	2	.04	1.5	2	.01	1.4	1	0
5	7.5	2	.04	1.2	2	.01	1.5	1	0
6	7.0	2	.04	1.2	3	.01	1.5	1	0
7	6.6	2	.04	1.1	3	.01	1.4	1	0
8	6.4	2	.03	1.4	3	.01	1.2	1	0
9	6.4	2	.03	1.6	3	.01	1.2	1	0
10	6.4	2	.03	1.6	2	.01	1.1	1	0
11	5.8	2	.03	1.5	1	0	1.1	1	0
12	5.4	2	.03	1.6	1	0	1.1	1	0
13	5.7	2	.03	1.4	1	0	1.1	1	0
14	5.7	2	.03	1.3	1	0	1.1	2	.01
15	5.0	2	.03	1.3	1	0	.96	3	.01
16	4.4	2	.02	1.0	1	0	.77	5	.01
17	3.5	2	.02	.98	1	0	.70	2	0
18	3.7	2	.02	.76	1	0	.65	1	0
19	4.7	2	.02	.75	2	0	.63	1	0
20	3.3	2	.02	.72	2	0	.60	1	0
21	3.3	2	.02	.77	2	0	.60	1	0
22	3.2	2	.02	.83	2	0	.55	1	0
23	2.7	2	.01	.89	2	0	.66	1	0
24	2.4	2	.01	1.1	2	.01	.77	0	0
25	2.2	2	.01	1.2	3	.01	.82	0	0
26	2.2	3	.02	1.3	3	.01	.99	0	0
27	2.2	2	.01	1.1	3	.01	1.2	0	0
28	1.7	2	.01	1.0	2	.01	1.5	0	0
29	1.6	2	.01	.95	2	.01	1.8	0	0
30	1.7	2	.01	.96	1	0	2.3	0	0
31	1.7	2	.01	1.0	1	0	--	--	--
TOTAL	148.0	--	.79	36.41	--	.16	33.20	--	.03

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

26662.81

3733.63



## 11152500 SALINAS RIVER NEAR SPRECKELS, CALIF.

LOCATION.--Lat 36°37'52", long 121°40'17", in Nacional Grant, Monterey County, at gaging station at bridge on Salinas-Monterey highway, 0.8 mile upstream from El Toro Creek, 1.6 miles northwest of Spreckels, and 2 miles south of Salinas.

DRAINAGE AREA.--4,156 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): Water years 1952-54 (partial-record station), October 1958 to September 1966, water years 1967-70 (partial-record station). Published as sta 11152300 "near Chualar" in 1967.

Water temperatures: December 1966 to September 1971. Published as sta 11152300 "near Chualar" in 1967-69. Sediment records: Water years 1950-51 (partial-record station), December 1966 to September 1971. Published as sta 11152300 "near Chualar" in 1967-69.

## EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 5,280 mg/l Dec. 24; minimum daily, 8 mg/l Oct. 19.

Sediment discharge: Maximum daily, 7,830 tons Dec. 24; minimum daily, 0.10 ton Aug. 30.

## Period of record:

Sediment concentrations: Maximum daily, 18,900 mg/l Feb. 25, 1969; minimum daily, no flow for several days in 1968.

Sediment discharge: Maximum daily, 2,790,000 tons Feb. 26, 1969; minimum daily, 0 tons on several days in 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	--	--	10.0	13.0	12.0	--	--	17.0	23.0	--	22.0
2	--	18.0	12.0	--	12.0	--	18.0	18.0	--	--	22.0	--
3	23.0	--	9.0	8.0	11.0	14.0	--	--	20.0	24.0	--	23.0
4	--	17.0	11.0	--	12.0	16.5	21.0	17.0	--	--	23.0	--
5	22.0	--	--	7.0	11.0	15.0	--	--	20.0	22.0	--	24.0
6	--	17.0	14.0	6.0	13.0	--	15.0	16.0	--	--	23.0	--
7	18.0	--	--	6.0	14.0	11.0	--	--	19.0	20.0	--	22.0
8	--	18.0	15.0	8.0	12.0	9.5	18.0	21.0	--	--	25.0	--
9	19.0	--	--	8.0	15.0	10.5	--	--	18.0	25.0	--	23.0
10	--	18.0	15.0	9.0	15.0	13.0	16.0	24.5	--	--	23.0	--
11	22.0	--	--	10.0	17.0	15.0	--	--	20.0	22.0	--	24.0
12	--	20.0	14.0	10.0	18.0	14.0	22.0	23.0	--	--	24.0	--
13	18.0	--	--	11.0	16.0	14.0	18.5	--	22.0	23.0	--	24.0
14	--	20.0	14.0	11.0	--	14.0	17.0	22.0	--	--	24.0	--
15	21.0	--	--	9.0	15.0	15.0	--	--	23.0	23.0	--	23.0
16	--	13.0	13.0	9.0	--	17.0	20.0	21.0	--	22.0	22.0	--
17	20.0	--	--	11.0	12.0	17.0	--	--	25.0	24.0	--	23.0
18	--	18.0	13.0	16.0	--	--	18.0	21.0	--	--	24.0	--
19	19.0	--	--	16.0	13.0	18.0	--	--	26.0	24.0	--	22.0
20	--	18.0	11.0	15.0	--	--	11.0	15.0	--	--	--	--
21	17.0	--	--	14.0	15.0	10.0	--	--	25.0	23.0	--	23.0
22	--	16.0	7.0	12.0	--	--	18.0	24.0	--	--	22.0	--
23	18.0	--	10.0	11.0	14.0	16.0	--	--	24.0	24.0	--	22.0
24	--	16.0	11.0	12.0	--	--	--	23.0	--	--	22.0	--
25	16.0	--	--	13.0	15.0	15.0	--	--	24.0	22.0	--	23.0
26	--	15.0	9.0	15.0	--	--	16.0	20.0	--	--	23.0	--
27	16.0	--	--	15.0	14.0	18.0	--	--	23.0	23.0	--	22.0
28	--	15.0	10.0	13.0	--	--	15.0	21.0	--	--	23.0	--
29	15.0	--	--	15.0	--	17.0	--	--	24.0	22.0	--	21.0
30	--	13.0	11.0	14.0	--	--	17.0	17.0	--	--	24.0	--
31	16.0	--	--	12.0	--	18.0	--	--	--	22.0	--	--
AVE	--	--	--	11.2	--	--	--	--	--	--	--	--

## SALINAS RIVER BASIN

11152500 SALINAS RIVER NEAR SPRECKELS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	2.1	35	.20	9.5	95	2.4	610	160	264
2	2.1	30	.17	9.0	85	2.1	289	135	105
3	2.1	25	.14	10	170	4.6	980	360	1110
4	2.1	40	.23	11	240	7.1	660	150	267
5	2.6	60	.42	9.5	230	5.9	330	130	116
6	2.6	80	.56	9.5	190	4.9	190	210	108
7	2.6	110	.77	9.5	160	4.1	132	230	82
8	2.6	180	1.3	9.5	145	3.7	52	210	29
9	2.6	220	1.5	9.5	150	3.8	27	130	9.5
10	4.8	100	1.3	9.5	150	3.8	13	70	2.5
11	3.5	40	.38	10	115	3.1	7.5	80	1.6
12	3.3	130	1.4	10	90	2.4	5.1	110	1.5
13	8.0	180	3.9	10	95	2.6	3.9	175	1.8
14	13	110	3.9	10	100	2.7	3.0	205	1.7
15	19	60	3.1	11	110	3.3	2.4	165	1.1
16	27	30	2.2	10	110	3.0	2.8	130	.98
17	33	15	1.3	10	110	3.0	3.5	120	1.1
18	38	10	1.0	10	115	3.1	3.7	170	1.7
19	45	8	.97	10	115	3.1	3.0	180	1.5
20	49	10	1.3	11	125	3.7	2.0	200	1.1
21	56	80	12	12	130	4.2	17	768	42
22	62	70	12	10	130	3.5	378	2180	1900
23	62	55	9.2	10	120	3.2	503	4530	6230
24	54	50	7.3	10	110	3.0	540	5280	7830
25	37	50	5.0	15	90	3.6	439	2200	2610
26	19	65	3.3	12	70	2.3	345	700	652
27	10	90	2.4	10	60	1.6	298	500	402
28	5.8	190	3.0	17	172	8.8	277	430	322
29	6.5	230	4.0	19	120	6.2	269	410	298
30	7.5	210	4.3	1260	279	1010	235	450	286
31	8.5	160	3.7	--	--	--	214	370	214
TOTAL	593.9	--	92.24	1573.5	--	1118.8	6834.9	--	22893.08

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	207	290	158	104	180	51	17	85	3.9
2	195	245	129	99	130	35	14	85	3.2
3	181	200	98	93	90	23	12	87	2.8
4	155	190	80	86	75	17	12	88	2.9
5	136	180	66	82	70	15	10	88	2.4
6	126	185	63	78	75	16	25	80	5.4
7	118	215	68	76	95	19	601	711	1270
8	111	200	60	72	130	25	345	334	336
9	104	180	51	70	90	17	200	185	100
10	99	170	45	66	80	14	140	240	91
11	76	165	43	64	80	14	101	220	60
12	99	200	53	59	95	15	78	210	44
13	100	150	44	54	90	13	70	260	49
14	99	175	49	54	88	13	54	220	32
15	181	286	134	52	85	12	48	80	10
16	200	334	188	48	85	11	41	55	6.1
17	247	410	273	46	86	11	34	88	8.1
18	244	380	250	44	96	11	30	75	6.1
19	233	320	201	46	100	12	25	53	3.6
20	225	525	319	40	90	9.7	22	40	2.4
21	212	390	223	38	75	7.7	18	36	1.7
22	197	430	255	35	69	6.5	15	42	1.7
23	190	210	108	33	65	5.8	12	52	1.7
24	177	250	119	32	70	6.0	12	75	2.4
25	159	310	133	28	78	5.9	10	96	2.6
26	146	320	126	25	90	6.1	11	110	3.3
27	138	300	112	22	90	5.3	10	125	3.4
28	130	240	84	20	85	4.6	9.0	110	2.7
29	122	200	66	--	--	--	8.5	75	1.7
30	114	240	74	--	--	--	8.5	55	1.3
31	109	240	71	--	--	--	8.0	50	1.1
TOTAL	4853	--	3743	1566	--	401.6	2001.0	--	2062.5

## 11152500 SALINAS RIVER NEAR SPRECKELS, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	8.0	60	1.3	6.5	130	2.3	14	76	2.9
2	8.0	75	1.6	6.8	104	1.9	21	62	3.5
3	8.0	95	2.1	6.8	110	2.0	27	48	3.5
4	7.5	110	2.2	8.5	116	2.7	31	41	3.4
5	7.2	95	1.8	10	75	2.0	33	35	3.1
6	7.2	70	1.4	12	42	1.4	33	28	2.5
7	8.0	70	1.5	14	38	1.4	30	22	1.8
8	7.2	80	1.6	14	34	1.3	33	25	2.2
9	6.8	120	2.2	12	63	2.0	38	28	2.9
10	7.2	160	3.1	11	92	2.7	41	32	3.5
11	6.8	140	2.6	10	96	2.6	38	36	3.7
12	6.8	105	1.9	9.0	100	2.4	33	30	2.7
13	7.2	85	1.7	8.5	110	2.5	31	23	1.9
14	10	95	2.6	8.0	120	2.6	28	25	1.9
15	9.0	100	2.4	8.0	120	2.6	28	28	2.1
16	7.2	107	2.1	7.5	130	2.6	19	30	1.5
17	7.2	130	2.5	7.2	130	2.5	10	32	.86
18	7.2	171	3.3	7.2	126	2.4	6.1	40	.66
19	7.2	180	3.5	7.2	100	1.9	4.1	48	.53
20	6.8	192	3.5	7.2	76	1.5	3.5	31	.29
21	6.5	150	2.6	8.5	65	1.5	3.3	14	.12
22	6.5	126	2.2	8.5	58	1.3	2.8	34	.26
23	6.5	120	2.1	7.2	120	2.3	2.8	54	.41
24	6.5	120	2.1	7.2	190	3.7	2.6	68	.48
25	6.8	120	2.2	7.2	150	2.9	2.6	82	.58
26	6.5	114	2.0	7.2	118	2.3	2.4	94	.61
27	6.5	150	2.6	7.2	120	2.3	2.2	106	.63
28	7.2	186	3.6	7.2	126	2.4	1.5	120	.49
29	6.8	170	3.1	7.2	110	2.1	1.5	128	.52
30	6.5	156	2.7	7.5	92	1.9	1.5	94	.38
31	--	--	--	6.8	84	1.5	--	--	--
TOTAL	216.8	--	70.1	263.1	--	67.5	524.9	--	49.92

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	1.4	60	.23	1.8	100	.49	2.4	32	.21
2	1.4	50	.19	1.9	125	.64	2.4	34	.22
3	1.4	40	.15	1.9	80	.41	2.0	36	.19
4	1.5	42	.17	1.9	31	.16	2.0	32	.17
5	3.0	44	.36	1.6	46	.20	2.0	28	.15
6	5.5	26	.39	1.5	36	.15	2.0	34	.18
7	6.5	12	.21	1.9	33	.17	2.0	40	.22
8	8.0	18	.39	2.2	30	.18	1.9	37	.19
9	3.9	24	.25	2.0	33	.18	2.6	34	.24
10	2.6	38	.27	1.9	36	.18	3.3	38	.34
11	1.8	53	.26	2.0	33	.18	3.5	42	.40
12	1.8	57	.28	2.0	30	.16	3.3	31	.28
13	1.9	60	.31	2.0	27	.15	3.5	20	.19
14	1.9	55	.28	2.2	23	.14	3.5	23	.22
15	1.5	50	.20	2.2	27	.16	3.1	26	.22
16	1.5	71	.29	2.0	31	.17	2.6	42	.29
17	1.8	91	.44	2.2	32	.19	2.4	44	.29
18	1.6	70	.30	1.9	33	.17	2.2	46	.27
19	1.9	48	.25	2.0	33	.18	2.0	49	.26
20	1.6	55	.24	2.0	34	.18	1.9	50	.26
21	1.5	62	.25	2.2	37	.22	1.8	52	.25
22	1.6	130	.56	2.2	40	.24	1.9	46	.24
23	1.3	202	.98	2.0	44	.24	1.9	40	.21
24	1.6	140	.60	2.0	48	.26	1.9	37	.19
25	1.6	78	.34	1.9	49	.25	1.9	34	.17
26	1.8	82	.40	1.8	50	.24	1.8	36	.17
27	1.6	85	.37	2.0	40	.22	1.6	38	.16
28	1.8	76	.37	1.6	29	.13	1.6	37	.16
29	1.8	68	.33	2.0	23	.12	1.6	36	.16
30	1.6	68	.29	2.0	18	.10	4.8	36	.47
31	1.9	69	.34	2.4	25	.16	--	--	--
TOTAL	71.0	--	10.79	61.2	--	6.62	71.4	--	6.97

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

18630.7

30522.62

## SALINAS RIVER BASIN

11152500 SALINAS RIVER NEAR SPRECKELS, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM
NOV. 30...	1130	13.0	1980	324	1730	--	--
DEC. 03...	1430	9.0	1540	508	2110	62	76
16...	1500	13.0	2.7	124	.90	--	--
22...	1045	7.0	471	4210	5350	72	83
24...	1400	11.0	605	6290	10300	69	80
30...	1315	11.0	232	460	288	59	77
JAN. 15...	1130	9.0	178	243	117	61	81
MAR. 08...	1045	9.5	330	207	184	54	71
09...	1015	10.5	212	132	76	--	--

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. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
NOV. 30...	--	--	--	96	96	97	100
DEC. 03...	92	95	96	97	98	99	100
16...	--	--	--	95	96	97	100
22...	96	99	100	--	--	--	--
24...	97	97	98	100	--	--	--
30...	85	91	91	92	92	97	100
JAN. 15...	92	95	95	95	96	99	100
MAR. 08...	83	89	90	91	92	100	--
09...	--	--	--	82	84	94	100

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
UCT. 05...	1300	22.0	5	3.3	4	18	65	93	99	99	100



## PAJARO RIVER BASIN

11153900 UVAS CREEK ABOVE UVAS RESERVOIR, NEAR MORGAN HILL, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.17	12	.01	.84	4	.01	147	274	164
2	.07	12	0	.82	2	0	347	842	1440
3	.15	12	0	.78	1	0	64	11	2.2
4	.30	12	.01	3.8	6	.07	89	17	4.4
5	.49	12	.02	7.7	11	.26	56	4	.60
6	.29	12	.01	8.5	17	.61	37	2	.20
7	.25	12	.01	6.3	19	.37	28	4	.30
8	.19	12	.01	2.7	10	.07	29	6	.47
9	.35	12	.01	2.0	10	.05	27	3	.22
10	.08	12	0	1.8	11	.05	22	2	.12
11	.31	12	.01	1.7	4	.02	19	2	.10
12	.46	12	.01	1.8	12	.06	17	2	.09
13	.37	12	.01	1.5	12	.05	15	2	.08
14	.43	12	.01	1.4	13	.05	14	2	.08
15	.35	12	.01	1.4	13	.05	15	4	.25
16	.44	12	.01	1.3	14	.05	72	30	5.8
17	.46	12	.01	1.3	15	.05	69	24	4.5
18	.36	12	.01	1.4	16	.06	88	18	4.3
19	.56	12	.02	1.3	18	.06	108	16	4.7
20	.66	15	.03	1.3	20	.07	159	376	430
21	1.2	12	.04	1.3	21	.07	199	174	148
22	.99	10	.03	1.4	15	.06	94	18	4.6
23	1.2	8	.03	1.4	12	.05	69	6	1.1
24	1.0	6	.02	1.4	10	.04	54	4	.58
25	1.1	12	.04	2.2	13	.08	45	6	.73
26	.80	10	.02	6.5	28	.55	44	5	.59
27	.53	10	.01	3.3	13	.12	61	8	1.3
28	.74	10	.02	153	516	298	51	4	.55
29	.52	10	.01	261	625	817	52	6	.84
30	.73	8	.02	71	44	17	47	3	.38
31	.78	6	.01	--	--	--	42	2	.23
TOTAL	16.33	--	.46	552.14	--	1134.98	2180	--	2221.31

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	39	2	.21	19	5	.26	9.1	3	.07
2	38	2	.21	17	5	.23	9.0	3	.07
3	32	2	.17	17	5	.23	9.0	3	.07
4	29	2	.16	16	4	.17	9.0	3	.07
5	28	2	.15	16	4	.17	8.9	2	.05
6	26	2	.14	15	4	.16	8.4	3	.07
7	24	2	.13	15	4	.16	8.7	3	.07
8	23	2	.12	15	4	.16	8.7	2	.05
9	21	2	.11	14	4	.15	8.7	1	.02
10	20	2	.11	14	4	.15	8.7	1	.02
11	37	10	1.4	13	4	.14	8.8	1	.02
12	65	17	3.2	13	4	.14	146	290	262
13	114	36	12	13	4	.14	67	52	13
14	144	38	16	12	4	.13	29	5	.39
15	90	19	4.6	12	4	.13	23	5	.31
16	69	11	2.0	12	4	.13	20	5	.27
17	57	5	.77	13	4	.14	18	4	.19
18	50	3	.41	12	4	.13	16	4	.17
19	43	3	.35	12	4	.13	15	4	.16
20	39	5	.53	12	4	.13	14	3	.11
21	34	13	1.2	11	3	.09	13	3	.11
22	32	9	.78	11	3	.09	13	3	.11
23	30	8	.65	11	3	.09	13	3	.11
24	28	8	.60	10	3	.08	13	2	.07
25	26	8	.56	9.6	3	.08	14	2	.08
26	24	8	.52	9.6	3	.08	86	35	10
27	23	8	.50	10	3	.08	45	9	1.1
28	22	7	.42	9.6	3	.08	33	6	.53
29	21	7	.40	--	--	--	28	7	.53
30	20	6	.32	--	--	--	25	8	.54
31	20	6	.32	--	--	--	23	8	.50
TOTAL	1768	--	49.04	363.8	--	3.85	751.0	--	290.86

11153900 UVAS CREEK ABOVE UVAS RESERVOIR, NEAR MORGAN HILL, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	20	9	.49	9.8	5	.13	4.6	4	.05
2	19	4	.21	10	8	.22	4.4	4	.05
3	18	3	.15	10	12	.32	3.5	3	.03
4	17	2	.09	9.8	17	.45	3.0	3	.02
5	16	3	.13	9.6	10	.26	3.4	3	.03
6	15	5	.20	9.5	8	.21	4.0	3	.03
7	16	6	.26	8.9	6	.14	3.6	4	.04
8	15	5	.20	8.7	4	.09	3.7	4	.04
9	14	4	.15	8.2	4	.09	3.4	4	.04
10	15	4	.16	8.3	4	.09	3.2	4	.03
11	13	3	.11	8.0	4	.09	3.2	4	.03
12	13	3	.11	8.0	4	.09	3.0	4	.03
13	13	3	.11	7.5	4	.08	3.4	5	.05
14	22	6	.36	7.1	4	.08	2.6	5	.04
15	15	3	.12	7.0	4	.08	2.9	5	.04
16	14	2	.08	6.7	4	.07	2.1	5	.03
17	17	4	.18	6.5	4	.07	2.1	5	.03
18	14	4	.15	6.0	4	.06	1.9	6	.03
19	14	4	.15	5.3	4	.06	2.5	6	.04
20	13	4	.14	5.7	4	.06	2.1	7	.04
21	13	3	.11	5.5	4	.06	1.7	8	.04
22	12	3	.10	5.1	4	.06	1.9	9	.05
23	12	3	.10	5.3	4	.06	1.9	9	.05
24	12	3	.10	5.1	3	.04	2.3	10	.06
25	12	3	.10	4.1	3	.03	2.0	10	.05
26	11	2	.06	4.1	3	.03	2.4	9	.06
27	11	2	.06	4.3	7	.08	2.6	8	.06
28	11	2	.06	4.5	7	.09	2.1	8	.05
29	11	2	.06	4.6	6	.07	2.0	7	.04
30	11	2	.06	4.4	6	.07	1.8	7	.03
31	--	--	--	4.6	5	.06	--	--	--
TOTAL	429	--	4.36	212.2	--	3.39	83.3	--	1.21

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	1.9	9	.05	1.1	9	.03	.11	13	0
2	1.6	12	.05	.31	8	.01	.62	14	.02
3	1.7	17	.06	.90	7	.02	.57	14	.02
4	1.7	12	.06	.67	7	.01	.42	10	.01
5	1.6	13	.06	.46	7	.01	.46	6	.01
6	1.4	13	.05	.71	7	.01	.27	3	0
7	1.6	13	.06	.67	8	.01	.76	3	.01
8	1.5	13	.05	.42	8	.01	.31	3	0
9	1.4	14	.05	.19	8	0	.61	4	.01
10	1.6	14	.06	.38	8	.01	.46	4	0
11	1.2	15	.05	.10	8	0	.24	4	0
12	1.1	15	.04	.46	8	.01	.36	5	0
13	.68	16	.03	.67	8	.01	.13	5	0
14	.50	16	.02	.46	9	.01	.36	5	0
15	.87	14	.03	.42	9	.01	.32	5	0
16	1.4	13	.05	.12	9	0	.39	4	0
17	.95	12	.03	.50	9	.01	.36	4	0
18	1.1	11	.03	.75	9	.02	.32	4	0
19	.52	10	.01	.67	9	.02	.47	4	.01
20	1.2	9	.03	.75	9	.02	.54	3	0
21	.96	9	.02	.50	9	.01	.49	3	0
22	1.2	8	.03	.67	9	.02	.17	3	0
23	1.2	8	.03	.12	9	0	.60	3	0
24	1.2	7	.02	.63	9	.02	.62	3	.01
25	1.2	7	.02	.12	9	0	.46	4	0
26	.93	6	.02	.60	9	.01	.82	4	.01
27	1.3	6	.02	.68	10	.02	1.1	4	.01
28	1.2	8	.03	.41	11	.01	.81	5	.01
29	1.2	10	.03	.50	11	.01	.89	5	.01
30	1.3	10	.04	.41	12	.01	.81	5	.01
31	1.0	10	.03	.69	13	.02	--	--	--
TOTAL	38.21	--	1.16	16.04	--	.36	14.85	--	.15

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)  
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

5924.87  
3711.13

## PAJARO RIVER BASIN

11159000 PAJARO RIVER AT CHITTENDEN, CALIF.

LOCATION.--Lat 36°54'01", long 121°35'48", in Salsipuedes Grant, Santa Cruz County, at gaging station at bridge on State Highway 129, 0.6 mile downstream from Pescadero Creek, 0.6 mile southeast of Chittenden, and 2.3 miles downstream from San Benito River.

DRAINAGE AREA.--1,186 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1952-53 (partial-record station), October 1953 to September 1966, water years 1967-69 (partial-record station), November 1969 to September 1971.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)
NOV. 05...	0815	7.6	15.0	8.0	--	--	171	--	557	0
JAN. 07...	1045	70	6.5	12.0	--	--	83	--	303	0
MAR. 04...	1230	34	14.5	12.1	84	67	95	2.1	396	0
MAY 05...	1130	26	16.5	10.2	--	--	--	--	--	--
JULY 11...	0810	24	15.5	7.9	82	72	117	--	419	0
JULY 08...	1100	10	21.0	9.6	74	64	132	2.8	389	29

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)
NOV. 05...	--	185	--	1000	--	--	--	554	97	457
JAN. 07...	--	80	--	500	--	--	--	377	128	249
MAR. 04...	212	94	30	500	800	1.09	73.4	486	161	325
MAY 05...	--	--	--	--	--	--	--	--	--	--
JULY 11...	--	100	26	--	--	--	--	500	156	344
JULY 08...	192	109	8.5	600	884	1.20	23.9	440	73	367

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC CONO- UCTANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
NOV. 05...	--	3.2	1650	8.0	--	--	--	--	--	--
JAN. 07...	--	1.9	1000	8.0	--	--	--	--	--	--
MAR. 04...	30	1.9	1230	7.7	--	--	--	--	--	--
MAY 05...	--	--	1300	8.2	0	0	0	0	.5	10
JULY 11...	--	2.3	1310	8.3	--	--	--	--	--	--
JULY 08...	39	2.7	1310	8.8	0	100	0	10	.0	0



## 11160000 SOQUEL CREEK AT SOQUEL, CALIF.

LOCATION.--Lat 36°59'29", long 121°57'17", in NE¼ sec.10, T.11 S., R.1 W., Santa Cruz County, temperature recorder at gaging station on left bank, 0.2 mile upstream from highway bridge in town of Soquel, and 0.4 mile downstream from Bates Creek.

DRAINAGE AREA.--40.2 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): Water years 1952-53 (partial-record station), October 1953 to September 1965, water year 1966 (partial-record station).

Water temperatures: January 1966 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 27.5°C Sept. 14; minimum, 6.5°C Feb. 4, 5.

Period of record:

Water temperatures: Maximum (1967-69, 1970-71), 30.5°C Aug. 29, 1968; minimum (1968-71), 3.0°C Jan. 5, 1970.

REMARKS.--Probe inoperative Oct. 1-12, Feb. 25 to Mar. 12, Mar. 19-25, May 5-20. Recorder stopped Jan. 4 to Feb. 3; range in temperature, 9.5°C to 20.0°C.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	16.0	10.0	12.5	12.0	15.0	13.5	--	--	--	--
2	--	--	15.0	11.5	12.0	10.0	14.5	11.0	--	--	--	--
3	--	--	14.5	11.0	11.5	9.5	13.0	11.0	--	--	--	--
4	--	--	14.5	13.5	12.5	11.5	--	--	11.0	6.5	--	--
5	--	--	16.5	14.0	13.0	12.0	--	--	11.5	6.5	--	--
6	--	--	15.5	13.5	13.0	11.5	--	--	12.5	8.0	--	--
7	--	--	16.5	13.0	14.0	12.5	--	--	12.5	8.5	--	--
8	--	--	16.5	14.0	14.0	12.0	--	--	12.0	8.0	--	--
9	--	--	17.0	14.0	12.5	11.0	--	--	14.0	7.5	--	--
10	--	--	16.0	13.5	11.5	9.5	--	--	15.0	9.0	--	--
11	--	--	15.5	13.5	12.0	10.0	--	--	16.5	10.0	--	--
12	--	--	15.5	12.0	11.5	9.0	--	--	16.5	10.5	--	--
13	15.0	14.0	14.5	9.5	11.0	9.0	--	--	16.0	10.0	13.5	9.5
14	16.0	14.0	15.0	10.5	12.5	9.5	--	--	13.5	10.0	11.0	8.5
15	17.5	12.0	14.0	9.5	13.5	10.5	--	--	15.5	8.5	15.5	10.0
16	16.5	12.0	13.5	8.5	12.5	11.0	--	--	12.5	8.5	16.0	10.0
17	17.0	11.0	14.5	10.0	12.0	11.0	--	--	14.0	7.5	16.0	10.0
18	16.5	11.5	14.5	9.5	11.5	11.0	--	--	13.5	8.0	16.5	8.5
19	17.0	11.5	13.5	9.0	12.0	11.0	--	--	13.5	7.5	--	--
20	15.5	12.5	13.5	8.5	12.0	10.5	--	--	13.0	8.0	--	--
21	15.5	12.5	13.5	12.0	13.5	12.0	--	--	13.5	7.0	--	--
22	16.5	14.0	14.0	12.5	13.0	10.5	--	--	13.5	7.5	--	--
23	16.0	13.5	14.5	10.0	13.0	11.5	--	--	14.5	7.0	--	--
24	16.0	12.0	14.5	10.0	13.0	11.5	--	--	14.0	8.0	--	--
25	16.5	11.0	14.0	13.5	12.5	10.5	--	--	--	--	--	--
26	16.0	10.0	13.5	10.5	14.0	12.5	--	--	--	--	14.5	12.0
27	15.0	8.5	12.0	10.5	15.0	13.5	--	--	--	--	15.5	10.5
28	16.0	9.5	12.5	11.5	14.5	13.0	--	--	--	--	16.0	10.0
29	15.5	9.5	12.5	11.5	16.0	14.0	--	--	--	--	17.5	11.0
30	14.0	11.0	12.0	11.0	14.5	13.0	--	--	--	--	17.0	11.0
31	17.0	11.0	--	--	14.5	12.5	--	--	--	--	16.5	9.5
AVE	--	--	14.5	11.4	12.9	11.2	--	--	--	--	--	--
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	8.5	14.0	11.5	13.5	11.5	22.5	15.5	26.0	15.5	26.0	15.5
2	17.0	9.5	16.0	12.0	18.5	10.5	24.0	15.0	25.5	16.0	26.0	16.0
3	18.0	9.5	16.0	10.0	17.5	12.5	23.0	15.0	25.5	16.5	26.5	15.5
4	20.0	10.0	15.5	12.5	20.5	13.0	23.5	15.0	26.0	16.0	26.5	15.5
5	16.5	11.5	--	--	21.5	13.5	23.0	15.0	26.0	16.0	23.5	17.5
6	15.5	12.0	--	--	21.0	14.0	23.0	15.0	26.0	15.5	26.0	16.5
7	17.0	10.5	--	--	21.0	14.5	24.0	15.0	26.0	15.0	26.0	14.0
8	17.0	8.5	--	--	21.5	14.0	24.5	15.0	26.5	16.0	26.5	15.5
9	17.0	10.0	--	--	20.5	13.5	26.0	15.5	26.0	16.0	26.5	16.5
10	18.0	13.0	--	--	21.0	14.5	25.0	15.0	26.0	16.0	25.0	15.5
11	19.0	9.5	--	--	22.0	15.0	25.5	14.0	25.0	16.5	25.0	15.5
12	19.5	10.0	--	--	22.0	14.5	25.0	14.5	24.0	17.0	26.5	15.0
13	14.5	11.5	--	--	22.5	13.5	25.0	15.0	23.0	16.5	27.0	16.5
14	17.5	12.5	--	--	23.0	14.5	24.0	15.5	24.5	15.5	27.5	16.5
15	18.0	13.0	--	--	24.0	15.0	23.5	16.0	25.0	15.0	26.0	17.0
16	18.5	12.0	--	--	25.0	15.5	23.5	15.5	25.0	14.5	21.5	18.0
17	17.0	12.0	--	--	25.0	15.5	24.5	16.0	25.0	14.5	22.0	17.5
18	17.5	10.0	--	--	25.0	15.5	26.0	17.0	22.5	15.5	24.5	17.5
19	17.0	9.5	--	--	26.0	17.0	25.5	17.0	21.0	16.0	24.0	15.0
20	16.0	11.5	--	--	25.5	16.0	26.0	17.0	25.5	16.0	23.0	16.0
21	16.5	7.5	19.5	11.0	25.5	16.0	26.0	16.5	26.0	15.0	23.0	16.5
22	15.0	8.5	19.5	11.5	24.5	16.5	26.0	16.5	26.5	17.0	23.5	17.0
23	18.5	12.0	20.0	13.0	25.5	15.5	25.0	16.5	23.0	15.5	20.0	16.0
24	16.5	9.5	20.0	13.0	24.5	15.0	23.0	16.5	20.0	16.0	20.5	14.5
25	17.0	9.5	21.5	13.5	24.0	15.0	22.5	16.0	25.0	16.5	23.0	16.0
26	17.0	11.5	16.0	13.0	21.5	16.5	24.0	16.0	25.0	17.5	20.0	14.0
27	19.0	10.0	13.0	11.5	24.5	16.5	24.0	16.0	26.0	17.0	21.0	12.5
28	18.0	12.5	17.5	12.0	23.5	14.5	24.0	16.0	25.0	15.0	21.0	12.0
29	16.5	11.5	17.5	13.0	23.0	14.5	24.5	16.0	25.0	15.0	21.0	13.0
30	17.0	9.0	20.0	12.5	23.0	15.5	25.0	15.5	24.5	14.5	20.0	13.0
31	--	--	18.5	12.0	--	--	--	--	25.0	15.5	--	--
AVE	17.3	10.5	--	--	22.5	14.6	24.4	15.7	24.9	15.8	23.9	15.6

## SAN LORENZO RIVER BASIN

11160300 ZAYANTE CREEK AT ZAYANTE, CALIF.

LOCATION.--Lat 37°05'10", long 122°02'45", in SE¼ sec.2, T.10 S., R.2 W., Santa Cruz County, at gaging station at bridge on Zayante Road, in town of Zayante, 0.4 mile upstream from Lompico Creek, 2.0 miles east of Ben Lomond, and 3.2 miles upstream from mouth.

DRAINAGE AREA.--11.1 sq mi.

PERIOD OF RECORD.--Water temperatures: February 1970 to September 1971.  
Sediment records: February 1970 to September 1971.

## EXTREMES.--1970-71:

Water temperatures: Minimum, 3.5°C Jan. 6.

Sediment concentrations: Maximum daily, 3,540 mg/l Nov. 28; minimum, 1 mg/l on several days.

Sediment discharge: Maximum daily, 2,110 tons Dec. 2; minimum daily, 0 tons on several days.

## Period of record:

Water temperatures (1970-71): Minimum, 3.5°C Jan. 6, 1971.

Sediment concentrations: Maximum daily, 4,720 mg/l Mar. 1, 1970; minimum daily, 1 mg/l on many days in 1970-71.

Sediment discharge: Maximum daily, 4,800 tons Mar. 1, 1970; minimum daily, 0 tons on several days in 1970-71.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	--	10.0	9.0	7.5	6.0	8.0	--	11.0	--	--	--
2	--	10.0	10.0	8.0	9.0	4.5	9.0	--	--	14.0	--	--
3	--	9.0	9.0	6.0	7.0	5.0	9.0	11.0	--	--	16.0	13.5
4	--	11.0	10.0	5.0	6.0	7.0	10.0	12.0	13.0	--	15.5	--
5	14.0	12.0	11.0	4.5	6.0	6.0	12.0	--	--	--	--	--
6	--	13.0	10.0	3.5	8.0	5.0	12.0	--	--	16.0	17.0	--
7	--	12.0	11.0	5.0	8.0	6.0	10.0	10.5	--	14.0	--	14.0
8	10.0	12.0	11.0	5.0	7.0	8.0	8.0	--	13.0	--	--	--
9	--	12.0	10.0	5.0	6.5	8.0	10.0	--	--	15.0	--	--
10	--	12.0	8.0	7.0	7.0	7.0	11.0	12.0	--	--	18.0	15.0
11	--	12.0	7.0	8.0	9.0	8.0	9.0	--	13.0	--	--	--
12	13.0	12.0	7.0	8.0	10.0	10.0	--	12.0	--	--	--	--
13	--	10.0	6.0	8.0	10.0	8.0	11.0	--	--	16.0	16.0	--
14	12.0	10.0	7.0	8.0	10.0	8.0	--	13.0	15.5	--	--	17.0
15	12.0	9.0	7.0	9.0	11.0	8.0	11.0	--	15.0	--	--	--
16	--	7.0	9.0	10.0	9.0	8.0	--	--	--	16.0	--	--
17	--	8.0	8.0	10.0	9.0	9.0	11.0	--	--	--	16.0	16.0
18	--	8.0	8.0	12.0	8.0	8.0	--	12.0	16.0	--	--	--
19	12.0	8.0	8.0	11.0	8.0	8.0	8.0	--	--	--	--	--
20	--	8.0	7.0	11.0	7.0	8.0	--	--	--	16.0	16.0	--
21	--	9.0	9.0	9.0	6.0	9.0	8.0	11.0	--	--	--	15.0
22	12.0	9.0	8.0	7.0	8.0	9.0	--	--	18.0	--	--	--
23	--	8.0	8.0	6.5	6.0	10.0	11.0	--	--	15.0	--	--
24	--	8.0	8.0	6.0	6.0	11.0	--	--	--	--	16.0	14.0
25	--	11.0	8.0	6.0	7.0	11.0	--	13.0	15.0	--	--	--
26	10.0	11.0	8.0	6.0	6.0	11.0	11.0	--	--	--	--	--
27	--	9.0	9.0	7.0	6.0	--	--	--	--	17.0	16.0	--
28	--	10.5	9.0	7.0	6.0	--	--	12.0	--	--	--	11.0
29	9.0	11.0	10.0	6.0	--	10.5	--	--	13.0	--	--	--
30	--	9.0	8.0	7.0	--	8.0	10.0	--	--	19.0	--	10.5
31	10.0	--	8.0	7.0	--	8.0	--	--	--	--	17.0	--
AVE	--	10.0	8.6	7.3	7.6	8.0	--	--	--	--	--	--

11160300 ZAYANTE CREEK AT ZAYANTE, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.58	9	.01	.84	2	0	55	1440	529
2	.47	8	.01	.84	2	0	143	2550	2110
3	.47	7	.01	1.2	4	.03	20	55	3.0
4	.47	7	.01	5.5	31	.50	54	530	94
5	.47	6	.01	5.3	26	.42	21	48	2.7
6	.41	6	.01	6.3	28	.68	14	20	.76
7	.41	7	.01	3.9	440	4.4	11	14	.42
8	.47	8	.01	2.2	102	.61	14	307	13
9	.47	7	.01	1.9	20	.10	11	12	.36
10	.52	6	.01	1.6	9	.04	9.0	6	.15
11	.58	4	.01	1.6	7	.03	8.3	5	.11
12	.71	2	0	1.7	7	.03	7.8	6	.13
13	.84	4	.01	1.5	5	.02	7.3	6	.12
14	.84	6	.01	1.4	3	.01	6.8	4	.07
15	.77	2	0	1.3	4	.01	7.5	120	4.4
16	.64	2	0	1.3	3	.01	16	1040	48
17	.64	1	0	1.3	3	.01	16	60	2.6
18	.64	1	0	1.2	3	.01	35	322	32
19	.64	1	0	1.2	3	.01	32	90	8.5
20	.97	1	0	1.2	3	.01	65	600	399
21	.84	2	0	1.2	3	.01	112	677	279
22	.77	3	.01	1.3	3	.01	37	74	7.9
23	.90	3	.01	1.3	3	.01	25	32	2.2
24	.90	3	.01	1.3	2	.01	19	18	.92
25	.71	2	0	3.6	9	.10	16	11	.48
26	.64	2	0	3.3	13	.12	18	23	1.2
27	.58	2	0	2.6	13	.09	19	26	1.3
28	.64	1	0	88	3540	1290	16	12	.52
29	.58	1	0	123	1960	1240	26	44	3.3
30	.64	1	0	18	103	5.7	21	18	1.0
31	.77	1	0	--	--	--	18	16	.78
TOTAL	19.98	--	.16	286.88	--	2542.98	880.7	--	3546.92

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	16	14	.60	6.5	4	.07	3.9	7	.07
2	14	11	.42	6.3	5	.09	4.1	5	.06
3	13	9	.32	6.0	7	.11	3.9	13	.14
4	12	6	.19	5.6	7	.11	3.9	4	.04
5	11	6	.18	5.6	7	.11	3.8	3	.03
6	10	6	.16	5.6	5	.08	3.8	10	.10
7	9.8	4	.11	5.6	6	.09	3.7	12	.12
8	9.4	5	.13	5.5	4	.06	3.7	6	.06
9	8.6	10	.23	5.3	5	.07	3.7	13	.13
10	8.3	6	.13	5.1	4	.06	3.6	10	.10
11	12	20	.65	5.1	5	.07	3.6	15	.15
12	14	50	1.9	4.9	6	.08	4.5	605	157
13	16	95	4.1	4.9	11	.15	19	203	13
14	19	40	2.1	4.7	6	.08	10	30	.81
15	17	19	.87	4.7	4	.05	8.6	30	.70
16	15	12	.49	4.7	4	.05	7.8	11	.23
17	14	10	.38	4.9	5	.07	7.3	11	.22
18	14	8	.30	4.6	10	.12	6.8	8	.15
19	12	8	.26	4.9	3	.04	6.3	7	.12
20	11	7	.21	4.6	4	.05	6.0	6	.10
21	11	5	.15	4.4	4	.05	5.8	5	.08
22	9.8	3	.08	4.4	5	.06	5.6	6	.09
23	9.8	4	.11	4.4	5	.06	5.6	9	.14
24	9.0	4	.10	4.1	6	.07	5.5	5	.07
25	8.6	4	.09	4.1	6	.07	6.0	7	.11
26	8.1	4	.09	3.9	5	.05	14	65	3.0
27	7.8	3	.06	4.2	16	.18	8.3	12	.27
28	7.6	3	.06	4.1	6	.07	7.6	10	.21
29	7.3	3	.06	--	--	--	7.0	7	.13
30	7.0	2	.04	--	--	--	6.5	11	.19
31	6.8	2	.04	--	--	--	6.0	20	.32
TOTAL	348.9	--	14.61	138.7	--	2.22	236.4	--	177.94

## SAN LORENZO RIVER BASIN

11160300 ZAYANTE CREEK AT ZAYANTE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.8	11	.17	4.2	9	.10	2.0	3	.02
2	5.8	7	.11	4.4	6	.07	2.0	4	.02
3	5.6	15	.23	4.1	3	.03	1.9	5	.03
4	5.5	13	.19	4.1	5	.06	1.8	6	.03
5	5.3	5	.07	4.1	4	.04	1.8	7	.03
6	5.3	9	.13	4.1	3	.03	1.7	9	.04
7	5.3	9	.13	4.1	3	.03	1.6	11	.05
8	5.1	3	.04	3.8	3	.03	1.6	13	.06
9	4.7	4	.05	3.8	3	.03	1.6	13	.06
10	5.1	3	.04	3.7	3	.03	1.6	12	.05
11	4.7	2	.03	3.6	4	.04	1.5	11	.04
12	4.6	2	.02	3.3	5	.04	1.5	11	.04
13	5.7	17	.56	3.0	4	.03	1.4	11	.04
14	15	118	6.6	2.8	3	.02	1.3	11	.04
15	6.5	32	.56	2.7	3	.02	1.2	11	.04
16	5.8	15	.23	2.6	4	.03	1.2	11	.04
17	6.5	11	.19	2.5	4	.03	1.1	12	.04
18	5.6	10	.15	2.3	5	.03	1.1	13	.04
19	5.3	8	.11	2.3	5	.03	1.1	13	.04
20	5.3	8	.11	2.3	4	.02	1.2	13	.04
21	5.1	8	.11	2.3	4	.02	1.2	14	.05
22	4.9	5	.07	2.2	4	.02	1.2	14	.05
23	4.9	2	.03	2.1	6	.03	1.2	14	.05
24	4.7	2	.03	2.1	7	.04	1.2	13	.04
25	4.7	3	.04	2.0	8	.04	1.1	13	.04
26	4.6	4	.05	2.0	6	.03	1.1	13	.04
27	4.6	4	.05	2.1	5	.03	1.2	13	.04
28	4.6	3	.04	2.2	4	.02	1.1	12	.04
29	4.4	7	.08	2.2	4	.02	1.1	12	.04
30	4.2	10	.11	2.1	3	.02	1.1	13	.04
31	--	--	--	2.0	3	.02	--	--	--
TOTAL	165.2	--	10.33	91.1	--	1.03	41.7	--	1.22

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.1	14	.04	.64	23	.04	.30	25	.02
2	1.1	15	.04	.64	24	.04	.36	20	.02
3	1.1	15	.04	.64	26	.04	.36	17	.02
4	1.1	16	.05	.60	22	.04	.28	15	.01
5	1.1	16	.05	.60	29	.05	.30	13	.01
6	1.1	17	.05	.57	35	.05	.36	12	.01
7	1.1	14	.04	.50	36	.05	.33	11	.01
8	.96	12	.03	.50	37	.05	.28	11	.01
9	.96	11	.03	.33	38	.03	.25	12	.01
10	.82	11	.02	.36	38	.04	.25	27	.02
11	.82	12	.03	.41	35	.04	.23	20	.01
12	.78	14	.03	.41	32	.04	.25	18	.01
13	.78	15	.03	.46	30	.04	.20	17	.01
14	.71	13	.02	.50	28	.04	.13	16	.01
15	.71	12	.02	.50	25	.03	.04	16	0
16	.71	10	.02	.46	23	.03	.33	23	.02
17	.68	11	.02	.38	22	.02	.41	23	.03
18	.12	11	0	.36	22	.02	.43	23	.03
19	.44	13	.02	.43	23	.03	.38	23	.02
20	.78	15	.03	.46	23	.03	.38	24	.02
21	.71	15	.03	.43	23	.03	.43	25	.03
22	.71	14	.03	.41	22	.02	.46	20	.02
23	.64	14	.02	.41	22	.02	.46	15	.02
24	.57	16	.02	.41	22	.02	.50	11	.01
25	.68	18	.03	.50	19	.03	.46	12	.01
26	.71	20	.04	.46	16	.02	.43	12	.01
27	.53	23	.03	.41	13	.01	.60	12	.02
28	.53	22	.03	.38	18	.02	.57	13	.02
29	.53	21	.03	.38	24	.02	.57	10	.02
30	.50	20	.03	.38	27	.03	.64	8	.01
31	.46	21	.03	.38	30	.03	--	--	--
TOTAL	23.54	--	.93	14.30	--	1.00	10.97	--	.47

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

2258.37

6299.81

## 11160300 ZAYANTE CREEK AT ZAYANTE, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (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
NOV.									
28...	1100	10.0	35	3910	369	56	70	86	95
28...	1430	10.5	24	992	64	56	69	86	95
DEC.									
02...	0800	10.0	145	2010	787	27	33	38	56
02...	1005	10.0	102	838	231	33	36	50	66
04...	1000	10.0	82	913	202	40	54	67	79
MAR.									
13...	0900	8.0	20	174	9.4	--	--	--	--

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL 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
NOV.									
28...	99	--	100	--	--	--	--	--	--
28...	98	--	100	--	--	--	--	--	--
DEC.									
02...	76	92	--	94	--	98	--	100	--
02...	86	--	98	--	98	--	100	--	--
04...	90	--	97	--	98	--	99	--	100
MAR.									
13...	--	--	98	--	100	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
OCT.								
14...	1415	12.0	5	.84	--	1	3	16
JAN.								
06...	1035	3.5	5	10	1	1	4	20
DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
OCT.								
14...	42	59	69	78	87	98	100	
JAN.								
06...	46	62	72	81	83	96	100	

## SAN LORENZO RIVER BASIN

11160500 SAN LORENZO RIVER AT BIG TREES, CALIF.

LOCATION.--Lat 37°01'49", long 122°03'24", in Canada del Rincon Grant, Santa Cruz County, temperature recorder at gaging station on right bank, 0.5 mile south of Big Trees station on Southern Pacific Railroad, 1.6 miles downstream from Zayante Creek, and 4 miles north of Santa Cruz.

DRAINAGE AREA.--111 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): January to December 1906, water years 1952-53 (partial-record station), October 1953 to September 1966, water years 1967, 1969-70 (partial-record station).  
Water temperatures: May 1966 to September 1971.

EXTREMES.--Period of record:

Water temperatures: Maximum (1966-67, 1968-70), 23.0°C on several days in 1970; minimum, 1.5°C Dec. 15, 1967.

REMARKS.--Recorder malfunction Oct. 11-15; recorder stopped Nov. 4 to Dec. 10, Mar. 7-15, May 6-12, May 21 to June 16, Sept. 9-21; probe inoperative June 24 to July 7, July 11-16, July 21 to Aug. 5.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	14.0	12.5	9.0	--	--	10.0	9.0	10.0	8.5	9.5	6.5
2	19.0	13.5	12.0	9.0	--	--	10.0	7.5	11.0	9.5	9.0	5.5
3	19.0	14.0	11.5	10.0	--	--	7.5	6.0	9.5	7.5	9.0	6.5
4	19.5	13.5	--	--	--	--	7.0	5.5	9.0	7.0	10.5	8.0
5	19.5	10.5	--	--	--	--	6.5	5.0	9.5	7.0	10.0	6.5
6	17.5	9.5	--	--	--	--	7.0	5.5	11.0	9.0	10.0	6.0
7	17.5	10.5	--	--	--	--	7.0	5.5	11.5	9.5	--	--
8	18.0	11.0	--	--	--	--	7.5	6.0	10.5	9.0	--	--
9	18.5	12.5	--	--	--	--	8.5	7.0	10.0	7.5	--	--
10	18.5	15.0	--	--	--	--	9.0	8.0	10.5	8.0	--	--
11	--	--	--	--	9.5	9.0	10.0	9.0	12.0	9.5	--	--
12	--	--	--	--	9.0	7.5	9.5	9.0	12.0	10.0	--	--
13	--	--	--	--	9.0	8.0	9.0	8.0	11.5	9.5	--	--
14	--	--	--	--	9.5	8.0	10.0	8.5	11.5	9.5	--	--
15	--	--	--	--	10.5	9.0	9.5	9.0	12.5	10.0	--	--
16	16.0	11.0	--	--	10.5	9.5	11.0	9.5	10.0	8.5	11.0	9.0
17	15.0	10.0	--	--	9.5	8.5	12.5	11.0	10.5	9.0	12.0	9.5
18	14.5	10.5	--	--	9.0	8.0	13.0	12.0	11.0	9.0	11.5	8.5
19	15.5	10.0	--	--	9.5	8.5	13.0	12.0	11.0	9.0	12.0	8.5
20	13.0	10.5	--	--	9.5	8.0	12.5	11.0	10.5	8.0	12.0	9.0
21	12.5	10.5	--	--	10.5	9.0	11.5	9.5	10.0	7.0	12.0	9.0
22	13.0	12.0	--	--	10.5	9.5	9.5	8.0	10.0	8.0	12.5	9.5
23	13.0	12.0	--	--	10.0	9.5	9.5	8.0	11.0	8.0	12.0	10.5
24	13.5	11.0	--	--	10.0	8.5	9.5	8.0	10.5	7.5	13.0	10.5
25	13.5	9.5	--	--	8.5	7.5	9.0	7.5	10.5	8.0	13.0	12.0
26	13.5	9.5	--	--	10.0	8.5	9.0	7.0	9.5	7.5	13.0	12.0
27	12.0	7.5	--	--	10.5	9.5	9.5	7.5	8.5	6.5	12.5	10.0
28	12.0	7.5	--	--	10.5	10.0	9.5	8.0	9.0	6.5	12.0	9.0
29	12.0	7.0	--	--	11.0	10.0	9.0	7.0	--	--	12.5	9.5
30	10.0	8.0	--	--	10.0	9.0	9.0	7.0	--	--	13.0	10.5
31	13.0	8.5	--	--	9.5	8.5	9.5	7.0	--	--	12.0	9.0
AVE	15.3	10.7	--	--	--	--	9.5	8.0	10.5	8.3	--	--
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	8.5	13.0	12.0	--	--	--	--	--	--	21.0	15.0
2	12.5	9.0	15.0	12.0	--	--	--	--	--	--	21.5	16.0
3	13.0	9.5	13.0	11.0	--	--	--	--	--	--	20.5	15.0
4	14.0	10.0	13.0	12.0	--	--	--	--	--	--	20.0	15.0
5	14.5	11.0	13.0	12.0	--	--	--	--	--	--	19.5	16.0
6	13.0	11.0	--	--	--	--	--	--	22.5	16.0	20.0	16.0
7	12.0	10.5	--	--	--	--	--	--	22.0	16.0	19.0	14.5
8	13.0	9.0	--	--	--	--	22.5	13.5	23.0	16.5	19.0	15.0
9	13.0	10.0	--	--	--	--	23.5	15.0	23.0	17.0	--	--
10	14.0	11.5	--	--	--	--	22.5	13.5	23.0	17.0	--	--
11	13.5	9.5	--	--	--	--	--	--	23.0	17.5	--	--
12	15.0	10.0	--	--	--	--	--	--	22.5	17.5	--	--
13	12.0	11.5	18.5	14.5	--	--	--	--	21.0	17.0	--	--
14	13.5	11.0	18.5	12.5	--	--	--	--	21.5	16.0	--	--
15	14.5	11.5	18.5	13.0	--	--	--	--	21.5	15.5	--	--
16	14.0	10.5	17.5	12.5	--	--	--	--	21.5	15.0	--	--
17	13.5	11.0	18.0	12.0	22.0	16.5	23.5	16.5	22.0	15.5	--	--
18	13.5	10.0	17.5	12.0	22.0	17.0	23.0	16.5	21.5	16.0	--	--
19	13.5	10.0	18.0	12.5	22.5	17.0	22.5	16.5	21.0	16.0	--	--
20	13.0	10.5	18.0	13.5	22.0	17.0	22.5	17.0	21.5	16.0	--	--
21	13.0	9.0	--	--	22.0	16.5	--	--	22.0	16.5	--	--
22	12.0	9.5	--	--	22.0	17.0	--	--	23.0	17.0	19.0	15.5
23	14.0	10.5	--	--	22.5	16.5	--	--	20.0	16.0	18.0	14.5
24	13.0	10.0	--	--	--	--	--	--	19.0	16.0	16.0	13.5
25	12.5	9.5	--	--	--	--	--	--	21.5	16.5	17.0	14.0
26	13.0	10.5	--	--	--	--	--	--	21.5	17.0	15.5	13.0
27	14.0	9.5	--	--	--	--	--	--	22.0	17.0	16.0	11.5
28	14.5	11.5	--	--	--	--	--	--	21.0	15.5	14.5	11.0
29	15.0	11.5	--	--	--	--	--	--	21.0	15.0	15.0	11.5
30	15.0	11.0	--	--	--	--	--	--	20.5	15.0	15.0	11.5
31	--	--	--	--	--	--	--	--	21.5	16.0	--	--
AVE	13.4	10.3	--	--	--	--	--	--	21.7	16.2	--	--

## 11162500 PESCADERO CREEK NEAR PESCADERO, CALIF.

LOCATION.--Lat 37°15'39", long 122°19'40", in SW¼ sec.5, T.8 S., R.4 W., San Mateo County, at gaging station at highway bridge, 3.0 miles east of Pescadero, and 5.3 miles upstream from mouth.

DRAINAGE AREA.--45.9 sq mi.

PERIOD OF RECORD.--Water temperatures: April 1965 to September 1971.  
Sediment records: Water year 1970-71 (partial-record station).

## EXTREMES.--1970-71:

Water temperatures: Maximum, 21.0°C Aug. 22; minimum, 3.5°C Jan. 5.

## Period of record:

Water temperatures: Maximum, 21.5°C on several days in 1965-66, 1968; minimum (1965-66, 1967-71), 2.0°C Dec. 19, 1965.

REMARKS.--Recorder malfunction Sept. 15-30.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	11.0	10.5	8.5	10.5	10.0	9.0	8.5	7.5	6.5	7.0	5.5
2	14.0	11.0	10.5	9.0	10.5	9.5	8.5	6.5	8.0	6.5	6.0	4.5
3	14.0	12.0	10.5	9.0	9.5	9.0	6.5	5.0	6.5	5.5	7.0	5.0
4	14.5	12.0	11.0	10.5	11.0	9.5	5.0	4.0	6.0	5.5	8.0	6.5
5	14.5	12.0	12.0	11.0	11.5	11.0	4.0	3.5	6.5	5.5	7.0	6.0
6	14.5	13.0	12.0	11.5	11.5	11.0	4.5	4.0	8.0	6.5	6.5	5.0
7	13.0	10.5	12.0	11.5	11.5	11.0	4.5	4.0	8.5	8.0	6.5	5.0
8	12.5	9.5	12.0	11.5	11.5	11.5	5.0	4.0	8.5	8.0	8.0	6.5
9	12.5	9.0	12.5	12.0	11.5	10.0	6.5	5.0	8.0	7.0	8.5	7.5
10	13.0	10.0	13.0	12.5	10.0	8.5	7.5	6.5	8.0	7.0	9.0	7.5
11	13.0	11.0	13.0	12.5	8.5	8.0	8.0	7.5	9.0	7.5	10.0	8.5
12	12.5	12.0	12.5	11.5	8.0	7.0	8.0	7.5	9.0	8.0	10.0	9.5
13	13.0	12.0	11.5	10.0	7.0	6.5	7.5	7.0	9.0	8.0	9.5	8.5
14	13.0	12.0	10.5	9.5	7.5	6.5	8.0	7.5	9.0	8.0	8.5	7.5
15	13.5	12.0	10.0	9.0	8.0	7.0	8.5	8.0	10.0	9.0	9.0	7.0
16	13.5	11.5	9.5	8.5	8.5	8.0	9.5	8.5	9.0	7.5	9.5	7.5
17	13.0	11.5	9.5	8.0	8.5	8.5	10.5	9.5	9.0	8.0	9.5	8.0
18	13.0	11.0	9.5	8.5	8.5	8.0	11.0	10.5	9.5	8.5	9.5	7.5
19	13.0	11.0	9.0	8.0	8.5	8.0	10.5	10.0	9.0	7.5	9.5	7.5
20	13.0	11.0	8.5	7.5	8.5	7.0	11.0	10.0	7.5	6.5	9.5	7.5
21	12.0	11.0	9.0	8.0	9.5	8.5	10.0	8.0	7.0	5.5	9.5	8.0
22	13.0	12.0	9.5	9.0	9.0	8.5	8.0	6.5	7.5	6.5	10.0	8.5
23	12.0	11.5	9.5	9.0	8.5	8.0	6.5	6.0	8.0	7.0	10.0	9.5
24	12.0	10.5	10.0	8.5	8.5	7.0	7.5	6.5	8.0	7.0	11.0	10.0
25	11.5	10.0	10.5	10.0	7.0	6.5	7.0	6.5	8.0	6.5	11.0	10.5
26	11.0	9.5	10.5	10.0	8.0	7.0	6.5	5.5	6.5	5.0	11.0	10.5
27	10.5	8.0	10.0	9.5	9.0	8.0	6.5	5.5	6.5	5.0	10.5	9.0
28	9.5	7.5	10.5	10.0	9.0	8.5	6.5	6.0	7.0	5.5	10.0	8.0
29	9.5	7.0	11.0	10.5	9.5	9.0	6.5	5.5	--	--	10.5	8.0
30	9.5	8.0	10.5	10.0	9.0	8.0	6.5	5.5	--	--	10.0	9.0
31	10.5	8.0	--	--	8.5	8.0	6.5	6.0	--	--	9.5	7.5
AVE	12.5	10.6	10.7	9.8	9.2	8.5	7.5	6.6	8.0	6.9	9.1	7.6
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	7.0	11.0	10.5	11.5	11.0	17.0	14.5	19.0	14.5	19.0	15.0
2	10.5	8.5	12.5	11.0	12.0	10.5	15.0	14.5	19.0	15.5	19.0	16.5
3	10.5	8.5	11.5	10.5	11.5	11.0	16.5	13.5	19.0	16.0	18.5	14.5
4	10.5	8.5	11.0	10.5	12.0	11.0	16.5	14.5	19.5	15.5	18.5	14.0
5	10.5	10.0	11.0	10.5	14.0	12.0	17.0	14.0	19.5	15.5	18.5	15.0
6	10.5	10.0	10.5	10.0	15.0	12.5	17.5	14.0	20.0	15.5	18.5	15.5
7	11.0	9.5	11.5	9.5	14.0	13.0	17.5	14.5	19.5	15.0	18.0	13.5
8	10.5	8.5	13.0	10.5	13.0	12.5	18.0	14.5	20.0	15.5	18.0	13.5
9	10.5	9.0	12.5	10.5	13.0	12.0	19.0	16.0	20.0	15.5	18.0	14.0
10	11.0	10.0	13.0	11.0	13.5	12.5	18.0	14.5	20.0	15.5	18.0	13.5
11	10.5	8.5	12.5	11.5	14.5	12.5	18.0	14.0	19.5	17.0	19.0	15.0
12	10.5	8.5	13.5	11.5	15.0	13.0	18.0	14.0	19.0	17.0	19.0	14.0
13	10.0	9.0	13.0	12.0	15.5	12.5	18.0	14.0	19.0	16.5	19.0	14.5
14	11.0	10.0	13.0	10.5	17.0	13.5	18.0	14.0	19.0	15.5	20.0	15.5
15	11.0	10.5	14.0	11.5	17.0	13.5	18.0	15.0	19.5	15.5	--	--
16	11.0	9.5	13.0	10.5	17.5	14.0	18.5	15.0	19.5	15.5	--	--
17	11.0	10.0	12.5	10.0	17.5	14.0	18.0	15.5	19.5	15.5	--	--
18	11.0	9.0	13.0	10.0	17.5	14.0	19.5	15.5	19.0	16.0	--	--
19	10.0	9.5	14.0	11.5	18.0	15.0	20.0	16.0	19.0	16.0	--	--
20	10.5	9.5	14.0	12.0	17.5	15.0	20.0	16.0	19.5	16.5	--	--
21	10.0	8.0	13.5	10.5	17.5	14.0	20.0	16.0	20.0	17.5	--	--
22	10.0	8.5	14.5	11.5	17.5	15.0	20.5	16.5	21.0	18.0	--	--
23	11.0	9.5	15.0	12.5	16.5	15.0	20.0	17.0	20.0	16.0	--	--
24	10.5	9.0	15.0	12.5	17.0	14.5	17.5	16.0	18.0	15.5	--	--
25	11.0	8.5	14.5	13.0	17.5	14.5	17.5	15.5	19.5	16.5	--	--
26	11.0	10.0	14.0	12.5	17.0	15.5	18.5	15.5	20.0	17.0	--	--
27	11.5	9.0	13.0	12.0	17.5	14.5	17.0	16.0	20.0	17.0	--	--
28	11.0	10.0	12.5	11.5	16.5	14.0	16.5	15.5	19.0	15.0	--	--
29	10.5	9.5	12.0	11.5	17.0	14.5	17.0	15.0	18.5	14.5	--	--
30	11.5	9.5	13.0	11.0	17.5	14.5	18.0	14.5	18.5	15.0	--	--
31	--	--	11.5	11.0	--	--	18.5	14.5	19.0	16.0	--	--
AVE	10.6	9.2	12.9	11.1	15.6	13.4	18.0	15.0	19.4	15.9	--	--

## PESCADERO CREEK BASIN

11162500 PESCADERO CREEK NEAR PESCADERO, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE 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
NOV.									
12...	1500	--	4.3	11	.13	--	--	--	--
28...	1430	10.0	188	1630	827	60	77	90	95
29...	1130	11.0	469	801	1010	35	49	60	72
29...	1245	11.0	408	769	847	37	49	60	70
DEC.									
02...	1120	10.0	279	629	474	49	64	75	84
MAR.									
26...	1525	10.5	195	253	133	49	65	72	81

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL 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 1.00 MM
NOV.									
12...	--	--	--	--	--	--	--	--	--
28...	98	--	99	--	99	--	100	--	--
29...	82	89	--	91	--	95	--	100	--
29...	79	84	--	85	--	89	--	98	100
DEC.									
02...	88	92	--	93	--	97	--	99	100
MAR.									
26...	87	--	92	--	94	--	100	--	--



## 11162720 COLMA CREEK AT SOUTH SAN FRANCISCO, CALIF.

LOCATION.--Lat 37°39'14", long 122°25'31", in Buri Buri Grant, San Mateo County, at gaging station in Orange Memorial Park, and 1.0 mile southwest of South San Francisco Post Office.

DRAINAGE AREA.--10.8 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1969 to September 1971.

Sediment records: October 1965 to September 1971.

EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 4,050 mg/l Nov. 28; minimum daily, 6 mg/l May 10.

Sediment discharge: Maximum daily, 5,780 tons Nov. 28; minimum daily, 0.02 ton May 10.

Period of record:

Sediment concentrations: Maximum daily, 19,800 mg/l Jan. 21, 1967; minimum daily, 2 mg/l Dec. 3, 1968.

Sediment discharge: Maximum daily, 26,900 tons Jan. 21, 1967; minimum daily, 0 tons Nov. 11-13, 1967, May 29, June 2, 1969.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	18.5	--	--	--	--	--	21.0	--	--	--
2	19.5	28.5	9.5	14.0	14.0	16.0	22.0	--	23.5	24.0	--	--
3	--	16.5	--	--	--	--	--	--	--	--	18.0	26.0
4	--	--	14.5	--	--	14.0	--	15.0	20.5	--	--	--
5	--	15.5	--	8.0	16.0	17.0	--	--	--	--	--	--
6	18.5	--	--	--	--	--	13.5	--	--	26.0	28.0	--
7	--	--	--	--	--	--	--	22.0	--	--	--	26.5
8	--	--	14.5	--	--	--	--	--	15.5	--	--	--
9	23.5	--	--	12.0	14.5	16.0	19.5	--	--	25.0	--	--
10	--	18.5	--	--	--	--	--	14.0	--	--	--	24.5
11	23.0	--	14.0	--	--	--	--	15.5	24.0	--	--	--
12	--	--	--	7.0	--	12.5	--	--	--	--	--	--
13	24.0	17.0	--	--	13.0	--	16.0	--	--	25.5	25.5	27.5
14	--	--	--	--	--	--	--	24.5	--	--	--	--
15	--	--	13.5	12.5	--	--	--	--	27.0	--	--	--
16	23.5	--	--	--	13.0	20.5	21.5	--	--	24.5	--	--
17	16.0	17.0	--	--	--	--	--	--	--	--	--	24.0
18	--	--	10.0	--	--	--	--	22.5	26.0	--	--	--
19	--	--	--	14.0	15.0	22.0	--	--	--	--	--	--
20	23.0	16.0	--	13.5	--	--	19.5	--	--	25.0	--	--
21	--	--	--	--	--	--	--	19.5	--	--	--	24.0
22	--	--	12.0	14.5	--	16.5	--	--	23.0	--	--	--
23	24.5	--	--	--	17.0	--	21.0	--	--	18.0	--	--
24	--	18.5	12.5	--	--	--	--	--	--	--	--	23.0
25	--	--	--	--	--	--	--	21.0	23.0	--	--	--
26	--	--	--	14.0	15.0	12.5	--	--	--	--	--	--
27	17.5	14.0	--	--	--	--	17.0	--	--	--	24.0	--
28	--	--	--	--	15.0	--	--	17.5	--	--	--	22.0
29	--	12.0	13.5	--	--	--	--	--	27.0	--	--	--
30	--	--	--	13.5	--	20.0	20.0	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	26.0	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

				SUS- PENDE SEDIM- 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		
DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- MENT (MG/L)							
NOV.											
05...	1020	15.5	39	1040	110	43	57	70	82		
20...	1212	16.0	3.2	3580	31	38	45	56	64		
24...	1208	18.5	3.2	2960	26	9	10	12	17		
29...	1135	12.0	56	1160	175	39	43	51	64		
DEC.											
02...	1022	9.0	83	5490	1230	22	23	29	41		
02...	1033	9.5	124	3940	1320	19	24	30	38		
04...	1203	14.5	24	359	23	--	--	--	--		
MAR.											
26...	0902	12.5	28	162	12	52	68	75	82		
DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL 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 2.00 MM
NOV.											
05...	--	--	94	--	96	--	100	--	--	--	--
20...	73	--	--	90	--	98	--	99	--	100	--
24...	57	--	--	96	--	98	--	98	--	99	100
29...	82	--	--	94	--	100	--	--	--	--	--
DEC.											
02...	71	--	--	96	--	99	--	100	--	--	--
02...	61	--	--	76	--	97	--	99	--	100	--
04...	--	--	85	--	87	--	98	--	100	--	--
MAR.											
26...	--	--	94	--	100	--	--	--	--	--	--

## COLMA CREEK BASIN

11162720 COLMA CREEK AT SOUTH SAN FRANCISCO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.80	110	.24	2.5	190	1.3	33	900	299
2	.80	146	.32	2.4	191	1.2	51	1300	455
3	1.6	142	.61	45	1330	454	57	1420	808
4	1.6	138	.60	17	728	49	89	1880	1100
5	1.2	134	.43	36	1280	337	14	300	11
6	1.2	130	.42	23	1070	235	6.6	200	3.6
7	1.2	140	.45	2.2	350	2.1	13	417	32
8	1.2	150	.49	2.1	250	1.4	20	776	97
9	1.2	155	.50	4.0	417	5.5	3.9	300	3.2
10	1.2	165	.53	4.0	450	4.9	4.6	300	3.7
11	1.2	172	.56	4.3	335	3.9	3.1	320	2.7
12	1.2	285	.92	3.9	220	2.3	2.6	200	1.4
13	1.2	397	1.3	3.8	115	1.2	15	646	102
14	.60	360	.58	3.8	230	2.4	2.6	100	.70
15	1.2	320	1.0	3.8	340	3.5	53	1060	838
16	.80	286	.62	3.8	460	4.7	34	1200	258
17	.80	426	.92	3.8	578	5.9	29	1010	186
18	3.0	455	5.4	3.8	800	8.2	32	1090	162
19	.80	300	.65	3.8	1000	10	14	437	31
20	17	635	142	3.3	1200	11	88	2140	1410
21	8.2	194	13	3.2	200	1.7	44	1180	348
22	9.1	195	6.3	3.2	150	1.3	9.0	650	16
23	14	502	77	3.2	1000	8.6	5.3	350	5.0
24	6.6	150	2.7	32	1650	337	3.4	82	.75
25	10	150	4.1	66	1830	901	3.8	100	1.0
26	12	200	6.5	6.1	642	20	30	859	270
27	12	300	9.7	127	2630	3960	14	506	40
28	12	200	6.5	203	4050	5780	7.6	274	17
29	12	200	6.5	150	2890	2690	17	600	97
30	6.6	221	4.2	19	642	49	3.4	100	.92
31	2.5	190	1.3	--	--	--	3.1	100	.84
TOTAL	144.80	--	296.34	789.0	--	14893.1	706.0	--	6600.81

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)
1	13	332	61	2.5	33	.22	2.2	200	1.2
2	3.4	100	.92	1.8	30	.15	1.8	200	.97
3	2.5	30	.20	1.5	28	.11	1.9	200	1.0
4	2.2	35	.21	2.0	26	.14	2.1	62	.35
5	2.1	36	.20	2.3	24	.15	2.2	96	.57
6	2.1	34	.19	2.3	24	.15	2.6	80	.56
7	2.5	30	.20	2.5	23	.16	3.0	70	.57
8	2.8	28	.21	2.3	22	.14	2.1	300	1.7
9	2.1	24	.14	2.0	22	.12	3.0	400	3.2
10	13	264	22	2.1	35	.20	3.0	300	2.4
11	45	1150	468	2.1	40	.23	3.7	200	2.0
12	53	1600	547	2.3	45	.28	95	2350	1650
13	15	383	26	2.5	40	.27	3.1	250	2.1
14	15	416	76	2.2	40	.24	2.5	100	.68
15	5.4	170	2.5	2.8	35	.26	1.7	50	.23
16	22	528	180	6.0	147	6.3	1.3	48	.17
17	6.3	150	2.6	2.2	70	.42	1.2	100	.32
18	3.7	100	1.0	12	411	80	1.6	200	.86
19	3.8	62	.64	3.4	34	.31	1.7	200	.92
20	3.2	72	.62	2.7	30	.22	2.4	100	.65
21	3.1	73	.61	2.7	30	.22	2.0	60	.32
22	3.2	74	.64	2.6	800	5.6	1.6	120	.52
23	2.7	60	.44	2.1	1600	9.1	13	435	36
24	2.5	45	.30	2.1	900	5.1	3.3	70	.62
25	2.3	30	.19	2.1	710	4.0	38	1130	267
26	2.1	17	.10	2.1	600	3.4	109	1970	1850
27	1.9	22	.11	3.6	572	14	3.6	50	.49
28	2.2	28	.17	2.4	50	.32	2.9	40	.31
29	2.2	34	.20	--	--	--	2.7	20	.15
30	2.1	39	.22	--	--	--	2.3	12	.07
31	2.0	36	.19	--	--	--	2.1	12	.07
TOTAL	244.4	--	1392.80	79.2	--	131.81	318.6	--	3826.00

11162720 COLMA CREEK AT SOUTH SAN FRANCISCO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.0	12	.06	2.6	12	.08	2.1	12	.07
2	1.7	12	.06	9.8	296	20	2.1	16	.09
3	2.1	13	.07	3.8	20	.21	1.6	40	.17
4	2.1	14	.08	4.3	19	.22	2.1	40	.23
5	2.6	15	.11	2.6	16	.11	2.6	20	.14
6	3.2	50	.43	2.6	12	.08	2.6	15	.11
7	2.1	20	.11	2.1	9	.05	2.1	46	.26
8	1.6	14	.06	2.6	8	.06	1.6	49	.21
9	10	260	44	2.1	7	.04	1.6	58	.25
10	4.4	79	1.8	1.2	6	.02	1.6	78	.34
11	2.1	15	.09	2.1	19	.11	1.6	100	.43
12	2.1	15	.09	2.1	18	.10	2.1	40	.23
13	24	706	223	2.1	16	.09	2.1	20	.11
14	4.3	131	2.0	2.1	15	.09	1.6	98	.42
15	3.2	15	.13	2.1	15	.09	3.2	96	.83
16	9.9	246	52	2.1	15	.09	2.1	74	.42
17	18	541	90	1.6	15	.06	1.6	52	.22
18	2.6	25	.18	2.6	313	3.3	2.1	30	.17
19	1.6	15	.06	1.6	360	3.0	2.1	27	.15
20	5.2	106	5.9	1.2	15	.05	2.6	24	.17
21	1.6	50	.22	1.2	15	.05	1.2	21	.07
22	1.6	80	.35	1.2	28	.09	2.1	18	.10
23	2.1	110	.62	1.2	40	.13	2.1	24	.14
24	1.6	90	.39	1.2	54	.17	2.1	30	.17
25	2.1	70	.40	3.2	68	.59	2.1	36	.20
26	1.6	50	.22	3.2	55	.48	5.2	34	.48
27	3.2	27	.23	4.4	40	.48	3.8	32	.33
28	3.7	22	.22	2.6	24	.17	2.1	28	.16
29	2.1	18	.10	2.6	21	.15	2.6	25	.18
30	2.6	13	.09	2.1	18	.10	2.6	28	.20
31	--	--	--	2.6	15	.11	--	--	--
TOTAL	127.0	--	423.07	78.8	--	30.37	67.0	--	7.05

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.6	30	.21	2.1	20	.11	2.6	50	.35
2	2.1	34	.19	2.1	90	.51	2.6	60	.42
3	2.6	34	.24	1.6	90	.39	2.1	56	.32
4	3.2	35	.30	1.6	70	.30	1.6	25	.11
5	3.2	36	.31	1.6	50	.22	1.6	20	.09
6	1.6	36	.16	1.6	32	.14	1.6	15	.06
7	2.6	40	.28	1.6	30	.13	1.6	49	.21
8	1.6	45	.19	1.6	25	.11	1.2	50	.16
9	2.1	49	.28	1.6	50	.22	1.2	50	.16
10	3.8	50	.51	1.6	55	.24	1.6	53	.23
11	2.6	50	.35	1.6	60	.26	2.1	20	.11
12	1.6	50	.22	2.1	70	.40	1.6	15	.06
13	2.1	52	.29	2.1	74	.42	2.1	43	.24
14	2.6	40	.28	2.1	30	.17	2.1	35	.20
15	1.6	30	.13	2.1	25	.14	2.1	30	.17
16	3.2	22	.19	2.1	70	.40	2.1	20	.11
17	3.8	20	.21	2.1	68	.39	1.6	15	.06
18	3.8	20	.21	2.1	66	.37	2.1	15	.09
19	2.1	150	.85	2.1	65	.37	1.2	15	.05
20	2.6	191	1.3	3.8	62	.64	1.6	55	.24
21	2.6	150	1.1	3.2	25	.22	2.1	66	.37
22	2.6	120	.84	3.8	20	.21	1.6	60	.26
23	2.6	82	.58	3.2	58	.50	1.2	55	.18
24	2.6	30	.21	3.2	56	.48	2.1	48	.27
25	2.6	20	.14	3.2	55	.48	1.6	25	.11
26	2.1	84	.48	3.2	54	.47	3.8	154	4.8
27	2.1	86	.49	3.2	52	.45	1.6	100	.43
28	1.6	86	.37	2.6	25	.18	1.5	120	.49
29	2.1	86	.49	3.2	20	.17	2.0	200	1.1
30	2.1	88	.50	4.4	143	3.9	2.0	30	.16
31	2.1	30	.17	2.6	120	.84	--	--	--
TOTAL	76.5	--	12.07	75.0	--	13.83	55.8	--	11.61

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)  
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

2762.10  
 27638.86

## COYOTE CREEK BASIN

11169800 COYOTE CREEK NEAR GILROY, CALIF.

LOCATION.--Lat 37°04'40", long 121°29'36", in NE<sup>1</sup>SE<sup>1</sup> sec.11, T.10 S., R.4 E., Santa Clara County, at gaging station 0.7 mile downstream from Bear Creek, 5.0 miles upstream from Coyote Creek Dam, and 6.4 miles northeast of Gilroy.

DRAINAGE AREA.--109 sq mi.

PERIOD OF RECORD.--Water temperatures: December 1964 to September 1971.

Sediment records: December 1964 to September 1971.

**EXTREMES, --1970-71:**

Sediment concentrations: Maximum daily, 178 mg/l (estimated) Dec. 2; minimum daily, no flow for many days.

Sediment discharge: Maximum daily, 372 tons (estimated) Dec. 2; minimum daily, 0 tons on many days.

Period of record:

Sediment concentrations: Maximum daily, 3,220 mg/l Jan. 19, 1969; minimum daily, no flow for many days each year.

Sediment discharge: Maximum daily, 41,600 tons Jan. 19, 1969; minimum daily, 0 tons on many days each year.

REMARKS.--No flow Oct. 1 to Nov. 27, Aug. 29 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

[illegible]

11169800 COYOTE CREEK NEAR GILROY, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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				0	0	0	192	53	30
2				0	0	0	615	178	372
3				0	0	0	148	38	15
4				0	0	0	93	32	8.0
5				0	0	0	81	23	5.0
6				0	0	0	45	16	1.9
7				0	0	0	29	13	1.0
8				0	0	0	23	8	.50
9				0	0	0	24	3	.19
10				0	0	0	17	2	.09
11				0	0	0	13	2	.07
12				0	0	0	12	2	.06
13				0	0	0	10	2	.05
14				0	0	0	10	2	.05
15				0	0	0	8.8	2	.05
16				0	0	0	212	27	22
17				0	0	0	254	26	19
18				0	0	0	251	37	48
19				0	0	0	408	48	57
20				0	0	0	284	28	43
21				0	0	0	715	126	270
22				0	0	0	314	32	29
23				0	0	0	157	12	5.1
24				0	0	0	98	10	2.6
25				0	0	0	69	8	1.5
26				0	0	0	57	7	1.1
27				0	0	0	87	10	2.3
28				14	45	5.0	110	8	2.4
29				321	97	100	89	5	1.2
30				115	33	11	75	5	1.0
31				--	--	--	63	5	.85
TOTAL	0	--	0	450	--	116.0	4563.8	--	940.01

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	52	5	.70	18	6	.29	9.6	8	.21
2	48	5.	.65	17	7	.32	8.5	7	.16
3	37	5	.50	16	8	.35	8.5	6	.14
4	31	5	.42	14	9	.34	8.5	6	.14
5	28	4	.30	14	10	.38	8.1	4	.09
6	25	4	.27	14	8	.30	7.8	6	.13
7	23	4	.25	13	7	.25	7.7	8	.17
8	21	4	.23	13	6	.21	7.6	9	.18
9	20	4	.22	12	7	.23	7.5	8	.16
10	19	4	.21	12	7	.23	7.5	8	.16
11	21	4	.23	12	8	.26	7.5	8	.16
12	74	8	1.6	11	8	.24	36	11	2.7
13	496	89	129	11	9	.27	163	20	11
14	610	115	199	11	9	.27	52	5	.70
15	294	50	40	11	9	.27	38	3	.31
16	170	40	18	11	10	.30	29	3	.31
17	117	35	11	14	10	.38	24	4	.32
18	90	25	6.1	12	8	.26	20	4	.32
19	71	20	3.8	13	7	.25	17	4	.32
20	58	16	2.5	12	7	.23	15	4	.28
21	47	14	1.8	11	8	.24	14	5	.26
22	40	12	1.3	10	8	.22	12	6	.23
23	35	10	.95	10	9	.24	12	6	.23
24	32	8	.69	9.6	9	.23	12	7	.23
25	28	6	.45	8.8	10	.24	13	7	.25
26	26	6	.42	8.5	10	.23	347	98	127
27	24	5	.32	8.8	9	.21	194	24	13
28	23	5	.31	11	9	.27	92	10	2.5
29	21	5	.28	--	--	--	60	3	.49
30	20	5	.27	--	--	--	45	1	.12
31	18	6	.29	--	--	--	36	1	.10
TOTAL	2619	--	422.06	338.7	--	7.51	1319.8	--	162.37

## COYOTE CREEK BASIN

11169800 COYOTE CREEK NEAR GILROY, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	29	1	.08	7.8	1	.02	4.1	3	.03
2	25	1	.07	9.2	1	.02	4.0	4	.04
3	22	2	.12	11	1	.03	4.0	4	.04
4	19	2	.10	9.6	1	.03	3.9	4	.04
5	18	2	.10	8.8	1	.02	3.8	4	.04
6	16	2	.09	8.8	1	.02	3.7	4	.04
7	18	3	.15	8.1	2	.04	3.6	4	.04
8	16	3	.13	8.1	2	.04	3.5	4	.04
9	14	3	.11	8.1	2	.04	3.4	4	.04
10	13	3	.11	7.5	2	.04	3.3	4	.04
11	13	3	.11	6.8	2	.04	3.2	4	.03
12	12	3	.10	6.2	2	.03	3.1	4	.03
13	12	3	.10	6.2	2	.03	2.9	5	.04
14	44	21	2.9	5.9	2	.03	2.7	5	.04
15	31	9	.75	5.6	3	.05	2.6	5	.04
16	20	9	.49	5.1	3	.04	2.4	5	.03
17	20	8	.43	5.1	3	.04	2.3	5	.03
18	20	8	.43	4.8	3	.04	2.1	5	.03
19	16	7	.30	4.6	3	.04	2.1	5	.03
20	14	7	.26	4.6	3	.04	2.0	5	.03
21	13	7	.25	4.6	3	.04	1.9	5	.03
22	12	6	.19	4.3	4	.05	1.8	5	.02
23	11	6	.18	4.1	4	.04	1.7	6	.03
24	10	5	.14	4.1	4	.04	1.6	7	.03
25	10	5	.14	4.2	4	.05	1.6	8	.03
26	10	4	.11	4.1	4	.04	1.6	8	.03
27	9.6	3	.08	4.0	4	.04	1.6	9	.04
28	9.2	2	.05	4.2	3	.03	1.5	10	.04
29	8.8	1	.02	4.5	3	.04	1.4	9	.03
30	8.1	1	.02	4.5	3	.04	1.4	9	.03
31	--	--	--	4.3	3	.03	--	--	--
TOTAL	493.7	--	8.11	188.8	--	1.12	78.8	--	1.03

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	1.2	8	.03	.25	6	0			
2	1.4	8	.03	.22	8	0			
3	1.3	8	.03	.21	10	.01			
4	1.3	8	.03	.19	11	.01			
5	1.3	8	.03	.21	11	.01			
6	1.3	8	.03	.15	11	0			
7	1.2	7	.02	.13	11	0			
8	1.2	7	.02	.13	11	0			
9	1.2	7	.02	.13	11	0			
10	1.0	6	.02	.11	11	0			
11	.94	6	.02	.09	11	0			
12	.91	6	.01	.08	11	0			
13	.84	6	.01	.08	12	0			
14	.83	5	.01	.06	12	0			
15	.76	5	.01	.06	12	0			
16	.74	5	.01	.06	12	0			
17	.73	5	.01	.06	12	0			
18	.66	5	.01	.04	12	0			
19	.65	5	.01	.04	12	0			
20	.61	5	.01	.04	12	0			
21	.57	5	.01	.04	12	0			
22	.53	5	.01	.04	12	0			
23	.53	5	.01	.03	12	0			
24	.52	6	.01	.02	10	0			
25	.45	6	.01	.02	8	0			
26	.45	6	.01	.02	7	0			
27	.34	6	.01	.01	5	0			
28	.34	6	.01	.01	5	0			
29	.34	6	.01	0	0	0			
30	.29	6	0	0	0	0			
31	.27	6	0	0	0	0			
TOTAL	24.70	--	.46	2.53	--	.03	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

10079.83

1658.70

11169800 COYOTE CREEK NEAR GILROY, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE 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
MAR.								
26...	1030	12.0	474	214	274	48	64	75
26...	1305	--	745	213	428	41	54	66
26...	1550	13.5	665	80	144	--	--	--
APR.								
14...	1135	14.5	60	50	8.1	--	--	--

DATE	TIME	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL 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 1.00 MM
MAR.								
26...	83	90	93	94	100	--	--	--
26...	76	82	87	88	89	93	100	--
26...	--	--	98	100	--	--	--	--
APR.								
14...	--	--	99	100	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

			NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
DATE	TIME							
OCT. 17...	1215	5	.00	1	1	2	6	
	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM	
DATE								
OCT. 17...	11	18	28	42	61	83	100	

## ALAMEDA CREEK BASIN

11176500 ARROYO VALLE NEAR LIVERMORE, CALIF.

LOCATION.--Lat 37°37'24", long 121°45'28", in Valle de San Jose Grant, Alameda County, temperature recorder at gaging station on right bank, 900 ft downstream from highway bridge, 1.1 miles upstream from Dry Creek, 1.3 miles downstream from Del Valle Dam, 4.1 miles south of Livermore, and 6.9 miles southeast of Pleasanton.

DRAINAGE AREA.--147 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): Water year 1953 (partial-record station), December 1958 to July 1966.

Water temperatures: October 1959 to September 1961, October 1962 to September 1971.

Sediment records: October 1962 to September 1967.

EXTREMES.--1970-71:

Water temperatures: Maximum, 28.0°C July 19; minimum, 6.5°C Jan. 7-9, Mar. 6.

Period of record:

Water temperatures: Maximum, 30.5°C June 14, 1966; minimum, 4.0°C Jan. 2, Dec. 28, 1966, Dec. 14, 1967.

REMARKS.--Recorder stopped Dec. 26 to Jan. 6, Feb. 4 to Mar. 5, Mar. 18 to Apr. 2, Apr. 6 to May 5, May 25 to June 1, Sept. 17-30.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	18.0	15.5	14.5	12.5	12.0	--	--	8.5	8.5	--	--
2	21.0	19.0	16.0	13.5	12.5	11.0	--	--	10.0	8.0	--	--
3	20.0	19.0	15.0	14.5	12.0	11.0	--	--	10.0	7.0	--	--
4	20.0	19.0	15.0	14.5	13.5	12.0	--	--	--	--	--	--
5	20.5	19.0	15.0	15.0	13.5	12.5	--	--	--	--	--	--
6	19.0	15.0	15.0	14.5	13.0	12.5	--	--	--	--	13.0	6.5
7	15.5	14.0	15.5	14.5	13.5	13.0	10.5	6.5	--	--	12.5	7.5
8	15.5	13.5	15.0	14.5	13.0	12.0	7.5	6.5	--	--	16.5	9.5
9	15.5	14.0	15.5	14.5	12.0	11.0	8.5	6.5	--	--	12.0	9.5
10	15.5	14.0	15.0	15.0	11.0	9.5	8.5	7.5	--	--	12.5	9.5
11	15.5	14.0	15.0	15.0	10.5	10.0	8.0	8.0	--	--	13.0	10.0
12	15.0	14.0	15.0	14.5	10.5	9.5	8.0	7.5	--	--	12.5	10.5
13	15.0	14.0	15.0	14.5	10.0	9.5	7.5	7.5	--	--	13.5	10.5
14	14.5	14.0	14.5	14.0	10.0	9.0	8.5	7.5	--	--	10.5	9.0
15	15.0	14.0	14.5	14.0	11.0	10.0	8.0	8.0	--	--	13.5	9.0
16	16.0	14.0	14.5	13.5	11.0	10.5	9.0	8.0	--	--	15.5	9.0
17	15.0	14.0	14.5	14.0	10.5	10.0	10.5	9.0	--	--	15.5	10.5
18	15.0	14.0	14.5	14.0	10.0	10.0	11.5	10.0	--	--	--	--
19	15.0	14.5	14.0	13.5	10.0	9.5	11.0	10.5	--	--	--	--
20	15.0	14.5	14.0	13.5	9.5	9.0	11.0	10.5	--	--	--	--
21	15.0	14.5	13.5	13.5	10.0	9.5	10.5	9.5	--	--	--	--
22	15.5	15.0	14.0	13.5	10.0	9.0	10.5	9.5	--	--	--	--
23	15.0	15.0	14.0	13.5	10.0	9.5	10.5	9.5	--	--	--	--
24	15.5	14.5	14.0	13.5	9.5	8.5	10.5	9.0	--	--	--	--
25	16.5	14.5	14.0	14.0	8.5	8.0	9.5	8.5	--	--	--	--
26	15.0	14.0	14.0	12.5	--	--	10.0	8.5	--	--	--	--
27	15.0	13.0	12.5	12.0	--	--	10.0	8.5	--	--	--	--
28	15.0	14.0	12.5	12.0	--	--	10.0	8.0	--	--	--	--
29	16.0	14.5	12.5	12.0	--	--	9.0	8.0	--	--	--	--
30	15.0	14.5	12.0	12.0	--	--	9.0	8.0	--	--	--	--
31	15.0	14.5	--	--	--	--	9.0	8.0	--	--	--	--
AVE	16.2	15.0	14.4	13.8	11.1	10.3	9.5	8.3	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	23.5	18.5	25.0	21.0	23.5	20.5
2	--	--	--	--	18.5	14.5	22.5	19.0	26.0	22.5	22.5	21.0
3	15.5	12.5	--	--	20.0	16.0	23.5	19.0	24.0	23.0	23.0	21.0
4	18.5	13.5	--	--	20.0	15.0	23.5	19.0	25.0	22.0	24.0	20.5
5	16.0	13.0	--	--	20.0	15.0	25.0	19.0	25.0	22.0	23.0	21.5
6	--	--	15.5	13.5	20.0	15.0	23.0	20.0	26.5	21.0	22.0	20.5
7	--	--	15.0	14.5	18.5	16.0	23.5	20.0	27.0	21.5	23.5	19.5
8	--	--	17.0	14.5	20.0	16.0	24.0	15.0	25.5	22.5	24.0	20.0
9	--	--	19.5	15.5	17.5	15.0	24.5	19.0	27.0	22.5	25.0	20.0
10	--	--	21.5	15.0	19.0	16.5	23.5	19.0	27.5	23.0	24.0	20.5
11	--	--	20.0	14.5	21.5	16.5	24.0	18.5	27.0	24.0	24.0	20.0
12	--	--	20.0	15.0	21.0	17.5	25.0	19.5	26.0	24.0	25.5	21.0
13	--	--	20.0	17.0	22.0	17.0	26.0	21.0	25.0	22.5	27.0	18.5
14	--	--	21.5	14.5	24.0	17.0	26.0	21.5	25.0	22.5	20.0	15.5
15	--	--	21.5	14.5	25.5	19.0	26.0	21.0	24.0	22.5	19.5	15.0
16	--	--	22.5	13.0	24.5	19.5	25.5	21.0	24.5	22.0	18.5	14.5
17	--	--	22.0	13.0	24.5	20.0	24.5	21.5	23.5	22.0	--	--
18	--	--	23.0	15.0	24.0	19.0	27.0	23.0	24.0	21.0	--	--
19	--	--	20.5	16.5	24.0	19.5	28.0	23.0	23.0	22.0	--	--
20	--	--	20.0	13.0	25.0	19.5	27.5	22.5	22.5	22.0	--	--
21	--	--	21.0	15.5	26.5	21.0	26.5	23.0	23.0	22.0	--	--
22	--	--	24.0	16.5	25.0	21.0	27.0	22.0	24.0	22.0	--	--
23	--	--	22.5	18.0	24.5	21.0	26.0	22.5	24.5	21.5	--	--
24	--	--	21.0	18.0	23.0	20.0	24.5	22.5	23.5	22.0	--	--
25	--	--	--	--	23.5	19.0	27.5	21.0	25.0	22.5	--	--
26	--	--	--	--	21.0	20.0	26.5	20.0	24.0	22.0	--	--
27	--	--	--	--	23.0	19.5	27.0	20.0	24.0	22.0	--	--
28	--	--	--	--	22.5	18.0	26.0	19.5	23.5	22.0	--	--
29	--	--	--	--	23.0	17.5	22.5	21.0	23.0	21.5	--	--
30	--	--	--	--	23.0	18.0	23.5	21.0	23.0	20.5	--	--
31	--	--	--	--	--	--	23.5	21.0	22.0	21.0	--	--
AVE	--	--	--	--	22.2	17.9	25.0	20.6	24.6	22.1	--	--



## 11179000 ALAMEDA CREEK NEAR NILES, CALIF.

LOCATION.--Lat 37°35'14", long 121°57'35", in NW¼ sec.15, T.4 S., R.1 W., Alameda County, at gaging station 0.3 mile downstream from railroad bridge, and 1.2 miles northeast of Niles.

DRAINAGE AREA.--633 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): January to November 1906, water years 1952-53 (partial-record station), October 1953 to September 1967, October 1968 to August 1969.

Water temperatures: July 1956 to September 1971.

Sediment records: January 1957 to September 1971.

## EXTREMES.--1970-71:

Water temperatures: Maximum, 24.5°C July 23; minimum, 5.0°C Jan. 8.

Sediment concentrations: Maximum daily, 1,540 mg/l Dec. 21; minimum daily, 6 mg/l Sept. 26-28.

Sediment discharge: Maximum daily, 3,380 tons Dec. 2; minimum daily, 0.21 ton Sept. 27.

## Period of record:

Water temperatures: Maximum (1956-62, 1964-71), 31.0°C June 1, 1960; minimum, 3.0°C Jan. 5, 1961, Jan. 14, 1963.

Sediment concentrations: Maximum daily, 5,340 mg/l Apr. 3, 1958; minimum daily, no flow for many days in 1957, 1959-61.

Sediment discharge: Maximum daily, 285,000 tons Apr. 3, 1958; minimum daily, 0 tons on many days in 1957, 1959-61.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	12.0	11.5	10.0	9.0	8.0	15.0	14.5	14.5	20.5	--	22.0
2	17.0	13.5	10.0	9.5	9.5	10.5	12.0	14.5	15.0	18.0	24.0	--
3	17.5	13.0	9.0	6.5	8.5	9.5	17.5	13.0	15.0	--	--	20.0
4	19.0	14.0	11.5	6.0	8.5	10.0	16.5	13.5	15.0	--	20.0	--
5	17.0	15.0	13.0	6.0	8.5	11.5	16.5	14.0	21.0	21.0	--	22.0
6	17.0	15.0	13.0	6.5	10.0	11.0	14.5	15.5	--	--	24.0	--
7	16.5	15.0	13.0	6.5	12.0	10.0	14.5	15.0	17.5	19.0	--	21.0
8	14.5	15.0	13.5	5.0	11.0	13.5	16.0	15.0	--	--	22.5	--
9	15.0	15.0	12.0	7.0	11.0	12.0	15.0	17.0	16.5	20.0	--	19.5
10	18.0	16.0	9.5	8.5	12.0	12.5	14.5	15.0	--	--	23.5	--
11	18.0	15.5	10.0	9.0	12.5	13.0	16.5	17.0	18.5	20.5	--	22.5
12	16.5	15.0	9.0	8.0	12.5	12.0	13.0	17.0	--	--	23.0	--
13	18.0	13.5	9.0	7.5	13.0	13.0	14.0	17.0	17.0	20.0	--	21.0
14	16.0	12.5	9.0	8.0	12.0	10.5	14.0	19.0	--	--	21.0	--
15	16.0	12.0	10.0	9.0	13.5	13.0	17.0	--	19.0	21.0	--	20.0
16	16.0	12.5	11.0	11.0	10.5	11.5	17.5	16.5	--	--	21.5	--
17	16.5	13.5	8.5	12.0	12.0	15.5	15.5	--	22.0	22.5	--	21.0
18	16.0	12.0	7.5	12.5	13.0	15.5	16.0	17.0	--	--	20.5	--
19	16.5	12.0	7.0	12.5	12.0	15.0	12.5	--	23.5	21.0	--	20.5
20	16.0	11.5	7.0	12.5	12.0	14.0	12.5	16.0	--	--	21.0	--
21	15.5	11.0	7.5	10.0	11.5	10.5	11.5	--	21.0	21.0	--	17.0
22	16.0	12.0	7.0	10.0	10.5	12.0	15.0	20.0	--	--	23.0	--
23	15.0	13.0	8.0	10.0	10.5	14.5	13.0	--	20.0	24.5	--	17.5
24	15.0	12.0	8.5	8.5	11.0	15.0	15.5	18.0	--	--	20.5	--
25	14.0	14.5	8.0	9.0	11.0	14.0	12.5	--	18.5	23.5	--	17.0
26	14.5	13.0	8.0	9.0	9.0	14.5	13.0	16.0	--	--	22.5	--
27	12.5	11.5	8.0	10.0	10.0	15.0	16.0	--	19.0	19.5	--	17.0
28	12.0	11.5	9.0	10.5	11.0	13.5	14.0	16.0	--	--	22.5	--
29	12.0	11.0	10.5	9.5	--	15.0	15.0	--	18.0	19.0	--	16.0
30	12.0	11.0	9.5	10.0	--	15.0	15.0	17.0	--	--	20.5	--
31	13.5	--	8.5	8.5	--	11.5	--	--	--	23.0	--	--
AVE	15.7	13.1	9.6	9.0	11.0	12.6	14.7	--	--	--	--	--

## ALAMEDA CREEK BASIN

11179000 ALAMEDA CREEK NEAR NILES, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	38	24	2.5	40	19	2.1	107	168	49
2	40	20	2.2	32	15	1.3	786	1100	3380
3	42	23	2.6	19	14	1.3	286	776	705
4	45	22	2.7	49	26	3.9 <sup>72</sup>	595	852	1430
5	46	26	3.2	68	57	11	217	575	337
6	46	26	3.2	57	67	11	80	150	32
7	47	19	2.4	52	84	12	52	50	7.0
8	42	19	2.2	28	51	3.9	41	32	3.5
9	34	17	1.6	19	27	1.4	34	16	1.5
10	32	15	1.3	35	41	5.0	25	12	.81
11	33	13	1.2	75	61	12	22	10	.59
12	32	17	1.5	65	44	7.7	25	9	.61
13	33	14	1.2	46	23	2.9	22	7	.42
14	33	20	1.8	63	28	4.8	25	10	.68
15	33	15	1.3	62	21	3.5	21	12	.68
16	32	13	1.1	60	17	2.8	160	345	187
17	28	10	.76	58	12	1.9	576	958	1580
18	30	9	.73	51	10	1.4	597	1390	2350
19	32	11	.95	46	10	1.2	700	1380	2710
20	38	18	1.8	46	10	1.2	300	788	820
21	42	19	2.2	49	13	1.7	756	1540	3160
22	39	15	1.6	50	16	2.2	419	1290	1550
23	42	20	2.3	50	13	1.8	184	425	211
24	46	27	3.4	47	10	1.3	109	268	79
25	26	17	1.2	75	35	8.1	84	100	23
26	18	9	.44	120	444	147	86	50	12
27	16	7	.30	46	305	43	171	250	115
28	22	10	.59	174	440	261	160	300	130
29	39	18	1.9	842	1230	3040	133	268	96
30	41	18	2.0	192	604	368	107	225	65
31	43	15	1.7	--	--	--	82	88	19
TOTAL	1110	--	53.87	2616	--	3965.82	6922	--	19055.79

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	71	75	14	45	38	4.6	23	51	3.2
2	90	100	24	48	50	6.5	24	29	1.9
3	64	125	22	38	38	3.9	22	49	2.9
4	53	68	9.7	36	20	1.9	19	65	3.3
5	50	50	6.8	48	27	3.5	20	47	2.5
6	52	42	5.9	45	38	4.6	17	35	1.6
7	46	50	6.2	41	34	3.8	16	33	1.4
8	45	125	15	40	36	3.9	17	49	2.2
9	46	88	11	36	50	4.9	19	51	2.6
10	43	125	15	31	50	4.2	17	58	2.7
11	61	68	11	29	39	3.1	15	53	2.1
12	174	259	135	35	37	3.5	128	338	393
13	442	825	1100	35	50	4.7	146	827	403
14	282	950	723	30	67	5.4	66	175	31
15	163	250	110	28	51	3.9	79	60	13
16	118	138	44	31	48	4.0	34	60	5.5
17	88	88	21	35	37	3.5	27	80	5.8
18	68	82	15	27	39	2.8	23	57	3.5
19	66	73	13	32	57	4.9	27	36	2.6
20	65	79	14	26	43	3.0	69	66	13
21	61	75	12	26	33	2.3	93	40	10
22	60	38	6.2	26	42	2.9	93	26	6.5
23	53	50	7.2	23	50	3.1	41	43	4.8
24	49	25	3.3	21	26	1.5	45	64	7.8
25	48	18	2.3	20	33	1.8	41	73	8.1
26	47	23	2.9	21	38	2.2	193	464	314
27	46	61	7.6	24	50	3.2	91	359	96
28	45	36	4.4	26	67	4.7	49	100	13
29	41	50	5.5	--	--	--	43	60	7.0
30	38	50	5.1	--	--	--	41	63	7.0
31	43	43	5.0	--	--	--	69	35	6.5
TOTAL	2618	--	2377.1	903	--	102.3	1607	--	1377.5

11179000 ALAMEDA CREEK NEAR NILES, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	32	30	2.6	22	45	2.7	14	31	1.2
2	39	45	4.7	20	40	2.2	14	27	1.0
3	32	54	4.7	28	39	2.9	14	30	1.1
4	30	38	3.1	22	55	3.3	24	37	2.4
5	29	52	4.1	22	50	3.0	23	27	1.7
6	27	46	3.4	22	40	2.4	33	35	3.1
7	26	37	2.6	23	38	2.4	36	47	4.6
8	25	30	2.0	26	42	2.9	31	44	3.7
9	26	30	2.1	25	40	2.7	29	37	2.9
10	31	31	2.6	23	32	2.0	33	37	3.3
11	28	31	2.3	22	23	1.4	35	40	3.8
12	24	31	2.0	25	27	1.8	26	40	2.8
13	21	32	1.8	22	36	2.1	24	34	2.2
14	76	254	61	22	33	2.0	21	28	1.6
15	35	227	21	22	25	1.5	18	22	1.1
16	24	85	5.5	18	23	1.1	13	19	.67
17	59	145	25	15	27	1.1	9.6	81	2.2
18	39	168	17	15	30	1.2	13	62	2.2
19	30	105	8.5	17	31	1.4	25	48	3.2
20	27	64	4.7	17	33	1.5	53	38	5.4
21	23	44	2.7	16	37	1.6	59	48	7.6
22	23	41	2.5	16	38	1.6	63	56	9.5
23	22	44	2.6	16	31	1.3	55	51	7.6
24	23	34	2.1	14	27	1.0	44	39	4.6
25	22	43	2.6	13	32	1.1	44	39	4.6
26	22	51	3.0	12	36	1.2	46	45	5.6
27	20	42	2.3	11	34	1.0	50	41	5.5
28	19	29	1.5	12	30	.97	39	30	3.2
29	21	31	1.8	13	24	.84	23	25	1.6
30	20	33	1.8	12	23	.75	20	27	1.5
31	--	--	--	13	32	1.1	--	--	--
TOTAL	875	--	203.6	576	--	54.06	931.6	--	101.47

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	26	31	2.2	24	23	1.5	58	28	4.4
2	30	35	2.8	28	26	2.0	69	29	5.4
3	32	37	3.2	19	37	1.9	60	31	5.0
4	33	27	2.4	29	46	3.6	57	27	4.2
5	32	27	2.3	32	37	3.2	57	25	3.8
6	30	32	2.6	33	24	2.1	58	27	4.2
7	27	29	2.1	27	15	1.1	59	22	3.5
8	19	27	1.4	24	22	1.4	54	16	2.3
9	16	30	1.3	36	42	4.1	29	17	1.3
10	15	27	1.1	61	58	9.6	27	18	1.3
11	12	22	.71	54	65	9.5	25	15	1.0
12	13	21	.74	54	68	9.9	25	10	.68
13	14	25	.95	54	67	9.8	24	13	.84
14	18	29	1.4	49	64	8.5	20	20	1.1
15	19	30	1.5	46	60	7.5	23	21	1.3
16	20	25	1.4	50	54	7.3	24	15	.97
17	23	21	1.3	57	48	7.4	23	10	.62
18	29	27	2.1	53	52	7.4	22	7	.42
19	30	36	2.9	51	61	8.4	22	7	.42
20	29	36	2.8	50	64	8.6	22	8	.48
21	25	30	2.0	52	56	7.9	24	10	.65
22	27	22	1.6	42	44	5.0	34	11	1.0
23	28	24	1.8	47	33	4.2	33	10	.89
24	32	28	2.4	51	25	3.4	30	8	.65
25	32	23	2.0	49	21	2.8	28	7	.53
26	20	23	1.2	52	18	2.5	28	6	.45
27	15	37	1.5	51	15	2.1	13	6	.21
28	26	50	3.5	51	17	2.3	26	6	.42
29	34	47	4.3	52	23	3.2	26	8	.56
30	30	33	2.7	52	23	3.2	23	10	.62
31	24	24	1.6	53	18	2.6	--	--	--
TOTAL	760	--	61.80	1383	--	154.0	1023	--	49.21

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

21324.6

27556.52

## ALAMEDA CREEK BASIN

11179000 ALAMEDA CREEK NEAR NILES, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDIM- ENT (MG/L)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY)	SUS.	SUS.	SUS.	SUS.	SUS.	SUS.
						SED. FALL DIAM. % FINER THAN .002 MM	SED. FALL DIAM. % FINER THAN .004 MM	SED. FALL DIAM. % FINER THAN .008 MM	SED. FALL DIAM. % FINER THAN .016 MM	SED. FALL DIAM. % FINER THAN .031 MM	SED. FALL DIAM. % FINER THAN .062 MM
NOV.											
29...	0950	11.0	1400	1390	5250	60	63	80	89	96	100
29...	1050	10.5	1320	1370	4880	57	67	83	92	97	100
29...	1230	10.5	986	1710	4550	62	71	87	95	98	100
30...	1450	11.0	133	477	171	74	90	95	99	100	--
DEC.											
02...	1150	10.0	1320	1580	5630	51	62	78	89	95	100
02...	1310	--	1130	1190	3630	55	72	84	95	97	100
02...	1405	--	1050	1090	3090	58	76	85	96	99	100
03...	1055	9.0	254	792	543	71	85	93	99	100	--
17...	1120	8.5	685	672	1240	61	74	86	95	99	100
MAR.											
13...	1730	13.0	75	618	125	73	88	95	99	99	100
26...	1315	14.5	341	709	653	52	67	82	92	96	100
APR.											
15...	1245	17.0	30	222	18	--	--	--	--	--	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
					% FINER THAN .0625 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM
OCT. 28...	1150	12.0	5	15	6	11	17	27
		BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
DATE	1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM	
OCT. 28...		34	42	51	66	82	96	100

## 11185350 KERN RIVER NEAR QUAKING ASPEN CAMP, CALIF.

LOCATION.--Lat 36°08'04", long 118°25'49", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.32, T.20 S., R.33 E., Tulare County, Sequoia National Forest, temperature recorder at gaging station on right bank, 0.4 mile upstream from Little Kern River, and 6.8 miles east of Quaking Aspen Camp.

DRAINAGE AREA.--530 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1965 to September 1971.

## EXTREMES.--1970-71:

Water temperatures: Maximum, 17.5°C on several days during July and August; minimum, freezing point on several days during December and January.

## Period of record:

Water temperatures: Maximum, 21.0°C July 26, 28, 1966, July 21, 1968; minimum, freezing point on several days in 1966, 1969, and 1971.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	10.0	7.0	5.0	3.0	1.5	0.0	0.0	4.0	3.0	3.5	1.5
2	12.5	9.0	7.5	6.0	3.0	2.0	0.0	0.0	4.0	3.0	4.0	1.5
3	11.5	10.5	7.5	5.5	2.0	1.0	0.0	0.0	3.5	2.0	5.0	2.5
4	12.5	10.5	7.0	6.5	2.5	2.0	0.0	0.0	3.0	2.0	6.0	3.5
5	12.5	10.5	8.0	6.0	3.0	2.5	0.0	0.0	4.0	2.5	5.0	3.0
6	12.5	10.5	8.0	6.0	3.0	2.5	0.0	0.0	4.0	3.0	5.0	2.5
7	11.5	8.5	7.0	6.0	4.5	3.0	0.5	0.0	4.0	3.0	6.0	2.5
8	10.0	7.5	6.0	5.0	4.5	3.5	0.5	0.5	4.0	2.5	6.5	3.5
9	10.5	7.5	6.5	5.5	4.5	4.5	0.5	0.5	4.0	2.5	6.5	4.0
10	11.0	8.0	6.5	5.5	4.5	3.0	0.5	0.0	4.5	3.0	6.0	4.0
11	11.5	8.5	6.5	5.5	3.0	2.5	1.0	0.5	5.5	3.5	6.5	4.0
12	11.0	8.5	6.5	5.5	3.0	2.5	1.0	1.0	5.5	4.0	7.0	4.5
13	11.0	8.5	6.0	4.5	2.5	2.0	1.0	0.5	5.5	4.0	6.0	4.5
14	11.0	8.5	5.5	4.5	2.0	2.0	0.5	0.5	5.5	4.0	5.5	3.0
15	11.0	8.5	5.5	4.0	2.0	1.5	0.5	0.5	5.5	4.5	6.5	3.5
16	10.5	8.0	5.5	3.5	2.0	2.0	1.5	0.5	5.0	4.0	7.0	4.0
17	10.0	8.0	6.0	4.0	2.0	1.5	2.5	1.5	4.0	3.5	7.0	4.0
18	10.0	7.5	5.5	4.0	1.5	1.0	3.0	2.5	4.0	3.5	7.5	4.5
19	9.5	7.5	5.5	4.0	1.5	1.0	3.0	2.5	3.5	2.5	7.5	4.5
20	9.5	7.5	5.0	4.0	1.5	1.0	3.5	3.0	2.5	1.0	8.0	4.5
21	8.5	7.0	5.0	3.5	1.0	1.0	3.5	2.5	2.5	1.0	8.5	5.0
22	8.5	7.5	4.5	3.0	1.0	1.0	2.5	2.0	3.0	1.5	9.0	5.5
23	8.5	6.5	5.0	3.5	1.0	0.5	2.0	1.5	4.5	3.0	8.0	6.0
24	8.5	7.5	5.5	4.0	0.5	0.0	3.0	1.0	4.5	2.5	8.5	6.0
25	7.5	6.0	5.5	4.0	0.0	0.0	3.0	2.0	4.5	3.0	8.5	6.0
26	7.0	5.0	5.5	4.5	0.0	0.0	3.5	2.0	3.5	2.0	9.0	7.0
27	6.5	5.0	4.5	4.0	0.0	0.0	3.5	2.5	2.5	1.0	8.5	6.5
28	6.0	3.5	4.5	3.5	0.0	0.0	3.5	2.5	3.0	1.5	8.5	6.0
29	6.5	4.0	4.5	2.5	0.0	0.0	3.5	2.5	--	--	9.5	6.5
30	6.5	4.5	3.0	2.0	0.0	0.0	3.5	2.5	--	--	9.0	6.5
31	7.5	4.0	--	--	0.0	0.0	3.5	2.5	--	--	8.0	6.0
AVE	9.8	7.5	5.9	4.5	1.9	1.5	1.8	1.2	4.1	2.7	7.0	4.4
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	5.5	12.0	9.0	10.0	7.0	15.0	13.0	16.5	14.5	16.5	12.5
2	8.0	5.5	11.5	9.5	9.0	8.0	15.5	13.5	16.0	14.5	16.5	13.0
3	8.5	6.0	11.5	9.5	11.0	8.0	15.5	13.5	16.0	14.0	16.5	13.5
4	9.0	6.5	11.0	8.0	12.0	9.5	15.0	13.5	15.5	14.0	16.5	13.0
5	9.0	6.5	12.5	10.0	12.0	10.0	15.0	13.0	16.0	14.5	16.5	13.0
6	8.5	7.0	11.5	9.5	12.0	11.0	15.5	13.0	16.5	14.0	16.0	13.0
7	8.5	5.5	9.5	8.5	11.5	10.5	15.5	13.5	17.5	14.0	16.0	13.0
8	8.5	6.5	11.5	8.0	12.0	10.5	16.0	13.5	17.5	14.5	16.0	12.0
9	9.5	6.5	12.0	10.0	12.0	11.0	16.0	13.5	17.0	14.0	17.0	13.5
10	9.5	7.0	11.5	9.0	12.0	11.0	16.0	13.5	16.5	13.5	17.0	14.0
11	10.0	7.0	11.0	10.0	12.0	10.5	16.0	13.5	16.5	14.0	17.0	14.0
12	10.0	7.5	12.0	10.0	12.0	11.0	16.0	13.0	15.5	13.5	17.0	14.0
13	9.5	8.0	13.0	10.5	12.0	10.5	16.0	13.5	15.5	13.5	16.0	14.0
14	8.0	7.5	13.0	11.0	12.0	11.0	17.0	14.0	15.0	13.0	16.0	13.5
15	10.0	7.0	13.0	11.0	12.0	11.0	16.5	15.0	16.0	12.5	17.0	14.0
16	11.0	8.0	12.5	11.0	12.0	11.0	16.0	14.5	17.0	13.0	17.0	13.5
17	10.0	6.0	11.0	9.0	12.0	11.5	16.0	15.0	17.0	13.0	16.5	13.5
18	6.5	5.0	10.5	8.5	12.0	11.0	17.0	14.5	17.0	13.0	16.0	12.5
19	8.0	5.0	10.5	8.5	12.0	11.0	16.5	14.5	17.0	13.0	15.0	11.0
20	9.0	7.0	11.0	9.0	12.5	11.0	15.5	13.5	17.0	13.0	14.0	11.5
21	8.0	6.5	11.0	9.0	13.0	12.0	15.5	13.5	16.5	13.0	14.0	11.0
22	8.0	5.0	10.0	7.0	13.0	12.0	15.5	13.5	16.5	13.0	14.0	11.0
23	10.0	6.0	11.5	9.0	13.0	12.0	15.5	13.5	16.5	13.0	13.5	10.5
24	9.5	7.5	12.0	10.0	13.0	12.0	16.5	13.5	16.5	14.0	13.5	11.0
25	8.5	6.5	11.5	10.0	13.0	12.0	16.5	14.0	16.0	14.0	13.5	10.5
26	9.5	6.0	11.5	10.0	14.0	12.0	16.5	13.5	16.5	14.0	12.5	9.0
27	9.0	7.0	10.5	7.0	14.5	13.0	17.5	14.5	17.0	14.0	11.0	8.5
28	11.0	8.0	7.0	6.5	14.5	13.0	17.5	14.5	17.0	14.0	11.0	8.0
29	11.5	8.5	10.0	7.0	15.0	12.0	17.5	14.5	16.5	13.0	10.5	8.0
30	12.0	9.0	11.0	9.0	15.0	13.0	17.0	14.5	16.5	13.0	10.5	9.5
31	--	--	10.5	8.0	--	--	17.5	15.0	16.0	12.5	--	--
AVE	9.2	6.7	11.2	9.1	12.4	11.0	16.1	13.8	16.5	13.6	15.0	12.0

## BUENA VISTA LAKE BASIN

11187000 KERN RIVER AT KERNVILLE, CALIF.

LOCATION.--Lat 35°45'34", long 118°25'12", in NE¼ sec.15, T.25 S., R.33 E., Kern County, temperature recorder at gaging station on left bank, 0.5 mile upstream from highway bridge at Kernville, 1.7 miles upstream from Caldwell Creek, 9.5 miles upstream from Isabella Dam, and 42 miles northeast of Bakersfield.

DRAINAGE AREA.--1,009 sq mi.

PERIOD OF RECORD.--Water temperatures: June 1962 to September 1971.

Sediment records: Water years 1967-71 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 21.5°C on many days during July and August; minimum, 0.5°C Dec. 24, 25.

Period of record:

Water temperatures: Maximum (1962-63, 1964-71), 26.5°C Aug. 5, 6, 8, 1966; minimum, 0.5°C Dec. 24, 25, 1970.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	13.5	11.0	9.0	4.0	3.5	2.5	2.0	6.5	5.5	5.5	4.0
2	15.0	13.5	11.0	10.0	4.0	3.5	2.5	2.0	6.0	5.5	5.5	4.0
3	15.0	14.0	10.0	9.5	4.0	3.0	2.5	1.5	6.0	5.0	6.0	4.0
4	15.0	14.0	9.5	9.5	4.0	3.0	2.5	2.0	5.5	4.5	7.5	5.5
5	15.0	14.0	10.5	9.5	4.5	3.0	2.5	2.0	6.0	4.5	7.5	6.0
6	15.0	14.0	10.5	9.5	4.5	3.5	2.5	1.5	6.0	5.0	7.5	5.5
7	14.0	13.0	10.5	9.5	4.5	3.5	2.5	1.5	6.5	5.0	7.5	5.5
8	13.5	12.0	10.0	9.0	5.0	4.5	2.0	1.5	6.5	5.0	8.0	6.5
9	13.0	12.0	9.5	9.0	5.5	4.5	2.5	1.5	6.5	5.0	8.5	7.0
10	13.5	11.5	10.0	8.0	4.5	3.5	3.5	1.5	6.5	5.5	8.0	7.0
11	13.5	12.0	10.0	8.0	4.0	3.0	3.5	2.5	7.0	6.0	8.5	7.0
12	13.5	12.5	10.0	8.0	3.5	3.0	3.5	3.0	7.5	6.5	9.0	7.5
13	13.5	12.0	9.0	8.0	3.5	2.5	3.5	2.5	7.5	6.5	9.0	7.0
14	14.0	12.0	9.0	7.5	3.0	2.5	3.5	2.0	8.5	6.5	7.5	6.5
15	14.5	13.0	8.0	7.0	3.0	2.0	3.0	2.0	8.0	7.0	8.5	6.5
16	14.5	13.0	7.5	6.5	3.0	2.5	3.0	2.0	7.5	6.0	8.5	7.5
17	14.0	12.5	7.5	6.5	3.0	2.0	4.5	3.0	6.5	6.0	9.0	7.0
18	13.0	12.5	7.5	6.5	2.5	1.5	5.5	4.5	7.0	6.0	9.0	7.5
19	13.5	12.0	7.5	6.5	2.0	1.5	6.0	5.0	7.0	5.0	8.5	7.0
20	13.0	12.0	7.5	6.5	2.0	1.5	6.0	5.0	5.5	4.0	9.0	7.0
21	12.0	11.5	7.0	6.5	2.0	1.5	6.0	5.5	5.5	4.0	9.5	8.0
22	12.5	11.0	7.0	6.0	2.0	1.5	6.0	5.0	6.0	4.5	9.5	8.5
23	12.5	11.0	7.0	6.0	1.5	1.5	5.5	4.5	7.0	5.0	10.0	9.0
24	12.5	11.5	6.5	6.0	1.5	0.5	5.5	4.5	7.5	5.5	10.0	8.5
25	12.0	10.5	6.5	5.5	1.5	0.5	5.5	4.5	7.0	5.0	10.0	8.5
26	11.5	10.5	6.0	5.0	1.0	1.0	5.5	4.5	6.0	4.5	10.5	9.0
27	10.5	9.5	5.0	4.5	2.0	1.0	6.0	5.0	6.0	4.0	10.0	9.0
28	9.5	8.0	5.0	4.0	2.5	2.0	6.0	5.0	4.5	4.0	10.0	8.5
29	10.0	8.0	4.5	4.0	2.5	1.5	6.0	5.0	--	--	10.0	8.5
30	9.5	8.5	4.5	4.0	2.5	1.5	6.0	5.0	--	--	10.0	9.0
31	10.5	8.5	--	--	2.5	2.0	6.0	5.0	--	--	10.0	9.0
AVF	13.0	11.7	8.2	7.2	3.1	2.3	4.2	3.3	6.6	5.2	8.6	7.1

BUENA VISTA LAKE BASIN

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11187000 KERN RIVER AT KERNVILLE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.0	11.5	10.5	12.5	11.0	18.0	17.0	21.5	20.5	20.0	19.0
2	9.5	8.0	11.0	10.5	12.0	11.5	18.5	17.5	21.5	20.5	20.0	19.0
3	9.5	8.5	10.5	9.5	13.0	11.5	18.5	17.5	21.0	20.0	20.5	19.0
4	9.5	8.0	11.0	9.5	14.0	12.5	18.5	17.5	21.0	20.5	20.0	18.5
5	10.0	8.5	11.5	10.0	14.0	13.0	19.0	17.5	21.0	20.5	19.5	18.5
6	9.5	8.5	11.5	10.5	14.0	13.5	19.0	18.0	21.0	20.5	19.0	18.5
7	9.0	7.5	10.5	10.0	14.5	12.5	19.0	18.0	21.5	20.5	19.5	18.0
8	9.0	7.5	10.5	9.0	15.0	13.5	19.0	18.5	21.5	21.0	18.5	17.5
9	9.5	8.0	11.5	9.5	15.0	14.0	19.0	18.5	21.5	21.0	19.5	18.5
10	9.5	8.5	11.5	10.5	15.0	13.5	19.0	18.5	21.5	21.0	20.0	19.0
11	10.0	8.5	11.0	10.5	15.0	14.0	19.0	18.5	21.5	20.5	20.0	19.0
12	10.0	8.5	12.5	10.5	15.0	14.0	19.5	18.5	21.5	20.5	20.0	19.0
13	10.0	9.0	12.5	11.5	15.0	14.0	20.0	19.0	21.5	20.5	20.0	19.0
14	9.0	8.0	13.0	12.0	15.5	14.0	20.5	19.5	21.5	20.5	20.0	18.5
15	9.5	7.5	13.5	12.0	15.5	14.5	20.5	20.0	20.5	19.5	20.0	19.0
16	10.5	9.0	13.0	11.5	15.5	14.5	20.5	19.5	21.5	20.0	19.5	19.0
17	10.0	7.0	12.0	10.5	16.5	15.0	20.5	19.5	21.5	20.0	19.5	18.0
18	8.0	6.0	11.5	10.0	16.0	15.0	20.5	19.0	21.0	20.0	18.5	17.0
19	8.5	6.5	12.5	10.0	16.0	15.0	20.5	20.0	21.0	20.0	17.5	16.0
20	9.0	7.5	12.5	11.0	17.0	15.0	20.5	19.5	21.0	19.5	17.5	16.0
21	9.0	7.5	12.5	10.5	17.5	16.0	20.5	20.0	21.0	19.5	17.5	16.0
22	8.5	7.0	11.5	9.5	17.5	16.5	20.5	20.0	21.0	19.5	17.5	15.5
23	9.5	7.5	12.5	10.5	17.5	16.5	20.5	19.0	20.5	20.0	17.5	16.0
24	9.0	8.5	13.5	12.0	17.5	16.0	20.5	19.5	20.5	20.5	17.0	15.5
25	9.0	7.5	13.5	12.5	17.0	16.0	20.5	19.5	21.0	20.0	16.5	15.0
26	9.5	7.0	13.5	12.5	17.5	16.0	20.5	19.5	21.5	20.0	16.0	14.5
27	10.0	8.0	13.0	10.5	18.5	16.5	21.0	20.0	21.0	20.0	15.5	14.0
28	11.0	9.0	11.0	10.0	18.5	17.0	21.0	20.5	21.0	20.0	15.0	13.5
29	11.0	10.0	12.5	10.0	17.5	16.0	21.0	20.5	20.5	19.5	14.5	13.0
30	11.5	10.0	13.5	11.5	18.0	16.5	21.5	21.0	20.5	19.5	14.5	13.0
31	--	--	13.0	12.0	--	--	21.5	21.0	20.5	19.0	--	--
AVE	9.5	8.0	12.1	10.7	15.8	14.5	20.0	19.1	21.1	20.1	18.3	17.1

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
16...	1520	14.5	176	1	.48
NOV.					
24...	1020	6.5	214	1	.58
DEC.					
23...	1305	1.5	314	2	1.7
JAN.					
21...	1540	6.0	634	7	12
FEB.					
19...	1320	6.5	512	5	6.9
APR.					
21...	1045	7.5	739	10	20
MAY					
19...	1050	10.0	1080	6	17
JUNE					
17...	1050	15.0	1890	15	77
JULY					
16...	0950	19.5	548	1	1.5
AUG.					
19...	1500	21.0	252	1	.68
SEP.					
22...	1120	15.5	148	2	.80

## BUENA VISTA LAKE BASIN

11187500 BOREL CANAL BELOW ISABELLA DAM, CALIF.

LOCATION.--Lat 35°38'32", long 118°28'09", in NE $\frac{1}{4}$  sec.30, T.26 S., R.33 E., Kern County, temperature recorder at gaging station on right bank, 500 ft downstream from Isabella Dam, and 3 miles upstream from point where canal crosses Erskine Creek.

PERIOD OF RECORD.--Water temperatures: October 1958 to September 1971.

## EXTREMES.--1970-71:

Water temperatures: Maximum, 26.0°C Aug. 11; minimum, 5.0°C on several days during January.

## Period of record:

Water temperatures: Maximum, 26.5°C July 31, Aug. 1, 1959; minimum, 0.5°C Jan. 17, 18, 1960.

REMARKS.--No flow Oct. 15 to Nov. 27, Dec. 6-12.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	19.5	--	--	10.0	10.0	6.5	6.5	7.5	7.0	7.5	7.0
2	20.0	19.0	--	--	10.0	9.5	6.5	6.5	7.0	7.0	7.5	7.0
3	20.0	19.5	--	--	9.5	9.0	6.5	6.0	7.0	6.5	7.5	7.5
4	20.5	19.5	--	--	9.0	9.0	6.0	5.0	6.5	6.5	7.5	7.5
5	20.0	19.5	--	--	9.0	9.0	6.0	5.5	6.5	6.5	7.5	7.5
6	19.5	19.0	--	--	--	--	5.5	5.0	6.5	6.0	8.0	7.5
7	19.0	19.0	--	--	--	--	5.0	5.0	7.0	6.5	8.0	8.0
8	19.0	18.5	--	--	--	--	5.0	5.0	7.0	6.5	8.0	8.0
9	19.0	18.5	--	--	--	--	5.0	5.0	7.0	6.5	8.0	8.0
10	18.5	18.0	--	--	--	--	5.0	5.0	7.0	6.5	8.0	8.0
11	19.0	18.0	--	--	--	--	5.0	5.0	8.0	7.0	8.0	8.0
12	19.0	18.5	--	--	--	--	5.0	5.0	8.0	7.5	8.0	8.0
13	18.5	18.0	--	--	9.0	9.0	5.0	5.0	7.5	6.5	8.0	8.0
14	18.5	19.0	--	--	9.0	8.5	5.0	5.0	7.5	6.5	8.0	8.0
15	--	--	--	--	8.5	8.0	5.0	5.0	6.5	6.5	8.5	8.0
16	--	--	--	--	8.0	8.0	5.5	5.0	6.5	6.5	9.5	8.5
17	--	--	--	--	8.0	8.0	6.0	5.5	6.5	6.5	8.5	8.5
18	--	--	--	--	8.0	7.5	6.0	6.0	6.5	6.5	9.5	8.5
19	--	--	--	--	7.5	7.5	6.0	6.0	6.5	6.5	9.5	9.0
20	--	--	--	--	7.5	7.0	6.0	6.0	7.0	6.5	10.0	9.5
21	--	--	--	--	7.0	7.0	6.0	6.0	8.0	7.0	10.0	9.5
22	--	--	--	--	7.0	7.0	6.0	6.0	7.5	7.5	10.0	9.5
23	--	--	--	--	7.0	7.0	6.0	6.0	7.5	7.5	10.0	10.0
24	--	--	--	--	7.0	6.5	6.0	6.0	7.5	7.5	10.0	10.0
25	--	--	--	--	7.0	6.5	6.0	6.0	7.5	7.5	10.0	10.0
26	--	--	--	--	6.5	6.5	6.0	6.0	7.5	7.5	10.5	10.0
27	--	--	--	--	6.5	6.5	7.0	6.0	7.5	7.5	11.0	10.5
28	--	--	10.0	10.0	6.5	6.5	7.0	7.0	7.5	7.5	11.5	10.5
29	--	--	10.0	10.0	6.5	6.5	7.0	7.0	--	--	13.0	11.0
30	--	--	10.0	10.0	6.5	6.5	7.0	7.0	--	--	11.5	11.5
31	--	--	--	--	6.5	6.5	7.0	7.0	--	--	11.5	11.0
AVE	--	--	--	--	--	--	5.9	5.7	7.1	6.8	9.2	8.8
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	11.0	13.5	13.0	15.5	15.5	20.0	20.0	24.5	22.5	22.5	22.0
2	13.0	12.0	13.0	12.5	15.5	15.0	20.0	20.0	24.5	23.0	22.0	22.0
3	12.5	11.5	12.5	12.5	15.0	15.0	20.0	20.0	24.5	24.0	22.5	22.0
4	14.0	12.0	12.5	12.5	15.0	15.0	20.0	20.0	24.0	23.5	23.0	21.5
5	15.0	13.0	12.5	12.5	15.5	15.0	20.5	20.0	24.0	23.5	23.0	22.0
6	15.0	12.5	12.5	12.5	16.5	15.5	20.5	20.0	24.0	23.5	22.5	22.0
7	12.5	12.0	13.0	12.5	16.0	16.0	20.5	20.0	24.0	23.5	23.0	21.5
8	12.0	12.0	13.0	12.5	16.5	16.0	20.5	20.0	24.0	23.0	23.0	21.5
9	12.5	12.0	13.5	13.0	16.0	16.0	20.5	20.0	24.0	23.5	23.5	22.0
10	12.0	12.0	15.0	13.5	16.0	16.0	20.5	20.5	25.0	23.5	22.5	21.5
11	12.5	12.0	16.0	14.5	17.0	16.0	21.0	20.5	26.0	24.0	23.0	21.5
12	13.5	12.5	15.0	14.0	18.5	17.0	22.0	20.5	25.5	24.0	23.5	21.5
13	12.5	12.5	14.0	14.0	18.0	17.5	22.5	21.5	24.0	23.5	22.5	22.0
14	12.5	12.5	14.0	14.0	18.0	17.5	21.5	21.5	24.5	23.5	24.0	22.0
15	13.0	12.5	15.0	14.0	18.5	18.0	21.5	21.0	25.0	24.5	24.0	22.0
16	13.0	13.0	14.5	14.5	19.0	18.0	21.5	21.0	24.5	23.5	23.0	22.0
17	13.0	13.0	14.5	14.5	19.0	18.5	22.0	20.5	24.0	23.5	23.0	22.0
18	13.0	13.0	16.0	14.5	19.0	18.5	22.5	21.5	24.5	23.5	22.0	21.5
19	13.0	13.0	16.0	15.5	18.5	18.5	22.5	21.0	24.5	23.5	22.5	21.0
20	13.0	13.0	15.5	15.0	19.0	18.5	22.5	21.0	23.5	23.5	22.5	22.0
21	13.0	12.5	15.5	15.0	20.0	18.5	22.0	21.5	23.5	23.0	22.5	21.0
22	12.5	12.5	15.0	15.0	20.0	19.5	22.0	21.5	23.0	23.0	22.5	21.5
23	12.5	12.5	15.5	15.0	19.5	18.5	22.0	21.5	24.0	22.5	22.5	21.5
24	12.5	12.5	16.5	15.0	20.0	18.5	23.0	21.0	23.5	23.0	22.0	21.0
25	12.5	12.5	16.5	16.0	20.0	19.5	23.0	22.0	23.5	23.0	21.0	20.0
26	12.5	12.5	16.0	16.0	19.5	19.5	23.0	21.5	23.5	23.0	20.0	19.5
27	12.5	12.5	16.0	15.5	19.5	19.0	23.0	21.5	23.0	22.5	19.5	18.5
28	12.5	12.5	15.5	15.5	19.5	19.0	24.0	21.5	23.0	22.5	18.5	18.5
29	12.5	12.5	15.5	15.5	19.5	19.5	23.0	22.5	23.5	22.5	18.5	18.0
30	13.5	12.5	15.5	15.5	20.0	19.5	23.0	22.5	23.0	22.5	18.0	17.5
31	--	--	15.5	15.5	--	--	23.5	22.5	22.5	22.5	--	--
AVE	12.9	12.4	14.7	14.2	18.0	17.5	21.7	21.0	24.0	23.2	22.1	21.1



## BUENA VISTA LAKE BASIN

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11191000 KERN RIVER BELOW ISABELLA DAM, CALIF.

LOCATION.--Lat 35°38'21", long 118°29'02", in S $\frac{1}{4}$  sec.30, T.26 S., R.33 E., Kern County, temperature recorder at gaging station on right bank 200 ft downstream from highway bridge, 0.6 mile downstream from Isabella Dam, and 1.6 miles southwest of town of Lake Isabella.

DRAINAGE AREA.--2,074 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1955 to September 1963, water years 1964-66 (partial-record station).  
Water temperatures: November 1970 to September 1971.

EXTREMES.--November 1970 to September 1971:

Water temperatures: Maximum, 24.5°C Sept. 3; minimum, 4.5°C Jan. 5-7, 9.

## TEMPERATURE (°C) OF WATER, NOVEMBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	11.5	9.5	8.0	6.5	9.0	5.5	7.5	7.5
2	--	--	--	--	10.0	9.0	6.5	5.5	8.5	5.5	7.5	7.5
3	--	--	--	--	9.0	8.5	7.5	5.0	8.0	5.5	7.5	7.5
4	--	--	--	--	8.5	7.5	7.0	5.0	8.5	5.5	7.5	7.5
5	--	--	--	--	9.0	8.0	7.0	4.5	8.5	5.5	7.5	7.5
6	--	--	--	--	10.5	8.0	7.0	4.5	8.5	6.0	8.0	7.5
7	--	--	--	--	10.5	8.5	7.0	4.5	9.0	6.0	8.0	7.5
8	--	--	--	--	10.5	8.0	6.5	5.0	9.0	6.0	8.0	7.5
9	--	--	--	--	9.5	8.0	7.5	4.5	9.5	6.0	8.0	7.5
10	--	--	--	--	10.0	7.5	7.5	5.0	9.5	6.0	8.0	8.0
11	--	--	--	--	10.5	8.0	8.0	5.0	10.0	6.5	8.0	8.0
12	--	--	--	--	10.5	7.5	7.0	5.5	10.0	6.5	8.0	8.0
13	--	--	--	--	10.0	8.0	6.5	5.0	10.0	6.5	8.5	8.0
14	--	--	--	--	9.0	8.0	7.5	5.5	9.0	6.5	8.5	8.0
15	--	--	--	--	9.5	7.5	7.0	5.0	8.0	7.0	8.5	8.0
16	--	--	--	--	9.0	8.0	7.5	5.0	7.5	7.0	9.0	8.5
17	--	--	--	--	9.0	7.5	8.0	5.0	8.0	7.5	8.5	8.5
18	--	--	--	--	8.0	7.0	8.0	5.5	8.0	7.5	9.5	8.5
19	--	--	--	--	8.5	7.5	8.0	5.5	8.5	7.5	9.5	9.0
20	--	--	--	--	8.0	7.0	8.0	5.5	9.5	6.5	10.0	9.0
21	--	--	--	--	8.0	6.5	6.0	5.5	10.5	6.0	10.0	9.0
22	--	--	--	--	8.5	6.5	8.0	5.5	8.5	6.5	10.0	9.5
23	--	--	--	--	8.0	6.0	8.0	5.5	8.0	7.5	10.0	9.5
24	--	--	--	--	8.0	5.5	8.0	5.0	8.0	7.5	10.0	9.5
25	--	--	11.5	11.0	8.5	6.0	8.0	5.0	8.0	7.5	10.0	10.0
26	--	--	11.5	11.0	7.0	6.0	8.5	5.0	8.0	7.5	11.0	9.5
27	--	--	12.0	11.0	7.5	6.0	8.5	5.5	8.0	7.5	13.0	9.5
28	--	--	11.5	10.0	8.0	5.5	8.5	5.5	7.5	7.5	14.0	10.0
29	--	--	10.5	10.0	8.0	5.5	8.5	5.5	--	--	14.5	9.0
30	--	--	11.5	10.0	8.0	5.5	8.5	5.5	--	--	14.0	9.5
31	--	--	--	--	8.0	5.5	8.0	5.5	--	--	13.5	8.5
AVE	--	--	--	--	9.0	7.2	7.6	5.2	8.7	6.6	9.5	8.5

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	9.0	16.0	11.0	17.5	12.5	18.5	18.0	21.5	20.5	24.0	20.5
2	14.5	9.0	16.0	11.5	15.5	12.5	19.0	18.0	21.5	20.5	24.0	20.5
3	15.0	9.5	14.5	11.0	18.0	13.0	18.5	18.0	21.0	20.5	24.5	20.5
4	15.0	9.5	14.0	11.5	18.5	13.0	19.0	18.0	21.5	21.0	24.0	20.5
5	14.5	9.5	15.5	11.5	18.5	13.5	19.0	18.5	21.5	21.0	24.0	20.5
6	12.0	10.5	14.0	11.5	17.0	13.5	19.0	18.5	21.5	20.5	22.0	20.5
7	12.5	10.5	14.5	11.5	16.5	14.0	19.5	18.5	21.5	21.0	24.0	20.5
8	12.5	10.5	15.5	11.5	16.0	14.0	19.0	18.5	21.5	21.0	24.0	20.0
9	13.0	10.5	17.0	11.5	15.5	14.5	19.5	19.0	21.5	21.0	24.0	20.5
10	15.0	10.5	16.5	11.5	15.5	14.5	19.0	19.0	22.0	21.0	24.0	20.5
11	12.5	10.5	16.0	12.0	15.5	15.0	19.5	19.0	22.0	21.5	24.0	20.5
12	13.0	12.0	18.0	12.0	16.0	15.0	20.0	19.5	21.5	21.5	24.0	20.5
13	12.5	12.0	17.5	12.5	16.0	15.5	20.0	19.5	22.0	21.5	23.0	20.5
14	13.5	11.5	18.0	12.0	16.0	15.5	20.0	19.5	22.0	21.5	23.5	20.5
15	14.5	11.5	18.0	12.5	16.5	16.0	20.0	19.5	21.5	21.5	24.0	20.5
16	16.0	11.5	17.5	12.5	16.5	16.0	20.5	19.5	22.0	21.5	23.5	20.5
17	12.5	11.0	17.5	11.5	16.5	16.0	20.5	19.5	22.5	22.0	23.5	20.5
18	15.0	11.0	17.5	11.5	16.5	16.5	20.0	20.0	22.5	22.0	23.0	20.0
19	15.5	11.0	16.5	12.0	17.0	16.5	20.5	19.5	22.5	22.0	23.5	19.0
20	14.0	11.5	18.0	12.0	17.0	16.5	20.5	20.0	22.5	22.0	23.5	20.5
21	13.0	10.5	16.0	12.0	17.5	16.5	20.5	20.0	22.5	22.0	23.0	19.5
22	15.5	11.0	14.5	12.0	17.5	16.5	20.5	20.0	22.5	22.0	23.0	19.5
23	15.5	11.0	17.5	12.0	17.5	17.0	20.5	20.0	22.5	22.0	23.0	19.0
24	13.0	11.0	15.0	13.5	18.0	17.0	20.5	20.0	22.5	22.0	22.5	19.0
25	14.0	11.0	15.0	13.5	17.5	17.0	20.5	20.0	22.5	22.0	21.0	18.5
26	15.5	11.0	14.5	13.5	18.0	17.5	21.0	20.0	22.5	21.5	21.5	18.5
27	16.0	11.0	14.0	13.0	18.0	17.5	21.0	20.0	22.5	20.5	21.0	18.0
28	15.5	11.0	17.0	12.5	18.0	17.5	21.0	20.5	22.5	20.5	20.5	17.5
29	16.0	11.0	17.5	12.5	18.5	18.0	21.0	20.5	24.0	20.5	19.5	17.0
30	16.0	11.0	18.0	13.5	18.5	18.0	21.0	20.5	23.5	20.5	19.0	17.0
31	--	--	16.0	12.5	--	--	21.5	20.5	23.5	20.0	--	--
AVE	14.3	10.7	16.2	12.1	17.0	15.5	20.0	19.4	22.2	21.2	22.9	19.7

## TULARE LAKE BASIN

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, temperature recorder at gaging station 10 ft downstream from highway bridge, 3.5 miles southwest of Springville, and 4.1 miles upstream from Success Dam.

DRAINAGE AREA.--247 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1963 to July 1966.

Water temperatures: October 1965 to September 1967, October 1968 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 34.0°C Aug. 2; minimum, 2.5°C Jan. 5-8.

Period of record:

Water temperatures: Maximum, 34.0°C Aug. 2, 1971; minimum (1966-67, 1969-71), 2.5°C Jan. 5-8, 1971.

REMARKS.--Prior to Mar. 20, 1968, gage was located 1.9 miles upstream.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	17.5	16.5	10.5	11.0	8.5	9.0	8.0	9.5	7.5	10.5	5.5
2	25.0	17.0	17.0	11.0	9.5	7.0	8.0	5.5	8.0	6.5	10.0	4.5
3	23.5	18.5	16.5	11.0	10.0	7.0	6.5	4.5	8.5	6.5	10.5	5.0
4	24.5	18.0	14.5	13.0	10.0	7.0	5.5	3.0	8.5	5.0	10.5	6.0
5	24.0	16.0	18.5	13.5	10.0	7.0	5.0	2.5	9.0	5.5	11.5	6.5
6	23.0	17.0	16.5	14.5	10.5	7.5	5.5	2.5	9.0	6.0	12.0	6.0
7	21.0	14.0	17.5	13.5	12.0	8.5	5.0	2.5	10.0	6.0	13.0	7.0
8	21.5	14.0	16.5	12.0	11.5	9.0	5.0	2.5	10.5	6.5	13.5	8.0
9	21.5	13.5	16.0	12.0	11.5	10.0	6.5	3.0	11.5	8.0	14.0	8.5
10	21.5	14.5	16.5	11.5	10.5	9.5	7.5	3.5	11.0	8.0	13.0	9.5
11	22.5	14.5	16.0	11.5	10.5	9.0	7.5	5.0	12.0	8.0	14.0	8.5
12	22.0	15.5	16.5	13.0	10.0	8.0	8.0	6.5	13.0	8.0	13.0	9.5
13	22.5	15.0	15.5	11.0	9.0	6.5	7.0	6.0	13.5	9.0	13.0	10.0
14	21.0	16.0	15.5	11.0	8.5	8.0	7.5	4.5	13.5	9.5	12.5	7.5
15	21.5	15.5	15.0	10.0	10.0	7.0	7.0	4.5	13.0	10.0	13.5	8.0
16	22.0	15.0	14.0	9.0	9.5	8.5	8.0	4.5	10.5	9.0	15.0	10.0
17	21.5	15.0	13.5	9.0	8.5	6.5	9.5	6.0	11.5	8.5	12.5	10.5
18	19.5	15.0	13.0	9.0	7.0	5.5	10.0	7.0	10.5	8.0	14.5	9.0
19	20.5	14.5	13.5	9.0	9.0	6.5	10.0	7.5	9.5	7.5	15.0	10.0
20	19.0	14.5	13.0	8.5	7.5	6.0	10.0	9.0	9.5	5.5	15.5	10.0
21	18.0	14.0	13.0	8.5	8.0	7.0	9.0	8.5	10.0	5.5	16.0	10.5
22	19.5	14.0	12.5	8.5	8.0	6.5	10.5	8.5	10.5	6.5	16.5	11.0
23	19.0	13.0	13.0	8.5	8.0	5.5	10.0	8.0	10.0	8.0	14.0	12.0
24	17.5	14.5	13.0	9.0	7.5	5.0	10.0	7.0	11.5	6.5	14.0	11.5
25	17.5	12.0	12.0	10.0	8.0	6.5	9.5	6.5	10.5	7.0	15.0	12.0
26	17.0	11.0	11.0	10.0	7.5	6.0	9.5	6.0	10.0	5.0	16.0	12.0
27	16.5	11.0	11.5	9.0	9.0	7.5	10.0	6.5	8.5	5.0	13.5	12.0
28	16.5	10.0	11.0	9.0	9.0	7.0	9.5	8.0	8.5	5.5	15.5	10.0
29	16.0	10.0	11.0	9.0	8.5	6.0	10.0	8.0	--	--	17.0	11.0
30	15.0	10.0	11.0	9.0	9.0	6.5	9.0	8.0	--	--	17.0	12.0
31	16.0	10.0	--	--	8.0	7.0	9.0	7.5	--	--	15.5	11.0
AVE	20.4	14.2	14.3	10.5	9.2	7.2	8.2	5.8	10.4	7.1	13.8	9.2
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	9.5	19.5	13.5	19.0	12.0	28.5	20.0	33.0	24.0	29.5	21.0
2	16.0	10.0	19.0	13.0	18.0	13.0	28.5	21.0	34.0	25.0	29.5	21.5
3	16.5	11.0	15.0	13.0	20.0	13.5	28.5	20.5	33.0	28.0	29.0	21.0
4	18.0	11.5	13.0	12.0	21.5	15.5	29.0	21.0	32.0	24.5	30.0	21.0
5	16.0	12.0	13.5	11.5	22.0	16.0	29.0	21.0	32.5	25.5	30.0	21.0
6	14.5	12.5	14.5	11.5	20.0	16.5	29.5	21.5	33.0	24.5	25.5	22.0
7	13.0	10.5	13.5	12.0	23.0	16.0	29.5	21.5	32.5	24.5	29.0	20.5
8	15.0	9.0	14.0	11.5	23.5	17.0	29.5	21.5	33.0	24.0	30.0	20.5
9	16.5	10.5	15.5	11.0	22.0	17.0	30.0	21.0	30.5	24.5	30.5	22.0
10	17.0	11.0	18.0	12.0	18.5	16.0	29.5	21.5	31.5	24.0	30.5	22.5
11	17.5	11.5	19.0	14.0	22.0	15.0	29.0	20.5	31.0	25.0	30.5	22.5
12	18.0	11.5	21.0	15.0	24.0	17.0	30.0	21.0	33.0	24.5	31.0	22.0
13	14.5	12.0	20.5	15.5	24.0	18.0	31.0	22.0	32.5	25.0	32.5	23.0
14	14.0	11.5	21.0	16.0	24.0	17.5	32.0	23.0	32.0	24.5	32.5	24.0
15	17.0	10.0	21.5	15.5	25.5	18.5	29.0	23.5	32.0	23.5	31.5	24.0
16	18.0	12.0	19.0	15.0	26.0	19.0	32.0	23.0	32.0	23.0	31.5	23.0
17	14.5	9.5	18.0	12.5	26.0	19.5	28.0	24.0	32.0	23.0	30.0	22.5
18	12.0	8.0	18.5	12.5	25.5	19.0	30.0	23.0	32.5	23.0	28.5	21.0
19	14.0	8.0	19.0	12.5	25.5	18.5	31.5	24.0	31.5	22.5	28.0	19.0
20	11.5	9.5	20.0	13.0	26.0	19.0	32.5	24.0	31.0	22.0	27.0	19.0
21	11.5	8.0	17.0	13.0	27.0	20.0	32.5	25.0	31.0	22.0	26.5	18.5
22	14.5	7.5	18.0	11.0	27.5	20.5	33.0	25.0	30.0	22.0	27.0	18.5
23	13.5	9.0	20.5	13.0	27.0	20.5	33.0	24.5	30.5	22.0	27.5	18.5
24	12.0	9.5	22.0	15.0	27.5	20.5	32.0	23.5	29.5	24.0	26.0	18.5
25	14.0	8.5	22.5	16.0	27.5	20.5	32.0	23.0	32.5	23.5	22.0	19.0
26	15.5	8.5	19.0	15.0	27.5	20.0	32.0	23.5	32.0	24.0	23.5	16.5
27	17.0	10.0	15.0	12.5	27.0	21.0	32.5	23.5	31.5	23.5	23.0	16.0
28	17.0	12.0	16.5	11.5	26.0	20.0	33.5	24.5	30.0	23.0	23.5	15.5
29	18.5	11.5	15.5	12.5	26.0	18.5	32.5	24.5	31.0	23.0	23.0	15.5
30	19.5	13.0	19.0	13.0	27.0	19.5	33.0	25.0	30.0	22.0	21.0	17.0
31	--	--	19.0	13.5	--	--	33.0	24.5	30.0	21.5	--	--
AVE	15.5	10.3	18.0	13.2	24.2	17.8	30.8	22.7	31.7	23.7	28.0	20.2

## TULARE LAKE BASIN

185

11204900 TULE RIVER BELOW SUCCESS DAM, CALIF.

LOCATION.--Lat 36°03'23", long 118°55'22", in SW $\frac{1}{4}$  sec.35, T.21 S., R.28 E., Tulare County, at gaging station 1,000 ft downstream from Success Dam, and 5 miles east of Porterville.

DRAINAGE AREA.--393 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1961 to September 1969, water years 1970-71 (partial-record station).  
Water temperatures: November 1970 to September 1971.

EXTREMES.--November 1970 to September 1971:

Water temperatures: Maximum, 27.0°C Aug. 24-28; minimum, 4.0°C Jan. 5.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. No temperature record May 27 to June 15.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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 (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)
MAR. 01...	1055	20	15.0	14.8	31	5.0	13	2.2	128	3
APR. 28...	1305	15	15.5	12.2	--	--	--	--	--	--
JULY 12...	1325	282	18.0	9.1	26	4.3	10	2.1	116	0

DATE	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO <sub>3</sub> ) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LINITY AS CACO <sub>3</sub> (MG/L)
MAR. 01...	5.9	8.6	1.0	0	153	.21	8.26	98	0	110
APR. 28...	--	--	--	--	--	--	--	--	--	--
JULY 12...	1.5	4.7	.0	100	124	.17	94.4	83	0	95

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
MAR. 01...	22	.6	244	8.4	--	--	--	--	--	--
APR. 28...	--	--	247	8.1	0	0	0	0	.0	0
JULY 12...	20	.5	205	7.8	0	200	0	0	.5	0

## TULARE LAKE BASIN

11204900 TULE RIVER BELOW SUCCESS DAM, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	13.0	12.5	9.0	9.0	12.5	8.5	12.0	9.5
2	--	--	--	--	13.0	12.5	9.0	9.0	9.0	7.5	12.5	9.5
3	--	--	--	--	12.5	12.5	13.5	8.5	14.0	8.0	12.5	9.5
4	--	--	--	--	12.5	12.0	12.5	4.5	14.0	5.5	12.0	10.0
5	--	--	--	--	12.5	12.0	11.0	4.0	14.5	6.5	12.0	10.0
6	--	--	--	--	12.5	12.0	8.0	7.5	15.5	7.0	13.0	9.5
7	--	--	--	--	12.0	12.0	8.0	7.5	16.5	7.0	13.5	10.0
8	--	--	--	--	17.0	12.0	7.5	7.0	15.5	7.5	11.5	10.5
9	--	--	--	--	15.0	13.0	8.0	7.0	17.0	9.5	11.5	10.5
10	--	--	--	--	14.0	12.0	7.5	7.0	13.5	9.0	11.5	10.5
11	--	--	21.5	16.0	14.0	12.0	12.0	7.0	17.0	9.5	11.5	10.5
12	--	--	19.0	16.0	14.5	10.5	11.0	7.0	20.0	8.5	11.5	10.5
13	--	--	21.5	15.5	13.0	9.0	8.0	7.0	20.0	10.0	11.5	10.5
14	--	--	21.0	15.0	11.0	10.5	8.0	7.5	20.0	11.0	11.5	10.5
15	--	--	17.5	15.0	11.5	11.0	8.0	7.5	17.0	12.0	12.0	11.0
16	--	--	17.0	14.5	11.0	10.5	8.0	7.5	13.5	9.5	12.0	11.0
17	--	--	18.0	14.5	11.0	10.5	8.5	7.5	16.5	10.0	11.5	10.5
18	--	--	16.5	14.5	10.5	10.0	9.5	8.0	13.0	9.0	12.5	10.5
19	--	--	16.5	14.0	10.5	10.0	9.5	7.5	10.0	9.0	12.5	10.5
20	--	--	16.5	14.0	10.5	10.0	9.0	8.0	11.5	8.5	12.5	10.5
21	--	--	17.5	14.0	10.0	10.0	9.5	8.5	11.0	8.5	13.0	10.5
22	--	--	15.5	13.5	10.0	9.5	10.5	8.5	11.0	9.0	13.0	10.5
23	--	--	15.5	13.5	9.5	8.5	13.5	9.5	11.5	9.5	16.0	11.0
24	--	--	15.5	13.5	11.5	7.0	15.0	7.5	11.5	9.0	19.5	12.5
25	--	--	--	13.5	13.0	9.5	15.5	7.0	11.5	9.0	20.5	13.0
26	--	--	15.0	13.5	12.5	8.5	14.0	7.0	11.5	9.0	22.5	14.0
27	--	--	14.5	13.0	14.0	10.0	11.5	7.5	11.0	9.0	19.5	14.0
28	--	--	14.0	13.0	11.0	9.0	11.5	9.5	11.0	9.5	24.0	13.0
29	--	--	13.5	13.0	9.5	9.0	12.0	9.5	--	--	25.0	13.0
30	--	--	13.0	13.0	9.5	9.0	12.0	9.0	--	--	24.5	14.5
31	--	--	--	--	9.0	9.0	12.5	9.0	--	--	22.0	11.5
AVE	--	--	--	--	12.0	10.5	10.4	7.7	13.9	8.8	14.9	11.1

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	11.0	16.0	11.5	--	--	15.5	15.5	21.0	20.5	26.5	26.0
2	15.5	11.0	15.5	11.5	--	--	15.5	15.5	21.5	20.5	26.0	26.0
3	15.5	11.0	13.5	12.0	--	--	16.0	15.5	22.0	21.0	26.0	25.0
4	15.5	11.0	13.0	12.0	--	--	16.0	15.5	22.5	21.5	25.5	25.0
5	15.0	10.5	13.5	12.0	--	--	16.0	15.5	23.0	22.0	25.5	25.0
6	13.0	10.5	14.0	12.0	--	--	16.0	15.5	23.0	22.5	25.5	25.0
7	14.0	10.5	13.5	12.0	--	--	16.5	16.0	23.5	22.5	26.5	23.5
8	14.5	10.5	14.0	12.0	--	--	16.5	16.0	23.5	23.0	26.5	23.5
9	13.0	10.5	15.5	12.0	--	--	16.5	16.0	24.0	23.5	26.0	23.5
10	13.5	10.5	16.0	12.0	--	--	17.0	16.5	24.5	24.0	26.5	23.5
11	13.5	10.5	16.5	12.5	--	--	17.0	16.0	24.5	24.0	26.5	23.5
12	12.5	11.0	16.0	12.0	--	--	17.0	16.5	25.0	24.5	26.0	23.5
13	12.5	11.0	14.5	12.0	--	--	17.5	16.5	25.5	24.5	26.5	23.0
14	12.0	11.5	14.5	12.5	--	--	17.5	17.0	25.5	25.0	26.0	23.5
15	12.5	11.0	14.5	12.5	--	--	17.5	17.0	26.0	25.0	26.0	23.5
16	12.5	11.0	14.5	12.5	15.0	14.0	18.0	17.0	26.0	25.0	25.5	23.5
17	12.0	11.0	14.5	12.5	15.0	14.5	18.0	17.0	26.0	25.5	25.0	23.5
18	12.5	11.5	14.5	12.5	15.5	14.0	18.0	17.5	26.0	25.5	25.0	23.5
19	14.5	11.0	14.5	12.5	15.5	14.0	18.5	17.5	26.5	25.5	25.0	23.5
20	12.0	11.0	15.0	12.5	15.5	14.0	18.5	17.5	26.5	25.5	25.0	24.0
21	13.5	11.0	14.5	12.5	15.5	14.0	19.0	18.0	26.5	25.5	25.0	24.0
22	14.5	11.0	15.0	12.5	16.5	14.0	19.0	18.0	26.5	26.0	25.0	24.0
23	14.0	11.0	15.0	13.0	16.5	14.0	19.0	18.5	26.5	26.0	25.0	24.0
24	13.0	11.0	14.5	13.0	16.5	14.0	19.0	18.5	27.0	26.5	24.5	24.0
25	14.0	11.0	14.5	13.0	16.5	14.0	19.5	18.5	27.0	26.5	24.0	23.5
26	15.0	11.5	15.0	13.0	17.5	14.0	19.5	19.0	27.0	26.5	24.0	23.0
27	14.5	11.5	--	--	18.0	14.5	20.0	19.0	27.0	26.0	23.5	22.5
28	14.5	11.5	--	--	15.5	15.0	20.0	19.5	27.0	26.0	23.0	22.0
29	15.5	11.5	--	--	15.5	15.5	20.5	20.0	26.5	26.5	22.5	21.5
30	15.5	11.5	--	--	15.5	15.0	21.0	20.0	26.5	26.0	22.5	21.5
31	--	--	--	--	--	--	20.5	20.0	26.5	26.0	--	--
AVE	13.8	11.0	14.7	12.3	--	--	17.9	17.3	25.2	24.5	25.2	23.7

## 11208000 MARBLE FORK KAWEAH RIVER AT POTWISHA CAMP, CALIF.

LOCATION.--Lat 36°31'08", long 118°48'03", in SE $\frac{1}{4}$  sec.23, T.16 S., R.29 E., Tulare County, Sequoia National Park, temperature recorder at gaging station on left bank, 0.1 mile north of Potwisha Camp, 0.3 mile upstream from confluence with Middle Fork Kaweah River, and 7.9 miles northeast of Three Rivers.

DRAINAGE AREA.--51.4 sq mi.

PERIOD OF RECORD.--Water temperatures: January 1962 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 23.0°C July 30, Aug. 2; minimum, freezing point Jan. 4-8.

Period of record:

Water temperatures: Maximum, 23.5°C on several days in 1964, 1966, and 1970; minimum (1963-71), freezing point Jan. 4-8, 1971.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	16.5	11.0	10.0	6.5	6.0	3.5	3.5	6.5	5.5	1.5	1.0
2	18.0	16.5	11.5	10.5	6.5	6.0	3.5	1.5	5.5	5.0	3.0	0.5
3	18.0	16.5	11.5	11.0	6.0	6.0	1.5	0.5	5.0	4.0	4.0	1.5
4	18.0	16.5	11.5	11.5	6.5	6.0	0.5	0.0	4.5	3.5	4.0	2.0
5	18.5	17.0	13.0	11.5	7.0	6.5	0.0	0.0	5.0	4.0	3.5	2.0
6	18.0	17.0	13.0	11.5	7.0	7.0	0.5	0.0	5.5	4.5	4.5	1.5
7	17.0	15.0	11.5	10.5	7.0	6.5	0.5	0.0	5.5	4.0	5.5	3.5
8	15.5	14.5	11.0	9.5	7.0	6.5	0.5	0.0	5.5	4.5	5.0	4.0
9	15.0	14.0	10.5	10.0	7.0	6.5	1.5	0.5	6.0	4.5	6.5	4.5
10	15.5	14.5	11.0	10.0	6.5	6.0	2.0	1.5	6.0	4.5	6.0	5.0
11	16.0	14.5	11.0	10.5	6.5	5.5	2.0	1.5	6.5	5.0	6.5	5.0
12	16.0	15.0	11.5	11.0	5.5	5.5	3.0	2.0	7.0	6.0	6.0	5.5
13	16.0	15.0	11.5	10.0	5.5	5.5	2.0	1.0	6.5	5.5	6.0	4.0
14	16.0	15.0	10.5	9.5	5.5	5.5	2.0	1.0	6.5	5.5	5.5	3.5
15	16.0	15.0	9.5	9.0	5.5	5.0	3.5	2.0	6.5	6.0	6.5	4.5
16	16.0	15.0	9.5	8.5	5.5	5.0	4.5	3.0	6.0	4.5	7.0	4.5
17	16.0	15.0	9.0	8.0	5.0	3.5	5.0	4.0	4.5	4.0	6.5	5.0
18	15.5	14.5	9.0	8.0	3.5	3.0	5.0	4.5	4.5	4.0	8.0	5.5
19	14.5	13.5	8.5	8.0	4.0	3.0	5.5	5.0	4.0	2.0	8.5	6.0
20	14.5	13.5	8.0	8.0	4.0	4.0	5.0	5.0	3.0	1.0	8.5	6.5
21	13.5	13.5	8.0	8.0	4.0	4.0	5.0	4.5	3.5	2.0	8.5	6.5
22	13.5	13.5	8.0	8.0	4.0	3.5	5.0	4.0	3.5	3.0	8.5	6.5
23	13.5	13.0	8.0	8.0	3.5	3.0	4.5	4.0	4.0	3.5	8.0	7.0
24	13.5	13.5	8.5	8.0	3.5	3.0	5.0	4.5	4.5	3.0	8.0	6.0
25	13.5	12.0	9.0	8.0	3.0	3.0	5.5	4.5	4.5	3.0	8.0	7.0
26	12.0	11.0	8.0	7.0	3.5	2.0	5.5	4.5	3.0	1.5	8.5	7.0
27	11.5	10.5	7.0	6.5	3.5	3.5	6.5	5.5	2.0	1.0	8.0	7.0
28	11.0	10.5	6.5	6.5	3.5	3.0	6.5	5.0	1.5	1.0	9.0	6.5
29	11.0	10.0	7.0	6.0	3.5	3.5	6.5	5.0	---	---	10.0	7.0
30	10.5	10.0	6.0	5.5	3.5	3.5	6.5	5.5	---	---	9.0	7.0
31	10.5	10.0	---	---	3.5	3.0	6.5	5.5	---	---	8.5	6.5
AVE	14.9	13.9	9.6	8.9	5.0	4.6	3.7	2.9	4.9	3.8	6.7	4.8
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	6.0	9.5	8.5	8.5	6.5	15.5	14.0	22.0	19.5	19.0	17.0
2	8.5	7.0	9.5	8.0	8.5	7.0	16.0	14.5	23.0	20.0	19.0	17.0
3	9.0	7.0	8.5	6.5	9.5	8.5	16.0	14.0	22.0	20.5	19.0	18.0
4	9.0	7.0	6.5	6.5	11.0	9.5	16.5	14.5	21.5	19.5	19.0	17.0
5	9.5	8.0	8.0	6.5	11.0	9.0	16.5	14.5	21.5	19.5	19.0	17.0
6	9.5	8.0	8.0	7.0	12.0	10.0	16.5	14.5	21.5	19.5	19.0	18.0
7	8.0	6.0	7.0	6.5	13.0	10.0	16.5	14.5	21.5	19.5	18.5	16.5
8	6.5	5.5	6.5	6.0	13.5	10.5	16.5	14.5	21.5	19.0	18.5	16.0
9	8.0	6.0	8.0	6.0	13.0	10.0	17.0	14.5	21.0	19.5	19.5	17.0
10	8.5	6.0	9.5	8.0	11.0	10.0	17.0	14.5	22.0	19.5	20.0	18.5
11	8.5	6.5	10.0	8.5	13.5	9.5	16.5	14.5	22.0	20.0	20.0	18.5
12	9.0	6.5	11.0	9.0	14.0	10.5	17.0	14.0	22.0	19.5	19.5	18.5
13	9.0	7.0	10.5	9.0	13.5	10.0	18.5	14.5	21.5	20.0	19.5	18.5
14	8.0	7.0	11.0	9.0	14.5	11.0	19.0	15.5	21.5	19.5	20.0	18.5
15	8.5	6.5	12.0	8.5	15.0	11.0	19.0	16.5	21.0	19.0	20.5	19.0
16	9.0	7.0	11.5	8.0	15.0	11.5	19.0	17.0	21.5	18.5	20.0	19.0
17	9.0	4.0	9.5	6.5	15.0	11.5	18.5	18.0	20.5	18.5	20.0	19.0
18	4.0	3.5	9.0	7.0	14.5	12.0	20.0	17.0	20.5	18.0	19.5	18.0
19	5.5	4.0	9.5	7.0	14.0	11.0	21.0	18.0	20.5	18.0	19.0	17.0
20	5.5	5.5	10.0	8.0	15.5	12.0	21.0	18.0	20.0	18.0	18.0	16.5
21	5.5	4.5	10.0	6.0	16.0	13.5	21.5	18.5	20.0	18.0	18.0	16.0
22	5.0	3.5	8.5	5.5	16.0	14.0	21.5	18.5	20.0	18.0	17.0	16.0
23	5.5	5.0	10.5	7.0	15.5	14.0	21.5	19.0	20.0	18.0	17.0	16.0
24	5.5	4.0	11.5	9.0	15.5	13.5	21.0	18.5	20.5	18.5	17.0	16.0
25	4.0	3.5	11.5	9.0	15.5	13.5	21.0	18.0	20.5	18.5	16.5	15.5
26	5.5	4.0	11.5	9.0	15.5	13.5	21.0	18.0	21.0	19.0	15.5	14.5
27	8.0	5.0	9.5	6.0	15.5	14.5	21.0	18.0	20.5	19.0	15.0	13.5
28	7.0	6.5	7.0	5.5	15.0	13.5	21.5	19.0	20.5	19.0	14.0	13.0
29	9.0	6.5	7.0	6.5	14.0	11.5	21.5	19.5	20.0	18.0	14.0	13.0
30	10.0	8.0	9.0	7.0	15.0	13.0	23.0	20.0	20.0	18.0	13.5	13.0
31	---	---	9.0	7.0	---	---	22.0	20.0	19.5	18.0	---	---
AVE	7.5	5.8	9.4	7.3	13.6	11.2	19.0	16.6	21.0	18.9	18.1	16.7

## TULARE LAKE BASIN

11208605 EAST FORK KAWEAH RIVER BELOW EAGLE CREEK, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°26'44", long 118°35'38", in NW¼SW¼ sec.15, T.17 S., R.31 E., Tulare County, Sequoia National Forest, on right bank 0.5 mile downstream from Eagle Creek and 15.5 miles east of Hammond.

DRAINAGE AREA.--9.92 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1968 to September 1971 (discontinued).  
Sediment records: Water years 1969-71 (partial-record station (discontinued).)

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	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)
MAY												
11...	1030	22	5.0	9.9	105	7.6	10	26	1.5	1.4	.7	84
JUNE												
23...	1610	68	12.0	8.3	104	5.2	10	12	.5	.7	.4	40
JULY												
06...	1545	--	13.5	7.6	99	--	--	--	--	--	--	32
AUG.												
09...	1415	--	12.0	8.5	106	--	--	--	--	--	--	50
SEP.												
07...	1330	--	13.0	7.8	100	--	--	--	--	--	--	66
27...	1600	--	10.0	8.4	100	--	--	--	--	--	--	74

DATE	CAR- BUNATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)
MAY												
11...	0	7.3	.5	.0	.05	.29	.21	.08	.16	.050	.000	0
JUNE												
23...	0	7.0	.4	.0	.20	.31	.20	.11	.00	.030	.010	0
JULY												
06...	--	--	--	--	.03	.19	.11	.08	.08	.30	.020	--
AUG.												
09...	--	--	--	--	.08	.25	.21	.04	.13	.050	.020	--
SEP.												
07...	--	--	--	--	--	.17	.11	.06	.13	.040	.010	--
27...	--	--	--	--	.10	.17	.11	.06	.01	.030	.000	--

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)	ALKA- LINITY AS CAC03 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE CULI- FORM (COL. PER 100 ML)
MAY												
11...	87	.12	5.17	71	2	69	4	.1	146	6.6	.1	36
JUNE												
23...	46	.06	8.45	32	0	33	4	.1	73	7.3	.2	13
JULY												
06...	--	--	--	38	12	26	--	--	78	7.3	--	--
AUG.												
09...	--	--	--	56	15	41	--	--	120	6.8	--	--
SEP.												
07...	--	--	--	74	20	54	--	--	160	6.8	--	--
27...	--	--	--	78	17	61	--	--	160	7.2	--	--

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDIM- ENT (MG/L)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY)
MAY					
11...	1030	5.0	22	1	.06
JUNE					
23...	1630	12.0	68	14	2.6

11208607 EAST FORK KAWEAH RIVER ABOVE MONARCH CREEK, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'01", long 118°35'40", in SE1/4 sec.15, T.17 S., R.31 E., Tulare County, Sequoia National Forest, at bridge at Mineral King, 1,000 ft upstream from Monarch Creek, and 14.9 miles east of Hammond.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971 (discontinued).  
Sediment records: Water years 1968-71 (partial-record station (discontinued).)

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	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)
MAY 11...	1200	23	5.0	10.0	105	7.6	10	27	1.4	1.3	.6	81
JUNE 23...	1520	68	12.0	8.4	105	5.4	10	13	.7	.7	.4	41

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAY 11...	0	8.0	1.0	.2	.29	.19	.10	.13	.050	.000	0	88
JUNE 23...	0	4.3	.4	.0	.43	.30	.13	.00	.030	.010	10	46

DATE	DIS- SOLVED SOLIDS (TONS PER AC-F-T)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
MAY 11...	.12	5.46	73	7	66	4	.1	147	8.2	.2	100
JUNE 23...	.06	8.45	35	1	34	4	.1	75	7.6	.1	11

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
MAY 11...	1200	5.0	23	1	.06
JUNE 23...	1520	12.0	68	2	.37

## TULARE LAKE BASIN

11208610 MONARCH CREEK NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'09", long 118°35'37", in SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec.15, T.17 S., R.31 E., Tulare County, Sequoia National Forest, at gaging station on right bank, 0.2 mile upstream from mouth, 0.3 mile northeast of Mineral King, and 14.9 miles east of Hammond.

DRAINAGE AREA.--1.89 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971 (discontinued).

Water temperatures: October 1968 to September 1971.

Sediment records: Water years 1968-71 (partial-record station (discontinued).)

## EXTREMES, 1970-71:

Water temperatures: Maximum, 12.0°C June 23; minimum, 1.0°C Dec. 28, 29.

Period of record:

Water temperatures: Maximum, 15.0°C Aug. 6, 18, 1970; minimum (1969-71), freezing point on several days in 1969 and 1970.

REMARKS.--Field determinations made and samples for chemical and sediment analysis collected by U.S. Forest Service since July 1, 1971. Clock stopped Dec. 30 to Mar. 15; range in temperature, 1.5°C to 5.0°C.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	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)
NOV.										
02...	0915	.94	4.5	10.0	105	8.7	0	17	.7	1.8
DEC.										
29...	1530	1.5	1.5	10.8	105	7.1	0	12	.6	1.3
FEB.										
01...	1210	3.9	2.5	13.1	131	6.0	0	13	--	1.6
MAR.										
16...	1230	3.9	4.0	9.8	102	8.6	0	14	.5	1.5
MAY										
11...	1300	8.1	6.0	9.6	105	8.0	20	12	.7	1.1
JUNE										
23...	1410	18	12.0	8.5	108	5.8	10	7.5	.5	.8
JULY										
06...	1820	--	11.0	8.0	100	--	--	--	--	--
AUG.										
09...	1530	--	13.0	8.0	104	--	--	--	--	--
SEP.										
07...	--	--	--	--	--	--	--	--	--	--
27...	1730	--	6.5	8.9	100	--	--	--	--	--

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)
NOV.										
02...	.3	44	0	8.0	1.0	.2	.09	--	.14	--
DEC.										
29...	.3	38	0	5.0	.7	.1	.09	--	.10	--
FEB.										
01...	.3	37	0	3.0	.6	.1	.00	--	.16	--
MAR.										
16...	.3	40	0	3.3	.9	.0	.11	.28	.18	.10
MAY										
11...	.4	42	0	3.5	1.4	.0	.08	.31	.22	.09
JUNE										
23...	.3	26	0	2.3	1.6	.0	.31	.42	.31	.11
JULY										
06...	--	20	--	--	--	--	.00	.16	.10	.06
AUG.										
09...	--	28	--	--	--	--	.11	.25	.22	.03
SEP.										
07...	--	--	--	--	--	--	.01	.21	.14	.07
27...	--	44	--	--	--	--	.12	.19	.13	.06



## TULARE LAKE BASIN

11208610 MONARCH CREEK NEAR HAMMOND, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)
NOV. 02...	.05	.05	.010	.010	0	60	.08	.15	46
DEC. 29...	.01	.07	.010	.000	210	46	.06	.19	32
FEB. 01...	.16	.05	.010	.010	100	43	.06	.45	32
MAR. 16...	.07	--	.000	.000	0	50	.07	.53	37
MAY 11...	.14	--	.030	.010	0	48	.07	1.05	33
JUNE 23...	.00	--	.040	.010	0	32	.04	1.56	21
JULY 06...	.10	--	.030	.020	--	--	--	--	20
AUG. 09...	.11	--	.040	.020	--	--	--	--	26
SEP. 07...	.13	--	.040	.020	--	--	--	--	--
27...	.01	--	.040	.030	--	--	--	--	46

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECT- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI- FORM (COL- ONIES PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
NOV. 02...	10	36	8	.1	100	7.1	.2	25	--
DEC. 29...	1	31	8	.1	77	7.1	.2	7	--
FEB. 01...	2	30	10	.1	75	7.2	.3	--	--
MAR. 16...	4	33	8	.1	81	7.4	.1	--	8
MAY 11...	0	34	7	.1	72	8.2	.2	--	32
JUNE 23...	0	21	8	.1	66	7.2	.1	--	9
JULY 06...	4	16	--	--	50	6.5	--	--	--
AUG. 09...	3	23	--	--	63	7.1	--	--	--
SEP. 07...	--	--	--	--	--	--	--	--	--
27...	10	36	--	--	95	7.4	--	--	--

DATE	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
DEC. 29...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
DEC. 29...	.00	.00	.00	.00	.00	.00	.00	.00

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
NOV. 02...	0915	4.5	.94	0	.00
FEB. 01...	1215	2.5	3.9	1	.01
MAR. 16...	1345	4.0	3.9	1	.01
MAY 11...	1300	6.0	8.1	1	.02
JUNE 23...	1500	11.0	18	1	.05
SEP. 21...	1015	4.5	1.1	1	.00

## TULARE LAKE BASIN

11208610 MONARCH CREEK NEAR HAMMOND, CALIF.--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.0	5.0	4.0	5.0	2.5	--	--	--	--	--	--
2	10.5	9.0	5.5	4.0	5.0	4.5	--	--	--	--	--	--
3	10.0	10.0	5.5	4.5	5.0	3.5	--	--	--	--	--	--
4	10.0	9.0	6.0	5.5	4.5	2.0	--	--	--	--	--	--
5	10.5	9.0	6.0	6.0	5.0	2.0	--	--	--	--	--	--
6	10.0	9.0	6.0	6.0	4.0	2.5	--	--	--	--	--	--
7	9.5	8.5	6.0	4.5	4.0	3.5	--	--	--	--	--	--
8	9.5	8.5	6.5	5.0	4.0	2.5	--	--	--	--	--	--
9	9.5	8.5	6.0	4.5	4.0	3.0	--	--	--	--	--	--
10	9.0	8.0	6.0	4.5	4.0	2.0	--	--	--	--	--	--
11	8.5	7.5	5.5	4.5	4.0	2.0	--	--	--	--	--	--
12	8.5	7.5	6.0	3.5	4.0	2.0	--	--	--	--	--	--
13	8.5	7.5	5.5	4.0	4.5	3.0	--	--	--	--	--	--
14	8.5	7.5	5.5	4.0	4.5	3.5	--	--	--	--	--	--
15	8.5	7.5	6.0	5.5	4.5	1.5	--	--	--	--	--	--
16	8.0	7.0	6.0	6.0	3.0	2.0	--	--	--	--	7.0	4.0
17	7.5	6.5	6.0	5.0	3.0	2.0	--	--	--	--	7.0	5.0
18	7.5	6.5	6.0	4.0	3.0	2.0	--	--	--	--	6.5	5.0
19	7.5	6.5	6.0	4.5	3.0	2.0	--	--	--	--	6.5	5.0
20	7.5	7.0	6.0	5.0	3.5	2.0	--	--	--	--	6.5	5.0
21	7.5	7.0	6.0	4.0	3.5	2.0	--	--	--	--	6.5	5.0
22	7.5	7.0	6.0	3.5	3.5	2.0	--	--	--	--	6.0	5.0
23	7.0	6.5	6.0	3.0	3.5	2.0	--	--	--	--	6.5	5.5
24	7.0	6.0	6.0	3.0	3.0	1.5	--	--	--	--	6.5	5.0
25	7.0	6.0	6.0	5.0	3.0	2.0	--	--	--	--	6.5	6.0
26	7.0	5.5	5.5	4.0	3.0	2.5	--	--	--	--	6.5	6.0
27	6.5	5.0	5.5	2.5	3.0	2.0	--	--	--	--	7.0	6.0
28	6.0	5.0	5.0	4.0	3.5	1.0	--	--	--	--	6.5	6.0
29	6.0	5.0	5.0	4.0	3.5	1.0	--	--	--	--	6.5	6.0
30	5.0	4.5	5.0	2.5	--	--	--	--	--	--	6.5	6.0
31	5.0	4.5	--	--	--	--	--	--	--	--	6.5	5.5
AVE	8.1	7.1	5.8	4.3	3.8	2.3	--	--	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	5.5	6.5	6.0	9.0	8.0	10.5	9.0	9.5	8.5	7.0	5.5
2	7.0	5.5	6.5	6.0	8.5	8.0	10.5	9.0	9.0	8.0	7.0	5.5
3	6.5	5.5	7.0	6.5	8.5	8.0	10.5	9.0	9.0	8.0	6.5	5.0
4	6.5	5.5	7.0	6.0	9.0	8.5	11.0	8.5	8.5	7.5	6.5	5.0
5	6.5	5.5	7.0	6.5	8.5	8.0	10.5	8.5	9.0	8.0	6.5	5.0
6	7.0	6.0	7.0	6.5	9.0	8.0	10.5	8.5	8.5	7.5	6.5	5.5
7	7.0	6.0	7.0	6.0	9.5	8.5	10.0	8.0	9.0	7.5	6.0	4.5
8	7.0	5.5	7.0	6.0	9.5	8.5	10.0	8.5	9.0	7.5	6.5	5.0
9	7.0	6.0	7.0	6.0	9.5	8.5	10.0	8.0	8.5	7.5	7.5	6.0
10	7.0	6.0	7.0	6.5	9.5	9.0	10.0	8.0	9.0	7.5	7.0	5.5
11	6.5	5.5	7.0	6.0	9.5	8.5	9.5	8.0	9.0	7.0	6.5	5.0
12	6.5	5.5	7.0	6.0	9.5	8.5	10.0	8.0	8.5	7.0	6.0	5.0
13	6.5	6.0	7.0	6.0	10.0	9.0	10.5	8.5	7.5	7.5	6.0	5.0
14	6.5	6.0	7.5	6.5	10.0	9.0	10.5	9.0	8.0	6.5	6.0	5.0
15	7.0	6.0	7.0	6.5	10.0	9.0	10.0	9.0	8.5	6.5	6.5	4.5
16	6.5	6.0	7.0	6.5	10.5	9.0	10.0	8.5	8.0	6.5	6.5	4.5
17	7.0	6.5	7.0	6.5	10.5	9.0	9.5	9.0	7.5	6.5	5.5	4.5
18	7.0	6.0	7.0	6.5	10.0	9.0	10.0	9.0	7.5	6.5	5.5	3.5
19	7.0	5.0	7.0	6.5	10.0	9.0	9.5	8.5	8.0	6.5	5.0	3.5
20	7.0	6.0	7.5	7.0	10.5	9.5	10.0	8.5	8.0	6.5	5.0	3.5
21	7.5	6.0	8.0	7.5	11.5	9.5	10.0	9.0	8.0	6.5	6.5	4.5
22	7.5	5.5	8.0	7.0	11.0	9.5	9.5	8.5	8.0	6.5	6.5	5.0
23	7.0	6.0	7.5	7.0	12.0	9.5	10.0	9.0	7.5	6.5	6.5	5.0
24	7.0	6.5	7.5	7.0	10.0	9.0	10.0	8.5	7.0	6.5	6.5	5.0
25	7.5	6.0	7.5	7.0	11.0	9.0	9.5	8.5	7.5	6.5	6.0	5.0
26	7.0	6.0	8.0	7.5	11.0	9.0	9.5	8.0	7.5	6.5	5.5	5.0
27	7.0	6.0	8.0	8.0	10.0	9.5	10.0	8.0	7.5	6.0	5.5	4.5
28	7.0	5.5	8.5	7.5	9.5	9.0	9.5	8.0	7.0	6.0	5.5	4.0
29	6.5	5.5	8.5	7.5	10.0	9.0	9.5	8.0	7.5	6.0	5.5	4.0
30	6.5	5.5	8.5	8.0	10.5	9.0	9.5	8.0	7.5	5.5	6.0	5.0
31	--	--	8.5	7.5	--	--	9.5	8.5	7.5	5.5	--	--
AVE	6.9	5.8	7.4	6.7	9.9	8.8	10.0	8.5	8.1	6.9	6.2	4.8

11208615 EAST FORK KAWEAH RIVER BELOW MONARCH CREEK, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'09", long 118°35'56", in NW1/4 sec.15, T.17 S., R.31 E., Tulare County, Sequoia National Forest, at gaging station on right bank, 250 ft downstream from Monarch Creek, and 14.6 miles east of Hammond.

DRAINAGE AREA.--12.1 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971 (discontinued)  
Sediment records: Water years 1968-71 (partial-record station (discontinued).)

REMARKS.--Field determinations made and samples for chemical analysis collected by U.S. Forest Service since July 1, 1971.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	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)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
MAY 11...	1400	40	8.0	9.2	105	8.0	20	23	1.3	1.4	.6	71
JUNE 24...	0825	85	6.0	9.5	102	5.0	20	12	.7	.8	.3	39
JULY 06...	1850	--	10.5	8.2	100	--	--	--	--	--	--	34
AUG. 09...	1600	--	13.5	8.1	104	--	--	--	--	--	--	58
SEP. 07...	--	--	--	--	--	--	--	--	--	--	--	--
27...	1815	--	8.0	8.6	98	--	--	--	--	--	--	82

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)
MAY 11...	0	5.8	.4	.0	.20	.33	.25	.08	.20	.050	.000	0
JUNE 24...	0	5.0	1.3	.0	.18	.31	.18	.13	.00	.030	.010	0
JULY 06...	--	--	--	--	.06	.21	.14	.07	.08	.040	.010	--
AUG. 09...	--	--	--	--	.01	.20	.18	.02	.17	.050	.020	--
SEP. 07...	--	--	--	--	.19	.24	.20	.04	.01	.040	.020	--
27...	--	--	--	--	.17	.22	.18	.04	.01	.030	.020	--

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)	ALKA- LINIT- AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
MAY 11...	76	.10	8.21	63	5	58	5	.1	133	8.1	.4	21
JUNE 24...	45	.06	10.3	33	1	32	5	.1	71	7.6	.2	7
JULY 06...	--	--	--	42	14	28	--	--	85	6.8	--	--
AUG. 09...	--	--	--	60	12	48	--	--	90	6.8	--	--
SEP. 07...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	86	19	67	--	--	185	7.3	--	--

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
MAY 11...	1400	8.0	40	1	.11
JUNE 24...	0900	6.0	85	10	2.3

## TULARE LAKE BASIN

11208620 EAST FORK KAWEAH RIVER BELOW MOSQUITO CREEK, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'05", long 118°37'04", in SW¼NW¼ sec.16, T.17 S., R.13 E., Tulare County, Sequoia National Forest, at gaging station on right bank, 300 ft downstream from Mosquito Creek, and 13.2 miles east of Hammond.

DRAINAGE AREA.--16.0 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971 (discontinued).

Water temperatures: August 1968 to September 1971.

Sediment records: Water years 1968-71 (partial-record station (discontinued).)

EXTREMES.--1970-71:

Water temperatures: Maximum, 14.5°C July 26-30, Aug. 9, 10; minimum, 0.5°C sometime during period Nov. 3 to Mar. 16.

Period of record:

Water temperatures: Maximum, 16.0°C Aug. 22-24, 1969, Aug. 30, 1970; minimum, freezing point on many days in 1968 and 1969.

REMARKS.--Field determinations made and samples for chemical analysis collected by U.S. Forest Service since July 1, 1971. Clock stopped Nov. 3 to Mar. 16; range in temperature, 0.5°C to 4.5°C.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	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)
NOV. 02...	1045	5.4	5.5	10.2	106	9.7	0	33	1.7	2.8
DEC. 29...	1330	7.7	.5	10.2	93	8.7	0	26	1.5	2.5
FEB. 01...	1325	13	4.0	11.2	112	8.2	0	25	--	2.6
MAR. 16...	1425	22	5.0	9.7	100	9.5	20	25	1.4	2.4
MAY 11...	1445	43	7.0	9.6	104	8.8	20	20	1.5	1.6
JUNE 24...	0945	86	8.0	9.6	107	5.2	10	11	.5	.8
JULY 07...	0930	--	8.0	9.1	101	--	--	--	--	--
AUG. 09...	1730	--	14.5	8.0	104	--	--	--	--	--
SEP. 07...	0800	--	8.0	9.0	102	--	--	--	--	--
28...	1015	--	4.5	9.7	100	--	--	--	--	--

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)
NOV. 02...	.8	104	0	8.0	1.0	.0	.17	--	.19	--
DEC. 29...	.7	88	0	8.0	.6	.1	.20	--	.20	--
FEB. 01...	.6	72	0	7.0	.8	.1	.00	--	.10	--
MAR. 16...	.9	68	0	6.3	.7	.0	.08	.40	.20	.20
MAY 11...	.7	70	0	6.0	.9	.0	.02	.25	.15	.10
JUNE 24...	.4	31	0	4.5	2.0	.0	.23	.35	.23	.12
JULY 07...	--	39	--	--	--	--	.07	.21	.13	.08
AUG. 09...	--	58	--	--	--	--	.14	.31	.25	.06
SEP. 07...	--	76	--	--	--	--	.11	.18	.12	.06
28...	--	85	--	--	--	--	.08	.14	.10	.04

11208620 EAST FORK KAWEAH RIVER BELOW MOSQUITO CREEK, NEAR HAMMOND, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)
NOV. 02...	.02	.02	.010	.010	0	108	.15	1.57	90
DEC. 29...	.00	.05	.000	.000	140	91	.12	1.89	71
FEB. 01...	.10	.09	.000	.000	90	79	.11	2.77	62
MAR. 16...	.12	--	.000	.000	0	81	.11	4.81	68
MAY 11...	.13	--	.050	.010	0	75	.10	8.71	56
JUNE 24...	.00	--	.030	.010	10	40	.05	9.29	30
JULY 07...	.06	--	.040	.010	--	--	--	--	40
AUG. 09...	.11	--	.080	.050	--	--	--	--	58
SEP. 07...	.01	--	.050	.020	--	--	--	--	80
28...	.02	--	.030	.010	--	--	--	--	90

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI- FORM (COL- ONIES PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
NOV. 02...	5	85	6	.1	190	8.0	.3	15	--
DEC. 29...	0	72	7	.1	163	7.6	.4	6	--
FEB. 01...	3	59	8	.1	141	7.7	.4	--	--
MAR. 16...	12	56	7	.1	133	7.6	.2	--	8
MAY 11...	0	57	6	.1	116	8.3	.3	--	24
JUNE 24...	5	25	5	.1	65	7.8	.2	--	0
JULY 07...	8	32	--	--	85	7.2	--	--	--
AUG. 09...	10	48	--	--	135	6.7	--	--	--
SEP. 07...	18	62	--	--	130	7.1	--	--	--
28...	20	70	--	--	185	7.4	--	--	--

DATE	ALORIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
DEC. 29...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
DEC. 29...	.00	.00	.00	.00	.00	.00	.00	.00

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
NOV. 02...	1045	5.5	5.4	0	.00
FEB. 01...	1430	4.0	13	1	.04
MAR. 16...	1530	5.5	22	1	.06
MAY 11...	1530	7.0	43	1	.12
JUNE 24...	1130	8.0	86	9	2.1
SEP. 21...	1130	8.0	6.7	2	.04

## TULARE LAKE BASIN

11208620 EAST FORK KAWEAH RIVER BELOW MOSQUITO CREEK, NEAR HAMMOND, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	8.0	6.0	4.5	--	--	--	--	--	--	--	--
2	9.5	7.5	6.5	5.0	--	--	--	--	--	--	--	--
3	9.5	8.5	--	--	--	--	--	--	--	--	--	--
4	9.5	8.0	--	--	--	--	--	--	--	--	--	--
5	10.0	8.0	--	--	--	--	--	--	--	--	--	--
6	9.5	8.0	--	--	--	--	--	--	--	--	--	--
7	8.5	6.0	--	--	--	--	--	--	--	--	--	--
8	8.5	6.0	--	--	--	--	--	--	--	--	--	--
9	8.5	6.5	--	--	--	--	--	--	--	--	--	--
10	8.5	7.0	--	--	--	--	--	--	--	--	--	--
11	9.0	7.0	--	--	--	--	--	--	--	--	--	--
12	8.5	7.0	--	--	--	--	--	--	--	--	--	--
13	8.5	6.5	--	--	--	--	--	--	--	--	--	--
14	8.5	6.5	--	--	--	--	--	--	--	--	--	--
15	8.5	7.0	--	--	--	--	--	--	--	--	--	--
16	8.0	6.5	--	--	--	--	--	--	--	--	--	--
17	8.0	6.0	--	--	--	--	--	--	--	--	5.5	2.5
18	7.5	6.0	--	--	--	--	--	--	--	--	6.0	3.5
19	7.5	6.0	--	--	--	--	--	--	--	--	6.0	3.5
20	7.0	5.5	--	--	--	--	--	--	--	--	6.5	3.5
21	6.5	5.5	--	--	--	--	--	--	--	--	6.5	4.0
22	7.0	6.0	--	--	--	--	--	--	--	--	6.5	4.0
23	7.0	6.0	--	--	--	--	--	--	--	--	5.5	4.5
24	7.0	6.0	--	--	--	--	--	--	--	--	6.5	4.0
25	6.5	5.0	--	--	--	--	--	--	--	--	5.5	5.0
26	5.5	4.0	--	--	--	--	--	--	--	--	5.5	5.0
27	5.0	4.0	--	--	--	--	--	--	--	--	6.0	4.0
28	5.0	4.0	--	--	--	--	--	--	--	--	6.0	4.5
29	5.5	4.0	--	--	--	--	--	--	--	--	6.5	4.5
30	5.5	4.0	--	--	--	--	--	--	--	--	6.5	4.5
31	5.5	4.5	--	--	--	--	--	--	--	--	6.0	3.5
AVE	7.7	6.1	--	--	--	--	--	--	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	3.5	7.5	5.0	6.5	4.5	11.0	9.0	13.5	12.0	13.5	10.0
2	6.0	4.0	7.0	5.0	5.5	4.5	11.5	9.5	13.0	12.0	13.5	10.0
3	6.0	4.0	6.0	5.0	6.5	4.5	11.5	9.5	13.0	12.0	13.0	9.5
4	6.0	4.5	5.5	4.0	6.5	5.5	11.5	9.0	13.5	11.5	13.5	10.0
5	6.5	5.0	6.0	5.0	6.5	5.5	11.5	9.5	13.5	12.5	13.0	10.0
6	5.5	5.0	5.5	5.0	7.0	5.5	11.5	9.0	13.5	12.0	12.5	10.0
7	5.0	4.0	5.5	5.0	7.5	6.0	11.5	8.0	14.0	11.5	12.0	8.0
8	6.0	4.0	6.0	4.5	7.5	6.5	11.5	8.5	14.0	12.0	13.0	9.5
9	6.5	4.5	7.0	5.0	7.0	6.5	11.5	8.5	14.5	13.0	13.0	11.0
10	6.5	4.0	7.0	5.5	7.0	6.5	11.5	8.5	14.5	12.0	13.0	11.0
11	6.5	4.5	7.5	6.0	7.5	6.5	11.5	8.5	14.0	12.0	13.5	10.5
12	6.5	4.5	8.0	6.5	7.5	6.5	12.0	9.0	13.5	11.5	13.0	11.0
13	5.5	5.0	8.0	6.0	7.5	6.5	12.5	9.5	13.5	11.5	13.0	11.0
14	5.0	5.0	8.0	6.0	7.5	6.5	13.0	10.0	13.5	11.0	13.0	10.5
15	7.0	4.5	7.5	6.0	8.0	7.0	12.5	10.5	14.0	11.0	14.0	11.0
16	7.0	5.0	6.5	6.0	8.0	7.0	12.0	10.5	14.0	11.0	13.5	11.0
17	6.0	3.0	6.5	5.5	8.0	7.0	12.0	11.0	14.0	10.5	13.0	10.5
18	4.0	3.0	6.5	5.0	8.0	7.0	12.0	10.5	13.5	11.0	12.5	9.5
19	5.5	3.0	6.5	5.0	8.0	6.5	12.0	11.0	14.0	11.0	12.0	9.0
20	5.0	4.0	6.5	5.0	8.5	7.0	13.0	10.5	14.0	10.5	11.5	9.0
21	4.5	4.0	6.0	4.5	9.0	7.5	13.5	11.5	14.0	10.5	10.5	8.0
22	5.0	3.0	5.5	4.5	9.0	8.0	13.5	10.5	13.5	11.5	10.5	8.0
23	5.0	4.0	7.0	5.0	9.0	8.0	13.5	10.5	13.0	11.5	10.5	8.0
24	4.5	3.5	7.0	6.0	10.0	8.0	14.0	11.0	13.5	12.0	10.5	8.0
25	4.0	3.0	7.5	5.5	10.0	8.5	14.0	10.5	13.0	11.5	10.0	7.5
26	5.0	3.0	7.0	6.0	10.5	9.0	14.5	11.0	13.5	11.5	8.5	6.0
27	5.5	4.0	6.5	5.0	10.5	9.5	14.5	11.5	14.0	11.0	8.0	6.0
28	6.5	4.5	5.0	4.5	10.0	9.0	14.5	11.5	14.0	11.5	8.0	4.5
29	7.0	5.0	5.5	4.0	10.5	8.5	14.5	11.5	13.0	11.0	8.0	6.0
30	8.0	5.0	6.5	5.0	11.0	9.0	14.5	12.0	12.5	10.0	8.0	6.0
31	--	--	6.0	5.0	--	--	13.5	12.0	13.0	10.0	--	--
AVE	5.0	4.1	6.6	5.2	8.2	6.9	12.6	10.1	13.6	11.4	11.7	9.0

11208625 EAST FORK KAWEAH RIVER AT SEQUOIA NATIONAL PARK BOUNDARY, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'30", long 118°39'11", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.7, T.17 S., R.31 E., Tulare County, Sequoia National Park, at gaging station on right bank, 0.6 mile southwest of Silver City, and 11.4 miles east of Hammond.

DRAINAGE AREA.--23.7 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971 (discontinued).

Water temperatures: August 1968 to September 1971 (discontinued).

Sediment records: Water years 1968-71 (partial-record station (discontinued).)

EXTREMES, 1970-71:

Water temperatures: Maximum, 17.0°C July 27-29; minimum, freezing point Dec. 2, 3.

Period of record:

Water temperatures: Maximum, 17.0°C Aug. 3, 1968, July 27-29, 1971; minimum, freezing point on many days during winter period each year.

REMARKS.--Field determinations made and samples for chemical and sediment analysis collected by U.S. Forest Service since July 1, 1971. Clock stopped Dec. 19 to Jan. 5; range in temperature, 1.5°C to 2.0°C.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	DIS- SOLVED SILICA (SIO <sub>2</sub> ) (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)
NOV. 02...	1300	7.4	5.0	10.9	107	11	0	28	1.5	3.0
DEC. 15...	1200	12	1.0	12.2	108	11	20	21	1.3	2.5
FEB. 02...	1200	22	2.0	13.1	119	10	10	19	--	2.6
APR. 02...	1000	45	3.0	11.9	112	10	20	17	.9	2.2
MAY 12...	0900	60	5.0	10.9	109	10	20	15	1.2	1.6
JUNE 24...	1445	118	14.0	9.3	115	6.0	20	9.3	.7	1.0
JULY 20...	1300	36	13.5	8.9	109	7.9	10	14	.7	1.4
SEP. 21...	1210	8.4	9.0	9.6	105	11	10	26	1.0	2.7

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)
NOV. 02...	.8	88	0	7.0	1.0	.2	.03	--	.08	--
DEC. 15...	.7	72	0	7.0	.6	.1	.49	--	.52	--
FEB. 02...	.8	56	0	5.0	.8	.2	.16	--	.26	--
APR. 02...	.9	56	0	4.3	.8	.0	.10	.38	.18	.20
MAY 12...	.6	51	0	3.8	1.0	.0	--	.27	.15	.12
JUNE 24...	.4	31	0	5.8	1.5	.0	.25	.31	.25	.06
JULY 20...	.1	53	0	1.3	.9	.3	.20	.28	.25	.03
SEP. 21...	.7	89	0	5.5	1.1	.3	.00	.25	.13	.12

DATE	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED URTHO. PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	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)
NOV. 02...	.05	.02	.010	.010	0	96	.13	1.92	76
DEC. 15...	.03	.07	.010	.000	120	79	.11	2.56	58
FEB. 02...	.10	.07	.020	.000	110	66	.09	3.92	48
APR. 02...	.08	--	.010	.000	10	65	.09	7.90	46
MAY 12...	.18	--	.25	.000	10	59	.08	9.56	42
JUNE 24...	.00	--	.020	.000	0	40	.05	12.7	26
JULY 20...	.05	--	.040	.010	10	53	.07	5.15	38
SEP. 21...	.13	--	.040	.030	30	93	.13	2.11	69

## TULARE LAKE BASIN

11208625 EAST FORK KAWEAH RIVER AT SEQUOIA NATIONAL PARK BOUNDARY, NEAR HAMMOND, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CaCO3 (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	DELAYED COLIFORM (COLONIES PER 100 ML)	IMMEDIATE COLIFORM (COL. PER 100 ML)
NOV. 02...	4	72	8	.1	164	7.8	.2	13	--
DEC. 15...	0	59	8	.1	136	7.5	.2	25	--
FEB. 02...	2	46	10	.2	109	7.5	.4	--	--
APR. 02...	0	46	9	.1	100	7.8	.3	--	2
MAY 12...	0	42	7	.1	90	7.7	.2	--	16
JUNE 24...	1	25	8	.1	60	8.0	.2	--	0
JULY 20...	0	43	7	.1	84	8.4	.1	--	180
SEP. 21...	0	73	8	.1	152	7.8	.6	--	4300

DATE	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)
DEC. 15...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
DEC. 15...	.00	.00	.00	.00	.00	.00	.00	.00

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV. 02...	1300	5.0	7.4	0	.00
DEC. 15...	1250	1.0	12	0	.00
FEB. 02...	1205	2.0	22	2	.12
APR. 02...	1000	3.0	45	2	.24
MAY 12...	0900	5.0	60	1	.16
JUNE 24...	1500	14.0	118	8	2.5
JULY 20...	1245	13.5	36	2	.19
SEP. 21...	1245	9.0	8.4	1	.02



11208625 EAST FORK KAWEAH RIVER AT SEQUOIA NATIONAL PARK BOUNDARY, NEAR HAMMOND, CALIF.--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	7.5	5.0	4.0	1.5	0.5	--	--	3.0	2.5	1.5	1.0
2	9.0	7.0	5.5	4.5	1.0	0.0	--	--	3.0	2.0	1.0	1.0
3	9.0	8.0	5.5	4.5	0.5	0.0	--	--	3.0	2.0	2.0	1.0
4	9.5	8.0	6.0	5.0	1.0	0.5	--	--	3.0	2.0	2.5	2.0
5	9.5	8.5	7.0	6.0	1.5	1.0	--	--	3.0	2.0	2.0	1.5
6	9.0	7.5	7.0	5.5	2.0	1.0	1.5	1.5	3.0	2.5	2.0	1.5
7	7.5	6.0	5.5	4.0	3.0	2.0	2.0	1.5	3.0	2.0	3.0	2.0
8	7.5	6.0	5.0	4.0	3.0	2.5	2.0	2.0	3.0	2.0	3.0	2.0
9	7.5	6.0	5.5	4.5	3.0	2.0	2.0	2.0	3.0	2.0	3.5	2.5
10	8.0	6.5	5.5	5.0	2.0	1.0	2.0	2.0	4.0	2.5	4.0	2.5
11	8.0	7.0	5.5	4.5	2.0	1.5	2.0	2.0	4.0	3.0	4.5	3.0
12	8.0	6.5	6.0	5.0	2.0	1.0	2.0	2.0	4.5	3.5	4.5	1.5
13	7.5	6.0	5.0	4.0	1.5	1.0	2.0	1.5	4.5	3.5	2.5	1.5
14	8.0	6.0	5.0	4.0	1.0	1.0	1.5	1.0	4.5	3.5	3.0	1.5
15	8.0	6.5	4.0	4.0	2.0	1.0	1.0	1.0	5.0	3.5	4.0	2.0
16	7.0	6.0	4.0	3.0	2.5	1.5	1.0	1.0	3.5	2.5	4.0	2.0
17	7.0	6.0	3.5	3.0	1.5	1.5	1.0	1.0	2.5	2.0	4.5	2.0
18	7.0	6.0	3.5	3.0	1.5	1.5	1.0	1.0	3.0	2.0	4.5	3.0
19	6.5	5.5	3.5	2.5	--	--	1.0	0.5	3.0	1.5	5.0	3.0
20	6.5	5.0	3.0	2.5	--	--	2.0	1.0	1.5	1.5	5.0	3.0
21	6.5	5.5	3.0	2.5	--	--	2.5	1.5	1.5	1.5	5.5	3.0
22	7.0	6.0	3.0	2.5	--	--	2.5	2.0	2.0	1.5	6.0	3.5
23	7.0	5.5	4.0	3.0	--	--	2.5	1.5	2.5	2.0	5.5	3.5
24	7.0	5.5	4.5	4.0	--	--	2.0	1.5	3.0	2.0	5.5	3.0
25	6.0	4.5	5.5	2.0	--	--	2.5	2.0	2.5	1.5	5.5	4.0
26	5.0	3.5	2.0	1.5	--	--	3.0	2.5	1.5	1.5	5.5	4.0
27	4.0	3.5	2.0	2.0	--	--	3.0	3.0	1.5	1.5	6.0	3.5
28	4.0	3.0	3.0	2.0	--	--	3.0	2.5	1.5	1.5	6.0	4.0
29	4.5	3.5	3.0	1.0	--	--	3.0	2.5	--	--	6.5	4.0
30	5.0	3.5	1.0	0.5	--	--	3.0	2.5	--	--	6.5	4.0
31	5.0	4.0	--	--	--	--	3.5	2.5	--	--	5.5	3.0
AVE	7.1	5.8	4.4	3.4	--	--	2.1	1.7	3.0	2.2	4.2	2.5

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.5	3.0	7.5	4.0	9.0	4.0	15.0	10.0	16.5	13.5	14.0	11.0
2	6.0	2.0	6.0	4.0	8.0	4.5	15.0	10.5	15.5	13.5	14.0	11.0
3	6.0	3.5	5.0	3.0	10.0	6.0	15.0	10.5	16.0	13.5	13.5	10.5
4	6.5	4.0	5.0	3.0	10.5	6.5	15.0	10.0	16.0	13.0	13.0	11.5
5	6.5	4.0	6.0	4.0	10.0	6.0	14.5	10.5	16.0	14.0	13.0	10.5
6	5.5	4.0	5.0	4.0	10.5	7.0	14.5	10.0	15.5	13.0	12.5	11.5
7	5.5	3.5	4.5	4.0	11.5	7.5	14.5	10.5	15.5	12.5	12.0	10.0
8	7.0	4.0	5.0	3.5	12.0	7.5	14.5	10.5	16.0	12.5	12.5	10.0
9	7.5	5.0	6.0	2.5	10.5	7.5	14.5	10.0	15.5	13.0	14.0	11.5
10	7.5	5.0	6.5	3.5	9.5	8.0	14.5	10.0	16.0	13.5	13.5	12.0
11	7.0	3.5	7.0	3.5	12.5	7.5	14.5	10.0	15.5	13.0	14.0	11.5
12	7.0	4.0	7.5	5.0	12.5	8.0	15.0	10.5	15.0	12.5	13.5	11.5
13	6.0	4.0	7.5	5.0	12.5	7.5	15.5	11.5	14.5	13.0	13.5	12.0
14	4.5	4.0	8.5	5.0	13.0	8.0	16.0	12.0	14.5	12.5	13.5	11.5
15	7.5	4.0	8.5	4.5	13.5	8.5	15.0	12.5	15.5	12.5	14.0	12.0
16	7.5	4.0	8.0	4.5	13.5	8.5	15.5	12.5	15.5	12.0	13.5	11.5
17	5.0	1.5	8.0	4.0	13.5	8.5	14.5	13.5	15.0	12.0	12.5	11.0
18	3.5	1.5	8.0	4.0	13.0	8.5	15.5	13.0	14.5	12.0	12.0	10.0
19	4.5	2.0	8.0	4.5	13.5	8.5	15.5	13.0	15.0	12.0	11.0	9.5
20	4.0	3.0	8.5	4.5	14.5	9.5	15.5	12.5	15.0	12.0	11.0	9.5
21	3.5	2.0	5.0	3.5	15.5	9.5	16.0	13.0	14.5	11.5	11.0	9.0
22	4.5	1.5	7.5	3.5	14.5	9.5	15.5	13.0	14.5	11.5	11.0	9.0
23	5.0	3.0	9.5	5.0	14.5	9.5	15.5	13.0	14.5	11.5	11.0	9.0
24	3.5	2.0	9.0	5.5	14.0	9.5	16.0	13.0	14.5	13.5	10.5	9.0
25	3.0	1.5	10.0	6.0	14.0	9.0	16.0	12.5	15.0	13.0	9.5	8.0
26	4.5	2.5	8.5	5.5	14.5	9.5	16.5	12.5	15.0	13.0	8.5	6.5
27	5.0	3.0	5.5	4.5	13.5	11.0	17.0	13.0	15.5	12.5	8.0	6.5
28	6.0	4.0	6.5	4.5	13.0	9.5	17.0	13.0	14.5	12.5	7.5	5.5
29	7.0	4.0	7.5	4.5	14.0	9.0	17.0	13.0	14.5	12.5	7.0	5.5
30	7.0	4.0	9.0	5.5	14.5	10.0	16.5	13.5	14.0	11.5	7.0	5.5
31	--	--	8.0	4.5	--	--	16.0	14.0	14.0	11.0	--	--
AVE	5.6	3.2	7.2	4.3	12.5	8.1	15.4	11.8	15.1	12.6	11.7	9.8

## TULARE LAKE BASIN

11208630 ATWELL CREEK ABOVE MINERAL KING HIGHWAY, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'57", long 118°40'30", in SE¼NE¼ sec.11, T.17 S., R.30 E., Tulare County, Sequoia National Park, at gaging station on right bank, 750 ft west of Atwell Mills Ranger Station, and 10.4 miles east of Hammond.

DRAINAGE AREA.--0.66 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971 (discontinued).  
Sediment records: Water years 1968-71 (partial-record station (discontinued).)

REMARKS.--Field determinations made and samples for chemical and sediment analysis collected by U.S. Forest Service since July 1, 1971.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED IRON (FF) (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)
MAY 12...	1030	.90	5.5	10.5	107	24	40	4.1	.9	3.3	1.2	25
JUNE 23...	1105	.50	10.0	9.0	102	26	30	4.3	.9	3.6	1.4	24
JULY 20...	1515	.24	12.0	8.4	100	27	10	4.7	.7	4.1	.9	34
SEP. 21...	1515	.11	11.0	8.5	99	29	20	5.3	.5	4.6	1.4	36

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)
MAY 12...	0	1.0	1.2	.0	--	.27	.22	.05	.29	.10	.050	20
JUNE 23...	0	1.3	2.6	.0	.20	.36	.20	.16	.00	.050	.030	10
JULY 20...	0	.0	.2	.3	.27	.34	.33	.01	.06	.050	.030	110
SEP. 21...	0	.0	.8	.3	.00	.21	.15	.06	.15	.060	.040	40

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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE CULI- FORM (COL. PER 100 ML)
MAY 12...	49	.07	.12	14	0	21	32	.4	39	7.2	.2	48
JUNE 23...	53	.07	.07	14	0	20	33	.4	46	7.5	.1	50
JULY 20...	55	.07	.04	15	0	28	36	.5	49	8.3	.1	160
SEP. 21...	60	.08	.02	15	0	30	37	.5	57	7.7	.2	1400

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
MAY 12...	1030	5.5	.90	1	.00
JUNE 23...	1130	10.0	.50	1	.00
JULY 20...	1520	12.0	.24	1	.00
SEP. 21...	1530	11.0	.11	3	.00

11208650 REDWOOD CREEK ABOVE MINERAL KING HIGHWAY, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'14", long 118°42'10", in NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec.15, T.17 S., R.30 E., Tulare County, Sequoia National Park, at gaging station on right bank, 50 ft upstream from Mineral King Road, and 8.9 miles east of Hammond.

DRAINAGE AREA.--1.38 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971 (discontinued).  
Sediment records: Water years 1968-71 (partial-record station (discontinued).)

REMARKS.--Field determinations made and samples for chemical and sediment analysis collected by U.S. Forest Service since July 1, 1971.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 <sub>3</sub> ) (MG/L)
MAY 04...	1400	2.6	3.5	10.7	101	18	40	4.5	.8	2.7	.9	23
JUNE 23...	0930	1.4	11.0	9.1	102	22	30	5.5	.7	3.3	.7	25
JULY 21...	0800	.69	13.5	8.6	102	23	10	4.9	.6	3.7	1.0	34
SEP. 22...	0800	.19	8.0	9.7	102	24	10	5.8	.4	4.2	1.1	35

DATE	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)
MAY 04...	0	.5	.9	.0	.01	.20	.18	.02	.17	.040	.020	40
JUNE 23...	0	3.0	1.4	.0	.31	.32	.31	.01	.00	.040	.030	10
JULY 21...	0	.0	.2	.2	.24	.33	.31	.02	.07	.040	.020	10
SEP. 22...	0	.0	.5	.2	.09	.29	.23	.06	.14	.040	.030	20

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)	ALKA- LINITY AS CaCO <sub>3</sub> (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
MAY 04...	40	.05	.28	15	0	19	27	.3	33	7.4	.3	420
JUNE 23...	49	.07	.19	17	0	21	29	.4	43	7.3	.3	56
JULY 21...	51	.07	.10	15	0	28	34	.4	46	8.2	.2	2000
SEP. 22...	54	.07	.03	16	0	29	34	.5	55	7.8	.6	4100

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
MAY 03...	1300	3.5	2.7	24	.17
JULY 21...	0800	13.5	.69	3	.01
SEP. 22...	0820	8.5	.19	2	.00

## TULARE LAKE BASIN

11208680 SQUIRREL CREEK BELOW MINERAL KING HIGHWAY, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°26'36", long 118°46'00", in SE<sup>1</sup>SE<sup>1</sup> sec.13, T.17 S., R.29 E., Tulare County, at gaging station on right bank, 300 ft upstream from old Mineral King Road, at Sequoia National Park boundary, and 5.4 miles east of Hammond.

DRAINAGE AREA.--5.80 sq mi.

PERIOD OF RECORD: Chemical analyses: July 1968 to September 1971 (discontinued).

Sediment records: Water years 1968-71 (partial-record station (discontinued).)

REMARKS.--Field determinations made and samples for chemical and sediment analysis collected by U.S. Forest Service since July 1, 1971.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	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 (HC03) (MG/L)
MAY 04...	1230	3.6	7.5	10.8	103	26	70	5.6	1.2	5.1	1.5	32
JUNE 23...	0740	1.9	14.0	9.2	101	28	160	5.9	1.4	5.1	1.7	20
JULY 21...	0930	.90	19.0	8.4	102	30	80	6.8	1.3	6.5	1.8	48
SEP. 22...	0950	.08	14.0	9.3	102	34	120	8.1	1.3	8.4	1.9	56

DATE	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRI- L PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)
MAY 04...	0	.0	1.5	.0	.15	.26	.22	.04	.07	.050	.030	10
JUNE 23...	0	3.5	2.1	.0	.26	.30	.26	.04	.00	.050	.030	40
JULY 21...	0	.3	.9	.3	.89	1.0	1.0	.03	.11	.060	.030	20
SEP. 22...	0	.3	1.5	.4	.01	.21	.18	.03	.17	.060	.040	20

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (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)	ALKA- LINITY AS CAC03 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
MAY 04...	57	.08	.55	19	0	26	35	.5	58	7.5	.6	7100
JUNE 23...	58	.08	.30	20	4	16	33	.5	44	7.3	.4	1400
JULY 21...	72	.10	.17	22	0	39	36	.6	71	8.0	.8	6200
SEP. 22...	84	.11	.02	26	0	46	40	.7	93	7.9	.7	15000

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
MAY 03...	1415	6.5	4.3	12	.14
JUNE 23...	0800	14.0	1.9	8	.04
24...	1740	14.0	1.9	5	.03
JULY 21...	0930	19.0	.90	2	.00
SEP. 22...	0950	14.0	.08	3	.00

11208715 CRUNIGEN CREEK BELOW MINERAL KING HIGHWAY, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°26'55", long 118°16'18", in SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.13, T.17 S., R.29 E., Tulare County, at gaging station on right bank, 100 ft upstream from old Mineral King Road, and 5.0 miles east of Hammond.

DRAINAGE AREA.--1.58 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1971 (discontinued).  
Sediment records: Water years 1969-71 (partial-record station (discontinued).)

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	DIS- SOLVED SILICA (SIO <sub>2</sub> ) (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 <sub>3</sub> ) (MG/L)
MAY 04...	1100	.36	9.0	10.5	103	36	30	24	3.3	9.3	1.5	103
JUNE 22...	1800	.03	20.5	8.0	100	44	60	26	3.6	11	1.9	126

DATE	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAY 04...	0	3.0	2.7	.1	.40	.28	.12	.19	.080	.020	20	131
JUNE 22...	0	3.5	3.6	.0	.40	.30	.10	.00	.10	.060	10	156

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)	ALKA- LINITY AS CACO <sub>3</sub> (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
MAY 04...	.18	.13	73	0	84	21	.5	176	8.4	.3	11000
JUNE 22...	.21	.01	80	0	103	23	.5	204	7.4	.2	950

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
MAY 03...	1515	7.0	.45	83	.10
JUNE 23...	0730	14.0	.03	184	.01

## TULARE LAKE BASIN

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.

LOCATION.--Lat 36°27'05", long 118°47'15", in NW $\frac{1}{4}$  sec.14, T.17 S., R.29 E., Tulare County, at gaging station on left bank just downstream from diversion dam, and 6.6 miles east of Three Rivers.

DRAINAGE AREA.--85.8 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1971 (discontinued).

Water temperatures: June 1968 to September 1971.

Sediment records: Water years 1968-71 (partial-record station (discontinued).)

EXTREMES.--1970-71:

Water temperatures: Maximum, 21.0°C July 30, 31, Aug. 2-4; minimum, 0.5°C Jan. 7-9.

Period of record:

Water temperatures: Maximum, 21.5°C Aug. 3, 4, 1968; minimum, 0.5°C in 1968, 1970-71.

REMARKS.--Field determinations made and samples for chemical and sediment analysis collected by U.S. Forest Service since July 1, 1971. Records of water temperatures furnished by Southern California Edison Company. Recorder malfunction Oct. 31 to Nov. 2. Discharge reported is combined flow of East Fork Kaweah River and East Fork Kaweah River No. 1 conduit near Three Rivers, Calif.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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)
NOV.										
02...	1530	15	9.0	10.9	103	16	10	17	1.1	5.0
DEC.										
14...	0830	30	3.0	12.7	103	17	20	10	1.1	4.4
FEB.										
02...	1720	53	4.0	--	--	16	10	11	--	4.1
MAR.										
17...	0925	57	4.0	12.0	101	18	30	11	1.0	4.5
MAY										
04...	0900	154	5.5	11.9	104	13	30	8.9	1.0	2.5
JUNE										
22...	1550	300	16.0	9.6	107	7.8	60	6.1	.4	4.3
JULY										
21...	1115	65	18.5	8.5	99	11	10	11	.7	2.4
SEP.										
22...	1125	15	15.5	9.3	102	14	10	17	.8	4.5

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)
NOV.										
02...	1.2	62	0	4.0	1.8	.2	.06	--	.06	--
DEC.										
14...	1.0	44	0	3.0	1.2	.2	.09	--	.10	--
FEB.										
02...	.9	40	0	3.0	1.0	.2	.10	--	.22	--
MAR.										
17...	1.4	40	0	3.5	1.3	.0	.20	.25	.25	.00
MAY										
04...	.7	36	0	2.0	1.2	.0	.23	.44	.36	.08
JUNE										
22...	.5	27	0	2.5	2.5	.0	.16	.21	.16	.05
JULY										
21...	.7	44	0	3.0	.4	.2	.21	.33	.29	.04
SEP.										
22...	1.2	67	0	3.5	1.4	.4	.02	.18	.12	.06

DATE	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)
NOV.									
02...	.00	.00	.020	.020	0	77	.10	3.12	47
DEC.									
14...	.01	.02	.040	.040	190	60	.08	4.86	30
FEB.									
02...	.12	.00	.010	.000	130	56	.08	8.01	28
MAR.									
17...	.05	--	.020	.010	130	61	.08	9.39	32
MAY									
04...	.13	--	.020	.000	10	48	.07	20.0	26
JUNE									
22...	.00	--	.030	.000	10	38	.05	30.8	17
JULY									
21...	.08	--	.030	.000	0	51	.07	8.95	30
SEP.									
22...	.10	--	.040	.030	30	76	.10	3.08	46

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CaCO <sub>3</sub> (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	DELAYED COLIFORMS (COLONIES PER 100 ML)	IMMEDIATE COLIFORMS (COLONIES PER 100 ML)
NOV. 02...	0	51	18	.3	117	7.6	.2	188	--
DEC. 14...	0	36	24	.4	90	7.4	.6	96	--
FEB. 02...	0	33	24	.3	79	7.4	.8	--	--
MAR. 17...	0	33	23	.3	76	7.3	.2	--	58
MAY 04...	0	30	17	.2	60	7.3	.4	--	1300
JUNE 22...	0	22	35	.5	--	7.8	.3	--	44
JULY 21...	0	36	14	.2	70	8.0	.3	--	2200
SEP. 22...	0	55	17	.3	119	7.7	.2	--	1600

DATE	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)
DEC. 14...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTACHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
DEC. 14...	.00	.00	.00	.00	.00	.00	.00	.00

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV. 02...	1605	9.0	16	0	.00
DEC. 14...	0930	3.0	30	0	.00
18...	1100	1.5	30	2	.16
FEB. 02...	1720	4.0	53	2	.29
MAR. 17...	1030	4.0	57	2	.31
MAY 03...	1100	7.0	170	2	.92
JUNE 22...	1710	16.0	300	9	7.3
JULY 21...	1200	18.5	65	5	.88
SEP. 22...	1130	14.5	15	3	.12

## TULARE LAKE BASIN

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	13.5	--	--	4.5	4.0	3.0	3.0	4.5	4.5	1.5	1.5
2	14.0	13.5	--	--	4.5	4.0	3.0	2.0	4.5	4.0	1.5	1.0
3	13.5	13.5	8.5	8.0	4.5	3.5	2.0	1.0	4.0	4.0	3.0	1.5
4	14.0	13.5	8.5	8.5	4.0	3.5	1.0	1.0	4.0	2.0	3.5	3.0
5	14.0	14.0	10.0	8.5	4.0	4.0	1.0	1.0	3.0	2.0	3.5	3.5
6	14.5	14.0	10.0	10.0	4.0	4.0	1.0	1.0	3.5	3.0	3.5	2.0
7	14.0	13.0	10.0	9.5	5.5	4.0	1.0	0.5	3.5	3.0	4.0	3.0
8	13.0	11.5	9.5	8.5	5.5	5.5	0.5	0.5	4.0	3.5	4.5	4.0
9	11.5	11.0	8.5	8.5	6.0	6.0	1.0	0.5	4.0	4.0	5.0	4.0
10	11.0	11.0	8.5	8.5	6.0	5.0	1.0	1.0	4.5	4.0	5.5	5.0
11	11.5	11.0	8.5	8.5	5.0	4.0	1.5	1.0	5.0	4.5	6.0	5.0
12	11.5	11.5	9.0	8.5	4.0	4.0	1.5	1.5	6.0	5.0	6.0	5.5
13	12.0	11.5	9.0	8.5	4.0	3.5	1.5	1.5	6.0	6.0	6.0	4.5
14	12.0	11.5	8.5	7.0	3.5	3.0	1.5	1.0	6.5	6.0	5.0	3.5
15	12.0	11.5	7.0	7.0	3.5	3.0	1.5	1.5	7.0	6.0	6.0	4.5
16	12.0	11.5	7.0	6.5	4.5	3.0	3.0	1.5	7.0	5.5	6.0	5.0
17	12.0	11.5	6.5	6.0	4.5	3.0	3.5	3.0	5.5	5.0	6.0	4.0
18	11.5	11.0	6.0	5.5	3.0	1.5	4.0	3.0	5.0	5.0	7.0	5.5
19	11.5	11.0	5.5	5.5	3.0	2.0	5.0	4.0	5.0	4.0	7.0	5.5
20	11.0	10.5	5.5	5.5	3.0	3.0	5.0	5.0	4.0	1.5	7.0	5.5
21	10.5	10.5	5.5	5.5	3.0	3.0	5.0	5.0	3.0	1.5	8.0	6.0
22	10.5	10.5	5.5	5.0	3.0	2.0	5.0	4.5	3.5	3.0	8.5	6.5
23	10.5	10.5	5.0	5.0	2.0	1.5	4.5	3.5	3.5	3.5	8.5	7.0
24	10.5	10.5	5.0	5.0	1.5	1.5	3.5	3.0	3.5	3.0	8.5	6.5
25	10.5	10.0	7.0	5.0	1.5	1.5	3.5	3.0	3.5	3.5	8.5	7.0
26	10.0	9.0	7.0	6.5	3.0	1.5	4.0	3.0	3.5	1.5	9.0	8.0
27	9.0	8.5	6.5	5.5	3.0	3.0	4.5	4.0	1.5	1.0	9.0	7.0
28	8.5	8.0	5.5	5.0	3.0	3.0	4.5	4.0	1.5	1.0	9.0	6.5
29	8.0	7.0	6.0	5.0	3.0	2.0	4.5	4.0	--	--	9.5	7.0
30	7.0	7.0	5.5	4.5	2.0	2.0	4.5	4.0	--	--	9.5	6.5
31	--	--	--	--	3.0	2.0	4.5	4.5	--	--	9.0	6.5
AVE	11.5	11.1	7.3	6.8	3.7	3.1	2.9	2.5	4.3	3.6	6.3	4.9

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	5.5	11.0	8.5	10.0	6.0	16.0	13.5	20.5	18.5	19.0	17.0
2	8.5	6.0	10.5	8.5	10.0	6.5	16.0	14.0	21.0	19.5	18.5	16.5
3	9.0	6.5	9.5	7.0	11.0	8.5	16.0	13.5	21.0	19.5	18.5	17.0
4	9.0	6.5	7.0	5.5	12.0	9.5	16.5	14.0	21.0	19.0	18.0	17.0
5	9.5	7.0	9.0	7.0	12.0	9.0	16.5	14.5	20.0	19.0	18.0	17.0
6	9.0	7.0	9.0	8.0	12.0	10.0	16.5	14.0	20.5	19.0	18.0	17.0
7	8.0	6.5	8.0	8.0	13.5	10.0	16.5	14.5	20.5	19.0	17.0	16.5
8	8.5	6.0	8.0	6.5	14.0	10.0	16.5	14.5	20.5	19.0	17.0	16.5
9	9.5	7.0	9.5	6.5	13.5	10.0	16.5	14.5	20.5	19.5	18.5	17.0
10	9.5	6.5	11.5	8.5	12.0	10.0	16.5	15.0	20.5	19.5	19.0	18.5
11	9.5	7.0	11.5	9.5	14.0	9.5	16.5	14.5	20.5	19.5	19.0	19.0
12	10.0	7.0	12.0	9.5	15.0	10.5	17.0	14.5	20.5	19.5	19.5	18.5
13	10.0	7.0	12.0	9.5	14.5	10.5	18.5	15.5	20.5	20.0	19.0	19.0
14	9.0	8.0	13.0	9.5	15.0	10.5	19.0	16.5	20.5	19.0	19.0	18.5
15	10.0	7.0	13.5	9.0	15.5	10.5	19.5	17.0	20.0	19.0	19.5	19.0
16	10.5	8.0	13.0	9.0	15.5	11.0	19.5	17.0	20.0	19.0	19.5	19.0
17	10.5	4.5	10.5	6.5	15.5	11.5	19.0	18.0	20.0	18.5	19.5	18.5
18	5.0	3.5	10.0	6.5	15.0	11.5	20.0	17.0	19.5	18.5	18.5	17.0
19	6.0	4.5	10.5	7.0	14.5	10.5	20.0	18.0	19.5	18.0	18.0	16.0
20	6.0	5.5	11.5	8.0	16.0	11.5	20.0	18.0	19.5	18.5	16.5	15.5
21	5.5	4.5	11.0	6.0	16.5	13.0	20.5	18.5	19.5	18.0	16.0	15.5
22	5.5	3.5	9.5	5.5	16.0	13.0	20.5	19.0	19.0	18.5	15.5	14.5
23	7.0	5.0	11.5	7.0	16.0	13.0	20.5	18.5	19.0	18.5	15.5	15.0
24	7.0	5.0	13.0	9.0	16.0	12.0	20.0	18.0	19.0	19.0	15.5	15.0
25	5.0	3.5	13.0	9.0	16.0	13.0	19.5	17.0	19.5	19.0	15.5	14.5
26	6.0	4.0	12.0	9.0	16.0	13.0	20.0	18.0	19.5	19.5	14.5	13.5
27	9.0	5.5	9.5	6.0	16.0	14.5	20.5	18.0	20.0	19.5	13.5	13.0
28	9.5	7.0	8.5	6.0	15.5	13.5	20.5	19.0	19.5	19.5	13.0	12.0
29	10.5	8.0	8.5	6.5	14.5	11.5	20.5	19.0	19.5	19.0	12.0	11.5
30	11.0	8.5	10.5	8.5	15.5	13.0	21.0	19.5	19.5	18.5	12.0	11.5
31	--	--	10.5	8.0	--	--	21.0	19.0	19.0	18.0	--	--
AVE	8.4	6.0	10.6	7.7	14.3	10.9	18.6	16.5	20.0	19.0	17.1	16.2



## 11209900 KAWEAH RIVER AT THREE RIVERS, CALIF.

LOCATION.--Lat 36°26'38", long 118°54'09", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.13, T17 S., R.28 E., Tulare County, temperature recorder at gaging station on right bank, opposite schoolhouse in Three Rivers, and 0.2 mile downstream from North Fork Kaweah River.

DRAINAGE AREA.--418 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1963 to July 1966.

Water temperatures.--October 1965 to December 1966, January 1968 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 28.5°C Aug. 3; minimum, 0.5°C Jan. 7.

Period of record:

Water temperatures: Maximum, 28.5°C Aug. 18, 1966, Aug. 3, 1971; minimum, 0.5°C Jan. 7, 1971.

REMARKS.--Clock stopped Oct. 1-12, Mar. 15 to Apr. 2; range in temperature, 14.0°C to 21.0°C and 6.0°C to 14.0°C, respectively. Recorder vandalized sometime during period Dec. 30 to Jan. 4.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	17.0	12.0	9.0	6.0	--	--	9.0	6.0	7.5	3.5
2	--	--	17.0	12.5	9.5	8.0	--	--	6.5	4.5	7.5	2.0
3	--	--	16.5	12.5	8.0	5.5	--	--	7.5	5.5	8.5	2.5
4	--	--	15.5	14.5	9.0	5.5	--	--	7.5	3.5	9.0	4.0
5	--	--	18.0	15.0	9.5	5.5	4.0	1.0	7.0	3.5	9.0	4.5
6	--	--	16.5	15.5	9.5	5.5	4.0	1.0	7.0	4.0	10.0	3.5
7	--	--	17.5	14.5	9.5	7.5	4.5	0.5	8.5	4.0	11.0	4.5
8	--	--	17.5	13.0	11.0	7.5	4.0	1.0	9.0	4.5	11.5	5.5
9	--	--	16.0	13.0	11.0	9.0	5.5	1.5	9.5	5.5	12.0	6.0
10	--	--	16.5	12.0	10.5	8.0	6.0	2.0	10.0	5.0	11.0	7.0
11	--	--	16.0	12.0	8.5	6.5	5.5	2.5	10.5	6.0	12.5	7.0
12	--	--	17.5	14.0	7.5	6.0	7.0	4.5	12.0	6.5	11.0	7.5
13	20.0	15.0	16.0	12.0	7.5	4.5	5.5	3.0	12.0	7.0	10.5	8.0
14	20.0	15.5	15.0	11.0	6.5	5.5	6.5	3.0	12.0	7.0	10.5	5.0
15	20.0	15.5	15.0	10.5	8.5	5.5	6.0	3.0	11.0	8.5	--	--
16	20.0	15.5	14.0	9.5	8.0	6.0	7.5	3.0	9.0	7.5	--	--
17	20.0	14.5	13.0	9.0	7.5	5.0	9.0	5.0	10.0	6.5	--	--
18	18.0	15.0	12.5	8.5	5.0	3.5	9.0	5.5	9.0	6.0	--	--
19	19.5	14.5	13.0	8.5	8.0	4.5	9.5	6.0	7.0	5.5	--	--
20	17.5	14.0	12.5	8.0	7.0	5.0	8.5	8.0	8.0	3.5	--	--
21	17.5	14.5	12.5	8.0	6.5	5.5	8.5	7.5	8.0	3.0	--	--
22	19.5	15.5	12.5	8.5	7.5	5.0	9.0	7.0	9.0	4.5	--	--
23	18.5	14.5	12.5	8.5	7.0	3.5	9.0	6.5	8.5	5.5	--	--
24	17.5	15.0	12.5	8.5	6.0	3.0	8.5	5.5	10.0	5.0	--	--
25	18.5	13.5	11.0	10.0	6.0	3.5	8.5	4.5	8.0	5.5	--	--
26	17.5	12.5	10.0	9.5	6.5	3.5	8.5	4.5	8.0	3.0	--	--
27	17.0	12.0	11.0	9.0	7.0	5.5	9.5	5.0	5.5	3.0	--	--
28	17.5	11.5	10.0	8.0	8.0	4.5	9.0	5.5	7.5	3.0	--	--
29	17.5	11.5	9.5	9.0	7.5	4.0	8.5	5.5	--	--	--	--
30	15.5	12.0	9.5	7.0	--	--	8.5	5.5	--	--	--	--
31	17.0	12.0	--	--	--	--	8.0	5.5	--	--	--	--
AVE	--	--	14.1	10.8	8.0	5.4	7.3	4.2	8.8	5.1	--	--
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	16.0	11.0	14.0	9.0	20.5	17.5	27.0	21.0	25.5	19.5
2	--	--	14.5	10.5	13.5	10.0	21.0	17.5	28.0	21.5	25.5	19.0
3	14.0	8.5	11.5	9.0	15.5	10.5	21.5	17.5	28.5	23.0	25.5	19.5
4	14.5	9.0	10.0	8.5	16.5	12.0	22.0	17.5	26.5	22.0	25.5	19.0
5	14.5	9.5	11.0	8.5	16.5	12.5	22.5	18.0	27.5	22.0	25.0	19.0
6	11.5	9.5	11.5	9.5	16.5	13.0	23.0	18.0	27.5	22.0	22.0	19.5
7	11.0	8.0	10.0	9.0	18.0	13.5	23.5	18.0	27.5	21.5	24.5	18.5
8	11.5	7.0	10.5	7.5	17.5	14.0	23.5	18.0	27.5	21.5	25.0	18.0
9	13.0	8.0	12.0	8.0	15.5	14.0	23.5	18.0	27.5	21.5	27.0	20.0
10	14.0	9.0	15.5	9.5	14.0	13.0	23.5	18.5	27.0	22.0	27.0	21.0
11	14.5	9.5	16.5	11.5	15.5	12.5	23.0	17.5	28.0	22.0	27.0	21.0
12	14.0	9.0	17.0	12.0	17.0	14.5	23.5	18.0	28.0	22.0	27.0	20.5
13	11.5	9.5	16.5	12.5	16.0	14.5	24.5	18.5	28.0	22.5	26.5	21.0
14	11.0	9.0	16.0	12.0	17.0	14.5	25.5	19.0	27.5	22.0	28.0	21.0
15	14.0	8.0	16.5	12.0	17.5	15.0	24.5	20.0	27.0	21.5	28.0	21.5
16	15.0	10.0	14.0	11.5	18.0	16.0	25.5	20.0	27.0	21.0	27.5	21.0
17	11.5	6.0	13.5	9.5	18.5	16.5	23.0	20.5	27.0	20.5	26.0	20.5
18	8.5	5.0	14.0	9.5	18.0	16.0	25.0	19.5	27.0	20.5	25.0	19.5
19	10.0	5.0	13.5	9.5	18.0	15.5	26.5	20.5	27.0	20.0	24.0	18.0
20	8.0	7.0	15.0	10.5	18.5	16.0	26.0	21.0	26.5	20.5	24.0	17.5
21	9.0	6.0	12.5	8.0	19.5	17.0	26.5	21.5	26.5	20.0	23.0	17.0
22	11.0	4.5	13.0	7.0	20.0	17.5	26.5	22.0	26.0	20.0	23.0	17.0
23	11.5	6.0	15.0	10.0	20.0	17.5	26.5	22.0	26.0	20.0	23.5	17.5
24	10.0	7.0	17.0	12.0	20.0	17.5	26.0	21.0	24.5	21.5	22.5	17.0
25	10.5	5.0	16.5	12.5	20.0	17.5	25.5	19.5	27.0	20.5	20.5	18.0
26	12.5	5.5	14.0	11.5	20.5	17.5	26.0	20.0	27.0	21.5	21.0	16.0
27	14.0	6.5	11.5	8.5	20.5	18.0	26.5	20.0	27.0	21.5	20.0	15.5
28	14.5	9.0	11.5	8.0	19.5	17.5	27.0	21.0	25.5	21.5	20.0	14.5
29	16.0	9.0	11.5	9.0	19.0	16.5	26.5	21.5	26.0	20.5	20.0	14.0
30	16.5	10.5	14.5	10.0	20.0	16.5	27.0	22.0	25.5	20.0	19.0	16.0
31	--	--	13.0	10.5	--	--	27.0	21.5	25.5	19.5	--	--
AVE	12.4	7.7	13.7	10.0	17.7	14.8	24.6	19.5	26.9	21.2	24.3	18.6

## TULARE LAKE BASIN

11210950 KAWEAH RIVER BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'51", long 119°00'42", in SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.26, T.17 S., R.27 E., Tulare County, at gaging station 0.6 mile downstream from Terminus Dam, and 2.2 miles northeast of Lemnecove.

DRAINAGE AREA.--561 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1961 to September 1969, water years 1970-71 (partial-record station).  
Water temperatures: November 1970 to September 1971.

EXTREMES.--November 1970 to September 1971:  
Water temperatures: Maximum, 27.5°C Sept. 14, 15; minimum, 5.0°C Jan. 9, 10.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)
MAR. 01...	1130	240	8.0	12.0	13	1.3	4.3	1.2	52	0
APR. 28...	1450	83	11.0	12.3	--	--	--	--	--	--
JULY 01...	1015	1770	15.5	11.5	6.5	.1	2.2	.9	23	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)
MAR. 01...	2.6	3.5	.0	0	74	.10	48.0	38	0	43
APR. 28...	--	--	--	--	--	--	--	--	--	--
JULY 01...	1.5	.0	.0	0	37	.05	177	17	0	19

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
MAR. 01...	19	.3	100	7.8	--	--	--	--	--	--
APR. 28...	--	--	60	7.5	0	0	0	0	.0	0
JULY 01...	21	.2	45	7.5	--	--	--	--	--	--

## 11210950 KAWEAH RIVER BELOW TERMINUS DAM, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	11.5	10.5	8.0	7.5	8.5	8.0	10.0	8.5
2	--	--	--	--	11.0	10.5	7.5	7.5	8.5	8.0	10.0	8.5
3	--	--	--	--	11.0	10.0	8.0	7.0	8.5	8.0	10.0	8.5
4	--	--	--	--	10.5	10.0	7.5	7.0	8.5	8.0	10.0	8.5
5	--	--	--	--	10.5	10.0	7.5	6.0	8.5	8.0	9.5	8.5
6	--	--	--	--	10.5	10.0	7.0	5.5	8.5	7.5	10.0	8.5
7	--	--	--	--	11.0	9.5	7.0	5.5	9.0	7.5	10.5	8.5
8	--	--	--	--	11.0	9.5	6.0	5.5	8.5	7.5	10.5	8.5
9	--	--	--	--	10.5	10.0	6.5	5.0	9.0	8.0	10.5	9.0
10	--	--	--	--	10.5	10.0	6.5	5.0	9.0	8.0	10.5	9.0
11	--	--	16.5	13.5	10.5	10.0	6.0	5.5	9.0	8.0	11.0	9.5
12	--	--	17.0	14.5	10.0	9.5	6.5	5.5	9.5	8.0	11.0	10.0
13	--	--	17.0	13.0	10.0	9.5	6.0	5.5	9.5	8.5	11.0	10.0
14	--	--	17.0	13.0	9.5	9.5	6.5	5.5	10.0	8.5	11.5	10.0
15	--	--	16.5	12.5	10.5	9.5	6.5	6.0	10.0	9.0	11.5	10.0
16	--	--	16.0	12.0	10.0	9.5	6.5	6.0	10.0	9.0	11.5	10.0
17	--	--	15.5	13.0	9.5	9.0	7.0	6.0	10.0	9.5	11.0	10.5
18	--	--	15.0	12.5	9.0	9.0	7.0	6.5	10.0	9.5	11.5	10.5
19	--	--	15.0	12.5	9.0	8.5	7.0	7.0	10.0	9.5	12.0	11.0
20	--	--	15.0	12.5	8.5	8.5	7.5	7.0	10.0	9.0	12.0	11.0
21	--	--	15.0	11.0	8.5	8.0	7.5	7.5	10.0	9.0	12.0	11.0
22	--	--	14.5	11.0	8.5	8.0	7.5	7.5	10.0	9.0	12.0	11.0
23	--	--	14.5	11.0	9.0	8.0	8.5	7.5	9.5	9.0	12.0	11.0
24	--	--	14.0	11.0	8.5	7.5	8.5	8.0	10.0	8.5	12.0	11.5
25	--	--	13.0	12.0	8.0	7.5	9.0	8.0	10.0	9.0	12.0	11.5
26	--	--	12.5	11.5	8.0	7.5	8.5	8.0	10.0	9.0	12.5	11.5
27	--	--	12.5	11.0	8.0	7.5	8.5	8.0	9.5	9.0	12.5	12.0
28	--	--	12.5	10.5	8.5	7.5	8.5	8.0	9.5	8.5	13.0	12.0
29	--	--	12.0	11.0	8.5	7.5	8.5	8.0	--	--	13.0	12.0
30	--	--	11.5	10.5	8.0	7.5	8.5	8.0	--	--	13.5	12.0
31	--	--	--	--	8.0	7.5	8.5	8.0	--	--	13.0	12.0
AVE	--	--	--	--	9.5	8.9	7.4	6.7	9.4	8.5	11.4	10.2
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	12.0	13.5	11.0	13.5	12.0	15.5	15.0	24.0	23.0	26.5	25.0
2	13.0	12.0	13.5	11.0	14.0	12.0	15.5	15.0	24.0	23.5	26.5	25.0
3	13.5	12.0	12.0	11.5	14.0	12.5	16.0	15.0	24.5	23.5	26.5	25.0
4	13.5	12.0	12.0	11.5	14.5	12.5	16.0	15.5	24.5	24.0	26.0	24.5
5	14.5	12.0	12.5	11.5	14.5	12.5	16.5	15.5	24.5	24.0	26.0	24.5
6	13.0	12.0	15.0	11.5	14.0	12.5	16.5	16.0	25.0	24.5	25.0	24.5
7	13.5	12.0	13.5	11.5	14.0	12.5	17.0	16.0	25.0	24.5	26.0	24.5
8	14.0	12.0	15.0	10.5	13.5	12.5	17.0	16.5	25.5	25.0	26.0	24.0
9	14.0	12.0	13.0	11.5	13.5	12.5	17.0	16.5	26.0	25.0	25.5	24.0
10	14.0	12.0	13.5	11.5	13.5	12.5	17.5	17.0	26.0	25.0	26.0	24.0
11	14.5	12.0	13.5	11.5	13.5	12.5	18.0	17.0	26.0	25.5	26.0	24.0
12	14.5	12.0	13.5	11.5	13.5	12.5	18.0	17.5	26.5	25.5	26.0	23.5
13	13.0	12.0	13.5	11.5	13.5	12.5	18.5	17.5	26.5	26.0	25.5	24.0
14	13.0	12.0	13.0	11.5	13.5	12.5	18.5	18.0	26.5	26.0	27.5	24.0
15	14.5	12.0	13.0	11.5	13.5	13.0	19.0	18.5	26.5	26.0	27.5	23.0
16	14.5	12.0	13.0	11.5	14.0	13.0	19.0	18.5	27.0	26.0	27.0	23.0
17	12.5	12.0	13.0	11.5	14.0	13.0	19.5	19.0	27.0	26.5	27.0	22.5
18	13.5	11.5	13.0	11.5	14.0	13.0	20.0	19.5	27.0	26.5	26.0	22.5
19	13.5	11.0	13.0	12.0	14.0	13.0	20.0	20.0	27.0	26.5	26.0	21.5
20	12.0	11.0	13.5	12.0	14.0	13.0	20.5	20.0	27.0	26.5	25.5	21.5
21	12.5	11.0	13.0	12.0	14.0	13.5	21.0	20.0	27.0	26.5	25.5	21.5
22	13.5	10.5	13.0	12.0	14.5	13.5	21.5	20.5	27.0	26.0	25.5	21.0
23	13.5	11.0	13.5	12.0	14.5	13.5	21.5	21.0	27.0	26.0	25.5	21.0
24	12.5	11.0	13.5	12.0	14.5	14.0	22.0	21.0	26.5	26.0	25.0	20.5
25	13.5	10.5	13.5	12.0	14.5	14.0	22.0	21.5	27.0	26.0	23.0	21.0
26	13.5	11.0	12.5	12.0	14.5	14.0	22.5	22.0	27.0	26.0	24.0	20.5
27	13.5	11.0	12.5	12.0	15.0	14.0	22.5	22.0	27.0	25.5	24.0	20.0
28	14.0	11.0	13.0	12.0	15.0	14.0	23.0	22.5	26.5	25.5	23.5	19.0
29	13.5	11.0	13.0	12.0	15.0	14.5	23.0	22.5	27.0	25.5	23.5	19.0
30	13.5	11.0	13.5	12.0	15.5	14.5	23.5	23.0	27.0	25.5	22.5	20.0
31	--	--	13.5	12.0	--	--	23.5	23.0	27.0	25.5	--	--
AVE	13.5	11.5	13.2	11.6	14.1	13.1	19.4	18.8	26.2	25.4	25.5	22.6

## TULARE LAKE BASIN

11213500 KINGS RIVER ABOVE NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°51'48", long 119°07'24", in NE $\frac{1}{4}$  sec.27, T.12 S., R.26 E., Fresno County, temperature recorder at gaging station on right bank at Rogers Crossing, 0.9 mile upstream from North Fork, 2.9 miles south of Balch Camp, and 9.6 miles southeast of Trimmer.

DRAINAGE AREA.--952 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1955. Water temperatures: December 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 25.0°C Aug. 13; minimum, 1.0°C Jan. 5-7.

Period of record:

Water temperatures: Maximum (1967-71), 25.0°C Aug. 13, 1971; minimum, freezing point Dec. 14, 15, 1967.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	16.0	12.0	10.0	7.0	5.5	6.0	5.0	7.5	6.5	5.0	3.5
2	18.5	16.0	12.0	11.0	7.5	6.0	5.5	4.0	7.0	5.5	6.0	3.5
3	18.5	17.0	12.0	10.5	6.0	5.0	4.0	2.0	7.0	5.5	7.0	4.0
4	19.0	17.0	12.0	11.5	7.5	6.0	3.0	2.0	6.0	4.5	7.5	5.0
5	19.0	17.5	13.0	12.0	7.0	6.0	2.5	1.0	6.5	4.5	8.0	6.0
6	19.0	17.0	13.5	12.5	7.0	6.0	2.0	1.0	6.5	5.0	8.0	5.5
7	17.0	14.5	13.5	12.0	8.5	6.5	2.5	1.0	7.0	5.0	8.5	6.0
8	16.0	14.0	12.5	11.0	9.0	8.0	2.5	1.5	7.5	5.0	9.5	7.0
9	16.0	14.0	11.5	11.0	9.0	8.5	4.0	2.0	7.5	5.5	10.0	7.0
10	16.5	14.0	12.5	10.5	8.5	6.5	4.0	2.5	8.0	5.5	10.5	8.5
11	17.0	14.5	12.5	10.5	7.0	5.5	5.0	3.0	8.5	6.0	11.0	8.5
12	17.0	15.0	13.0	11.5	7.0	5.5	5.0	4.5	9.0	7.0	10.5	9.5
13	17.0	15.0	11.5	10.0	6.0	5.0	5.0	3.5	9.0	7.5	10.0	8.0
14	17.0	15.0	11.0	9.0	6.0	5.0	5.0	3.0	9.0	7.0	9.5	7.0
15	17.0	15.0	10.0	9.0	6.0	5.5	4.5	3.0	10.0	8.0	11.0	7.5
16	17.0	15.0	9.5	7.5	6.5	5.5	6.0	4.0	8.5	7.5	11.5	8.5
17	16.5	14.5	9.0	7.5	6.5	5.0	7.0	5.5	8.0	7.0	11.5	9.0
18	15.0	14.0	8.5	7.5	5.0	4.0	7.0	6.0	8.5	7.0	11.5	8.5
19	16.0	13.5	8.5	7.5	6.0	4.5	8.0	7.0	7.5	5.5	12.0	9.0
20	14.5	14.0	8.5	7.0	6.0	5.0	8.5	7.5	6.0	4.5	12.0	9.0
21	15.0	13.5	8.5	7.0	6.0	5.5	7.5	6.5	6.5	4.0	12.0	9.5
22	16.0	14.0	9.0	7.5	5.5	4.0	7.0	5.0	7.5	5.0	12.0	9.5
23	15.0	13.5	8.5	7.5	4.0	3.0	6.0	4.5	7.5	5.5	11.0	10.0
24	15.5	13.5	8.5	7.5	4.0	3.0	6.0	4.5	8.0	6.0	12.0	9.0
25	14.5	12.5	9.5	8.0	4.0	2.5	6.0	4.5	7.0	5.5	11.0	10.0
26	13.5	11.5	9.5	8.5	5.0	3.0	6.5	4.5	6.5	4.0	11.0	10.0
27	13.0	11.0	8.5	7.5	5.5	5.0	7.0	5.0	5.0	4.0	11.0	9.5
28	12.0	10.5	8.0	7.0	5.0	4.0	7.0	5.5	4.5	3.0	12.0	9.5
29	12.0	10.0	8.0	7.0	5.0	4.0	7.0	5.5	--	--	12.5	10.0
30	11.5	10.0	7.0	5.5	5.0	3.5	7.5	5.5	--	--	12.5	10.0
31	12.0	10.5	--	--	5.5	4.0	7.0	5.5	--	--	11.5	9.5
AVE	15.9	14.0	10.4	9.1	6.2	5.0	5.5	4.0	7.4	5.6	10.3	8.0
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	8.5	13.0	11.5	12.5	10.0	17.5	15.5	23.5	20.5	22.5	19.5
2	11.5	9.0	11.5	10.5	13.0	11.0	17.5	16.5	23.5	21.0	22.5	19.5
3	11.5	9.5	10.5	9.0	13.0	11.5	18.0	16.0	23.0	21.0	23.0	19.5
4	12.0	10.0	10.0	9.0	14.5	12.5	18.0	16.5	23.0	20.5	22.5	19.5
5	11.5	10.0	11.0	10.0	14.5	12.5	18.5	16.5	23.5	20.5	22.0	19.5
6	11.0	9.5	11.0	10.0	14.5	13.0	18.5	16.0	24.0	20.5	21.5	20.0
7	10.0	9.0	10.0	9.0	15.0	13.0	18.5	16.5	23.5	20.5	21.5	18.5
8	11.0	8.5	10.5	9.0	15.0	13.0	18.5	16.5	24.0	20.0	21.5	18.0
9	11.5	9.5	12.0	9.5	14.5	12.5	18.5	16.5	24.5	21.0	22.5	19.5
10	11.5	9.0	13.5	11.0	14.0	12.5	19.0	16.5	23.5	21.0	23.0	20.0
11	12.0	10.0	13.5	12.0	15.0	12.5	19.5	17.0	24.5	21.5	23.0	20.5
12	12.0	9.5	14.0	12.0	15.5	13.5	20.0	17.5	24.5	21.5	23.0	20.0
13	11.0	9.5	13.5	11.5	15.0	13.0	20.5	18.0	25.0	22.0	23.5	21.0
14	10.0	9.0	14.0	12.0	15.5	13.0	21.0	18.5	24.0	21.0	23.5	20.5
15	12.0	9.0	14.0	11.5	16.0	13.5	21.0	19.0	23.5	20.5	24.0	21.0
16	12.5	10.5	12.5	11.5	16.0	13.5	20.5	19.0	23.5	20.0	24.0	21.0
17	11.0	6.0	12.0	10.0	16.0	14.0	20.5	18.5	23.5	20.0	23.0	20.5
18	7.0	5.5	11.5	10.0	15.5	14.0	21.5	18.0	23.0	20.0	22.0	20.0
19	8.5	7.0	12.0	10.0	15.0	13.5	21.5	19.0	23.5	20.0	21.0	18.5
20	9.0	8.0	12.5	10.5	16.5	14.0	21.0	18.5	23.5	20.0	20.5	18.0
21	9.0	7.0	12.0	8.0	17.0	15.0	21.5	18.5	23.0	20.0	20.0	17.5
22	10.0	7.0	11.0	7.5	17.0	15.5	22.0	19.0	22.5	20.0	20.0	17.5
23	11.5	8.5	12.5	10.5	17.0	15.5	21.5	19.0	23.5	20.0	20.5	17.5
24	10.0	7.0	14.0	11.0	16.5	15.0	22.0	19.0	22.5	21.0	20.0	17.5
25	8.0	7.0	14.0	12.0	17.0	15.5	22.0	19.0	24.0	21.0	18.5	16.5
26	9.5	7.0	13.5	12.0	17.0	15.5	22.5	19.5	24.5	21.5	18.0	15.5
27	12.0	8.0	12.5	9.0	18.0	16.0	23.0	20.0	24.0	21.5	17.5	15.0
28	13.0	10.0	11.0	8.5	17.0	15.5	23.5	21.0	23.5	21.0	17.0	14.0
29	14.0	11.0	12.0	10.0	16.0	14.5	23.5	20.5	23.5	20.5	16.5	14.0
30	13.5	11.5	13.5	12.0	17.0	15.0	24.0	21.0	23.5	20.5	17.0	15.0
31	--	--	12.5	11.0	--	--	23.5	21.0	23.0	20.0	--	--
AVE	10.9	8.7	12.3	10.4	15.5	13.6	20.6	18.2	23.6	20.6	21.2	18.5

11216500 NORTH FORK KINGS RIVER ABOVE DINKEY CREEK, AT BALCH CAMP, CALIF.

LOCATION.--Lat 36°54'12", long 119°07'14", in SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.10, T.12 S., R.26 E., Fresno County, temperature recorder at gaging station on left bank, 100 ft downstream from bridge at Balch Camp, 200 ft upstream from Dinkey Creek, and 9.3 miles east of Trimmer.

DRAINAGE AREA.--250 sq mi.

PERIOD OF RECORD.--Water temperatures: September 1967 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 23.0°C Sept. 12; minimum, 0.5°C Jan. 7.

Period of record:

Water temperatures: Maximum, 26.0°C June 22, 23, 25-27, 1968; minimum, freezing point Dec. 14-16, 21, 1967.

REMARKS.--Clock stopped Oct. 1-7, Mar. 23, 24, Apr. 9-26; range in temperature, 9.5°C to 15.0°C, 8.5°C to 12.0°C, and 6.0°C to 15.5°C, respectively.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	12.5	9.0	8.0	6.5	7.0	5.5	6.0	4.5	5.5	4.0
2	--	--	12.5	9.5	8.0	7.0	6.0	4.0	5.5	4.0	8.0	2.5
3	--	--	12.0	9.5	8.0	6.0	5.0	2.5	5.5	4.5	8.5	4.0
4	--	--	11.5	11.0	9.5	7.5	4.0	2.0	6.0	4.0	8.0	4.5
5	--	--	12.5	11.5	9.0	7.0	3.0	1.5	6.0	4.0	8.0	4.5
6	--	--	12.5	11.5	9.0	6.5	3.0	1.0	7.0	4.5	10.0	4.5
7	--	--	12.5	10.0	9.0	7.5	2.5	0.5	7.5	4.0	10.5	5.0
8	14.5	11.0	12.5	9.5	10.5	8.5	3.0	1.0	7.5	4.0	11.5	6.0
9	14.5	11.0	11.5	10.0	11.0	9.0	4.5	2.0	8.5	4.0	12.0	6.5
10	15.0	11.0	12.0	9.5	9.5	7.5	5.0	2.0	9.0	5.0	11.0	7.0
11	15.5	11.5	12.0	10.0	8.5	6.5	5.0	2.5	10.0	5.5	12.5	7.5
12	15.5	12.0	12.5	10.5	9.0	6.5	5.0	4.5	10.5	6.5	10.0	7.5
13	15.5	12.0	11.5	9.0	7.0	5.0	5.5	4.5	10.0	6.5	9.0	6.5
14	15.0	12.0	11.0	9.0	7.0	5.5	6.0	3.5	10.5	6.5	10.5	6.0
15	16.0	12.0	11.0	8.5	8.0	6.0	6.0	3.5	12.0	8.0	13.0	7.0
16	15.0	11.5	10.5	8.0	7.5	7.0	7.0	4.0	9.5	7.5	13.0	8.0
17	14.5	11.5	10.0	8.0	7.5	6.0	8.5	6.0	8.5	7.0	13.0	8.0
18	13.5	11.5	10.0	7.5	6.0	5.0	8.5	6.0	10.5	6.5	13.5	8.0
19	14.5	11.5	10.0	7.5	8.0	6.0	8.5	6.5	8.5	6.5	14.0	8.0
20	13.0	11.5	10.0	8.0	7.0	6.0	8.5	7.0	8.5	4.0	14.0	8.0
21	13.5	11.5	10.0	7.5	6.5	6.0	8.5	7.5	8.5	4.5	14.5	8.5
22	14.5	12.5	10.0	8.0	6.5	5.0	8.5	6.5	8.5	5.5	14.5	9.0
23	13.0	11.0	10.0	8.0	6.0	3.5	7.5	5.5	8.5	5.5	--	--
24	14.0	11.5	10.0	8.0	5.5	3.0	7.0	4.0	10.0	5.5	--	--
25	13.0	10.5	10.0	9.0	5.5	2.5	7.0	4.0	7.5	5.5	12.0	11.0
26	12.5	9.5	10.0	9.0	6.5	3.0	7.5	4.0	7.5	3.5	11.5	10.0
27	12.0	9.0	9.0	8.0	6.0	5.5	5.5	4.5	5.5	3.5	12.5	10.0
28	12.0	8.5	9.0	8.0	7.0	4.5	6.5	4.5	6.5	3.0	15.0	9.0
29	12.0	8.5	9.0	8.0	7.0	4.5	5.0	3.5	--	--	16.0	9.5
30	11.0	9.0	8.0	7.0	6.5	4.0	7.0	4.0	--	--	16.0	10.0
31	12.0	9.0	--	--	6.5	4.5	6.5	4.5	--	--	15.0	10.0
AVE	--	--	10.8	8.9	7.6	5.8	6.1	4.0	8.2	5.1	11.8	7.2
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	9.0	17.0	11.5	17.5	11.5	20.5	14.5	20.0	14.0	16.5	11.5
2	15.0	9.0	15.5	11.5	15.5	11.5	21.0	15.0	20.5	14.5	17.0	12.0
3	15.5	9.0	12.0	10.0	16.5	11.5	21.0	15.0	19.0	15.0	18.0	12.5
4	16.5	10.0	12.0	9.5	18.0	12.0	21.0	15.0	18.5	14.0	18.0	13.0
5	16.5	10.0	12.5	10.5	19.0	12.5	21.5	15.0	19.0	14.0	17.5	12.5
6	12.5	10.0	12.0	10.5	19.0	13.5	21.5	15.0	19.5	14.0	15.0	14.0
7	12.0	9.0	11.5	10.0	19.5	13.5	21.0	15.5	19.0	13.5	18.0	13.0
8	12.0	8.0	13.5	9.0	20.0	14.0	19.5	13.5	19.5	13.5	18.0	13.0
9	--	--	13.5	10.0	19.0	14.5	19.5	13.0	19.5	14.0	17.5	13.5
10	--	--	18.0	10.5	16.5	13.5	19.0	13.0	18.0	15.5	18.5	14.0
11	--	--	18.5	12.5	20.5	13.5	19.0	12.5	19.5	14.5	21.0	14.5
12	--	--	20.0	13.0	21.0	15.0	19.5	13.0	19.5	14.5	23.0	14.0
13	--	--	19.5	13.0	21.0	15.0	19.5	13.5	20.0	15.0	17.5	14.0
14	--	--	19.5	13.5	21.0	14.5	20.0	13.5	19.5	14.5	18.5	13.5
15	--	--	20.5	14.0	22.0	15.5	19.5	14.0	19.5	14.0	18.5	14.5
16	--	--	18.0	14.0	22.0	16.0	19.0	14.5	19.5	14.0	19.0	14.5
17	--	--	19.0	12.0	22.0	16.0	17.5	14.5	19.5	13.5	18.0	14.0
18	--	--	19.5	12.5	21.5	15.5	21.5	14.5	19.0	13.5	17.0	13.5
19	--	--	19.0	12.5	21.0	15.5	21.5	16.0	18.5	13.0	16.5	12.0
20	--	--	20.0	12.5	21.5	15.0	21.5	15.5	18.5	13.0	16.5	12.0
21	--	--	15.5	11.5	22.0	16.0	21.0	15.5	18.5	13.0	16.5	12.0
22	--	--	18.0	10.0	21.5	16.0	21.0	15.5	17.5	12.5	16.5	12.0
23	--	--	19.5	12.5	20.5	15.5	20.0	15.5	18.5	13.0	16.5	12.5
24	--	--	21.0	14.0	20.5	14.5	20.0	14.0	17.0	14.0	16.0	12.0
25	--	--	21.5	14.5	20.5	14.5	20.0	14.0	19.0	14.0	14.0	12.5
26	--	--	18.0	15.0	20.0	14.0	20.5	15.0	18.5	14.5	15.0	11.5
27	15.5	7.5	15.0	12.0	20.5	15.0	20.5	15.0	18.0	12.5	15.5	11.0
28	16.0	10.0	14.0	11.5	20.0	14.5	20.0	15.0	16.5	13.0	15.0	10.5
29	16.5	10.0	15.5	11.5	19.5	13.0	18.0	14.5	18.0	13.0	14.5	10.5
30	17.5	10.0	18.5	12.5	20.0	14.0	20.0	14.0	17.5	12.5	14.0	12.0
31	--	--	18.0	13.0	--	--	20.0	14.5	17.0	12.0	--	--
AVE	--	--	17.0	12.0	20.0	14.2	20.2	14.5	18.8	13.7	17.1	12.7

## TULARE LAKE BASIN

11218500 KINGS RIVER BELOW NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°53'04", long 119°09'07", in NW $\frac{1}{4}$  sec.16 T.12 S., R.26 E., Fresno County, on right bank 1 mile downstream from gaging station, 1.8 miles downstream from North Fork, 2.2 miles southwest of Balch Camp, and 7.7 miles southeast of Trimmer.

DRAINAGE AREA.--1,342 sq mi (at gaging station).

PERIOD OF RECORD.--Chemical analyses: October 1955 to July 1963, water years 1964-66 (partial-record station), October 1967 to September 1969, water year 1970 (partial-record station).

Water temperatures: October 1966 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 24.0°C July 31; minimum, 1.0°C sometime during period Jan. 3-25.

Period of record:

Water temperatures: Maximum, 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. Temperature subject to fluctuation because of powerplant operation upstream. Probe out of water Oct. 3, 4, 7-11, 17-19; Oct. 24 to Nov. 1, 14, 21, 22. Recorder malfunction Apr. 2-9, 20-25, Sept. 29, 30. Clock stopped Jan. 3-25, June 17-23, Sept. 8-27; range in temperature, 1.0°C to 7.0°C, 15.0°C to 17.0°C, and 10.5°C to 22.0°C, respectively.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.3	11.0	--	--	6.5	5.5	6.0	4.5	8.5	5.5	5.0	2.5
2	13.5	11.0	14.5	8.0	7.0	6.5	5.0	3.5	6.5	4.5	7.0	2.0
3	--	--	13.0	7.5	6.5	5.5	--	--	7.0	5.5	7.0	3.0
4	--	--	14.0	11.0	8.0	6.0	--	--	7.0	3.5	7.5	4.0
5	14.5	10.5	12.5	11.5	8.5	5.5	--	--	6.5	3.5	7.5	4.0
6	14.0	10.0	13.0	12.0	8.0	5.5	--	--	5.5	3.5	9.0	4.0
7	--	--	13.5	11.0	7.5	6.5	--	--	6.5	3.0	9.5	5.0
8	--	--	13.5	10.5	8.5	7.5	--	--	6.5	3.0	10.5	6.0
9	--	--	12.0	10.5	8.5	7.5	--	--	6.5	3.0	10.5	6.0
10	--	--	12.5	10.0	8.5	6.5	--	--	6.0	2.5	9.5	7.0
11	--	--	13.0	10.5	6.5	5.5	--	--	6.5	3.0	11.0	7.0
12	15.0	9.0	13.0	10.5	7.5	5.5	--	--	7.5	4.0	9.0	6.5
13	15.0	9.0	12.0	10.0	5.5	3.5	--	--	7.0	4.0	8.5	6.5
14	14.5	9.0	--	--	5.5	4.5	--	--	7.5	4.0	9.0	5.5
15	14.5	8.0	12.5	8.0	6.5	4.5	--	--	7.5	5.0	10.5	6.0
16	15.0	11.0	12.0	7.0	6.0	5.0	--	--	5.5	4.5	11.0	7.5
17	--	--	12.0	6.0	6.0	4.5	--	--	5.5	4.0	11.0	8.0
18	--	--	11.0	3.0	4.5	3.5	--	--	6.0	4.0	11.5	7.5
19	--	--	11.0	2.5	6.0	4.0	--	--	5.5	2.0	12.0	7.5
20	14.0	6.0	11.0	3.0	5.0	4.0	--	--	4.5	1.5	12.0	8.0
21	12.5	6.0	--	--	4.5	4.5	--	--	4.5	1.5	12.0	8.0
22	14.0	10.0	--	--	5.0	3.5	--	--	6.0	2.0	12.0	8.5
23	14.0	7.0	11.0	3.5	5.5	3.0	--	--	7.5	3.5	9.5	8.0
24	--	--	10.5	2.5	5.0	2.0	--	--	9.0	5.0	11.5	7.5
25	--	--	9.0	8.5	5.0	1.5	--	--	6.5	4.5	8.5	7.0
26	--	--	9.0	8.0	4.5	2.5	7.5	4.0	7.0	2.5	8.0	6.5
27	--	--	8.5	7.0	5.0	4.5	8.5	4.5	4.5	2.5	8.5	6.5
28	--	--	7.5	7.0	6.0	4.0	8.5	4.5	5.0	2.0	9.5	6.5
29	--	--	7.5	7.5	6.0	3.5	8.0	5.0	--	--	11.5	7.0
30	--	--	7.5	6.0	6.0	3.5	8.5	4.5	--	--	10.0	6.5
31	--	--	--	--	5.0	4.0	8.0	5.0	--	--	8.5	5.5
AVE	--	--	11.4	7.8	6.3	4.6	--	--	6.4	3.5	9.6	6.2
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	5.0	12.5	9.0	11.0	8.5	17.5	15.0	23.5	15.0	15.5	11.0
2	--	--	12.0	9.5	12.0	10.0	18.0	15.0	20.0	15.0	15.0	11.5
3	--	--	9.5	7.5	12.5	11.0	19.0	15.0	17.5	14.5	14.0	10.5
4	--	--	9.0	7.5	13.5	11.5	19.5	16.0	16.0	14.0	20.0	11.5
5	--	--	9.5	8.0	13.5	12.5	19.5	16.0	15.5	14.0	19.5	14.5
6	--	--	9.5	8.5	14.0	13.0	18.0	15.5	17.0	14.0	18.0	12.0
7	--	--	9.0	7.5	14.5	13.0	16.0	14.0	21.0	13.5	15.0	12.0
8	--	--	10.0	7.5	14.5	13.5	16.0	13.5	20.5	15.0	--	--
9	--	--	11.0	8.5	14.0	13.0	15.5	12.5	17.0	14.5	--	--
10	9.0	7.0	13.5	9.5	13.0	12.0	19.0	13.0	19.5	13.5	--	--
11	10.0	7.0	14.0	11.0	14.0	12.5	17.0	14.5	17.0	13.0	--	--
12	10.0	7.0	14.0	11.0	15.0	13.5	15.5	12.0	20.5	13.0	--	--
13	8.5	7.0	13.5	11.5	14.5	13.5	16.0	13.0	15.5	13.0	--	--
14	8.5	6.5	13.5	11.5	14.5	13.5	16.0	13.0	21.0	13.0	--	--
15	10.5	6.5	14.0	12.0	15.0	14.0	16.5	13.0	20.0	16.0	--	--
16	10.5	8.0	12.0	10.0	15.5	14.5	15.5	13.5	18.0	13.0	--	--
17	8.5	4.0	11.5	9.0	--	--	18.0	13.5	16.5	12.0	--	--
18	6.0	3.0	11.5	9.0	--	--	21.0	14.5	16.0	12.0	--	--
19	8.0	4.0	12.0	9.5	--	--	19.5	15.5	15.5	12.0	--	--
20	--	--	12.5	10.5	--	--	17.0	14.5	14.0	12.0	--	--
21	--	--	11.5	7.5	--	--	18.0	14.0	21.5	11.0	--	--
22	--	--	10.5	6.5	--	--	18.5	14.0	19.5	11.5	--	--
23	--	--	12.5	9.5	--	--	16.0	14.0	18.0	13.5	--	--
24	--	--	14.0	12.0	16.0	14.5	21.5	14.0	15.0	12.0	--	--
25	--	--	13.5	12.0	16.5	14.0	20.0	16.5	14.5	12.0	--	--
26	8.0	4.5	12.5	11.0	16.5	14.0	18.0	14.5	16.0	12.0	--	--
27	9.5	5.0	11.0	8.5	17.5	15.0	17.5	14.0	17.0	12.0	--	--
28	10.0	6.5	9.0	7.5	17.0	14.5	17.5	14.5	22.0	11.5	13.0	9.5
29	12.0	8.0	10.0	8.5	16.0	13.5	17.0	14.5	20.5	14.0	--	--
30	12.0	8.0	12.5	9.5	16.5	14.0	20.5	14.0	16.5	12.0	--	--
31	--	--	11.5	10.0	--	--	24.0	14.5	14.0	11.0	--	--
AVE	--	--	11.7	9.4	--	--	18.0	14.2	17.9	13.0	--	--

## 11221500 KINGS RIVER BELOW PINE FLAT DAM, CALIF.

LOCATION.--Lat 36°49'50", long 119°20'07", in NW¼ sec.2, T.13 S., R.24 E., Fresno County, temperature recorder at gaging station on right bank, 3,200 ft downstream from Pine Flat Dam, and 2.9 miles northeast of Piedra.

DRAINAGE AREA.--1,545 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1955 to July 1963, water years 1964-66 (partial-record station).

Water temperatures: October 1969 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 19.5°C Oct. 5, 11; minimum, 7.0°C Dec. 23, 24, 26, Jan. 4.

Period of record:

Water temperatures: Maximum (1970-71), 19.5°C Oct. 5, 11, 1970; minimum, 7.0°C Dec. 23, 24, 26, 1970, Jan. 4, 1971.

REMARKS.--Temperature probe above water level Oct. 15 to Nov. 7. Clock stopped Nov. 9, 10; range in temperature, 12.5°C to 14.5°C. Clock stopped Mar. 25-29, Apr. 9-26; no range in temperature available.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	16.0	--	--	13.0	11.5	10.5	9.5	9.5	9.0	9.0	9.0
2	18.0	16.5	--	--	13.0	11.5	10.0	8.5	9.0	8.5	9.0	8.5
3	18.5	16.5	--	--	12.0	10.0	9.5	7.5	10.0	8.5	9.0	9.0
4	19.0	17.0	--	--	13.0	11.0	9.5	7.0	11.0	8.0	9.0	9.0
5	19.5	17.0	--	--	12.5	11.0	9.5	8.0	11.0	8.0	9.5	9.0
6	18.5	16.5	--	--	13.0	11.0	10.0	8.0	10.0	9.0	9.5	9.0
7	18.0	16.5	--	--	13.0	12.0	10.0	8.0	11.5	8.0	9.5	9.0
8	18.5	16.5	15.0	13.0	14.0	11.5	9.5	8.5	12.5	8.5	9.5	9.0
9	18.0	16.5	--	--	13.5	12.5	10.5	8.5	12.5	9.0	9.5	9.0
10	19.0	16.5	--	--	13.0	11.5	10.5	9.0	11.5	9.5	9.5	9.0
11	19.5	17.0	15.5	14.0	12.0	11.0	10.5	9.0	14.0	10.0	9.5	9.0
12	19.0	16.0	15.0	14.5	11.0	10.5	10.0	9.0	14.5	9.5	9.5	9.0
13	18.5	15.5	14.5	14.0	10.5	9.5	10.0	8.5	14.0	10.5	9.5	9.0
14	18.5	16.0	14.5	13.5	10.5	9.5	11.5	7.5	13.5	10.5	9.5	9.0
15	--	--	14.5	13.0	11.0	9.5	10.5	8.0	12.5	10.0	10.0	9.0
16	--	--	14.0	13.0	11.0	10.0	10.0	8.5	10.5	9.5	10.0	9.0
17	--	--	14.0	13.0	11.0	10.5	11.5	9.5	12.0	9.5	9.5	9.0
18	--	--	14.0	13.0	10.5	9.0	10.0	8.0	11.5	9.5	10.0	9.0
19	--	--	14.0	13.0	10.5	9.5	12.5	9.0	11.5	9.0	10.0	9.0
20	--	--	14.0	12.5	10.0	9.5	10.5	9.0	12.0	8.5	10.0	9.5
21	--	--	14.0	12.5	9.5	8.5	10.5	9.0	11.0	9.0	10.0	9.5
22	--	--	14.5	13.0	10.0	7.5	10.5	9.0	11.5	9.5	10.0	9.5
23	--	--	14.0	12.5	10.5	7.0	10.5	9.5	11.0	9.5	9.5	9.5
24	--	--	14.5	12.5	10.5	7.0	11.0	9.5	9.5	9.0	10.0	9.5
25	--	--	14.0	13.5	9.5	7.5	10.5	9.5	9.0	9.0	--	--
26	--	--	14.0	12.5	10.0	7.0	10.0	9.5	9.0	9.0	--	--
27	--	--	14.0	11.5	10.0	8.5	10.5	9.5	9.0	8.5	--	--
28	--	--	13.0	12.0	11.0	8.0	10.0	9.5	9.0	8.5	--	--
29	--	--	13.0	11.5	11.0	8.5	9.5	9.5	--	--	--	--
30	--	--	12.5	10.5	11.0	9.0	9.5	9.5	--	--	10.0	9.0
31	--	--	--	--	10.0	9.0	9.5	9.5	--	--	10.0	9.0
AVE	--	--	--	--	11.3	9.7	10.3	8.8	11.2	9.1	9.6	9.1
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.5	11.0	10.5	11.0	10.5	12.0	12.0	16.0	15.5	18.5	18.0
2	10.0	9.5	11.0	10.5	11.0	10.5	12.5	12.0	16.0	15.5	18.5	18.0
3	10.0	9.5	11.5	11.0	11.0	11.0	12.5	12.0	16.0	16.0	18.5	18.0
4	10.5	9.5	11.5	11.0	11.0	11.0	12.5	12.0	16.0	16.0	18.5	18.0
5	10.0	9.5	12.0	11.5	11.0	11.0	12.5	12.0	16.0	16.0	18.5	18.0
6	10.0	9.5	11.5	11.5	11.0	11.0	13.0	12.5	16.5	16.0	18.5	18.0
7	10.5	10.0	12.0	11.5	11.0	11.0	13.0	12.5	16.5	16.0	18.5	18.0
8	10.5	9.5	12.5	12.0	11.0	11.0	13.0	12.5	16.5	16.0	18.5	18.5
9	--	--	12.0	12.0	11.0	11.0	13.0	12.5	16.5	16.5	19.0	18.5
10	--	--	12.5	12.0	11.0	11.0	13.0	12.5	16.5	16.5	19.0	18.5
11	--	--	12.5	12.0	11.5	11.0	13.0	12.5	17.0	16.5	18.5	18.0
12	--	--	12.5	12.0	11.5	11.0	13.0	13.0	17.0	17.0	18.5	18.0
13	--	--	12.5	12.0	11.0	11.0	13.0	13.0	17.0	17.0	18.5	18.0
14	--	--	12.5	12.0	11.5	11.0	13.5	13.0	17.0	17.0	18.5	18.0
15	--	--	12.5	12.0	11.5	11.0	13.5	13.0	17.0	17.0	18.5	18.5
16	--	--	12.0	11.0	11.5	11.0	13.5	13.5	17.0	17.0	18.5	18.0
17	--	--	12.0	11.0	11.5	11.0	14.0	13.5	17.0	17.0	18.5	18.0
18	--	--	11.5	11.0	11.5	11.0	14.0	13.5	17.0	17.0	18.5	18.0
19	--	--	11.5	11.0	11.5	11.0	14.0	14.0	17.0	17.0	18.5	18.0
20	--	--	12.0	11.5	11.5	11.5	14.5	14.0	17.5	17.0	18.0	17.5
21	--	--	11.5	11.0	12.0	11.5	14.5	14.0	17.5	17.0	18.0	17.5
22	--	--	11.0	11.0	12.0	11.5	15.0	14.5	17.5	17.0	18.5	18.0
23	--	--	11.0	11.0	12.0	11.5	15.0	14.5	17.5	17.0	18.5	18.0
24	--	--	11.0	9.5	12.0	11.5	15.0	14.5	17.5	17.5	18.5	18.0
25	--	--	10.5	9.5	12.0	11.5	15.0	14.5	17.5	17.5	18.0	18.0
26	--	--	10.5	10.5	12.0	11.5	15.0	15.0	18.0	17.5	18.5	18.0
27	11.0	10.5	10.5	10.5	12.0	11.5	15.5	15.0	18.0	18.0	18.5	18.0
28	11.0	10.5	11.0	10.5	12.0	11.5	15.5	15.0	18.0	18.0	18.5	18.0
29	11.0	10.5	11.0	10.5	12.0	11.5	15.5	15.0	18.0	18.0	18.5	18.0
30	11.0	10.5	11.0	10.5	12.0	11.5	15.5	15.5	18.0	18.0	18.0	18.0
31	--	--	11.0	10.5	--	--	15.5	15.5	18.5	18.0	--	--
AVE	--	--	11.6	11.1	11.5	11.1	13.9	13.5	17.1	16.9	18.5	18.0

## SAN JOAQUIN RIVER BASIN

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, temperature recorder at gaging station on left bank, 40 ft upstream from bridge, 0.4 mile upstream from mouth, 1.3 miles downstream from Whiskey Creek, and 4.3 miles northeast of Auberry.

DRAINAGE AREA.--130 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1960 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 28.0°C Aug. 2, 12; minimum, 1.0°C Jan. 6, 7.

Period of record:

Water temperatures: Maximum (1960-63, 1964-68, 1969-71), 33.0°C Aug. 5, 1966; minimum (1960-69, 1970-71), 1.0°C Jan. 6, 7, 1971.

REMARKS.--Recorder stopped Oct. 1-5, 10.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	12.0	10.5	7.0	6.5	5.5	5.0	8.5	7.0	5.5	4.5
2	--	--	13.0	11.0	7.0	6.5	5.5	4.5	7.0	6.0	5.5	4.0
3	--	--	13.0	11.0	6.5	5.0	4.5	3.0	7.0	6.0	6.5	4.5
4	--	--	12.0	11.5	7.0	6.0	4.0	2.0	7.0	5.5	6.0	5.0
5	--	--	13.0	12.0	7.0	6.0	3.5	2.0	7.0	5.5	7.0	5.0
6	21.0	15.5	13.5	13.0	7.0	6.0	3.0	1.0	8.0	7.0	7.0	5.0
7	18.5	14.0	13.5	12.0	8.0	6.5	3.0	1.0	7.0	5.5	8.5	5.5
8	18.5	13.0	12.0	11.0	9.0	8.0	3.0	1.5	8.0	5.5	9.0	6.5
9	18.0	13.0	12.0	11.5	9.0	8.0	3.5	1.5	8.0	6.0	9.5	6.5
10	--	--	13.0	11.5	8.0	6.5	4.0	2.0	8.5	6.5	9.5	7.0
11	18.5	13.0	13.0	12.0	6.5	6.0	4.0	3.0	9.0	6.5	10.0	8.0
12	17.0	13.5	13.5	12.0	6.5	5.5	5.0	4.5	9.5	8.0	10.0	9.5
13	17.0	13.5	12.0	10.0	6.0	4.5	4.5	3.0	9.0	8.0	9.0	7.0
14	16.0	13.5	10.0	9.5	5.5	5.0	5.0	4.0	10.0	8.5	8.0	6.0
15	16.0	13.5	10.0	9.5	5.5	4.5	5.0	4.0	10.5	9.0	10.0	6.5
16	16.5	13.5	9.5	9.0	6.0	5.5	5.5	4.5	10.0	8.5	10.0	8.0
17	16.5	13.5	9.5	8.5	5.5	4.5	6.5	5.5	8.5	8.0	10.5	8.5
18	15.0	13.5	9.0	8.5	4.5	4.0	7.0	5.5	8.0	6.5	10.5	8.5
19	15.5	13.0	9.0	8.5	5.5	4.5	8.5	6.5	8.0	6.5	10.5	9.0
20	14.0	13.0	8.5	7.0	5.5	4.5	8.5	8.0	6.5	5.0	11.0	9.0
21	14.0	13.0	8.5	7.0	5.5	5.0	8.0	8.0	6.5	5.0	11.5	9.5
22	15.0	13.5	8.5	8.0	5.5	4.5	8.0	7.0	7.0	5.5	12.0	9.5
23	14.0	13.0	8.5	8.0	5.0	4.0	8.0	6.0	7.0	5.5	11.5	10.5
24	14.0	13.0	8.5	8.0	4.5	3.5	6.5	5.5	8.0	6.0	11.5	9.5
25	14.0	12.0	9.5	8.0	4.5	3.5	7.0	5.5	8.0	6.5	11.0	10.5
26	13.0	11.0	9.5	8.0	5.0	3.5	8.0	5.5	6.5	5.0	11.0	8.5
27	12.0	10.5	8.0	6.5	5.5	5.0	8.0	6.5	5.5	4.5	9.5	7.0
28	11.5	10.5	8.0	6.5	5.5	4.5	8.0	6.5	5.0	4.0	10.5	8.5
29	11.5	10.0	8.0	6.5	6.0	5.0	8.0	6.0	--	--	11.5	9.5
30	11.0	10.0	7.0	6.0	5.5	4.5	8.5	6.5	--	--	11.0	9.5
31	12.0	10.5	--	--	5.5	4.5	8.5	6.5	--	--	10.5	9.0
AVE	15.2	12.6	10.5	9.4	6.1	5.2	6.0	4.6	7.8	6.3	9.5	7.6
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.0	12.0	10.0	13.0	9.5	21.0	17.0	26.5	23.0	24.0	19.5
2	10.0	8.0	11.5	10.0	13.5	10.0	21.5	17.0	28.0	23.5	24.0	19.5
3	11.0	8.5	10.0	8.5	14.0	10.5	21.0	17.0	27.0	24.0	24.0	19.0
4	11.0	9.0	8.5	7.0	16.0	11.0	21.5	18.0	27.0	23.5	24.5	19.5
5	11.0	9.0	9.0	8.0	17.0	13.0	21.5	18.0	25.5	23.0	23.5	19.5
6	11.0	9.5	8.5	8.5	18.5	14.0	21.5	18.0	26.0	22.0	21.5	20.5
7	9.5	9.0	8.5	8.0	19.5	15.0	21.5	18.0	26.5	22.0	23.0	18.5
8	9.0	7.0	8.0	6.5	19.5	15.5	21.5	18.0	26.0	21.5	23.5	19.0
9	10.0	8.0	9.0	7.0	18.0	15.5	21.5	18.0	25.5	22.0	24.5	19.5
10	10.5	8.5	11.0	8.5	16.5	14.0	21.5	18.5	26.5	23.0	25.0	20.0
11	10.5	8.5	14.5	10.0	18.5	14.0	21.0	18.0	27.0	23.5	25.0	20.0
12	11.0	8.5	14.5	12.0	20.0	15.0	21.5	18.0	28.0	24.0	25.0	20.0
13	10.5	9.5	14.5	11.5	20.0	15.5	22.0	18.5	27.0	23.5	25.5	20.5
14	9.5	9.0	14.5	11.5	20.0	15.5	23.5	19.0	27.0	23.5	26.0	21.0
15	9.5	8.5	16.0	12.0	21.5	16.0	24.0	20.0	26.0	22.0	26.0	21.0
16	12.0	9.5	15.0	13.0	22.0	17.0	24.5	21.0	26.0	22.0	26.0	20.5
17	11.0	6.0	13.0	10.0	22.0	17.0	24.0	21.5	26.0	21.0	25.0	20.0
18	7.0	5.5	13.0	9.5	21.0	16.5	24.5	21.0	26.0	21.0	24.0	19.0
19	9.0	6.0	14.0	10.0	21.0	16.0	25.0	21.5	26.0	21.0	23.0	18.0
20	9.0	8.0	15.5	11.5	21.5	16.5	25.0	21.5	26.0	20.5	23.0	18.0
21	8.0	6.0	14.0	10.0	23.0	18.0	26.0	22.0	25.5	20.0	21.5	17.0
22	7.0	5.5	13.0	9.0	23.0	18.0	26.0	23.0	25.0	20.0	21.5	16.5
23	8.5	6.5	15.5	11.0	22.0	18.0	26.0	23.0	25.5	20.5	21.5	17.0
24	8.5	6.5	17.0	13.0	22.0	18.0	25.0	22.0	24.5	21.0	21.0	16.5
25	6.5	5.5	18.0	14.0	21.5	18.0	25.0	21.5	25.5	22.0	19.0	16.5
26	8.0	6.0	16.0	13.5	21.5	18.0	25.5	21.5	26.5	22.0	19.0	15.0
27	9.5	6.0	14.0	10.5	21.0	19.0	26.0	22.0	26.5	21.5	18.5	14.5
28	11.0	8.0	10.5	10.0	20.5	16.5	26.0	23.0	25.5	21.5	18.0	14.0
29	11.5	8.5	11.0	10.0	20.0	15.5	26.5	23.0	25.5	21.0	17.0	13.5
30	12.0	9.5	13.5	10.5	21.0	16.5	26.5	23.5	25.0	20.5	16.0	15.0
31	--	--	13.0	10.0	--	--	26.5	23.5	24.5	20.0	--	--
AVE	9.7	7.7	12.8	10.1	19.6	15.4	23.7	20.2	26.1	21.9	22.6	18.3



## 11247000 SAN JOAQUIN RIVER BELOW KERCKHOFF POWERHOUSE, NEAR PRATHER, CALIF.

LOCATION.--Lat 37°04'45", long 119°33'36", in NE $\frac{1}{4}$  sec.10, T.10 S., R.22 E., Fresno County, temperature recorder at gaging station on left bank, 1.1 miles downstream from Kerckhoff powerhouse, 1.4 miles upstream from Big Sandy Creek, and 3.8 miles southeast of Prather.

DRAINAGE AREA.--1,480 sq mi.

PERIOD OF RECORD.--Water temperatures: November 1960 to September 1968, January 1970 to September 1971.

## EXTREMES.--1970-71:

Water temperatures: Maximum, 18.5°C Oct. 4, 5; minimum, 4.0°C on several days during January.

## Period of record:

Water temperatures: Maximum (1960-66, 1967-68, January 1970 to September 1971), 29.0°C Sept. 1, 2, 1968; minimum (1960-68, 1970-71), 2.0°C Jan. 29, 1968.

REMARKS.--No record Oct. 1-3.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	15.5	15.0	11.5	11.5	6.0	4.5	6.5	4.5	6.0	5.5
2	--	--	15.5	15.0	11.5	11.0	5.0	5.0	5.0	4.5	6.0	5.5
3	--	--	15.5	15.0	11.0	10.5	5.0	4.5	4.5	4.5	5.5	5.5
4	18.5	18.0	15.0	15.0	11.5	10.5	4.5	4.5	4.5	4.5	5.5	5.5
5	18.5	18.0	15.0	15.0	10.5	10.0	6.5	4.5	4.5	4.5	7.0	5.5
6	18.0	17.5	15.5	15.0	10.0	10.0	4.5	4.5	5.0	4.5	5.5	5.5
7	18.0	17.5	15.0	15.0	11.5	10.0	4.5	4.0	5.0	4.5	5.5	5.5
8	17.5	17.5	15.0	15.0	10.0	10.0	4.0	4.0	4.5	4.5	5.5	5.5
9	17.5	17.5	15.0	14.5	10.0	10.0	4.5	4.5	4.5	4.5	5.5	5.5
10	17.5	17.5	14.5	14.5	10.0	9.5	6.0	4.0	4.5	4.5	7.5	5.5
11	17.5	17.0	14.5	14.0	11.5	9.5	5.5	4.0	5.0	4.5	7.0	5.5
12	17.5	17.0	14.0	14.0	9.5	9.0	4.5	4.0	7.0	4.5	5.5	5.5
13	17.5	17.0	14.0	14.0	9.0	8.5	4.5	4.5	5.0	5.0	6.0	5.5
14	17.0	16.5	14.0	14.0	8.5	8.5	4.5	4.5	5.0	5.0	6.0	6.0
15	16.5	16.5	14.0	13.5	8.5	8.0	6.0	4.0	5.0	5.0	7.5	6.0
16	16.5	16.5	13.5	13.0	8.0	8.0	4.5	4.0	5.0	5.0	7.5	6.0
17	16.5	16.5	13.5	13.0	8.0	8.0	6.0	4.0	5.0	5.0	7.0	6.0
18	16.5	16.5	13.0	12.5	8.0	7.5	4.5	4.0	5.0	5.0	7.0	6.0
19	16.5	16.5	13.0	12.5	7.5	7.0	4.0	4.0	7.5	5.0	7.0	6.5
20	16.5	16.0	13.0	12.0	8.0	7.0	4.0	4.0	6.0	5.5	7.0	6.5
21	16.0	16.0	12.5	12.0	7.0	6.5	4.0	4.0	5.5	5.5	7.5	6.5
22	16.0	16.0	12.5	12.0	8.0	6.5	6.5	4.0	5.5	5.5	7.5	7.0
23	16.0	16.0	12.5	12.0	6.5	6.0	4.5	4.5	5.5	5.5	9.5	7.5
24	16.0	16.0	12.5	12.0	7.5	5.5	4.5	4.5	6.0	5.5	9.5	8.0
25	16.0	16.0	12.5	12.0	5.5	5.5	4.5	4.0	6.0	6.0	8.0	8.0
26	16.5	16.0	12.0	12.0	5.5	5.0	4.0	4.0	6.0	5.5	8.0	8.0
27	16.0	15.5	12.5	11.5	5.0	5.0	4.0	4.0	7.5	6.0	8.0	8.0
28	16.0	15.5	12.0	12.0	5.5	5.0	4.5	4.0	6.5	6.0	8.0	8.0
29	15.5	15.0	12.5	12.0	5.0	5.0	4.5	4.5	--	--	8.0	8.0
30	16.0	15.0	12.5	11.5	6.5	4.5	5.0	4.5	--	--	8.0	8.0
31	15.5	15.0	--	--	5.0	4.5	4.5	4.5	--	--	8.0	8.0
AVE	16.8	16.5	13.7	13.3	8.4	7.8	4.8	4.2	5.4	5.0	7.0	6.4
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	8.0	9.0	8.5	11.0	10.5	13.5	13.0	15.5	15.0	17.5	17.0
2	8.5	8.0	9.0	8.5	11.0	10.5	13.0	13.0	15.5	15.0	17.0	17.0
3	8.5	8.0	9.0	8.5	11.5	10.5	13.0	13.0	15.5	15.0	17.0	17.0
4	8.5	8.0	9.0	8.5	11.5	11.0	13.0	12.5	16.0	15.5	17.0	17.0
5	9.0	8.0	9.0	9.0	12.0	11.0	14.5	13.0	16.5	16.0	17.0	17.0
6	9.0	8.5	9.0	9.0	12.0	11.5	14.5	13.0	17.0	15.0	17.0	17.0
7	8.5	8.5	9.0	9.0	13.5	11.5	14.0	13.5	15.5	15.0	17.5	17.0
8	9.0	8.5	9.0	9.0	13.5	12.0	13.5	13.0	15.5	15.0	17.5	17.0
9	9.0	8.5	9.5	9.0	12.5	12.0	13.5	13.5	15.5	15.0	18.0	17.5
10	9.0	9.0	9.5	9.0	12.5	12.0	13.5	13.5	15.5	15.0	18.0	17.5
11	9.0	9.0	9.5	9.0	12.5	12.0	14.0	13.5	16.0	15.5	18.0	17.5
12	9.0	8.5	10.0	9.5	12.5	12.5	14.0	13.5	16.0	15.5	18.0	17.5
13	9.0	9.0	10.0	10.0	12.5	12.5	14.0	14.0	16.0	15.5	18.0	17.0
14	9.0	9.0	10.0	10.0	12.5	12.5	14.0	13.5	16.0	16.0	17.5	17.5
15	9.0	9.0	10.5	10.0	12.5	12.5	14.0	14.0	16.0	16.0	17.5	17.5
16	9.0	8.5	10.5	10.0	13.0	12.5	14.0	14.0	16.0	16.0	18.0	17.5
17	9.0	9.0	10.5	10.0	13.0	12.5	14.0	13.5	16.0	16.0	18.0	17.5
18	9.0	9.0	10.5	10.0	13.0	12.5	14.5	13.5	16.5	16.0	18.0	17.5
19	9.0	9.0	10.5	10.0	13.0	12.5	14.5	14.0	16.5	16.0	18.0	18.0
20	9.0	8.5	10.5	10.0	12.5	12.5	14.5	14.0	17.0	16.5	18.0	18.0
21	8.5	8.5	10.5	10.0	12.5	12.5	14.5	14.5	16.5	16.0	18.0	18.0
22	8.5	8.5	10.0	10.0	12.5	12.5	14.5	14.5	16.5	16.0	18.0	18.0
23	8.5	8.5	10.0	9.5	12.5	12.5	14.5	14.5	16.5	16.5	18.0	18.0
24	8.5	8.5	10.5	10.0	13.0	12.5	14.5	14.0	16.5	16.5	18.0	17.5
25	8.5	8.5	10.5	10.0	13.0	12.5	14.5	14.5	17.0	16.5	17.5	17.5
26	8.5	8.5	11.0	10.5	13.0	13.0	14.5	14.0	17.0	17.0	17.5	17.5
27	8.5	8.5	11.0	11.0	13.0	13.0	14.5	14.0	17.0	17.0	17.5	17.5
28	9.0	8.5	12.0	11.0	13.5	13.0	14.5	14.5	17.0	17.0	17.5	17.0
29	9.0	8.5	11.0	11.0	13.5	13.5	14.5	14.5	17.0	17.0	17.0	17.0
30	9.0	8.5	11.0	11.0	13.5	13.5	15.5	14.5	17.0	17.0	17.0	17.0
31	--	--	11.0	11.0	--	--	15.0	14.5	17.5	17.0	--	--
AVE	8.8	8.5	10.1	9.7	12.6	12.2	14.1	13.8	16.3	15.9	17.6	17.4

## SAN JOAQUIN RIVER BASIN

11257500 FRESNO RIVER NEAR KNOWLES, CALIF.

LOCATION.--Lat 37°14'14"; long 119°46'26", in SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec.15, T.8 S., R.20 E., Madera County, temperature recorder at gaging station on left bank at Fresno Crossing, 0.1 mile downstream from Bean Gulch, and 6 miles northeast of Knowles.

DRAINAGE AREA.--133 sq mi.

PERIOD OF RECORD.--Water temperatures: July to September 1971.

EXTREMES.--July to September 1971:

Water temperatures: Maximum, 33.0°C Aug. 11.

## TEMPERATURE (°C) OF WATER, JULY TO SEPTEMBER 1971

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	27.0	20.0	30.5	22.0	26.0	17.5
2	--	--	--	--	--	--	27.5	20.0	31.5	23.0	27.0	19.0
3	--	--	--	--	--	--	27.0	20.0	31.5	23.0	27.0	18.5
4	--	--	--	--	--	--	28.0	21.0	32.0	22.0	28.0	18.5
5	--	--	--	--	--	--	28.5	21.5	31.5	22.5	27.0	18.5
6	--	--	--	--	--	--	28.5	21.5	32.5	22.0	25.5	21.5
7	--	--	--	--	--	--	28.0	21.5	32.0	22.0	26.5	18.0
8	--	--	--	--	20.5	17.0	28.0	21.0	32.0	21.5	27.0	18.0
9	--	--	--	--	19.0	16.0	28.5	21.0	31.5	22.0	28.0	20.0
10	--	--	--	--	18.5	15.0	28.0	21.5	32.0	23.5	27.5	19.5
11	--	--	--	--	20.5	14.5	28.0	20.5	33.0	23.5	27.5	19.5
12	--	--	--	--	21.5	16.0	29.0	21.5	32.0	25.0	28.0	19.5
13	--	--	--	--	21.5	16.5	29.5	22.0	32.0	23.0	28.5	20.0
14	--	--	--	--	21.5	16.0	30.5	22.5	30.0	22.0	29.0	20.5
15	--	--	--	--	22.5	17.0	31.0	23.5	30.0	21.0	28.0	21.0
16	--	--	--	--	23.0	18.0	32.0	24.5	29.5	20.5	28.0	20.5
17	--	--	--	--	23.0	18.0	27.5	25.0	30.0	20.0	26.0	19.5
18	--	--	--	--	22.0	17.0	30.5	23.0	30.0	20.0	24.0	18.5
19	--	--	--	--	22.5	17.0	30.5	23.5	30.0	20.0	24.0	17.0
20	--	--	--	--	23.0	17.5	31.0	23.5	29.0	19.5	23.5	16.5
21	--	--	--	--	24.0	19.0	31.0	24.0	28.0	19.0	22.5	16.0
22	--	--	--	--	24.0	19.0	31.0	24.0	28.0	19.5	23.0	16.0
23	--	--	--	--	24.0	18.5	30.0	22.5	28.5	20.5	23.0	16.0
24	--	--	--	--	24.0	19.0	29.5	22.0	27.5	21.5	21.5	16.0
25	--	--	--	--	24.0	18.5	29.5	21.5	29.5	22.5	20.0	15.5
26	--	--	--	--	24.0	19.0	29.5	21.5	30.0	22.0	20.0	14.0
27	--	--	--	--	24.0	19.0	30.0	22.5	29.0	21.0	20.0	13.5
28	--	--	--	--	23.5	17.5	30.0	22.5	27.0	20.5	20.0	13.5
29	--	--	--	--	24.5	17.5	30.0	22.5	28.5	20.5	20.0	13.0
30	--	--	--	--	25.5	18.5	30.5	23.0	27.0	19.0	19.5	15.5
31	--	--	--	--	--	--	30.0	22.5	26.0	18.5	--	--
AVE	--	--	--	--	--	--	29.3	22.2	30.0	21.4	24.8	17.7

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, at gaging station on right bank, 10 ft downstream from footbridge at Happy Isles, 0.4 mile downstream from Illilouette Creek, and 2.0 miles southeast of Yosemite National Park headquarters.

DRAINAGE AREA.--181 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1968 to September 1971.

Water temperatures: October 1965 to September 1971.

Sediment records: Water years 1970-71 (partial-record station).

EXTREMES, 1970-71:

Water temperatures: Maximum, 18.5°C July 30, 31, Aug. 10; minimum, freezing point on several days during December to March.

Period of record:

Water temperatures: Maximum (1966-71), 18.5°C July 30, 31, Aug. 10, 1971; minimum, freezing point on many days during winter period each year.

REMARKS.--Thermograph malfunction Dec. 8, 9, 13-21.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	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)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT.												
06...	1750	--	--	--	--	12	--	--	--	--	--	--
20...	1000	3.1	7.5	9.2	15	--	3.1	.3	2.5	.5	9	0
DEC.												
08...	1030	139	4.5	12.0	5.2	30	2.0	.0	1.7	.3	6	0
FEB.												
09...	0920	114	1.5	13.8	7.3	0	2.9	.0	2.1	.3	6	0
APR.												
06...	1230	456	5.0	10.0	7.9	40	1.7	.2	7.4	.4	22	0
MAY												
18...	1130	982	6.0	12.0	6.6	40	1.3	.1	1.4	.0	11	0
JUNE												
30...	1200	810	11.0	10.2	4.0	40	1.1	.5	.6	.2	5	0
AUG.												
19...	1400	59	15.0	10.0	3.8	70	1.6	.4	1.1	.3	7	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)
OCT.												
06...	--	--	--	--	--	--	--	--	--	--	--	--
20...	1.0	4.9	.1	.06	--	.06	--	.00	.1	.000	.000	0
DEC.												
08...	1.0	2.8	.0	.03	--	.18	--	.15	.00	.000	.000	0
FEB.												
09...	1.0	2.7	.0	.00	--	.03	--	.03	.00	.010	.000	0
APR.												
06...	.8	2.5	.0	--	--	.14	.10	.15	--	.30	.020	0
MAY												
18...	2.3	.8	.0	--	--	.31	.02	.16	--	.13	.010	30
JUNE												
30...	.8	2.2	.4	--	--	.19	.13	.09	--	.020	.010	10
AUG.												
19...	.8	2.0	.0	--	.25	.21	.04	.10	--	.010	.000	20

## SAN JOAQUIN RIVER BASIN

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
OCT. 06...	--	--	--	--	--	--	--	--	--	--	--	--
20...	31	.04	.26	8	1	7	36	.4	55	7.1	.6	7
DEC. 08...	16	.02	6.00	5	0	5	41	.3	24	6.4	.3	17
FEB. 09...	19	.03	5.85	7	2	5	37	.3	29	6.1	.3	2
APR. 06...	32	.04	39.4	5	0	18	74	1.4	45	7.5	.4	0
MAY 18...	18	.02	47.7	4	0	9	45	.3	14	7.7	.3	0
JUNE 30...	13	.02	28.4	5	1	4	21	.1	11	6.6	.2	6
AUG. 19...	14	.02	2.23	6	0	6	28	.2	16	8.0	.5	133

DATE	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
JUNE 16...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
JUNE 16...	.00	.00	.00	.00	.00	.00	.00	.00

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 20...	1000	7.5	3.1	2	.02
DEC. 08...	1030	4.5	139	1	.38
FEB. 09...	1100	1.5	116	4	1.3
APR. 06...	1230	5.0	456	3	3.7
MAY 18...	1130	6.0	982	5	13
18...	1300	6.0	964	3	7.8

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	9.5	8.0	6.5	3.5	2.5	1.0	0.5	3.5	2.0	0.5	0.0
2	12.0	9.5	8.0	7.0	3.0	1.0	0.5	0.0	3.0	0.5	0.5	0.0
3	11.5	10.0	8.0	6.5	2.0	1.0	0.0	0.0	1.0	0.0	0.5	0.5
4	11.5	10.0	7.5	7.5	3.0	2.0	0.0	0.0	2.0	0.5	1.5	0.5
5	12.0	10.5	8.0	7.5	3.5	2.5	0.0	0.0	3.5	2.0	1.0	0.5
6	12.0	9.5	8.0	7.0	4.0	2.5	0.0	0.0	3.5	1.0	1.5	0.5
7	11.0	8.5	7.0	6.0	5.0	4.0	0.5	0.0	3.0	1.0	2.5	1.0
8	10.5	8.5	7.0	6.0	--	--	0.5	0.5	3.0	1.0	3.0	2.0
9	11.0	8.5	7.5	7.0	--	--	1.0	0.5	3.5	1.5	3.5	1.5
10	11.5	8.5	7.5	7.0	3.0	2.0	1.0	0.5	5.0	2.0	4.5	3.0
11	11.5	8.5	7.5	6.5	3.5	3.0	1.0	0.5	5.5	3.5	5.5	4.0
12	11.0	8.0	7.5	5.5	3.0	1.5	0.5	0.0	5.5	3.5	5.5	2.5
13	11.0	8.0	5.5	4.5	--	--	0.0	0.0	4.5	3.0	2.5	1.5
14	9.5	8.0	6.0	5.0	--	--	0.0	0.0	5.5	2.5	3.0	1.5
15	9.0	8.0	6.0	5.0	--	--	0.5	0.0	5.5	2.5	5.0	3.0
16	10.0	7.5	5.0	4.5	--	--	1.5	0.5	3.5	1.5	5.5	2.5
17	10.0	7.5	5.0	4.5	--	--	2.0	1.5	3.0	2.5	5.5	3.0
18	9.5	7.5	5.5	5.0	--	--	2.5	2.0	3.0	0.5	5.5	4.5
19	10.0	7.5	5.5	5.0	--	--	3.5	2.0	3.0	0.5	6.0	3.5
20	9.0	7.5	5.0	4.5	--	--	4.0	2.5	1.0	0.5	6.5	3.0
21	9.5	8.0	5.0	4.5	--	--	2.5	1.5	1.5	0.5	6.0	3.5
22	10.0	8.0	6.0	5.0	0.5	0.0	2.5	1.5	1.5	1.0	6.5	3.5
23	8.5	8.0	6.0	5.5	0.5	0.0	2.5	1.5	2.0	0.5	5.5	4.0
24	8.5	7.0	6.5	6.0	0.0	0.0	2.5	1.5	2.5	1.0	6.0	3.0
25	8.5	7.0	7.0	5.5	0.5	0.0	3.0	1.5	2.5	0.5	6.0	5.0
26	7.5	6.0	5.5	3.5	0.5	0.0	3.5	2.0	1.0	0.5	5.5	4.0
27	7.0	5.5	3.5	3.0	0.5	0.0	3.5	2.0	0.5	0.5	7.0	3.5
28	7.0	5.5	3.5	2.5	0.5	0.0	3.0	1.5	0.5	0.5	7.5	3.5
29	7.0	5.5	4.0	2.0	0.5	0.5	3.5	1.5	--	--	7.5	4.5
30	7.0	5.5	2.5	2.0	0.5	0.5	3.0	2.0	--	--	7.0	4.0
31	7.5	6.5	--	--	0.5	0.5	3.5	2.0	--	--	6.0	2.0
AVE	9.8	7.9	6.1	5.3	--	--	1.7	1.0	3.0	1.3	4.5	2.5
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	3.0	8.5	5.0	7.5	3.5	14.5	11.5	18.0	16.5	14.0	12.5
2	6.5	3.0	7.5	5.0	8.5	4.0	14.0	11.5	18.0	16.0	14.0	12.5
3	7.5	3.0	6.0	4.0	9.5	5.5	14.5	11.0	18.0	16.0	13.5	12.0
4	7.5	3.5	7.0	4.0	10.0	7.5	14.5	11.0	17.5	16.0	14.0	12.5
5	7.5	4.0	8.0	5.0	10.5	6.0	14.5	11.5	17.5	16.0	13.5	12.0
6	5.5	4.5	7.0	6.0	10.5	7.0	15.0	11.0	17.0	15.5	14.0	12.5
7	6.0	3.5	6.5	5.5	11.5	7.5	15.0	11.5	17.0	14.5	13.5	11.0
8	7.0	3.0	7.0	5.5	11.0	7.5	15.0	11.0	17.0	15.5	14.0	12.0
9	7.0	4.5	9.0	6.0	10.0	7.5	15.0	11.0	18.0	15.5	16.0	14.0
10	7.5	4.5	10.5	6.0	10.5	7.0	14.5	10.5	18.5	16.5	16.0	14.0
11	7.5	3.5	8.0	6.5	11.5	7.0	15.5	11.5	18.0	15.5	15.5	14.0
12	8.5	4.0	10.0	6.0	11.5	8.0	15.5	11.5	18.0	15.5	15.5	14.0
13	6.5	3.5	9.5	5.5	11.0	8.0	16.0	12.5	17.0	15.0	15.0	14.0
14	6.5	4.0	10.5	5.5	12.0	7.5	16.5	13.0	17.0	14.5	15.0	14.0
15	8.5	4.0	10.0	5.5	12.0	8.0	17.0	14.0	17.5	15.0	15.0	13.5
16	7.5	4.0	7.5	4.5	11.5	8.5	17.5	15.0	17.5	15.0	14.0	13.0
17	5.5	2.0	7.5	3.5	11.5	7.5	17.5	15.0	19.5	13.5	13.5	12.5
18	4.5	1.0	8.5	4.0	11.0	7.5	17.5	15.5	15.5	13.5	13.0	12.0
19	6.0	2.0	9.0	5.0	12.0	8.0	17.0	15.0	15.5	14.0	12.5	11.0
20	5.5	3.5	9.0	5.5	13.0	8.5	17.5	15.0	15.5	13.0	12.5	11.0
21	4.5	1.5	7.0	4.0	12.5	9.5	17.0	14.5	15.0	13.0	12.0	10.5
22	5.0	2.0	9.0	4.0	12.5	9.0	16.5	14.5	15.0	12.5	12.0	10.5
23	6.5	4.0	10.5	5.5	13.0	9.5	16.5	14.5	15.5	13.0	12.0	10.0
24	4.5	2.5	9.5	6.5	13.5	9.5	17.0	14.5	15.5	14.0	12.0	10.0
25	3.5	1.5	10.0	6.0	13.0	10.0	16.5	14.0	16.0	14.5	11.5	10.0
26	5.5	2.5	8.5	7.0	12.5	10.0	17.0	13.5	16.5	15.0	10.0	8.5
27	7.0	4.0	7.0	4.5	13.0	10.5	17.5	15.0	16.0	13.5	10.0	8.0
28	8.0	5.0	7.5	4.0	12.0	9.5	18.0	15.5	15.5	14.5	10.0	8.0
29	8.5	5.0	9.0	5.0	13.0	9.5	18.0	14.5	15.0	13.5	9.0	7.0
30	8.5	4.5	8.0	5.0	14.0	10.5	18.5	16.0	14.0	12.5	8.5	7.5
31	--	--	6.5	3.5	--	--	18.5	16.5	13.5	11.5	--	--
AVE	6.5	3.3	8.4	5.1	11.5	8.0	16.3	13.3	16.5	14.5	13.0	11.5

## SAN JOAQUIN RIVER BASIN

11283100 LILY CREEK NEAR PINECREST, CALIF.

LOCATION.--Lat 38°08'41", long 119°53'59", in T.3 N., R.19 E., Tuolumne County, Stanislaus National Forest, temperature recorder at gaging station on left bank, 1,500 ft downstream from Mud Lake, and 5.7 miles southeast of Pinecrest.

DRAINAGE AREA.--11.9 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1964 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 23.0°C July 31, Aug. 1, 2; minimum, freezing point on many days during winter period.

Period of record:

Water temperatures: Maximum, 25.0°C Aug. 17, 1966; minimum, freezing point on many days during winter period each year.

REMARKS.--Temperature probe frozen Dec. 1 to Mar. 17. No flow Oct. 1-23.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	5.5	5.0	--	--	--	--	--	--	--	--
2	--	--	5.5	5.0	--	--	--	--	--	--	--	--
3	--	--	5.5	5.5	--	--	--	--	--	--	--	--
4	--	--	5.5	4.0	--	--	--	--	--	--	--	--
5	--	--	4.0	2.0	--	--	--	--	--	--	--	--
6	--	--	3.0	2.0	--	--	--	--	--	--	--	--
7	--	--	3.0	2.0	--	--	--	--	--	--	--	--
8	--	--	3.0	2.5	--	--	--	--	--	--	--	--
9	--	--	3.5	3.0	--	--	--	--	--	--	--	--
10	--	--	4.0	3.5	--	--	--	--	--	--	--	--
11	--	--	4.0	3.0	--	--	--	--	--	--	--	--
12	--	--	4.0	3.0	--	--	--	--	--	--	--	--
13	--	--	3.5	2.0	--	--	--	--	--	--	--	--
14	--	--	3.5	3.0	--	--	--	--	--	--	--	--
15	--	--	3.5	3.0	--	--	--	--	--	--	--	--
16	--	--	3.5	2.5	--	--	--	--	--	--	--	--
17	--	--	3.5	2.5	--	--	--	--	--	--	--	--
18	--	--	3.5	3.0	--	--	--	--	--	--	0.5	0.5
19	--	--	3.5	2.5	--	--	--	--	--	--	1.0	0.5
20	--	--	3.0	2.5	--	--	--	--	--	--	1.5	0.5
21	--	--	3.0	2.5	--	--	--	--	--	--	2.0	1.0
22	--	--	3.5	3.0	--	--	--	--	--	--	2.0	1.0
23	--	--	4.5	3.5	--	--	--	--	--	--	2.0	1.0
24	--	--	4.5	4.0	--	--	--	--	--	--	2.0	1.0
25	4.5	4.0	4.5	2.5	--	--	--	--	--	--	2.0	1.0
26	4.5	4.5	2.5	2.0	--	--	--	--	--	--	1.0	0.5
27	4.5	4.5	2.0	2.0	--	--	--	--	--	--	1.5	0.5
28	5.0	4.5	2.0	1.0	--	--	--	--	--	--	2.0	1.0
29	5.0	5.0	1.0	1.0	--	--	--	--	--	--	2.5	1.0
30	5.0	5.0	1.0	1.0	--	--	--	--	--	--	2.0	1.5
31	5.5	5.0	--	--	--	--	--	--	--	--	2.0	1.0
AVE	--	--	3.5	2.8	--	--	--	--	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.0	0.5	2.5	1.5	5.0	2.5	14.0	10.0	23.0	19.5	17.0	14.5
2	2.5	1.0	2.0	1.5	5.5	2.5	14.0	10.5	23.0	19.5	17.0	14.5
3	2.5	1.0	1.5	1.0	4.5	3.0	14.0	10.5	22.0	19.0	16.0	13.0
4	2.5	1.0	1.5	1.0	5.0	3.5	14.5	11.0	22.0	19.0	16.5	13.5
5	2.5	1.5	2.5	1.0	6.0	3.0	15.5	11.5	22.0	19.0	16.0	13.5
6	1.5	1.5	2.0	1.5	6.5	3.5	15.5	11.5	22.0	19.0	15.5	14.0
7	1.5	1.0	2.0	1.5	7.5	3.5	15.5	11.5	22.0	18.5	16.5	14.0
8	2.5	0.5	2.0	1.5	7.0	4.5	16.0	11.5	22.0	18.5	17.0	14.0
9	2.5	1.0	3.5	2.0	7.0	4.5	16.0	11.5	21.0	19.0	17.5	15.0
10	2.5	1.5	3.5	2.0	6.5	4.5	16.0	11.5	21.5	18.5	17.5	15.0
11	2.5	1.5	2.5	1.5	8.0	5.0	16.0	12.0	21.0	19.0	18.0	15.0
12	2.5	1.5	2.5	2.0	9.5	6.0	17.0	13.0	22.0	19.0	18.0	15.5
13	1.5	1.5	2.0	1.5	9.5	6.5	17.5	14.0	21.5	18.5	18.0	15.5
14	2.5	1.5	3.5	1.5	10.0	6.5	18.0	15.0	21.0	18.0	18.0	16.0
15	2.5	1.5	4.0	1.5	11.0	7.0	19.0	16.0	21.0	18.0	18.0	15.0
16	2.5	1.5	3.5	1.5	11.0	7.0	20.0	17.0	21.0	18.0	17.0	14.5
17	1.5	1.0	4.0	1.5	11.0	7.0	20.0	18.0	20.5	17.0	16.5	13.5
18	2.0	0.5	4.5	1.5	10.5	7.0	18.5	16.5	20.0	17.0	16.0	12.5
19	2.5	0.5	4.0	2.0	11.0	7.0	18.5	16.5	20.5	17.0	15.0	11.5
20	2.0	1.0	4.0	2.0	11.5	7.5	19.5	16.5	20.0	17.0	14.0	10.5
21	1.5	0.5	2.5	2.0	11.5	8.0	19.5	16.5	19.5	16.5	13.0	10.0
22	1.5	1.0	6.0	2.0	11.5	8.0	19.5	17.0	19.0	16.0	12.0	9.5
23	3.5	1.0	5.0	2.5	11.0	8.0	19.0	17.5	18.5	16.0	13.0	10.0
24	3.0	0.5	5.0	3.0	11.5	8.0	19.5	18.0	19.0	16.0	12.0	10.5
25	0.5	0.5	5.5	3.0	11.5	8.0	20.0	18.0	19.5	16.5	11.5	10.5
26	1.5	0.5	3.5	3.0	9.0	7.5	20.0	18.0	20.0	17.0	10.5	9.0
27	2.5	0.5	3.0	2.5	9.0	7.5	21.0	18.0	19.0	16.0	9.0	7.5
28	3.0	1.0	4.5	1.5	10.5	7.0	21.5	18.5	18.5	16.0	8.5	7.0
29	3.0	1.0	4.5	2.5	12.0	7.5	22.0	19.0	18.5	15.5	7.5	7.0
30	3.5	1.0	4.0	2.5	13.0	9.0	22.5	19.5	17.5	14.5	7.5	5.0
31	--	--	4.5	2.5	--	--	23.0	19.5	17.0	14.5	--	--
AVE	2.3	1.0	3.4	1.9	9.1	6.0	18.1	15.0	20.5	17.5	14.6	12.2

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, temperature recorder at gaging station on left bank, 0.5 mile downstream from La Grange Dam, and 1.1 miles east of La Grange.

DRAINAGE AREA.--1,538 sq mi.

PERIOD OF RECORD.--Water temperatures: November 1970 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Minimum, 6.0°C Feb. 6-8, 10.

REMARKS.--No record May 9, June 14 to Sept. 30. Record furnished by city and county of San Francisco.

## TEMPERATURE (°C) OF WATER, NOVEMBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	12.0	12.0	8.0	8.0	7.0	7.0	8.0	7.0
2	--	--	--	--	12.0	12.0	8.0	8.0	7.0	7.0	8.0	7.0
3	--	--	--	--	12.0	12.0	8.0	8.0	7.0	7.0	8.0	8.0
4	--	--	--	--	12.0	12.0	8.0	8.0	7.0	7.0	9.0	8.0
5	--	--	--	--	12.0	12.0	8.0	8.0	7.0	7.0	8.0	7.0
6	--	--	--	--	12.0	12.0	8.0	7.0	7.0	6.0	8.0	7.0
7	--	--	--	--	12.0	12.0	8.0	7.0	7.0	6.0	8.0	7.0
8	--	--	--	--	12.0	11.0	8.0	7.0	7.0	6.0	8.0	7.0
9	--	--	--	--	11.0	11.0	8.0	7.0	7.0	7.0	8.0	8.0
10	--	--	14.0	13.0	11.0	11.0	8.0	8.0	7.0	6.0	9.0	8.0
11	--	--	14.0	14.0	11.0	11.0	8.0	8.0	7.0	7.0	9.0	8.0
12	--	--	14.0	13.0	11.0	10.0	8.0	8.0	8.0	7.0	8.0	8.0
13	--	--	14.0	13.0	10.0	10.0	8.0	8.0	8.0	7.0	9.0	8.0
14	--	--	14.0	13.0	10.0	10.0	8.0	8.0	8.0	7.0	8.0	8.0
15	--	--	13.0	13.0	10.0	10.0	8.0	7.0	8.0	8.0	9.0	8.0
16	--	--	13.0	13.0	10.0	10.0	8.0	7.0	8.0	8.0	9.0	8.0
17	--	--	13.0	13.0	10.0	10.0	8.0	7.0	9.0	8.0	9.0	8.0
18	--	--	13.0	13.0	10.0	10.0	8.0	7.0	9.0	8.0	9.0	8.0
19	--	--	13.0	13.0	10.0	10.0	8.0	7.0	9.0	9.0	9.0	8.0
20	--	--	13.0	13.0	10.0	10.0	7.0	7.0	9.0	8.0	10.0	9.0
21	--	--	13.0	13.0	10.0	10.0	7.0	7.0	9.0	8.0	10.0	9.0
22	--	--	13.0	13.0	10.0	9.0	7.0	7.0	9.0	8.0	10.0	9.0
23	--	--	13.0	13.0	10.0	9.0	7.0	7.0	9.0	8.0	10.0	10.0
24	--	--	13.0	13.0	9.0	9.0	7.0	7.0	9.0	8.0	11.0	10.0
25	--	--	13.0	13.0	9.0	9.0	7.0	7.0	9.0	8.0	10.0	10.0
26	--	--	13.0	13.0	9.0	9.0	8.0	7.0	9.0	8.0	10.0	10.0
27	--	--	13.0	13.0	9.0	9.0	7.0	7.0	8.0	8.0	12.0	10.0
28	--	--	13.0	12.0	9.0	9.0	7.0	7.0	8.0	8.0	12.0	10.0
29	--	--	13.0	12.0	9.0	9.0	7.0	7.0	--	--	11.0	10.0
30	--	--	12.0	12.0	9.0	8.0	7.0	7.0	--	--	10.0	10.0
31	--	--	--	--	9.0	8.0	7.0	7.0	--	--	10.0	10.0
AVE	--	--	--	--	10.4	10.2	7.6	7.3	8.0	7.4	9.3	8.5
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.0	13.0	11.0	15.0	12.0	--	--	--	--	--	--
2	11.0	10.0	13.0	11.0	13.0	12.0	--	--	--	--	--	--
3	11.0	10.0	14.0	11.0	16.0	12.0	--	--	--	--	--	--
4	11.0	10.0	13.0	11.0	16.0	12.0	--	--	--	--	--	--
5	11.0	10.0	12.0	11.0	16.0	12.0	--	--	--	--	--	--
6	11.0	10.0	13.0	11.0	17.0	12.0	--	--	--	--	--	--
7	11.0	10.0	11.0	11.0	17.0	12.0	--	--	--	--	--	--
8	11.0	10.0	13.0	11.0	17.0	12.0	--	--	--	--	--	--
9	11.0	10.0	--	--	15.0	12.0	--	--	--	--	--	--
10	11.0	10.0	17.0	11.0	16.0	12.0	--	--	--	--	--	--
11	11.0	10.0	17.0	12.0	18.0	12.0	--	--	--	--	--	--
12	11.0	10.0	16.0	12.0	18.0	13.0	--	--	--	--	--	--
13	11.0	10.0	15.0	12.0	16.0	13.0	--	--	--	--	--	--
14	11.0	10.0	15.0	12.0	--	--	--	--	--	--	--	--
15	11.0	10.0	15.0	11.0	--	--	--	--	--	--	--	--
16	12.0	10.0	14.0	11.0	--	--	--	--	--	--	--	--
17	11.0	10.0	14.0	11.0	--	--	--	--	--	--	--	--
18	11.0	10.0	15.0	11.0	--	--	--	--	--	--	--	--
19	12.0	10.0	16.0	11.0	--	--	--	--	--	--	--	--
20	12.0	11.0	15.0	12.0	--	--	--	--	--	--	--	--
21	12.0	11.0	17.0	12.0	--	--	--	--	--	--	--	--
22	12.0	11.0	17.0	12.0	--	--	--	--	--	--	--	--
23	12.0	12.0	18.0	12.0	--	--	--	--	--	--	--	--
24	12.0	11.0	17.0	12.0	--	--	--	--	--	--	--	--
25	12.0	11.0	16.0	12.0	--	--	--	--	--	--	--	--
26	12.0	11.0	15.0	12.0	--	--	--	--	--	--	--	--
27	12.0	11.0	12.0	12.0	--	--	--	--	--	--	--	--
28	13.0	11.0	14.0	12.0	--	--	--	--	--	--	--	--
29	13.0	11.0	16.0	12.0	--	--	--	--	--	--	--	--
30	12.0	11.0	14.0	12.0	--	--	--	--	--	--	--	--
31	--	--	14.0	12.0	--	--	--	--	--	--	--	--
AVE	11.5	10.4	14.7	11.5	--	--	--	--	--	--	--	--

## SAN JOAQUIN RIVER BASIN

11290000 TUOLUMNE RIVER AT MODESTO, CALIF.

LOCATION.--Lat 37°37'38", long 120°59'11", in SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec.33, T.3 S., R.9 E., Stanislaus County, temperature recorder at gaging station on left bank, at bridge on Ninth Street in Modesto, and 0.2 mile downstream from Dry Creek.

DRAINAGE AREA.--1,884 sq mi.

PERIOD OF RECORD.--Water temperatures: July 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum recorded, 31.0°C Aug. 11, 1971; minimum, 8.0°C Feb. 3.

Period of record:

Water temperatures: Maximum (1965-67, 1968-71), 31.0°C (recorded) Aug. 11, 1971; minimum, 8.0°C on many days during winter period of most years.

REMARKS.--Clock stopped Oct. 1-8, Jan. 2-12, May 2-24; range in temperature, 17.5°C to 23.5°C, 8.5°C to 10.0°C, and 16.0°C to 22.5°C, respectively. Probe was destroyed June 10 and replaced July 29.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	16.5	15.0	13.5	12.5	10.5	10.0	9.0	9.0	10.0	8.5
2	--	--	16.5	15.0	13.0	12.0	--	--	9.0	8.5	10.5	9.0
3	--	--	16.0	15.0	13.0	12.0	--	--	9.0	8.0	11.0	10.0
4	--	--	16.0	15.5	13.0	12.0	--	--	9.0	8.5	12.0	10.5
5	--	--	17.0	16.0	13.0	12.5	--	--	9.5	9.0	11.5	10.0
6	--	--	16.5	16.0	14.0	13.0	--	--	9.5	9.0	12.0	10.0
7	--	--	17.0	15.0	13.5	13.5	--	--	9.5	9.0	11.5	10.5
8	--	--	17.0	16.0	13.5	13.5	--	--	10.0	9.5	12.0	10.5
9	20.5	18.5	17.0	16.0	13.5	13.0	--	--	10.0	9.5	13.0	11.0
10	21.0	19.0	17.0	16.0	13.0	12.5	--	--	9.5	9.0	13.0	11.5
11	21.0	19.0	17.0	16.5	13.0	12.5	--	--	9.5	9.0	13.5	12.0
12	21.5	19.5	16.5	15.5	12.5	12.0	--	--	9.5	9.0	13.0	12.5
13	20.5	19.0	15.5	14.5	12.0	11.5	10.0	9.0	10.5	9.5	13.0	11.5
14	20.5	19.0	15.5	15.0	11.5	11.0	9.5	9.0	12.0	10.5	12.5	11.5
15	19.5	18.5	15.0	14.0	11.5	11.0	9.5	9.0	12.5	11.5	12.5	11.0
16	19.5	18.0	14.5	13.5	11.5	11.0	9.5	9.0	11.5	10.0	13.5	11.5
17	19.0	17.5	14.5	13.5	11.5	11.0	10.0	9.5	10.5	10.0	13.5	12.0
18	18.5	17.5	14.5	13.5	11.5	11.0	10.5	10.0	11.0	10.0	14.0	11.5
19	19.0	17.0	14.0	13.0	11.0	10.5	10.5	10.0	11.0	10.5	14.5	12.5
20	18.5	17.5	14.0	13.0	11.0	10.5	10.5	10.5	10.5	10.0	15.0	12.5
21	18.5	17.0	14.0	13.0	11.0	11.0	10.5	10.0	10.5	9.5	15.5	13.5
22	18.5	17.5	14.5	14.0	11.5	11.0	10.5	9.5	11.0	10.0	16.5	14.5
23	18.5	17.5	14.0	13.5	11.5	11.5	10.0	9.0	11.0	10.0	16.0	15.5
24	17.5	16.5	14.5	14.0	11.5	11.0	10.0	9.0	11.5	10.5	17.5	15.5
25	17.5	16.0	15.0	14.5	11.0	10.5	10.0	9.5	11.5	10.5	17.0	15.0
26	17.0	15.5	14.5	14.0	10.5	10.5	10.0	9.5	10.5	9.5	15.5	15.0
27	16.5	14.5	14.0	13.0	11.0	10.5	10.0	9.5	10.0	9.0	16.0	14.5
28	16.5	14.5	13.5	12.0	11.0	10.5	10.0	10.0	10.5	9.5	16.0	14.0
29	16.5	14.5	13.0	12.5	11.0	10.5	10.0	10.0	--	--	17.0	14.5
30	16.0	15.0	12.5	12.0	10.5	10.0	10.0	9.5	--	--	17.0	15.5
31	16.5	14.5	--	--	10.5	10.0	9.5	9.0	--	--	16.5	14.0
AVE	--	--	15.2	14.3	12.0	11.5	--	--	10.3	9.6	13.9	12.3
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	14.5	19.5	18.0	21.0	18.0	--	--	29.0	24.5	25.5	22.0
2	17.0	14.5	--	--	21.5	18.0	--	--	29.0	25.5	25.0	22.5
3	17.0	14.5	--	--	22.0	19.0	--	--	28.5	24.5	25.0	21.0
4	17.5	15.0	--	--	22.5	19.0	--	--	29.0	24.5	26.0	21.5
5	18.0	15.5	--	--	23.5	20.0	--	--	29.0	24.5	26.0	22.5
6	17.5	16.5	--	--	24.0	21.0	--	--	29.0	24.0	25.5	22.5
7	16.5	14.5	--	--	24.0	21.0	--	--	29.0	24.5	25.0	21.0
8	15.0	13.0	--	--	24.0	21.0	--	--	29.0	24.5	26.0	21.5
9	15.5	13.5	--	--	22.5	21.0	--	--	29.5	25.0	26.0	22.5
10	16.5	14.5	--	--	--	--	--	--	30.5	25.5	25.5	22.5
11	17.0	14.5	--	--	--	--	--	--	31.0	27.0	25.5	22.5
12	17.5	15.0	--	--	--	--	--	--	30.5	26.5	26.0	22.5
13	17.5	16.0	--	--	--	--	--	--	29.5	25.5	27.0	23.5
14	17.5	16.0	--	--	--	--	--	--	28.0	25.0	26.5	24.0
15	18.0	15.5	--	--	--	--	--	--	28.0	24.5	27.0	23.5
16	18.0	16.0	--	--	--	--	--	--	27.5	24.0	27.0	23.5
17	17.5	15.0	--	--	--	--	--	--	28.0	24.0	25.0	23.0
18	17.0	15.0	--	--	--	--	--	--	28.0	23.5	24.5	21.5
19	17.5	15.0	--	--	--	--	--	--	28.0	24.5	25.0	21.5
20	17.0	15.5	--	--	--	--	--	--	27.5	23.5	24.5	21.5
21	16.5	14.5	--	--	--	--	--	--	27.5	23.5	24.0	21.0
22	16.5	14.5	--	--	--	--	--	--	27.0	24.0	24.0	21.0
23	17.5	15.5	--	--	--	--	--	--	26.5	24.0	24.5	21.0
24	16.5	15.0	--	--	--	--	--	--	26.0	24.0	23.0	21.0
25	17.5	14.5	23.0	20.5	--	--	--	--	27.5	24.0	22.0	20.0
26	18.5	16.5	22.0	19.5	--	--	--	--	28.0	24.0	22.0	19.0
27	19.0	16.5	19.5	17.5	--	--	--	--	27.0	23.5	21.0	19.0
28	19.5	17.0	18.5	17.0	--	--	--	--	26.0	23.0	21.0	18.0
29	19.5	17.0	19.5	18.0	--	--	28.0	23.5	25.5	22.0	21.0	18.5
30	20.0	17.5	20.5	18.0	--	--	27.0	24.0	25.0	22.0	20.5	18.5
31	--	--	20.0	18.0	--	--	28.5	24.0	25.0	22.0	--	--
AVE	17.4	15.3	--	--	--	--	--	--	28.0	24.2	24.5	21.4



## 11292700 MIDDLE FORK STANISLAUS RIVER AT HELLS HALF ACRE BRIDGE, NEAR PINECREST, CALIF.

LOCATION.--Lat 38°14'49", long 120°01'51", in SW¼ sec.31, T.5 N., R.18 E., Tuolumne County, temperature recorder at gaging station on left bank, 200 ft upstream from Donnell powerhouse, 800 ft downstream from Hells Half Acre Bridge, 1.1 miles upstream from Cow Creek, and 4.7 miles northwest of Pinecrest.

DRAINAGE AREA.--287 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1965 to September 1971.

EXTREMES,--1970-71:

Water temperatures: Maximum, 21.5°C July 21, 22, Aug. 2; minimum, freezing point on several days during January to March.

Period of record:

Water temperatures: Maximum (1966-71), 22.0°C sometime during period June 7-26, June 27, 1968, July 15, 1970; minimum, freezing point on several days during winter period each year.

REMARKS.--Clock stopped May 9-19; range in temperature, 4.5°C to 11.0°C.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	12.5	10.0	8.0	3.5	3.0	3.0	2.0	4.5	3.0	1.5	0.0
2	15.0	12.5	10.5	9.0	4.0	2.0	2.5	0.0	4.5	3.0	2.0	0.0
3	15.5	12.5	10.5	9.0	2.5	2.0	1.0	0.0	3.5	2.0	2.5	1.0
4	15.5	13.0	9.5	9.0	3.5	2.5	1.0	0.0	3.5	2.0	3.0	2.0
5	15.0	12.5	9.5	9.0	4.5	3.0	1.0	0.0	5.0	3.0	3.5	1.0
6	14.5	12.0	9.5	8.0	4.5	3.5	1.5	0.0	5.0	3.0	4.5	1.0
7	13.0	11.0	9.0	7.5	5.0	4.5	1.0	0.0	4.5	2.5	4.5	2.0
8	13.0	10.0	9.5	7.5	5.5	4.5	1.5	0.0	4.5	2.5	5.5	2.5
9	13.0	10.0	9.5	8.5	5.0	4.0	2.5	1.0	5.0	3.0	5.0	2.5
10	14.0	11.5	9.5	8.0	4.0	3.0	3.0	1.5	6.0	3.5	5.5	3.5
11	14.0	11.0	10.0	8.5	4.5	3.0	2.5	2.0	7.0	5.0	6.5	4.0
12	14.0	11.5	9.5	8.0	5.0	4.0	2.5	0.0	6.5	4.5	5.5	2.5
13	13.5	11.0	8.0	6.5	4.0	3.0	0.0	0.0	6.5	4.0	4.0	1.5
14	13.5	11.0	7.5	6.5	3.5	2.5	0.5	0.0	6.0	4.0	3.0	2.0
15	13.0	11.0	8.0	6.5	4.0	2.5	1.0	0.0	6.5	4.0	5.0	2.5
16	13.0	11.0	7.5	6.0	3.5	1.5	2.0	1.0	4.0	3.0	6.0	3.0
17	12.5	11.0	7.5	5.5	2.0	1.5	2.5	1.5	4.5	3.0	7.0	4.0
18	11.5	10.5	7.5	6.0	2.0	1.0	3.5	2.0	4.5	2.0	6.5	3.0
19	12.0	9.5	7.5	5.5	3.0	2.0	3.5	2.5	4.0	1.5	7.0	3.5
20	11.0	10.5	7.0	5.5	2.5	1.5	4.5	3.0	3.5	0.5	7.5	4.0
21	11.0	10.0	7.0	5.5	2.0	1.0	4.0	3.0	3.5	1.5	7.5	4.0
22	12.0	10.0	7.5	6.5	2.0	1.0	3.5	2.0	3.0	2.0	7.0	4.0
23	11.5	10.0	8.5	7.0	2.0	1.0	4.0	2.0	4.0	1.5	6.0	5.0
24	11.0	9.5	8.5	7.0	1.5	0.5	4.0	2.5	4.5	1.5	7.0	4.0
25	11.0	9.0	8.0	6.5	2.0	0.5	4.0	2.5	4.5	1.5	6.0	4.5
26	10.0	8.5	6.5	5.0	2.0	1.5	4.5	3.0	2.5	0.5	5.0	4.0
27	9.5	7.5	5.5	4.5	2.5	2.0	4.5	3.0	0.5	0.0	7.0	3.5
28	9.5	7.5	4.5	4.5	3.0	2.0	4.5	3.0	0.5	0.0	7.0	3.5
29	10.0	7.5	4.5	3.0	3.0	2.0	4.5	3.0	--	--	8.0	4.0
30	9.5	8.0	4.0	3.0	3.0	2.0	4.5	3.0	--	--	7.5	4.5
31	10.0	8.0	--	--	3.0	2.0	4.5	3.0	--	--	6.5	3.0
AVE	12.5	10.4	8.0	6.7	3.3	2.3	2.8	1.5	4.4	2.4	5.5	2.9
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	3.0	9.0	5.0	7.5	5.0	15.5	11.5	21.0	17.0	17.5	13.5
2	7.0	3.5	7.5	5.5	9.5	5.5	16.0	11.5	21.5	17.0	17.5	14.0
3	8.0	4.0	6.0	5.0	9.5	7.0	16.0	11.5	20.0	17.0	17.0	13.0
4	8.0	4.0	6.0	5.0	11.5	7.5	16.0	12.0	20.5	16.5	17.0	13.5
5	8.5	4.5	7.5	4.5	12.0	8.0	16.5	12.5	20.0	16.5	16.5	13.5
6	6.0	4.5	7.0	6.0	13.0	8.5	16.5	12.5	20.0	16.5	17.0	14.0
7	5.0	4.0	7.0	6.0	13.5	9.5	16.5	12.5	20.0	16.0	17.0	13.0
8	7.0	3.5	6.5	6.0	13.0	10.0	16.5	12.5	19.5	15.5	17.5	13.5
9	7.5	4.0	--	--	12.5	10.0	16.5	12.5	19.5	16.0	18.5	14.5
10	7.5	5.0	--	--	13.0	9.0	16.5	13.0	18.0	16.0	18.5	15.0
11	8.0	4.0	--	--	13.5	9.5	17.0	12.5	19.5	16.0	18.5	15.0
12	8.5	4.0	--	--	15.0	11.0	18.0	13.5	20.5	16.5	19.0	15.5
13	7.0	5.0	--	--	13.5	10.5	19.0	14.0	20.5	16.5	19.0	16.0
14	7.5	4.5	--	--	14.0	10.5	19.5	15.0	19.5	16.0	19.0	16.0
15	9.0	4.5	--	--	15.0	11.0	20.0	15.5	19.5	15.5	18.5	15.5
16	8.5	4.5	--	--	15.0	10.5	20.5	16.5	19.5	15.5	18.0	15.0
17	5.0	2.5	--	--	14.5	10.0	18.5	17.0	19.0	15.0	17.5	14.5
18	5.5	1.5	--	--	14.5	9.5	19.5	16.5	19.0	15.0	16.5	13.5
19	6.5	3.0	--	--	14.5	10.5	20.5	16.0	19.0	15.0	16.0	13.0
20	5.5	2.5	10.5	6.5	15.0	11.5	21.0	17.0	18.5	14.5	16.0	13.0
21	4.5	2.0	7.5	5.5	15.0	11.0	21.5	17.0	17.5	14.0	16.0	13.0
22	5.0	2.5	9.5	5.0	15.5	11.0	21.5	17.0	17.5	14.0	16.0	13.0
23	7.0	3.5	10.0	6.5	15.0	10.5	20.5	16.5	17.0	14.0	16.0	13.0
24	5.0	2.5	12.0	7.5	15.5	10.5	20.5	16.5	18.0	14.0	16.0	13.0
25	3.5	2.0	11.5	7.5	15.0	11.0	20.0	16.0	18.5	15.0	15.5	12.5
26	5.5	3.0	10.0	7.0	13.5	10.5	20.0	15.5	19.0	15.0	13.5	11.5
27	7.5	3.5	7.0	5.5	13.0	10.0	20.0	16.0	19.0	15.0	13.5	11.0
28	8.0	4.5	7.5	4.5	14.0	10.0	20.5	16.5	17.5	15.0	13.0	10.0
29	9.0	5.0	8.5	5.5	14.5	10.5	21.0	16.5	18.5	14.5	12.0	9.5
30	9.0	5.0	8.0	5.5	15.0	11.0	21.0	17.0	18.0	14.0	11.5	9.0
31	--	--	7.5	5.5	--	--	21.0	17.0	17.5	13.5	--	--
AVE	6.9	3.6	--	--	13.5	9.7	18.8	14.7	19.1	15.4	16.5	13.3

## SAN JOAQUIN RIVER BASIN

11295400 STANISLAUS RIVER NEAR HATHAWAY PINES, CALIF.

LOCATION.--Lat 38°08'09", long 120°22'38", in NE¼NE¼ sec.12, T.3 N., R.14 E., Calaveras County, temperature recorder on downstream side of Camp Nine Road bridge at right bank pier, 0.8 mile downstream from gaging station, 4.0 miles southeast of Hathaway Pines, and 4.6 miles east of Murphys.

DRAINAGE AREA.--629 sq mi (at gaging station).

PERIOD OF RECORD.--Water temperatures: February 1970 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum recorded, 18.0°C July 22; minimum, 3.5°C Jan. 13, 14, Feb. 27, Mar. 1, 2.

Period of record:

Water temperatures: Maximum, 18.0°C (recorded) July 22, 1971; minimum, 3.5°C Jan. 13, 14, Feb. 27, Mar. 1, 2, 1971.

REMARKS.--Clock stopped Dec. 12-14; range in temperature, 6.5°C to 8.0°C. Recorder vandalized sometime during period June 28 to July 21.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	12.5	13.0	12.5	9.0	8.5	6.5	6.0	5.0	4.5	4.5	3.5
2	14.0	12.5	13.5	12.5	9.0	7.5	6.0	5.0	5.0	4.5	4.5	3.5
3	14.0	13.0	13.5	13.0	8.0	7.0	5.5	4.5	4.5	4.0	5.0	4.0
4	14.0	13.0	13.5	13.0	8.5	7.5	5.5	4.5	4.5	4.0	5.5	5.0
5	14.0	13.0	13.5	13.0	8.5	7.5	5.5	4.5	5.0	4.5	5.0	4.5
6	14.0	13.0	13.5	12.5	8.5	8.0	5.0	3.0	5.0	5.0	5.5	4.5
7	13.5	12.5	13.0	12.5	9.0	8.0	5.0	4.0	5.5	4.5	5.5	5.0
8	13.0	12.5	13.0	12.0	9.0	8.5	5.0	4.0	5.0	4.5	6.0	5.5
9	13.0	12.5	13.5	12.5	9.0	8.0	5.0	4.5	5.0	4.5	6.5	6.0
10	13.5	12.5	13.5	12.5	8.0	7.0	5.5	5.0	5.0	5.0	7.0	6.0
11	13.5	12.5	13.5	13.0	8.0	7.0	5.5	5.5	5.0	4.5	7.0	6.5
12	13.5	13.0	13.5	13.0	--	--	5.5	4.5	6.0	5.0	7.5	7.0
13	13.5	13.0	13.0	12.0	--	--	4.5	3.5	6.0	5.5	7.0	5.5
14	13.5	13.0	12.5	12.0	--	--	4.5	3.5	6.0	5.5	6.5	6.0
15	14.0	13.0	12.5	12.0	8.0	6.0	5.0	4.5	6.5	6.0	6.5	6.0
16	14.0	13.0	12.5	12.0	8.0	7.0	5.5	5.0	6.5	5.0	7.0	6.5
17	13.5	13.0	12.5	12.0	7.5	7.0	6.0	5.5	6.0	5.0	7.5	7.0
18	13.5	13.0	12.5	11.5	7.0	6.5	5.5	5.0	6.0	4.5	7.5	6.5
19	15.0	13.0	12.5	12.0	7.5	7.0	5.5	4.5	5.5	5.0	8.0	7.0
20	14.0	13.5	12.5	12.0	7.5	7.0	5.5	5.0	5.0	4.0	8.0	7.0
21	14.0	13.0	12.5	12.0	7.0	6.5	5.5	5.0	4.5	4.0	8.0	7.5
22	14.0	13.5	12.5	12.0	7.0	6.0	5.0	4.5	5.0	4.5	8.0	7.5
23	14.0	13.5	12.5	12.5	6.5	6.0	5.0	4.0	5.0	4.5	8.0	7.5
24	13.5	12.5	12.5	12.5	6.5	6.0	4.5	4.0	5.0	4.5	7.5	7.0
25	12.5	11.0	12.5	11.5	6.0	5.0	4.5	4.0	5.5	5.0	8.0	7.5
26	11.0	10.0	12.0	11.0	6.5	5.0	5.0	4.5	5.0	4.0	7.5	6.0
27	10.5	9.5	11.0	10.0	6.5	6.0	5.0	4.5	4.0	3.5	8.0	6.0
28	10.5	10.0	10.5	10.0	7.0	6.0	5.0	4.5	4.5	4.0	8.0	6.5
29	10.0	9.5	10.0	9.0	7.0	6.5	5.0	4.5	--	--	8.5	6.5
30	10.5	9.5	9.0	8.0	7.0	6.0	5.0	4.5	--	--	8.5	7.5
31	12.5	10.5	--	--	6.5	6.0	5.0	4.5	--	--	8.0	6.0
AVE	13.2	12.2	12.5	11.9	7.6	6.8	5.2	4.5	5.2	4.6	7.0	6.1

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	6.0	9.5	7.5	9.5	8.5	--	--	16.0	13.5	14.5	13.0
2	7.5	6.5	9.0	7.5	10.5	9.0	--	--	16.5	13.5	14.5	13.5
3	8.5	7.0	8.0	7.5	11.0	10.0	--	--	15.5	13.5	14.0	13.5
4	8.5	7.0	7.5	7.0	12.0	10.5	--	--	15.5	13.0	14.0	13.5
5	8.5	7.0	8.5	7.5	12.5	11.0	--	--	15.0	13.0	14.5	13.5
6	8.5	6.5	8.5	8.0	13.0	11.5	--	--	15.0	13.0	14.5	13.5
7	7.0	6.5	8.5	8.0	14.0	12.5	--	--	16.0	13.0	14.5	13.5
8	8.0	6.5	8.0	8.0	14.0	12.5	--	--	15.5	13.0	14.5	13.5
9	8.5	7.5	10.0	8.0	14.0	12.0	--	--	16.0	13.0	15.0	13.0
10	8.5	7.5	10.5	8.5	14.0	12.5	--	--	19.5	13.5	15.0	13.0
11	8.5	6.5	10.5	8.0	14.5	12.0	--	--	16.5	13.5	14.5	13.0
12	8.5	7.0	10.0	8.0	15.0	13.0	--	--	16.0	13.5	17.0	13.5
13	8.5	7.0	10.0	8.5	15.0	12.5	--	--	15.5	13.5	17.0	13.5
14	8.0	7.0	11.0	8.0	15.5	13.5	--	--	15.5	13.5	15.0	13.5
15	9.0	7.0	11.0	8.0	16.0	14.0	--	--	15.5	13.5	17.5	13.5
16	9.0	7.0	12.0	8.5	15.5	13.5	--	--	16.0	13.0	14.5	13.0
17	8.5	6.5	10.0	8.0	15.5	14.0	--	--	16.0	13.0	14.5	13.0
18	6.5	5.5	10.5	8.5	15.0	14.0	--	--	15.0	13.0	14.5	13.0
19	8.0	6.5	10.5	9.0	15.5	14.0	--	--	16.0	13.0	13.5	13.0
20	8.0	7.0	11.0	9.5	16.0	14.0	--	--	15.5	13.0	14.0	12.5
21	7.0	6.0	11.0	9.0	15.5	14.0	--	--	15.5	13.0	14.0	12.5
22	7.0	6.0	11.0	8.5	16.0	14.0	--	--	15.0	13.0	14.0	12.5
23	8.0	6.5	12.0	10.0	16.0	14.0	--	--	13.0	13.0	14.0	13.0
24	8.0	5.5	12.0	10.5	16.0	14.0	--	--	15.0	12.5	14.0	13.0
25	6.5	6.0	12.5	10.0	16.0	14.0	--	--	15.0	12.5	13.5	12.5
26	7.0	6.0	12.5	10.5	15.5	14.0	--	--	15.5	13.0	13.0	12.5
27	9.0	6.5	10.5	9.0	15.5	14.0	--	--	15.5	13.0	12.5	12.0
28	9.0	8.0	9.0	8.5	--	--	--	--	16.0	13.0	13.0	12.0
29	9.5	8.0	9.5	9.0	--	--	--	--	13.0	13.0	12.5	12.0
30	9.5	8.0	10.0	9.5	--	--	--	--	15.0	13.0	13.5	12.0
31	--	--	9.5	9.0	--	--	--	--	14.0	13.0	--	--
AVE	8.1	6.7	10.1	8.5	14.4	12.7	--	--	15.6	13.1	14.4	13.0

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, temperature recorder at gaging station on right bank, 250 ft upstream from Owl Creek, 0.9 mile downstream from Goodwin Dam, and 2.9 miles northeast of Knights Ferry.

DRAINAGE AREA.--986 sq mi.

PERIOD OF RECORD.--Water temperatures: February 1966 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 26.5°C Aug. 10-12; minimum, 6.5°C on several days during February.

Period of record:

Water temperatures: Maximum, 26.5°C June 25, 1968, July 26, 1970, Aug. 10-12, 1971; minimum (1966-68, 1969-71), 6.0°C sometime during period Jan. 13-31, 1968.

REMARKS.--No record Nov. 13-16, Jan. 25, 26, 30, Mar. 24 to Apr. 1, 20-22, Apr. 24 to May 3, Aug. 1, 2. Clock stopped June 6 to July 1; range in temperature, 15.5°C to 22.5°C.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	19.0	16.0	15.5	13.0	12.5	8.5	8.5	7.0	7.0	8.0	7.5
2	24.0	19.5	16.0	15.5	12.5	12.5	8.5	8.0	7.0	7.0	8.0	7.5
3	22.5	20.5	16.0	15.5	12.5	12.5	8.5	8.0	7.5	7.0	8.0	7.5
4	22.5	20.5	15.5	15.5	12.5	12.5	8.5	7.5	7.5	7.0	8.0	7.5
5	22.5	20.0	15.5	15.5	12.5	11.5	8.0	7.5	7.5	7.0	8.0	7.5
6	21.5	20.0	15.5	15.5	12.0	11.5	8.0	7.0	7.5	7.5	7.5	7.0
7	21.0	19.5	15.5	15.0	12.0	11.5	8.0	7.0	7.5	7.0	7.5	7.0
8	22.5	19.0	15.5	15.0	12.0	11.5	7.5	7.0	7.5	7.5	7.5	7.0
9	22.5	19.0	15.5	15.5	11.5	11.0	7.5	7.0	7.5	7.0	8.0	7.5
10	21.0	19.0	15.5	15.5	11.5	10.5	7.5	7.0	7.5	7.0	8.0	7.5
11	23.0	18.0	15.5	15.5	11.0	11.0	7.5	7.5	7.5	7.0	8.0	7.5
12	20.5	18.5	15.5	15.5	11.0	11.0	7.5	7.0	7.5	7.0	8.0	8.0
13	21.0	18.0	--	--	11.0	10.5	7.0	7.0	7.0	7.0	8.0	8.0
14	19.5	18.0	--	--	10.5	10.5	7.0	6.5	7.0	7.0	8.0	8.0
15	18.0	17.5	--	--	10.5	10.5	7.0	7.0	7.0	7.0	8.5	8.0
16	18.0	17.5	--	--	10.5	10.5	7.0	6.5	7.0	7.0	8.5	8.0
17	18.0	17.5	15.0	15.0	10.5	10.0	6.5	6.5	7.5	7.0	8.5	8.5
18	18.0	17.5	15.0	15.0	10.5	10.5	6.5	6.5	7.5	7.0	9.0	8.0
19	18.0	17.0	15.0	14.5	10.5	10.0	6.5	6.5	8.0	7.5	9.0	8.0
20	17.5	17.5	15.0	14.0	10.5	10.0	6.5	6.5	8.5	7.5	9.0	8.5
21	17.5	17.5	14.5	14.0	10.5	10.0	7.0	6.5	8.5	7.5	9.0	8.5
22	17.5	17.0	14.5	14.0	10.5	9.5	7.0	6.5	8.5	8.0	9.0	8.5
23	17.5	17.5	14.5	14.0	10.0	9.5	7.0	6.5	8.5	7.5	9.5	8.5
24	17.5	17.0	14.0	14.0	10.0	9.5	7.0	6.5	8.5	8.0	--	--
25	17.5	17.0	14.0	14.0	10.0	9.5	--	--	8.5	8.0	--	--
26	17.0	17.0	14.0	14.0	9.5	9.0	--	--	8.0	7.5	--	--
27	17.0	16.5	14.0	13.5	9.0	9.0	7.0	7.0	8.0	8.0	--	--
28	17.0	16.0	13.5	13.5	9.0	8.5	7.0	7.0	8.0	7.5	--	--
29	16.5	16.0	13.5	13.5	9.0	8.5	7.0	7.0	--	--	--	--
30	16.0	15.5	13.5	13.0	8.5	8.0	--	--	--	--	--	--
31	16.0	15.5	--	--	8.5	8.0	7.0	7.0	--	--	--	--
AVE	19.5	17.9	14.9	14.7	10.7	10.4	7.3	7.0	7.7	7.3	--	--
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	15.5	14.0	--	--	--	--	23.0	22.0
2	12.5	11.0	--	--	16.5	15.5	19.5	17.5	--	--	23.0	22.5
3	14.0	12.0	--	--	17.0	16.0	19.5	18.5	24.5	24.0	23.0	22.5
4	14.0	12.5	13.0	12.5	18.0	17.0	20.0	17.5	24.5	24.0	23.5	22.0
5	15.0	12.5	12.5	11.5	19.0	17.5	22.5	20.0	24.5	23.5	23.0	22.0
6	15.0	13.5	11.5	10.5	--	--	23.0	21.0	24.5	23.5	23.0	22.5
7	13.5	13.0	11.5	11.0	--	--	23.0	22.0	24.5	23.5	22.5	22.5
8	14.0	13.0	11.0	11.0	--	--	23.0	22.0	24.5	23.5	22.5	22.0
9	14.0	13.0	11.5	11.0	--	--	23.5	22.5	24.5	23.5	22.5	22.0
10	13.0	12.0	11.5	10.5	--	--	23.5	22.5	26.5	24.0	22.5	22.0
11	12.5	12.0	11.5	11.0	--	--	23.5	22.5	26.5	24.5	22.5	22.0
12	14.5	12.0	11.5	10.5	--	--	24.5	22.5	26.5	24.5	23.5	22.0
13	14.5	13.0	11.5	11.0	--	--	25.0	23.0	25.5	24.5	23.5	23.0
14	13.5	13.0	11.5	11.0	--	--	25.5	23.5	25.0	24.5	23.5	23.5
15	13.5	12.5	11.5	11.0	--	--	25.5	24.0	24.5	24.0	24.0	23.5
16	13.5	13.0	13.0	11.5	--	--	26.0	24.5	24.0	23.5	24.0	23.5
17	13.5	13.0	13.0	12.5	--	--	25.5	24.0	24.0	23.0	24.0	23.5
18	13.0	12.0	13.5	13.0	--	--	25.0	23.5	23.5	22.5	24.0	23.0
19	12.0	11.5	13.5	13.0	--	--	25.0	23.5	23.5	22.5	23.0	22.5
20	--	--	13.5	12.5	--	--	25.0	24.0	23.0	22.5	23.0	22.5
21	--	--	13.5	12.0	--	--	26.0	24.5	23.0	22.0	23.0	22.5
22	--	--	16.0	13.5	--	--	25.5	24.5	23.0	22.5	22.5	22.0
23	11.0	10.5	17.0	15.5	--	--	25.5	24.5	23.0	22.5	22.5	21.5
24	--	--	18.0	16.0	--	--	25.0	24.0	23.0	22.5	22.0	21.5
25	--	--	18.0	17.5	--	--	24.5	24.0	23.0	22.5	21.5	21.0
26	--	--	18.0	17.5	--	--	25.0	23.5	23.5	22.5	21.0	20.5
27	--	--	18.0	17.0	--	--	25.0	23.5	23.0	22.5	21.0	20.5
28	--	--	17.0	13.5	--	--	25.0	23.5	23.0	22.5	20.5	20.0
29	--	--	13.5	13.0	--	--	25.0	23.5	22.5	22.0	20.0	19.5
30	--	--	13.5	13.0	--	--	24.0	23.5	22.5	22.0	19.5	19.0
31	--	--	15.0	13.5	--	--	24.5	23.0	22.5	22.0	--	--
AVE	--	--	13.7	12.8	--	--	24.1	22.7	24.0	23.1	22.6	22.0

## SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.  
(International Hydrological Decade Station)

LOCATION.--Lat 37°40'34", long 121°15'55", in El Pescadero Grant, San Joaquin County, at gaging station on left bank, 12 ft downstream from Durham Ferry highway bridge, 2.6 miles downstream from Stanislaus River, and 3.2 miles northeast of Vernalis.

DRAINAGE AREA.--13,536 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1950 (revised) to September 1971.  
Water temperatures: March 1951 to September 1971.  
Sediment records: November 1956 to September 1971.

## EXTREMES.--1970-71:

Water temperatures: Maximum, 28.5°C July 21, 23, Aug. 11; minimum, 6.0°C Jan. 4, 7.  
Sediment concentrations: Maximum daily, 234 mg/l June 29; minimum daily, 23 mg/l Oct. 30, Nov. 1.  
Sediment discharge: Maximum daily, 2,460 tons June 29; minimum daily, 70 tons Nov. 1.

## Period of record:

Water temperatures: Maximum, 30.0°C July 7, 1970; minimum, 3.0°C Jan. 24, 1962.  
Sediment concentrations (1956-71): Maximum daily, 1,590 mg/l Dec. 25, 1964; minimum daily, 9 mg/l Jan. 4, 1960, Nov. 18, 1961.  
Sediment discharge (1956-71): Maximum daily, 54,100 tons Dec. 25, 1964; minimum daily, 2 tons Aug. 10, 1961.

REMARKS.--Chemical-quality samples collected by California Department of Water Resources.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	MEAN DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	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 STRON- TIUM (SR) (UG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
OCT.											
14...	1020	1590	18.0	10.1	39	10	36	17	450	83	3.8
NOV.											
18...	0830	1570	18.0	9.6	38	10	43	21	540	101	3.7
DEC.											
16...	0920	4550	10.5	10.0	16	20	22	9.5	250	44	2.1
JAN.											
20...	1120	5140	10.0	10.7	14	40	22	11	260	51	2.0
FEB.											
18...	0900	4670	11.0	11.3	12	20	20	9.7	240	46	1.8
MAR.											
02...	1540	2570	10.5	13.0	18	20	31	14	600	69	2.5
APR.											
15...	1230	2150	19.5	9.2	20	80	38	18	410	76	3.2
MAY											
13...	0855	1980	19.0	--	20	40	27	16	390	86	3.0
JUNE											
10...	0845	2030	19.0	10.0	15	20	26	12	770	78	2.3
JULY											
08...	0810	1140	23.5	6.1	--	--	44	21	--	86	3.4
AUG.											
18...	0745	875	--	--	--	--	43	21	--	86	3.9
SEP.											
14...	1500	1040	24.5	12.5	21	20	48	22	760	100	4.7

DATE	DIS- SOLVED LITHIUM (LI) (UG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT.											
14...	10	146	0	54	108	.2	--	1.7	.25	60	421
NOV.											
18...	10	169	0	86	122	.2	--	1.5	.22	160	505
DEC.											
16...	10	82	0	45	50	.0	--	.8	.30	150	233
JAN.											
20...	10	94	0	51	56	.2	--	.9	.16	250	258
FEB.											
18...	10	71	0	48	55	.0	--	.5	.13	100	230
MAR.											
02...	20	104	0	79	88	.3	1.3	--	.12	370	360
APR.											
15...	10	127	0	83	110	.1	1.6	--	.32	370	419
MAY											
13...	10	124	0	130	92	.1	1.0	--	.32	270	440
JUNE											
10...	10	107	0	51	94	.4	.70	--	.25	240	335
JULY											
08...	--	155	0	74	131	--	--	1.5	--	200	476
AUG.											
18...	--	159	0	69	131	--	--	1.1	--	300	443
SEP.											
14...	0	188	0	77	150	.2	.84	--	.30	360	520

## 11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (JTU)
OCT. 14...	.57	1810	160	40	120	52	2.9	713	7.9	14
NOV. 18...	.69	2140	194	55	139	53	3.2	863	7.7	8
DEC. 16...	.32	2860	94	27	67	50	2.0	413	7.2	15
JAN. 20...	.35	3580	100	23	77	52	2.2	453	7.3	9
FEB. 18...	.31	2900	90	32	58	52	2.1	409	7.2	--
MAR. 02...	.49	2500	140	50	85	52	2.6	627	7.5	7
APR. 15...	.57	2430	170	65	104	49	2.5	697	7.4	20
MAY 13...	.60	2350	130	32	102	58	3.2	645	7.4	20
JUNE 10...	.46	1840	110	27	88	59	3.2	515	7.0	30
JULY 08...	.65	1470	198	71	127	48	2.7	832	8.2	--
AUG. 18...	.60	1050	193	63	130	48	2.7	806	7.9	--
SEP. 14...	.71	1460	210	56	154	50	3.0	915	7.3	30

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.5	17.0	11.0	8.0	8.0	10.0	15.5	19.0	18.0	19.5	26.5	20.0
2	20.5	16.0	12.5	8.0	9.5	11.0	18.0	17.0	18.5	24.0	26.5	22.0
3	20.0	15.0	10.0	7.0	9.5	10.0	18.5	18.0	19.0	24.5	25.5	21.0
4	18.0	15.0	10.5	6.0	9.0	12.0	15.0	19.0	20.0	23.5	27.0	22.0
5	18.0	16.0	12.5	6.5	10.0	12.0	19.5	19.5	22.0	25.0	27.0	22.0
6	17.0	15.0	13.0	7.0	11.0	13.0	18.0	19.0	21.0	24.5	27.0	22.0
7	17.5	14.0	13.0	6.0	10.5	10.5	18.0	20.0	22.5	24.5	26.5	22.0
8	20.0	16.0	13.5	7.0	11.0	13.0	19.5	17.5	22.5	25.0	26.5	22.0
9	19.5	16.0	13.0	7.0	10.5	13.5	19.0	19.5	22.0	24.5	26.0	22.0
10	18.0	16.0	11.5	7.0	10.0	13.0	20.0	18.5	21.5	23.0	27.0	23.5
11	20.0	17.0	11.0	8.0	11.0	14.0	18.0	19.5	22.0	23.5	28.5	23.0
12	20.0	17.0	10.0	8.0	11.0	15.0	18.0	24.5	22.0	24.0	28.0	23.0
13	21.0	13.5	10.0	7.5	13.5	12.0	19.0	20.0	21.0	25.0	27.0	24.0
14	17.0	13.0	9.5	8.0	13.0	13.5	19.0	20.0	22.0	26.0	25.0	25.0
15	17.0	13.0	9.5	8.0	12.5	13.0	21.0	20.0	21.5	27.0	25.0	24.0
16	17.0	13.0	9.0	9.0	12.0	13.5	20.5	19.0	22.5	27.5	26.0	25.0
17	17.0	13.0	10.0	10.0	13.0	14.0	19.0	18.0	22.5	26.5	25.0	23.0
18	18.0	13.0	9.5	10.0	11.0	13.5	17.0	18.0	24.0	25.0	25.0	20.0
19	16.0	13.0	9.0	10.0	13.0	13.5	18.0	18.0	22.5	25.0	26.0	21.0
20	17.0	12.0	8.5	10.0	11.0	15.0	14.5	18.0	22.0	25.0	25.0	20.0
21	17.0	13.0	9.0	9.0	12.0	16.5	15.0	18.0	22.5	28.5	25.0	20.0
22	17.0	12.0	9.0	7.0	10.5	16.5	16.5	18.0	21.5	25.5	26.0	21.0
23	17.0	13.0	10.0	8.0	12.0	17.0	19.0	20.0	22.5	28.5	26.0	20.0
24	19.0	13.0	10.0	7.0	12.5	17.0	18.0	21.5	21.0	25.5	26.0	20.0
25	16.0	12.0	9.0	10.5	11.5	13.0	15.5	21.5	20.0	25.5	26.0	17.5
26	16.0	13.0	8.0	7.0	10.5	16.5	16.5	20.0	20.5	25.5	24.0	18.0
27	17.0	12.0	8.5	9.0	10.0	14.0	16.0	20.0	18.5	24.5	27.0	15.0
28	16.0	11.5	9.0	8.0	10.0	15.5	19.0	21.5	20.0	25.0	24.0	15.0
29	17.0	11.5	10.0	8.0	--	15.5	19.0	18.0	18.5	25.0	22.0	15.0
30	16.0	11.0	9.0	9.0	--	14.0	20.0	17.0	18.0	25.0	22.0	17.0
31	15.0	--	9.0	10.0	--	15.5	--	18.0	--	25.0	21.0	--
AVE	17.8	13.8	10.2	8.1	11.0	13.7	18.0	19.2	21.1	25.0	25.6	20.8

## SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	1420	68	261	1120	23	70	3580	138	1330
2	1530	67	277	1140	29	89	3430	108	1000
3	1550	71	297	1150	25	78	3590	104	1010
4	1590	76	326	1190	30	96	3590	85	824
5	1600	93	402	1270	33	113	3640	97	953
6	1640	88	390	1360	42	154	4620	159	1980
7	1570	76	322	1470	45	179	5230	163	2300
8	1530	53	219	1530	44	182	5270	119	1690
9	1500	46	186	1520	44	181	4730	83	1060
10	1540	56	233	1480	47	188	3830	69	714
11	1570	52	220	1470	43	171	3260	69	607
12	1560	52	219	1550	43	180	3590	83	805
13	1550	55	230	1560	44	185	3900	72	758
14	1590	55	236	1590	51	219	4150	70	784
15	1650	53	236	1600	58	251	4350	56	658
16	1820	64	314	1570	56	237	4550	67	823
17	1860	54	271	1600	64	276	4660	74	931
18	1670	37	167	1570	63	267	5060	73	997
19	1530	37	153	1540	57	237	5470	70	1030
20	1440	39	152	1520	53	218	5760	69	1070
21	1370	35	129	1520	46	189	6100	93	1530
22	1300	35	123	1620	40	175	6330	110	1880
23	1280	28	97	1750	42	198	6630	84	1500
24	1280	27	93	1800	53	258	6610	93	1660
25	1290	26	91	1860	56	281	6500	75	1320
26	1250	29	98	1950	52	274	6510	81	1420
27	1240	30	100	1990	49	263	6500	71	1250
28	1200	47	152	2040	55	303	6400	72	1240
29	1200	31	100	2750	142	1050	6310	65	1110
30	1190	23	74	3570	227	2190	6240	67	1130
31	1140	25	77	--	--	--	5970	69	1110
TOTAL	45450	--	6245	49650	--	8752	156360	--	36474

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	5880	58	921	4730	40	511	2620	46	325
2	5920	80	1280	4740	26	333	2570	44	305
3	6080	56	919	5100	30	413	2420	51	333
4	6110	44	726	4980	24	323	2380	59	379
5	6040	44	718	4710	28	356	2400	67	434
6	5780	43	671	4670	38	479	2380	66	424
7	5100	33	454	4700	45	571	2390	58	374
8	4780	33	426	4700	38	482	2470	57	380
9	4710	37	471	4580	32	396	2440	58	382
10	4660	40	503	4600	28	348	2280	58	357
11	4560	43	529	4620	33	412	2280	62	382
12	4410	40	476	4740	41	525	2300	75	466
13	4380	34	402	4690	51	646	2470	70	467
14	5070	67	917	4290	57	660	2690	75	545
15	5660	76	1160	4010	47	509	3020	76	620
16	5900	50	797	4140	50	559	3140	71	602
17	5530	47	702	4630	49	613	3060	68	562
18	5150	44	612	4670	43	542	2860	66	510
19	5080	44	604	4670	43	542	2630	61	433
20	5140	60	833	4580	42	519	2500	71	479
21	5160	51	711	4560	47	579	2330	76	478
22	5220	43	606	4510	50	609	2320	81	507
23	5230	38	537	4410	47	560	2290	61	377
24	5460	47	693	3980	59	634	2290	64	396
25	5560	49	736	3830	58	600	2310	76	474
26	5370	40	580	3470	45	422	2880	83	645
27	5030	34	462	2990	48	388	3220	69	600
28	4780	36	465	2660	41	294	3100	89	745
29	4560	31	382	--	--	--	2970	64	513
30	4440	27	324	--	--	--	2760	67	499
31	4560	30	369	--	--	--	2500	65	439
TOTAL	161310	--	19986	122960	--	13825	80270	--	14432

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2040	160	881	780	209	440	1000	98	265
2	1700	186	854	870	159	373	1010	79	215
3	1530	172	711	870	131	308	980	65	172
4	1490	167	672	790	108	230	986	104	277
5	1530	134	554	775	94	197	1020	89	245
6	1370	106	392	770	98	204	1010	78	213
7	1180	181	577	830	94	211	1030	82	228
8	1140	168	517	845	66	151	986	87	232
9	1090	185	544	850	65	149	997	87	234
10	1050	116	329	795	124	266	930	71	178
11	1080	141	411	757	147	300	940	83	211
12	1110	144	432	762	117	241	1110	91	273
13	1050	161	456	734	65	129	1150	72	224
14	940	159	404	795	127	273	1040	42	118
15	900	131	318	950	164	421	935	50	126
16	865	99	231	1010	124	338	890	72	173
17	860	124	288	945	104	265	890	84	202
18	945	151	385	875	131	309	945	83	212
19	1040	143	402	870	132	310	986	77	205
20	930	122	306	890	182	437	1050	79	224
21	830	117	262	830	143	320	1020	64	176
22	762	173	356	930	72	181	1050	75	213
23	757	149	305	1070	138	399	1120	65	197
24	748	139	281	1080	181	528	1260	89	303
25	805	128	278	970	140	367	1300	66	232
26	935	188	475	870	104	244	1350	63	230
27	905	134	327	945	80	204	1440	68	264
28	905	121	296	925	84	210	1510	62	253
29	875	142	335	1060	135	386	1480	63	252
30	855	160	369	1120	144	435	1500	55	223
31	825	183	408	1080	86	251	--	--	--
TOTAL	33042	--	13356	27643	--	9077	32915	--	6570

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)  
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

894910  
189987

## SAN JOAQUIN RIVER BASIN

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT 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
DEC.									
01...	1335	12.0	3590	127	1230	92	93	96	100
06...	1000	13.0	4570	144	1780	74	76	85	100
24...	1200	10.0	6610	98	1750	82	87	100	--
JAN.									
05...	1400	7.5	6070	44	721	54	57	70	100
FEB.									
01...	1430	8.5	4740	40	512	56	58	71	100
MAR.									
01...	1230	9.5	2600	48	337	93	100	--	--
APR.									
01...	1215	15.5	2270	65	398	97	100	--	--
MAY									
02...	1000	17.0	1540	164	682	98	100	--	--
03...	1335	18.0	1770	104	497	92	94	100	--
JUNE									
01...	1040	18.0	1910	127	655	97	100	--	--



## 11308600 CALAVERAS RIVER ABOVE NEW HOGAN RESERVOIR, NEAR SAN ANDREAS, CALIF.

LOCATION.--Lat 38°11'48", long 120°43'18", in NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.13, T.4 N., R.11 E., Calaveras County, on right bank  
600 ft below confluence of the North and South Forks of the Calaveras River, and 2.3 miles west of San Andreas.

DRAINAGE AREA.--307 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1970 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Minimum, 2.5°C Jan. 6, 7.

REMARKS.--Recorder malfunction Aug. 12 to Sept. 2.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	15.0	13.5	11.0	10.5	10.0	7.5	6.5	7.5	7.0	7.0	5.0
2	21.0	15.5	14.0	12.0	10.5	9.0	7.5	5.5	7.0	7.0	7.5	5.0
3	20.5	15.0	13.5	11.5	9.0	8.0	5.5	4.0	7.5	6.5	8.0	6.5
4	20.5	16.5	13.0	12.5	10.5	9.0	4.0	3.0	7.0	6.0	8.5	7.0
5	20.0	15.0	14.5	13.0	11.0	10.0	3.5	3.0	7.5	6.0	9.0	7.0
6	19.5	15.0	13.5	13.0	11.0	10.5	3.5	2.5	8.0	6.5	9.5	7.0
7	19.0	14.0	14.0	12.5	11.5	10.5	3.5	2.5	8.0	6.5	9.0	7.5
8	18.5	14.0	14.5	12.5	11.5	11.0	4.0	3.0	8.5	7.0	10.0	7.5
9	18.5	13.5	14.5	13.0	11.5	10.0	4.5	3.5	8.0	6.5	10.0	8.0
10	18.5	14.5	15.0	13.5	10.0	9.0	5.5	4.0	8.5	7.0	10.5	8.5
11	19.0	15.0	15.0	13.5	9.5	8.5	6.5	5.0	9.0	7.5	11.5	9.5
12	19.0	15.5	15.5	13.0	9.5	9.0	6.5	5.5	9.5	8.0	11.5	10.5
13	18.5	15.5	14.0	11.5	9.0	8.0	6.5	5.5	10.0	8.0	10.5	9.0
14	18.5	15.0	13.0	11.5	8.0	7.5	7.0	6.0	10.0	8.5	10.0	8.5
15	18.0	14.5	13.0	10.5	8.0	7.0	7.0	6.0	10.5	9.5	11.5	8.5
16	17.5	14.0	12.0	10.0	8.5	8.0	8.0	7.0	9.5	9.0	12.0	9.5
17	16.5	14.0	12.0	9.5	8.0	7.5	10.0	8.0	10.0	9.0	13.0	11.0
18	15.5	14.0	11.5	9.5	7.5	7.0	9.5	8.5	10.0	8.5	12.5	10.0
19	16.0	13.0	11.0	9.0	8.0	7.0	9.0	8.0	10.0	8.5	13.0	10.5
20	16.0	14.0	11.0	9.0	7.0	6.5	9.0	8.5	9.0	7.5	14.0	11.0
21	15.0	14.0	10.5	9.0	7.5	7.0	10.0	9.0	8.5	7.0	14.0	11.5
22	16.0	14.0	11.0	10.0	7.0	6.5	9.0	7.5	8.5	7.5	14.5	11.5
23	15.0	14.0	12.0	10.5	7.0	6.0	7.5	6.5	8.5	7.0	13.5	13.0
24	16.0	13.5	11.5	10.0	6.5	5.5	7.5	6.5	9.0	7.0	14.5	12.5
25	15.5	12.5	12.0	11.5	5.5	4.5	7.0	6.0	9.5	8.0	14.0	13.0
26	15.0	12.5	12.0	11.0	6.5	5.0	7.5	6.0	8.0	6.5	13.0	12.0
27	14.0	11.5	11.0	10.0	7.5	6.5	8.0	7.0	6.5	5.5	13.5	10.5
28	14.0	11.0	10.5	10.0	8.0	7.0	7.5	7.0	5.5	5.0	13.5	11.0
29	13.5	11.0	11.0	10.0	8.5	7.5	7.5	7.0	--	--	14.5	11.5
30	12.0	11.0	10.5	10.0	7.5	6.5	7.5	7.0	--	--	14.5	13.0
31	14.0	11.5	--	--	7.0	6.0	7.5	7.0	--	--	14.0	12.5
AVE	17.1	13.8	12.6	11.1	8.6	7.8	6.9	5.9	8.5	7.3	11.7	9.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	12.0	18.0	16.5	17.5	16.5	23.0	21.5	26.5	23.5	--	--
2	13.5	12.5	17.5	16.5	18.0	16.5	23.5	22.0	27.0	24.0	--	--
3	14.0	13.0	17.0	16.0	18.0	16.5	23.5	22.0	26.0	23.5	24.5	17.5
4	14.5	13.0	17.0	16.5	18.5	17.0	23.5	22.5	26.0	23.0	25.0	17.5
5	15.5	14.0	16.5	16.0	19.5	18.0	24.0	22.5	26.5	23.5	25.0	17.0
6	15.0	14.0	16.5	16.0	20.0	19.0	24.0	22.5	26.5	23.5	24.0	18.5
7	14.0	13.0	16.0	16.0	20.5	19.5	24.0	22.5	26.5	23.0	24.0	15.5
8	13.5	12.5	16.0	15.5	21.0	20.0	23.5	22.5	26.0	23.5	25.0	17.0
9	14.0	13.0	17.0	15.0	20.5	19.5	23.5	22.5	26.5	23.5	25.0	18.5
10	14.5	13.5	18.0	16.5	20.5	19.0	23.5	22.5	27.5	24.0	25.0	17.5
11	14.5	13.5	20.0	18.0	21.0	19.5	23.0	22.0	28.0	25.0	24.5	17.5
12	15.0	13.5	20.0	19.0	21.0	20.0	23.5	22.0	--	--	25.5	17.5
13	14.5	14.0	20.0	19.0	21.5	20.0	24.0	22.5	--	--	25.5	18.5
14	15.0	13.5	20.5	19.0	21.5	20.0	24.5	23.0	--	--	25.5	19.0
15	16.0	14.5	20.5	19.0	22.0	20.5	24.5	23.5	--	--	26.0	19.0
16	16.5	15.0	20.0	19.0	22.5	21.0	25.5	24.0	--	--	26.0	18.0
17	16.0	15.0	19.5	18.0	23.0	21.5	25.0	24.0	--	--	24.5	18.0
18	15.5	14.5	19.0	17.5	23.0	21.5	25.0	23.5	--	--	23.5	16.5
19	16.0	14.0	19.0	17.0	23.5	21.5	25.5	23.5	--	--	23.0	16.5
20	15.0	14.0	19.5	18.5	24.0	22.0	25.5	24.0	--	--	22.0	15.5
21	14.5	13.0	19.0	18.5	24.0	22.0	26.0	24.0	--	--	22.0	16.0
22	14.0	13.0	19.0	17.5	24.0	22.5	26.0	24.0	--	--	22.0	16.0
23	15.0	12.5	20.0	18.5	23.5	22.0	26.0	23.5	--	--	22.0	16.0
24	14.5	13.5	20.5	19.0	23.5	22.0	25.5	23.0	--	--	21.5	17.0
25	14.0	13.0	21.0	19.5	23.0	21.5	25.5	23.0	--	--	19.5	16.5
26	15.0	13.5	21.0	20.0	23.0	21.5	25.5	22.5	--	--	18.5	15.0
27	16.0	14.0	20.5	18.5	22.5	20.5	25.5	23.0	--	--	19.0	13.5
28	17.0	15.0	18.5	17.5	22.0	20.5	26.0	23.5	--	--	19.0	12.5
29	17.5	15.5	17.5	17.0	22.0	20.5	26.0	23.5	--	--	18.5	13.5
30	18.0	16.0	17.5	16.5	22.5	21.0	26.0	23.5	--	--	19.0	14.5
31	--	--	17.5	16.5	--	--	26.0	23.0	--	--	--	--
AVE	15.0	13.7	18.7	17.5	21.6	20.1	24.7	23.0	--	--	23.0	16.6

## SAN JOAQUIN RIVER BASIN

11308900 CALAVERAS RIVER BELOW NEW HOGAN DAM, NEAR VALLEY SPRINGS, CALIF.

LOCATION.--Lat 38°08'53", long 120°49'26", in NE¼ sec.1, T.3 N., R.10 E., Calaveras County, temperature recorder at gaging station on right bank at county road bridge, 0.5 mile upstream from Cosgrove Creek, 0.8 mile downstream from New Hogan Dam, and 3.0 miles south of Valley Springs.

DRAINAGE AREA.--363 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1964 to August 1966. Published as "below Hogan Dam" in 1964.  
Water temperatures: October 1970 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 14.5°C Oct. 9-12.

REMARKS.--Recorder malfunction Oct. 1, 4-7, Nov. 17-30, Feb. 22 to Apr. 7.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	12.0	13.0	10.5	11.5	11.5	10.0	9.5	8.5	8.0	--	--
2	13.5	12.0	13.5	12.0	11.5	10.0	10.0	9.5	8.0	7.5	--	--
3	13.5	12.0	13.0	11.5	10.0	9.0	9.5	9.0	10.0	7.5	--	--
4	--	--	13.0	12.0	11.0	9.0	9.5	9.0	10.0	7.5	--	--
5	--	--	13.5	12.5	11.5	10.0	9.5	9.0	10.0	7.5	--	--
6	--	--	13.5	13.0	12.0	11.5	9.0	8.5	10.0	7.5	--	--
7	--	--	13.0	12.0	12.0	12.0	9.5	8.0	10.0	7.5	--	--
8	14.0	12.0	13.5	12.0	12.0	11.5	10.0	7.5	10.5	7.5	--	--
9	14.5	12.0	13.5	13.0	12.0	10.5	10.0	8.0	10.5	7.5	--	--
10	14.5	12.0	13.5	13.0	10.5	8.5	9.5	8.0	10.0	8.0	--	--
11	14.5	12.0	14.0	13.0	9.0	8.5	9.0	8.0	10.0	8.0	--	--
12	14.5	12.0	14.0	13.0	9.0	9.0	9.0	8.0	10.5	8.0	--	--
13	14.0	12.0	13.0	10.5	9.0	8.5	8.5	7.5	11.0	8.0	--	--
14	14.0	12.0	11.5	10.5	8.5	8.0	8.5	8.5	10.5	8.0	--	--
15	14.0	12.0	11.5	10.0	9.0	8.0	8.5	8.5	10.5	8.0	--	--
16	14.0	12.0	11.0	9.5	8.5	8.0	8.5	8.5	9.5	8.0	--	--
17	13.5	12.0	--	--	11.0	8.5	8.5	8.5	10.0	8.0	--	--
18	13.0	12.0	--	--	11.0	11.0	8.5	8.5	10.5	7.5	--	--
19	14.0	12.0	--	--	11.0	11.0	8.5	8.5	10.0	7.5	--	--
20	14.0	12.0	--	--	11.0	10.5	8.5	8.5	10.5	7.5	--	--
21	13.5	12.0	--	--	10.5	10.5	9.0	8.0	10.5	8.0	--	--
22	14.0	12.0	--	--	10.5	10.5	8.5	8.0	--	--	--	--
23	13.0	12.5	--	--	10.5	10.5	8.5	8.0	--	--	--	--
24	14.0	12.0	--	--	10.5	10.0	8.5	8.5	--	--	--	--
25	14.0	11.5	--	--	10.0	10.0	10.5	8.0	--	--	--	--
26	13.0	11.5	--	--	10.0	10.0	10.0	7.5	--	--	--	--
27	12.5	11.5	--	--	10.0	10.0	9.5	7.5	--	--	--	--
28	12.0	10.5	--	--	10.0	10.0	9.0	8.0	--	--	--	--
29	13.0	10.5	--	--	10.0	9.5	8.5	8.0	--	--	--	--
30	12.0	10.5	--	--	10.0	9.5	8.5	8.0	--	--	--	--
31	13.0	10.5	--	--	10.0	9.5	8.5	8.0	--	--	--	--
AVE	13.6	11.7	--	--	10.4	9.8	9.1	8.3	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	11.5	10.0	11.5	10.0	11.5	10.5	12.0	11.0	12.0	11.0
2	--	--	10.5	10.0	11.5	10.5	11.5	10.5	12.0	11.0	12.0	11.0
3	--	--	11.0	10.0	11.5	10.0	12.0	10.5	12.0	10.5	12.0	11.0
4	--	--	10.5	10.0	12.0	10.0	12.0	10.5	12.0	11.0	12.0	11.0
5	--	--	11.0	10.0	12.0	10.0	12.0	10.5	12.0	11.0	12.0	11.0
6	--	--	11.5	10.0	12.0	10.0	12.0	10.5	12.0	11.0	12.0	11.0
7	--	--	10.5	10.0	12.0	10.0	12.0	10.5	12.0	11.0	12.0	11.0
8	12.0	9.5	10.5	10.0	11.5	10.0	12.0	10.5	12.0	11.0	12.0	11.0
9	12.0	9.5	12.0	10.0	11.5	10.0	12.0	10.5	12.0	11.0	12.0	11.0
10	12.5	9.5	11.5	10.0	11.5	10.5	11.5	10.5	12.0	11.0	12.0	11.0
11	12.5	9.0	11.5	10.0	12.0	10.5	11.5	10.5	12.0	11.0	12.5	11.0
12	13.0	9.0	11.5	10.0	11.5	10.5	11.5	10.5	12.0	11.0	12.0	11.0
13	11.0	9.5	11.5	10.0	11.5	10.5	11.5	11.0	12.0	11.0	12.0	11.0
14	13.0	9.5	11.5	10.0	11.5	10.5	12.0	11.0	12.0	11.0	12.5	11.0
15	13.5	9.5	11.5	10.0	11.5	10.5	12.0	11.0	12.0	11.0	13.5	11.0
16	13.0	9.5	11.5	10.0	12.0	10.5	12.0	11.0	12.0	11.0	12.0	11.0
17	12.0	9.5	11.5	10.0	12.0	10.5	11.5	11.0	12.0	11.0	12.0	11.0
18	13.0	9.0	11.5	10.0	11.5	10.5	12.0	11.0	12.0	11.0	12.0	11.0
19	12.5	9.0	11.5	10.0	11.5	10.5	12.0	11.0	12.0	11.0	12.0	11.0
20	10.5	9.5	11.5	10.0	11.5	10.5	12.0	11.0	12.0	11.0	12.0	11.0
21	11.0	9.5	11.5	10.5	11.5	10.5	12.0	11.0	12.0	11.0	12.0	11.0
22	10.5	9.5	11.5	10.5	11.5	10.5	12.0	11.0	12.0	11.0	12.0	11.0
23	11.0	10.0	11.5	10.5	11.5	10.5	12.0	11.0	12.0	11.0	12.5	11.0
24	11.5	9.5	11.5	10.5	11.5	11.0	12.0	11.0	12.0	11.0	12.5	11.0
25	11.5	9.5	11.5	10.5	12.0	11.0	12.0	10.5	12.0	11.0	12.0	11.0
26	11.5	10.0	11.0	10.5	11.0	11.0	11.5	11.0	12.0	11.0	12.0	11.0
27	11.0	9.5	11.0	10.5	11.5	10.5	12.0	11.0	12.0	11.0	12.5	11.0
28	11.0	10.0	11.0	10.5	12.0	10.5	12.0	11.0	12.0	11.0	12.5	11.0
29	11.0	10.0	11.0	10.5	11.5	10.5	12.0	11.0	12.0	11.0	12.0	11.0
30	11.5	10.0	11.5	10.5	11.5	10.5	12.0	11.0	12.0	11.0	12.0	11.0
31	--	--	11.5	10.5	--	--	12.0	11.0	12.0	11.0	--	--
AVE	--	--	11.3	10.2	11.6	10.4	11.9	10.8	12.0	11.0	12.1	11.0

## 11319500 MOKELUMNE RIVER NEAR MOKELUMNE HILL, CALIF.

LOCATION.--Lat 38°18'46", long 120°43'09", in SW1/4 sec.1, T.5 N., R.11 E., Calaveras County, temperature recorder at gaging station on downstream side of bridge, 1.2 miles northwest of Mokelumne Hill, and 8 miles downstream from confluence of North and South Forks.

DRAINAGE AREA.--544 sq mi.

PERIOD OF RECORD.--Water temperatures: February 1961 to September 1971.

## EXTREMES.--1970-71:

Water temperatures: Maximum, 19.0°C Sept. 13-15; minimum, 3.0°C Jan. 6, 7, and sometime during period Feb. 26 to Mar. 2.

Period of record:

Water temperatures: Maximum, 24.5°C Aug. 5, 1967; minimum (1961-65, 1966-71), 1.0°C Jan. 31, Feb. 1, 1968.

REMARKS.--Clock stopped Feb. 26 to Mar. 2; range in temperature, 3.0°C to 5.0°C.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.5	13.5	11.0	9.0	8.5	6.0	5.5	5.0	4.5	--	--
2	16.0	12.0	14.0	12.0	9.0	8.0	6.0	5.0	5.0	5.0	--	--
3	16.0	13.0	14.5	12.0	8.0	7.5	5.0	4.0	5.0	4.0	4.0	4.0
4	15.5	14.0	14.5	13.0	8.0	8.0	4.5	4.0	4.5	4.0	5.0	4.0
5	15.0	13.0	13.5	13.0	8.5	8.0	4.0	3.5	4.5	4.0	5.5	5.0
6	15.0	12.5	13.0	13.0	8.5	8.0	4.0	3.0	5.0	4.5	5.5	4.5
7	14.5	12.5	13.0	12.5	9.0	8.5	4.0	3.0	5.5	5.0	5.5	4.5
8	15.0	13.0	12.5	12.5	9.0	9.0	4.0	3.5	5.0	4.5	6.0	5.0
9	15.0	12.0	12.5	12.5	9.0	8.5	4.5	4.0	5.0	4.5	6.0	5.0
10	15.0	12.0	12.5	12.5	8.5	7.5	4.5	4.0	5.5	5.0	6.0	5.5
11	15.0	13.0	13.0	12.5	7.5	7.0	5.0	4.5	6.0	5.0	6.0	6.0
12	15.0	13.0	13.0	12.0	7.0	7.0	5.0	4.5	6.5	5.5	6.5	6.0
13	15.0	14.0	12.0	11.5	7.0	6.5	4.5	4.0	6.5	6.0	7.0	6.0
14	14.5	13.5	11.5	11.0	7.0	7.0	4.5	4.0	6.5	6.0	7.0	5.5
15	15.0	12.5	11.0	11.0	7.0	6.5	4.5	4.0	7.5	6.5	6.5	5.5
16	15.0	12.5	11.0	10.5	7.0	7.0	5.0	4.0	6.5	6.5	6.5	5.5
17	14.5	12.0	11.0	10.5	7.0	5.5	6.5	5.0	6.5	6.0	7.0	6.0
18	14.5	13.5	11.0	10.5	6.0	5.5	6.0	5.5	6.5	6.0	7.5	6.5
19	14.5	13.0	11.0	10.5	6.0	6.0	6.0	6.0	6.5	5.5	7.5	6.5
20	14.0	14.0	11.0	10.5	6.5	6.0	6.0	6.0	5.5	4.5	8.0	7.0
21	14.0	14.0	11.0	10.5	7.0	6.5	6.0	5.5	5.0	4.5	8.0	7.0
22	14.5	14.0	11.5	11.0	6.5	6.0	5.5	5.0	5.0	4.5	8.0	7.5
23	14.5	14.0	12.0	11.5	6.0	6.0	5.0	4.5	5.5	4.5	8.5	8.0
24	15.0	13.0	12.0	11.5	6.0	5.5	5.0	4.5	5.5	4.5	9.0	8.0
25	14.5	13.5	12.0	11.5	5.5	5.0	5.0	4.5	5.5	5.0	8.5	8.5
26	14.0	13.5	11.5	10.0	5.0	5.0	5.0	4.5	--	--	9.5	8.5
27	14.0	12.5	10.0	9.0	6.0	5.0	5.0	4.5	--	--	9.0	8.0
28	14.0	13.0	9.0	9.0	6.5	6.0	5.0	4.5	--	--	9.0	8.0
29	13.0	12.0	9.0	9.0	6.5	6.0	5.0	4.5	--	--	9.5	8.0
30	13.0	11.0	9.0	9.0	6.0	6.0	5.0	4.5	--	--	9.5	8.5
31	13.5	12.0	--	--	6.0	5.5	5.0	4.5	--	--	9.0	8.0
AVE	14.6	12.9	11.9	11.2	7.1	6.7	5.0	4.5	5.6	5.0	7.2	6.4
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	11.5	11.0	11.0	10.5	17.0	15.0	16.0	14.5	17.0	14.5
2	9.0	8.0	11.5	10.5	11.5	10.5	17.0	15.0	16.0	15.0	18.0	15.0
3	9.0	8.0	11.0	10.5	12.5	11.0	17.0	15.5	16.0	15.0	18.0	15.0
4	9.5	8.5	10.5	9.5	13.0	12.0	17.0	15.5	16.5	14.5	18.0	15.0
5	10.5	9.0	10.0	9.5	14.0	12.5	16.5	16.0	16.0	14.5	17.5	15.0
6	10.0	9.5	10.0	9.0	14.5	13.0	16.5	15.0	16.5	14.5	17.5	15.0
7	9.5	8.5	10.0	10.0	15.0	13.5	16.0	15.0	16.0	14.5	17.5	14.0
8	9.0	8.0	10.0	10.0	15.0	14.0	16.0	14.5	15.5	14.5	17.5	15.0
9	9.0	8.0	11.0	10.0	14.5	13.5	19.0	14.5	16.0	14.5	18.0	15.0
10	10.0	9.0	12.0	10.5	14.5	13.5	15.5	14.5	16.0	14.5	18.5	15.5
11	9.5	8.5	13.5	11.5	15.0	14.0	15.5	14.5	16.5	15.0	18.5	15.5
12	10.0	8.5	13.0	12.0	15.5	13.5	15.5	14.0	16.5	15.0	17.5	15.5
13	10.0	9.0	13.0	11.5	16.0	14.0	15.5	14.5	16.5	15.0	19.0	16.0
14	10.0	9.0	13.0	11.5	15.5	14.5	16.0	14.5	16.5	15.0	19.0	16.0
15	10.0	9.5	13.0	12.0	16.0	15.0	16.0	15.0	16.5	15.0	19.0	15.5
16	10.5	9.5	13.0	12.0	16.5	15.5	16.5	15.0	16.0	14.5	18.5	15.5
17	10.0	9.5	13.0	11.5	16.5	15.5	17.0	15.0	15.0	14.0	18.0	15.5
18	9.5	8.5	12.5	11.0	16.0	15.5	16.5	15.0	17.0	14.0	16.0	15.0
19	9.5	8.5	13.0	12.0	17.0	15.5	16.5	14.5	17.0	14.0	17.5	15.0
20	9.5	8.5	13.0	12.5	17.0	15.5	16.5	15.0	17.0	14.0	17.0	14.5
21	9.5	8.5	13.5	13.0	17.0	16.0	17.5	15.5	16.5	14.0	16.5	14.0
22	8.5	8.0	13.5	12.5	17.0	16.0	16.0	15.0	16.5	14.0	17.0	14.0
23	9.0	8.5	14.0	12.0	17.5	16.0	16.5	15.0	16.0	14.0	17.5	14.5
24	9.5	8.5	15.0	13.0	17.0	16.0	17.0	14.5	17.0	14.5	16.0	15.0
25	9.0	8.0	15.5	14.0	17.0	15.5	16.0	14.5	17.0	14.5	16.0	15.0
26	9.0	8.5	15.5	14.5	16.0	15.0	16.0	14.0	17.0	15.0	15.5	14.5
27	9.5	8.5	14.5	12.5	17.0	15.0	16.0	14.5	17.5	15.0	15.0	14.0
28	10.5	9.0	12.5	11.5	16.5	15.0	15.5	14.5	17.0	15.0	14.5	13.5
29	11.5	10.0	11.5	11.0	16.0	14.5	16.0	14.5	16.5	14.5	14.0	13.5
30	11.5	10.5	11.0	10.5	16.0	14.5	16.0	14.5	16.5	14.5	14.0	13.0
31	--	--	11.0	10.5	--	--	16.0	14.5	17.0	14.5	--	--
AVE	9.7	8.7	12.4	11.4	15.4	14.2	16.4	14.8	16.4	14.5	17.1	14.8

## SAN JOAQUIN RIVER BASIN

## 11323500 MOKELUMNE 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, temperature recorder at gaging station on left bank, 0.7 mile downstream from Murphy Creek, 1.0 mile downstream from Camanche Dam, and 3.4 miles northeast of Clements.

DRAINAGE AREA.--627 sq mi.

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 September 1971.

Sediment records: Water years 1956-70 (partial-record station). Prior to 1962 water year published as "near Clements".

EXTREMES, 1970-71:

Water temperatures: Maximum, 22.0°C Aug. 9, 10; minimum, 9.0°C on many days during January and February.

Period of record:

Water temperatures (1961-63, 1964-68, 1970-71): Maximum (1961-63, 1964-65, 1970-71), 22.0°C Aug. 9, 10, 1971; minimum (1961-63, 1965-68, 1970-71), 7.0°C Jan. 22-26, 1962.

REMARKS.--Recorder malfunction Aug. 19-31.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	14.0	14.5	14.0	14.5	14.5	11.5	11.5	10.0	9.0	10.0	9.5
2	14.0	13.5	14.5	14.0	14.5	14.0	11.5	11.0	9.5	9.0	10.0	9.5
3	14.5	14.0	14.5	14.5	14.0	14.0	11.5	11.0	9.5	9.0	10.0	9.5
4	14.5	14.0	15.0	14.5	14.0	14.0	11.0	10.5	10.0	9.0	10.0	9.5
5	14.5	14.0	14.5	14.5	14.0	14.0	11.0	10.5	9.5	9.0	10.0	9.5
6	14.5	14.0	14.5	14.0	14.0	14.0	10.5	10.0	9.5	9.0	10.5	9.5
7	14.5	14.0	15.0	14.5	14.0	14.0	10.5	10.0	9.5	9.0	10.5	9.5
8	14.5	14.0	15.0	14.5	14.0	14.0	10.5	10.0	9.5	9.0	10.5	9.5
9	14.5	14.0	15.0	14.5	14.0	13.5	10.5	10.0	9.5	9.0	10.0	9.5
10	14.5	14.0	15.0	14.5	13.5	13.5	11.0	10.0	9.5	9.0	10.0	9.5
11	14.5	14.5	15.0	14.5	13.5	13.5	10.5	10.0	9.5	9.0	10.0	9.5
12	14.5	14.5	14.5	14.5	13.5	13.5	11.0	10.5	9.5	9.0	11.0	10.0
13	14.5	14.0	14.5	14.5	13.5	13.5	11.0	10.0	9.5	9.0	10.5	10.0
14	14.5	14.0	14.5	14.5	13.5	13.5	11.0	10.0	9.5	9.0	10.5	10.0
15	14.5	14.0	15.0	14.5	13.5	13.5	11.0	10.0	9.5	9.0	10.5	10.0
16	14.5	14.0	15.0	14.5	13.5	13.5	11.0	10.5	9.5	9.0	10.5	10.0
17	14.5	14.0	15.0	14.5	13.5	13.0	11.0	10.0	9.5	9.0	10.0	9.5
18	14.5	14.0	14.5	14.5	13.5	13.0	11.0	10.0	9.5	9.0	10.0	9.5
19	14.5	14.5	14.5	14.5	13.0	12.0	10.5	10.0	9.5	9.0	10.5	10.0
20	14.5	14.5	14.5	14.5	13.0	12.0	10.5	10.0	9.5	9.0	10.5	10.0
21	14.5	14.0	15.0	14.5	13.0	12.0	10.5	10.0	10.0	9.0	10.5	9.5
22	14.5	14.0	14.5	14.5	12.0	11.5	10.5	9.5	10.0	9.5	10.5	9.5
23	14.5	14.0	14.5	14.5	12.0	11.5	10.5	9.5	10.0	9.5	10.0	9.5
24	14.5	14.5	15.0	14.5	12.0	11.5	10.5	9.5	10.0	9.5	10.0	9.5
25	14.5	14.0	15.0	15.0	12.0	11.5	10.0	9.5	10.0	9.0	10.0	9.5
26	14.5	14.0	15.0	14.5	12.0	11.5	10.0	9.5	10.0	9.0	10.5	10.0
27	14.5	14.0	15.0	14.5	12.0	11.5	10.0	9.0	10.0	9.0	10.5	9.5
28	14.5	14.0	14.5	14.5	12.0	11.5	10.0	9.5	10.0	9.5	10.5	9.5
29	14.5	14.0	14.5	14.5	12.0	11.5	9.5	9.0	--	--	12.0	10.0
30	14.5	14.0	14.5	14.5	12.0	11.5	9.5	9.0	--	--	13.0	11.5
31	14.5	14.0	--	--	12.0	11.5	9.5	9.0	--	--	11.5	10.5
AVE	14.5	14.1	14.7	14.5	13.1	12.8	10.6	10.0	9.7	9.1	10.5	9.7
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	11.0	14.0	13.0	15.0	14.0	14.5	14.0	21.0	20.0	19.5	18.0
2	12.0	11.5	14.5	14.0	15.5	14.5	15.0	14.0	21.0	20.0	18.5	17.0
3	13.0	11.5	14.5	14.0	15.5	14.5	14.5	14.5	21.0	20.0	18.0	16.5
4	13.5	12.0	14.5	13.5	15.5	14.5	15.0	14.5	21.0	20.0	17.0	16.5
5	13.5	12.0	14.5	14.0	15.5	14.5	15.5	14.5	21.0	20.0	18.0	16.5
6	13.5	12.0	15.0	14.5	16.0	15.0	16.5	15.0	21.0	20.0	17.0	16.5
7	13.0	11.5	14.5	14.5	16.0	15.0	16.5	15.5	21.5	20.0	17.0	16.5
8	13.0	11.5	15.0	14.5	16.0	15.0	16.5	14.5	21.5	20.0	17.0	16.5
9	13.5	12.0	15.5	14.5	16.0	15.0	15.5	14.5	22.0	20.5	17.0	16.5
10	14.0	13.0	15.5	14.5	16.0	15.0	15.5	14.5	22.0	21.0	16.5	12.0
11	14.0	13.0	15.5	14.5	16.0	15.0	16.0	13.5	21.5	20.5	13.0	12.0
12	14.0	13.0	15.5	14.5	16.0	15.0	16.5	15.5	21.5	20.5	13.0	12.0
13	14.0	13.0	15.5	14.5	15.5	14.5	16.5	15.5	21.0	19.5	13.0	12.0
14	14.0	13.5	16.0	14.5	15.5	15.0	17.0	15.5	21.0	19.5	13.0	12.0
15	14.0	13.5	16.5	14.0	15.5	15.0	18.0	16.5	20.5	19.5	13.0	12.0
16	14.5	12.0	15.0	14.0	16.0	15.5	18.0	16.5	21.0	19.5	13.0	12.0
17	14.0	12.0	15.0	13.5	16.0	14.5	18.0	17.0	21.0	20.0	13.0	12.0
18	14.0	12.0	15.5	14.5	16.0	14.5	18.0	17.0	20.5	19.5	13.0	12.0
19	14.5	13.0	15.0	14.5	16.0	15.0	18.0	17.0	--	--	13.0	12.0
20	14.0	11.5	15.0	14.0	16.0	15.5	18.0	17.0	--	--	13.0	12.0
21	13.5	11.5	14.5	13.0	15.5	15.0	18.5	17.0	--	--	13.0	12.0
22	13.5	12.0	15.0	14.5	15.5	14.5	18.5	17.0	--	--	13.0	12.0
23	13.5	11.5	15.5	14.5	15.5	15.0	18.5	17.0	--	--	13.0	12.0
24	13.5	11.5	15.5	14.5	18.0	15.0	18.0	17.0	--	--	13.0	12.0
25	13.5	12.0	16.0	14.0	18.0	16.5	18.0	17.0	--	--	13.0	12.0
26	14.5	13.0	15.5	14.5	17.0	13.5	19.5	17.0	--	--	13.0	12.0
27	14.0	13.5	15.0	14.5	14.5	13.5	20.0	19.0	--	--	13.0	12.0
28	14.0	13.0	15.0	14.5	14.5	14.0	20.0	19.0	--	--	13.0	12.0
29	14.0	13.0	15.0	14.5	14.5	14.0	20.5	19.0	--	--	13.5	12.0
30	14.0	13.0	15.0	14.0	14.5	14.0	20.5	19.5	--	--	13.5	13.0
31	--	--	15.0	14.0	--	--	21.0	19.5	--	--	--	--
AVE	13.6	12.3	15.1	14.2	15.8	14.7	17.5	16.3	--	--	14.5	13.4

## 11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.

LOCATION.--Lat 38°09'31", long 121°18'09", in NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.34, T.4 N., R.6 E., San Joaquin County, at gaging station on right bank at Woodbridge, 0.4 mile downstream from county highway bridge, and 0.5 mile downstream from dam and canal intake of Woodbridge Irrigation District.

DRAINAGE AREA.--661 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1951 to September 1963, water years 1946-66, 1968-71 (partial-record station).

Water temperatures: March 1951 to September 1958, November 1960 to September 1971.

EXTREMES, 1970-71:

Water temperatures: Maximum, 26.0°C Aug. 10-13; minimum, 8.5°C on many days during January and February.

Period of record:

Water temperatures: Maximum (1951-54, 1956-58, 1960-71), 28.5°C July 9, 1951; minimum (1951-55, 1956-58, 1961-71), 1.5°C Jan. 29, 30, 1954.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
FEB.											
13...	0930	828	9.0	11.5	5.3	2.0	18	0	2.2	19	4
MAY											
04...	0830	244	14.0	10.6	3.7	2.1	18	0	.8	16	1
20...	1330	232	18.5	9.5	--	--	--	--	--	--	--

DATE	ALKA- LITY AS CACO3 (MG/L)	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
FEB.											
18...	15	.2	47	7.5	5	--	--	--	--	--	--
MAY											
04...	15	.3	45	7.3	1	0	0	0	0	.1	0
20...	--	--	--	--	--	0	100	0	0	.0	0

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	18.5	14.0	14.0	13.0	13.0	--	--	8.5	8.5	9.5	9.5
2	19.0	17.5	14.0	14.0	13.0	13.0	--	--	8.5	8.5	9.5	9.5
3	17.5	17.0	14.0	14.0	13.0	12.5	9.5	9.5	8.5	8.5	9.5	9.5
4	17.0	17.0	14.0	14.0	12.5	12.5	9.5	9.5	8.5	8.5	9.5	9.5
5	17.0	16.5	14.0	13.5	12.5	12.5	9.5	9.5	8.5	8.5	9.5	9.5
6	16.5	16.5	13.5	13.5	12.5	12.5	9.5	9.5	8.5	8.5	9.5	9.5
7	16.5	16.0	13.5	13.5	12.5	12.5	9.5	9.5	8.5	8.5	9.5	9.5
8	16.0	15.0	14.0	13.5	12.5	12.5	9.5	9.5	8.5	8.5	9.5	9.5
9	15.0	15.0	14.0	14.0	12.5	12.0	9.5	9.5	8.5	8.5	9.5	9.5
10	15.0	15.0	14.0	14.0	12.0	12.0	9.5	9.0	8.5	8.5	9.5	9.5
11	15.0	15.0	14.0	14.0	12.5	12.0	9.0	9.0	8.5	8.5	10.0	9.5
12	15.0	15.0	14.0	14.0	12.0	12.0	9.0	9.0	8.5	8.5	10.0	10.0
13	15.0	15.0	14.0	13.5	12.0	12.0	9.0	9.0	8.5	8.5	10.0	10.0
14	15.0	15.0	13.5	13.5	12.0	12.0	9.0	9.0	8.5	8.5	10.0	10.0
15	15.0	15.0	13.5	13.5	12.0	12.0	9.0	9.0	8.5	8.5	10.5	10.5
16	15.0	15.0	13.5	13.0	12.0	12.0	9.0	9.0	8.5	8.5	11.0	10.5
17	15.0	15.0	13.0	13.0	12.0	12.0	9.5	9.0	8.5	8.5	11.0	11.0
18	15.0	15.0	13.0	13.0	12.0	12.0	9.5	9.0	9.0	8.5	11.0	11.0
19	15.0	15.0	13.0	13.0	12.0	11.5	9.5	9.0	9.0	9.0	11.0	11.0
20	15.0	15.0	13.0	13.0	11.5	11.5	9.0	9.0	9.0	9.0	11.0	11.0
21	15.0	15.0	13.0	13.0	11.5	11.5	9.0	9.0	9.0	9.0	11.0	11.0
22	15.0	15.0	13.0	13.0	11.5	11.0	9.0	8.5	9.0	9.0	11.5	11.5
23	15.0	15.0	13.0	13.0	11.0	11.0	8.5	8.5	9.0	9.0	11.5	11.5
24	15.0	15.0	13.0	13.0	11.0	11.0	8.5	8.5	9.0	9.0	11.5	11.5
25	15.0	15.0	13.0	13.0	11.0	11.0	8.5	8.5	9.0	9.0	11.5	11.5
26	15.0	15.0	13.0	13.0	11.0	10.5	8.5	8.5	9.0	9.0	11.5	11.5
27	15.0	14.5	13.0	13.0	10.5	10.5	8.5	8.5	9.5	9.0	12.0	12.0
28	14.5	14.5	13.0	13.0	10.5	10.5	8.5	8.5	9.5	9.5	12.0	12.0
29	14.5	14.0	13.0	13.0	10.5	10.5	8.5	8.5	--	--	12.0	12.0
30	14.0	14.0	13.0	13.0	10.5	10.5	8.5	8.5	--	--	12.0	12.0
31	14.0	14.0	--	--	10.5	10.0	8.5	8.5	--	--	13.0	12.0
AVE	15.5	15.3	13.4	13.4	11.8	11.7	9.0	8.9	8.7	8.7	10.6	10.6

## SAN JOAQUIN RIVER BASIN

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	13.0	14.5	14.5	15.5	15.5	17.0	17.0	25.0	23.0	23.0	22.5
2	13.5	13.5	15.0	15.0	15.5	15.5	17.0	17.0	25.5	24.0	23.0	22.0
3	14.0	13.5	15.0	14.5	16.0	15.5	17.5	17.0	25.5	24.0	22.0	22.0
4	14.5	14.0	14.5	14.5	16.5	16.0	18.0	17.5	25.5	24.0	22.0	21.0
5	14.5	14.5	14.5	14.5	17.0	16.5	18.0	17.5	25.0	23.5	21.0	20.0
6	14.5	14.5	15.0	14.5	17.0	16.5	18.0	17.5	25.0	23.0	20.0	20.0
7	14.5	14.0	14.5	14.0	18.0	17.0	18.0	18.0	25.0	23.0	20.0	19.5
8	14.0	13.5	14.0	14.0	18.0	17.5	18.0	17.5	25.5	23.0	20.0	19.5
9	13.5	13.5	14.0	13.5	18.0	18.0	19.0	18.0	25.5	23.0	19.5	19.5
10	14.0	13.5	16.0	14.0	18.0	17.5	19.0	18.5	26.0	24.0	20.0	19.5
11	14.0	13.5	17.0	16.0	18.0	17.5	18.5	17.5	26.0	24.0	19.5	19.0
12	14.0	14.0	17.5	17.0	18.0	18.0	18.0	17.5	26.0	24.0	19.0	17.0
13	14.5	14.5	17.5	17.0	18.0	17.5	18.0	18.0	26.0	23.5	17.0	16.5
14	14.5	14.5	17.5	17.0	17.5	17.5	19.0	18.0	25.5	23.0	16.5	16.0
15	15.0	14.5	18.5	17.0	18.5	17.5	19.5	19.0	25.0	23.0	16.0	16.0
16	15.0	15.0	18.0	17.5	19.0	18.5	19.5	19.0	24.5	23.0	16.0	16.0
17	15.0	14.5	18.0	17.0	19.0	18.5	19.5	19.5	24.5	23.0	16.0	16.0
18	14.5	14.0	18.0	17.0	19.0	18.5	19.5	19.5	24.5	22.5	16.0	16.0
19	14.5	14.0	18.0	17.0	19.0	18.5	20.5	19.5	24.5	22.5	16.0	15.5
20	14.0	14.0	18.0	17.0	19.0	18.5	20.5	20.0	24.5	22.5	15.5	15.5
21	14.0	13.5	17.5	17.0	19.0	18.5	21.0	20.5	24.0	22.5	15.5	15.5
22	13.5	13.0	17.5	17.5	19.0	18.5	21.0	20.5	24.0	23.0	15.5	15.0
23	13.0	13.0	17.5	17.0	19.0	18.0	21.0	20.5	24.0	22.5	15.5	15.0
24	13.0	13.0	18.0	17.5	19.0	18.5	21.0	20.5	24.0	23.0	15.0	15.0
25	13.0	12.5	18.0	17.5	19.0	18.5	21.0	20.5	24.5	23.0	15.5	15.0
26	13.5	13.0	18.0	18.0	19.0	18.5	20.5	20.0	24.5	22.5	15.0	15.0
27	14.5	13.5	18.0	17.0	19.5	18.5	21.5	20.0	24.0	22.5	15.0	14.5
28	15.0	14.5	17.0	16.0	19.5	17.0	22.5	21.0	24.0	22.5	14.5	14.5
29	15.0	14.5	16.0	15.5	17.0	17.0	23.0	22.0	23.0	22.5	14.5	14.5
30	14.5	14.5	15.5	15.5	17.0	17.0	24.0	22.5	22.5	22.0	14.5	14.5
31	--	--	15.5	15.5	--	--	24.5	23.0	22.5	22.0	--	--
AVE	14.1	13.8	16.6	16.0	18.0	17.5	19.8	19.2	24.7	23.0	17.6	17.3

## 11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.

LOCATION.--Lat 38°30'01", long 121°02'39", in NW¼ sec. 36, T. 8 N., R. 8 E., Sacramento County, at gaging station on downstream side of midstream pier of highway bridge at Michigan Bar, 5.5 miles southwest of Latrobe, and 12 miles downstream from confluence of North and Middle Fork Cosumnes River.

DRAINAGE AREA.--536 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1953 (partial-record station), October 1953 to September 1963, water years 1964-71 (partial-record station).

Water temperatures: October 1962 to September 1971.

Sediment records: Water years 1958-62 (partial-record station), October 1962 to September 1970, water year 1971 (partial-record station).

EXTREMES, 1970-71:

Water temperatures: Maximum, 29.5°C Aug. 11, 12; minimum, 3.0°C Jan. 5-8.

Period of record:

Water temperatures: Maximum (1965-71), 30.0°C Aug. 26, 27, 1967; minimum (1963-71), 1.5°C on several days in 1965 and 1968.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. No temperature record Oct. 16 to Nov. 3, Feb. 22 to Mar. 4. Clock stopped Mar. 7 to Apr. 1, July 17 to Aug. 3; range in temperature, 7.0°C to 11.5°C and 26.0°C to 29.0°C, respectively.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
NOV.											
10...	1515	74	15.0	11.2	9.0	6.3	50	0	5.8	39	0
DEC.											
09...	1340	1090	11.0	11.6	8.9	3.8	46	0	3.6	36	0
JAN.											
15...	1130	866	8.0	12.6	12	4.1	56	0	2.8	58	12
MAR.											
10...	0830	241	8.5	12.2	7.3	3.2	43	0	2.0	34	0
MAY											
18...	0700	700	13.5	10.5	3.8	2.4	25	0	.7	18	0
JULY											
19...	1230	61	28.0	7.8	5.9	3.6	33	0	1.0	27	0
AUG.											
05...	0730	32	25.0	7.5	--	--	--	--	--	--	--
SEP.											
03...	0830	18	21.0	7.6	8.4	4.8	42	0	2.4	31	0

DATE	ALKA- LITY AS CACO3 (MG/L)	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
NOV.											
10...	41	.6	107	7.5	--	--	--	--	--	--	--
DEC.											
09...	38	.4	99	7.5	20	--	--	--	--	--	--
JAN.											
15...	46	.3	115	7.8	15	--	--	--	--	--	--
MAR.											
10...	35	.3	84	7.5	7	--	--	--	--	--	--
MAY											
18...	21	.3	50	7.6	1	0	0	0	0	.0	0
JULY											
19...	27	.4	66	7.5	9	--	--	--	--	--	--
AUG.											
05...	--	--	--	--	--	--	--	--	--	--	--
SEP.											
03...	34	.5	80	7.5	1	--	--	--	--	--	--

## SAN JOAQUIN RIVER BASIN

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	20.0	--	--	10.0	10.0	6.0	5.5	6.5	6.5	--	--
2	21.5	20.0	--	--	10.0	10.0	6.0	5.5	7.0	6.5	--	--
3	21.0	20.0	--	--	10.0	9.0	5.5	4.0	7.0	7.0	--	--
4	21.0	20.0	17.0	16.5	10.5	9.0	4.0	3.5	7.0	6.0	--	--
5	21.5	19.5	16.5	16.5	10.5	10.0	3.5	3.0	7.0	6.5	11.0	10.0
6	21.5	19.5	16.5	16.5	10.5	10.0	3.0	3.0	7.5	7.0	11.5	10.0
7	20.5	18.5	16.5	16.0	10.5	10.0	3.5	3.0	8.0	7.0	--	--
8	20.0	17.0	16.0	16.0	10.5	10.5	3.5	3.0	8.0	7.0	--	--
9	19.5	18.0	16.0	16.0	10.5	9.0	4.0	3.5	8.0	7.0	--	--
10	20.0	18.0	16.0	16.0	9.5	8.0	5.0	4.0	8.0	7.5	--	--
11	20.0	18.0	16.0	16.0	8.0	8.0	6.5	5.0	8.0	8.0	--	--
12	20.0	19.0	16.0	15.5	8.0	8.0	6.5	6.5	9.0	8.0	--	--
13	20.0	19.0	15.5	14.5	8.0	7.5	6.5	6.0	9.0	8.0	--	--
14	20.0	18.5	14.5	13.5	7.5	7.0	6.5	6.0	9.0	8.0	--	--
15	20.0	18.5	13.5	13.0	7.0	7.0	6.5	6.0	9.0	8.5	--	--
16	--	--	13.0	13.0	8.0	7.0	7.0	6.5	9.0	8.0	--	--
17	--	--	13.0	12.0	8.0	7.5	8.5	7.0	8.5	8.0	--	--
18	--	--	12.0	12.0	7.5	7.5	8.5	8.5	8.5	8.0	--	--
19	--	--	12.0	11.5	7.5	7.0	8.5	7.5	9.0	8.5	--	--
20	--	--	11.5	11.5	7.5	6.5	7.5	7.5	8.5	7.0	--	--
21	--	--	11.5	11.0	7.0	6.5	7.5	7.5	8.0	7.0	--	--
22	--	--	11.5	11.0	6.5	6.5	7.5	6.5	--	--	--	--
23	--	--	12.0	11.5	6.5	6.5	6.5	5.5	--	--	--	--
24	--	--	12.0	11.5	6.5	6.0	6.0	5.5	--	--	--	--
25	--	--	12.0	11.5	6.0	5.5	6.0	5.5	--	--	--	--
26	--	--	12.0	11.5	5.5	5.5	6.5	5.5	--	--	--	--
27	--	--	11.5	10.5	6.5	5.5	7.0	6.5	--	--	--	--
28	--	--	11.5	10.5	7.0	6.5	7.0	6.5	--	--	--	--
29	--	--	11.0	10.5	7.0	6.5	6.5	6.5	--	--	--	--
30	--	--	10.5	10.0	7.0	6.0	6.5	6.5	--	--	--	--
31	--	--	--	--	6.0	5.0	6.5	6.5	--	--	--	--
AVE	--	--	13.6	13.2	8.1	7.6	6.1	5.6	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	14.0	13.5	14.0	12.5	23.5	22.0	--	--	25.0	22.0
2	12.0	10.5	13.5	12.5	14.5	12.5	24.0	23.0	--	--	25.5	22.5
3	12.0	10.0	13.0	12.5	16.0	14.0	24.0	23.0	--	--	25.0	21.5
4	12.5	10.5	13.0	12.5	16.0	15.0	24.0	23.0	29.0	26.5	25.0	22.0
5	12.5	11.0	12.5	12.0	17.5	16.0	24.5	23.5	28.5	26.0	25.0	22.5
6	12.5	11.0	13.0	12.5	18.5	17.0	25.0	24.0	28.0	26.0	24.5	22.0
7	11.0	10.0	13.0	13.0	18.5	17.5	25.0	24.0	28.0	25.5	24.0	20.5
8	10.5	9.0	13.0	12.0	18.5	17.5	25.0	24.0	28.0	25.5	23.5	21.0
9	11.0	10.0	14.0	12.0	18.5	17.5	25.0	24.0	28.5	26.0	24.0	21.5
10	11.5	10.5	15.0	14.0	18.0	16.5	25.0	24.0	28.5	27.5	24.0	21.5
11	11.0	9.5	16.0	15.0	19.0	17.5	25.0	24.0	29.5	27.5	24.0	21.5
12	11.5	10.0	16.0	15.0	19.0	18.0	25.5	24.0	29.5	27.0	24.0	21.5
13	11.5	10.5	15.5	14.0	19.0	17.5	26.0	24.5	28.5	26.5	24.0	22.0
14	12.0	10.5	15.0	14.0	19.5	18.0	26.5	25.0	28.0	26.0	24.5	22.0
15	13.0	11.5	15.5	14.5	20.0	18.5	26.5	25.5	27.5	25.5	24.5	22.0
16	13.0	11.5	16.0	14.5	21.5	19.5	27.0	26.0	27.0	25.0	24.5	22.0
17	13.0	11.5	15.0	13.5	21.5	20.5	--	--	27.0	24.5	24.0	21.0
18	12.0	10.0	14.0	13.0	21.5	20.5	--	--	26.5	24.0	23.5	20.5
19	12.0	10.0	14.5	13.5	22.0	20.5	--	--	27.0	24.5	23.0	20.0
20	12.0	11.0	15.5	14.5	22.0	21.0	--	--	26.5	24.0	23.0	20.0
21	11.0	10.0	15.5	14.5	23.0	21.5	--	--	26.5	24.5	22.0	19.5
22	11.0	10.0	15.0	13.0	23.0	22.0	--	--	26.5	24.5	22.0	19.5
23	11.0	10.5	16.0	14.0	23.0	22.0	--	--	26.0	24.5	22.0	19.0
24	11.5	10.0	17.0	15.0	23.0	22.0	--	--	26.0	24.5	21.5	19.5
25	11.0	9.5	17.5	16.0	22.5	21.5	--	--	26.0	24.5	20.5	19.0
26	12.0	10.5	17.5	16.0	22.5	21.5	--	--	26.5	24.5	20.0	18.5
27	13.0	11.5	16.5	14.5	21.5	21.0	--	--	26.0	24.0	20.0	17.5
28	14.0	12.5	14.5	13.0	21.5	20.0	--	--	25.5	24.0	19.5	17.0
29	14.0	12.5	13.0	12.0	22.0	20.5	--	--	25.5	23.5	18.0	17.0
30	14.0	13.0	13.5	12.5	22.5	21.5	--	--	25.0	23.0	18.5	16.5
31	--	--	14.0	13.0	--	--	--	--	25.0	23.0	--	--
AVE	12.0	10.6	14.7	13.6	20.0	18.7	--	--	27.1	25.1	22.9	20.4



11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT 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
OCT. 02...	1140	20.0	18	4	.19	--	--	--	--	--
NOV. 03...	0945	15.0	35	1	.09	--	--	--	--	--
DEC. 01...	1520	10.0	2400	77	499	86	86	90	96	100
DEC. 16...	1300	8.0	866	7	16	--	--	--	--	--
JAN. 04...	1000	3.5	446	4	4.8	--	--	--	--	--
MAR. 01...	1100	4.5	328	2	1.8	--	--	--	--	--
APR. 01...	1050	9.5	1450	13	51	--	--	--	--	--
MAY 03...	1110	12.5	732	4	7.9	--	--	--	--	--
JUNE 03...	0900	14.0	385	3	3.1	--	--	--	--	--
JULY 07...	0830	24.0	116	3	.94	--	--	--	--	--
AUG. 03...	1500	29.0	34	2	.18	--	--	--	--	--

## SACRAMENTO RIVER BASIN

11341400 SACRAMENTO RIVER NEAR MT SHASTA, CALIF.

LOCATION.--Lat 41°15'56", long 122°18'32", in SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.33, T.40 N., R.4 W., Siskiyou County, at gaging station on left bank, 200 ft upstream from Stink Creek, 0.3 mile upstream from Southern Pacific Railroad bridge, and 3.3 miles south of town of Mt Shasta.

DRAINAGE AREA.--135 sq mi.

PERIOD OF RECORD.--Chemical analyses: May 1970 to September 1971.  
Water temperatures: October 1965 to September 1971.

## EXTREMES, 1970-71:

Water temperatures: Maximum, 16.5°C July 14, 23, 25, 26; minimum, 3.0°C Jan. 2.

## Period of record:

Water temperatures: Maximum (1966-71), 17.0°C on many days in 1968 and 1969; minimum (1965-66, 1967-71), 1.5°C on several days in 1968 and 1969.

REMARKS.--Clock stopped Oct. 1-5, Oct. 8 to Nov. 5, Apr. 27 to May 6, June 7; range in temperature, 13.0°C to 14.0°C, 14.0°C to 15.5°C, 6.5°C to 7.5°C, and 11.0°C to 13.0°C, respectively.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL RESI- DUAL CHLO- RINE (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)
OCT.									
01...	1455	41	13.0	9.3	98	.00	--	.16	--
NOV.									
12...	1345	213	10.0	9.9	98	--	--	.23	--
JAN.									
26...	1635	119	4.5	11.7	101	--	--	.24	--
MAR.									
23...	1445	241	6.0	11.4	102	--	--	1.2	.000
MAY									
13...	1030	967	9.5	10.4	101	--	--	.18	--
JUNE									
17...	1030	296	15.0	9.1	100	--	--	.25	--
JULY									
15...	1200	88	18.5	8.4	101	--	--	.34	.000
AUG.									
11...	1315	60	14.0	9.3	100	--	--	.24	.000
SEP.									
16...	1030	48	11.5	9.8	100	--	.20	.14	.000

DATE	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (JTU)	FECAL COLI- FORM (COL. PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
OCT.									
01...	--	.1	.11	--	--	--	--	.1	14
NOV.									
12...	--	.09	.050	--	121	8.0	1	--	480
JAN.									
26...	--	.1	.050	--	110	7.9	1	50	104
MAR.									
23...	.10	--	.15	.10	109	7.6	1	31	260
MAY									
13...	.03	--	.070	.030	83	7.9	--	26	330
JUNE									
17...	.02	--	.050	--	91	7.8	1	8	220
JULY									
15...	.04	.04	.090	--	116	8.0	2	4	2000
AUG.									
11...	.11	.1	.030	--	110	8.1	1	1	650
SEP.									
16...	.06	.06	.090	--	128	8.2	1	2	4800

11341400 SACRAMENTO RIVER NEAR MT SHASTA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	6.0	6.0	3.5	3.5	4.5	4.5	4.5	4.0
2	--	--	--	--	6.0	5.5	3.5	3.0	4.5	4.5	4.5	4.0
3	--	--	--	--	5.5	5.5	3.5	3.5	4.5	4.0	4.5	4.5
4	--	--	--	--	5.5	5.5	3.5	3.5	4.5	4.5	5.0	4.5
5	--	--	--	--	5.5	5.5	3.5	3.5	4.5	4.5	5.0	4.5
6	15.0	14.0	10.0	10.0	5.5	5.5	4.0	3.5	5.0	4.5	5.0	4.5
7	15.0	14.0	10.0	10.0	5.5	5.5	4.0	3.5	5.0	4.5	5.0	4.5
8	--	--	10.0	9.5	5.5	5.0	3.5	3.5	4.5	4.5	5.0	4.5
9	--	--	9.5	9.5	5.0	5.0	3.5	3.5	4.5	4.5	5.0	4.5
10	--	--	9.5	9.5	5.0	5.0	3.5	3.5	4.5	4.5	5.0	5.0
11	--	--	9.5	9.5	5.0	5.0	3.5	3.5	4.5	4.5	5.0	5.0
12	--	--	10.0	9.5	5.0	5.0	3.5	3.5	4.5	4.5	5.0	4.5
13	--	--	9.5	8.5	5.0	4.5	3.5	3.5	4.5	4.5	5.0	4.5
14	--	--	8.5	8.5	4.5	4.5	3.5	3.5	4.5	4.0	5.0	4.5
15	--	--	8.5	8.0	4.5	4.0	3.5	3.5	4.0	4.0	5.0	4.5
16	--	--	8.0	8.0	4.5	4.5	3.5	3.5	4.0	4.0	5.0	4.5
17	--	--	8.5	8.0	4.5	4.5	4.0	3.5	4.5	4.0	5.0	4.5
18	--	--	8.5	8.0	4.5	4.5	4.0	4.0	4.5	4.0	5.0	4.5
19	--	--	8.0	8.0	4.5	4.5	4.0	4.0	4.5	4.0	5.0	4.5
20	--	--	8.0	7.5	4.5	4.0	4.0	4.0	4.5	4.0	5.0	5.0
21	--	--	8.0	7.5	5.0	4.5	4.0	4.0	4.5	4.0	6.0	5.0
22	--	--	8.0	8.0	4.5	4.5	4.5	4.0	4.5	4.5	5.0	5.0
23	--	--	8.0	8.0	5.0	4.5	4.5	4.5	5.0	4.5	6.0	5.0
24	--	--	8.0	7.5	4.5	4.5	5.0	4.5	5.0	4.5	5.5	5.0
25	--	--	7.5	7.5	4.5	4.0	5.0	4.5	4.5	4.5	5.0	5.0
26	--	--	7.5	7.0	4.0	4.0	5.0	4.5	4.5	4.5	5.0	5.0
27	--	--	7.0	6.5	4.0	3.5	5.0	4.5	4.5	4.5	5.0	5.0
28	--	--	6.5	6.0	3.5	3.5	4.5	4.5	4.5	4.0	5.0	4.5
29	--	--	6.0	6.0	3.5	3.5	4.5	4.5	--	--	5.0	4.5
30	--	--	6.0	6.0	4.0	3.5	4.5	4.5	--	--	5.0	5.0
31	--	--	--	--	3.5	3.5	4.5	4.5	--	--	5.0	4.5
AVE	--	--	8.3	8.1	4.8	4.6	4.0	3.9	4.5	4.3	5.0	4.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.0	4.5	--	--	11.5	10.5	14.5	14.0	15.0	12.5	13.0	12.0
2	5.5	5.0	--	--	12.0	11.0	15.0	14.0	14.0	12.0	13.5	12.0
3	5.0	5.0	--	--	12.0	11.0	15.5	14.5	14.0	12.0	13.0	11.0
4	5.5	5.0	--	--	12.5	11.0	15.5	14.5	14.0	12.0	13.0	11.0
5	5.0	5.0	--	--	12.5	11.5	15.5	14.5	13.0	11.0	13.0	11.5
6	5.0	5.0	--	--	12.5	11.0	16.0	15.5	12.5	10.5	13.0	12.0
7	5.0	5.0	10.0	9.5	--	--	16.0	15.0	13.5	12.5	13.0	11.0
8	5.0	5.0	9.5	9.5	13.0	12.5	16.0	15.0	13.5	11.5	13.5	11.5
9	5.0	5.0	10.0	9.0	13.0	12.0	16.0	15.0	15.0	13.0	13.5	11.5
10	5.0	5.0	10.5	9.5	14.0	13.0	16.5	15.5	15.0	13.0	13.5	11.5
11	5.0	5.0	10.0	9.0	14.0	13.0	17.0	15.5	15.0	13.0	13.0	12.0
12	5.0	4.5	10.0	9.0	14.5	13.0	17.0	15.5	15.0	13.0	13.0	11.5
13	5.0	5.0	10.0	9.5	14.0	13.0	17.0	15.5	15.0	13.0	13.5	12.0
14	5.0	5.0	10.0	9.0	14.5	14.0	18.0	16.0	15.0	13.0	13.0	11.5
15	5.0	5.0	10.0	9.0	15.0	14.5	18.5	17.0	14.5	12.5	13.0	11.0
16	5.0	5.0	10.0	10.0	16.0	15.0	18.5	17.0	14.5	12.5	13.0	11.5
17	5.5	5.0	10.0	9.0	15.5	15.0	18.0	17.0	13.5	11.5	13.0	11.0
18	6.0	5.5	11.0	10.0	15.5	15.0	17.5	17.0	13.5	11.5	12.5	11.0
19	6.0	5.5	11.0	10.5	15.0	14.5	18.0	17.0	14.0	12.0	12.5	11.0
20	6.0	5.5	11.0	10.0	15.5	14.5	17.5	16.5	14.0	11.5	13.0	11.0
21	6.0	6.0	10.5	10.0	15.0	14.0	17.5	16.5	14.0	12.0	12.0	11.0
22	6.5	6.0	10.5	10.0	15.0	14.0	17.5	16.5	14.0	12.0	12.5	11.0
23	6.0	6.0	11.0	10.0	15.0	14.5	18.0	16.5	14.0	11.5	12.5	11.0
24	6.5	6.0	11.0	9.5	15.0	14.5	17.5	16.5	14.0	11.5	12.5	11.0
25	6.5	6.0	11.0	10.0	15.0	15.0	18.0	16.5	14.0	12.0	12.0	12.0
26	6.5	6.0	11.0	10.0	15.5	15.0	17.5	13.0	14.0	12.0	12.0	11.5
27	--	--	11.5	10.5	15.0	14.0	14.5	13.0	13.5	11.0	12.5	12.0
28	--	--	11.5	10.5	14.5	13.5	15.0	12.5	13.0	11.0	13.0	12.0
29	--	--	11.5	11.0	14.5	13.5	14.5	12.5	13.0	11.0	13.0	12.5
30	--	--	11.5	11.0	14.5	13.5	14.5	12.5	12.5	11.0	13.0	12.5
31	--	--	11.0	11.0	--	--	14.0	12.5	13.0	11.5	--	--
AVE	5.5	5.3	10.6	9.8	14.2	13.3	16.5	15.2	14.0	11.9	12.9	11.5

## SACRAMENTO RIVER BASIN

11342000 SACRAMENTO RIVER AT DELTA, CALIF.

LOCATION.--Lat 40°56'23", long 122°24'58", in NW¼ sec.35, T.36 N., R.5 W., Shasta County, Bureau of Reclamation property, at gaging station on left bank 0.2 mile downstream from Dog Creek, 0.6 mile southeast of Delta, and 2.8 miles south of Lamaine.

DRAINAGE AREA.--425 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), December 1953 to September 1971. Water temperatures: June to September 1951, October 1953 to September 1957, October 1962 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 26.5°C Aug. 10, 11; minimum, 2.0°C Dec. 20, 21.

Period of record:

Water temperatures: Maximum (1951, 1953-57, 1963-71), 28.0°C July 6, 1968; minimum, freezing point on several days in 1964, 1967, and 1968.

REMARKS.--Six chemical-quality analyses furnished by California Department of Water Resources.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	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)
OCT.											
02...	1215	188	13.5	10.9	108	--	--	--	--	--	--
06...	0750	175	12.0	9.8	--	9.0	7.4	11	1.2	75	0
NOV.											
13...	1015	977	7.5	11.4	98	--	--	--	--	--	--
16...	0930	640	7.0	11.5	--	--	--	5.6	--	62	0
JAN.											
12...	0945	1020	4.5	12.8	--	--	--	3.6	--	53	0
28...	1045	1620	5.5	12.3	102	--	--	--	--	--	--
MAR.											
15...	0950	1990	6.0	12.6	--	5.6	5.8	3.0	.6	47	0
23...	0830	2270	6.5	11.7	99	--	--	--	--	--	--
MAY											
10...	1010	2380	10.0	12.5	--	--	--	2.2	--	44	0
14...	0900	2280	9.0	10.9	99	--	--	--	--	--	--
JUNE											
17...	1500	722	17.0	9.6	102	--	--	--	--	--	--
JULY											
06...	0945	412	17.5	10.5	--	--	--	5.7	--	61	0
15...	1845	320	21.0	8.6	100	--	--	--	--	--	--
AUG.											
12...	1215	236	22.5	9.4	112	--	--	--	--	--	--
SEP.											
16...	1625	204	18.5	9.8	108	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)	NITRATE PLUS NITRATE (N) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)
OCT.										
02...	--	--	--	.22	--	--	.0	.00	.060	--
06...	2.1	8.0	--	--	--	--	.0	--	--	--
NOV.										
13...	--	--	--	.08	--	--	.2	.05	.020	--
16...	--	5.2	--	--	--	--	--	--	--	--
JAN.										
12...	--	4.1	--	--	--	--	--	--	--	--
28...	--	--	--	.10	--	--	.1	.02	.010	--
MAR.										
15...	1.2	2.8	--	--	--	--	.0	--	--	--
23...	--	--	--	.60	.000	.10	--	--	.10	.040
MAY										
10...	--	.8	--	--	--	--	--	--	--	--
14...	--	--	--	.25	--	.03	--	--	.070	.040
JUNE										
17...	--	--	--	.25	--	.00	--	--	.040	--
JULY										
06...	--	3.8	--	--	--	--	--	--	--	--
15...	--	--	--	.44	.000	.02	--	.02	.070	--
AUG.										
12...	--	--	--	.31	.000	.00	--	.00	.050	--
SEP.										
16...	--	--	.20	.19	.000	.01	--	.01	.080	--

## 11342000 SACRAMENTO RIVER AT DELTA, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CAC03 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
OCT.										
02...	--	--	--	--	--	--	--	--	--	--
06...	200	109	.15	51.5	53	0	62	31	.7	154
NOV.										
13...	--	--	--	--	--	--	--	--	--	106
16...	100	--	--	--	50	0	51	--	.3	122
JAN.										
12...	100	--	--	--	44	1	43	--	.2	101
28...	--	--	--	--	--	--	--	--	--	80
MAR.										
15...	0	53	.07	285	38	0	39	14	.2	88
23...	--	--	--	--	--	--	--	--	--	82
MAY										
10...	0	--	--	--	37	1	36	--	.2	76
14...	--	--	--	--	--	--	--	--	--	73
JUNE										
17...	--	--	--	--	--	--	--	--	--	96
JULY										
06...	100	--	--	--	50	0	50	--	.4	120
15...	--	--	--	--	--	--	--	--	--	124
AUG.										
12...	--	--	--	--	--	--	--	--	--	133
SEP.										
16...	--	--	--	--	--	--	--	--	--	143

DATE	PH (UNITS)	TUR- BID- ITY (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT.										
02...	--	--	1	31	--	--	--	--	--	--
06...	8.0	7	--	--	--	--	--	--	--	--
NOV.										
13...	8.0	--	--	80	--	--	--	--	--	--
16...	7.8	4	--	--	--	--	--	--	--	--
JAN.										
12...	8.0	2	--	--	--	--	--	--	--	--
28...	7.8	--	11	56	--	--	--	--	--	--
MAR.										
15...	7.5	14	--	--	--	--	--	--	--	--
23...	7.3	--	31	1020	--	--	--	--	--	--
MAY										
10...	7.7	6	--	--	0	100	0	0	.0	0
14...	7.9	--	2	1200	--	--	--	--	--	--
JUNE										
17...	8.1	--	3	220	--	--	--	--	--	--
JULY										
06...	8.1	3	--	--	--	--	--	--	--	--
15...	8.3	--	8	2100	--	--	--	--	--	--
AUG.										
12...	8.4	--	9	6200	--	--	--	--	--	--
SEP.										
16...	8.7	--	0	1600	--	--	--	--	--	--

## SACRAMENTO RIVER BASIN

11342000 SACRAMENTO RIVER AT DELTA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	11.5	12.5	9.0	6.5	6.0	6.5	5.5	9.5	5.5	6.5	3.5
2	17.0	12.0	12.5	9.0	8.0	6.5	5.5	4.0	8.0	5.5	5.5	3.0
3	15.5	10.5	10.0	8.5	6.5	4.0	4.5	3.0	6.0	3.5	5.5	4.5
4	14.5	10.5	9.5	9.0	6.0	4.0	4.5	3.0	7.0	5.0	7.0	4.5
5	14.5	10.5	11.5	9.5	6.5	6.0	5.0	3.0	8.5	5.5	7.0	3.5
6	13.5	10.0	10.5	9.5	7.0	6.5	5.0	3.0	9.0	5.5	8.0	4.5
7	12.5	8.0	10.0	9.0	7.5	7.0	6.0	4.0	8.5	5.0	7.5	6.0
8	13.5	7.5	10.5	9.5	8.0	7.5	6.5	5.0	8.0	4.5	9.0	5.0
9	13.0	9.5	11.5	10.5	8.5	7.5	6.5	5.0	8.0	5.0	7.0	5.5
10	15.5	10.5	11.0	9.0	8.0	7.0	6.5	5.0	10.0	6.5	6.5	5.5
11	15.5	10.5	11.0	10.0	7.5	6.0	6.5	5.5	10.0	6.5	8.0	6.5
12	14.5	10.0	10.5	8.0	7.0	5.0	6.0	3.5	10.0	7.0	7.5	6.0
13	14.0	9.0	10.0	7.0	5.5	4.5	3.5	2.5	10.0	6.5	8.0	5.0
14	13.0	8.0	10.0	9.0	5.5	4.5	5.5	3.0	8.5	6.5	7.0	5.5
15	12.5	7.5	9.0	8.0	5.5	5.0	6.5	5.5	9.0	6.5	8.5	6.0
16	12.5	7.5	11.5	8.5	6.0	5.0	7.0	6.0	7.5	5.0	7.5	6.0
17	11.5	8.0	11.0	8.5	6.0	5.5	7.0	6.5	8.5	6.0	9.0	5.0
18	11.5	9.5	10.0	8.0	5.5	4.5	8.5	7.0	6.0	4.5	9.5	5.0
19	12.0	10.0	10.5	8.0	5.5	4.0	9.0	7.5	6.5	4.5	10.5	5.5
20	11.0	10.0	9.5	7.5	4.5	2.0	9.0	8.0	7.5	3.5	11.0	6.5
21	10.0	8.5	9.0	8.5	5.0	2.0	8.5	7.0	7.0	4.5	10.5	7.5
22	9.0	7.5	9.5	9.0	4.5	3.5	8.0	6.0	8.5	5.5	9.5	7.0
23	9.0	8.5	10.0	9.5	5.5	4.5	8.0	5.5	8.0	5.0	8.0	6.5
24	9.0	7.0	10.5	10.0	5.0	4.0	7.5	5.0	7.0	6.0	9.5	7.0
25	10.0	8.0	11.0	9.0	4.5	3.5	8.0	5.0	7.0	4.5	8.5	7.5
26	9.5	6.0	9.0	7.5	4.5	3.0	9.0	5.5	6.5	3.0	8.5	7.5
27	9.0	5.5	7.5	5.5	5.0	4.5	9.0	6.0	6.0	4.5	9.5	7.0
28	10.5	6.5	6.0	5.5	5.5	5.0	9.0	5.5	7.0	4.5	10.5	7.5
29	11.0	7.0	7.0	6.0	7.0	5.0	9.0	6.0	--	--	11.0	8.0
30	9.0	7.0	7.0	6.0	7.0	6.5	9.0	5.5	--	--	10.0	7.5
31	12.5	8.5	--	--	7.0	6.5	9.0	5.5	--	--	10.5	5.5
AVE	12.4	8.7	10.0	8.4	6.2	5.0	7.1	5.1	8.0	5.2	8.5	5.8

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	6.0	10.5	7.0	12.5	8.5	21.0	16.0	25.0	19.0	18.0	14.5
2	12.5	7.0	11.0	8.0	14.5	9.0	20.5	17.0	25.0	19.5	18.5	13.5
3	12.5	7.0	10.0	8.0	15.5	11.5	20.0	16.0	24.5	19.5	19.5	14.0
4	13.5	7.5	10.0	8.0	15.5	12.0	21.0	16.5	23.0	20.0	21.0	14.5
5	13.5	7.5	10.5	8.0	17.5	12.0	20.5	16.0	23.5	19.0	20.5	15.0
6	12.0	9.0	12.0	7.0	18.5	12.5	20.5	16.0	23.0	17.5	20.0	16.0
7	10.5	8.5	14.5	9.5	18.0	13.0	20.0	15.5	22.5	17.0	19.5	14.0
8	9.5	7.5	12.0	8.0	19.0	13.5	20.5	16.5	23.0	16.5	20.0	14.0
9	8.5	7.5	14.0	7.5	18.5	14.5	19.5	16.0	24.5	17.5	20.0	14.5
10	8.0	5.0	15.5	8.5	18.0	13.0	18.5	13.5	26.5	19.5	20.5	14.5
11	9.5	5.0	14.5	9.5	18.5	13.5	19.5	14.0	26.5	20.5	21.0	15.0
12	11.0	6.0	13.5	10.5	18.5	14.0	21.0	15.5	25.5	20.5	22.0	16.0
13	10.0	7.5	14.5	9.0	17.5	12.5	22.0	16.5	25.0	20.5	22.5	17.0
14	13.5	7.0	15.0	8.5	18.5	13.0	23.0	17.5	24.5	19.5	22.0	17.5
15	13.0	8.0	14.0	9.5	19.5	14.5	23.0	17.5	23.0	18.0	21.5	16.0
16	10.5	7.5	12.5	7.0	20.0	16.0	24.0	18.0	23.0	17.0	21.0	15.0
17	9.0	6.0	12.5	7.0	19.0	15.0	23.0	19.0	23.0	17.0	20.0	16.0
18	11.5	5.5	14.0	7.5	18.5	16.0	23.0	20.0	23.0	16.5	19.0	14.0
19	12.0	6.0	14.5	10.0	18.5	15.0	24.0	18.5	22.5	17.0	18.5	12.5
20	11.0	6.0	13.0	9.5	20.5	16.0	24.5	20.0	22.0	17.0	18.5	12.5
21	10.0	4.0	12.5	7.5	20.5	16.5	24.5	20.0	21.5	17.0	18.5	13.5
22	8.5	6.0	16.0	9.0	20.5	17.0	25.0	19.0	23.5	18.0	18.5	13.5
23	10.0	7.0	17.0	11.0	20.0	16.5	24.5	19.0	22.5	17.5	18.0	12.5
24	9.5	5.0	16.5	11.5	19.0	16.5	24.5	19.0	23.5	17.0	17.5	12.5
25	12.0	6.0	14.0	10.5	18.5	14.0	24.5	19.5	24.0	18.5	16.0	14.0
26	12.0	8.0	14.0	9.5	14.5	13.0	24.5	19.5	24.0	19.5	14.0	11.5
27	12.5	8.0	14.5	10.0	17.0	13.0	25.0	19.0	24.5	19.5	13.5	9.5
28	12.0	7.5	12.5	10.0	17.5	13.5	25.0	19.5	22.0	18.0	12.5	10.5
29	12.0	8.5	15.0	9.5	18.5	13.5	24.5	21.0	21.5	16.5	10.5	8.5
30	13.0	7.5	13.0	9.5	20.0	15.5	24.0	18.5	18.5	15.5	12.0	8.0
31	--	--	10.5	8.5	--	--	23.5	18.5	18.0	13.5	--	--
AVE	11.1	6.8	13.3	8.8	18.1	13.8	22.5	17.7	23.3	18.0	18.5	13.7

## 11348500 PIT RIVER NEAR CANBY, CALIF.

LOCATION.--Lat 41°24'22", long 120°55'36", in NW¼SW¼ sec.10, T.41 N., R.9 E., Modoc County, at gaging station on right bank, at lower end of Warm Spring Valley, and 4 miles southwest of Canby.

DRAINAGE AREA.--1,431 sq mi, excluding Goose Lake basin.

PERIOD OF RECORD.--Chemical analyses: Water years 1951-58 (partial-record station), October 1958 to September 1971.

Water temperatures: March 1965 to September 1971.

Sediment records: Water years 1957-61, 1967-70 (partial-record station).

EXTREMES, 1970-71:

Water temperatures: Maximum, 30.5°C Aug. 12; minimum, freezing point on many days during winter period.

Period of record:

Water temperatures: Maximum, 30.5°C Aug. 12, 1971; minimum (1965-66, 1967-69, 1970-71), freezing point on many days during most years.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Clock stopped Jan. 5-11; range in temperature, 0.0°C to 0.5°C. Temperature record may be in error during the months of January and February because of possible ice effect.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
UCT.											
07...	0815	76	8.5	9.8	21	6.2	26	6.2	154	0	8.1
NOV.											
17...	1145	169	5.0	10.8	--	--	26	--	145	0	--
DEC.											
15...	1200	225	1.0	12.5	--	--	26	--	140	0	--
JAN.											
13...	1515	217	.0	11.2	--	--	25	--	132	0	--
FEB.											
17...	1635	329	5.0	11.6	--	--	16	--	98	0	--
MAR.											
16...	1120	959	3.5	10.5	--	--	27	--	107	0	--
APR.											
13...	1600	926	9.5	9.5	--	--	8.7	--	76	0	--
MAY											
11...	1155	1680	15.0	9.6	--	--	10	--	81	0	--
JUNE											
03...	1615	3660	15.5	8.3	11	--	13	2.7	73	0	6.6
JULY											
07...	1220	490	20.0	8.3	--	--	14	--	89	0	--
AUG.											
05...	1500	150	24.0	8.2	--	--	13	--	104	0	--
SEP.											
22...	1110	105	14.0	9.8	--	--	21	--	135	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT.										
07...	7.1	.1	200	180	.24	36.9	78	0	126	40
NOV.										
17...	7.9	--	100	--	--	--	96	0	119	--
DEC.										
15...	9.0	--	100	--	--	--	90	0	115	--
JAN.										
13...	8.2	--	200	--	--	--	81	0	108	--
FEB.										
17...	6.1	--	100	--	--	--	69	0	80	--
MAR.										
16...	9.3	--	200	--	--	--	67	0	88	--
APR.										
13...	2.8	--	100	--	--	--	58	0	62	--
MAY										
11...	1.7	--	100	--	--	--	53	0	66	--
JUNE										
03...	2.2	1.4	200	119	.16	1180	46	0	60	48
JULY										
07...	3.8	--	100	--	--	--	62	0	73	--
AUG.										
05...	3.7	--	100	--	--	--	65	0	85	--
SEP.										
22...	4.8	--	200	--	--	--	88	0	111	--

## SACRAMENTO RIVER BASIN

11348500 PIT RIVER NEAR CANBY, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT.										
07...	1.3	280	8.1	120	--	--	--	--	--	--
NOV.										
17...	1.2	274	7.8	30	--	--	--	--	--	--
DEC.										
15...	1.2	289	7.6	45	--	--	--	--	--	--
JAN.										
13...	1.2	263	7.7	30	--	--	--	--	--	--
FEB.										
17...	.8	195	8.0	40	--	--	--	--	--	--
MAR.										
16...	1.4	241	7.7	160	--	--	--	--	--	--
APR.										
13...	.5	142	7.6	65	--	--	--	--	--	--
MAY										
11...	.6	154	7.7	25	0	0	0	0	.0	0
JUNE										
03...	1.1	148	7.3	80	--	--	--	--	--	--
JULY										
07...	.8	182	7.5	40	--	--	--	--	--	--
AUG.										
05...	.7	187	7.8	55	--	--	--	--	--	--
SEP.										
22...	1.0	240	7.9	55	--	--	--	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	11.5	10.0	4.0	0.5	0.0	0.0	0.0	6.0	2.5	2.0	0.0
2	17.5	11.0	10.0	4.0	0.0	0.0	0.5	0.0	5.5	3.0	2.0	0.0
3	17.0	11.5	9.5	4.5	0.0	0.0	0.0	0.0	4.0	1.0	1.5	0.0
4	18.0	12.5	8.5	7.0	0.0	0.0	0.0	0.0	3.0	1.5	4.0	0.0
5	17.5	13.5	8.0	6.5	2.0	0.0	--	--	3.5	1.5	4.0	0.0
6	14.5	11.5	7.0	5.5	2.0	1.0	--	--	6.0	2.5	5.5	1.0
7	12.0	7.5	6.5	5.0	1.0	0.0	--	--	5.5	2.0	6.0	3.0
8	13.0	7.0	7.5	5.0	1.5	0.0	--	--	5.5	2.5	8.0	3.0
9	13.0	9.0	7.0	6.0	1.5	0.0	--	--	5.0	2.5	6.0	4.0
10	14.5	10.0	7.0	5.0	0.5	0.0	--	--	8.5	4.5	5.5	4.0
11	15.0	10.0	6.5	6.0	1.5	0.0	--	--	9.0	5.5	7.0	4.0
12	15.0	10.5	7.0	5.0	4.0	0.0	0.5	0.0	9.0	6.0	4.0	0.0
13	12.5	8.0	5.5	3.0	3.0	0.0	0.5	0.0	9.0	6.0	3.0	0.0
14	12.0	7.0	5.0	3.0	0.5	0.0	0.0	0.0	7.0	5.0	2.5	1.0
15	12.0	6.5	6.0	3.5	1.5	0.0	0.0	0.0	7.0	4.5	5.0	1.5
16	12.0	6.5	7.0	5.0	0.0	0.0	0.5	0.0	4.5	3.0	4.5	3.0
17	11.0	6.5	7.0	3.5	0.0	0.0	1.0	0.0	4.5	2.5	6.0	2.0
18	10.5	8.0	4.5	3.0	1.5	0.0	3.5	1.0	2.5	1.0	5.0	1.0
19	9.0	6.5	4.0	2.0	1.5	0.0	4.0	0.5	6.5	1.0	7.0	2.0
20	8.5	6.5	5.0	1.0	0.5	0.0	5.5	3.0	6.5	0.0	9.0	4.0
21	7.0	5.5	3.5	3.0	0.0	0.0	3.5	0.5	5.5	1.0	9.0	6.0
22	6.5	4.0	4.5	3.5	0.0	0.0	3.0	0.0	3.5	2.0	9.0	6.5
23	5.5	4.5	6.0	4.0	0.5	0.0	3.5	1.0	5.0	1.5	8.5	6.0
24	6.0	3.0	6.5	5.5	1.5	0.0	3.5	1.0	5.0	3.5	9.0	5.5
25	6.0	3.5	6.5	4.5	1.5	0.0	4.0	2.0	4.0	1.0	7.5	5.5
26	6.0	2.5	4.5	2.5	1.0	0.0	5.5	2.0	5.0	0.0	7.0	4.0
27	7.0	3.0	2.5	1.0	0.0	0.0	5.5	2.0	3.0	0.0	8.0	3.0
28	7.5	2.0	2.5	1.0	0.0	0.0	5.0	2.5	1.0	0.0	12.0	5.5
29	8.0	2.5	3.0	1.5	0.0	0.0	5.0	2.0	--	--	13.5	8.0
30	6.0	2.5	2.0	0.0	0.5	0.0	5.5	2.0	--	--	11.0	5.5
31	8.5	3.0	--	--	0.0	0.0	5.0	2.0	--	--	11.0	4.5
AVE	11.2	7.0	6.0	3.8	0.9	0.0	--	--	5.4	2.4	6.5	3.0



.11348600 PIT RIVER NEAR CANBY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	5.5	15.5	11.0	9.0	3.0	24.5	19.0	29.0	22.0	17.0	13.0
2	14.0	7.5	15.0	11.5	13.5	7.0	24.5	19.5	29.0	23.0	17.5	13.5
3	15.0	8.0	13.0	10.0	16.0	10.5	24.0	19.0	28.0	21.5	18.0	11.5
4	15.5	8.5	12.0	9.0	15.5	13.0	24.0	19.0	26.5	20.5	19.5	13.0
5	15.5	9.5	11.0	8.0	19.0	12.0	23.5	18.5	26.5	19.5	19.5	15.0
6	14.0	11.5	11.5	7.0	21.5	16.0	23.5	19.0	26.5	20.0	19.0	15.0
7	12.5	9.0	15.0	8.0	21.5	17.0	23.0	19.0	26.0	19.5	19.0	13.0
8	12.5	7.0	14.5	9.0	22.5	16.5	23.0	20.0	27.0	19.0	20.5	14.0
9	12.5	9.0	16.0	7.5	22.0	17.5	22.5	19.0	27.5	21.0	20.5	15.0
10	10.0	6.5	19.5	11.0	18.5	15.0	21.5	18.5	28.0	23.0	19.5	15.0
11	10.5	6.5	19.5	13.5	21.0	13.5	23.0	17.0	29.0	22.0	21.5	15.0
12	12.0	6.5	18.5	14.5	21.0	16.0	24.0	18.5	30.5	21.0	22.0	15.5
13	12.0	9.0	18.0	12.5	19.0	15.0	25.5	19.5	26.5	20.5	22.5	17.0
14	13.5	8.5	18.5	11.5	21.5	14.5	28.0	20.5	25.5	18.5	21.0	17.5
15	14.5	10.0	17.5	13.0	23.0	16.0	29.0	21.5	23.0	16.5	21.0	15.5
16	13.0	10.0	13.5	9.0	23.5	17.5	28.5	22.0	24.0	16.0	20.0	16.0
17	10.5	7.0	13.0	6.5	23.0	17.5	28.5	22.5	25.0	16.5	18.0	14.5
18	8.5	4.5	15.5	8.5	21.5	17.5	27.5	23.0	25.0	15.5	16.5	12.0
19	11.5	5.0	16.0	11.0	20.5	16.0	29.0	23.0	24.5	17.0	16.5	11.5
20	11.0	6.5	15.0	10.0	23.0	17.0	29.5	23.0	23.0	16.5	16.5	12.0
21	8.0	4.0	10.5	7.0	24.0	18.5	28.0	22.0	22.5	15.0	16.5	12.0
22	8.0	4.0	13.5	7.5	24.0	20.0	28.5	22.5	22.0	17.0	17.0	12.0
23	8.0	6.0	17.5	10.5	23.0	19.5	28.0	21.5	21.5	14.0	17.5	12.5
24	6.5	4.0	19.5	14.0	22.5	18.5	29.0	21.0	23.0	16.0	16.5	12.5
25	6.5	4.0	19.0	16.0	21.0	17.0	29.0	20.5	23.5	17.0	14.5	12.0
26	10.0	4.5	17.5	13.5	17.0	14.0	30.0	21.5	25.0	17.5	12.0	10.0
27	12.5	7.0	14.0	12.0	16.0	13.0	29.0	23.0	25.0	19.0	12.5	8.5
28	14.5	8.5	12.5	10.0	18.5	12.5	30.0	22.0	23.0	16.5	11.0	9.0
29	16.0	11.0	11.0	9.5	21.0	14.5	28.5	21.5	23.0	17.0	9.5	6.0
30	16.0	11.0	10.0	7.0	23.5	17.0	27.0	22.0	20.0	15.0	6.5	4.5
31	--	--	7.0	4.0	--	--	28.5	22.0	18.5	14.5	--	--
AVE	11.9	7.3	14.8	10.1	20.2	15.1	26.5	20.7	25.1	18.3	17.3	12.8

## SACRAMENTO RIVER BASIN

11370500 SACRAMENTO RIVER AT KESWICK, CALIF.

LOCATION.--Lat 40°36'04", long 122°26'36", in SW1/4 sec.28, T.32 N., R.5 W., Shasta County, at gaging station 0.4 mile upstream from Middle Creek, 0.8 mile downstream from Keswick Dam, 1.6 miles downstream from Keswick, and 10 miles downstream from Shasta Dam.

DRAINAGE AREA.--6,468 sq mi, excluding Goose Lake basin.

PERIOD OF RECORD.--Chemical analyses: Water years 1951 and 1953 (partial-record station), December 1953 to September 1971. Published as "near" in 1951 and 1953; as "at Keswick Dam, near Keswick" in 1968-69.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
13...	1325	7100	12.0	8.9	--	--	5.0	--	53	0	5.1	3.3
NOV.												
18...	1115	14800	11.5	7.8	--	--	6.7	--	56	0	3.1	2.0
DEC.												
16...	1400	20400	9.5	11.0	--	--	6.3	--	55	0	7.2	2.4
JAN.												
18...	1420	25000	9.0	11.5	8.9	4.4	5.2	1.5	54	0	4.9	1.9
FEB.												
22...	1135	7000	7.0	13.1	--	--	5.2	--	56	0	4.1	2.2
MAR.												
23...	1340	5500	8.5	12.1	--	--	4.1	--	53	0	6.6	2.5
APR.												
19...	1400	14700	8.5	11.2	--	--	4.3	--	58	0	5.3	2.3
MAY												
24...	1300	15100	9.0	12.2	--	--	5.2	--	53	0	4.1	1.2
JUNE												
09...	1040	14400	9.0	12.1	--	--	5.8	--	56	0	--	1.7
JULY												
14...	1105	13600	9.5	11.4	--	--	4.4	--	57	0	4.0	2.4
AUG.												
10...	0900	14100	10.5	10.5	--	--	5.3	--	60	0	1.6	2.1
SEP.												
27...	1115	11500	12.0	10.0	9.1	4.5	5.4	1.0	58	0	--	1.0

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)
OCT.											
13...	--	--	--	--	100	--	--	--	48	5	43
NOV.											
18...	--	--	--	--	0	--	--	--	48	2	46
DEC.											
16...	--	--	--	--	100	--	--	--	45	0	45
JAN.											
18...	--	.5	--	--	0	78	.11	5270	40	0	44
FEB.											
22...	--	--	--	--	0	--	--	--	43	0	46
MAR.											
23...	--	--	--	--	100	--	--	--	43	0	43
APR.											
19...	--	--	--	--	100	--	--	--	44	0	48
MAY											
24...	--	--	--	--	0	--	--	--	42	0	43
JUNE											
09...	.10	.4	.020	.010	0	--	--	--	42	0	46
JULY											
14...	.10	.3	.010	.010	0	--	--	--	38	0	47
AUG.											
10...	.20	.4	.030	.030	0	--	--	--	40	0	49
SEP.											
27...	.10	.4	.030	.020	0	90	.12	2800	41	0	48

11370500 SACRAMENTO RIVER AT KESWICK; CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT. 13...	--	.3	103	8.0	3	--	--	--	--	--	--
NOV. 18...	--	.4	120	7.8	7	--	--	--	--	--	--
DEC. 16...	--	.4	115	7.4	9	--	--	--	--	--	--
JAN. 18...	21	.4	111	--	40	--	--	--	--	--	--
FEB. 22...	--	.3	105	7.6	10	--	--	--	--	--	--
MAR. 23...	--	.3	103	7.4	6	--	--	--	--	--	--
APR. 19...	--	.3	112	7.3	7	--	--	--	--	--	--
MAY 24...	--	.3	109	7.8	4	0	200	0	0	.1	0
JUNE 09...	--	.4	109	7.3	6	--	--	--	--	--	--
JULY 14...	--	.3	102	7.4	5	--	--	--	--	--	--
AUG. 10...	--	.4	108	7.3	7	--	--	--	--	--	--
SEP. 27...	22	.4	111	7.2	4	--	--	--	--	--	--

## SACRAMENTO RIVER BASIN

11372000 CLEAR CREEK NEAR IGO, CALIF.

LOCATION.--Lat 40°30'48", long 122°31'23", (unsurveyed), Shasta County, temperature recorder at gaging station on left bank, at highway bridge on Redding-Igo road, 1.0 mile northeast of Igo, 8.3 miles southwest of Redding, and 10.4 miles upstream from mouth.

DRAINAGE AREA.--228 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1958 (partial-record station), October 1958 to September 1966. Water temperatures: March 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 20.0°C Aug. 10-13; minimum, 3.5°C Jan. 13.

Period of record:

Water temperatures: Maximum, 21.0°C July 1, 1967; minimum, 2.0°C sometime during period Jan. 3 to Feb. 1, 1968.

REMARKS.--Clock stopped Nov. 30 to Dec. 1, Dec. 20 to Jan. 6, Feb. 28 to Mar. 6, Apr. 10-15, June 3 to July 13; range in temperature, 9.0°C to 10.5°C, 5.5°C to 8.0°C, 4.0°C to 6.0°C, 9.0°C to 11.5°C, and 13.0°C to 15.5°C, respectively.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	12.5	12.0	11.0	--	--	--	--	7.5	6.0	--	--
2	13.0	12.5	12.0	10.5	9.5	9.0	--	--	7.5	5.5	--	--
3	13.0	12.0	12.0	11.0	9.5	8.0	--	--	5.5	4.0	--	--
4	13.0	12.5	12.0	11.5	10.0	9.5	--	--	6.0	5.5	--	--
5	14.0	13.0	13.0	12.0	10.5	10.0	--	--	7.0	5.5	--	--
6	13.0	12.0	13.0	12.0	10.5	10.0	--	--	6.5	5.5	--	--
7	13.0	11.5	12.5	12.0	10.5	10.0	5.0	4.0	6.5	5.0	7.5	6.5
8	13.5	11.5	12.5	12.0	10.0	9.5	5.0	4.5	6.0	5.0	7.5	6.0
9	13.0	12.0	13.0	12.5	9.5	8.0	5.5	4.5	7.0	5.5	7.5	6.5
10	13.0	12.0	13.0	11.5	9.0	7.5	5.5	5.5	8.0	6.5	7.0	6.5
11	13.0	12.0	12.5	12.0	8.5	7.5	6.0	5.5	8.0	6.5	7.5	7.0
12	13.0	12.5	12.5	11.0	7.5	6.5	6.0	4.5	8.0	7.5	8.5	7.5
13	12.5	12.0	11.5	10.0	7.5	7.0	4.5	3.5	7.5	7.0	8.0	6.0
14	12.0	11.5	11.5	11.0	7.5	6.5	5.0	4.0	7.5	6.5	8.5	7.5
15	12.0	11.5	11.0	10.0	7.5	7.0	6.5	5.0	7.0	6.0	9.5	7.5
16	12.0	11.5	10.5	10.0	7.5	7.0	8.0	6.5	6.5	5.5	9.5	8.0
17	12.0	11.5	11.5	10.0	7.5	7.5	8.5	8.0	7.0	6.0	9.0	7.5
18	13.5	12.0	11.0	10.0	7.5	6.5	9.5	8.5	6.0	5.5	8.5	6.5
19	13.0	13.0	11.0	10.0	7.0	6.0	9.0	8.0	6.5	5.5	9.5	6.5
20	13.5	13.0	11.0	10.0	--	--	8.5	7.0	6.0	4.5	10.0	7.5
21	13.0	12.0	11.0	10.5	--	--	7.0	6.0	6.0	5.0	10.5	8.5
22	12.0	11.5	11.0	11.0	--	--	7.0	5.5	6.5	5.5	10.5	9.0
23	12.5	12.0	11.5	11.0	--	--	7.0	5.5	7.0	6.0	10.5	9.0
24	12.0	11.0	11.5	11.0	--	--	6.5	5.5	7.0	6.5	10.5	9.0
25	12.0	11.5	11.5	11.0	--	--	6.5	5.5	7.5	5.5	10.5	9.5
26	12.0	10.5	11.0	10.0	--	--	7.5	5.5	6.0	4.5	10.5	9.0
27	11.0	10.5	10.5	9.5	--	--	7.5	6.0	6.0	5.5	10.5	8.0
28	11.0	10.5	10.5	10.0	--	--	6.5	5.5	--	--	11.5	8.5
29	11.0	10.5	11.0	10.0	--	--	7.0	5.5	--	--	12.0	9.0
30	11.0	10.5	--	--	--	--	7.0	6.0	--	--	11.5	9.0
31	12.0	11.0	--	--	--	--	7.0	6.0	--	--	10.0	7.0
AVE	12.5	11.7	11.7	10.8	--	--	6.8	5.7	6.8	5.7	9.5	7.7
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	7.5	12.5	10.5	12.0	10.5	--	--	18.5	17.0	15.0	14.0
2	11.5	8.5	11.5	10.5	14.0	11.5	--	--	19.5	17.5	15.5	14.0
3	11.5	8.5	11.5	10.5	--	--	--	--	19.0	18.0	15.5	14.5
4	12.0	8.5	11.0	10.5	--	--	--	--	19.0	17.5	15.5	14.5
5	12.5	9.5	11.5	10.5	--	--	--	--	19.0	17.5	15.5	14.5
6	12.0	10.5	12.0	10.5	--	--	--	--	19.0	17.5	16.0	14.5
7	11.5	10.0	14.0	12.0	--	--	--	--	18.5	17.0	15.0	13.5
8	12.0	9.5	13.5	11.0	--	--	--	--	18.5	17.0	14.0	13.5
9	11.5	9.5	13.5	10.0	--	--	--	--	19.0	17.5	14.5	13.5
10	--	--	13.5	11.5	--	--	--	--	20.0	18.5	14.5	13.5
11	--	--	13.5	12.0	--	--	--	--	20.0	18.5	15.5	14.0
12	--	--	14.0	12.5	--	--	--	--	20.0	19.0	16.0	15.0
13	--	--	14.0	12.5	--	--	--	--	20.0	18.5	16.0	15.0
14	--	--	14.0	11.5	--	--	18.5	16.5	19.5	18.0	16.0	15.0
15	--	--	13.5	11.5	--	--	18.0	16.5	19.0	17.5	15.0	14.5
16	12.5	10.0	14.0	11.0	--	--	18.0	16.5	18.5	17.0	15.0	14.0
17	11.5	9.0	12.5	10.5	--	--	18.5	17.0	19.0	17.5	15.0	14.0
18	11.0	8.5	13.0	11.0	--	--	18.5	17.0	18.5	17.0	14.5	13.5
19	12.0	9.5	14.0	12.0	--	--	19.0	17.5	18.5	17.0	14.0	13.0
20	12.5	10.5	13.5	11.5	--	--	19.5	17.5	18.0	16.5	14.0	13.0
21	11.0	8.5	12.0	10.0	--	--	18.5	17.5	18.0	16.5	14.5	14.0
22	11.0	9.5	14.0	11.5	--	--	18.5	17.5	18.5	17.0	14.5	13.5
23	12.0	9.5	14.5	12.5	--	--	18.5	17.0	18.0	16.5	14.0	13.0
24	12.0	9.0	15.0	13.5	--	--	18.5	17.0	18.0	16.5	14.5	13.5
25	12.0	9.0	14.5	12.5	--	--	18.5	17.0	18.0	16.0	15.0	14.0
26	13.0	10.5	13.5	11.5	--	--	18.5	17.0	16.5	15.0	14.0	12.5
27	13.0	11.0	13.0	12.0	--	--	18.5	17.0	17.0	15.5	13.0	12.0
28	12.5	10.5	13.0	11.0	--	--	18.5	17.0	16.0	14.5	13.0	12.5
29	12.5	11.0	11.5	11.0	--	--	18.5	17.0	15.5	14.5	12.5	12.0
30	12.5	10.5	13.0	11.0	--	--	18.0	16.5	15.0	13.5	12.5	11.0
31	--	--	12.0	10.5	--	--	18.5	16.5	15.5	13.5	--	--
AVE	11.9	9.5	13.1	11.3	--	--	--	--	18.3	16.8	14.6	13.6

11372200 SOUTH COW CREEK NEAR MILLVILLE, CALIF.

LOCATION.--Lat 40°32'56", long 122°05'29", in NW¼NE¼ sec.16, T.31 N., R.2 W., Shasta County, temperature recorder at gaging station on left bank, 2.5 miles upstream from Old Cow Creek, and 4.4 miles east of Millville.

DRAINAGE AREA.--77.3 sq mi.

PERIOD OF RECORD.--Water temperatures: December 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 29.0°C July 20, 21, Aug. 2, 11; minimum, 0.5°C Jan. 4.

Period of record:

Water temperatures: Maximum, 31.0°C Aug. 6, 7, 1966; minimum (1965-66, 1967-71), freezing point sometime during period Dec. 6, 1968 to Jan. 14, 1969.

REMARKS.--No record Aug. 16-27.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN.		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	13.5	12.5	8.0	7.5	5.0	6.5	5.0	7.5	5.5	6.5	3.0
2	20.0	13.5	12.5	8.5	7.5	6.5	5.0	2.5	7.5	6.0	5.0	2.0
3	19.0	14.0	11.5	9.0	7.0	6.5	2.5	1.0	6.0	3.5	6.5	5.0
4	19.0	14.5	11.0	10.0	8.5	7.0	2.0	0.5	6.5	5.0	8.5	5.5
5	18.5	14.5	12.0	10.5	9.0	8.5	2.5	1.0	8.0	6.0	7.0	3.5
6	16.5	13.0	12.0	11.0	9.5	9.0	3.5	1.5	8.0	6.5	7.5	4.0
7	15.5	11.0	11.0	10.0	9.5	9.0	3.5	2.0	8.0	6.0	7.5	5.5
8	18.0	11.0	10.0	9.5	9.5	9.0	4.5	2.0	10.0	7.5	8.5	4.5
9	16.5	13.0	11.0	9.5	9.0	7.0	5.0	3.5	9.0	7.5	7.5	6.0
10	18.0	13.0	10.0	8.0	8.0	6.0	5.0	5.0	9.0	7.0	7.0	5.0
11	18.0	12.5	11.0	10.0	8.0	6.5	6.0	5.0	9.0	7.5	7.0	5.5
12	17.5	13.0	11.0	7.5	7.0	4.5	6.0	4.0	9.5	8.0	7.5	6.0
13	16.5	11.5	8.0	6.0	6.0	5.5	4.0	3.5	9.0	7.5	8.0	6.0
14	16.0	11.0	9.0	7.0	6.0	5.0	6.0	4.0	8.5	7.0	8.0	7.0
15	16.0	11.0	8.5	7.5	6.5	6.0	6.5	6.0	8.5	7.0	8.5	6.5
16	16.0	11.0	9.5	7.5	6.5	5.0	6.5	6.0	7.0	6.0	8.5	7.5
17	16.0	11.5	8.5	6.0	5.0	4.5	8.0	6.5	8.0	6.0	8.5	6.0
18	15.5	13.5	8.5	6.0	5.5	5.0	9.0	8.0	7.0	5.5	8.5	5.5
19	15.0	12.0	8.5	5.5	5.0	3.0	9.0	7.5	7.0	5.0	9.5	6.5
20	15.0	13.0	8.0	5.0	5.0	4.0	8.5	7.5	7.0	4.0	10.0	7.5
21	13.5	12.0	8.5	7.5	5.5	5.0	7.5	5.5	6.5	5.0	11.0	8.5
22	12.5	11.0	9.0	8.5	5.5	5.0	7.0	5.5	7.5	5.0	10.5	9.0
23	12.5	11.5	10.0	9.0	6.5	5.5	7.5	5.5	7.0	4.5	11.0	9.0
24	12.0	9.0	11.5	10.0	6.0	3.5	7.5	5.5	8.0	6.0	10.5	8.5
25	12.0	10.0	11.5	9.5	4.5	3.0	6.5	5.0	7.0	4.5	10.0	9.5
26	11.0	8.0	9.5	8.0	4.0	3.0	7.5	5.0	7.0	2.5	10.0	7.5
27	10.0	6.0	8.0	7.0	5.0	4.0	7.5	5.5	7.0	4.0	9.5	6.0
28	11.0	6.5	8.0	7.0	5.5	5.0	7.5	6.0	7.0	3.0	10.5	7.5
29	10.5	6.0	9.0	8.0	5.5	4.5	7.5	6.0	--	--	11.0	7.5
30	10.5	7.5	8.5	4.5	6.5	5.5	7.5	6.0	--	--	11.0	7.0
31	12.0	8.5	--	--	6.5	6.0	7.0	6.0	--	--	9.0	5.5
AVE	15.1	11.2	9.9	8.0	6.7	5.6	6.1	4.6	7.8	5.7	8.7	6.2
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	6.5	14.0	12.0	12.0	10.0	24.5	18.5	28.5	21.5	21.0	17.0
2	11.0	8.0	13.5	11.5	14.5	9.5	24.5	18.5	29.0	22.0	20.5	16.5
3	11.5	8.0	12.5	11.5	16.0	11.5	24.5	18.5	28.0	22.0	20.0	15.5
4	12.0	8.5	12.0	11.0	17.0	13.5	25.0	18.5	27.5	21.0	21.0	15.0
5	13.0	9.5	12.5	10.5	17.0	13.0	25.0	19.0	27.0	20.5	20.5	15.5
6	12.0	10.5	12.0	10.0	18.0	13.5	25.5	18.5	27.0	20.5	20.5	16.5
7	11.0	9.5	14.5	11.5	18.0	14.0	26.0	19.0	26.5	20.5	20.0	15.5
8	11.5	8.5	13.5	11.0	18.5	14.5	27.0	20.5	26.5	20.0	22.0	16.0
9	12.0	10.5	14.5	10.5	17.0	15.0	27.0	20.5	27.5	21.0	22.0	17.0
10	11.0	8.5	15.0	11.0	18.0	14.5	26.0	18.5	27.5	22.0	22.0	16.5
11	11.5	9.0	15.0	12.0	18.5	14.0	25.5	18.5	29.0	22.0	22.0	16.5
12	12.0	9.0	15.5	12.5	16.5	15.0	26.5	19.0	28.5	23.0	22.5	16.5
13	12.0	10.0	15.0	12.0	18.5	14.0	25.5	19.0	28.0	22.5	22.5	17.0
14	13.0	9.0	14.0	10.5	19.5	14.5	26.5	19.0	27.5	21.0	22.0	18.0
15	13.0	10.5	14.0	11.0	20.0	15.0	27.5	20.0	26.0	20.0	22.5	17.0
16	12.0	10.0	12.5	9.0	21.0	16.5	28.0	21.0	--	--	22.0	16.0
17	10.5	8.0	13.0	8.5	20.0	16.0	27.0	21.5	--	--	20.5	17.0
18	11.5	7.5	13.5	9.0	18.5	17.0	27.5	23.0	--	--	20.0	15.0
19	13.0	9.0	14.5	11.0	21.5	16.0	28.5	22.0	--	--	19.5	14.0
20	12.0	7.5	15.0	11.5	22.0	16.5	29.0	23.0	--	--	18.5	14.0
21	11.0	6.5	14.0	9.5	23.0	17.0	29.0	23.0	--	--	18.5	14.0
22	11.0	8.5	15.5	10.5	24.0	18.0	28.5	22.5	--	--	19.0	13.5
23	12.5	9.0	17.0	12.5	23.5	17.5	28.0	21.5	--	--	19.0	13.5
24	11.5	8.0	17.5	13.5	23.0	17.5	28.0	21.0	--	--	18.5	14.0
25	13.0	8.0	16.0	13.5	19.5	17.0	28.0	21.5	--	--	17.0	15.5
26	14.0	11.0	14.0	12.0	18.5	16.5	28.0	21.5	--	--	16.0	14.0
27	14.5	10.5	15.0	11.5	20.5	16.5	28.5	21.5	--	--	15.5	11.5
28	15.0	11.5	13.0	11.0	21.0	16.0	28.0	22.0	23.5	19.0	15.0	12.0
29	15.5	12.0	13.0	11.0	22.0	16.0	28.0	22.0	22.5	18.0	13.5	12.0
30	15.0	11.5	14.5	11.5	23.5	17.0	27.5	21.5	22.0	18.0	13.0	9.5
31	--	--	12.0	10.0	--	--	27.5	21.5	21.5	17.0	--	--
AVE	12.3	9.1	14.1	11.1	19.3	15.1	27.0	20.5	--	--	19.5	15.0

## SACRAMENTO RIVER BASIN

11374000 COW CREEK NEAR MILLVILLE, CALIF.

LOCATION.--Lat 40°30'19", long 122°13'56", in NE¼NW¼ sec.32, T.31 N., R.3 W., Shasta County, temperature recorder at gaging station on right bank, 2.9 miles upstream from mouth, 4.2 miles southwest of Millville, and 4.3 miles downstream from Little Cow Creek.

DRAINAGE AREA.--425 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1966.

Water temperatures: October 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 30.5°C Aug. 2, 3; minimum, 2.0°C Jan. 6.

Period of record:

Water temperatures: Maximum (1966-67, 1968-71), 32.0°C Aug. 3, 4, 7, 1966, July 5, 1970; minimum, freezing point Dec. 14, 15, 1967, Jan. 10, 11, 1968.

REMARKS.--Clock stopped Nov. 9-25; range in temperature, 8.0°C to 13.0°C.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	18.5	14.0	11.5	12.0	10.5	7.0	6.0	9.0	7.5	8.0	5.5
2	23.0	18.5	14.0	12.0	11.5	9.5	6.5	5.0	10.0	8.0	7.0	4.5
3	23.0	19.0	14.0	13.0	11.0	7.5	6.0	4.0	8.5	5.5	7.5	7.0
4	22.5	19.5	14.5	12.5	9.0	7.5	4.5	3.0	8.5	5.5	10.0	7.0
5	22.5	19.5	12.5	11.5	9.5	9.0	4.0	2.5	9.5	7.0	9.5	6.0
6	21.5	19.0	13.0	12.0	9.0	9.0	3.5	2.0	10.0	7.0	10.5	7.0
7	19.5	16.5	13.0	12.5	9.5	9.0	4.0	2.5	9.5	6.0	10.0	8.5
8	20.5	16.0	13.5	12.5	9.5	9.0	4.5	2.5	9.0	6.0	11.0	7.5
9	20.0	17.5	--	--	9.0	7.0	4.5	3.0	9.0	6.5	11.0	9.0
10	20.0	17.0	--	--	9.0	7.5	4.0	4.0	10.5	7.0	10.0	8.5
11	20.5	16.5	--	--	9.0	7.5	5.0	4.0	11.5	8.0	11.0	9.5
12	20.5	17.0	--	--	9.0	6.5	5.5	4.5	11.5	8.5	11.0	9.5
13	20.0	16.5	--	--	8.0	8.0	5.5	4.5	11.0	8.0	11.0	6.5
14	19.5	16.0	--	--	8.0	7.0	4.5	4.5	11.5	8.5	10.5	8.5
15	19.0	16.0	--	--	7.0	7.0	5.5	4.5	11.5	8.5	11.0	8.0
16	19.0	15.5	--	--	7.5	6.5	6.5	6.0	11.0	7.5	10.5	9.0
17	19.0	16.0	--	--	7.5	6.5	7.5	6.0	10.5	7.5	11.0	8.0
18	19.0	17.5	--	--	7.5	6.5	9.0	6.5	10.5	7.5	11.0	7.0
19	18.5	17.5	--	--	7.5	5.5	8.5	6.0	9.5	6.5	13.0	7.5
20	17.5	16.5	--	--	7.0	6.0	8.5	7.0	8.5	5.5	13.5	9.0
21	17.5	15.0	--	--	6.5	5.0	7.0	4.0	8.5	6.0	14.0	10.0
22	15.5	14.0	--	--	6.5	5.5	6.5	4.5	9.5	6.5	14.5	12.0
23	15.5	14.5	--	--	7.0	5.5	7.0	4.0	9.5	7.0	13.0	11.0
24	14.5	11.5	--	--	7.0	5.0	7.0	4.5	9.5	7.5	13.5	10.5
25	14.5	12.5	--	--	7.0	4.0	7.0	4.5	9.5	6.0	13.0	12.0
26	14.5	12.0	12.0	10.0	6.0	5.5	7.5	4.5	8.5	5.0	12.5	11.0
27	13.5	10.0	10.0	9.0	5.5	5.5	8.0	4.5	8.5	6.5	13.0	8.0
28	12.5	10.0	9.5	8.5	5.5	5.0	8.0	5.5	8.5	6.0	14.0	9.5
29	12.5	9.5	12.0	9.0	5.5	4.5	8.5	7.0	--	--	14.5	10.0
30	14.0	11.5	11.5	10.0	6.0	5.0	8.5	7.5	--	--	14.0	11.5
31	14.5	12.0	--	--	6.5	6.0	8.5	7.0	--	--	13.0	8.5
AVE	18.3	15.4	--	--	7.9	6.7	6.4	4.7	9.7	6.9	11.5	8.6
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	9.0	18.5	15.0	16.0	14.0	23.5	20.0	30.0	27.0	24.0	21.5
2	15.5	10.5	17.5	14.5	16.0	13.0	24.0	21.0	30.5	28.0	23.5	21.0
3	16.0	11.0	16.5	15.0	17.0	14.5	24.0	21.0	30.5	28.0	23.0	20.5
4	16.5	11.0	15.5	14.5	18.5	15.5	24.5	21.0	28.0	27.5	24.0	20.0
5	16.5	11.5	16.0	13.5	19.0	16.0	24.5	21.5	28.0	24.5	24.0	21.0
6	16.0	13.5	16.0	13.0	19.5	16.5	25.0	22.0	27.5	24.0	25.0	21.5
7	14.5	13.0	19.0	13.5	20.0	17.0	25.0	22.0	28.0	24.0	24.0	21.5
8	15.5	11.0	18.0	14.5	20.0	17.5	24.5	22.0	28.0	24.0	24.5	20.5
9	15.0	13.5	19.0	12.5	20.0	19.0	25.0	22.5	28.5	24.5	24.5	21.0
10	14.5	10.5	20.5	14.5	20.5	18.0	25.0	21.5	29.5	25.5	24.5	21.0
11	16.0	12.0	20.5	16.0	21.0	18.0	24.5	21.0	30.0	26.5	25.0	21.5
12	17.0	12.0	21.0	17.5	21.0	19.0	25.0	21.5	30.0	27.0	25.0	21.0
13	16.0	13.5	20.5	16.5	20.5	18.0	25.5	22.0	29.0	26.5	24.5	22.0
14	18.0	12.0	20.5	15.0	21.0	18.0	26.0	22.5	29.0	26.0	24.0	21.5
15	18.0	13.5	19.5	15.5	21.5	18.0	26.5	23.0	28.0	25.0	24.5	21.0
16	17.5	14.0	18.0	13.5	22.0	19.0	27.0	24.0	27.0	23.5	24.5	21.0
17	15.5	11.5	18.0	13.5	22.5	19.5	27.0	25.0	27.0	23.5	23.0	20.5
18	16.0	11.0	19.0	13.0	22.0	20.0	27.0	25.0	27.0	23.0	21.5	18.0
19	17.0	11.5	19.0	14.5	22.0	19.0	27.5	24.5	27.0	23.0	22.0	17.5
20	16.5	14.0	19.0	16.0	23.0	19.5	28.5	26.0	26.5	23.5	21.0	18.0
21	15.5	10.5	18.5	16.0	23.0	20.0	29.0	26.0	27.0	23.5	21.0	18.0
22	15.0	12.0	18.0	15.0	23.5	21.0	29.5	26.5	28.0	24.5	21.5	18.0
23	16.5	11.5	19.0	15.5	23.5	21.0	29.5	26.5	26.5	23.5	21.5	18.0
24	16.5	11.5	19.5	17.0	23.5	21.0	29.5	26.0	27.0	23.5	20.5	18.5
25	17.0	11.5	20.0	17.5	23.0	21.5	29.0	26.5	27.5	24.0	19.5	18.5
26	18.5	14.0	19.5	17.0	21.5	19.5	29.0	26.0	27.5	25.0	19.0	17.5
27	18.5	14.0	18.0	16.5	20.5	18.0	29.5	26.5	28.0	25.0	18.5	16.0
28	19.0	14.5	17.5	16.0	21.0	18.0	30.0	27.0	27.0	24.0	18.0	16.5
29	19.0	15.5	16.0	14.5	21.5	18.5	29.5	27.0	25.5	23.0	17.0	15.0
30	19.0	15.0	17.0	15.0	22.5	19.0	29.5	26.5	24.5	21.5	15.0	11.5
31	--	--	17.0	15.0	--	--	29.5	27.0	24.5	21.5	--	--
AVE	16.5	12.3	18.4	15.0	20.9	18.2	26.9	23.9	27.8	24.6	22.3	19.3

## 11374400 MIDDLE FORK COTTONWOOD CREEK NEAR ONO, CALIF.

LOCATION.--Lat 40°22'03", long 122°34'19", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.17, T.29 N., R.6 W., Shasta County, temperature recorder at gaging station on right bank, 700 ft downstream from Poverty Gulch, 4.6 miles upstream from North Fork, and 7.8 miles southeast of Ono.

DRAINAGE AREA.--244 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1963 to September 1965, July 1968 to September 1971. Prior to June 24, 1970, at site 4.2 miles downstream.

Sediment records: Water years 1963-70 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 35.5°C Aug. 9; minimum, 2.0°C Mar. 11.

Period of record:

Water temperatures: Maximum, 35.5°C Aug. 9, 1971; minimum, freezing point Dec. 25, 26, 1968.

REMARKS.--Clock stopped Mar. 28.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	14.5	16.5	11.0	7.5	7.0	8.5	8.0	15.5	12.5	8.5	3.0
2	23.0	14.5	16.5	11.5	9.5	7.0	9.5	8.0	16.0	13.0	7.5	3.0
3	21.5	14.0	15.5	11.5	9.5	6.5	8.0	6.5	10.5	4.5	11.0	6.0
4	23.0	15.5	14.5	13.0	7.0	7.0	8.0	6.0	8.5	5.5	10.0	6.0
5	22.0	15.5	14.5	11.5	7.0	6.0	8.5	6.5	9.0	6.5	10.0	4.0
6	19.5	13.5	14.5	12.5	6.0	5.0	8.5	7.0	10.0	6.5	10.5	5.0
7	18.0	11.5	13.0	12.0	6.0	5.0	9.5	7.5	9.0	5.0	11.5	6.5
8	20.0	11.5	12.5	11.0	7.0	5.0	10.0	8.5	8.5	5.0	9.0	2.0
9	19.0	13.5	11.5	10.0	8.5	7.0	10.5	8.5	9.0	5.5	5.5	2.5
10	21.0	13.5	10.5	8.5	10.0	8.5	10.5	10.0	12.0	6.5	5.5	4.0
11	21.0	13.0	10.5	10.0	11.0	9.0	10.5	8.5	11.5	7.5	6.5	2.0
12	21.5	13.5	13.0	10.0	9.5	8.0	9.5	9.0	11.0	8.0	7.0	3.5
13	20.0	12.5	12.0	8.5	8.5	8.5	9.0	7.5	11.0	7.5	6.5	2.5
14	19.5	11.5	12.0	9.5	8.5	8.0	7.5	6.5	9.0	7.5	7.5	4.5
15	19.5	12.0	10.5	9.5	8.0	6.5	7.5	7.0	10.5	7.0	8.0	3.0
16	19.5	12.5	11.5	8.5	6.5	6.5	9.0	8.0	8.5	6.5	8.0	2.5
17	18.0	12.5	13.5	9.5	6.5	6.5	10.0	8.5	10.0	6.5	9.5	3.0
18	19.0	15.0	13.5	9.5	6.5	6.0	10.5	8.0	7.5	5.5	10.5	5.0
19	17.5	14.0	13.0	9.0	8.0	5.0	12.0	10.5	9.0	5.0	11.5	6.0
20	17.5	13.5	12.5	8.5	7.5	7.0	14.0	12.0	8.5	3.5	11.0	7.0
21	16.0	12.0	11.5	10.5	7.0	7.0	13.0	11.0	7.5	4.0	8.5	6.5
22	15.0	11.0	11.0	9.5	7.0	7.0	13.0	11.0	10.0	5.0	9.0	5.5
23	13.5	11.0	10.0	9.5	8.5	7.0	13.5	11.0	10.0	5.5	9.5	6.5
24	14.0	9.5	9.5	9.5	8.5	7.5	13.0	11.0	11.0	6.0	7.0	5.0
25	16.0	11.0	9.5	8.0	8.0	6.5	13.0	10.5	9.0	5.0	8.5	5.0
26	13.5	9.0	10.0	8.5	8.0	7.0	14.0	11.0	8.5	3.0	10.5	6.5
27	13.5	7.5	10.5	8.5	8.5	8.0	14.5	11.5	8.5	4.0	11.0	7.0
28	14.0	8.0	8.5	7.5	9.0	7.0	15.0	11.5	9.0	3.5	--	--
29	14.0	8.5	7.5	7.5	8.5	7.5	14.5	11.5	--	--	12.0	7.5
30	13.0	9.5	8.0	7.0	9.0	7.0	14.5	12.0	--	--	13.0	9.0
31	16.0	11.0	--	--	8.5	8.0	14.5	12.5	--	--	12.5	6.5
AVE	18.1	12.2	11.9	9.7	8.0	6.9	11.1	9.2	9.8	6.1	9.2	4.9
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	7.5	17.0	12.0	18.5	12.5	31.0	20.5	34.5	24.0	24.5	17.0
2	14.5	9.0	14.5	12.0	22.5	12.5	30.0	19.5	34.5	24.5	25.0	16.0
3	15.5	9.0	14.0	11.5	23.0	16.0	30.5	21.0	34.0	24.0	24.5	16.5
4	16.0	9.5	14.0	11.0	25.0	16.5	30.0	19.5	33.0	24.0	26.5	17.5
5	16.0	10.0	16.5	11.5	26.0	16.5	30.5	20.0	33.5	23.0	26.5	18.0
6	14.0	11.5	19.0	11.0	27.0	18.0	30.0	19.5	33.5	23.0	25.5	18.5
7	13.5	9.5	21.0	13.5	26.0	18.0	30.5	20.5	33.0	23.0	25.5	17.0
8	13.5	8.5	18.0	12.5	26.5	18.0	30.0	20.5	34.0	22.5	26.0	17.0
9	11.5	10.0	21.0	11.5	22.5	19.0	28.5	20.0	35.5	23.5	26.5	17.5
10	13.0	8.0	23.0	13.5	26.0	18.0	28.5	17.0	35.0	25.5	26.5	18.0
11	14.5	8.0	23.0	14.5	26.5	17.5	30.0	18.5	35.0	25.5	27.5	19.0
12	15.0	9.0	21.5	15.5	22.5	19.5	30.0	18.0	34.5	26.0	28.5	19.5
13	13.0	10.5	21.5	14.0	25.5	17.0	31.5	20.0	34.5	26.0	28.0	20.0
14	17.5	9.5	22.0	13.0	26.5	17.5	32.5	21.5	31.0	22.0	26.5	20.0
15	17.5	10.5	21.5	14.5	28.0	19.0	32.5	22.0	30.5	21.5	26.5	18.0
16	15.0	10.5	19.5	11.0	28.0	18.5	33.5	22.5	30.0	21.0	26.5	18.5
17	13.5	8.5	19.5	11.5	26.0	18.5	31.5	23.5	30.0	20.5	23.5	18.0
18	15.5	7.5	21.5	12.5	22.5	18.5	33.0	24.5	30.0	19.5	22.5	15.5
19	17.0	9.0	21.5	12.0	25.5	18.5	35.0	24.5	29.5	20.5	23.5	15.0
20	15.0	11.0	20.0	13.5	29.0	19.0	34.5	25.0	28.5	20.0	23.5	15.5
21	14.5	7.0	19.0	11.0	30.0	21.0	34.0	24.0	28.5	20.5	23.0	16.0
22	13.5	9.0	23.0	13.5	29.0	20.5	33.0	23.5	29.0	20.5	23.5	16.0
23	15.5	9.0	24.5	16.0	29.0	20.0	33.5	23.5	29.0	19.5	23.5	16.0
24	14.5	7.5	25.0	17.0	28.0	20.0	33.5	22.5	29.5	20.0	22.5	16.0
25	17.0	8.5	20.0	17.0	23.5	19.5	33.5	23.0	30.0	21.5	23.0	17.0
26	18.0	10.5	20.5	13.0	22.5	18.0	33.5	23.0	29.0	22.0	20.0	15.0
27	19.0	10.5	21.5	14.0	26.0	17.5	34.0	23.5	30.0	22.5	19.5	12.5
28	18.5	11.5	16.5	14.0	25.5	15.5	34.0	24.0	27.0	20.0	18.5	15.0
29	19.0	12.0	18.5	13.0	28.0	18.0	33.0	23.5	27.0	19.0	16.0	13.0
30	20.0	12.0	18.0	12.5	30.0	19.0	32.5	23.0	22.5	19.0	18.5	11.0
31	--	--	15.5	11.5	--	--	33.5	24.0	25.0	16.5	--	--
AVE	15.5	9.5	19.7	13.2	25.8	17.9	32.0	22.0	31.0	22.1	24.0	16.6

## SACRAMENTO RIVER BASIN

11376000 COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'10", long 122°14'12", in NE $\frac{1}{4}$  sec.7, T.29 N., R.3 W., Tehama County, at gaging station 2 miles east of Cottonwood, and 2.4 miles upstream from mouth.

DRAINAGE AREA.--927 sq mi (revised).

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1971.  
Water temperatures: October 1962 to September 1967.

Sediment records: Water years 1957-62 (partial-record station), October 1962 to September 1967.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 07...	1415	115	15.0	11.1	--	--	6.1	--	82	0	--
NOV. 12...	1445	558	13.0	10.6	29	13	14	1.1	118	0	27
DEC. 10...	0945	2180	6.0	11.6	--	--	7.0	--	98	0	--
JAN. 13...	1320	1130	4.0	13.3	24	11	7.8	.8	117	0	18
FEB. 08...	1415	1160	10.0	11.8	--	--	7.2	--	122	0	--
MAR. 09...	1030	498	9.5	12.8	--	--	8.6	--	130	0	--
APR. 18...	1450	936	19.0	10.3	--	--	6.4	--	123	0	--
MAY 24...	0920	480	19.0	10.0	--	--	7.0	--	109	0	--
JUNE 09...	0910	418	20.0	9.6	--	--	7.5	--	113	0	--
JULY 14...	0920	148	24.0	9.8	--	--	7.6	--	131	0	--
AUG. 10...	0755	68	23.0	6.5	--	--	7.6	--	128	0	--
SEP. 27...	0755	92	15.0	9.0	--	--	7.5	--	97	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT. 07...	3.7	--	0	--	--	--	62	0	67	--
NOV. 12...	18	2.8	100	164	.22	247	126	29	97	19
DEC. 10...	5.0	--	0	--	--	--	86	6	80	--
JAN. 13...	6.3	.5	0	143	.19	436	106	10	96	14
FEB. 08...	6.7	--	0	--	--	--	115	15	100	--
MAR. 09...	7.9	--	100	--	--	--	118	11	107	--
APR. 18...	5.2	--	100	--	--	--	109	8	101	--
MAY 24...	5.0	--	0	--	--	--	96	7	89	--
JUNE 09...	5.3	--	0	--	--	--	99	6	93	--
JULY 14...	6.7	--	0	--	--	--	113	6	107	--
AUG. 10...	6.6	--	100	--	--	--	108	3	105	--
SEP. 27...	4.1	--	0	--	--	--	79	0	80	--



11376000 COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT.										
07...	.3	146	7.5	3	--	--	--	--	--	--
NOV.										
12...	.5	306	8.3	5	--	--	--	--	--	--
DEC.										
10...	.3	204	7.7	80	--	--	--	--	--	--
JAN.										
13...	.3	248	--	40	--	--	--	--	--	--
FEB.										
08...	.3	237	8.2	7	--	--	--	--	--	--
MAR.										
09...	.3	252	8.2	2	--	--	--	--	--	--
APR.										
18...	.3	232	7.7	6	--	--	--	--	--	--
MAY										
24...	.3	214	8.0	2	0	100	0	0	.0	0
JUNE										
09...	.3	212	7.6	2	--	--	--	--	--	--
JULY										
14...	.3	249	7.6	2	--	--	--	--	--	--
AUG.										
10...	.3	230	7.4	2	--	--	--	--	--	--
SEP.										
27...	.4	182	7.5	4	--	--	--	--	--	--

## SACRAMENTO RIVER BASIN

11376550 BATTLE CREEK BELOW COLEMAN FISH HATCHERY, NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'54", long 122°08'43", in SW¼ sec.1, T.29 N., R.3 W., Shasta County, temperature recorder at Coleman Fish Hatchery, 300 ft upstream from gaging station, 3.7 miles downstream from Spring Branch, 5.7 miles upstream from mouth, and 7.0 miles east of Cottonwood.

DRAINAGE AREA.--357 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1966.

Water temperatures: December 1965 to September 1971.

Sediment records: Water years 1962-70 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 23.0°C July 20; minimum, 4.0°C Dec. 17, Jan. 3, 4.

Period of record:

Water temperatures: Maximum, 23.0°C July 20, 1971; minimum, 2.0°C Dec. 23, 24, 1968.

REMARKS.--Temperature record furnished by U.S. Fish and Wildlife Service.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971.

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	11.5	11.0	9.0	8.0	6.0	8.0	6.5	8.5	7.0	7.0	5.5
2	15.0	11.5	11.0	9.5	8.0	7.0	6.5	5.0	9.0	8.0	7.0	5.0
3	14.5	11.5	11.0	9.5	7.0	6.5	5.0	4.0	8.0	6.0	8.5	7.0
4	14.0	11.5	10.5	10.0	8.5	7.0	5.0	4.0	8.5	6.5	9.5	8.0
5	14.0	11.5	12.0	10.0	9.5	8.5	5.5	4.5	9.5	8.0	8.5	6.0
6	13.0	11.0	11.0	10.0	9.5	9.0	6.5	5.0	9.5	8.5	9.0	6.0
7	11.5	9.5	10.0	9.0	9.5	9.5	6.5	5.5	9.0	7.0	9.0	7.0
8	13.0	9.5	10.0	9.5	9.5	8.5	7.0	6.0	9.0	6.5	9.5	7.0
9	13.0	10.5	12.0	10.0	9.0	8.0	7.0	6.0	9.0	7.0	9.0	8.0
10	14.0	11.0	10.0	8.5	8.0	6.5	8.0	7.0	10.5	8.5	9.0	8.0
11	13.5	10.5	10.5	9.5	8.5	7.0	8.0	7.0	11.0	9.0	10.0	9.0
12	13.5	11.0	10.5	8.5	8.0	6.0	7.0	6.0	10.5	9.0	10.0	8.0
13	13.0	10.0	8.5	6.5	7.0	6.5	6.0	5.0	10.5	9.0	8.5	6.0
14	12.0	9.5	9.0	8.0	7.0	6.0	8.0	6.0	10.0	8.5	8.0	7.0
15	12.0	9.5	9.0	8.0	8.0	7.0	8.0	7.0	10.5	9.0	9.0	7.0
16	12.0	10.0	9.5	8.5	8.0	6.5	7.0	6.5	9.0	7.0	9.0	8.5
17	12.0	10.0	9.0	8.0	6.5	4.0	8.5	7.0	9.5	8.0	9.0	7.0
18	12.0	10.5	9.0	7.0	6.5	5.5	9.5	8.5	9.0	7.0	9.5	6.5
19	11.5	10.5	9.0	7.0	6.0	5.0	9.0	8.0	8.5	7.0	10.5	8.0
20	12.0	10.5	8.5	6.5	6.0	5.5	9.0	8.0	8.0	5.5	11.5	9.0
21	11.5	10.0	9.0	8.5	6.5	6.0	8.0	6.0	8.0	6.5	11.5	9.5
22	10.5	9.5	9.0	9.0	6.5	5.5	7.0	6.0	8.5	6.5	11.0	9.5
23	10.5	9.5	10.5	9.0	7.0	6.5	8.0	6.0	8.5	6.5	10.0	9.5
24	9.5	8.5	11.0	10.5	7.0	5.5	8.0	6.5	9.0	7.0	10.0	8.5
25	10.0	8.5	11.5	10.5	6.0	5.0	8.0	6.0	8.0	6.5	10.0	9.5
26	9.5	8.0	10.5	9.0	6.0	5.5	8.5	6.5	7.0	5.0	9.5	8.0
27	9.0	7.0	9.0	8.0	7.0	6.0	9.0	7.0	7.0	6.0	9.5	6.0
28	9.5	7.0	8.0	6.5	7.0	7.0	9.0	7.0	8.0	5.5	10.5	8.5
29	9.5	8.0	9.0	8.0	8.5	6.0	8.5	7.0	--	--	11.5	9.0
30	9.5	8.5	8.5	8.0	8.5	7.0	8.5	7.0	--	--	11.0	8.5
31	11.0	9.0	--	--	8.5	7.0	8.5	8.0	--	--	10.0	6.5
AVE	12.0	9.8	9.9	8.6	7.6	6.5	7.6	6.3	9.0	7.2	9.5	7.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	8.0	13.5	11.5	13.0	10.0	20.0	16.0	21.0	18.0	16.0	14.0
2	12.0	9.0	13.0	11.0	14.5	10.0	20.0	16.5	21.0	18.5	16.0	14.0
3	12.0	9.5	11.5	11.0	15.5	11.5	20.0	16.5	20.5	18.5	16.0	13.5
4	13.0	9.5	11.0	10.5	17.0	13.5	19.5	16.0	20.0	18.0	16.5	14.0
5	13.5	10.0	12.0	10.0	17.0	13.5	19.5	16.0	19.5	16.5	16.5	14.5
6	12.0	11.0	12.0	10.0	18.0	14.0	20.0	16.5	20.0	16.5	16.5	14.5
7	11.0	10.0	14.0	11.0	18.0	15.0	19.5	16.5	19.5	17.0	16.0	13.5
8	11.5	8.5	13.0	10.5	18.0	15.0	19.5	16.5	19.5	16.5	16.5	14.0
9	11.5	10.0	14.5	10.0	17.0	15.0	20.0	16.5	20.5	17.0	16.5	14.0
10	10.5	9.0	15.5	12.0	18.0	14.5	18.5	15.5	21.0	18.0	16.5	14.0
11	11.0	8.5	15.0	13.0	18.0	14.5	18.5	15.0	21.0	18.5	16.5	14.5
12	12.0	9.0	15.5	13.0	16.5	15.0	19.5	15.5	20.5	18.5	17.0	15.0
13	11.5	10.5	15.5	13.5	18.0	14.0	20.0	16.0	20.5	18.5	18.0	15.0
14	13.5	9.5	15.0	12.0	18.0	14.5	20.5	16.5	19.5	17.0	18.5	15.5
15	14.0	10.5	14.5	12.0	19.0	15.0	21.0	17.0	19.0	16.5	17.0	15.0
16	12.0	10.5	13.0	10.5	19.0	15.5	21.0	18.0	19.0	16.0	17.0	14.5
17	10.5	9.0	13.0	10.0	18.0	15.5	21.0	18.0	19.5	16.0	16.5	14.5
18	11.5	8.5	14.5	10.5	16.5	15.0	21.0	18.5	19.0	16.0	15.5	13.5
19	13.0	9.0	15.0	11.5	18.5	15.0	22.0	18.0	19.0	16.0	15.0	12.0
20	12.0	10.0	14.5	12.0	19.0	15.5	23.0	19.0	18.5	16.0	15.0	13.0
21	11.0	7.0	13.5	10.5	19.5	16.0	22.0	18.5	18.5	16.0	15.0	13.0
22	10.5	9.0	15.5	11.0	19.5	16.0	22.0	18.5	19.0	16.5	15.0	13.0
23	13.0	9.5	16.5	13.5	19.0	15.5	21.0	18.0	19.5	16.0	15.0	13.0
24	11.0	9.0	17.0	14.0	18.5	15.5	21.0	18.0	19.0	16.5	15.0	13.0
25	13.0	8.5	16.0	14.5	18.0	14.5	21.0	18.0	19.5	16.5	14.5	13.5
26	13.5	10.5	14.5	13.0	15.5	14.0	21.0	18.0	18.5	16.5	13.5	12.0
27	14.0	10.0	14.5	12.0	16.0	13.5	21.5	18.0	19.0	16.5	13.0	11.0
28	14.5	11.0	13.5	11.0	16.5	13.5	21.0	18.0	18.5	15.5	13.0	11.0
29	14.5	11.5	13.0	10.5	18.0	14.0	21.0	18.0	17.0	15.0	13.0	11.0
30	14.5	11.5	14.5	11.0	19.0	15.0	21.0	18.0	15.0	14.5	11.5	9.5
31	--	--	13.0	10.5	--	--	21.0	18.0	16.5	14.0	--	--
AVE	12.3	9.6	14.1	11.5	17.5	14.3	20.6	17.2	19.3	16.7	15.6	13.4

11377100 SACRAMENTO RIVER ABOVE BEND BRIDGE, NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°17'19", long 122°11'08", in NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 15, T.28 N., R.3 W., Tehama County, temperature recorder at gaging station on left bank, 2.7 miles upstream from Bend Bridge, and 8.1 miles northeast of Red Bluff.

DRAINAGE AREA.--8,900 sq mi, excluding Goose Lake basin.

PERIOD OF RECORD.--Water temperatures: March 1970 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 15.0°C Sept. 13, 14; minimum, 6.5°C on several days during January to March.

Period of record:

Water temperatures: Maximum, 15.5°C on several days in 1970; minimum, 6.5°C on several days in 1971.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	11.5	11.5	11.0	10.0	9.0	8.5	8.0	8.0	7.5	7.0	6.5
2	13.5	12.0	11.5	11.0	10.5	10.0	8.0	7.0	8.0	7.5	7.0	6.5
3	13.0	12.0	11.5	11.0	10.5	9.5	7.5	7.0	7.5	7.0	7.5	7.0
4	13.0	12.0	11.5	11.5	10.5	8.5	7.5	7.0	7.5	7.0	8.0	7.0
5	13.0	12.0	12.0	11.5	11.0	10.5	8.0	7.0	7.5	7.0	8.0	6.5
6	13.0	11.5	12.0	11.5	11.5	11.0	8.0	7.5	8.0	7.0	8.0	7.0
7	12.0	11.0	11.5	11.0	11.5	11.0	8.0	7.5	8.0	7.0	8.0	7.5
8	12.5	11.5	11.5	11.5	11.0	10.5	8.0	7.5	8.0	7.0	8.5	7.0
9	12.5	12.0	12.5	11.5	10.5	10.5	8.0	7.5	7.5	7.0	8.5	7.5
10	13.0	11.5	12.0	11.5	10.5	10.0	8.0	7.5	8.0	7.0	7.5	7.5
11	13.0	11.5	12.0	11.5	10.5	10.5	7.5	7.0	8.5	7.5	8.5	7.5
12	13.0	11.5	11.5	11.0	10.5	10.0	7.5	7.0	8.5	7.5	8.5	8.0
13	13.0	11.5	11.0	10.5	10.0	10.0	7.0	6.5	8.5	7.5	8.5	7.5
14	12.5	11.5	11.0	10.5	10.0	9.5	7.5	6.5	8.5	7.5	8.5	7.5
15	12.0	11.5	11.0	10.5	9.5	9.5	7.5	7.5	8.5	7.5	8.5	7.5
16	12.0	11.5	11.0	10.0	9.5	8.5	7.5	7.0	8.5	7.0	9.0	8.5
17	12.0	11.5	11.0	10.5	9.0	8.0	8.0	7.5	8.0	7.0	8.5	7.5
18	12.5	12.0	11.5	10.5	9.0	8.5	9.0	8.0	8.0	7.0	8.5	7.5
19	12.0	12.0	11.0	10.5	8.5	8.5	9.0	8.5	7.5	7.0	9.5	8.0
20	12.5	11.5	11.0	10.5	8.5	8.0	9.0	8.5	7.5	6.5	10.0	9.0
21	12.5	11.0	11.0	11.0	8.0	7.0	8.5	7.5	7.5	7.0	10.0	9.5
22	11.5	11.0	11.0	11.0	8.0	7.5	8.0	7.5	7.5	7.0	10.0	9.0
23	11.5	11.0	11.0	11.0	8.5	8.0	8.0	7.5	8.0	7.0	9.5	8.5
24	11.0	10.5	11.5	11.0	8.5	8.0	8.0	7.5	8.0	7.0	10.0	9.5
25	11.5	11.0	11.5	11.5	8.0	7.5	8.0	7.5	7.5	7.0	10.0	9.5
26	11.5	10.5	11.5	10.5	8.5	8.0	8.0	7.5	7.5	6.5	10.0	9.5
27	11.0	10.0	10.5	9.5	8.5	8.0	8.5	8.0	7.5	7.0	10.0	8.0
28	11.0	10.0	9.5	8.5	8.5	8.5	8.5	8.0	7.0	6.5	11.0	9.5
29	11.0	10.0	10.0	9.0	8.5	7.5	8.0	7.5	--	--	11.5	10.0
30	11.0	10.5	10.0	9.5	8.5	8.5	8.0	7.5	--	--	11.5	9.5
31	11.5	11.0	--	--	8.5	8.5	8.0	7.5	--	--	10.0	8.0
AVE	12.2	11.3	11.2	10.7	9.5	9.0	8.0	7.5	7.9	7.1	9.0	8.0
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	8.0	11.0	9.5	11.0	9.5	14.0	11.0	14.0	11.0	13.5	11.0
2	10.0	8.5	10.5	9.5	11.5	9.5	14.0	11.0	14.0	11.0	13.5	11.0
3	10.0	8.5	10.0	9.5	12.0	10.0	14.0	11.0	14.0	11.0	14.0	11.0
4	10.0	8.5	10.0	9.5	12.5	10.0	14.0	11.0	13.5	11.0	14.0	11.5
5	10.5	8.5	10.0	9.0	12.5	10.0	14.0	11.0	13.5	10.5	14.0	11.5
6	9.5	9.0	10.0	8.5	13.0	10.5	14.0	11.0	14.0	11.0	14.0	11.5
7	9.5	8.5	11.0	9.0	13.0	10.5	14.0	11.0	13.5	11.0	14.0	11.5
8	10.0	8.0	10.5	9.0	13.5	10.5	13.5	11.0	13.5	10.5	14.0	12.0
9	9.5	9.0	10.5	8.5	12.5	10.5	14.0	11.0	14.0	11.0	14.0	12.0
10	9.5	8.0	11.5	9.5	13.0	10.0	13.5	10.5	14.5	11.5	14.5	12.0
11	10.0	8.0	11.5	9.5	13.5	10.5	13.5	10.5	14.5	11.5	14.5	12.0
12	10.0	8.5	11.5	9.5	12.5	10.5	14.0	10.5	14.5	11.5	14.5	12.0
13	9.5	8.5	11.5	9.5	12.5	10.0	14.0	11.0	14.0	11.0	15.0	12.0
14	10.0	8.5	11.5	9.5	13.0	10.5	14.0	11.0	14.0	11.0	15.0	12.5
15	10.5	9.0	11.0	9.5	13.5	10.5	14.0	11.0	14.0	11.0	14.5	12.0
16	10.0	9.0	11.0	9.0	14.0	10.5	14.0	11.0	13.5	11.0	14.5	12.0
17	9.5	8.0	11.0	8.5	13.0	10.5	13.5	11.0	13.5	11.0	14.5	12.0
18	10.0	8.0	11.0	9.0	12.0	10.5	13.0	11.0	14.0	10.5	14.0	11.5
19	10.5	8.5	11.5	9.5	13.5	10.5	14.0	11.0	14.0	11.0	14.0	11.5
20	10.0	9.0	11.0	9.5	13.5	10.5	14.0	11.0	14.0	11.0	14.0	11.5
21	10.0	8.0	11.0	9.0	14.0	10.5	14.0	11.0	14.0	11.0	14.0	11.5
22	10.0	8.5	12.0	9.5	14.0	10.5	14.0	11.0	14.0	11.5	14.0	11.5
23	10.0	8.5	12.0	9.5	13.5	10.5	14.0	11.0	14.0	11.0	14.0	12.0
24	10.0	8.5	12.5	10.0	13.0	10.5	14.0	11.0	13.5	11.0	14.0	12.0
25	11.0	9.0	12.0	10.0	12.0	10.5	14.0	11.0	14.0	11.0	14.0	12.5
26	11.0	9.5	11.5	10.0	11.5	10.0	14.0	11.0	13.5	11.5	13.5	12.0
27	11.0	9.5	11.0	10.0	12.5	10.5	14.0	11.0	14.0	11.5	13.0	11.0
28	11.5	9.5	11.0	10.0	13.0	10.5	14.0	11.0	13.5	11.0	13.0	11.5
29	11.5	9.5	11.0	9.5	13.5	10.5	14.0	11.0	13.5	11.0	13.0	11.5
30	11.5	9.5	11.5	9.5	14.0	10.5	13.0	11.0	13.0	11.0	12.5	11.0
31	--	--	11.0	9.5	--	--	13.5	10.5	13.0	11.0	--	--
AVE	10.2	8.6	11.1	9.4	12.9	10.3	13.9	10.9	13.8	11.0	14.0	11.7

## SACRAMENTO RIVER BASIN

11377200 SACRAMENTO RIVER AT BEND, CALIF.

LOCATION.--Lat 40°15'51", long 122°13'19", in NW¼SE¼ sec.20, T.28 N., R.3 W., Tehama County, at highway bridge at Bend, 2.7 miles downstream from gaging station, 0.1 mile upstream from Spring Creek, and approximately 6 miles north of Red Bluff.

DRAINAGE AREA.--8,900 sq mi, excluding Goose Lake basin (at gaging station).

PERIOD OF RECORD.--Chemical analyses: May 1955 to September 1968, water years 1969-71 (partial-record station).

Water temperatures: May 1955 to September 1970.

Sediment records: Water year 1957 (partial-record station), October 1957 to September 1970.

Water year 1957 published as "near Red Bluff"; water years 1958-66 published as "at Red Bluff".

REMARKS.--Records furnished by California Department of Water Resources. Records of daily discharge data given for Sacramento River above Bend Bridge, near Red Bluff (sta 11377100). No appreciable inflow between sampling point and gaging station.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV. 12...	1530	9100	11.0	10.5	--	--	6.2	--	59	0	--
JAN. 13...	1230	14200	6.5	12.1	10	5.1	6.0	1.0	61	0	5.6
MAR. 09...	0900	7600	8.5	11.4	--	--	5.7	--	63	0	--
MAY 24...	0750	15800	10.0	11.5	--	--	5.4	--	57	0	--
JULY 14...	0730	13590	11.0	11.1	--	--	5.1	--	55	0	--
SEP. 27...	0710	11300	11.0	9.9	9.4	4.7	6.3	1.0	61	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
NOV. 12...	5.2	--	.030	0	--	--	--	48	0	48	--
JAN. 13...	2.6	.7	--	100	89	.12	3410	46	0	50	22
MAR. 09...	3.2	.2	.010	100	--	--	--	49	0	52	--
MAY 24...	2.6	--	--	100	--	--	--	44	0	47	--
JULY 14...	4.1	.2	.000	100	--	--	--	38	0	45	--
SEP. 27...	2.0	.6	.020	0	94	.13	2870	43	0	50	24

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
NOV. 12...	.4	127	7.6	15	--	--	--	--	--	--
JAN. 13...	.4	127	8.3	30	--	--	--	--	--	--
MAR. 09...	.4	121	7.7	8	--	--	--	--	--	--
MAY 24...	.4	114	7.8	3	0	100	10	0	.0	0
JULY 14...	.4	109	7.3	6	--	--	--	--	--	--
SEP. 27...	.4	117	7.0	4	--	--	--	--	--	--

## 11382000 THOMES CREEK AT PASKENTA, CALIF.

LOCATION.--Lat 39°52'57", long 122°33'03", in SW¼NW¼ sec.4, T.23 N., R.6 W., Tehama County, at gaging station on left bank, 0.2 mile upstream from Digger Creek, and 0.3 mile upstream from highway bridge at Paskenta.

DRAINAGE AREA.--194 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1971.

Water temperatures: October 1961 to September 1971.

Sediment records: October 1962 to September 1971.

## EXTREMES.--1970-71:

Water temperatures: Maximum, 34.0°C Aug. 9-11; minimum, freezing point Jan. 3-5, Mar. 2.

Sediment concentrations: Maximum daily, 6,590 mg/l Jan. 17; minimum daily, 0 mg/l Oct. 8.

Sediment discharge: Maximum daily, 113,000 tons Jan. 17; minimum daily, 0 ton Oct. 8.

## Period of record:

Water temperatures: Maximum, 34.5°C Aug. 18, 23, 1967, July 4, 1970; minimum, freezing point on several days during most years.

Sediment concentrations: Maximum daily, 60,200 mg/l Dec. 22, 1964; minimum daily, no flow Oct. 4, 1964.

Sediment discharge: Maximum daily, 5,070,000 tons Dec. 22, 1964; minimum daily, 0 tons Oct. 4, 1964, Oct. 8, 1970.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Temperature recorder malfunction Oct. 7, Feb. 19.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.											
07...	1030	2.8	14.0	10.8	--	--	16	--	135	0	--
NOV.											
10...	1030	305	9.0	10.6	25	4.7	4.8	1.2	68	0	23
DEC.											
10...	1125	693	5.5	13.0	--	--	3.5	--	72	0	--
JAN.											
12...	1240	731	3.5	13.3	--	--	2.5	--	75	0	--
FEB.											
08...	1015	540	5.0	12.8	--	--	3.6	--	79	0	--
MAR.											
10...	1045	180	6.5	12.1	--	--	4.7	--	99	0	--
APR.											
12...	1400	554	13.0	10.5	--	--	2.6	--	80	0	--
MAY											
18...	0835	360	10.5	12.1	--	--	3.4	--	76	0	--
JUNE											
08...	0830	244	15.5	10.3	19	4.4	2.9	.8	70	0	12
JULY											
09...	0840	51	29.0	9.4	--	--	5.8	--	118	0	--
AUG.											
09...	0755	14	24.0	8.5	--	--	8.5	--	113	0	--
SEP.											
24...	0845	4.5	17.5	10.5	--	--	13	--	116	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT.											
07...	33	.0	.000	200	--	--	--	208	97	111	--
NOV.											
10...	5.5	.4	.010	100	108	.15	88.9	87	31	56	11
DEC.											
10...	1.5	.2	.000	0	--	--	--	68	9	59	--
JAN.											
12...	2.5	.1	.010	100	--	--	--	70	8	62	--
FEB.											
08...	2.8	--	.010	100	--	--	--	72	7	65	--
MAR.											
10...	3.0	.0	.010	100	--	--	--	96	15	81	--
APR.											
12...	1.8	--	--	0	--	--	--	75	9	66	--
MAY											
18...	3.0	.0	.010	0	--	--	--	60	0	62	--
JUNE											
08...	1.4	.6	.000	0	91	.12	60.0	66	9	57	9
JULY											
09...	6.3	.0	.010	100	--	--	--	115	18	97	--
AUG.											
09...	14	.2	.000	200	--	--	--	129	36	93	--
SEP.											
24...	22	.1	.000	100	--	--	--	157	62	95	--

## SACRAMENTO RIVER BASIN

11382000 THOMES CREEK AT PASKENTA, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT.										
07...	.5	474	8.0	2	--	--	--	--	--	--
NOV.										
10...	.2	182	7.6	500	--	--	--	--	--	--
DEC.										
10...	.2	148	7.9	240	--	--	--	--	--	--
JAN.										
12...	.1	152	7.9	140	--	--	--	--	--	--
FEB.										
08...	.2	162	8.0	45	--	--	--	--	--	--
MAR.										
10...	.2	202	7.9	3	--	--	--	--	--	--
APR.										
12...	.1	162	7.7	35	--	--	--	--	--	--
MAY										
18...	.2	192	8.0	4	0	0	0	0	.0	0
JUNE										
08...	.2	145	7.8	1	--	--	--	--	--	--
JULY										
09...	.2	254	7.9	1	--	--	--	--	--	--
AUG.										
09...	.3	308	7.9	2	--	--	--	--	--	--
SEP.										
24...	.5	388	7.5	0	--	--	--	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	15.0	19.5	9.0	8.0	4.0	6.0	4.0	9.0	4.0	8.0	0.5
2	26.0	14.5	19.5	9.5	7.5	4.5	6.0	1.0	8.5	4.0	8.5	0.0
3	25.0	14.0	16.5	10.0	5.5	4.5	4.0	0.0	6.5	2.0	8.5	3.0
4	25.0	15.5	13.5	11.5	6.0	2.5	5.0	0.0	7.5	3.0	11.0	2.5
5	24.5	15.0	14.0	10.5	7.5	6.0	5.5	0.0	9.0	4.5	9.5	1.0
6	22.0	13.0	12.5	9.5	7.5	6.5	6.0	1.0	10.0	5.0	11.0	1.5
7	--	--	12.0	8.5	8.0	6.5	6.5	1.5	9.0	3.5	10.5	3.5
8	22.0	11.5	12.5	10.5	8.5	6.5	6.5	2.0	9.0	3.0	12.0	3.5
9	22.5	12.5	11.5	9.0	7.5	5.0	6.5	2.5	9.0	4.0	8.5	4.0
10	23.0	14.0	12.0	7.5	7.0	4.5	5.5	4.5	12.0	6.0	8.5	4.0
11	23.5	13.0	12.0	9.0	9.5	5.5	6.5	4.5	11.5	6.5	9.0	6.5
12	23.5	13.0	11.0	6.0	8.0	4.0	4.5	1.5	10.5	6.5	7.5	4.0
13	22.0	12.5	11.5	5.0	5.5	4.0	2.0	0.5	10.0	6.5	7.5	3.0
14	21.0	10.5	10.5	6.5	5.5	4.0	5.5	1.0	8.0	6.0	5.0	4.0
15	21.5	10.5	8.5	6.0	6.5	5.5	4.5	3.5	10.0	5.5	8.5	4.0
16	21.0	11.0	12.0	6.5	6.5	4.5	4.5	3.0	6.5	4.5	9.0	5.0
17	19.5	11.0	11.0	8.0	6.0	4.5	6.5	4.0	9.0	4.0	10.0	4.5
18	18.5	13.5	11.0	7.5	5.0	3.5	9.0	6.0	6.5	3.5	11.0	3.5
19	18.0	13.0	11.0	8.0	6.0	2.5	8.5	6.0	--	--	12.0	4.0
20	18.5	12.5	10.0	8.0	3.5	2.5	8.0	4.0	8.0	3.0	13.0	5.5
21	14.5	12.0	10.5	9.5	6.0	3.0	6.5	3.0	6.5	2.5	12.5	6.0
22	16.0	12.0	11.0	10.5	4.5	2.5	6.5	3.0	9.5	3.5	9.5	7.0
23	14.5	11.5	11.0	10.5	7.0	3.0	7.0	3.0	9.5	3.0	9.5	7.0
24	14.5	7.5	11.0	10.0	7.0	2.5	6.0	2.5	10.0	4.0	9.5	6.0
25	17.5	8.0	11.0	8.5	6.0	1.5	7.0	2.5	8.0	2.0	8.0	7.0
26	15.0	6.5	8.5	6.5	6.0	3.0	8.0	3.5	8.0	0.5	9.0	5.0
27	15.0	4.5	7.0	6.0	6.0	4.0	8.5	4.0	7.0	1.5	9.0	3.5
28	16.5	5.5	6.0	4.5	6.0	5.0	8.5	3.5	8.0	1.0	11.5	5.5
29	17.5	6.0	8.0	6.0	7.0	4.5	8.5	3.5	--	--	12.5	6.0
30	13.5	8.0	8.5	7.0	7.5	4.0	8.5	4.5	--	--	11.0	7.0
31	18.5	9.0	--	--	9.0	4.0	8.5	4.5	--	--	10.5	3.5
AVE	19.8	11.2	11.5	8.2	6.7	4.1	6.5	2.8	8.7	3.8	9.7	4.2

## 11382000 THOMES CREEK AT PASKENTA, CALIF.--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	MAX	APR MIN	MAX	MAY MIN	MAX	JUN MIN	MAX	JUL MIN	MAX	AUG MIN	MAX	SEP MIN
1	11.5	4.0	12.5	8.0	11.5	7.0	28.5	16.0	33.5	21.0	26.0	16.0
2	13.5	6.0	10.5	8.0	18.0	6.0	28.5	16.5	33.5	22.0	25.0	15.0
3	14.0	6.5	9.5	7.5	18.0	8.0	29.0	17.0	32.5	21.5	25.0	14.0
4	15.0	6.5	8.5	7.5	18.0	9.5	29.0	16.5	31.5	20.5	28.5	15.5
5	14.5	7.5	14.5	8.0	21.5	10.0	29.0	17.0	31.5	20.0	28.5	17.0
6	12.0	9.0	15.5	6.5	22.5	11.0	29.5	17.0	31.5	19.5	26.5	16.5
7	10.5	8.0	16.5	9.0	22.0	12.0	29.0	17.5	31.5	19.5	26.5	15.5
8	12.0	6.0	11.5	8.0	22.5	12.0	28.5	17.0	32.5	19.0	28.0	15.0
9	11.5	8.0	17.0	7.5	21.0	13.5	26.5	17.0	34.0	20.0	29.0	16.0
10	9.5	5.5	18.0	8.5	22.5	12.0	27.0	14.0	34.0	22.0	29.5	17.0
11	13.0	5.0	18.0	9.5	23.5	12.0	28.0	15.0	34.0	22.0	29.5	17.0
12	14.0	6.5	15.5	9.0	19.5	14.0	29.5	16.0	33.5	22.5	30.5	18.0
13	11.0	8.5	16.0	8.5	22.5	11.5	30.5	17.5	32.5	22.0	30.0	18.5
14	15.5	7.0	16.5	7.5	24.0	12.0	31.0	18.5	31.5	21.0	28.0	19.0
15	15.0	7.5	16.5	8.5	26.0	13.5	31.5	19.5	31.5	20.0	29.0	17.5
16	12.5	7.5	14.0	6.0	25.5	14.0	32.0	20.0	31.5	19.5	29.0	17.5
17	10.5	5.0	14.5	5.5	24.5	13.5	30.0	20.5	31.5	19.0	24.5	14.5
18	12.5	4.0	17.0	6.5	23.5	14.5	31.0	21.5	32.0	18.0	24.0	12.5
19	14.0	5.0	18.0	8.5	25.0	14.0	33.0	21.5	30.5	18.5	26.5	13.5
20	11.5	5.0	18.0	9.0	27.5	14.5	33.5	22.0	28.5	18.5	27.0	14.0
21	11.5	2.5	15.0	6.0	27.0	16.0	32.5	21.0	30.5	18.5	25.0	14.0
22	10.5	5.0	18.5	8.0	26.5	15.5	32.5	20.0	30.5	18.5	26.0	14.0
23	12.5	5.0	19.5	9.5	27.0	15.5	32.0	21.0	30.0	18.0	26.5	14.0
24	12.0	3.0	19.5	10.5	26.5	16.5	32.5	20.0	30.5	17.5	25.0	14.0
25	14.0	4.0	16.5	10.5	20.5	15.5	32.5	20.5	31.0	20.0	21.0	14.5
26	14.5	6.5	15.0	7.5	22.0	15.5	33.0	21.0	31.0	20.0	22.0	12.5
27	16.0	6.5	12.5	7.0	23.0	14.0	33.5	21.0	30.5	20.0	22.0	10.5
28	15.5	7.5	9.5	8.5	24.0	11.5	32.5	21.5	27.0	18.0	20.0	12.5
29	15.0	7.5	10.5	9.0	26.0	13.0	32.0	21.0	28.5	17.0	14.0	10.5
30	15.5	7.5	14.5	8.0	27.5	14.0	--	--	21.5	17.0	19.0	8.5
31	--	--	11.0	6.0	--	--	33.5	21.5	27.0	15.5	--	--
AVE	13.0	6.1	14.8	8.0	23.0	12.7	30.7	18.9	31.0	19.5	25.7	14.8

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDEO	SUS- PENDEO	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL	
				SEDI- MENT (MG/L)	DIS- CHARGE (T/DAY)	DIAM. % FINER THAN .002 MM	DIAM. % FINER THAN .004 MM	DIAM. % FINER THAN .008 MM	
NOV.									
04...	1700	13.5	96	433	112		65	84	
05...	1240	14.0	534	2290	3300		26	38	
09...	1600	11.5	1200	3070	9950		16	24	
30...	1520	8.5	526	307	436		20	29	
DEC.									
04...	1215	6.0	1970	3120	16600		17	26	
08...	1710	8.5	1620	2190	9580		17	26	
JAN.									
16...	1215	4.5	3420	4780	44100		19	19	
17...	0825	5.5	5860	5450	86200		16	23	
17...	1750	5.5	6940	6820	128000		16	23	
MAR.									
12...	1610	7.5	4200	5320	60300		20	24	
23...	1220	9.0	2390	1680	10800		16	24	
26...	1615	9.0	3960	3030	32400		15	25	
30...	1130	8.5	1160	440	1380		14	24	
DATE		SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL 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 1.00 MM
NOV.									
04...	99	99	--	100	--	--	--	--	--
05...	69	83	90	--	95	99	100	--	--
09...	47	60	69	--	81	93	99	100	100
30...	48	55	59	--	62	79	99	100	100
DEC.									
04...	47	59	66	--	71	85	98	100	100
08...	46	56	63	--	66	80	97	100	100
JAN.									
16...	41	53	62	--	75	90	97	100	100
17...	43	54	62	--	71	86	98	100	100
17...	43	54	63	--	73	87	96	100	100
MAR.									
12...	44	57	65	--	72	85	97	100	100
23...	42	51	58	--	62	75	94	100	100
26...	44	56	63	--	69	86	98	100	100
30...	42	48	57	--	60	70	99	100	100

## SACRAMENTO RIVER BASIN

11382000 THOMES CREEK AT PASKENTA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.0	1	.01	12	1	.03	380	240	246
2	2.0	1	.01	12	1	.03	360	235	228
3	2.0	1	.01	12	2	.06	742	598	2110
4	2.5	1	.01	63	270	71	2300	3270	22400
5	2.5	1	.01	261	1200	785	1280	1990	6880
6	2.8	1	.01	188	155	79	1290	1710	5960
7	2.2	1	.01	184	110	55	2310	2630	21500
8	2.0	0	0	140	20	7.6	1820	2580	13200
9	2.2	1	.01	758	1980	4880	964	1470	3830
10	2.2	1	.01	387	459	620	674	980	1780
11	2.2	1	.01	255	316	310	621	635	1060
12	2.2	1	.01	386	413	514	604	465	758
13	2.2	1	.01	203	136	75	525	290	411
14	2.0	1	.01	166	55	25	423	335	383
15	1.9	1	.01	138	25	9.3	519	701	1520
16	2.0	1	.01	101	14	3.8	972	1230	3740
17	2.2	1	.01	80	10	2.2	702	392	743
18	3.1	1	.01	65	7	1.2	720	263	511
19	3.1	1	.01	56	4	.60	518	186	260
20	4.4	2	.02	51	3	.41	488	205	270
21	7.0	8	.18	46	3	.37	442	175	209
22	16	5	.22	46	2	.25	358	90	87
23	26	5	.35	61	10	1.6	320	88	76
24	73	52	11	338	362	876	288	74	58
25	39	5	.53	981	1030	2900	262	66	47
26	23	2	.12	680	584	1190	249	50	34
27	18	1	.05	645	435	1110	238	53	34
28	14	2	.08	752	479	1010	249	62	42
29	13	2	.07	900	844	2030	442	249	337
30	13	2	.07	550	350	520	320	128	111
31	13	1	.04	--	--	--	300	96	78
TOTAL	302.7	--	12.91	8517	--	17077.45	21680	--	88903

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	316	106	90	1180	415	1320	262	15	11
2	304	112	92	1080	430	1250	246	13	8.6
3	274	70	52	912	402	990	241	13	8.5
4	262	46	33	783	306	647	235	14	8.9
5	246	44	29	684	167	308	205	10	5.5
6	232	42	26	638	152	262	196	10	5.3
7	224	42	25	562	110	167	191	10	5.2
8	244	71	47	518	97	136	187	5	2.5
9	329	153	136	475	82	105	182	4	2.0
10	684	654	1390	510	95	131	180	3	1.5
11	838	641	1450	750	223	452	265	44	40
12	750	428	867	886	382	914	2130	2540	19400
13	646	294	513	938	300	760	910	826	2350
14	555	192	288	783	263	556	630	427	726
15	963	928	4250	731	213	420	540	273	398
16	4260	6140	96300	674	150	273	525	180	255
17	6310	6590	113000	630	101	172	587	284	450
18	5620	5280	81800	540	108	157	510	214	295
19	3780	2820	29400	462	110	137	510	204	281
20	2410	1750	11400	412	70	78	510	165	227
21	1690	1060	4840	372	47	47	510	124	171
22	1310	805	2850	348	40	38	495	118	158
23	1120	578	1750	324	34	30	2120	1780	11600
24	1080	415	1210	300	25	20	1450	1100	4740
25	1000	276	745	296	25	20	1930	2270	21200
26	938	252	638	278	33	25	5500	5970	107000
27	977	235	620	278	25	19	1970	1790	9930
28	1000	235	635	271	15	11	1460	880	3470
29	1060	302	864	--	--	--	1320	670	2390
30	1120	386	1170	--	--	--	1240	480	1610
31	1200	442	1430	--	--	--	1040	368	1030
TOTAL	41742	--	357940	16615	--	9445	28277	--	187780.0



11382000 THOMES CREEK AT PASKENTA, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1010	240	654	448	29	35	227	8	4.9
2	996	185	498	434	33	39	204	7	3.9
3	963	189	491	408	14	15	186	5	2.5
4	870	222	521	402	13	14	188	6	3.0
5	821	181	401	455	22	27	188	5	2.5
6	803	181	392	462	23	29	195	6	3.2
7	740	152	304	476	24	31	210	7	4.0
8	650	125	219	522	55	78	217	10	5.9
9	626	133	234	490	45	60	222	7	4.2
10	677	232	452	522	53	75	210	5	2.8
11	562	93	141	554	45	67	195	5	2.6
12	538	72	105	634	52	89	184	4	2.0
13	578	72	112	594	44	71	175	3	1.4
14	659	93	165	506	37	51	164	3	1.3
15	668	88	159	483	31	40	156	4	1.7
16	668	85	153	455	22	27	156	4	1.7
17	650	71	125	384	15	16	154	4	1.7
18	594	45	72	351	12	11	142	4	1.5
19	546	35	52	338	11	10	138	3	1.1
20	530	39	56	342	11	10	130	3	1.1
21	498	47	63	328	10	8.9	121	3	.98
22	462	32	40	296	9	7.2	115	3	.93
23	462	20	25	304	10	8.2	110	3	.89
24	427	27	31	328	14	12	104	3	.84
25	408	30	33	384	21	22	98	2	.53
26	390	16	17	378	14	14	110	5	1.5
27	342	17	16	328	10	8.9	107	4	1.2
28	333	25	22	441	45	56	92	3	.75
29	351	22	21	427	14	16	82	3	.66
30	366	29	29	408	11	12	76	3	.62
31	--	--	--	315	8	6.8	--	--	--
TOTAL	18188	--	5603	13197	--	967.0	4656	--	61.90

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	71	2	.38	14	4	.15	8.7	3	.07
2	67	1	.18	14	4	.15	9.1	3	.07
3	64	1	.17	14	4	.15	9.1	2	.05
4	61	1	.16	14	5	.19	8.7	1	.02
5	57	1	.15	13	6	.21	8.3	1	.02
6	54	1	.15	12	7	.23	8.7	1	.02
7	51	1	.14	12	6	.19	8.3	1	.02
8	49	1	.13	12	5	.16	7.9	1	.02
9	47	1	.13	12	4	.13	7.5	1	.02
10	46	1	.12	11	7	.21	7.1	2	.04
11	44	1	.12	11	11	.33	6.7	2	.04
12	41	1	.11	11	14	.42	6.3	2	.03
13	38	1	.10	11	18	.53	5.5	2	.03
14	36	1	.10	10	18	.49	5.3	2	.03
15	35	1	.09	9.1	16	.39	5.3	2	.03
16	33	2	.18	8.7	13	.31	5.1	1	.01
17	33	1	.09	8.3	11	.25	5.1	1	.01
18	31	1	.08	7.9	8	.17	4.9	1	.01
19	30	1	.08	7.9	7	.15	4.5	1	.01
20	29	3	.23	7.9	7	.15	4.5	1	.01
21	31	6	.50	8.3	7	.16	4.5	1	.01
22	29	6	.47	8.3	7	.16	4.7	1	.01
23	24	4	.26	7.9	7	.15	4.7	1	.01
24	22	4	.24	7.5	5	.10	4.9	1	.01
25	21	4	.23	7.1	4	.08	5.3	1	.01
26	19	3	.15	7.5	3	.06	5.3	2	.03
27	18	5	.24	7.9	2	.04	5.5	2	.03
28	16	7	.30	7.5	2	.04	6.3	1	.02
29	16	7	.30	7.5	1	.02	7.1	1	.02
30	16	6	.26	7.9	1	.02	9.5	2	.05
31	14	5	.19	8.3	2	.04	--	--	--
TOTAL	1143	--	6.03	306.5	--	5.83	194.4	--	.76

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

154818.6

667802.88



11387000 STONY CREEK NEAR FRUTO, CALIF.

LOCATION.--Lat 39°40'18", long 122°31'01", in SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec.15, T.21 N., R.6 W., Glenn County, temperature recorder at gaging station on right bank, 0.3 mile downstream from Grindstone Creek, and 6.5 miles northwest of Fruto.

DRAINAGE AREA.--597 sq mi.

PERIOD OF RECORD.--Chemical analyses: March 1964 to September 1966.  
Water temperatures: December 1970 to September 1971.

EXTREMES.--1970-71:  
Water temperatures: Maximum recorded, 29.5°C Aug. 6, 7.

REMARKS.--Temperature recorder malfunction Dec. 16-20, Jan.14 to Feb. 7, Aug. 2, 3, Aug. 10 to Sept. 30. No recorded ranges.

## TEMPERATURE (°C) OF WATER, DECEMBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	8.0	6.5	7.5	7.5	--	--	7.0	6.5
2	--	--	--	--	8.0	6.0	7.5	6.5	--	--	6.5	6.0
3	--	--	--	--	7.0	6.0	6.5	6.0	--	--	7.0	6.5
4	--	--	--	--	8.0	6.0	6.5	6.0	--	--	7.0	7.0
5	--	--	--	--	8.0	7.0	6.0	5.5	--	--	7.0	7.0
6	--	--	--	--	8.0	8.0	6.0	5.0	--	--	7.5	7.5
7	--	--	--	--	8.5	8.0	6.0	5.0	--	--	7.5	7.5
8	--	--	--	--	8.5	8.5	5.5	4.0	7.5	7.0	7.5	7.5
9	--	--	--	--	8.5	8.0	6.0	4.5	7.5	7.0	8.0	8.0
10	--	--	--	--	7.5	7.5	6.0	5.0	7.5	7.0	8.0	7.5
11	--	--	--	--	8.0	7.5	6.5	6.0	7.5	7.5	8.0	8.0
12	--	--	--	--	7.5	7.0	6.5	6.0	8.0	7.5	8.0	8.0
13	--	--	--	--	7.0	6.5	6.0	5.0	8.5	8.0	8.0	7.5
14	--	--	--	--	7.0	6.5	--	--	8.5	8.5	8.0	8.0
15	--	--	--	--	7.0	7.0	--	--	8.5	8.5	8.0	8.0
16	--	--	--	--	--	--	--	--	8.5	8.0	8.5	8.0
17	--	--	--	--	--	--	--	--	8.0	8.0	9.0	8.5
18	--	--	--	--	--	--	--	--	8.0	8.0	8.5	8.0
19	--	--	--	--	--	--	--	--	8.0	8.0	8.5	8.0
20	--	--	--	--	--	--	--	--	8.0	7.5	9.5	8.5
21	--	--	--	--	7.5	7.5	--	--	7.5	7.5	10.0	9.5
22	--	--	--	--	7.5	7.0	--	--	7.5	7.5	10.5	10.0
23	--	--	--	--	7.5	7.0	--	--	7.5	7.5	10.5	10.5
24	--	--	--	--	7.0	6.5	--	--	7.5	7.5	10.5	10.0
25	--	--	--	--	6.5	6.0	--	--	7.5	7.5	11.0	10.0
26	--	--	--	--	6.5	6.0	--	--	7.5	7.0	11.5	10.5
27	--	--	--	--	7.0	6.5	--	--	7.0	7.0	11.5	9.5
28	--	--	--	--	7.0	6.5	--	--	7.0	6.5	11.5	10.0
29	--	--	--	--	7.5	7.0	--	--	--	--	11.5	11.0
30	--	--	--	--	7.5	7.5	--	--	--	--	12.0	11.5
31	--	--	--	--	7.5	7.5	--	--	--	--	11.5	11.0
AVE	--	--	--	--	7.5	7.0	--	--	--	--	9.0	8.5
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	11.0	13.5	10.5	17.0	12.0	29.0	16.5	26.0	18.0	--	--
2	11.5	11.5	13.0	11.0	22.5	10.5	29.0	17.0	--	--	--	--
3	12.0	11.5	13.0	11.0	21.5	12.0	28.5	17.0	--	--	--	--
4	12.0	12.0	14.0	11.5	24.0	13.5	29.0	17.0	26.0	20.0	--	--
5	12.5	12.0	16.5	11.5	22.5	14.0	29.0	17.0	29.0	19.0	--	--
6	13.0	12.5	19.0	10.0	25.0	14.0	29.0	16.5	29.5	22.5	--	--
7	13.5	13.0	20.0	12.0	25.0	14.5	29.0	17.0	29.5	23.0	--	--
8	13.5	13.0	13.5	12.0	25.0	14.5	28.5	17.0	28.5	21.5	--	--
9	13.5	13.5	21.0	11.5	22.5	15.0	26.5	17.0	26.5	23.0	--	--
10	13.5	13.5	22.0	11.5	24.5	15.0	27.5	15.0	--	--	--	--
11	13.5	13.5	22.5	12.0	24.5	15.0	28.5	15.5	--	--	--	--
12	13.5	13.0	20.5	13.0	20.5	15.5	27.5	16.0	--	--	--	--
13	14.0	13.5	21.0	13.0	24.5	14.0	25.0	15.5	--	--	--	--
14	14.0	13.5	21.5	11.5	24.5	14.0	25.5	15.5	--	--	--	--
15	14.5	14.0	21.5	12.0	23.5	16.0	25.5	16.0	--	--	--	--
16	15.0	14.0	19.5	9.5	22.0	17.0	25.0	16.0	--	--	--	--
17	15.0	14.5	19.0	10.0	22.0	17.0	21.5	16.0	--	--	--	--
18	14.5	14.0	21.5	10.5	21.5	17.5	22.5	16.5	--	--	--	--
19	14.0	13.0	22.0	12.0	24.5	17.0	23.0	16.0	--	--	--	--
20	13.5	13.0	22.0	12.0	27.0	17.5	23.5	16.5	--	--	--	--
21	13.5	13.0	18.5	9.5	29.0	17.0	23.5	16.5	--	--	--	--
22	13.0	12.5	21.5	11.5	27.5	17.0	23.0	16.0	--	--	--	--
23	13.0	13.0	23.5	12.5	27.5	16.5	23.5	16.5	--	--	--	--
24	13.5	13.0	24.0	14.0	27.0	17.0	23.5	16.5	--	--	--	--
25	13.5	13.5	20.0	14.0	21.5	16.5	23.5	17.0	--	--	--	--
26	14.0	13.5	19.0	11.5	24.0	17.5	24.0	17.0	--	--	--	--
27	14.5	14.0	15.5	12.0	25.0	15.5	24.0	17.0	--	--	--	--
28	15.5	11.0	14.5	13.0	27.0	14.0	24.0	17.5	--	--	--	--
29	15.5	10.0	15.5	13.0	28.0	15.0	25.0	17.5	--	--	--	--
30	15.5	10.5	21.0	12.0	28.5	15.5	25.0	18.0	--	--	--	--
31	--	--	17.0	10.5	--	--	25.5	18.5	--	--	--	--
AVE	13.6	12.9	18.9	11.7	24.3	15.2	25.7	16.6	--	--	--	--

## SACRAMENTO RIVER BASIN

11388000 STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.

LOCATION.--Lat 39°49'07", long 122°19'26", in SW $\frac{1}{4}$  sec.28, T.23 N., R.4 W., Tehama County, at gaging station on left bank, 200 ft downstream from road bridge, 0.6 mile downstream from Black Butte Dam, and 8.1 miles northwest of Orland.

DRAINAGE AREA.--737 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): October 1957 to September 1969, water years 1970-71 (partial-record station). Published as "damsite" in 1959-64.

Water temperatures: June 1969 to September 1971.

Sediment records: Water years 1958-62 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum recorded, 29.0°C July 29.

Period of record:

Water temperatures: Maximum, 29.0°C (recorded), July 29, 1971.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Temperature recorder malfunction Nov. 26 to Dec. 10, Dec. 16 to Jan. 18, Feb. 8-11, Mar. 28 to Apr. 21, July 21-28, Sept. 18-30.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV.											
10...	1240	28	13.5	12.6	43	23	17	1.7	237	0	22
JAN.											
12...	1440	32	5.5	13.1	--	--	15	--	127	0	--
MAR.											
10...	1300	98	10.0	13.8	31	7.9	11	.9	109	3	18
MAY											
18...	1030	A 193	16.5	11.8	--	--	10	--	131	0	--
JULY											
09...	1125	312	23.0	10.7	--	--	9.6	--	135	0	--
SEP.											
24...	1100	244	20.5	10.4	--	--	14	--	169	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM
NOV.											
10...	14	.0	.010	200	202	.27	15.3	203	9	194	15
JAN.											
12...	21	--	.020	200	--	--	--	124	20	104	--
MAR.											
10...	12	.2	.000	200	153	.21	40.5	110	16	94	18
MAY											
18...	11	.5	.020	100	--	--	--	114	7	107	--
JULY											
09...	11	.0	.000	100	--	--	--	113	2	111	--
SEP.											
24...	13	.4	.010	200	--	--	--	144	5	139	--

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHQS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
NOV.										
10...	.5	429	8.3	40	--	--	--	--	--	--
JAN.										
12...	.6	303	8.0	80	--	--	--	--	--	--
MAR.										
10...	.5	251	8.5	7	--	--	--	--	--	--
MAY										
18...	.4	260	8.3	30	0	100	0	0	.0	0
JULY										
09...	.4	276	7.3	45	--	--	--	--	--	--
SEP.										
24...	.5	338	7.8	85	--	--	--	--	--	--

A Daily mean discharge.

11388000 STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	17.0	18.0	14.0	--	--	--	--	8.0	7.0	10.0	7.0
2	20.0	18.0	17.0	13.0	--	--	--	--	9.0	8.0	10.5	6.5
3	20.0	18.0	16.0	13.0	--	--	--	--	9.5	8.5	10.0	7.0
4	19.5	17.5	15.5	14.0	--	--	--	--	10.5	8.5	11.0	7.0
5	20.0	17.5	17.5	14.0	--	--	--	--	10.5	8.5	11.5	6.5
6	20.0	18.0	16.0	14.0	--	--	--	--	10.5	8.5	12.5	6.5
7	19.0	18.0	16.0	14.0	--	--	--	--	11.5	8.5	11.5	7.5
8	20.0	17.0	16.0	13.5	--	--	--	--	--	--	11.5	8.0
9	19.0	17.0	17.0	13.0	--	--	--	--	--	--	10.5	7.0
10	19.0	17.0	16.0	13.0	--	--	--	--	--	--	9.5	6.5
11	19.5	17.0	16.5	12.5	10.5	9.5	--	--	--	--	9.0	7.0
12	21.0	17.0	16.5	12.0	12.0	10.0	--	--	12.0	9.0	10.0	7.0
13	20.0	16.0	16.5	13.0	13.5	11.0	--	--	13.5	9.0	9.0	7.0
14	20.0	16.0	15.0	13.0	13.5	12.5	--	--	12.0	10.0	8.5	7.5
15	20.0	16.5	17.0	13.0	13.5	12.5	--	--	13.0	9.5	8.5	6.5
16	20.0	16.0	17.0	12.5	--	--	--	--	12.5	9.0	9.5	6.0
17	20.0	16.0	17.0	12.5	--	--	--	--	13.5	8.5	10.0	7.0
18	20.5	16.5	17.0	12.0	--	--	--	--	12.0	8.5	10.5	7.0
19	19.5	16.5	17.0	12.0	--	--	8.0	6.0	12.0	8.5	11.0	8.0
20	20.0	16.0	15.0	13.0	--	--	8.0	6.0	12.0	8.5	10.0	7.5
21	19.0	15.0	14.5	13.0	--	--	7.0	6.0	12.0	9.0	10.0	7.5
22	17.5	16.0	16.0	13.0	--	--	7.5	6.0	13.0	9.0	11.0	7.0
23	20.0	15.5	15.0	12.5	--	--	7.0	5.5	13.0	9.5	10.0	8.0
24	20.0	15.0	15.0	13.0	--	--	8.0	5.5	13.0	10.0	10.0	7.0
25	17.0	14.0	15.0	12.0	--	--	9.0	6.0	12.0	9.5	9.5	7.5
26	18.0	13.0	--	--	--	--	10.0	6.5	12.5	8.5	9.5	7.5
27	18.5	13.5	--	--	--	--	9.0	6.0	11.5	8.0	9.0	7.0
28	18.0	13.0	--	--	--	--	9.0	7.0	12.5	7.5	--	--
29	16.0	14.0	--	--	--	--	8.5	7.0	--	--	--	--
30	15.0	14.0	--	--	--	--	8.5	7.0	--	--	--	--
31	18.0	14.5	--	--	--	--	8.0	7.0	--	--	--	--
AVE	19.1	16.0	16.2	13.0	--	--	--	--	11.7	8.7	10.1	7.1
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	14.5	14.0	19.5	18.5	21.5	19.5	27.5	24.5	25.5	23.5
2	--	--	14.5	14.0	19.5	18.5	21.5	19.5	27.0	25.0	25.0	23.5
3	--	--	14.5	13.5	19.5	18.0	22.5	20.0	27.0	25.0	24.5	23.0
4	--	--	14.0	13.0	19.5	18.0	22.5	20.0	27.0	24.5	25.0	23.0
5	--	--	15.0	13.0	19.5	18.0	22.5	20.5	27.0	24.0	24.0	22.0
6	--	--	15.0	14.0	19.5	18.0	22.5	20.5	27.0	24.5	24.0	22.0
7	--	--	15.0	14.0	19.5	18.0	23.0	21.0	27.0	24.5	23.5	22.0
8	--	--	14.0	13.5	19.5	18.0	23.0	21.0	27.0	24.5	24.0	22.0
9	--	--	15.5	13.5	19.0	18.0	23.0	21.0	26.5	24.0	24.0	22.0
10	--	--	15.5	14.0	19.0	18.0	23.0	21.0	27.0	24.0	24.0	22.0
11	--	--	15.5	14.5	19.0	18.0	23.0	21.0	27.5	24.5	23.5	22.0
12	--	--	15.5	14.0	18.5	18.0	23.5	21.5	27.5	24.5	24.0	22.0
13	--	--	15.5	14.5	19.0	17.5	24.0	21.5	27.5	24.5	23.5	22.5
14	--	--	16.0	14.5	19.0	17.5	24.0	22.0	27.5	24.5	24.0	22.0
15	--	--	16.0	14.5	18.5	17.5	24.5	22.0	27.0	24.5	24.0	22.0
16	--	--	16.0	14.5	18.5	17.5	24.5	22.5	27.5	24.5	24.0	22.0
17	--	--	16.5	14.5	18.5	17.5	24.5	22.5	28.0	24.5	--	--
18	--	--	18.5	15.5	18.5	17.5	24.5	23.0	27.5	24.5	--	--
19	--	--	17.0	15.5	19.0	17.5	26.0	23.0	28.0	24.5	--	--
20	--	--	18.0	15.5	19.0	17.5	26.5	22.5	27.0	24.5	--	--
21	--	--	18.0	15.5	19.5	18.0	--	--	27.5	25.0	--	--
22	15.5	14.0	19.0	16.0	19.5	17.5	--	--	27.5	25.0	--	--
23	16.0	15.0	21.0	16.5	20.0	18.0	--	--	28.0	24.0	--	--
24	16.0	15.5	21.0	16.5	20.0	18.0	--	--	27.5	25.0	--	--
25	16.5	15.5	19.5	17.0	19.5	18.5	--	--	27.5	25.5	--	--
26	18.0	15.5	20.5	17.0	20.0	18.5	--	--	27.0	25.0	--	--
27	17.5	16.5	19.0	17.0	20.5	18.5	--	--	27.0	25.5	--	--
28	18.0	14.0	19.0	17.0	20.5	18.0	--	--	26.5	25.0	--	--
29	15.5	14.0	20.5	17.0	20.5	18.5	29.0	25.0	26.5	25.0	--	--
30	15.0	14.0	20.0	17.0	21.5	19.0	27.5	24.0	26.0	24.5	--	--
31	--	--	20.0	17.0	--	--	27.0	23.5	26.0	24.0	--	--
AVE	--	--	17.1	15.1	19.4	18.0	--	--	27.2	24.6	--	--

## SACRAMENTO RIVER BASIN

11389000 SACRAMENTO RIVER AT BUTTE CITY, CALIF.

LOCATION.--Lat 39°27'28", long 121°59'35", in SE $\frac{1}{4}$  sec.32, T.19 N., R.1 W., Glenn County, temperature recorder at gaging station on left bank, 100 ft upstream from highway bridge, 0.5 mile south of Butte City, and at mile 115.8 upstream from Sacramento.

DRAINAGE AREA.--12,081 sq mi.

PERIOD OF RECORD.--Chemical analyses: May 1955 to September 1966.

Water temperatures: May 1955 to September 1958, October 1959 to September 1967, July 1969 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 19.5°C July 21-24; minimum, 5.5°C Jan. 3-5.

Period of record:

Water temperatures: Maximum, 24.0°C June 2, 3, 5, 7, 1960; minimum (1955-57, 1959-62, 1963-67, 1969-71), freezing point Jan. 2-5, 1960.

REMARKS.--Clock stopped Oct. 22 to Nov. 10, Feb. 22-25; no range in temperature available.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	15.0	--	--	9.0	9.0	8.0	7.5	8.0	8.0	8.0	7.5
2	16.0	15.5	--	--	9.0	8.5	7.5	6.0	8.0	8.0	8.5	7.5
3	16.0	15.5	--	--	9.0	8.5	6.0	5.5	8.0	8.0	9.0	8.0
4	16.5	16.0	--	--	9.0	8.5	5.5	5.5	8.0	7.5	9.5	9.0
5	16.5	16.0	--	--	10.0	8.5	6.0	5.5	8.0	8.0	9.5	9.0
6	16.5	15.5	--	--	10.5	10.0	6.5	6.0	8.5	8.0	10.0	9.0
7	15.5	14.5	--	--	11.0	10.5	7.0	6.5	9.0	8.5	10.0	9.5
8	15.0	14.0	--	--	11.0	10.5	7.0	7.0	9.0	8.5	10.5	9.5
9	15.0	14.5	--	--	10.5	10.0	7.5	7.0	9.0	8.5	10.5	10.0
10	15.5	14.5	--	--	10.0	10.0	7.5	7.5	9.0	8.0	10.5	10.0
11	16.0	15.0	13.0	12.0	10.0	10.0	8.0	7.5	9.0	8.5	10.5	10.0
12	16.0	15.0	12.5	12.0	10.0	10.0	8.0	7.5	9.5	9.0	11.0	10.5
13	16.0	15.0	12.0	11.5	10.0	9.5	7.5	7.0	9.5	9.0	10.5	9.5
14	15.5	15.0	11.5	11.0	9.5	9.0	7.0	6.5	9.5	9.0	10.0	9.0
15	15.5	14.5	11.0	11.0	9.0	9.0	8.5	7.0	9.0	9.0	10.0	8.5
16	15.0	14.5	11.0	11.0	9.0	8.5	8.0	7.5	9.0	9.0	10.5	9.5
17	15.0	14.5	11.0	10.5	8.5	8.0	7.5	7.5	9.0	9.0	10.5	9.5
18	15.0	14.5	11.0	10.5	8.0	8.0	9.0	8.0	9.0	9.0	10.0	9.0
19	15.0	14.5	11.0	10.5	8.0	7.5	9.5	9.0	9.0	8.0	11.0	9.5
20	15.0	14.5	11.0	11.0	8.0	7.5	9.0	9.0	8.5	7.5	12.0	10.5
21	14.5	13.5	11.0	11.0	8.0	7.0	9.0	8.0	9.0	8.0	12.5	11.5
22	--	--	11.5	11.0	7.5	6.5	8.0	7.5	--	--	12.5	12.0
23	--	--	11.5	11.0	8.0	7.5	8.0	7.5	--	--	12.5	12.0
24	--	--	11.5	11.5	8.0	8.0	8.0	7.5	--	--	12.5	11.5
25	--	--	12.0	11.5	8.0	7.5	8.0	7.5	--	--	11.5	11.0
26	--	--	12.0	10.5	7.5	7.5	8.0	7.5	9.0	8.0	11.5	11.5
27	--	--	10.5	9.5	7.5	7.5	8.5	7.5	8.5	8.0	11.5	11.0
28	--	--	9.5	8.5	7.5	7.5	8.5	8.0	8.5	7.5	11.0	10.5
29	--	--	8.5	8.0	8.0	7.5	8.5	8.0	--	--	12.5	11.0
30	--	--	9.0	8.5	8.0	7.0	8.0	8.0	--	--	13.5	12.0
31	--	--	--	--	8.0	7.5	8.0	8.0	--	--	12.5	11.5
AVE	--	--	--	--	8.9	8.5	7.8	7.3	8.8	8.3	10.8	10.0
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.5	14.5	14.0	14.0	13.0	18.5	16.5	18.0	17.0	16.5	15.5
2	11.5	11.0	14.0	13.5	14.5	13.0	19.0	17.0	18.5	17.0	17.0	16.0
3	12.0	11.0	13.5	13.0	15.5	14.0	19.0	17.0	18.5	17.0	17.0	15.5
4	12.0	11.5	13.5	13.0	16.5	15.0	19.0	17.5	18.5	17.5	17.5	16.0
5	12.0	12.0	13.5	12.5	17.0	15.5	19.0	17.5	18.5	17.5	18.0	16.5
6	12.0	11.5	13.5	12.5	17.5	16.0	19.0	17.5	18.5	17.0	18.0	16.5
7	11.5	11.0	14.0	13.0	17.5	16.5	19.0	17.5	18.5	17.0	17.5	16.5
8	11.5	11.0	14.0	13.0	18.0	16.5	19.0	17.5	18.5	17.0	18.0	16.5
9	11.5	11.5	13.5	12.5	17.5	16.5	19.0	17.5	18.5	17.0	18.0	16.5
10	12.0	11.5	14.0	13.0	17.5	16.0	19.0	17.5	18.5	17.0	18.0	16.5
11	11.5	11.5	15.0	14.0	17.5	16.5	18.5	17.0	19.5	17.5	18.0	16.5
12	12.0	11.5	15.5	15.0	17.0	16.0	18.5	16.5	19.5	18.0	18.5	17.0
13	12.0	11.5	15.5	14.5	17.0	15.5	18.5	17.0	19.5	18.0	18.5	17.0
14	12.0	11.5	15.0	14.0	17.0	16.0	19.0	17.0	19.0	17.5	18.5	17.0
15	12.5	12.0	15.0	14.5	17.5	16.0	19.0	17.0	18.5	17.0	18.5	17.0
16	12.5	12.5	14.5	13.5	18.0	16.5	19.0	17.5	18.0	17.0	18.0	17.0
17	12.5	11.5	13.5	13.0	18.0	16.5	19.0	17.5	18.0	16.5	17.5	16.5
18	12.0	11.5	13.5	13.0	17.5	16.5	19.0	17.5	18.0	16.5	17.0	15.5
19	12.5	11.5	14.5	13.5	17.5	16.0	19.0	17.5	18.0	16.5	17.0	15.5
20	13.0	12.0	15.0	14.0	18.0	16.5	19.0	17.5	18.0	16.5	17.0	15.5
21	13.0	12.0	14.0	12.5	18.5	17.0	19.5	18.0	18.0	16.5	16.5	15.5
22	13.0	12.5	14.0	13.0	18.5	17.0	19.5	18.0	18.5	16.5	17.0	15.5
23	13.5	12.5	16.0	14.0	18.5	17.0	19.5	18.0	18.0	16.5	17.0	16.0
24	13.0	12.5	16.5	15.0	18.0	17.0	19.5	17.5	17.5	16.5	17.0	16.0
25	14.0	12.5	16.5	15.5	18.5	16.0	19.0	17.5	17.5	16.5	16.5	15.5
26	15.0	13.0	16.0	15.0	16.5	15.5	19.0	17.0	18.0	16.5	16.5	15.5
27	15.0	13.5	15.0	14.0	16.0	15.0	19.0	17.5	18.5	17.0	16.0	15.0
28	15.5	14.0	14.0	13.0	17.0	15.5	19.0	17.5	17.5	16.5	15.5	14.5
29	15.5	14.5	13.5	13.0	17.5	16.0	19.0	17.5	17.5	16.0	15.0	14.0
30	15.5	14.0	14.5	13.5	18.0	16.5	18.5	17.0	16.5	16.0	14.5	13.5
31	--	--	14.5	13.5	--	--	18.5	17.0	17.0	15.5	--	--
AVE	12.8	12.0	14.5	13.6	17.3	15.9	19.0	17.3	18.2	16.8	17.2	15.9

## 11390000 BUTTE CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°43'34", long 121°42'28", in NW1/4 sec.36, T.22 N., R.2 E., Butte County, at gaging station on right bank, 0.7 mile downstream from Little Butte Creek, and 7.5 miles east of Chico.

DRAINAGE AREA.--147 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1953 (partial-record station), October 1953 to September 1968, water years 1969-71 (partial-record station).  
Water temperatures: November 1961 to September 1971.

## EXTREMES, 1970-71:

Water temperatures: Maximum, 24.0°C July 20-22; minimum, 2.5°C Jan. 4, 5.

## Period of record:

Water temperatures: Maximum (1961-64, 1965-71), 26.0°C July 21, 22, 1966; minimum, 1.0°C Dec. 14, 15, 1967.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (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)	DIS- SOLVED BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV.												
18...	1010	194	7.0	12.7	10	5.6	3.6	1.0	61	0	2.6	1.6
JAN.												
14...	1210	464	4.5	14.2	--	--	1.8	--	47	0	--	2.0
MAR.												
17...	1125	690	7.0	12.3	--	--	2.4	--	39	0	--	1.4
MAY												
18...	1305	570	11.5	12.5	6.1	2.4	2.2	.6	34	0	.2	.0
JULY												
08...	1255	246	19.5	10.3	--	--	2.8	--	48	0	--	.0
SEP.												
23...	1130	135	14.5	11.3	--	--	3.9	--	65	0	--	.0
28...	1210	154	11.0	10.9	11	4.3	3.4	1.0	72	0	3.3	1.0

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)
NOV.												
18...	--	--	.0	--	--	0	82	.11	43.0	48	0	50
JAN.												
14...	--	--	--	--	--	100	--	--	--	42	3	39
MAR.												
17...	--	--	--	--	--	100	--	--	--	30	0	32
MAY												
18...	--	--	.0	--	--	0	46	.06	70.8	25	0	28
JULY												
08...	--	--	--	--	--	0	--	--	--	39	0	39
SEP.												
23...	--	--	--	--	--	0	--	--	--	51	0	53
28...	.0	.03	--	.080	.010	20	--	.11	34.5	45	0	59

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
NOV.											
18...	14	.2	104	7.9	1	--	--	--	--	--	--
JAN.											
14...	--	.1	84	7.8	2	--	--	--	--	--	--
MAR.											
17...	--	.2	67	7.5	4	--	--	--	--	--	--
MAY											
18...	16	.2	60	7.6	1	0	0	0	0	.0	0
JULY											
08...	--	.2	97	7.6	2	--	--	--	--	--	--
SEP.											
23...	--	.2	110	7.7	1	--	--	--	--	--	--
28...	14	.2	103	7.9	--	--	--	--	--	--	--

## SACRAMENTO RIVER BASIN

11390000 BUTTE CREEK NEAR CHICO, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	12.0	10.0	8.5	8.5	8.0	6.0	6.0	6.5	6.5	5.0	3.0
2	14.5	12.0	10.5	9.0	8.0	7.5	6.0	4.5	7.0	6.5	4.5	3.0
3	14.5	12.5	10.0	9.0	8.0	7.5	4.5	3.0	6.5	5.0	5.5	4.0
4	14.0	12.0	10.0	10.0	8.5	7.5	3.5	2.5	6.5	5.5	7.5	5.5
5	14.0	12.0	11.5	10.0	9.0	8.5	3.5	2.5	7.0	6.0	7.0	5.0
6	14.5	12.5	11.0	11.0	9.0	8.0	3.5	3.0	7.0	6.0	6.5	4.5
7	13.0	11.0	11.0	10.5	8.5	8.5	4.0	3.5	6.5	5.5	6.5	5.5
8	12.5	10.5	10.5	10.0	8.5	8.5	4.5	3.5	7.0	6.0	8.0	5.5
9	12.5	10.5	11.0	10.0	8.5	8.0	5.0	4.0	7.5	6.5	7.5	6.5
10	13.5	11.0	11.0	10.0	8.0	7.0	5.5	5.0	8.5	7.0	8.0	6.5
11	13.5	11.5	10.5	10.0	7.0	6.5	6.0	5.5	8.5	7.5	8.0	7.5
12	13.5	11.5	10.5	10.0	7.0	6.0	6.0	4.5	9.0	8.0	8.5	8.0
13	13.0	11.5	10.0	8.0	6.0	6.0	4.5	4.0	8.5	8.0	8.0	7.5
14	12.5	11.0	9.0	8.0	6.0	5.5	4.5	4.0	8.0	7.5	8.0	7.0
15	12.5	11.0	8.5	8.0	6.5	6.0	5.5	4.5	9.0	8.0	8.5	7.0
16	12.5	10.5	9.0	8.0	6.5	6.0	7.0	5.5	8.0	7.0	8.5	8.0
17	12.0	10.5	8.5	7.5	6.0	5.0	7.5	7.0	8.0	7.0	8.5	7.5
18	11.5	11.0	8.0	7.0	5.5	5.0	8.0	7.5	7.0	6.5	8.0	6.5
19	12.0	10.5	8.0	7.0	5.0	4.5	8.0	7.5	7.0	5.5	8.5	7.0
20	12.5	11.5	8.0	7.0	5.5	4.5	8.0	7.0	6.0	4.5	9.0	7.5
21	12.0	11.5	8.0	7.5	6.0	5.5	7.0	5.5	6.0	5.0	9.5	8.5
22	11.5	11.0	8.5	8.0	6.0	5.0	6.5	6.0	7.0	5.5	9.0	8.5
23	11.0	11.0	8.5	8.0	6.0	5.5	6.5	6.0	6.5	5.0	9.5	8.5
24	11.0	10.5	8.5	8.5	6.0	5.0	6.5	5.5	7.0	6.0	9.5	9.0
25	11.0	9.5	9.5	8.5	5.0	4.0	6.5	5.5	7.0	5.5	9.5	9.0
26	10.5	9.0	9.5	8.5	5.0	4.5	6.5	5.5	5.5	4.0	10.0	9.0
27	9.5	8.0	8.5	7.5	5.5	5.0	6.5	6.0	4.5	4.0	9.5	8.5
28	9.5	7.5	8.5	7.5	5.5	5.5	7.0	6.0	4.5	3.5	9.5	8.5
29	10.0	8.0	8.5	8.0	6.5	5.5	6.5	6.0	--	--	9.5	8.5
30	9.5	8.0	8.5	8.0	6.5	6.0	7.0	6.5	--	--	10.0	9.0
31	9.5	8.0	--	--	6.0	5.5	7.0	6.5	--	--	9.0	7.0
AVE	12.2	10.6	9.4	8.6	6.8	6.2	6.0	5.1	7.0	6.0	8.2	7.0

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.0	11.5	10.5	11.0	10.0	20.5	17.0	23.5	20.0	19.0	16.0
2	10.0	9.0	11.0	10.0	12.5	9.5	21.0	18.0	23.5	20.0	18.5	16.0
3	10.5	9.0	10.5	10.0	14.0	11.0	20.5	17.5	23.5	20.5	18.5	15.5
4	10.5	9.5	10.5	10.0	15.5	12.5	20.5	17.5	22.5	19.5	18.0	15.0
5	11.0	10.0	11.0	10.0	16.0	13.0	21.0	18.0	22.5	19.5	18.5	15.5
6	10.5	10.0	12.0	10.0	16.0	13.0	21.0	18.0	22.5	19.5	18.5	15.5
7	10.0	9.0	12.0	10.5	16.5	14.0	21.0	18.0	22.5	19.5	18.0	15.0
8	10.0	8.5	11.0	10.0	17.0	14.5	20.5	18.0	21.5	18.5	17.5	14.5
9	10.0	10.0	12.5	10.0	17.0	15.0	21.0	18.0	22.0	18.5	17.5	14.5
10	10.0	9.5	13.0	11.0	17.5	15.0	20.5	17.5	22.5	19.0	17.5	14.5
11	10.0	8.5	13.5	12.0	17.5	15.0	20.0	17.0	23.0	20.0	17.5	14.5
12	10.5	9.0	13.0	11.5	16.5	15.0	20.0	17.0	23.5	20.5	17.5	14.5
13	10.5	10.0	13.0	12.0	17.0	14.5	20.5	17.5	23.0	20.0	18.0	15.0
14	11.0	9.5	12.0	11.0	17.5	14.5	21.0	18.0	22.0	19.0	18.5	15.5
15	11.5	10.5	12.5	11.0	18.5	15.0	21.5	18.0	21.0	18.5	18.5	15.5
16	10.5	9.5	11.5	10.5	19.0	16.0	22.0	19.0	21.0	18.0	18.0	15.5
17	10.0	8.5	11.5	10.0	19.0	16.5	22.0	19.5	21.0	17.5	17.5	15.5
18	9.5	8.0	12.0	9.5	18.5	16.5	22.5	20.0	21.0	17.5	16.0	13.5
19	10.5	8.5	12.5	10.5	19.0	16.0	23.0	20.0	21.0	17.5	15.5	13.0
20	10.5	9.0	14.0	11.5	19.5	16.5	24.0	20.5	20.5	17.5	15.0	12.5
21	10.0	8.0	12.0	10.5	20.0	17.0	24.0	21.0	20.0	17.0	15.0	13.0
22	9.5	8.0	12.5	9.5	20.0	17.0	24.0	21.0	20.5	17.0	16.0	13.0
23	11.0	9.0	14.0	11.5	20.0	17.0	23.5	20.5	20.5	17.0	15.5	13.0
24	9.5	8.0	14.5	12.5	19.5	17.0	23.0	20.0	20.0	17.5	15.5	13.0
25	9.5	8.0	14.5	12.5	18.0	16.5	23.0	20.0	21.0	17.5	14.5	13.0
26	10.5	8.5	14.5	13.0	17.0	16.5	23.0	19.5	21.5	18.0	14.0	12.5
27	11.5	9.0	13.0	11.5	18.0	15.5	23.0	19.5	21.5	18.5	13.0	11.0
28	12.0	10.0	11.5	11.0	18.0	15.5	23.0	20.0	20.5	18.5	12.5	10.5
29	12.5	10.5	11.5	10.5	18.5	15.5	23.0	20.0	20.0	17.0	11.0	10.5
30	12.0	10.5	13.5	11.0	19.0	16.0	23.0	20.0	18.5	16.0	13.0	10.0
31	--	--	12.0	10.0	--	--	23.0	20.0	19.5	16.5	--	--
AVE	10.5	9.1	12.4	10.8	17.4	14.9	21.9	18.9	21.5	18.4	16.4	13.9



11390210 CHEROKEE CANAL NEAR NELSON, CALIF.

LOCATION.--Lat 39°34'54", long 121°41'54", in SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec.13, T.20 N., R.2 E., Butte County, at gaging station 25 ft upstream from county bridge, 4.1 miles northeast of Nelson, and 10.5 miles northwest of Oroville.

PERIOD OF RECORD.--Water temperatures: August 1970 to September 1971.

Sediment records: August 1970 to September 1971.

EXTREMES, August 1970 to September 1971:

Sediment concentrations: Maximum daily, 1,470 mg/l Dec. 4; minimum daily, no flow for many days during September and October 1970.

Sediment loads: Maximum daily, 6,050 tons Dec. 4; minimum daily, 0 tons on many days.

## TEMPERATURE (°C) OF WATER, AUGUST TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	--	--	--	--	--	--	--	--	23.0
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--	--	--	24.0
5	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	24.0
8	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	25.0	25.0
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	30.0	--
13	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	16.0
15	--	--	--	--	--	--	--	--	--	--	24.0	--
16	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	24.0	--
18	--	--	--	--	--	--	--	--	--	--	21.5	--
19	--	--	--	--	--	--	--	--	--	--	24.0	--
20	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	23.0	--
22	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	22.0	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	21.5	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	23.0	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	23.0	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	13.5	12.5	9.0	8.0	9.5	--	15.0	--	26.5	--	--
2	--	--	9.5	6.0	11.5	--	19.0	--	27.0	--	28.5	--
3	--	--	8.5	5.5	9.5	12.0	--	22.0	--	--	32.5	25.0
4	--	--	9.0	5.5	9.5	--	20.0	--	25.0	26.0	26.5	--
5	--	12.5	10.0	7.0	10.0	13.0	--	22.5	--	--	--	--
6	--	13.0	13.0	7.0	12.0	--	16.0	19.0	33.0	--	26.0	--
7	--	13.5	9.5	6.5	11.5	13.5	--	--	--	26.0	--	--
8	--	13.5	12.0	7.5	12.5	--	18.5	--	31.0	--	--	--
9	--	14.0	11.0	8.0	12.5	13.5	--	--	--	--	--	23.5
10	--	14.5	10.5	8.0	12.5	--	17.0	23.5	26.0	27.0	33.5	--
11	--	13.5	9.5	6.0	15.0	11.5	--	--	--	--	--	25.5
12	--	--	9.0	8.0	15.5	11.5	20.5	25.0	--	--	--	--
13	--	12.5	7.5	6.5	18.0	--	--	--	--	--	--	--
14	--	--	9.5	7.0	13.5	10.0	24.0	25.0	30.5	27.5	--	--
15	--	12.0	9.0	7.5	16.0	--	--	--	--	30.0	--	--
16	--	--	9.5	8.5	12.5	15.5	--	--	30.0	28.5	--	--
17	--	11.5	9.0	9.5	13.0	--	14.0	23.5	--	--	--	--
18	--	--	8.0	6.0	--	17.0	--	--	28.0	--	--	--
19	--	--	--	12.0	11.0	--	--	27.0	--	28.5	--	--
20	--	11.0	7.0	12.5	--	19.0	9.5	--	--	--	27.0	--
21	--	--	7.0	12.5	11.0	--	--	29.0	--	31.5	--	22.0
22	14.0	--	8.5	11.0	--	14.0	--	--	27.0	--	--	22.5
23	13.0	--	9.0	9.0	12.5	14.0	22.0	--	--	28.0	27.0	--
24	--	12.0	9.0	9.0	--	17.0	--	28.0	--	--	--	--
25	--	--	7.5	11.5	7.5	12.0	21.0	--	22.5	--	--	--
26	10.5	--	7.0	9.5	13.0	14.0	--	--	24.0	--	--	--
27	--	9.0	7.5	10.0	9.5	17.5	26.0	15.5	--	27.5	--	--
28	--	9.5	7.5	9.0	--	--	--	15.0	24.0	--	--	--
29	11.5	9.5	8.0	8.0	--	19.0	25.0	--	--	27.0	--	14.5
30	--	10.0	10.5	8.0	--	--	--	24.5	22.0	--	--	--
31	10.5	--	10.5	8.0	--	15.0	--	--	--	27.5	29.0	--
AVE	--	--	9.2	8.4	12.1	--	--	--	--	--	--	--

## SACRAMENTO RIVER BASIN

11390210 CHEROKEE CANAL NEAR NELSON, CALIF.---Continued

## SUSPENDED SEDIMENT, AUGUST TO SEPTEMBER 1970

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				--	--	--	.18	15	.01
2				--	--	--	.12	20	.01
3				--	--	--	.14	16	.01
4				--	--	--	.06	8	0
5				--	--	--	.02	14	0
6				.42	32	.04	.02	20	0
7				.42	32	.04	.06	22	0
8				.46	32	.04	.06	21	0
9				.58	32	.05	.05	17	0
10				.62	32	.05	.01	14	0
11				.29	32	.03	0	0	0
12				.12	34	.01	0	0	0
13				.08	28	.01	0	0	0
14				.08	18	0	0	0	0
15				.23	13	.01	0	0	0
16				.68	11	.02	0	0	0
17				1.4	10	.04	0	0	0
18				1.4	13	.05	0	0	0
19				.20	11	.01	0	0	0
20				.18	10	0	0	0	0
21				.35	11	.01	0	0	0
22				.42	12	.01	0	0	0
23				.46	12	.01	0	0	0
24				.46	13	.02	0	0	0
25				.58	12	.02	0	0	0
26				.38	9	.01	0	0	0
27				.32	8	.01	0	0	0
28				.23	9	.01	0	0	0
29				.20	10	.01	0	0	0
30				.35	12	.01	0	0	0
31				.38	13	.01	--	--	--
TOTAL				11.29	--	.53	.72	--	.03
TOTAL DISCHARGE FOR PERIOD Aug. 6 to Sept. 30 (CFS-DAYS)									12.01
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR PERIOD Aug. 6 to Sept. 30 (TONS)									0.56

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	0	0	0	23	15	.93	230	200	134
2	0	0	0	23	16	.99	514	595	1110
3	0	0	0	22	16	.95	415	560	909
4	0	0	0	26	17	1.2	1290	1470	6050
5	0	0	0	67	252	91	498	279	393
6	0	0	0	136	478	236	267	94	70
7	0	0	0	79	172	46	200	90	49
8	0	0	0	48	18	2.3	214	140	81
9	0	0	0	46	17	2.1	184	140	70
10	0	0	0	89	52	14	136	105	59
11	0	0	0	86	46	14	120	42	14
12	0	0	0	85	40	9.7	110	17	5.0
13	0	0	0	66	20	3.6	103	14	3.9
14	0	0	0	53	14	2.0	101	16	4.4
15	0	0	0	51	11	1.5	96	19	4.9
16	0	0	0	48	25	3.2	144	239	99
17	0	0	0	47	25	3.2	113	44	13
18	0	0	0	44	25	3.0	123	280	93
19	0	0	0	43	20	2.3	115	85	26
20	0	0	0	43	11	1.3	130	40	30
21	0	0	0	44	9	1.1	855	728	1840
22	0	0	0	43	9	1.0	238	160	111
23	19	7	.61	43	9	1.0	177	88	42
24	36	13	1.3	44	105	12	147	35	14
25	36	14	1.4	46	120	15	125	18	6.1
26	36	14	1.4	48	22	2.9	120	32	10
27	35	13	1.2	48	20	2.6	139	100	38
28	36	11	1.1	872	1070	3490	156	94	47
29	36	10	.97	1370	1360	5990	314	275	272
30	36	11	1.1	392	383	463	162	66	29
31	32	14	1.2	--	--	--	134	32	12
TOTAL	302	--	10.28	4075	--	10417.87	7670	--	11619.3

## 11390210 CHEROKEE CANAL NEAR NELSON, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	123	25	8.5	70	9	1.7	18	4	.19
2	193	84	49	68	13	2.4	17	4	.16
3	108	20	5.8	64	8	1.4	17	4	.18
4	94	14	3.6	62	7	1.2	16	6	.26
5	90	13	3.2	62	10	1.7	21	8	.45
6	86	17	3.9	61	11	1.8	18	8	.39
7	82	11	2.4	61	9	1.5	19	6	.31
8	82	7	1.5	53	10	1.4	38	5	.51
9	80	8	1.7	23	8	.50	22	3	.18
10	82	10	2.2	20	10	.54	19	3	.15
11	92	23	5.7	24	50	3.9	25	12	.87
12	96	55	14	31	77	7.0	68	714	196
13	144	215	84	53	42	5.8	81	537	132
14	120	105	34	52	13	1.8	52	74	10
15	118	109	39	53	14	2.0	61	34	5.6
16	388	467	762	66	239	52	45	16	1.9
17	261	206	155	68	285	52	57	14	2.2
18	160	100	43	48	105	14	50	15	2.0
19	130	51	18	48	130	17	38	18	1.8
20	108	42	12	20	19	1.0	36	20	1.9
21	97	27	7.1	50	23	3.1	20	16	.86
22	90	19	4.6	53	19	2.7	33	9	.80
23	86	21	4.9	26	26	1.8	128	236	118
24	82	22	4.9	24	20	1.3	131	183	79
25	78	18	3.8	19	8	.41	405	436	756
26	76	11	2.3	18	8	.39	595	549	1210
27	76	13	2.7	19	8	.41	199	91	50
28	74	17	3.4	20	6	.32	141	40	15
29	74	13	2.6	--	--	--	110	27	8.0
30	72	9	1.7	--	--	--	95	25	6.4
31	70	7	1.3	--	--	--	82	22	4.9
TOTAL	3512	--	1287.8	1236	--	181.07	2657	--	2606.03

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	74	18	3.6	22	3	.18	19	2	.10
2	70	11	2.1	20	2	.11	19	3	.15
3	66	8	1.4	20	2	.11	18	4	.19
4	64	7	1.2	22	4	.24	17	2	.09
5	62	5	.84	20	8	.43	18	2	.10
6	61	4	.66	20	12	.65	17	3	.14
7	62	3	.50	19	12	.62	15	3	.12
8	62	4	.67	19	10	.51	6.7	4	.07
9	57	5	.77	19	8	.41	13	4	.14
10	57	6	.92	18	7	.34	13	3	.11
11	53	8	1.1	16	5	.22	13	3	.11
12	52	9	1.3	15	3	.12	11	3	.09
13	53	11	1.6	14	2	.08	14	4	.15
14	62	12	2.0	13	2	.07	17	5	.23
15	62	12	2.0	9.2	2	.05	16	11	.48
16	61	11	1.8	6.4	4	.07	13	17	.60
17	52	7	.98	9.2	5	.12	12	19	.62
18	46	7	.87	11	8	.24	11	22	.65
19	45	11	1.3	14	10	.38	11	24	.71
20	46	14	1.7	11	8	.24	11	26	.77
21	48	13	1.7	17	3	.14	11	28	.83
22	45	8	.97	19	2	.10	9.4	30	.76
23	45	5	.61	16	2	.09	3.7	29	.29
24	44	5	.59	17	2	.09	6.3	19	.32
25	39	4	.42	16	2	.09	9.2	10	.25
26	36	4	.39	18	2	.10	11	10	.30
27	34	5	.46	19	2	.10	14	11	.42
28	33	5	.45	23	2	.12	13	12	.42
29	33	5	.45	22	2	.12	11	12	.36
30	32	4	.35	20	3	.16	11	12	.36
31	--	--	--	19	2	.10	--	--	--
TOTAL	1556	--	33.70	523.8	--	6.40	384.3	--	9.93

## SACRAMENTO RIVER BASIN

11390210 CHEROKEE CANAL NEAR NELSON, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	9.9	11	.29	12	12	.39	7.9	12	.26
2	9.2	11	.27	12	13	.42	8.5	11	.25
3	8.5	14	.32	11	13	.39	6.7	10	.18
4	9.2	16	.40	11	13	.39	7.3	10	.20
5	9.2	14	.35	11	11	.33	6.1	11	.18
6	9.9	12	.32	11	8	.24	5.0	12	.16
7	11	9	.27	9.9	8	.21	4.5	13	.16
8	9.9	10	.27	9.9	9	.24	6.7	14	.25
9	9.2	12	.30	9.2	11	.27	8.5	14	.32
10	6.7	14	.25	9.9	12	.32	7.9	13	.28
11	9.2	13	.32	11	12	.36	5.0	12	.16
12	9.9	11	.29	6.1	12	.20	4.0	12	.13
13	11	10	.30	5.0	12	.16	4.0	12	.13
14	11	10	.30	5.0	12	.16	3.5	12	.11
15	9.2	13	.32	4.5	12	.15	3.0	12	.10
16	9.2	15	.37	4.5	12	.15	2.6	12	.08
17	9.2	16	.40	4.0	12	.13	2.6	13	.09
18	9.2	15	.37	4.0	12	.13	1.8	13	.06
19	9.2	12	.30	3.5	12	.11	.13	13	0
20	9.2	10	.25	2.6	12	.08	1.5	13	.05
21	9.2	9	.22	2.6	12	.08	2.2	13	.08
22	9.9	9	.24	2.6	12	.08	2.2	9	.05
23	11	10	.30	2.3	12	.07	2.2	8	.05
24	11	10	.30	.10	12	0	2.6	9	.06
25	11	10	.30	1.2	12	.04	3.0	9	.07
26	11	9	.27	3.5	13	.12	4.0	9	.10
27	11	8	.24	6.1	13	.21	5.0	10	.14
28	11	6	.18	7.9	13	.28	6.7	10	.18
29	9.9	4	.11	8.5	13	.30	6.1	10	.16
30	9.9	6	.16	11	13	.39	6.1	10	.16
31	11	10	.30	11	13	.39	--	--	--
TOTAL	304.9	--	8.88	213.90	--	6.79	137.33	--	4.20

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

22572.23

26192.25

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.
						% FINER THAN .002 MM	% FINER THAN .004 MM	% FINER THAN .008 MM	% FINER THAN .016 MM	% FINER THAN .031 MM	% FINER THAN .062 MM
NOV.											
06...	1645	13.0	307	1150	953	57	64	81	91	92	--
24...	1700	12.0	48	284	37	57	66	76	88	94	--
28...	0830	10.0	940	1210	3070	26	34	42	49	55	58
29...	1345	10.0	2050	2560	14200	12	16	20	23	27	28
DEC.											
18...	1620	8.0	134	544	197	58	77	90	98	99	--
JAN.											
16...	1800	10.0	702	16	31	29	31	44	54	64	71
16...	2400	9.0	472	356	454	41	57	68	78	84	--
FEB.											
16...	1715	12.0	84	614	139	41	58	74	89	97	--
MAR.											
23...	1710	14.0	175	347	164	36	51	64	75	83	--
26...	1200	14.0	490	254	336	31	43	52	61	66	--
DATE						SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.
						% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .250 MM	% FINER THAN 2.00 MM
NOV.											
06...	94	--	95	--	95	--	96	--	99	--	100
24...	95	--	98	--	100	--	--	--	--	--	--
28...	--	63	--	88	--	100	--	--	--	--	--
29...	--	30	--	38	--	71	--	96	--	100	--
DEC.											
18...	99	--	99	--	100	--	--	--	--	--	--
JAN.											
16...	--	78	--	93	--	100	--	--	--	--	--
16...	90	--	91	--	97	--	98	--	100	--	--
FEB.											
16...	100	--	--	--	--	--	--	--	--	--	--
MAR.											
23...	93	--	95	--	100	--	--	--	--	--	--
26...	73	--	75	--	83	--	100	--	--	--	--

11390500 SACRAMENTO RIVER BELOW WILKINS SLOUGH, NEAR GRIMES, CALIF.

LOCATION.--Lat 39°00'36", long 121°49'25", in NW¼NE¼ sec.2, T.13 N., R.1 E., Colusa County, temperature recorder at gaging station on right bank, 1,200 ft downstream from Wilkins Slough, 5.8 miles southeast of Grimes, and at mile 62.9 upstream from Sacramento.

DRAINAGE AREA.--12,926 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 20.5°C July 22, 23; minimum, 6.5°C Jan. 4-6, 15.

Period of record:

Water temperatures: Maximum, 22.0°C June 23, 1970; minimum, 4.0°C Dec. 26, 1968.

REMARKS.--No record Oct. 7-11.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	16.0	13.0	12.5	10.0	10.0	9.5	9.0	9.0	8.5	8.5	8.0
2	16.5	16.0	13.5	13.0	10.5	10.0	9.5	9.0	8.5	8.5	8.0	8.0
3	16.5	16.0	14.0	13.5	10.0	10.0	9.0	7.5	9.0	8.5	8.5	8.0
4	17.0	16.5	14.0	14.0	10.0	10.0	7.5	6.5	9.0	9.0	9.5	8.5
5	17.0	16.5	14.0	14.0	10.0	10.0	7.0	6.5	9.0	9.0	9.5	9.5
6	17.0	16.5	14.0	14.0	11.0	10.0	7.0	6.5	9.0	9.0	9.5	9.5
7	--	--	14.0	14.0	12.0	11.0	7.5	7.0	10.0	9.0	10.0	9.5
8	--	--	14.0	13.5	12.0	12.0	8.0	7.0	10.0	9.0	10.0	10.0
9	--	--	14.0	13.5	12.5	11.5	7.5	7.0	10.0	9.5	10.5	10.0
10	--	--	14.0	13.5	11.5	10.5	7.5	7.5	10.0	9.5	10.5	10.5
11	--	--	14.0	13.5	11.0	10.5	8.0	7.5	10.0	9.5	10.5	10.5
12	15.5	15.5	14.0	13.5	11.0	11.0	8.0	8.0	10.5	9.5	11.0	10.5
13	15.5	15.5	14.0	13.0	11.0	10.5	8.0	7.0	10.5	10.5	11.0	11.0
14	15.5	15.0	13.0	12.5	10.5	10.0	7.0	7.0	11.0	10.5	11.0	10.0
15	15.0	15.0	12.5	12.0	10.0	10.0	7.0	6.5	10.5	10.5	10.0	9.5
16	15.0	15.0	12.5	12.0	10.0	10.0	7.5	7.0	10.5	10.0	10.0	9.0
17	15.0	14.5	12.0	12.0	10.0	9.5	8.0	7.5	10.0	10.0	10.5	10.0
18	14.5	14.5	12.0	12.0	9.5	9.0	8.5	8.0	10.5	10.0	10.5	10.0
19	14.5	14.5	12.0	11.5	9.0	9.0	10.0	8.5	10.5	10.0	10.5	10.0
20	14.5	14.5	11.5	11.5	9.0	9.0	10.0	10.0	10.0	9.5	11.5	10.5
21	14.5	14.0	12.0	11.5	9.0	8.5	10.0	10.0	9.5	9.0	12.5	11.5
22	14.0	13.5	12.5	12.0	9.0	8.0	10.0	8.5	9.5	9.0	13.0	12.5
23	14.5	13.5	12.5	12.0	8.0	7.5	8.5	8.0	9.5	9.0	13.0	13.0
24	14.5	13.5	12.5	12.0	8.5	8.0	9.0	8.0	10.0	9.5	13.5	13.0
25	13.5	13.5	13.0	12.0	9.0	8.5	9.0	8.5	10.0	9.5	13.5	12.0
26	13.5	13.0	13.0	12.5	9.0	9.0	9.0	8.5	10.0	9.0	12.0	11.5
27	13.0	12.0	12.5	12.0	9.0	8.5	9.0	8.5	9.5	9.0	12.5	11.5
28	12.5	12.0	12.0	10.5	9.0	8.5	9.0	9.0	9.0	8.5	11.5	11.5
29	12.5	12.0	10.5	9.5	9.0	9.0	9.0	9.0	--	--	11.5	10.5
30	12.5	12.0	10.0	9.5	9.0	8.5	9.0	9.0	--	--	13.0	11.0
31	12.5	12.5	--	--	9.0	8.5	9.0	9.0	--	--	13.0	12.5
AVE	14.7	14.3	12.9	12.4	9.9	9.5	8.5	8.0	9.8	9.4	11.0	10.4
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	11.5	15.0	14.5	14.0	13.5	18.0	17.0	18.5	18.5	16.5	16.5
2	11.5	11.5	14.5	13.5	14.0	13.5	18.5	17.5	18.5	18.0	16.5	16.5
3	12.0	11.5	14.0	13.0	14.5	13.5	19.0	18.0	19.0	18.5	16.5	16.5
4	12.5	11.5	13.5	13.0	15.5	14.5	19.0	18.5	18.5	18.5	16.5	16.5
5	12.5	12.0	13.0	13.0	16.5	15.5	19.0	18.5	19.0	18.5	17.5	16.5
6	13.0	12.5	13.0	13.0	17.0	16.0	19.0	18.5	19.0	18.5	18.0	17.5
7	12.5	12.0	13.5	13.0	17.5	17.0	19.0	18.5	18.5	18.5	18.0	17.5
8	12.0	11.5	14.0	13.5	17.5	17.0	19.0	18.5	18.5	18.0	18.0	17.0
9	11.5	11.5	13.5	12.5	17.5	17.0	19.0	18.5	18.5	18.0	17.5	17.0
10	12.0	11.5	13.0	12.5	17.5	17.0	18.5	18.5	18.5	18.0	18.0	17.5
11	12.5	11.5	14.5	13.0	17.0	17.0	18.5	18.5	19.5	18.5	18.0	17.5
12	12.0	11.5	15.0	14.5	17.5	17.0	18.5	18.0	19.5	19.0	18.0	17.5
13	12.5	11.5	15.0	15.0	17.0	16.5	18.5	18.0	19.5	19.0	18.0	17.5
14	12.0	11.5	15.0	14.5	16.5	16.5	18.5	18.0	19.5	19.0	18.5	18.0
15	12.5	12.0	15.0	14.5	17.0	16.0	19.0	18.5	19.0	18.5	18.5	18.0
16	12.5	12.5	15.0	14.5	17.5	16.5	19.5	18.5	19.0	18.5	18.0	17.5
17	13.0	12.5	14.5	13.0	18.0	17.0	19.5	19.0	19.0	18.5	18.5	17.5
18	13.0	12.0	13.5	12.5	18.0	17.5	19.5	18.5	18.5	18.0	18.0	17.0
19	12.0	12.0	14.0	13.0	18.0	17.5	19.5	19.0	18.5	18.0	17.0	16.5
20	12.5	12.0	14.5	13.5	17.5	17.0	19.5	19.0	19.0	18.5	16.5	16.5
21	12.5	11.5	14.5	13.5	18.0	17.5	20.0	19.0	18.5	18.0	16.5	16.0
22	12.5	11.5	13.5	13.0	18.5	18.0	20.5	19.5	19.0	18.5	16.5	16.0
23	12.0	11.5	14.5	13.0	18.5	18.0	20.5	20.0	19.0	18.5	16.5	16.0
24	12.5	12.0	15.5	14.5	18.5	18.0	20.0	19.5	19.0	18.5	16.5	16.0
25	12.0	11.5	16.5	15.5	18.0	17.5	20.0	19.0	18.5	18.0	16.5	16.0
26	13.0	12.0	16.5	16.0	17.5	17.0	19.5	19.0	18.5	18.0	16.5	15.5
27	14.0	13.0	16.0	15.0	17.0	16.0	19.5	19.0	18.5	18.0	16.0	15.5
28	14.5	13.5	15.0	13.5	16.0	15.5	19.5	19.0	18.0	17.5	15.5	15.0
29	15.0	14.0	13.5	12.5	16.5	16.0	19.5	19.0	18.0	17.0	15.5	15.0
30	15.0	14.0	13.5	12.5	17.5	16.5	19.0	18.5	17.0	17.0	15.0	14.0
31	--	--	14.0	13.5	--	--	19.0	18.5	17.0	16.5	--	--
AVE	12.6	12.0	14.4	13.6	17.0	16.4	19.2	18.6	18.7	18.2	17.1	16.6

## SACRAMENTO RIVER BASIN

11390650 SACRAMENTO RIVER ABOVE COLUSA TROUGH, AT KNIGHTS LANDING, CALIF.

LOCATION.--Lat 38°48'18", long 121°43'22", in NW¼ sec.14, T.11 N., R.2 E., Yolo County, approximately 200 yards upstream from State Highway 24 bridge at Knights Landing, and approximately 0.3 mile upstream from gaging station.

PERIOD OF RECORD.--Chemical analyses: July 1960 to September 1971.

REMARKS.--Records furnished by California Department of Water Resources. Records of discharge given for 11391000 Sacramento River at Knights Landing.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT..												
14...	1145	8120	16.0	10.5	10	6.3	7.8	1.1	65	0	4.8	3.8
NOV..												
19...	1150	13200	12.0	10.9	--	--	6.9	--	60	0	--	5.9
DEC..												
17...	1215	25300	9.0	11.2	--	--	8.2	--	72	0	--	5.8
JAN..												
19...	1515	27100	8.5	11.3	--	--	4.6	--	51	0	--	3.6
FEB..												
23...	1500	12800	9.5	11.1	--	--	8.7	--	84	0	--	6.1
MAR..												
24...	1210	10900	13.5	10.3	--	--	7.4	--	78	0	--	5.1
APR..												
20...	1615	13500	12.0	10.7	--	--	5.1	--	68	0	--	3.3
MAY..												
25...	1345	15500	16.5	10.7	11	5.4	6.6	.8	68	0	7.1	1.6
JUNE..												
10...	1410	13200	18.0	10.1	--	--	6.8	--	69	0	--	2.8
JULY..												
15...	1405	9540	21.0	9.7	--	--	7.0	--	69	0	--	4.5
AUG..												
11...	1235	10200	22.0	9.9	--	--	7.8	--	70	0	--	5.0
SEP..												
28...	1245	11500	17.0	10.5	--	--	7.8	--	67	0	--	2.9

DATE	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	NITRATE (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)
OCT..											
14...	--	.3	--	--	0	81	.11	1780	51	0	53
NOV..											
19...	--	--	--	--	100	--	--	--	52	3	49
DEC..											
17...	--	--	--	--	100	--	--	--	61	2	59
JAN..											
19...	--	--	--	--	100	--	--	--	47	5	42
FEB..											
23...	--	--	--	--	100	--	--	--	50	0	69
MAR..											
24...	--	--	--	--	100	--	--	--	64	0	64
APR..											
20...	--	--	--	--	200	--	--	--	55	0	56
MAY..											
25...	--	.6	--	--	0	86	.12	3600	50	0	56
JUNE..											
10...	.20	.6	.060	.020	0	--	--	--	55	0	57
JULY..											
15...	.10	.4	.040	.020	100	--	--	--	52	0	57
AUG..											
11...	.20	.4	.040	.030	100	--	--	--	53	0	57
SEP..											
28...	.10	.4	.050	.030	0	--	--	--	48	0	55

11390650 SACRAMENTO RIVER ABOVE COLUSA TROUGH, AT KNIGHTS LANDING, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT. 14...	25	.5	135	7.4	90	--	--	--	--	--	--
NOV. 19...	--	.4	136	7.8	25	--	--	--	--	--	--
DEC. 17...	--	.5	156	7.9	80	--	--	--	--	--	--
JAN. 19...	--	.3	106	7.6	380	--	--	--	--	--	--
FEB. 23...	--	.5	168	8.0	20	--	--	--	--	--	--
MAR. 24...	--	.4	157	7.7	35	--	--	--	--	--	--
APR. 20...	--	.3	133	7.6	30	--	--	--	--	--	--
MAY 25...	22	.4	134	7.9	10	0	0	0	0	.0	0
JUNE 10...	--	.4	138	7.4	30	--	--	--	--	--	--
JULY 15...	--	.4	132	7.6	25	--	--	--	--	--	--
AUG. 11...	--	.5	138	7.8	20	--	--	--	--	--	--
SEP. 28...	--	.5	136	7.5	10	--	--	--	--	--	--

## SACRAMENTO RIVER BASIN

11390700 COLUSA TROUGH NEAR COLUSA, CALIF.

LOCATION.--Lat 39°11'43", long 122°03'34", in SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.34, T.15 N., R.2 W., Colusa County, at gaging station 3 miles west of Colusa, on State Highway 20, and 6 miles northeast of Williams.

PERIOD OF RECORD.--Chemical analyses: Water year 1953 (partial-record station), October 1953 to September 1971.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.											
14...	0835	146	16.5	8.2	33	26	64	2.6	235	0	82
NOV.											
19...	0910	152	10.0	9.6	37	31	84	2.9	273	0	125
DEC.											
17...	1005	715	8.0	11.1	33	26	82	3.2	224	0	118
JAN.											
19...	0930	1250	13.0	9.0	28	20	63	2.9	189	0	91
FEB.											
23...	0945	133	9.5	10.6	53	46	172	2.1	331	10	275
MAR.											
24...	0840	296	15.5	8.2	33	28	102	2.2	236	0	135
APR.											
20...	0900	198	14.0	9.3	25	19	49	1.8	158	0	83
MAY											
25...	0940	732	21.0	8.0	27	20	60	1.3	185	0	82
JUNE											
10...	0845	222	20.0	7.8	31	28	81	.8	202	0	128
JULY											
15...	0940	380	25.5	7.1	28	23	59	.8	213	0	70
AUG.											
11...	0800	551	26.0	6.6	29	20	50	.6	220	0	55
SEP.											
28...	0925	352	16.0	9.1	27	23	44	1.6	198	0	57

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT.										
14...	37	1.9	200	360	.49	142	188	0	193	42
NOV.										
19...	42	2.6	300	387	.53	159	218	0	224	45
DEC.										
17...	42	4.6	300	403	.55	778	190	6	184	48
JAN.										
19...	28	2.8	300	341	.46	1150	152	0	155	47
FEB.										
23...	92	4.8	200	780	1.06	280	322	34	288	54
MAR.										
24...	60	3.2	300	507	.69	405	200	6	194	53
APR.										
20...	28	1.7	200	305	.41	163	141	11	130	43
MAY										
25...	29	2.7	200	331	.45	654	150	0	152	46
JUNE										
10...	51	2.7	400	430	.58	258	193	27	166	48
JULY										
15...	25	2.8	300	241	.33	247	164	0	175	44
AUG.										
11...	26	1.2	400	294	.40	437	156	0	180	41
SEP.										
28...	24	2.2	200	301	.41	286	161	0	162	37



11390700 COLUSA TROUGH NEAR COLUSA, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT. 14...	2.0	617	7.5	100	--	--	--	--	--	--
NOV. 19...	2.5	748	8.0	45	--	--	--	--	--	--
DEC. 17...	2.6	701	8.3	150	--	--	--	--	--	--
JAN. 19...	2.2	593	--	550	--	--	--	--	--	--
FEB. 23...	4.2	1310	8.4	60	--	--	--	--	--	--
MAR. 24...	3.2	819	8.3	360	--	--	--	--	--	--
APR. 20...	1.8	490	8.0	140	--	--	--	--	--	--
MAY 25...	2.1	548	7.8	13	0	100	0	0	.0	0
JUNE 10...	2.5	774	7.9	70	--	--	--	--	--	--
JULY 15...	2.0	511	8.0	25	--	--	--	--	--	--
AUG. 11...	1.7	508	8.3	60	--	--	--	--	--	--
SEP. 28...	1.5	504	8.2	4	--	--	--	--	--	--

## SACRAMENTO RIVER BASIN

11392100 MIDDLE FORK FEATHER RIVER NEAR PORTOLA, CALIF.

LOCATION.--Lat 39°43'13", long 120°26'26", in SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec.29, T.23 N., R.14 E., Plumas County, at gaging station on right bank, 0.8 mile downstream from Big Grizzly Creek, and 1.6 miles northeast of Portola.

DRAINAGE AREA.--586 sq mi.

PERIOD OF RECORD.--Chemical analyses: May 1970 to September 1971.

Sediment records: Water years 1970-71 (partial-record station).

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
OCT.											
20...	0900	28	8.0	9.0	92	75	0	3.0	.8	.53	--
NOV.											
24...	1400	57	6.0	10.2	99	79	0	1.0	1.1	.33	--
DEC.											
29...	1515	102	.0	6.2	52	99	0	5.0	.5	.36	--
FEB.											
10...	1405	189	1.0	7.3	62	101	0	5.0	3.0	.36	--
MAR.											
03...	1010	170	.0	10.0	83	108	0	6.0	4.0	.41	--
APR.											
05...	1445	535	12.0	7.8	88	70	0	1.0	2.5	.03	--
28...	1020	894	10.0	8.3	88	74	0	5.3	3.0	.25	--
MAY											
25...	1415	798	18.0	6.6	84	77	0	5.5	3.0	.38	--
JUNE											
29...	0850	199	17.5	7.0	89	64	0	2.0	.9	--	--
JULY											
28...	1130	49	24.0	6.0	86	76	0	3.3	1.9	.31	--
AUG.											
17...	1300	19	20.0	7.4	97	80	0	4.3	1.8	.58	.74
SEP.											
29...	1545	22	10.5	9.3	100	89	0	5.8	3.3	.18	.30

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)	NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (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)	DIS- SOLVED SOLIDS (TONS PER DAY)	ALKA- LINITY AS CaCO <sub>3</sub> (MG/L)
OCT.											
20...	.56	--	--	.03	.05	.060	.020	96	.13	7.26	62
NOV.											
24...	.33	--	--	.00	.02	.040	.010	94	.13	14.5	65
DEC.											
29...	.39	--	--	.03	.05	.030	.010	124	.17	34.1	81
FEB.											
10...	.37	--	--	.01	.05	.030	.020	123	.17	62.8	83
MAR.											
03...	.41	--	--	.00	.05	.050	.030	142	.19	65.2	89
APR.											
05...	.18	.000	.10	.15	--	.090	.050	92	.13	133	57
28...	.34	--	.10	.09	--	.17	.020	102	.14	246	61
MAY											
25...	.43	--	.05	.05	--	.090	.070	95	.13	205	63
JUNE											
29...	.55	--	.02	1.1	--	.070	.030	86	.12	46.2	52
JULY											
28...	.55	--	.05	.24	--	.060	.020	96	.13	12.7	62
AUG.											
17...	.68	--	.06	.10	--	.050	.020	86	.12	4.41	66
SEP.											
29...	.22	--	.08	.04	--	.040	.010	122	.17	7.25	73

11392100 MIDDLE FORK FEATHER RIVER NEAR PORTOLA, CALIF.--Continued  
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SPECIFIC CONDUCTANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	DELAYED COLI- FORM (COL- ONIES PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 20...	135	7.4	35	8	1.4	60	800	--	3.0	.01
NOV. 24...	139	7.6	30	4	.6	16	248	--	3.0	.02
DEC. 29...	181	6.8	35	2	.8	6	--	64	4.0	.02
FEB. 10...	178	6.9	25	2	.7	8	--	376	5.0	.02
MAR. 03...	215	7.2	35	4	1.3	2	--	23	4.5	.02
APR. 05...	131	7.7	40	6	1.3	4	--	910	--	.00
28...	131	7.7	35	5	1.2	7	--	3200	--	.01
MAY 25...	129	7.5	35	4	1.9	6	--	12000	--	.00
JUNE 29...	114	7.4	50	6	1.7	96	--	6100	--	.01
JULY 28...	132	7.7	40	10	1.6	18	--	19000	--	.01
AUG. 17...	131	7.7	25	4	1.6	20	--	4400	--	.00
SEP. 29...	157	7.9	30	8	4.4	22	--	1800	7.5	.00

DATE	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
OCT. 20...	.00	.00	.00	.00	.00	.00	.00	.00
AUG., 1971 17...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 20...	.00	.00	.00	.00	.00	.00	.00
AUG., 1971 17...	.00	.00	--	--	.00	.00	.00

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
 WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
NOV. 24...	1500	5.5	57	12	1.8
DEC. 29...	1600	.0	102	2	.55
FEB. 10...	1500	1.0	189	5	2.6
MAR. 03...	1150	.0	170	8	3.7
APR. 05...	1500	13.0	538	16	23
28...	1305	10.0	892	10	24
MAY 25...	1555	18.0	800	8	17
JUNE 29...	1045	17.5	199	20	11
JULY 28...	1220	24.0	48	32	4.1
AUG. 17...	1410	20.0	19	20	1.0
SEP. 29...	1700	10.5	22	28	1.7

## SACRAMENTO RIVER BASIN

11392200 MIDDLE FORK FEATHER RIVER AT DELLEKER, CALIF.

LOCATION.--Lat 39°48'07", long 120°29'42", in NE¼ sec.3, T.22 N., R.13 E., Plumas County, 0.5 mile downstream from unnamed tributary, and 1.7 miles southwest of Portola.

DRAINAGE AREA.--597 sq mi.

PERIOD OF RECORD.--Chemical analyses: May 1970 to September 1971.  
Sediment records: Water years 1970-71 (partial-record station).

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
OCT.											
20...	1100	28	8.0	9.1	92	78	0	4.0	1.7	.65	--
NOV.											
24...	1530	57	5.5	10.6	101	79	0	3.0	1.7	.24	--
DEC.											
29...	1415	102	.0	8.9	74	98	0	5.0	.6	.59	--
FEB.											
10...	1305	189	2.0	10.7	93	101	0	5.0	2.8	.35	--
MAR.											
03...	0900	170	.0	11.0	91	117	0	6.0	5.0	.55	--
APR.											
05...	1345	535	12.5	8.4	94	70	0	2.0	2.5	.17	--
28...	1230	894	11.0	8.8	96	76	0	3.0	3.2	.27	--
MAY											
26...	1130	736	15.5	7.6	92	73	0	1.0	1.5	.27	--
JUNE											
29...	1115	199	18.0	7.5	95	64	0	7.8	1.1	--	--
JULY											
28...	1400	48	25.5	6.4	94	82	0	3.0	2.3	.38	--
AUG.											
17...	1815	19	23.0	7.5	106	86	0	4.5	2.7	.45	.64
SEP.											
29...	1415	24	9.5	9.2	97	94	0	5.5	3.0	.13	.29

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (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)	DIS- SOLVED SOLIDS (TONS PER DAY)	ALKA- LITY AS CaCO3 (MG/L)
OCT.											
20...	.67	--	--	.02	.05	.060	.020	102	.14	7.71	64
NOV.											
24...	.24	--	--	.00	.02	.040	.010	100	.14	15.4	65
DEC.											
29...	.62	--	--	.03	.05	.040	.020	126	.17	34.7	80
FEB.											
10...	.36	--	--	.01	.02	.030	.020	124	.17	63.3	83
MAR.											
03...	.58	--	--	.03	.02	.080	.060	147	.20	67.5	96
APR.											
05...	.32	.000	.10	.15	--	.090	.060	100	.14	144	57
28...	.34	--	.00	.07	--	.17	.010	108	.15	261	62
MAY											
26...	.39	--	.01	.12	--	.090	.040	64	.09	127	60
JUNE											
29...	.51	--	.01	.96	--	.060	.030	90	.12	48.4	52
JULY											
28...	.52	--	.02	.14	--	.050	.020	96	.13	12.4	67
AUG.											
17...	.61	--	.03	.16	--	.040	.020	94	.13	4.82	71
SEP.											
29...	.20	--	.09	.07	--	.050	.010	118	.16	7.65	77

## 11392200 MIDDLE FORK FEATHER RIVER AT DELLEKER, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SPECIFIC CONDUCTANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	DELAYED COLI- FORM (COL- ONIES PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 20...	149	7.6	40	7	1.1	34	100	--	3.0	.02
NOV. 24...	144	7.7	30	4	.7	2	140	--	3.0	.03
DEC. 29...	184	7.1	35	2	1.0	4	--	44	4.0	.03
FEB. 10...	179	7.2	30	2	1.1	2	--	80	5.5	.02
MAR. 03...	223	7.3	35	3	1.3	25	--	3700	5.0	.03
APR. 05...	131	7.8	40	6	1.1	8	--	800	--	.00
28...	133	7.9	35	6	1.3	8	--	1800	--	.00
MAY 26...	128	7.8	35	4	1.9	10	--	9500	--	.00
JUNE 29...	118	7.6	40	6	1.5	65	--	15000	--	.00
JULY 28...	139	7.9	40	8	1.7	6	--	3400	--	.00
AUG. 17...	148	8.0	25	4	1.7	6	--	11000	--	.00
SEP. 29...	168	8.0	25	8	1.1	6	--	1400	5.0	.00

DATE	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
OCT. 20...	.00	.00	.00	.00	.00	.00	.00	.00
AUG., 1971 17...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THON (UG/L)	METHYL PARA- THON (UG/L)	PARA- THON (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 20...	.00	.00	.00	.00	.00	.00	.00	.00
AUG., 1971 17...	.00	.00	--	--	--	.00	.00	.00

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDIM- ENT (MG/L)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY)
NOV. 24...	1600	5.5	57	13	2.0
DEC. 29...	1445	.0	102	3	.83
FEB. 10...	1315	2.0	189	6	3.1
MAR. 03...	0900	.0	170	6	2.8
APR. 05...	1330	13.0	538	23	33
28...	1330	11.5	892	10	24
MAY 26...	1130	15.5	736	7	14
JUNE 29...	1115	18.0	199	21	11
JULY 28...	1400	25.5	48	20	2.6
AUG. 17...	1430	23.0	19	16	.82
SEP. 29...	1535	9.5	24	15	.97

## SACRAMENTO RIVER BASIN

11392500 MIDDLE FORK FEATHER RIVER NEAR CLIO, CALIF.

LOCATION.--Lat 39°45'14", long 120°35'42", in SE $\frac{1}{4}$  sec.23, T.22 N., R.12 E., Plumas County, temperature recorder at gaging station on left bank, 0.6 mile upstream from Frazier Creek, 1.0 mile northwest of Clio, and 2.2 miles southeast of Blairsdon.

DRAINAGE AREA.--686 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1963 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 23.5°C Aug. 1; minimum, freezing point probably sometime during period of missing record in December and January.

Period of record:

Water temperatures: Maximum, 26.0°C Aug. 3, 1966; minimum (1963-66, 1968-71), freezing point on many days in 1963, 1969, and 1971.

REMARKS.--Recorder malfunction Dec. 12 to June 10, Aug. 26 to Sept. 13.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	10.0	7.0	5.0	1.5	0.5	--	--	--	--	--	--
2	13.0	9.5	7.0	5.0	0.5	0.5	--	--	--	--	--	--
3	13.0	9.5	7.0	6.0	0.5	0.5	--	--	--	--	--	--
4	13.0	10.0	7.0	7.0	1.0	0.5	--	--	--	--	--	--
5	13.0	10.0	7.5	7.0	1.0	1.0	--	--	--	--	--	--
6	13.0	11.0	7.5	6.0	1.5	1.0	--	--	--	--	--	--
7	11.5	8.5	7.0	5.5	1.5	1.5	--	--	--	--	--	--
8	10.5	7.0	7.5	6.5	1.5	1.0	--	--	--	--	--	--
9	10.5	8.0	7.5	7.0	1.0	0.5	--	--	--	--	--	--
10	12.0	8.5	7.5	7.5	0.5	0.0	--	--	--	--	--	--
11	11.5	8.5	7.5	7.5	0.0	0.0	--	--	--	--	--	--
12	12.0	9.0	7.5	6.5	--	--	--	--	--	--	--	--
13	11.0	8.5	6.5	5.5	--	--	--	--	--	--	--	--
14	11.0	7.5	5.5	5.0	--	--	--	--	--	--	--	--
15	10.0	7.0	5.5	5.0	--	--	--	--	--	--	--	--
16	9.5	7.0	5.0	4.5	--	--	--	--	--	--	--	--
17	10.0	7.0	5.0	4.5	--	--	--	--	--	--	--	--
18	9.5	8.5	4.5	4.5	--	--	--	--	--	--	--	--
19	10.0	7.0	4.5	3.5	--	--	--	--	--	--	--	--
20	10.0	8.5	4.0	3.0	--	--	--	--	--	--	--	--
21	9.0	8.0	4.0	3.5	--	--	--	--	--	--	--	--
22	8.5	7.5	4.5	4.0	--	--	--	--	--	--	--	--
23	8.0	7.0	6.0	4.5	--	--	--	--	--	--	--	--
24	7.0	5.5	5.5	4.5	--	--	--	--	--	--	--	--
25	6.0	4.5	5.0	4.5	--	--	--	--	--	--	--	--
26	6.0	4.5	4.5	4.0	--	--	--	--	--	--	--	--
27	4.5	3.5	4.0	4.0	--	--	--	--	--	--	--	--
28	4.5	2.5	4.0	2.5	--	--	--	--	--	--	--	--
29	4.5	2.5	2.5	2.5	--	--	--	--	--	--	--	--
30	5.5	4.0	2.5	1.5	--	--	--	--	--	--	--	--
31	6.5	5.0	--	--	--	--	--	--	--	--	--	--
AVE	9.6	7.3	5.7	4.9	--	--	--	--	--	--	--	--
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	20.0	17.0	23.5	20.5	--	--
2	--	--	--	--	--	--	20.5	18.0	22.5	20.0	--	--
3	--	--	--	--	--	--	21.0	18.5	22.0	19.5	--	--
4	--	--	--	--	--	--	21.0	18.0	21.5	18.5	--	--
5	--	--	--	--	--	--	21.0	18.5	21.0	18.5	--	--
6	--	--	--	--	--	--	21.0	18.5	21.0	18.5	--	--
7	--	--	--	--	--	--	21.0	18.0	20.5	18.0	--	--
8	--	--	--	--	--	--	21.0	18.0	20.5	18.0	--	--
9	--	--	--	--	--	--	20.5	18.0	20.5	18.5	--	--
10	--	--	--	--	--	--	20.0	17.5	21.0	18.5	--	--
11	--	--	--	--	20.0	17.0	20.0	16.5	21.0	18.5	--	--
12	--	--	--	--	20.0	17.0	20.0	16.5	21.5	18.5	--	--
13	--	--	--	--	20.0	17.0	21.0	17.0	21.0	17.5	--	--
14	--	--	--	--	20.0	17.0	21.5	18.0	20.5	16.5	20.0	13.5
15	--	--	--	--	21.0	18.0	22.0	19.0	19.5	16.5	19.0	12.5
16	--	--	--	--	21.5	19.0	22.5	19.5	19.5	16.5	19.0	12.0
17	--	--	--	--	21.5	19.0	22.0	19.5	19.0	16.0	16.5	12.0
18	--	--	--	--	21.0	19.0	22.0	20.0	19.0	16.0	15.0	9.5
19	--	--	--	--	20.5	18.5	23.0	19.5	19.5	16.5	15.5	8.0
20	--	--	--	--	21.0	18.0	22.5	20.0	19.5	15.5	15.5	9.0
21	--	--	--	--	19.5	18.0	22.5	19.0	18.0	14.5	15.5	9.0
22	--	--	--	--	20.0	16.0	22.0	19.5	18.0	14.5	16.0	8.5
23	--	--	--	--	20.0	16.0	22.0	18.5	19.0	15.5	16.0	9.5
24	--	--	--	--	19.0	16.0	21.5	18.5	19.5	16.0	15.0	9.0
25	--	--	--	--	18.0	15.0	21.5	18.5	19.5	16.5	13.0	10.5
26	--	--	--	--	18.0	15.5	22.0	19.0	--	--	12.0	9.0
27	--	--	--	--	17.0	14.5	22.0	18.5	--	--	13.0	8.5
28	--	--	--	--	17.0	14.5	22.5	19.5	--	--	13.0	9.5
29	--	--	--	--	18.5	15.0	22.5	19.5	--	--	11.5	6.5
30	--	--	--	--	19.0	16.5	22.5	20.0	--	--	8.5	6.0
31	--	--	--	--	--	--	23.0	20.5	--	--	--	--
AVE	--	--	--	--	--	--	21.5	18.6	20.3	17.3	--	--

11393300 MIDDLE FORK FEATHER RIVER·BELOW LONG VALLEY CREEK, AT SLOAT, CALIF.

LOCATION.--Lat 39°51'58", long 120°44'00", in SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec.10, T.23 N., R.11 E., Plumas County, Plumas National Forest, 0.1 mile downstream from Long Valley Creek, at Sloat.

DRAINAGE AREA.--813 sq mi.

PERIOD OF RECORD.--Chemical analyses: May 1970 to September 1971.  
Sediment records: Water years 1970-71 (partial-record station).

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
OCT. 20...	1415	116	11.5	10.3	111	76	2	5.0	.9	.27	--
NOV. 24...	1130	146	7.5	11.2	109	72	1	4.0	1.1	.21	--
DEC. 29...	0950	314	1.0	12.4	102	71	0	4.0	.1	.20	--
FEB. 10...	0945	426	2.0	12.0	102	79	0	3.0	1.4	.25	--
MAR. 02...	1525	396	2.5	12.1	104	80	0	5.0	2.0	.28	--
APR. 06...	0930	1220	7.5	10.2	100	52	0	.0	1.3	.60	--
28...	1510	1340	11.0	9.6	102	64	0	5.5	2.1	.40	--
MAY 26...	0830	2090	9.5	9.8	100	43	0	.0	.9	.21	--
JUNE 29...	1400	728	15.0	8.8	102	40	0	3.5	.8	.06	--
JULY 28...	1615	176	25.0	7.1	100	76	0	2.8	5.2	.22	--
AUG. 17...	1940	96	21.5	7.3	97	76	4	1.8	1.3	.44	.52
SEP. 29...	0945	97	9.5	9.6	98	82	0	4.8	1.7	.06	.14

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (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)	DIS- SOLVED SOLIDS (TONS PER DAY)	ALKA- LINITY AS CaCO <sub>3</sub> (MG/L)
OCT. 20...	.27	--	--	.00	.02	.040	.020	96	.13	30.1	66
NOV. 24...	.21	--	--	.00	.00	.030	.010	86	.12	33.9	61
DEC. 29...	.20	--	--	.00	.07	.030	.020	87	.12	73.8	58
FEB. 10...	.26	--	--	.01	.02	.020	.010	94	.13	108	65
MAR. 02...	.28	--	--	.00	.02	.040	.030	104	.14	111	66
APR. 06...	.72	.000	.10	.12	--	.050	.030	74	.10	244	43
28...	.48	--	.00	.08	--	.12	.010	100	.14	362	52
MAY 26...	.28	--	.01	.07	--	.060	.040	34	.05	192	35
JUNE 29...	.26	--	.00	.20	--	.040	.020	57	.08	112	33
JULY 28...	.38	--	.02	.16	--	.070	.050	106	.14	50.4	62
AUG. 17...	.51	--	.01	.07	--	.040	.020	82	.11	21.3	69
SEP. 29...	.10	--	.04	.04	--	.060	.030	84	.11	22.0	67

## SACRAMENTO RIVER BASIN

11393300 MIDDLE FORK FEATHER RIVER BELOW LONG VALLEY CREEK, AT SLOAT, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	DELAYED COLI- FORM (COL- ONIES PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 20...	145	8.4	15	2	1.0	49	210	--	1.0	.01
NOV. 24...	133	8.4	15	2	.5	5	188	--	2.0	.04
DEC. 29...	130	7.8	15	2	.6	13	--	44	2.0	.03
FEB. 10...	134	7.9	15	2	.6	4	--	61	3.5	.01
MAR. 02...	150	7.6	20	3	1.0	1	--	25	2.5	.01
APR. 06...	92	7.9	25	5	.5	8	--	680	--	--
28...	108	8.1	25	3	.7	0	--	120	--	.00
MAY 26...	77	7.6	10	4	.7	28	--	3400	--	.00
JUNE 29...	76	7.9	15	3	.4	15	--	1600	--	.00
JULY 28...	132	8.1	15	1	.8	5	--	2800	--	.00
AUG. 17...	132	8.5	10	1	.6	24	--	2500	--	.00
SEP. 29...	141	8.3	15	1	.7	1	--	1300	4.0	.00

DATE	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
OCT. 20...	.00	.00	.00	.00	.00	.00	.00	.00
AUG., 1971 17...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 20...	.00	.00	.00	.00	.00	.00	.00	.00
AUG., 1971 17...	.00	.00	--	--	--	.00	.00	.00

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
NOV. 24...	1130	7.5	146	4	1.6
DEC. 29...	1100	1.0	314	3	2.5
FEB. 10...	1055	2.0	426	4	4.6
MAR. 02...	1745	2.5	396	6	6.4
APR. 06...	0930	7.5	1220	22	72
28...	1700	11.0	1340	18	65
MAY 26...	0830	9.5	2090	33	186
JUNE 29...	1530	--	725	17	33
JULY 28...	1700	25.0	176	6	2.9
AUG. 17...	1610	21.5	92	12	3.0
SEP. 29...	1030	9.5	96	3	.78



## 11394500 MIDDLE FORK FEATHER RIVER NEAR MERRIMAC, CALIF.

LOCATION.--Lat 39°42'30", long 121°16'10", in NW¼NE¼ sec.2, T.21 N., R.6 E., Butte County, Plumas National Forest, temperature recorder at gaging station, 400 ft downstream from bridge on Milsap Bar Road, 500 ft downstream from Little North Fork, 4.5 miles southeast of Merrimac, and 20 miles northeast of Oroville.

DRAINAGE AREA.--1,062 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1963 to June 1966, May 1970 to September 1971.

Water temperatures: October 1962 to September 1971.

Sediment records: Water years 1970-71 (partial-record station).

EXTREMES, 1970-71:

Water temperatures: Maximum, 22.0°C Aug. 1, 2, 11, 12; minimum, 1.0°C Jan. 4.

Period of record:

Water temperatures: Maximum (1964-71), 24.0°C Aug. 3, 1966; minimum (1962-64, 1965-71), 0.5°C on several days in 1966-68, and 1970.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
OCT. 21...	1245	282	10.0	10.4	97	78	0	7.0	1.4	.27	--
NOV. 23...	1345	408	7.5	11.5	101	67	0	6.0	1.3	.12	--
JAN. 04...	1245	789	1.0	13.6	101	64	0	5.0	.1	.07	--
FEB. 04...	1300	1690	4.0	--	--	--	--	5.0	1.4	--	--
23...	1100	1660	4.0	12.5	101	67	0	4.0	1.2	.28	--
MAR. 31...	1130	4800	7.0	11.7	102	50	0	1.0	1.4	.76	--
APR. 29...	0930	3040	10.0	10.9	102	56	0	--	1.8	.33	--
MAY 27...	1030	4550	10.0	10.8	101	36	0	.8	.8	.21	--
JUNE 30...	0945	1750	14.5	9.7	100	40	0	9.8	.9	.38	--
JULY 29...	1000	458	20.0	8.1	93	67	0	3.5	1.4	.12	--
AUG. 17...	1045	309	18.5	8.6	97	83	--	4.8	1.9	.27	.36
SEP. 28...	1345	250	12.0	10.1	100	80	0	1.8	2.0	.04	.11

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)	NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (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)	DIS- SOLVED SOLIDS (TONS PER DAY)	ALKA- LITY AS CaCO <sub>3</sub> (MG/L)
OCT. 21...	.27	--	--	.00	.00	.020	.000	94	.13	71.6	64
NOV. 23...	.12	--	--	.00	.00	.020	.010	78	.11	85.9	55
JAN. 04...	.07	--	--	.00	.05	.010	.010	76	.10	162	52
FEB. 04...	--	--	--	--	--	.030	--	77	.10	351	--
23...	.28	--	--	.00	.02	.020	.010	79	.11	354	55
MAR. 31...	.86	.000	.20	.10	--	.10	.030	52	.07	674	41
APR. 29...	.38	--	.00	.05	--	.11	.000	72	.10	591	46
MAY 27...	.22	--	.01	.01	--	.050	.030	34	.05	418	30
JUNE 30...	.44	--	.01	.06	--	.040	.030	55	.07	260	33
JULY 29...	.29	--	.05	.17	--	.040	.020	82	.11	101	55
AUG. 17...	.36	--	.00	.09	--	.020	.010	86	.12	71.7	68
SEP. 28...	.08	--	.03	.04	--	.040	.010	64	.09	43.2	66

## SACRAMENTO RIVER BASIN

11394500 MIDDLE FORK FEATHER RIVER NEAR MERRIMAC, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SPECIFIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	DELAYED COLI- FORM (COL- ONIES PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE- BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 21...	150	8.1	5	1	.6	7	440	--	.5	.03
NOV. 23...	125	8.0	5	1	.2	0	162	--	1.0	.07
JAN. 04...	123	7.8	5	1	.2	2	--	40	1.5	.04
FEB. 04...	119	--	5	1	--	--	--	--	--	.05
23...	121	7.7	10	2	--	2	--	76	3.0	.01
MAR. 31...	88	7.9	20	10	.3	3	--	320	--	.00
APR. 29...	97	8.0	10	2	.4	3	--	48	--	.00
MAY 27...	65	7.6	5	5	.4	9	--	1200	--	.00
JUNE 30...	75	7.8	5	2	.3	14	--	800	--	.00
JULY 29...	118	8.1	5	0	.7	3	--	3500	--	.00
AUG. 17...	133	--	5	0	.3	0	--	4000	--	.00
SEP. 28...	145	8.3	5	1	.2	0	--	240	1.5	.00

DATE	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
OCT. 21...	.00	.00	.00	.00	.00	.00	.00	.00
AUG., 1971 17...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	HALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 21...	.00	.00	.00	.00	.00	.00	.00	.00
AUG., 1971 17...	.00	.00	--	--	--	.00	.00	.00

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
NOV. 23...	1600	7.5	408	2	2.2
JAN. 04...	1330	1.0	789	1	2.1
FEB. 04...	1340	4.0	1690	4	18
23...	1145	4.5	1660	4	18
MAR. 31...	1350	7.0	4800	37	480
APR. 29...	1135	10.0	3040	6	49
MAY 27...	1130	9.5	4550	15	184
JUNE 30...	0915	14.5	1750	6	28
JULY 29...	1045	19.5	458	7	8.7
AUG. 17...	1800	19.5	302	8	6.5
SEP. 28...	1545	12.0	250	4	2.7

11394500 MIDDLE FORK FEATHER RIVER NEAR MERRIMAC, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	13.0	8.0	7.5	5.5	5.0	3.0	3.0	5.0	4.5	2.5	2.0
2	15.0	14.0	9.0	8.0	5.0	4.5	3.0	2.0	5.0	5.0	2.5	2.0
3	14.5	13.5	9.5	9.0	4.5	4.0	2.0	1.5	5.0	4.5	4.0	2.5
4	14.5	13.5	10.0	9.5	4.5	4.0	1.5	1.0	4.5	4.0	5.0	4.0
5	14.5	14.0	10.5	10.0	5.0	4.5	2.0	1.5	5.5	4.5	5.0	4.5
6	14.5	13.5	10.5	10.5	5.5	5.0	2.0	2.0	6.0	5.5	4.5	4.5
7	13.5	12.0	10.5	10.0	5.5	5.5	2.5	2.0	6.0	5.5	5.0	4.5
8	12.0	11.5	10.0	9.5	5.5	5.5	3.0	2.5	5.5	5.0	5.5	4.5
9	12.0	11.0	9.5	9.5	5.5	5.5	3.5	3.0	5.0	5.0	5.5	5.0
10	12.5	11.5	9.5	9.5	5.5	5.0	4.0	3.5	5.5	5.0	5.5	5.0
11	12.5	11.5	9.5	9.5	5.0	4.5	4.0	4.0	6.0	5.5	5.5	5.5
12	12.5	11.5	9.5	9.0	4.5	4.0	4.0	3.0	6.0	6.0	5.5	5.0
13	12.5	11.5	9.0	7.5	4.0	4.0	3.0	2.0	6.0	5.5	5.0	4.5
14	11.5	11.0	7.5	7.0	4.0	4.0	3.0	2.0	5.5	5.5	4.5	4.0
15	11.0	10.5	7.0	7.0	4.0	4.0	3.5	3.0	6.0	5.5	4.5	4.0
16	11.0	10.0	7.0	7.0	4.0	3.5	4.0	3.5	5.5	5.5	5.5	4.5
17	10.5	10.0	7.0	7.0	3.5	3.5	4.5	4.0	5.5	5.0	6.0	5.5
18	10.5	10.0	7.0	7.0	3.5	3.5	5.0	4.5	5.0	5.0	6.0	5.5
19	10.0	10.0	7.0	7.0	3.5	3.0	5.0	5.0	5.0	4.5	5.5	5.5
20	10.0	10.0	7.0	6.0	3.0	2.5	5.5	5.0	4.5	4.0	6.5	5.5
21	10.0	9.5	6.5	6.0	2.5	2.5	5.5	5.0	4.5	4.0	7.5	6.5
22	9.5	9.5	7.0	6.0	3.5	2.5	5.0	5.0	4.5	4.0	8.0	7.5
23	9.5	9.0	7.5	7.0	3.5	3.5	5.0	5.0	5.0	4.0	8.5	8.0
24	9.0	9.0	8.0	7.5	3.5	2.5	5.0	5.0	5.5	5.0	8.0	7.0
25	9.5	9.0	8.0	8.0	2.5	2.0	5.0	4.5	5.5	5.0	7.5	7.0
26	9.0	8.5	8.0	7.0	2.0	2.0	4.5	4.5	5.0	3.0	7.5	6.0
27	8.5	7.5	7.0	6.5	2.0	2.0	5.0	4.5	3.0	2.5	7.0	6.0
28	7.5	7.0	6.5	4.5	2.0	2.0	5.0	4.5	2.5	2.5	8.0	7.0
29	7.0	6.5	5.0	4.5	2.5	2.0	4.5	4.5	--	--	8.5	7.5
30	7.0	6.5	5.5	5.0	3.0	2.5	4.5	4.5	--	--	8.5	8.0
31	8.0	7.0	--	--	3.0	3.0	4.5	4.5	--	--	8.0	7.0
AVE	11.1	10.4	8.1	7.6	3.9	3.6	3.9	3.5	5.1	4.7	6.0	5.3
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.0	10.0	10.0	8.0	8.0	16.5	15.5	22.0	20.5	18.0	16.5
2	8.0	7.5	10.0	9.5	9.5	8.0	17.0	16.0	22.0	20.5	18.0	17.0
3	8.5	8.0	9.5	9.0	11.0	9.5	17.0	16.5	21.5	20.5	17.5	16.0
4	8.5	8.0	9.0	9.0	11.5	11.0	17.0	16.5	21.0	19.5	17.0	15.5
5	9.0	8.5	9.0	9.0	12.5	11.5	17.5	17.0	20.5	19.0	17.0	16.0
6	9.0	9.0	9.5	9.0	12.5	12.0	17.5	17.0	20.5	19.5	17.0	16.0
7	9.0	8.5	10.0	9.5	13.0	12.5	17.5	16.5	20.5	19.5	16.5	15.5
8	8.5	8.0	10.0	9.5	12.5	12.5	17.5	16.5	20.5	19.0	16.5	15.0
9	8.5	8.0	10.5	9.5	12.5	12.0	17.5	17.0	21.0	19.5	16.5	15.0
10	8.5	8.0	11.5	10.5	12.5	12.0	17.0	16.5	21.5	20.0	17.0	15.0
11	8.0	7.5	11.5	11.0	12.5	12.0	16.5	16.0	22.0	20.5	17.0	15.0
12	8.5	8.0	11.5	11.0	12.5	12.0	17.0	16.0	22.0	20.5	17.0	16.0
13	9.0	8.5	11.5	10.5	12.0	11.0	17.5	17.0	21.5	20.0	18.0	16.5
14	9.5	9.0	11.0	10.0	12.5	11.5	18.0	17.5	20.5	19.0	18.0	16.5
15	9.5	9.5	11.0	10.0	13.0	12.5	19.0	18.0	20.0	18.5	18.0	16.5
16	9.5	9.5	11.0	9.0	13.5	13.0	19.5	19.0	19.5	18.5	17.5	16.5
17	9.5	8.0	9.5	8.0	13.5	13.0	20.0	19.5	19.5	18.0	17.0	15.0
18	8.0	7.5	10.0	9.0	13.5	13.0	20.5	20.0	19.5	18.0	15.5	14.0
19	8.5	7.5	11.0	10.0	13.5	13.5	21.0	20.5	19.5	18.0	14.5	13.0
20	8.5	7.5	11.0	10.5	14.0	13.5	21.5	20.5	19.0	17.5	14.5	13.0
21	7.5	7.0	10.5	8.5	14.5	14.0	21.5	21.0	18.5	17.5	14.5	13.5
22	7.5	7.5	10.0	8.0	14.5	14.0	21.0	20.5	18.5	17.5	14.5	13.5
23	8.0	7.5	11.0	10.0	14.5	14.0	21.0	20.5	19.0	17.5	14.5	13.5
24	8.0	7.5	11.5	11.0	14.5	14.0	20.5	19.5	19.0	17.5	14.5	13.5
25	8.0	7.5	11.5	11.0	14.0	13.5	20.5	19.5	19.5	18.0	14.0	13.0
26	8.0	7.5	11.5	10.5	14.0	13.0	20.0	19.0	20.0	19.0	13.0	12.5
27	9.0	8.0	10.5	9.0	13.0	12.0	20.5	19.5	20.5	19.0	12.5	12.0
28	10.0	9.0	9.0	9.0	13.0	12.0	21.0	19.5	20.0	19.0	12.5	11.5
29	10.5	10.0	9.0	9.0	14.0	13.0	21.5	19.5	19.5	18.0	11.5	10.5
30	10.0	10.0	9.0	8.5	15.5	14.0	21.0	20.0	19.0	17.0	11.0	10.0
31	--	--	8.5	7.5	--	--	21.5	20.5	19.0	17.0	--	--
AVE	8.7	8.1	10.3	9.5	12.9	12.3	19.1	18.3	20.2	18.8	15.7	14.4

## SACRAMENTO RIVER BASIN

11401180 LITTLE GRIZZLY CREEK NEAR GENESEE, CALIF.

LOCATION.--Lat 40°00'50", long 120°45'11", in NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 25 N., R. 11 E., Plumas County, Plumas National Forest, temperature recorder at gaging station on right bank, 2.5 miles upstream from Indian Creek, and 2 miles south of Genesee.

DRAINAGE AREA.--29.6 sq mi.

PERIOD OF RECORD.--Water temperatures: August 1964 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 19.0°C July 31, Aug. 1, 11; minimum, freezing point Jan. 13, 14, 16.

Period of record:

Water temperatures: Maximum, 20.0°C July 15, 1970; minimum, freezing point on many days during winter period of most years.

REMARKS.--Clock stopped Oct. 23-28; range in temperature, 5.5°C to 7.0°C.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	7.0	4.5	3.5	2.5	0.5	1.5	1.0	3.0	2.0	3.5	3.0
2	9.0	7.0	5.0	3.5	1.5	0.5	1.0	0.5	3.0	2.5	4.0	2.5
3	9.0	7.0	5.5	3.5	2.0	1.5	1.0	0.5	3.0	2.0	4.0	3.0
4	9.5	7.5	6.0	5.5	4.0	2.0	0.5	0.5	3.5	2.5	4.0	3.5
5	9.5	7.5	6.0	6.0	4.0	3.5	1.0	0.5	4.0	3.5	3.5	3.0
6	9.5	7.5	6.0	5.0	4.0	3.5	1.0	0.5	4.0	3.0	4.0	3.0
7	7.5	5.5	6.0	4.5	4.5	4.0	1.0	1.0	3.0	2.0	5.0	3.5
8	7.0	5.0	6.0	5.0	5.0	4.5	1.5	1.0	3.0	2.0	5.0	3.5
9	8.5	6.0	7.0	5.5	5.0	4.5	2.0	1.5	4.0	2.5	5.5	4.5
10	8.5	7.0	6.0	5.0	4.5	4.0	2.0	2.0	4.5	3.5	6.0	5.0
11	7.5	5.5	6.0	5.5	4.5	3.5	2.0	1.0	4.0	3.5	6.0	5.5
12	8.0	6.0	5.5	4.0	3.5	2.5	1.5	0.5	4.0	3.5	5.5	3.5
13	7.5	5.0	4.0	3.0	3.0	2.0	0.5	0.0	4.0	3.0	4.5	4.5
14	6.0	4.0	4.0	3.0	3.0	2.0	0.5	0.0	4.0	3.0	4.5	4.0
15	6.0	4.0	4.0	3.0	3.0	1.0	1.0	0.5	4.5	4.0	5.0	4.0
16	6.0	4.0	4.0	3.5	2.0	1.5	1.5	0.0	4.5	3.5	5.0	4.0
17	6.5	4.5	3.5	3.0	2.0	1.5	1.0	0.5	4.5	4.5	4.0	3.0
18	7.0	6.0	4.0	3.0	2.0	1.5	3.5	1.0	4.5	3.5	4.0	2.5
19	7.0	5.0	3.5	3.0	2.0	1.5	4.0	3.0	4.5	3.0	4.5	2.5
20	6.5	6.0	3.5	2.5	2.0	1.0	3.5	3.0	4.5	3.0	5.5	4.0
21	6.5	5.5	5.0	3.5	2.5	2.0	3.0	2.5	4.5	3.5	6.0	4.0
22	7.0	5.5	5.5	5.0	3.0	2.0	3.5	2.5	4.5	4.0	6.0	5.0
23	--	--	6.0	5.0	2.0	2.0	3.5	3.0	4.5	4.0	6.0	4.5
24	--	--	6.5	5.0	2.0	1.5	3.5	2.5	4.5	3.5	5.5	5.0
25	--	--	6.5	4.5	2.0	1.0	3.5	2.5	4.5	3.5	5.0	4.5
26	--	--	5.0	4.0	1.0	0.5	3.0	2.0	4.0	3.0	5.0	4.0
27	--	--	4.5	3.5	0.5	0.5	3.0	2.0	3.5	3.5	5.0	4.5
28	--	--	3.5	2.0	1.0	0.5	2.5	2.0	3.5	3.5	5.5	4.0
29	5.5	2.0	3.5	3.0	1.5	0.5	2.5	2.0	--	--	5.5	4.0
30	4.0	3.5	3.5	1.5	1.5	1.5	2.5	2.0	--	--	5.5	3.5
31	4.5	3.5	--	--	1.5	1.0	3.0	2.0	--	--	4.5	2.5
AVE	7.3	5.5	5.0	3.9	2.7	1.9	2.1	1.4	4.0	3.2	4.9	3.8
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.0	3.0	6.5	4.0	6.5	4.5	14.0	9.5	19.0	15.5	14.5	11.0
2	5.5	4.0	6.5	4.0	9.5	4.5	14.0	10.0	18.5	15.0	14.5	12.5
3	5.5	4.0	5.5	3.5	9.5	6.0	14.0	9.5	18.0	15.0	13.5	11.0
4	6.0	4.0	5.5	3.5	9.5	6.0	14.5	10.5	17.5	14.0	14.0	11.0
5	6.5	4.0	6.0	3.0	10.5	6.0	15.0	10.5	17.5	14.0	14.0	11.5
6	5.5	4.5	6.0	3.5	11.0	6.5	15.0	11.0	18.0	14.5	14.0	12.0
7	5.5	4.0	6.5	4.5	10.5	6.5	15.0	11.0	17.5	14.0	13.5	10.5
8	6.0	3.5	5.5	4.5	10.5	6.5	14.5	10.5	17.5	14.0	13.5	10.5
9	6.0	4.0	7.5	4.5	9.5	6.5	15.0	11.0	18.5	14.5	14.0	11.0
10	5.0	3.0	7.5	4.5	10.0	7.0	14.0	10.5	18.5	15.0	14.0	11.0
11	6.5	3.5	7.5	4.0	10.5	6.5	14.5	10.0	19.0	15.5	14.0	11.5
12	6.5	3.5	7.0	4.5	10.0	6.5	15.0	10.5	18.5	15.0	14.5	11.5
13	6.0	4.0	7.0	4.5	11.0	6.5	15.5	11.5	17.0	13.5	15.0	12.5
14	6.5	4.0	8.0	4.0	11.5	6.5	16.5	12.0	16.0	12.5	14.5	12.5
15	6.0	3.5	7.5	4.5	12.0	7.5	16.5	13.0	16.0	12.5	14.0	11.5
16	6.0	3.5	7.0	3.5	12.0	7.5	16.5	13.5	16.0	13.0	13.5	11.0
17	4.5	2.5	7.0	3.5	12.0	7.5	17.5	14.0	16.0	12.5	13.5	10.5
18	5.5	3.0	8.0	3.5	12.0	8.0	17.5	15.0	16.0	12.5	11.5	9.0
19	7.0	3.0	8.5	4.5	12.5	8.0	18.0	14.5	16.5	13.0	11.5	8.5
20	5.5	3.0	8.0	5.0	13.0	8.0	18.0	14.5	15.5	12.0	11.5	9.5
21	5.5	2.5	5.5	3.0	13.0	8.5	17.5	14.0	15.0	11.5	11.0	9.0
22	6.0	3.0	9.0	4.5	13.0	8.5	17.5	14.0	15.5	12.0	11.5	9.0
23	6.0	4.0	9.5	5.0	13.0	8.0	17.0	13.5	15.5	12.0	11.5	9.5
24	5.0	3.0	9.5	6.0	12.5	8.0	17.0	13.0	16.0	13.0	11.5	9.0
25	5.5	3.5	9.5	6.0	12.5	8.0	17.5	14.0	17.0	14.0	11.0	10.0
26	6.0	4.0	8.0	6.0	11.5	10.0	17.5	14.5	17.5	14.5	10.0	9.0
27	8.0	4.0	7.5	6.0	11.5	9.0	17.5	13.5	17.0	14.5	9.5	8.0
28	7.5	4.0	6.5	6.0	12.0	7.5	18.0	14.5	17.0	13.5	9.5	8.0
29	7.5	4.0	7.0	5.5	12.5	8.0	17.5	14.0	15.5	12.5	9.5	7.5
30	7.0	3.5	6.5	4.5	13.5	8.5	18.0	15.0	14.5	12.0	8.0	7.0
31	--	--	6.0	4.5	--	--	19.0	16.0	14.5	13.0	--	--
AVE	6.0	3.6	7.2	4.5	11.3	7.2	16.3	12.5	16.8	13.5	12.5	10.2

## 11401500 INDIAN CREEK NEAR CRESCENT MILLS, CALIF.

LOCATION.--Lat 40°04'42", long 120°55'36", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.25, T.26 N., R.9 E., Plumas County, temperature recorder at gaging station on left bank, 0.8 mile upstream from Dixie Creek, and 1.5 miles south of Crescent Mills.

DRAINAGE AREA.--739 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1951-58 (partial-record station), October 1958 to September 1963, water years 1964-66 (partial-record station).

Water temperatures: October 1962 to September 1971.

Sediment records: Water years 1957-66 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 25.5°C Aug. 1; minimum, freezing point on several days during January to March.

Period of record:

Water temperatures (1962-65, 1966-71): Maximum, 28.0°C July 26-28, 1963; minimum (1962-64, 1966-71), freezing point on many days during most years.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	10.5	10.0	6.0	2.5	2.0	2.5	1.5	4.0	1.0	3.0	0.0
2	16.0	10.0	10.0	6.5	2.0	0.5	1.5	0.0	4.0	1.5	3.0	0.0
3	15.5	10.5	9.0	7.0	2.0	1.0	0.5	0.0	3.0	0.5	4.0	1.5
4	15.5	11.0	8.5	8.0	4.0	2.0	1.0	0.0	3.5	1.0	4.5	2.5
5	14.5	11.0	9.0	8.0	6.0	4.0	1.0	0.0	5.0	2.5	4.5	1.0
6	13.5	10.5	8.0	7.0	6.5	5.5	1.5	0.5	5.5	3.0	5.0	1.5
7	12.5	8.0	8.5	6.5	5.5	5.0	2.5	0.5	4.5	1.5	5.5	2.5
8	13.0	8.0	9.0	7.5	5.5	5.0	3.0	1.0	4.5	1.0	6.0	2.5
9	13.0	9.0	10.5	8.5	6.5	4.5	4.0	2.0	4.5	1.0	5.5	3.5
10	14.0	9.5	9.0	7.5	4.5	3.0	3.0	2.5	5.5	2.0	5.5	3.5
11	13.5	9.5	9.0	8.0	4.5	3.0	2.5	1.0	5.5	2.5	6.0	5.0
12	14.0	10.0	9.5	7.0	4.0	2.0	1.0	0.0	5.0	2.0	5.5	3.0
13	13.5	9.0	8.0	5.0	2.5	1.5	0.0	0.0	5.0	2.5	5.5	2.0
14	12.5	8.0	7.0	4.0	3.0	2.0	2.0	0.0	4.5	2.5	5.0	2.5
15	12.5	8.0	7.0	4.5	3.5	2.0	2.0	1.0	5.0	3.5	6.5	3.0
16	12.0	8.0	8.5	5.5	2.0	1.0	2.5	2.0	4.0	2.0	6.5	3.5
17	11.5	8.0	8.0	5.0	2.0	1.0	2.5	2.0	4.5	3.0	6.5	3.0
18	11.0	9.0	7.0	5.0	2.5	1.0	3.0	2.0	5.0	3.0	6.5	2.0
19	11.5	9.0	7.0	3.5	2.5	0.5	3.5	2.5	4.5	3.0	7.5	2.0
20	10.5	8.5	7.0	4.0	2.0	1.0	4.5	3.0	4.0	1.0	8.0	3.5
21	9.5	8.5	6.5	5.0	2.5	1.5	4.0	1.5	3.0	1.5	8.0	4.0
22	10.0	8.0	8.0	6.5	4.0	2.5	3.5	2.0	3.5	1.5	7.0	4.5
23	9.5	8.5	8.5	7.0	3.0	2.0	3.5	1.5	5.0	2.0	5.5	4.5
24	9.5	7.5	8.5	6.5	2.0	0.5	3.5	1.5	5.0	2.0	6.0	3.5
25	9.5	7.5	8.5	6.5	1.0	0.5	3.5	1.0	4.5	2.0	5.5	4.0
26	9.5	6.5	6.5	4.5	1.0	0.5	4.0	1.0	3.5	0.0	4.5	3.5
27	9.0	5.0	4.5	3.5	2.0	0.5	4.0	1.0	2.5	0.0	7.0	3.0
28	8.5	5.0	3.5	2.0	3.0	1.5	3.5	1.0	2.5	0.0	8.0	4.5
29	8.5	5.5	3.5	2.5	2.5	1.5	3.5	0.5	--	--	7.5	5.0
30	8.0	6.0	3.5	2.5	2.5	1.5	4.0	1.0	--	--	6.5	4.5
31	10.0	6.5	--	--	3.5	1.5	3.5	1.0	--	--	6.0	3.0
AVE	11.8	8.4	7.7	5.7	3.2	2.0	2.7	1.1	4.3	1.8	5.9	3.0
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	3.5	10.5	7.5	7.5	7.0	18.5	16.5	25.5	21.5	22.0	19.0
2	7.0	5.0	9.5	7.5	11.5	7.5	18.5	17.0	25.0	21.0	22.5	20.0
3	7.5	5.0	9.0	7.5	12.5	10.0	19.0	17.0	24.5	21.0	22.0	18.5
4	8.0	5.5	8.0	7.5	12.5	10.0	19.0	17.0	24.0	20.0	22.0	18.5
5	8.0	5.5	8.0	7.5	14.0	9.5	20.0	18.0	24.0	20.0	22.0	18.5
6	7.5	6.5	9.0	7.5	15.0	11.0	20.5	18.0	24.0	20.0	21.5	19.0
7	6.5	5.5	10.0	7.5	15.0	11.5	20.0	18.0	24.0	20.0	21.5	17.5
8	8.0	5.0	9.5	8.0	15.5	11.5	19.5	17.0	24.0	20.0	21.5	18.0
9	8.0	6.0	11.5	7.5	15.5	11.0	19.5	17.0	25.0	21.0	21.5	18.0
10	7.0	5.5	12.5	8.5	14.5	11.0	19.5	17.5	25.0	21.0	21.5	18.0
11	8.5	5.0	11.0	9.0	15.5	11.0	19.5	16.5	25.0	21.0	22.0	18.5
12	9.0	6.0	11.5	8.5	15.5	11.5	20.5	17.0	24.5	21.5	22.0	19.0
13	8.0	7.0	11.5	8.5	15.0	10.5	21.0	17.5	24.0	20.5	22.5	19.5
14	10.0	6.0	12.5	8.5	15.0	11.0	21.5	18.0	23.5	19.5	22.5	20.0
15	9.5	7.0	12.0	8.5	16.0	12.5	22.0	18.5	23.5	19.5	20.5	17.5
16	9.0	6.5	11.5	7.0	16.0	13.0	22.0	19.0	23.5	19.5	19.5	16.5
17	7.5	5.5	11.0	7.0	16.5	13.5	23.0	19.5	23.5	19.5	19.0	15.5
18	7.5	5.0	12.0	7.0	16.0	13.0	23.0	20.5	23.5	19.5	16.5	13.5
19	9.5	5.5	12.5	8.5	16.0	13.0	24.0	20.0	23.0	20.0	16.0	12.5
20	8.5	5.5	12.5	9.0	16.5	13.5	23.5	20.5	22.5	19.0	15.5	12.0
21	8.0	4.5	11.5	6.0	16.5	14.0	23.0	20.0	22.0	18.5	14.5	11.5
22	7.5	5.0	11.5	6.5	16.5	14.5	23.5	20.0	22.5	18.5	14.5	11.5
23	8.0	6.0	13.0	10.0	16.5	14.0	23.5	20.0	23.0	19.0	13.5	11.0
24	6.5	5.0	14.5	10.0	16.0	14.0	23.5	19.5	23.0	20.0	13.5	10.5
25	7.0	5.0	14.5	10.0	16.5	14.5	23.5	19.5	23.0	20.5	12.5	10.5
26	7.0	6.0	13.0	9.5	16.5	14.5	24.0	20.0	24.0	21.0	11.5	9.5
27	10.5	6.0	12.0	9.0	16.0	13.0	24.0	20.0	24.0	22.0	11.5	9.0
28	11.5	8.0	10.0	8.5	16.0	13.0	24.0	20.5	24.5	21.0	11.0	9.0
29	11.0	8.0	9.5	8.0	17.0	14.0	24.5	21.0	23.5	20.5	10.5	8.5
30	10.5	7.5	9.5	7.5	18.0	15.5	24.5	21.0	23.0	20.0	9.0	8.0
31	--	--	7.5	6.0	--	--	25.0	21.0	22.5	19.5	--	--
AVE	8.3	5.8	11.0	8.0	15.2	12.1	21.8	18.8	23.8	20.2	17.9	14.9

## SACRAMENTO RIVER BASIN

11404500 NORTH FORK FEATHER RIVER AT PULGA, CALIF.

LOCATION.--Lat 39°47'39", long 121°27'03", in SW 1/4 sec. 6, T.22 N., R.5 E., Butte County, Plumas National Forest, temperature recorder at gaging station on left bank between railroad and highway bridges, 0.5 mile downstream from Flea Valley Creek and Pulga, and 1.5 miles downstream from Poe Dam.

DRAINAGE AREA.--1,953 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1963 to June 1966.

Water temperatures: October 1962 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 24.0°C July 21, 22; minimum, 2.0°C Jan. 4, and sometime during period Mar. 1-25.

Period of record:

Water temperatures: Maximum (1963-64, 1965-66, 1967-71), 24.0°C July 21, 22, 1971; minimum (1963-65, 1966-71), 1.0°C Jan. 12, 13, 1963.

REMARKS.--Recorder stopped Feb. 20-28, Mar. 1-25, Apr. 1-14; range in temperature, 2.5°C to 4.5°C, 2.0°C to 8.0°C, and 5.5°C to 8.0°C, respectively. No record Mar. 26-31. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	16.0	13.5	11.5	10.0	7.0	6.0	5.5	5.0	6.0	5.0	4.0	--
2	16.0	13.5	11.5	10.0	7.0	6.0	5.5	3.5	6.0	5.0	--	--
3	16.0	13.5	11.0	10.0	6.5	6.0	4.0	3.0	5.0	4.0	--	--
4	15.5	13.5	11.0	10.5	8.0	6.0	3.0	2.0	5.5	4.0	--	--
5	15.5	13.5	11.0	10.0	6.5	6.0	3.0	2.5	5.5	4.5	--	--
6	15.0	13.5	10.0	10.0	7.5	6.5	3.5	2.5	6.0	4.5	--	--
7	14.5	12.0	10.0	9.5	7.5	6.5	4.0	3.0	6.0	4.5	--	--
8	14.5	12.0	10.0	9.5	7.5	5.5	4.0	3.0	5.5	4.5	--	--
9	14.0	12.5	10.0	9.5	6.5	6.0	4.5	3.5	6.0	4.5	--	--
10	14.5	12.5	9.5	9.0	6.5	5.5	5.0	4.0	6.5	5.0	--	--
11	14.5	12.5	10.0	9.0	6.5	6.0	5.0	5.0	7.0	5.0	--	--
12	14.5	12.5	10.0	9.0	6.0	5.0	5.0	3.5	7.0	5.5	--	--
13	13.5	11.5	9.0	8.5	5.5	5.0	3.5	3.0	7.0	5.5	--	--
14	13.5	11.0	8.5	8.5	5.5	4.5	4.5	3.5	6.5	5.5	--	--
15	14.0	11.5	8.5	8.5	5.5	5.0	5.0	4.5	7.0	6.0	--	--
16	14.5	12.5	8.5	8.0	5.5	5.0	6.0	5.0	6.5	5.0	--	--
17	14.5	13.0	8.5	8.0	5.0	4.5	6.5	6.0	6.5	5.5	--	--
18	14.5	13.5	8.0	7.5	5.0	4.5	6.5	5.0	6.0	5.0	--	--
19	14.5	13.0	8.0	7.5	4.0	3.5	5.5	5.0	5.5	4.5	--	--
20	14.0	13.5	7.5	7.0	4.0	3.5	5.5	5.0	--	--	--	--
21	13.5	13.0	7.5	7.5	4.0	3.5	6.5	4.5	--	--	--	--
22	13.5	12.5	8.0	7.5	4.5	4.0	5.5	4.5	--	--	--	--
23	13.5	12.5	8.0	8.0	5.0	4.5	6.0	5.0	--	--	--	--
24	13.0	12.0	8.5	8.0	4.5	3.5	5.5	5.0	--	--	--	--
25	13.0	11.5	8.5	8.5	3.5	3.0	5.5	4.5	--	--	6.5	--
26	12.5	11.0	8.5	8.0	3.0	3.0	6.0	4.5	--	--	--	--
27	11.5	9.5	8.0	7.5	4.0	3.0	6.0	5.0	--	--	--	--
28	11.5	10.0	7.5	6.5	4.5	4.0	5.5	4.5	--	--	--	--
29	11.5	9.5	8.0	6.0	6.0	4.5	6.0	5.0	--	--	--	--
30	10.5	9.5	8.5	6.0	6.0	5.0	5.5	4.5	--	--	--	--
31	11.0	10.0	--	--	5.5	5.0	6.0	5.0	--	--	--	--
AVE	13.8	12.1	9.1	8.4	5.6	4.8	5.1	4.2	--	--	--	--
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	--	6.0	10.0	9.5	9.0	8.5	20.0	16.0	23.5	20.0	19.5	16.0
2	--	--	9.5	9.5	9.0	8.0	20.0	16.5	23.5	20.0	19.5	17.0
3	--	--	9.5	9.0	11.0	9.0	20.5	16.5	23.5	20.5	18.5	15.5
4	--	--	9.5	9.0	12.0	11.0	20.5	16.5	23.0	19.5	19.0	15.5
5	--	--	9.0	9.0	12.0	11.5	20.5	17.0	23.0	19.5	19.0	16.0
6	--	--	9.0	9.0	12.5	12.0	20.5	17.0	22.5	19.5	18.5	16.0
7	--	--	9.5	9.0	13.0	12.5	20.0	16.5	22.0	18.5	18.5	15.5
8	--	--	9.5	9.5	13.5	12.5	20.0	16.5	22.0	18.5	18.0	16.0
9	--	--	9.5	9.0	13.5	13.0	20.0	16.5	22.0	18.5	17.5	17.0
10	--	--	10.5	9.5	14.5	12.5	20.0	16.5	22.5	19.0	17.5	16.5
11	--	--	11.5	10.0	15.0	12.5	20.0	16.0	22.5	19.0	17.0	16.5
12	--	--	11.0	10.0	15.5	13.0	20.0	16.0	22.5	19.5	17.0	16.5
13	--	--	11.0	10.0	16.5	12.5	20.5	16.5	22.5	19.0	18.0	16.5
14	--	--	10.5	10.0	16.5	12.5	21.0	17.0	22.0	18.5	18.5	15.5
15	9.5	8.5	11.0	10.5	15.0	12.5	21.0	17.0	21.5	18.0	18.5	15.0
16	9.5	9.0	11.0	10.0	17.5	13.0	21.5	18.0	21.5	18.0	18.0	15.0
17	9.0	8.0	10.0	8.5	18.0	14.0	22.0	19.0	21.0	17.5	17.0	14.5
18	8.0	7.0	9.5	8.5	18.0	14.5	22.5	19.5	20.5	17.0	16.5	13.5
19	8.0	7.0	10.5	9.5	18.5	15.0	23.0	19.5	20.5	17.0	17.0	14.0
20	8.0	7.5	11.0	10.0	19.0	15.0	23.5	20.0	20.5	17.0	16.5	14.0
21	8.0	7.0	10.5	9.5	19.5	15.5	24.0	20.5	20.5	17.5	16.5	14.0
22	8.5	6.5	10.0	9.0	19.5	15.5	24.0	20.5	20.5	17.0	16.5	14.0
23	7.5	6.5	10.5	9.0	19.5	15.0	23.5	20.0	20.5	17.0	17.0	14.5
24	9.0	6.5	11.5	10.5	18.5	15.5	23.0	19.5	20.0	17.0	16.5	14.0
25	8.0	6.5	12.5	11.5	18.0	15.5	23.0	19.5	20.5	17.5	16.0	14.5
26	8.0	7.0	12.0	11.0	17.5	15.5	23.0	19.5	21.0	18.5	14.5	14.0
27	10.0	6.5	11.0	10.5	17.5	14.5	23.0	19.0	21.0	18.0	15.0	13.0
28	10.5	7.5	10.5	9.5	18.0	14.0	23.0	19.5	20.0	17.5	15.0	13.0
29	11.0	8.5	9.5	8.5	17.0	14.0	23.0	19.5	20.0	17.0	14.0	11.5
30	10.0	8.5	9.5	8.5	19.0	14.5	22.5	19.5	19.0	17.0	13.0	11.5
31	--	--	9.0	8.0	--	--	23.0	20.0	19.5	17.5	--	--
AVE	--	--	10.3	9.5	15.8	13.1	21.7	18.1	21.5	18.2	17.1	14.9

## 11405300 WEST BRANCH FEATHER RIVER NEAR PARADISE, CALIF.

LOCATION.--Lat 39°47'12", long 121°33'42", in SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.6, T.22 N., R.4 E., Butte County, temperature recorder at gaging station on right bank, 0.6 mile upstream from Griffin Gulch, and 4.0 miles northeast of Paradise.

DRAINAGE AREA.--110 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1962 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Minimum, 2.0°C Feb. 28 to Mar. 2.

Period of record:

Water temperatures: Maximum (1962-63, 1964-70), 30.5°C Aug. 18, 1967; minimum, 1.0°C on several days in 1965.

REMARKS.--Probe buried June 1 to Sept. 30.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	16.0	8.5	8.5	6.5	6.0	6.0	6.0	5.5	5.0	2.5	2.0
2	16.5	16.0	9.0	8.5	6.5	5.5	6.0	5.0	5.5	5.5	2.5	2.0
3	16.5	16.0	11.0	9.0	6.5	5.5	5.0	4.0	5.5	4.5	3.5	2.5
4	16.5	16.0	11.0	10.0	7.0	6.5	4.0	3.5	5.0	4.5	5.0	3.5
5	16.5	15.5	10.0	9.5	7.5	7.0	4.0	3.5	5.5	5.0	4.5	3.5
6	16.5	15.5	9.5	9.0	7.0	6.0	4.0	3.5	5.5	5.0	4.0	3.5
7	15.5	14.5	9.0	8.5	7.0	6.5	4.0	3.5	5.5	5.0	4.5	4.0
8	14.5	14.0	9.0	8.0	7.0	6.5	4.5	4.0	5.0	5.0	5.0	4.0
9	14.0	14.0	9.0	8.0	6.5	6.0	5.0	4.5	5.5	5.0	5.0	4.5
10	14.0	13.5	8.0	7.5	6.0	5.5	5.0	5.0	6.0	5.5	5.5	4.5
11	14.0	13.5	9.5	8.0	6.0	5.5	5.0	5.0	6.5	6.0	5.5	5.5
12	14.0	13.5	9.5	7.0	6.0	5.5	5.0	3.5	7.0	6.5	6.0	4.5
13	14.0	13.5	7.5	6.5	5.5	5.5	3.5	3.0	6.5	6.0	5.0	4.5
14	14.0	13.5	8.0	7.0	5.5	5.0	4.0	3.0	6.5	6.0	5.0	4.0
15	14.0	13.5	8.5	7.5	6.0	5.5	5.0	4.0	6.5	6.0	5.5	4.0
16	13.5	13.0	8.5	8.0	6.0	5.5	5.5	5.0	6.5	5.5	6.0	5.0
17	13.5	13.0	9.0	8.0	5.5	4.5	6.0	5.5	6.0	5.5	6.0	5.0
18	13.0	13.0	8.5	8.0	5.0	4.5	6.0	5.5	5.5	5.5	5.5	4.5
19	13.0	13.0	8.5	8.0	4.5	4.5	6.0	6.0	5.5	4.0	6.0	5.0
20	13.0	12.0	8.5	8.0	4.5	4.0	6.0	5.5	4.0	3.5	6.5	5.5
21	12.0	11.0	9.0	8.0	4.0	4.0	5.5	4.5	4.5	3.5	7.0	6.0
22	11.0	10.5	9.5	9.0	5.0	4.0	5.0	4.5	4.5	4.0	7.0	6.5
23	10.5	10.5	10.0	9.0	5.5	5.0	5.5	5.0	4.5	4.0	6.5	6.0
24	10.5	9.5	10.0	9.5	5.5	5.5	5.5	5.0	5.0	4.5	6.5	5.5
25	9.5	8.5	9.5	8.0	5.5	5.0	5.0	4.5	5.0	4.5	6.5	6.0
26	8.5	8.5	8.0	7.5	5.0	4.5	5.0	5.0	4.5	3.0	6.5	5.0
27	8.5	8.0	7.5	6.5	5.5	5.0	5.5	5.0	3.0	2.5	6.0	5.0
28	8.0	8.0	6.5	6.0	5.5	5.5	5.5	5.0	2.5	2.0	6.5	6.0
29	8.0	8.0	6.5	6.0	6.0	5.0	5.5	5.0	--	--	7.0	6.5
30	8.0	8.0	6.5	6.0	6.0	5.5	5.5	5.0	--	--	7.5	6.5
31	8.5	8.0	--	--	6.0	5.5	5.5	5.0	--	--	7.0	6.0
AVE	12.8	12.3	8.8	7.9	5.9	5.3	5.1	4.6	5.3	4.7	5.6	4.7
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.0	8.0	7.5	--	--	--	--	--	--	--	--
2	7.5	7.0	7.5	7.0	--	--	--	--	--	--	--	--
3	8.0	7.5	7.0	6.5	--	--	--	--	--	--	--	--
4	8.0	7.5	6.5	6.5	--	--	--	--	--	--	--	--
5	8.0	7.5	6.5	6.5	--	--	--	--	--	--	--	--
6	8.0	7.5	6.5	6.5	--	--	--	--	--	--	--	--
7	7.5	7.0	7.0	6.5	--	--	--	--	--	--	--	--
8	7.0	6.5	7.0	6.5	--	--	--	--	--	--	--	--
9	7.0	7.0	7.0	6.5	--	--	--	--	--	--	--	--
10	7.0	6.5	7.5	7.0	--	--	--	--	--	--	--	--
11	6.5	6.5	8.0	7.5	--	--	--	--	--	--	--	--
12	7.0	6.5	8.0	7.0	--	--	--	--	--	--	--	--
13	7.0	7.0	7.5	7.0	--	--	--	--	--	--	--	--
14	7.5	7.0	7.5	7.0	--	--	--	--	--	--	--	--
15	7.5	7.5	7.5	7.0	--	--	--	--	--	--	--	--
16	7.5	7.5	7.5	6.5	--	--	--	--	--	--	--	--
17	7.5	6.5	6.5	6.5	--	--	--	--	--	--	--	--
18	6.5	6.0	7.0	6.5	--	--	--	--	--	--	--	--
19	6.5	6.0	7.5	7.0	--	--	--	--	--	--	--	--
20	7.0	6.5	8.0	7.5	--	--	--	--	--	--	--	--
21	7.0	6.0	8.0	7.0	--	--	--	--	--	--	--	--
22	6.0	6.0	7.5	6.5	--	--	--	--	--	--	--	--
23	6.5	6.0	8.0	7.5	--	--	--	--	--	--	--	--
24	6.5	6.0	8.5	8.0	--	--	--	--	--	--	--	--
25	6.0	6.0	8.5	8.5	--	--	--	--	--	--	--	--
26	6.5	6.0	8.5	8.0	--	--	--	--	--	--	--	--
27	7.0	6.5	8.0	7.5	--	--	--	--	--	--	--	--
28	7.5	7.0	7.5	7.0	--	--	--	--	--	--	--	--
29	8.0	7.5	7.0	7.0	--	--	--	--	--	--	--	--
30	8.0	7.5	7.5	7.0	--	--	--	--	--	--	--	--
31	--	--	7.5	6.5	--	--	--	--	--	--	--	--
AVE	7.1	6.7	7.5	7.0	--	--	--	--	--	--	--	--

## SACRAMENTO RIVER BASIN

## 11406920 THERMALITO AFTERBAY RELEASE TO FEATHER RIVER NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°27'23", long 121°38'10", in NW¼ sec.33, T.19 N., R.3 E., Butte County, temperature recorder on left bank of outlet channel, 955 ft downstream from centerline of Thermalito Afterbay Dam, and 5.7 miles south-east of Oroville.

PERIOD OF RECORD.--Water temperatures: May 1968 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 25.5°C July 21; minimum, 5.5°C Jan. 4-6.

Period of record:

Water temperatures: Maximum, 28.0°C July 13, 1970; minimum, 5.5°C Jan. 4-6, 1971.

REMARKS.--Temperature is listed only when water is released from Thermalito Afterbay. Due to the complete regulation of the Feather River below Oroville Dam, the temperature of the water released from Thermalito Afterbay affects the temperature of the Feather River downstream from the Oroville project. Records furnished by California Department of Water Resources.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	15.0	14.0	13.0	10.0	9.5	8.5	8.0	8.0	7.0	8.5	8.0
2	15.5	14.5	14.5	13.5	10.0	9.5	8.0	7.0	8.0	7.0	8.5	7.0
3	15.5	14.0	14.0	14.0	9.5	9.0	7.0	6.0	8.0	7.0	8.5	8.0
4	16.0	14.0	14.0	14.0	9.0	9.0	6.0	5.5	8.0	7.0	8.5	8.5
5	15.0	14.5	14.0	14.0	9.5	9.0	6.0	5.5	8.5	8.0	9.5	8.5
6	15.5	14.5	14.0	14.0	10.0	9.5	6.0	5.5	9.0	8.0	9.5	8.5
7	15.0	14.0	14.0	13.5	10.0	10.0	6.5	6.0	9.0	8.5	9.5	8.5
8	14.0	13.0	14.0	13.5	10.5	10.0	6.5	6.5	9.0	8.5	10.5	9.0
9	13.5	13.5	14.0	14.0	10.5	10.5	7.0	6.5	9.0	9.0	10.0	9.5
10	15.0	13.0	14.5	14.0	10.5	10.5	7.0	7.0	9.5	9.0	10.0	9.5
11	14.5	14.0	14.5	14.0	10.5	10.0	8.0	7.0	10.5	9.5	9.5	9.0
12	15.0	14.5	14.5	14.0	10.0	10.0	8.0	7.0	10.5	10.0	10.0	9.0
13	15.5	14.5	14.0	13.0	10.0	9.5	7.0	6.5	11.0	10.0	9.5	9.0
14	15.0	14.5	13.5	13.5	9.5	9.5	6.5	6.5	10.5	10.0	9.0	8.0
15	15.0	14.5	13.5	13.0	9.5	9.5	6.5	6.5	11.0	10.5	8.5	8.0
16	14.5	14.5	13.5	13.0	9.5	9.0	7.0	6.5	11.0	10.0	9.0	8.5
17	14.5	14.0	13.5	13.0	9.5	9.0	8.0	7.0	11.0	10.5	9.5	8.5
18	15.0	14.0	13.0	12.0	9.0	8.5	8.5	8.0	11.0	10.5	9.0	8.0
19	15.0	14.5	13.0	11.5	8.5	8.0	8.5	8.5	11.0	10.0	9.5	8.5
20	14.5	14.5	12.0	11.5	8.0	7.0	8.5	8.5	10.0	9.5	9.5	9.0
21	14.5	13.5	12.0	11.5	8.0	7.0	8.5	8.0	9.5	9.5	10.0	9.5
22	13.5	13.0	12.0	12.0	7.0	7.0	8.0	8.0	9.5	9.5	10.0	9.0
23	13.0	13.0	12.0	11.5	8.0	7.0	8.0	7.0	10.0	9.0	9.5	8.5
24	13.0	12.0	12.0	12.0	8.5	8.0	8.5	8.0	10.0	9.5	9.5	8.5
25	13.0	12.0	12.0	12.0	8.5	8.0	8.5	8.0	10.0	9.0	9.0	8.5
26	13.0	12.0	12.0	12.0	8.5	8.0	8.5	8.0	9.0	8.5	9.5	8.5
27	12.0	11.5	12.0	11.0	8.0	8.0	8.5	8.5	9.0	8.5	9.5	8.5
28	12.0	11.5	11.0	10.5	8.5	8.0	8.5	8.5	8.5	8.0	10.0	8.5
29	13.0	12.0	10.5	10.5	8.5	8.0	8.5	8.5	--	--	10.0	9.5
30	12.0	12.0	10.5	10.0	8.5	8.5	8.5	8.0	--	--	10.0	9.5
31	13.0	12.0	--	--	8.5	8.5	8.0	8.0	--	--	10.0	9.0
AVE	14.2	13.5	13.1	12.6	7.2	8.8	7.6	7.2	9.6	9.0	9.5	8.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.0	13.5	13.0	15.0	14.0	20.5	18.5	24.5	21.0	18.0	17.0
2	10.0	9.5	14.0	13.0	15.5	14.0	20.5	19.0	24.0	21.0	18.0	16.5
3	11.0	10.0	13.0	12.0	15.0	13.5	21.0	19.5	22.0	21.5	18.0	16.5
4	11.5	10.5	13.0	12.0	15.5	14.0	22.0	19.5	22.0	21.5	16.5	15.5
5	12.0	11.0	13.0	12.0	16.0	14.5	22.0	20.5	22.0	21.0	17.0	15.5
6	11.5	10.5	13.0	11.5	16.0	14.5	24.0	21.5	23.0	21.0	17.0	16.0
7	10.5	10.0	13.0	12.0	16.5	15.5	21.5	20.5	24.0	20.5	17.0	16.5
8	10.5	9.5	13.0	13.0	16.0	15.5	21.5	20.5	24.0	21.5	16.5	16.0
9	10.5	10.0	15.0	13.0	16.0	15.0	21.5	20.5	23.5	21.5	17.0	15.5
10	11.0	10.0	15.5	13.5	16.5	15.0	23.5	20.5	24.5	22.0	17.0	16.0
11	11.5	10.5	14.5	13.5	18.0	15.0	24.0	21.0	23.5	23.0	18.0	15.5
12	11.0	10.5	14.5	14.0	16.0	15.5	23.5	21.5	23.5	21.5	17.0	16.0
13	10.5	10.5	16.0	14.0	17.0	15.5	24.0	21.5	23.0	20.5	18.0	16.5
14	12.0	10.5	16.5	14.5	19.5	16.0	23.0	21.0	21.5	19.5	18.0	17.0
15	12.0	11.5	16.0	14.5	19.5	17.0	23.0	20.5	20.0	19.0	18.0	17.0
16	12.0	11.5	16.0	15.0	19.5	17.0	23.5	21.0	21.0	19.5	17.0	15.5
17	13.0	11.0	15.0	14.5	19.0	18.0	21.5	20.5	20.0	18.5	15.5	15.0
18	13.0	11.5	15.5	14.5	18.5	17.0	25.0	21.0	20.0	18.0	15.5	15.0
19	11.5	11.0	15.5	14.0	19.0	18.0	25.0	23.0	19.5	18.5	15.5	15.0
20	11.5	11.0	15.5	15.0	21.5	19.0	24.5	22.0	19.5	18.5	16.0	15.0
21	11.0	10.5	15.0	14.5	22.0	19.5	25.5	23.0	20.0	18.5	15.5	15.0
22	11.0	10.5	16.5	14.0	21.0	20.0	24.5	22.0	21.0	19.0	15.0	14.5
23	11.5	10.5	16.5	15.0	22.0	20.0	24.5	22.0	21.0	19.5	15.5	14.5
24	11.5	11.0	16.5	16.0	20.5	20.0	23.5	22.0	21.0	19.5	15.5	15.0
25	11.5	11.0	18.0	16.5	20.5	19.5	24.0	21.5	21.5	19.5	15.5	15.0
26	13.0	11.5	18.0	16.5	20.5	19.5	23.0	21.0	21.0	19.5	15.5	15.0
27	14.0	12.0	17.0	15.5	19.5	18.5	22.0	20.5	21.0	19.5	16.0	15.0
28	13.5	13.0	15.5	14.0	21.0	19.5	21.0	20.5	20.5	19.5	15.5	15.0
29	13.5	13.0	14.0	13.5	20.0	19.0	21.5	20.0	19.5	18.5	15.5	14.0
30	14.0	12.0	15.0	13.5	19.5	18.5	21.5	20.5	18.5	17.0	14.5	14.0
31	--	--	15.0	14.5	--	--	23.0	20.5	18.0	16.5	--	--
AVE	11.7	10.8	15.1	13.9	18.4	16.9	22.9	20.9	21.5	19.9	16.5	15.5



## 11407000 FEATHER RIVER AT OROVILLE, CALIF.

LOCATION.--Lat 39°31'13", long 121°32'48", in SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.8, T.19 N., R.4 E., Butte County, at gaging station on right bank, 300 ft upstream from fish barrier dam on Feather River, and 0.8 mile northeast of Oroville Post Office.

DRAINAGE AREA.--3,624 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): January to December 1906, water years 1951-53 (partial-record station), October 1953 to September 1971.

Water temperatures: October 1953 to September 1954, November 1956 to September 1971.

Sediment records: November 1956 to September 1971.

## EXTREMES.--1970-71:

Water temperatures: Maximum, 17.0°C on several days during July and August; minimum, 6.5°C Mar. 12, 13.

Sediment concentrations: Maximum daily, 28 mg/l Nov. 30; minimum daily, 1 mg/l on several days.

Sediment loads: Maximum daily, 75 tons Mar. 30; minimum daily, 1.1 tons on several days.

## Period of record:

Water temperatures: Maximum (1956-67, 1968-71), 27.0°C Sept. 10, 12, 1959; minimum (1956-67, 1969-71), 1.5°C

Dec. 27, 1959, Jan. 23-25, 1962.

Sediment concentrations (1956-71): Maximum daily, 4,100 mg/l Feb. 1, 1963; minimum daily, 1 mg/l on many days in 1961-62, 1964, 1968-71.

Sediment loads (1956-71): Maximum daily, 1,500,000 tons Feb. 1, 1963; minimum daily, 1.0 ton June 9, 10, 1968.

REMARKS.--Water-temperature data for the gaging station are obtained from a thermograph located at fish hatchery near fish barrier dam. Chemical and sediment sampling point ranges from 0.2 to 1.5 miles downstream from gaging station. Records of discharge and temperature data furnished by California Department of Water Resources and reviewed by Geological Survey.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)
NOV.										
03...	1300	409	13.0	11	10	8.2	3.3	3.2	.9	44
DEC.										
01...	0815	409	9.5	12	20	8.8	3.4	3.3	.9	44
30...	1610	409	9.0	11	10	7.7	3.7	6.2	.6	42
JAN.										
29...	1130	405	7.0	11	0	8.5	2.8	3.7	.9	44
FEB.										
26...	1010	408	7.0	15	20	8.7	3.4	4.4	.9	46
MAR.										
26...	0830	414	8.5	16	30	11	3.7	4.5	1.0	56
APR.										
29...	1300	409	11.5	16	50	8.7	3.2	4.2	.9	47
MAY										
25...	1430	415	16.5	14	80	8.2	3.0	4.3	1.6	51
JUNE										
29...	1820	413	19.0	13	20	8.2	2.7	3.4	.7	50
JULY										
29...	0615	406	17.0	15	60	10	4.8	3.6	.9	59
SEP.										
28...	1345	404	14.5	14	30	8.0	3.0	3.1	.9	55

DATE	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
NOV.									
03...	0	3.0	.8	.1	--	.00	0	50	53
DEC.									
01...	0	3.0	1.0	.1	--	.00	0	58	55
30...	0	4.0	7.0	.0	--	.00	10	--	61
JAN.									
29...	0	2.0	1.0	.1	--	.00	90	57	52
FEB.									
26...	0	3.0	2.2	.1	.00	--	100	54	60
MAR.									
26...	0	1.8	1.4	.1	.00	--	60	60	67
APR.									
29...	0	1.0	1.4	.1	.00	--	60	60	59
MAY									
25...	0	2.0	1.8	.0	.14	--	40	--	61
JUNE									
29...	0	2.0	1.0	.0	.00	--	0	54	56
JULY									
29...	0	5.3	2.4	.2	.05	--	20	69	72
SEP.									
28...	0	2.5	1.1	.0	.07	--	20	72	60

## 11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

[illegible]

## 11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.5	12.0	12.0	9.5	9.0	8.5	8.5	8.0	8.0	8.0	7.0
2	11.5	10.5	12.0	11.5	10.0	9.0	8.5	8.5	8.0	7.0	8.0	7.0
3	11.0	11.0	11.5	11.5	10.0	9.5	8.5	8.5	7.0	7.0	7.0	7.0
4	11.5	11.5	11.5	11.5	10.0	10.0	8.5	8.5	7.0	7.0	7.0	7.0
5	12.0	11.0	11.5	11.0	10.5	10.0	8.5	8.5	7.0	7.0	8.0	7.0
6	11.5	11.0	11.5	11.0	10.5	10.5	8.5	8.0	8.0	7.0	8.0	7.0
7	11.5	11.0	12.0	12.0	10.5	10.5	8.0	8.0	8.0	8.0	8.0	7.0
8	12.0	11.5	12.0	12.0	10.5	10.5	8.0	8.0	8.0	8.0	8.0	7.0
9	12.0	11.5	12.0	11.5	10.5	10.0	8.0	8.0	8.0	7.0	7.0	7.0
10	12.0	11.5	11.5	11.0	10.0	10.0	8.0	8.0	8.0	7.0	7.0	7.0
11	12.0	11.5	11.0	11.0	10.0	10.0	8.0	8.0	8.0	8.0	7.0	7.0
12	13.0	11.0	11.5	11.0	10.0	10.0	8.0	7.0	8.0	8.0	7.0	6.5
13	11.5	11.0	11.5	11.0	10.0	10.0	7.0	7.0	8.0	8.0	7.0	6.5
14	11.5	11.0	11.0	11.0	10.0	10.0	7.0	7.0	8.5	8.0	7.0	7.0
15	11.5	11.0	11.0	11.0	10.0	9.5	7.0	7.0	8.5	8.0	8.0	7.0
16	11.5	11.0	11.0	11.0	9.5	9.0	7.0	7.0	8.5	8.0	8.0	8.0
17	12.0	11.5	11.0	10.5	9.5	9.0	8.0	7.0	8.0	8.0	8.0	8.0
18	12.0	12.0	11.0	11.0	9.5	9.5	8.0	8.0	8.0	8.0	8.5	8.0
19	12.0	11.5	11.0	11.0	9.5	9.5	8.0	8.0	8.0	8.0	8.5	8.0
20	12.0	11.0	11.0	11.0	9.5	9.5	8.0	8.0	8.0	8.0	8.0	8.0
21	11.5	11.0	11.0	11.0	9.5	9.0	8.0	8.0	8.0	8.0	8.0	7.0
22	13.0	11.5	11.0	11.0	9.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0
23	12.0	11.5	11.0	10.5	9.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0
24	11.5	11.5	10.5	10.5	9.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0
25	11.5	11.5	10.5	10.5	9.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0
26	11.5	11.5	10.5	10.0	9.0	9.0	8.0	8.0	8.0	8.0	8.0	7.0
27	13.0	11.5	10.5	10.0	9.0	9.0	8.0	8.0	8.0	8.0	8.0	7.0
28	12.0	11.5	10.0	10.0	9.0	9.0	8.0	8.0	8.0	7.0	8.5	8.0
29	12.0	11.5	10.0	10.0	9.0	8.5	8.0	8.0	--	--	8.5	8.5
30	12.0	11.5	10.0	9.5	8.5	8.5	8.0	8.0	--	--	8.5	8.5
31	12.0	11.5	--	--	8.5	8.5	8.0	8.0	--	--	8.5	8.5
AVE	11.9	11.3	11.1	10.9	9.6	9.4	8.0	7.9	7.9	7.7	7.8	7.4
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	10.5	10.0	12.0	11.5	15.0	14.5	16.0	15.5	13.5	11.0
2	8.5	8.0	10.5	10.0	12.0	11.5	15.0	15.0	16.5	15.0	11.5	11.0
3	9.5	8.5	10.5	10.0	12.0	11.5	15.0	14.5	16.5	16.0	12.0	11.5
4	9.5	9.5	10.5	10.0	11.5	11.0	15.0	15.0	16.5	16.0	12.0	11.5
5	9.5	9.0	10.5	10.0	13.0	11.5	15.0	14.5	16.5	16.0	12.0	12.0
6	9.0	9.0	10.5	10.0	13.0	11.5	15.5	15.0	17.0	16.0	13.0	12.0
7	9.0	8.5	10.5	10.0	12.0	12.0	15.5	15.0	17.0	16.5	13.5	12.0
8	9.0	8.5	10.0	10.0	12.0	12.0	15.5	15.0	17.0	16.5	13.5	12.0
9	9.5	9.0	10.0	9.5	12.0	11.5	16.0	15.5	17.0	16.5	13.5	12.0
10	9.0	8.0	11.0	9.5	12.0	11.5	15.5	14.5	17.0	14.5	13.5	13.0
11	9.5	8.5	11.0	10.5	13.0	12.0	16.0	15.5	14.5	13.5	13.5	13.0
12	9.5	9.5	10.5	10.5	13.0	12.0	16.0	15.0	14.5	13.5	13.5	13.0
13	9.5	9.5	10.5	10.0	13.5	12.0	16.5	16.0	14.5	14.0	14.0	12.0
14	10.0	9.5	11.5	10.5	13.5	13.0	16.5	16.0	14.5	14.0	14.0	11.5
15	10.0	9.5	11.5	11.0	14.0	13.0	16.5	16.0	14.5	14.0	11.5	10.5
16	10.0	9.0	11.5	10.5	14.0	13.5	16.5	15.5	15.0	14.0	11.5	10.5
17	9.0	8.5	12.0	10.5	14.0	13.5	16.5	16.0	15.0	14.5	13.0	11.0
18	10.5	9.0	12.0	11.5	14.0	13.0	16.5	16.0	15.5	14.5	13.0	11.5
19	10.5	10.0	11.5	11.5	13.5	12.0	17.0	16.0	15.5	15.0	11.5	10.5
20	10.0	9.0	11.5	11.0	13.5	13.5	17.0	16.5	16.0	15.0	11.5	10.5
21	10.0	9.0	13.0	11.0	14.5	13.0	17.0	15.0	16.0	15.0	12.0	11.5
22	10.0	9.5	13.0	11.5	14.5	14.0	15.0	14.5	16.0	15.0	12.0	12.0
23	10.0	9.5	13.0	12.0	14.5	14.0	15.0	14.5	16.5	15.0	13.0	12.0
24	10.0	10.0	13.0	12.0	14.5	14.0	15.0	14.5	16.5	15.5	13.0	12.0
25	10.5	10.0	12.0	11.5	14.5	14.0	15.5	14.5	16.5	16.0	13.0	12.0
26	11.0	10.0	11.5	11.0	14.5	13.5	15.5	14.5	16.5	15.0	12.0	12.0
27	10.0	10.0	12.0	11.5	14.0	13.0	15.5	15.0	15.0	13.0	13.0	11.5
28	10.0	10.0	11.5	11.5	14.5	14.0	16.0	15.0	13.5	13.0	12.0	10.5
29	10.0	9.5	12.0	11.5	15.0	14.5	16.0	15.0	13.5	13.5	12.0	11.0
30	10.0	9.5	12.0	11.5	15.0	14.5	16.0	15.5	14.0	13.0	11.5	11.0
31	--	--	12.0	11.5	--	--	16.0	15.5	14.0	13.5	--	--
AVE	9.7	9.2	11.4	10.7	13.4	12.7	15.8	15.2	15.6	14.8	12.6	11.6

## SACRAMENTO RIVER BASIN

## 11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	406	2	2.2	418	2	2.3	409	14	15
2	406	2	2.2	416	2	2.2	414	6	6.7
3	406	2	2.2	409	2	2.2	410	4	4.4
4	403	2	2.2	408	2	2.2	420	4	4.5
5	399	2	2.2	405	2	2.2	414	9	10
6	409	2	2.2	403	4	4.4	410	8	8.9
7	410	3	3.3	401	3	3.2	412	4	4.4
8	415	3	3.4	401	3	3.2	411	6	6.7
9	416	2	2.2	402	2	2.2	413	2	2.2
10	412	2	2.2	404	2	2.2	409	3	3.3
11	407	2	2.2	411	3	3.3	411	5	5.5
12	409	2	2.2	412	4	4.4	411	3	3.3
13	409	2	2.2	412	4	4.4	407	3	3.3
14	408	2	2.2	414	2	2.2	412	2	2.2
15	409	2	2.2	412	4	4.4	412	2	2.2
16	410	2	2.2	414	4	4.5	412	2	2.2
17	409	2	2.2	414	4	4.5	410	2	2.2
18	407	2	2.2	415	4	4.5	413	3	3.3
19	407	2	2.2	413	2	2.2	407	2	2.2
20	414	2	2.2	412	2	2.2	403	8	8.7
21	420	3	3.4	411	3	3.3	413	2	2.2
22	421	4	4.5	411	7	7.8	414	4	4.5
23	422	3	3.4	413	3	3.3	415	2	2.2
24	415	2	2.2	416	4	4.5	415	3	3.4
25	414	2	2.2	415	3	3.4	411	2	2.2
26	413	2	2.2	411	6	6.7	411	2	2.2
27	416	2	2.2	412	14	16	412	2	2.2
28	413	3	3.3	428	6	6.9	410	2	2.2
29	414	3	3.4	431	9	10	414	3	3.4
30	415	3	3.4	414	28	31	409	2	2.2
31	419	2	2.3	--	--	--	408	5	5.5
TOTAL	12753	--	78.8	12358	--	155.8	12752	--	133.4

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	408	4	4.4	400	2	2.2	406	12	13
2	413	4	4.5	401	2	2.2	409	11	12
3	413	2	2.2	400	2	2.2	411	14	16
4	413	4	4.5	398	2	2.1	410	4	4.4
5	413	2	2.2	398	3	3.2	410	8	8.9
6	413	2	2.2	398	2	2.1	410	6	6.6
7	413	2	2.2	397	2	2.1	421	4	4.5
8	399	2	2.2	399	4	4.3	423	5	5.7
9	386	2	2.1	399	4	4.3	411	6	6.7
10	386	4	4.2	400	4	4.3	411	6	6.7
11	402	3	3.3	399	4	4.3	410	5	5.5
12	415	4	4.5	400	3	3.2	403	5	5.4
13	414	4	4.5	396	4	4.3	406	3	3.3
14	413	4	4.5	394	3	3.2	408	4	4.4
15	412	4	4.4	394	3	3.2	413	4	4.5
16	415	3	3.4	401	1	1.1	419	3	3.4
17	415	4	4.5	413	1	1.1	415	4	4.5
18	411	4	4.4	991	2	5.4	409	12	13
19	407	2	2.2	405	2	2.2	407	12	13
20	408	2	2.2	406	1	1.1	408	3	3.3
21	405	3	3.3	412	2	2.2	404	4	4.4
22	404	2	2.2	418	1	1.1	410	4	4.4
23	405	2	2.2	416	1	1.1	420	6	6.8
24	403	3	3.3	418	5	5.6	414	10	11
25	403	4	4.4	414	4	4.5	427	3	3.5
26	402	6	6.5	408	4	4.4	2480	4	27
27	403	3	3.3	408	6	6.6	6910	2	37
28	405	3	3.3	408	4	4.4	6960	3	56
29	405	2	2.2	--	--	--	6960	3	56
30	401	2	2.2	--	--	--	5530	5	75
31	403	1	1.1	--	--	--	2510	3	20
TOTAL	12608	--	102.6	11891	--	88.0	41645	--	445.9

## 11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	421	2	2.3	404	8	8.7	398	3	3.2
2	408	5	5.5	405	5	5.5	404	3	3.3
3	395	2	2.1	412	3	3.3	402	4	4.3
4	396	2	2.1	413	1	1.1	406	4	4.4
5	407	2	2.2	410	1	1.1	408	4	4.4
6	413	2	2.2	398	1	1.1	402	4	4.3
7	414	4	4.5	397	2	2.1	408	3	3.3
8	418	3	3.4	393	4	4.2	408	3	3.3
9	409	4	4.4	399	4	4.3	409	3	3.3
10	402	4	4.3	402	4	4.3	415	4	4.5
11	402	4	4.3	407	4	4.4	415	4	4.5
12	416	2	2.2	406	3	3.3	414	4	4.5
13	415	2	2.2	401	3	3.2	412	4	4.4
14	416	2	2.2	399	3	3.2	414	3	3.4
15	405	3	3.3	394	3	3.2	412	3	3.3
16	400	2	2.2	394	4	4.3	410	2	2.2
17	401	4	4.3	401	4	4.3	414	1	1.1
18	405	3	3.3	401	4	4.3	412	1	1.1
19	410	2	2.2	399	3	3.2	412	2	2.2
20	407	3	3.3	401	2	2.2	413	4	4.5
21	408	4	4.4	401	3	3.2	414	4	4.5
22	409	3	3.3	401	4	4.3	416	3	3.4
23	408	3	3.3	404	4	4.4	416	3	3.4
24	401	2	2.2	411	3	3.3	412	4	4.4
25	394	3	3.2	415	2	2.2	410	4	4.4
26	405	3	3.3	410	3	3.3	412	4	4.4
27	414	2	2.2	400	3	3.2	410	4	4.4
28	412	2	2.2	401	2	2.2	414	4	4.5
29	409	3	3.3	400	3	3.2	413	4	4.5
30	408	3	3.3	395	4	4.3	412	4	4.4
31	--	--	--	395	4	4.3	--	--	--
TOTAL	12228	--	93.2	12469	--	109.2	12317	--	111.8

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	414	4	4.5	403	2	2.2	407	2	2.2
2	417	4	4.5	410	2	2.2	409	2	2.2
3	415	4	4.5	407	2	2.2	409	2	2.2
4	417	4	4.5	404	2	2.2	409	2	2.2
5	418	4	4.5	409	2	2.2	406	2	2.2
6	424	4	4.6	424	2	2.3	413	2	2.2
7	419	3	3.4	406	2	2.2	413	2	2.2
8	407	2	2.2	410	2	2.2	410	2	2.2
9	409	2	2.2	412	2	2.2	413	2	2.2
10	407	2	2.2	410	2	2.2	412	2	2.2
11	402	2	2.2	407	3	3.3	409	2	2.2
12	406	1	1.1	411	3	3.3	405	2	2.2
13	408	1	1.1	407	3	3.3	407	2	2.2
14	410	1	1.1	404	2	2.2	407	2	2.2
15	405	2	2.2	405	2	2.2	416	2	2.2
16	404	2	2.2	409	2	2.2	411	3	3.3
17	401	2	2.2	414	2	2.2	412	3	3.3
18	400	2	2.2	408	2	2.2	406	3	3.3
19	400	2	2.2	407	2	2.2	406	3	3.3
20	403	2	2.2	407	2	2.2	412	2	2.2
21	399	2	2.2	402	2	2.2	414	2	2.2
22	394	2	2.1	402	2	2.2	410	2	2.2
23	396	3	3.2	402	2	2.2	404	4	4.4
24	401	4	4.3	402	3	3.3	406	5	5.5
25	403	2	2.2	405	4	4.4	406	4	4.4
26	413	2	2.2	411	2	2.2	403	3	3.3
27	407	2	2.2	411	2	2.2	406	3	3.3
28	406	3	3.3	413	2	2.2	404	2	2.2
29	404	3	3.3	407	2	2.2	402	2	2.2
30	406	3	3.3	407	2	2.2	397	2	2.1
31	404	2	2.2	411	2	2.2	--	--	--
TOTAL	12619	--	86.3	12647	--	74.9	12244	--	80.2

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)  
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

178531  
1560.1

## SACRAMENTO RIVER BASIN

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.

LOCATION.--Lat 39°22'00", long 121°38'46", in SW $\frac{1}{4}$  sec.33, T.18 N., R.3 E., Butte County, at gaging station on right bank, 300 ft upstream from highway bridge, and 2.7 miles east of Gridley.

DRAINAGE AREA.--3,676 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1964 to September 1971.

Sediment records: October 1964 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Minimum, 8.0°C Dec. 19, 20.

Sediment concentrations: Maximum daily, 38 mg/l Mar. 26; minimum daily, 2 mg/l July 21.

Sediment discharge: Maximum daily, 1,720 tons Mar. 26; minimum daily, 19.0 tons Feb. 26.

Period of record:

Water temperatures (1964-69, 1970-71): Minimum, 4.0°C on several days in December and January of most years.

Sediment concentrations: Maximum daily, 1,340 mg/l Dec. 25, 1964; minimum daily, 1 mg/l Dec. 12, 1968, Dec. 4, 1969, Sept. 1, 1970.

Sediment discharge: Maximum daily, 527,000 tons Dec. 23, 1964; minimum daily, 1.4 tons Oct. 27, 1966.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	--	10.0	9.0	9.0	10.0	10.0	10.5	10.5	11.0	11.5	--
2	--	13.0	10.0	9.0	9.0	10.0	10.0	10.5	10.5	11.0	--	10.5
3	18.0	--	10.0	9.0	9.0	10.0	10.0	10.5	10.5	11.0	11.5	--
4	--	13.0	10.0	9.0	9.0	10.0	10.0	10.5	10.5	11.0	--	10.5
5	18.0	--	10.0	9.0	10.0	10.0	10.0	10.5	10.5	11.0	11.5	--
6	--	13.0	10.0	9.0	10.0	10.0	10.0	10.5	10.5	11.0	--	10.5
7	17.0	--	10.0	9.0	10.0	10.0	10.0	10.5	10.5	11.0	12.0	--
8	--	13.0	10.0	9.0	10.0	10.0	10.0	10.5	10.5	11.0	--	10.5
9	17.0	--	11.0	9.0	10.0	10.0	10.0	10.5	10.5	11.0	12.0	--
10	--	13.0	10.0	9.0	10.0	10.0	10.0	10.5	10.5	11.5	--	10.5
11	17.0	--	10.0	8.5	10.0	10.0	10.0	10.5	11.0	11.5	12.0	--
12	--	13.0	10.0	8.5	10.0	10.0	10.0	10.5	11.0	11.5	--	10.5
13	15.0	--	10.0	8.5	10.0	10.0	10.0	10.5	11.0	11.5	12.0	--
14	--	12.0	--	9.0	10.0	10.0	10.0	10.5	11.0	11.5	--	10.5
15	15.0	--	10.0	9.0	10.0	10.0	10.0	10.5	11.0	11.5	12.0	--
16	--	12.0	9.5	9.0	10.0	10.0	10.0	10.5	11.0	11.5	--	10.5
17	14.0	--	9.5	9.0	10.0	10.0	10.0	10.5	11.0	11.5	12.0	--
18	--	12.0	8.5	9.0	10.0	10.0	10.0	10.5	11.0	11.5	--	10.5
19	14.0	--	8.0	9.0	10.0	10.0	10.0	10.5	11.0	11.5	12.0	--
20	--	12.0	8.0	9.0	10.0	10.0	10.5	10.5	11.0	11.5	--	10.5
21	14.0	--	9.0	9.0	10.0	10.0	10.5	10.5	11.0	11.5	12.0	--
22	--	12.0	9.0	9.0	10.0	10.0	10.5	10.5	11.0	11.5	--	10.5
23	14.0	--	9.0	9.0	10.0	10.0	10.5	10.5	11.0	--	12.0	--
24	--	11.0	9.0	9.0	10.0	10.0	10.5	10.5	11.0	11.5	--	10.5
25	14.0	--	9.0	8.0	10.0	10.0	10.5	10.5	11.0	--	12.0	--
26	--	10.0	9.0	9.0	10.0	10.0	10.5	10.5	11.0	11.5	--	10.0
27	12.0	10.0	9.0	9.0	10.0	10.0	10.5	10.5	11.0	--	11.0	--
28	--	10.0	9.0	9.0	10.0	10.0	10.5	10.5	11.0	11.5	--	10.0
29	12.0	10.0	9.0	9.0	--	10.0	10.5	10.5	11.0	--	10.5	--
30	12.0	10.0	9.0	9.0	--	10.0	10.5	10.5	11.0	11.5	--	10.0
31	--	--	9.0	9.0	--	10.0	--	10.5	--	--	10.5	--
AVE	--	--	9.4	8.9	9.9	10.0	10.2	10.5	10.8	11.3	--	--

## 11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	3110	4	34	3070	7	58	2880	9	70
2	3090	5	42	3290	8	71	3530	10	95
3	3030	6	49	3080	9	75	4420	13	155
4	3030	5	41	3300	10	89	5590	16	241
5	3030	4	33	3730	8	81	6280	10	170
6	3050	5	41	3220	7	61	6330	9	154
7	3030	6	49	3120	6	51	6600	10	178
8	3050	6	49	3080	5	42	7250	7	137
9	3040	6	49	3110	5	42	7210	7	136
10	3020	6	49	3090	5	42	7530	8	163
11	3060	5	41	3120	5	42	8130	7	154
12	3050	5	41	3090	5	42	8110	7	153
13	3050	5	41	3090	5	42	8100	12	262
14	3040	5	41	3110	5	42	8110	9	197
15	3060	6	50	3080	5	42	8150	9	198
16	3050	6	49	3110	5	42	8170	15	331
17	3050	5	41	3090	5	42	8140	8	176
18	3040	6	49	3080	5	42	7770	5	105
19	3040	8	66	3070	5	41	6690	5	90
20	3090	7	58	3090	6	50	5760	4	62
21	3080	6	50	3090	6	50	4800	5	65
22	3080	7	58	3090	6	50	5370	6	87
23	3110	7	59	3010	6	49	7080	6	115
24	3070	7	58	2720	6	44	6340	6	103
25	3060	6	50	2710	6	44	6140	5	83
26	3050	7	58	2670	6	43	6120	6	99
27	3060	8	66	2720	7	51	6120	4	66
28	3060	7	58	2830	10	76	6160	9	150
29	3090	6	50	2900	10	78	6180	7	117
30	3100	5	42	2820	9	69	6270	8	135
31	3070	6	50	--	--	--	6620	7	125
TOTAL	94840	--	1512	91580	--	1593	201950	--	4372

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	6590	5	89	2620	8	57	1770	6	29
2	6850	4	74	2410	11	72	1800	9	44
3	6930	4	75	2150	12	70	1840	7	35
4	6660	3	54	2010	12	65	1830	6	30
5	6230	7	118	1980	16	86	1800	11	53
6	5940	6	96	1890	11	56	1820	10	49
7	5640	7	107	1830	6	30	1800	9	44
8	5390	6	87	1820	6	29	2420	9	59
9	5010	4	54	1830	7	35	3380	10	91
10	4870	6	79	1830	6	30	4850	9	118
11	4890	12	158	1840	6	30	5930	22	352
12	6650	9	162	1820	6	29	7020	17	322
13	7410	5	100	1810	6	29	10500	27	765
14	7430	4	80	1800	5	24	13000	10	351
15	8910	3	72	1800	6	29	13500	8	292
16	10800	5	146	1800	7	34	13600	7	257
17	10900	5	147	1810	6	29	13600	7	257
18	11100	4	120	1780	6	29	13600	6	220
19	13500	5	182	1820	7	34	13500	12	437
20	15000	5	203	1780	9	43	13500	7	255
21	14900	4	161	1790	11	53	13500	8	292
22	14000	6	227	1800	11	53	13200	8	285
23	11800	6	191	1810	6	29	12400	17	569
24	10200	6	165	1820	6	29	12300	8	266
25	9210	10	249	1790	6	29	13600	9	330
26	8170	8	176	1790	4	19	16800	38	1720
27	7170	11	213	1820	4	20	23800	11	707
28	6240	8	135	1790	7	34	24000	16	1040
29	5290	11	157	--	--	--	24100	9	586
30	4190	14	158	--	--	--	23400	15	948
31	3230	6	52	--	--	--	20500	17	941
TOTAL	251100	--	4087	52840	--	1106	338660	--	11744

## SACRAMENTO RIVER BASIN

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	17500	13	614	6560	8	142	9720	8	210
2	17300	16	747	6490	7	123	9680	12	314
3	14400	8	311	6560	6	106	9880	9	240
4	10000	8	216	6540	7	124	9920	11	295
5	9650	9	234	6510	6	105	9890	10	267
6	9780	10	264	6470	5	87	9870	17	453
7	10200	10	275	6460	6	105	9650	16	417
8	10600	11	315	6440	4	70	8780	10	237
9	10600	11	315	6360	3	52	7930	18	385
10	10600	9	258	6990	4	75	7530	18	366
11	10500	8	227	7060	7	133	7310	20	395
12	10800	9	262	7090	5	96	6610	10	178
13	11400	6	185	7090	7	134	6540	16	283
14	11400	6	185	7090	3	57	6580	14	249
15	11400	18	554	7050	11	209	6600	12	214
16	11400	11	339	7020	16	303	6540	17	300
17	11400	14	431	7060	10	191	6340	16	274
18	11300	12	366	6820	10	184	5360	8	116
19	11400	10	308	5920	11	176	4480	9	109
20	11000	9	267	5250	24	340	3440	10	93
21	10000	10	270	4830	22	287	3220	12	104
22	9140	8	197	4690	16	203	3910	9	95
23	8130	7	154	4640	14	175	4260	12	138
24	7430	8	160	4690	8	101	4310	19	221
25	7420	6	120	4720	11	140	4280	8	92
26	7520	5	102	4890	11	145	4320	10	117
27	7500	5	101	5730	7	108	4280	12	139
28	7500	5	101	7410	7	140	4290	8	93
29	6740	6	109	9220	13	324	4920	9	120
30	6590	7	125	9660	9	235	5290	9	129
31	--	--	--	9750	10	263	--	--	--
TOTAL	310600	--	8112	203060	--	4933	195730	--	6643

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5290	6	86	4540	10	123	7640	5	103
2	5290	10	143	4570	8	99	7590	6	123
3	5330	4	58	4580	7	87	7560	6	122
4	5350	6	87	4580	7	87	7540	6	122
5	5320	8	115	4590	7	87	7470	6	121
6	5410	8	117	4580	7	87	7520	5	102
7	5040	7	95	4590	6	74	7520	5	102
8	4570	6	74	4580	6	74	7540	6	122
9	4460	9	108	4580	5	62	7630	8	165
10	4460	9	108	5260	6	85	7610	7	144
11	4420	6	72	6390	7	121	7500	5	101
12	4480	7	85	7420	8	160	7440	4	80
13	4500	5	61	7910	8	171	7670	5	104
14	4500	11	134	7920	7	150	8570	6	139
15	4520	11	134	7840	5	106	9640	6	156
16	4520	6	73	7920	5	107	9830	7	186
17	4500	5	61	7950	5	107	8910	8	192
18	4500	7	85	6020	4	65	7860	10	212
19	4540	10	123	7870	4	85	7440	7	141
20	4580	5	62	7890	4	85	7490	5	101
21	4630	2	25	7850	5	106	7530	5	102
22	4670	8	101	7780	5	105	7350	6	119
23	4640	7	88	7770	6	126	6830	8	148
24	4600	7	87	7750	5	105	6330	11	188
25	4590	6	74	7740	5	104	5780	10	156
26	4640	6	75	7710	4	83	5190	7	126
27	4630	6	75	7720	4	83	4750	8	103
28	4600	6	75	7650	4	83	4330	7	82
29	4620	7	87	7560	5	102	3860	7	73
30	4600	7	87	7580	5	102	3350	8	72
31	4560	9	111	7650	5	103	--	--	--
TOTAL	146360	--	2766	206340	--	3124	213270	--	3807

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

2306330

53799



## 11407700 FEATHER RIVER AT YUBA CITY, CALIF.

LOCATION.--Lat 39°08'20", long 121°36'17", in NE¼ sec.23, T.15 N., R.3 E., Yuba County, at gaging station on left bank, at 5th Street railroad bridge in Yuba City, 0.7 mile upstream from confluence with Yuba River, and at mile 28.0 upstream from mouth.

DRAINAGE AREA.--3,974 sq mi.

PERIOD OF RECORD.--Water temperatures: July 1964 to September 1971.  
Sediment records: October 1964 to September 1971.

## EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 538 mg/l Mar. 26, 27; minimum daily, 10 mg/l Mar. 2.  
Sediment discharge: Maximum daily, 32,200 tons Mar. 27; minimum daily, 61 tons Mar. 2.

## Period of record:

Water temperatures (1964-67): Maximum, 32.0°C July 29, 1964; minimum (1964-65), 3.0°C on several days in 1965.  
Sediment concentrations: Maximum daily, 786 mg/l Dec. 24, 1964; minimum daily, 6.0 mg/l Jan. 9, 10, 1969.  
Sediment discharge: Maximum daily, 334,000 tons Dec. 24, 1964; minimum daily, 12 tons Oct. 27, 1966.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	--	10.0	--	8.0	9.0	12.0	15.0	15.5	--	--	--
2	--	15.0	10.0	--	9.0	--	13.0	--	--	20.5	25.0	--
3	--	15.0	9.0	6.5	8.0	--	10.5	14.5	16.0	--	--	--
4	--	14.0	10.0	7.0	9.0	--	--	--	--	--	24.0	19.0
5	17.0	15.0	11.0	7.0	10.0	--	15.0	15.0	17.0	--	--	--
6	--	14.0	--	7.0	9.0	--	12.0	--	--	23.0	--	--
7	15.0	--	11.0	7.0	--	--	12.0	--	--	--	--	18.5
8	--	--	11.5	7.0	11.0	11.0	12.0	13.0	19.0	23.0	--	--
9	16.0	15.0	11.5	8.0	10.0	11.5	12.5	--	--	--	--	16.5
10	--	15.0	11.0	--	10.0	10.5	--	--	17.0	22.0	26.0	--
11	17.0	14.0	9.5	8.0	11.5	11.0	--	17.5	--	--	--	18.0
12	--	13.0	10.0	8.0	12.0	10.0	14.0	--	17.0	--	26.0	--
13	17.0	--	--	8.0	12.0	10.0	13.0	16.0	--	25.0	--	--
14	--	--	9.0	8.0	--	--	11.0	--	--	--	23.0	19.0
15	17.0	--	9.5	8.0	--	10.0	12.0	18.0	20.0	--	--	--
16	--	13.0	9.5	8.0	12.0	10.0	14.0	--	--	24.0	--	19.0
17	16.0	13.0	9.5	--	12.0	10.0	13.0	--	20.0	--	21.0	--
18	--	11.5	9.0	9.5	11.5	10.0	--	16.0	--	24.0	--	16.0
19	16.0	13.0	9.0	10.0	10.0	11.0	14.0	--	20.0	--	21.0	--
20	--	13.0	--	10.0	9.0	--	12.0	--	--	26.0	--	18.0
21	15.0	--	9.0	9.0	--	--	13.0	14.5	--	--	20.0	--
22	--	--	8.5	9.0	11.5	11.0	12.0	--	--	26.0	--	18.0
23	--	13.0	9.0	9.5	10.5	11.5	13.0	--	--	24.0	22.0	--
24	13.0	13.0	8.0	--	11.0	12.0	12.0	20.0	--	25.0	--	15.0
25	--	12.5	--	8.5	10.5	10.0	--	--	--	--	--	--
26	14.0	--	--	10.0	9.0	11.5	14.0	18.0	--	--	22.0	--
27	14.0	11.5	--	9.0	8.0	11.0	15.0	--	--	24.0	--	--
28	13.0	11.0	9.0	8.5	--	--	15.5	--	--	--	20.0	15.0
29	13.0	--	9.5	8.5	--	12.0	15.0	13.5	--	23.0	--	--
30	13.0	10.5	10.0	8.5	--	12.0	15.0	--	20.0	--	--	14.0
31	13.0	--	9.5	--	--	12.0	--	--	--	24.0	19.0	--
AVE	--	--	9.7	8.3	10.2	--	13.1	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	MEAN DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT CHARGE (T/DAY)	SUS- SEDIM- FALL DIAM. % FINER THAN .062 MM	SUS- SEDIM- FALL DIAM. % FINER THAN .062 MM	SUS- SEDIM- FALL DIAM. % FINER THAN 1.00 MM
JAN. 25...	1245	8.5	10900	98	2880	31	--	--
APR. 22...	1430	12.0	9380	67	1700	--	38	--
JUNE 08...	1615	18.0	8900	62	1490	--	37	--
DATE								
JAN. 25...	41	--	88	--	100	--	--	--
APR. 22...	--	43	--	68	--	100	--	--
JUNE 08...	--	39	--	52	--	79	100	--

## SACRAMENTO RIVER BASIN

11407700 FEATHER RIVER AT YUBA CITY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	3750	34	344	3600	26	253	5320	78	1120
2	3840	32	332	3670	26	258	5850	72	1140
3	3660	29	287	3750	23	233	7490	104	2100
4	3680	27	268	3650	31	306	7210	115	2240
5	3680	25	248	4150	80	896	11300	205	6250
6	3690	29	289	3820	38	392	9210	93	2310
7	3700	34	340	3730	32	322	8130	82	1800
8	3690	31	309	3680	27	268	8360	123	2780
9	3690	28	279	3650	25	246	8770	111	2630
10	3690	29	289	3710	24	240	8360	120	2710
11	3660	29	287	3640	24	236	8810	146	3470
12	3630	31	304	3720	25	251	8940	123	2970
13	3640	32	314	3420	26	240	8870	111	2660
14	3660	30	296	3540	26	249	8890	105	2520
15	3640	27	265	3520	25	238	8880	98	2350
16	3680	32	318	3500	24	227	8900	85	2040
17	3670	37	367	3510	26	246	9370	80	2020
18	3660	31	306	3500	28	265	9290	79	1980
19	3670	24	238	3500	22	208	8410	62	1410
20	3730	31	312	3710	21	210	7260	44	862
21	3750	34	344	3450	20	186	6470	44	769
22	3720	31	311	3480	21	197	6780	44	805
23	3700	30	300	3510	22	208	8090	72	1570
24	3730	29	292	3400	35	321	7750	69	1440
25	3680	29	288	3110	24	202	6900	62	1160
26	3620	29	283	3150	18	153	6710	50	906
27	3630	26	255	3260	17	150	6750	40	729
28	3620	27	264	3310	38	340	6910	35	653
29	3690	27	269	4320	123	1430	7010	39	738
30	3510	22	208	6200	209	3500	7580	44	901
31	3590	26	252	--	--	--	7300	54	1060
TOTAL	113950	--	9058	110160	--	12471	245870	--	58093

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	7310	62	1220	3570	19	183	2200	12	71
2	7420	63	1260	3230	18	157	2270	10	61
3	7770	62	1300	2960	17	136	2280	12	74
4	7570	58	1190	2720	14	103	2310	14	87
5	7100	50	959	2570	13	90	2300	14	87
6	6460	32	558	2560	15	104	2280	13	80
7	6090	26	428	2490	15	101	2280	12	74
8	5860	28	443	2440	14	92	2430	33	217
9	5480	27	392	2390	14	90	3310	68	608
10	5310	16	229	2350	16	102	4660	144	1810
11	4610	15	187	2310	20	125	5630	152	2310
12	6780	51	934	2270	19	116	6250	216	3650
13	8260	100	2230	2200	17	101	8840	342	8160
14	8530	88	2030	2160	18	105	12000	468	15200
15	9310	140	3520	2110	16	91	13200	370	13200
16	11600	288	9020	2080	13	73	13300	312	11200
17	12600	148	5030	2220	14	84	13400	320	11600
18	12600	210	7140	2140	15	87	13500	321	11700
19	13400	343	12400	2060	19	106	13600	260	9550
20	15800	478	20400	2020	17	93	13600	229	8410
21	16200	330	14400	1990	12	64	13400	245	8860
22	15000	268	10900	2110	13	74	13300	289	10400
23	14500	260	10200	2150	16	93	12600	286	9730
24	11800	140	4460	2160	16	93	12500	239	8070
25	10900	103	3030	2190	17	101	12600	269	9150
26	9820	130	3450	2170	15	88	13000	538	18900
27	8700	74	1740	2220	15	90	22200	538	32200
28	7730	56	1170	2190	16	95	23600	488	31100
29	6810	44	809	--	--	--	23700	395	25300
30	5710	31	478	--	--	--	23600	360	22900
31	4580	23	284	--	--	--	22200	335	20100
TOTAL	281510	--	121791	66030	--	2837	332340	--	294859

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5390	51	742	4400	26	309	7660	78	1610
2	5270	41	583	4390	28	332	7660	82	1700
3	5250	35	496	4370	30	354	7680	92	1910
4	5350	32	462	4360	32	377	7670	107	2220
5	5310	32	459	4380	33	390	7620	109	2240
6	5310	33	473	4390	32	379	7590	94	1930
7	5290	33	463	4420	30	358	7710	75	1560
8	4730	30	383	4450	29	348	7670	73	1510
9	4390	29	344	4470	31	374	7760	85	1780
10	4390	34	403	4620	34	424	7860	105	2230
11	4380	41	485	5540	53	793	7900	125	2670
12	4340	48	562	6580	93	1650	7800	103	2170
13	4160	54	636	7290	142	2790	7480	63	1270
14	4160	37	436	7490	147	2970	8310	75	1680
15	4350	23	270	7460	140	2820	9190	110	2730
16	4360	20	235	7510	130	2640	9980	140	3770
17	4330	24	281	7570	118	2410	9580	135	3490
18	4340	30	352	6510	101	1780	8620	130	3030
19	4300	36	418	6900	82	1530	7800	109	2300
20	4290	36	417	7560	78	1590	7640	85	1750
21	4300	33	383	7580	80	1640	7680	77	1600
22	4270	34	392	7570	78	1590	7630	86	1770
23	4310	40	465	7650	75	1550	7200	85	1650
24	4690	46	582	7630	74	1520	6700	67	1210
25	4100	45	498	7620	74	1520	6260	54	913
26	4370	38	448	7620	76	1560	5760	45	700
27	4390	34	403	7610	82	1680	5230	40	565
28	4380	33	390	7600	90	1850	4830	36	469
29	4400	32	380	7610	88	1810	4370	32	378
30	4390	30	356	7510	80	1620	4100	29	321
31	4370	28	330	7690	73	1520	--	--	--
TOTAL	141970	--	13527	198350	--	42478	220940	--	53126

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	2424680
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	776315



11413520 NORTH YUBA RIVER BELOW NEW BULLARDS BAR DAM, NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°22'48", long 121°08'19", in SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.36, T.18 N., R.7 E., Yuba County, Plumas National Forest, temperature recorder at gaging station on right bank, 1.1 miles downstream from New Bullards Bar Dam, and 2 miles northwest of North San Juan.

DRAINAGE AREA.--490 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1969, July to September 1971.

EXTREMES.--July to September 1971:

Water temperatures: Maximum, 19.5°C on several days during July and August.

Period of record:

Water temperatures: Maximum, 25.0°C July 7, 9, 21, 1968; minimum (1966-69), 2.0°C on many days in 1967 and 1968.

## TEMPERATURE (°C) OF WATER, JULY TO SEPTEMBER 1971

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	14.0	9.5	19.5	15.5	17.0	14.0
2	--	--	--	--	--	--	14.5	10.0	19.5	15.5	16.5	14.5
3	--	--	--	--	--	--	15.5	11.0	19.0	15.5	16.5	13.5
4	--	--	--	--	--	--	16.5	12.0	19.0	15.5	16.5	13.5
5	--	--	--	--	--	--	17.0	12.5	19.0	15.5	16.5	13.5
6	--	--	--	--	--	--	17.0	13.0	19.0	15.5	16.5	13.5
7	--	--	--	--	--	--	17.5	13.5	19.0	15.5	16.0	13.0
8	--	--	--	--	--	--	17.5	13.5	19.0	15.5	16.0	13.0
9	--	--	--	--	--	--	17.5	13.5	19.0	15.5	16.0	13.0
10	--	--	--	--	--	--	17.5	13.5	19.5	15.5	16.0	13.0
11	--	--	--	--	--	--	17.5	13.5	19.5	16.0	16.0	13.0
12	--	--	--	--	--	--	17.5	13.5	19.5	16.0	16.5	13.0
13	--	--	--	--	--	--	18.0	13.5	19.0	15.5	16.5	13.5
14	--	--	--	--	--	--	18.0	14.0	19.0	15.5	16.5	13.5
15	--	--	--	--	--	--	18.0	14.0	19.0	15.5	16.5	13.5
16	--	--	--	--	--	--	18.5	14.5	18.5	15.5	16.5	13.5
17	--	--	--	--	--	--	18.0	15.0	18.5	15.0	16.5	13.5
18	--	--	--	--	--	--	19.0	15.0	18.5	15.0	16.0	13.0
19	--	--	--	--	--	--	19.0	15.0	18.5	15.0	15.5	13.0
20	--	--	--	--	--	--	19.5	15.5	18.0	14.5	15.5	13.0
21	--	--	--	--	--	--	19.5	15.5	18.0	14.5	15.5	12.5
22	--	--	--	--	--	--	19.5	15.5	18.0	14.5	15.0	12.5
23	--	--	--	--	--	--	19.5	15.5	18.0	14.5	15.0	12.5
24	--	--	--	--	--	--	19.5	15.5	17.5	15.0	14.5	12.5
25	--	--	--	--	--	--	19.5	15.5	17.5	14.5	13.0	12.0
26	--	--	--	--	--	--	19.0	15.5	18.0	15.0	12.5	12.0
27	--	--	--	--	--	--	19.0	15.5	18.0	15.0	13.5	11.0
28	--	--	--	--	--	--	19.0	15.5	17.0	15.0	13.0	11.0
29	--	--	--	--	--	--	19.0	15.5	17.5	14.5	11.5	11.0
30	--	--	--	--	--	--	19.0	15.5	17.5	14.5	12.0	10.5
31	--	--	--	--	--	--	19.0	15.5	17.0	15.0	--	--
AVE	--	--	--	--	--	--	18.0	14.1	18.5	15.2	15.4	12.8

## SACRAMENTO RIVER BASIN

11417500 SOUTH YUBA RIVER AT JONES BAR, NEAR GRASS VALLEY, CALIF.

LOCATION.--Lat 39°17'32", long 121°06'13", near center of sec. 32, T.17 N., R.8 E., Nevada County, temperature recorder at gaging station on left bank at Jones Bar, 100 ft upstream from Rush Creek, 0.9 mile downstream from bridge on State Highway 49, and 5 miles northwest of Grass Valley.

DRAINAGE AREA.--308 sq mi.

PERIOD OF RECORD.--Water temperatures: February 1965 to September 1971.

Sediment records: Water years 1967-71 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 26.5°C Aug. 10-12; minimum, 1.0°C Jan. 4.

Period of record:

Water temperatures: Maximum, 27.0°C June 21-23, July 5, 15, 1970; minimum, freezing point on several days in most years.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	14.5	10.5	9.0	7.5	7.5	6.0	5.0	6.5	5.5	3.5	2.0
2	16.5	14.5	11.0	9.5	7.5	7.0	6.0	3.0	6.0	5.5	3.5	1.5
3	16.5	14.5	10.5	9.5	7.0	6.5	3.0	2.0	5.5	4.5	5.0	3.5
4	16.5	15.0	11.0	10.5	8.5	7.0	2.0	1.0	6.0	4.5	6.0	5.0
5	16.0	14.5	12.5	11.0	9.0	8.5	2.0	1.5	6.5	5.0	6.0	4.5
6	16.0	14.5	12.0	11.0	8.5	7.5	2.5	2.0	7.0	5.5	6.0	4.0
7	14.5	13.0	11.0	10.5	8.5	8.0	3.0	2.0	6.0	5.0	6.5	4.5
8	13.5	12.0	11.5	11.0	9.0	8.5	3.5	2.5	6.5	5.0	7.5	5.0
9	13.0	11.5	12.0	11.0	8.5	7.5	4.5	3.5	6.5	5.5	7.5	6.0
10	14.0	12.0	12.0	11.0	7.5	6.0	6.0	4.5	7.5	6.0	8.0	6.5
11	14.0	12.5	11.5	11.0	6.5	6.0	6.0	5.5	8.0	7.0	8.5	8.0
12	15.0	13.0	11.0	9.5	6.0	5.5	5.5	4.0	8.0	7.0	8.5	7.0
13	15.0	13.5	9.5	8.0	5.5	5.0	4.0	3.0	8.5	7.5	7.5	6.0
14	14.5	13.0	8.5	7.5	5.5	4.5	4.5	3.0	8.0	7.5	6.0	6.0
15	14.0	12.5	8.0	7.5	6.5	5.5	5.0	4.5	9.0	7.5	7.5	6.0
16	13.5	12.5	8.0	7.5	6.0	5.0	6.0	5.0	7.5	7.0	8.0	6.5
17	13.5	12.0	7.5	7.0	5.0	4.5	7.0	6.0	8.0	6.5	9.0	7.0
18	13.5	12.0	7.5	6.5	5.0	4.5	7.0	6.0	7.0	6.0	8.5	6.5
19	13.0	11.5	6.5	6.0	4.5	4.0	7.0	6.0	7.0	5.0	9.0	7.0
20	13.5	12.5	6.5	5.5	4.5	4.0	7.0	6.5	6.0	4.5	9.5	7.5
21	12.5	12.5	7.5	6.5	5.0	4.0	7.0	6.0	6.0	4.5	10.0	8.0
22	13.0	12.0	8.5	7.5	5.0	4.0	6.0	5.5	6.0	5.0	9.0	8.5
23	12.5	12.5	9.5	8.5	5.5	5.0	6.0	5.0	7.0	5.0	9.5	9.0
24	12.5	11.5	9.0	8.0	5.5	3.5	6.0	5.5	7.0	5.5	9.5	8.0
25	11.5	10.5	10.0	9.0	3.5	3.0	6.0	5.0	6.5	5.0	9.0	8.5
26	10.5	9.5	9.5	8.0	4.0	3.0	6.0	5.0	5.0	3.5	8.5	7.5
27	9.5	8.5	8.0	7.5	5.0	4.0	6.0	5.5	3.5	3.0	9.0	7.0
28	9.0	8.0	7.5	7.0	5.5	5.0	6.0	5.0	3.5	2.5	9.5	7.5
29	9.0	8.5	7.5	7.0	6.0	5.5	6.0	5.0	--	--	10.0	8.0
30	9.0	8.0	7.5	7.0	6.0	5.0	6.0	5.5	--	--	9.5	9.0
31	10.5	9.0	--	--	5.5	5.0	6.5	5.5	--	--	9.0	7.0
AVE	13.3	12.0	9.4	8.5	6.2	5.5	5.3	4.4	6.6	5.4	7.9	6.4

## 11417500 SOUTH YUBA RIVER AT JONES BAR, NEAR GRASS VALLEY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	7.0	13.0	11.5	11.0	9.5	19.5	16.5	24.5	22.5	21.0	18.0
2	9.5	8.0	12.0	11.0	13.5	9.5	19.0	16.5	26.0	23.0	21.5	19.0
3	10.5	8.0	11.0	10.0	15.5	11.5	19.0	16.0	25.5	22.5	20.0	17.5
4	10.5	8.5	10.0	10.0	16.5	13.5	20.5	16.5	25.0	21.5	20.5	17.5
5	11.5	9.5	11.0	9.5	17.5	14.0	21.0	17.5	25.0	21.5	20.5	17.5
6	11.0	10.0	12.0	10.5	18.5	15.0	21.5	18.0	25.0	22.0	20.0	17.5
7	10.0	8.5	11.5	11.0	19.0	15.5	21.5	18.0	25.0	21.5	19.5	16.5
8	10.0	7.5	11.0	10.0	19.0	16.0	21.5	18.0	25.0	21.5	20.0	17.0
9	10.0	9.0	13.0	9.5	18.0	16.0	21.5	18.5	25.5	21.5	20.0	17.5
10	10.0	8.5	15.0	12.0	19.0	16.0	21.5	18.5	26.5	23.0	20.0	17.0
11	10.0	8.0	14.5	12.5	19.5	16.0	21.0	17.5	26.5	23.5	20.5	17.5
12	11.0	8.5	13.5	11.0	18.0	15.5	21.5	18.0	26.5	24.0	21.0	17.5
13	10.5	9.5	13.5	12.5	15.5	14.0	22.5	19.0	25.5	22.5	21.5	18.5
14	12.0	9.0	14.0	11.5	15.0	12.0	23.0	19.5	24.5	21.5	22.0	19.5
15	12.5	10.0	14.0	12.0	16.0	12.5	23.0	20.0	24.0	21.0	22.0	19.5
16	11.5	10.5	13.0	11.0	16.5	13.5	24.0	21.0	23.5	20.5	21.5	19.0
17	10.5	8.5	12.5	10.0	16.0	12.5	23.5	21.0	23.5	20.0	21.0	18.5
18	9.5	7.0	13.0	10.0	16.0	12.0	24.5	21.5	23.5	20.0	19.5	17.5
19	10.5	7.5	14.0	11.0	16.0	12.5	24.5	21.5	23.0	20.0	19.0	16.5
20	10.5	8.0	15.0	12.5	16.5	13.0	25.5	22.0	22.5	19.5	18.5	16.0
21	9.5	7.0	13.5	11.5	16.5	13.0	25.5	22.5	22.0	19.0	18.0	16.0
22	9.0	7.5	13.5	10.0	16.5	13.5	25.5	22.5	22.5	19.0	18.0	15.5
23	9.5	8.0	15.5	12.0	18.5	15.0	24.5	21.5	23.0	19.5	18.0	16.0
24	9.5	8.0	16.5	13.5	16.5	13.5	24.0	21.0	23.0	20.5	17.5	15.5
25	8.5	7.5	16.0	14.0	16.5	13.5	24.0	21.0	23.5	20.5	16.0	15.0
26	9.5	8.0	16.0	14.0	16.5	12.5	24.0	20.5	24.0	21.0	15.0	14.0
27	12.0	8.0	14.5	11.5	15.5	12.5	23.5	20.5	24.0	21.0	15.0	13.0
28	13.5	10.0	11.5	10.5	15.0	11.5	24.0	20.5	23.0	21.5	15.0	13.0
29	13.5	11.0	11.0	10.0	16.0	14.0	24.0	20.5	22.0	19.5	14.0	13.0
30	14.0	11.0	12.0	10.5	18.0	15.0	24.0	21.0	21.0	19.0	13.0	11.5
31	--	--	10.5	9.5	--	--	24.0	21.0	21.5	20.0	--	--
AVE	10.6	8.6	13.1	11.2	16.6	13.5	22.8	19.6	24.0	21.1	19.0	16.6

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
30...	0930	8.5	53	2	.29
NOV.					
30...	1400	7.0	765	28	58
JAN.					
04...	1315	1.5	272	6	4.4
FEB.					
03...	1220	4.5	482	8	10
25...	1115	5.5	298	3	2.4
APR.					
07...	1225	9.0	677	6	11
MAY					
04...	1100	10.0	532	6	8.6
JUNE					
15...	1145	12.5	2370	57	365
AUG.					
02...	1115	23.0	79	6	1.3
30...	1250	19.0	56	2	.30
SEP.					
27...	1210	13.0	64	2	.35

## SACRAMENTO RIVER BASIN

## 11425100 FEATHER RIVER NEAR NICOLAUS, CALIF.

LOCATION.--Lat 38°51'39", long 121°37'22", in SW¼NE¼ sec.27, T.12 N., R.3 E., Sutter County, temperature recorder on left bank, 3.8 miles downstream from gaging station at Nicolaus, 3.9 miles southwest of Nicolaus, 6.6 miles north-east of Knights Landing, and at mile 5.6.

DRAINAGE AREA.--5,920 sq mi (at gaging station).

PERIOD OF RECORD (revised).--Water temperatures: October 1963 to September 1971.

EXTREMES, 1970-71:

Water temperatures: Maximum, 25.5°C Aug. 11; minimum, 6.0°C on several days during January and March.

Period of record:

Water temperatures: Maximum, 30.5°C July 13, 1964, Aug. 4, 6, 7, 1966; minimum (1963-66, 1967-71), 3.0°C

Dec. 14-18, 1967.

REMARKS.--Prior to 1964 water year, thermograph located at gaging station at Nicolaus (sta 11425000).

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	17.0	14.0	12.0	9.5	9.0	8.0	8.0	7.5	7.0	8.5	6.5
2	19.5	17.5	14.0	12.5	9.0	9.0	8.0	7.0	8.0	7.0	9.0	6.0
3	19.5	17.5	14.0	12.5	9.0	8.5	7.0	6.0	8.0	7.0	9.5	7.5
4	19.0	17.0	13.5	13.0	10.0	8.5	6.5	6.0	8.0	7.0	10.5	8.0
5	18.5	16.5	14.0	13.0	10.5	10.0	6.5	6.0	9.0	8.0	10.5	8.0
6	18.5	16.0	13.0	12.5	10.5	10.0	7.0	6.0	9.0	8.0	11.0	8.0
7	16.5	15.5	13.0	12.0	10.5	10.5	7.0	6.0	9.0	8.0	10.5	8.5
8	17.0	14.5	13.0	12.5	10.5	10.5	7.0	6.5	9.0	8.0	11.5	9.0
9	16.5	14.5	13.0	12.0	11.0	10.5	7.5	6.5	9.0	8.0	11.5	9.5
10	17.0	14.5	13.5	12.5	10.5	10.0	7.5	7.0	9.5	8.0	11.0	10.0
11	17.0	15.0	13.5	12.5	10.5	10.0	8.0	7.5	10.0	8.5	11.5	10.5
12	17.0	15.0	13.0	12.0	10.0	9.5	8.0	7.0	9.5	9.0	11.5	10.5
13	17.0	15.0	12.5	11.0	9.5	9.0	7.0	7.0	10.0	8.5	10.5	9.5
14	17.0	15.0	11.5	10.5	9.0	9.0	7.5	7.0	10.0	9.0	10.5	9.0
15	16.5	14.5	11.0	10.0	9.0	9.0	7.5	7.5	10.5	9.0	9.5	8.5
16	16.5	14.5	11.5	10.0	9.0	9.0	7.5	7.5	10.0	9.5	10.0	8.5
17	16.0	14.0	11.5	10.5	9.0	8.5	8.5	7.5	10.5	9.5	10.0	9.0
18	15.5	14.0	11.5	10.0	9.0	8.5	9.0	8.5	10.5	9.0	10.0	8.5
19	15.5	14.0	11.0	10.0	8.5	8.0	9.0	8.0	10.5	9.5	10.0	8.5
20	15.5	14.0	11.0	9.5	8.0	8.0	9.5	9.0	9.5	8.0	11.0	9.0
21	15.0	13.5	11.0	9.5	8.5	8.0	9.0	8.5	10.0	8.5	11.5	10.0
22	14.5	13.0	10.5	10.0	8.0	8.0	8.5	8.0	10.0	8.5	11.0	10.0
23	14.0	13.0	11.0	10.0	8.0	8.0	8.5	8.0	10.5	8.5	11.0	10.5
24	14.0	12.5	11.0	10.0	8.0	8.0	8.5	8.0	11.0	8.5	11.5	10.0
25	14.0	12.5	11.5	11.0	8.0	7.5	9.0	8.0	10.5	9.0	11.0	10.5
26	14.0	12.5	11.0	10.0	8.0	7.5	9.0	8.0	9.5	7.5	11.5	10.5
27	13.5	11.5	10.0	9.0	8.0	7.5	8.5	8.0	9.0	7.5	11.5	10.5
28	13.5	11.5	9.0	9.0	8.0	7.5	8.5	8.0	9.0	6.5	11.0	10.0
29	13.5	12.5	9.5	9.0	8.5	8.0	8.5	8.0	--	--	11.5	10.5
30	13.0	12.0	9.5	9.0	8.5	8.0	8.0	7.5	--	--	11.5	11.0
31	13.5	11.5	--	--	8.5	8.0	8.0	7.5	--	--	11.0	10.5
AVE	16.0	14.2	11.9	10.9	9.1	8.7	8.0	7.4	9.5	8.2	10.7	9.2

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.0	15.0	13.5	15.0	14.0	20.0	18.5	24.0	21.5	19.0	17.5
2	12.0	10.5	14.5	13.5	15.5	14.0	20.5	18.5	24.5	22.0	19.0	17.5
3	12.5	11.0	15.0	12.5	16.0	15.0	21.0	19.0	24.0	22.0	18.0	16.5
4	13.0	11.5	14.0	13.5	16.5	15.0	21.5	19.0	24.0	21.5	18.5	17.0
5	14.5	12.0	15.0	13.0	17.5	15.5	22.0	19.5	24.0	21.5	18.0	16.5
6	14.0	13.0	15.5	13.5	17.5	16.0	22.5	20.0	24.0	21.5	17.5	16.0
7	13.0	12.0	15.5	14.0	18.0	16.0	22.5	20.0	24.0	21.0	17.5	15.5
8	12.5	11.5	14.5	14.0	18.0	16.0	22.0	20.0	24.5	21.5	17.5	16.0
9	12.5	11.5	16.0	13.0	17.5	15.5	22.0	19.5	25.0	22.5	17.5	16.0
10	13.0	11.5	18.0	14.5	17.5	16.0	22.0	19.5	24.0	22.0	17.0	15.5
11	13.0	12.0	18.0	16.0	18.5	16.5	22.0	19.5	25.5	23.5	18.0	16.0
12	13.5	12.0	18.0	15.5	17.5	16.5	22.5	20.0	24.5	22.5	18.5	16.5
13	13.0	12.0	17.5	15.5	17.5	16.0	23.5	20.5	23.5	22.0	19.0	17.0
14	13.5	11.5	18.0	15.5	18.5	16.5	23.5	20.5	23.0	21.0	18.0	17.0
15	14.0	12.0	18.5	16.5	19.0	17.0	23.0	20.5	23.0	20.5	18.0	17.0
16	14.0	12.5	17.0	15.5	19.5	18.0	23.0	20.5	22.0	20.0	17.5	16.5
17	13.5	12.0	17.0	14.5	20.0	18.0	22.0	20.5	22.5	20.0	17.0	15.5
18	13.5	11.5	17.5	15.0	19.0	18.0	22.5	20.5	22.0	20.0	16.5	15.0
19	14.0	12.0	18.0	15.5	19.0	18.0	23.5	20.5	22.0	19.5	17.0	15.0
20	13.0	12.0	18.5	16.0	19.5	17.5	24.0	21.5	21.5	19.5	17.0	15.0
21	13.0	11.5	17.5	15.0	20.0	18.5	24.5	22.0	21.5	20.0	17.0	15.0
22	13.0	12.0	18.5	15.5	20.0	19.0	24.5	22.0	21.5	20.0	17.0	15.5
23	13.5	11.5	19.5	16.5	20.5	18.5	24.0	22.0	22.0	20.0	16.5	15.0
24	13.0	11.5	20.5	17.5	20.0	18.5	23.5	21.0	22.0	20.5	16.5	15.0
25	13.5	11.5	20.0	17.5	19.5	18.5	24.5	21.0	22.0	20.5	16.0	14.5
26	14.0	12.0	20.0	17.5	19.0	18.0	23.5	20.5	21.5	20.0	15.5	14.0
27	15.0	12.5	19.0	17.0	18.5	17.0	23.5	21.0	21.5	20.0	16.0	14.0
28	14.5	13.0	17.0	15.0	18.5	17.0	23.0	21.0	21.0	19.5	16.0	14.0
29	15.5	13.0	15.0	13.5	19.5	17.5	23.0	20.5	20.5	19.0	15.0	13.5
30	16.0	13.0	15.0	13.5	20.0	18.5	23.0	20.5	20.0	18.5	14.5	13.0
31	--	--	15.0	13.5	--	--	23.5	20.5	19.5	18.0	--	--
AVE	13.5	11.8	17.0	14.9	18.4	16.9	22.8	20.3	22.7	20.7	17.2	15.6



## 11427000 NORTH FORK AMERICAN RIVER AT NORTH FORK DAM, CALIF.

LOCATION.--Lat 38°56'10", long 121°01'22", in SW1/4 sec.31, T.13 N., R.9 E., Placer County, temperature recorder at gaging station on left bank, 50 ft upstream from spillway of North Fork Dam, 2 miles upstream from Middle Fork, and 4 miles northeast of Auburn.

DRAINAGE AREA.--342 sq mi.

PERIOD OF RECORD.--Water temperatures: November 1959 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 27.5°C Aug. 14-16; minimum, 5.0°C Jan. 11-14.

Period of record:

Water temperatures: Maximum, 27.5°C Aug. 14-16, 1971; minimum, 4.5°C Jan. 21, 1967.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	20.5	15.5	15.5	9.0	9.0	7.0	7.0	7.0	7.0	7.0	7.0
2	20.5	20.5	15.5	15.5	9.0	9.0	7.0	7.0	7.0	7.0	7.0	7.0
3	20.5	20.5	15.5	15.5	9.0	9.0	7.0	7.0	7.0	7.0	7.0	7.0
4	20.5	20.0	15.5	15.5	9.0	8.5	7.0	7.0	7.0	7.0	7.0	7.0
5	20.0	20.0	15.5	15.0	9.0	8.5	7.0	6.5	7.0	7.0	7.0	7.0
6	20.0	20.0	15.0	14.5	9.0	9.0	6.5	6.5	7.0	7.0	7.0	7.0
7	20.0	19.5	14.5	14.5	9.0	9.0	6.5	6.5	7.0	7.0	7.0	7.0
8	19.5	19.5	14.5	14.0	9.0	9.0	6.5	6.0	7.0	7.0	7.0	7.0
9	19.5	19.0	14.0	13.5	9.0	9.0	6.0	5.5	7.0	7.0	7.5	7.0
10	19.0	19.0	13.5	13.5	9.0	9.0	5.5	5.5	7.0	7.0	7.5	7.5
11	19.0	19.0	13.5	13.0	9.0	8.5	5.5	5.0	7.0	7.0	8.0	7.5
12	19.0	19.0	13.0	12.5	8.5	8.5	5.0	5.0	7.0	7.0	8.0	8.0
13	19.0	19.0	12.5	12.0	8.5	8.0	5.0	5.0	7.0	7.0	8.0	8.0
14	19.0	18.5	12.0	12.0	8.0	8.0	5.5	5.0	7.0	7.0	8.0	8.0
15	18.5	18.5	12.0	11.5	8.0	7.5	6.0	5.5	7.0	7.0	8.0	8.0
16	18.5	18.0	11.5	11.5	7.5	7.5	6.0	6.0	7.0	7.0	8.0	8.0
17	18.0	17.5	11.5	11.5	7.5	7.5	6.5	6.0	7.0	7.0	8.0	8.0
18	17.5	17.5	11.5	11.0	7.5	7.5	7.0	6.5	7.0	7.0	9.0	8.0
19	17.5	17.5	11.0	11.0	7.5	7.5	7.0	7.0	7.0	7.0	9.5	9.0
20	17.5	17.5	11.0	11.0	7.5	7.0	7.0	7.0	7.0	7.0	10.0	9.5
21	17.5	17.0	11.0	10.5	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0
22	17.0	17.0	10.5	10.5	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0
23	17.0	17.0	10.5	10.0	7.0	7.0	7.0	7.0	7.0	7.0	10.5	10.0
24	17.0	17.0	10.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	10.5	10.0
25	17.0	17.0	10.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0
26	17.0	17.0	10.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	9.0
27	17.0	16.5	10.0	9.5	7.0	7.0	7.0	7.0	7.0	7.0	9.0	9.0
28	16.5	16.0	9.5	9.5	7.0	6.5	7.0	7.0	7.0	7.0	9.0	9.0
29	16.0	16.0	9.5	9.5	6.5	6.5	7.0	7.0	--	--	9.5	9.0
30	16.0	16.0	9.5	9.0	7.0	6.5	7.0	7.0	--	--	10.0	9.5
31	16.0	15.5	--	--	7.0	7.0	7.0	7.0	--	--	10.0	10.0
AVE	18.3	18.1	12.3	12.1	7.9	7.8	6.6	6.4	7.0	7.0	8.5	8.3
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	10.0	12.0	11.5	11.5	11.5	19.0	18.0	26.5	26.0	25.0	25.0
2	10.0	10.0	11.5	11.5	11.5	11.5	20.0	19.0	26.5	26.5	25.0	25.0
3	10.0	10.0	11.5	11.0	12.0	11.5	20.5	20.0	26.5	26.5	25.0	24.5
4	10.0	10.0	11.0	11.0	13.0	12.0	20.5	20.5	26.5	26.5	24.5	24.0
5	10.5	10.0	11.0	10.5	14.0	13.0	21.0	20.5	26.5	26.5	24.0	24.0
6	11.0	10.5	10.5	10.5	14.5	14.0	21.5	21.0	26.5	26.5	24.0	24.0
7	11.0	11.0	11.0	10.5	15.0	14.5	21.5	21.0	26.5	26.5	24.0	23.5
8	11.0	10.5	11.0	11.0	15.0	14.5	21.5	21.0	26.5	26.5	23.5	23.5
9	10.5	10.5	11.0	10.0	14.5	14.5	21.5	21.0	26.5	26.5	23.5	23.5
10	10.5	10.5	11.0	10.0	15.0	14.5	21.5	21.0	26.5	26.5	23.5	23.5
11	10.5	10.5	12.0	11.0	15.0	14.5	21.5	21.5	26.5	26.5	23.5	23.5
12	10.5	10.5	12.0	12.0	15.5	15.0	21.5	21.5	27.0	26.5	23.5	23.0
13	11.0	10.5	12.5	12.0	15.0	14.5	22.0	21.5	27.0	27.0	23.0	23.0
14	11.0	10.5	12.5	12.0	15.5	14.5	22.5	22.0	27.5	27.0	23.0	23.0
15	11.0	10.5	12.5	12.0	16.0	15.0	23.0	22.5	27.5	27.0	23.0	23.0
16	11.5	11.0	12.0	12.0	16.5	15.0	23.5	23.0	27.5	27.0	23.0	23.0
17	11.0	11.0	12.0	11.5	17.0	16.5	24.0	23.5	27.0	27.0	23.0	23.0
18	11.0	10.0	11.5	11.5	17.0	16.5	24.5	24.0	27.0	27.0	23.0	23.0
19	10.0	10.0	12.0	11.5	17.0	16.0	25.0	24.5	27.0	27.0	23.0	23.0
20	10.5	10.0	12.0	11.5	17.5	17.0	25.0	25.0	27.0	26.0	23.0	23.0
21	10.5	10.0	12.0	12.0	18.5	17.5	25.0	25.0	26.0	26.0	23.0	22.5
22	10.0	10.0	12.5	12.0	19.0	18.0	25.5	25.0	26.0	25.5	22.5	22.5
23	10.0	10.0	12.5	12.0	19.0	18.0	25.5	25.5	26.0	25.5	22.5	22.5
24	10.0	10.0	13.5	12.5	19.0	18.0	25.5	25.5	25.5	25.5	22.5	22.5
25	10.0	10.0	13.5	13.0	19.0	18.0	25.5	25.5	25.5	25.5	22.5	21.5
26	10.0	10.0	13.0	13.0	19.0	18.0	25.5	25.5	25.5	25.5	21.5	21.5
27	10.0	10.0	13.0	12.5	18.5	16.5	26.0	25.5	26.0	25.5	21.5	21.0
28	10.5	10.0	12.5	11.5	17.0	16.5	26.0	26.0	26.0	25.5	21.0	20.5
29	11.5	10.5	11.5	11.5	17.5	17.0	26.0	26.0	26.0	25.5	20.5	20.0
30	12.0	11.5	11.5	11.5	18.5	17.5	26.0	26.0	25.5	25.0	20.0	20.0
31	--	--	11.5	11.5	--	--	26.0	26.0	25.0	25.0	--	--
AVE	10.6	10.3	11.9	11.5	16.1	15.4	23.3	23.0	26.4	26.2	23.0	22.8

## SACRAMENTO RIVER BASIN

11433400 CANYON CREEK NEAR GEORGETOWN, CALIF.

LOCATION.--Lat 38°56'03", long 120°52'21", in SW¼NW¼ sec.33, T.13 N., R.10 E., El Dorado County, Eldorado National Forest, temperature recorder at gaging station on right bank, 0.7 mile downstream from West Canyon, and 2.6 miles northwest of Georgetown.

DRAINAGE AREA.--12.5 sq mi.

PERIOD OF RECORD.--Water temperatures: July 1966 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 22.0°C Aug. 10-12; minimum, 2.5°C Mar. 2.

Period of record:

Water temperatures: Maximum, 23.5°C July 22, 1966; minimum, 1.0°C Dec. 17, 18, 1967.

REMARKS.--Clock stopped Mar. 24 to Apr. 13; range in temperature, 8.5°C to 10.5°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971													
DAY	OCT		NOV		DEC		JAN		FEB		MAR		
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	14.0	12.0	9.0	8.0	8.5	8.5	6.5	6.0	6.0	5.0	4.0	3.0	
2	13.5	11.5	9.0	8.0	8.5	8.0	6.5	5.0	6.0	5.0	4.0	2.5	
3	13.5	12.0	9.5	8.0	8.0	7.5	5.0	4.5	5.0	4.5	5.0	4.0	
4	13.5	12.5	10.0	9.5	9.0	7.5	4.5	4.0	5.5	4.5	6.0	5.0	
5	13.0	12.0	10.0	10.0	8.5	8.5	4.5	4.0	6.0	5.0	6.0	4.0	
6	13.0	12.0	10.0	10.0	8.5	8.0	4.5	4.0	6.0	5.5	6.0	4.0	
7	12.0	10.5	10.5	10.0	9.0	8.0	4.5	4.0	6.0	5.5	6.0	4.5	
8	12.5	10.5	11.0	10.5	9.0	8.5	4.0	4.0	6.0	5.0	6.5	5.0	
9	12.5	10.5	11.0	10.5	9.0	7.5	5.0	4.5	6.0	5.0	6.5	5.0	
10	12.5	11.0	11.0	10.5	7.5	7.0	6.0	5.0	6.5	5.5	6.5	5.5	
11	12.5	11.0	11.0	10.0	7.0	6.5	6.0	5.5	7.0	6.0	7.0	6.5	
12	12.5	11.5	11.0	9.5	6.5	5.5	6.0	4.5	7.0	6.0	7.5	6.5	
13	12.5	11.5	9.5	8.0	5.5	5.5	5.0	4.0	7.0	6.0	7.0	6.5	
14	12.5	11.0	8.5	7.5	6.0	5.5	5.5	4.5	7.0	6.0	6.5	6.0	
15	12.0	10.5	8.0	7.0	6.5	6.0	5.5	5.5	7.5	7.0	8.0	6.5	
16	12.0	10.5	8.0	7.5	6.5	6.0	6.0	5.5	7.0	6.0	8.0	6.5	
17	12.0	10.5	8.0	7.0	6.5	6.0	6.5	6.0	7.0	6.5	8.5	7.0	
18	12.0	11.0	7.5	7.0	6.5	6.0	6.5	6.0	6.5	5.5	8.0	6.5	
19	11.5	10.0	7.0	6.5	6.0	5.5	6.5	6.5	6.5	6.0	8.5	6.5	
20	11.5	11.5	7.0	6.5	5.5	5.5	7.0	6.5	6.0	4.5	8.5	7.0	
21	11.5	11.5	8.0	6.5	6.0	5.5	6.5	6.5	6.0	5.0	9.0	7.0	
22	12.0	11.5	9.0	8.0	6.0	6.0	6.5	6.0	6.0	5.5	9.0	7.5	
23	12.0	12.0	9.0	8.0	6.5	6.0	6.0	5.5	6.0	5.0	9.0	8.5	
24	12.0	11.5	9.0	7.5	6.5	5.5	6.0	5.5	6.5	5.0	--	--	
25	11.5	10.0	9.5	8.0	5.5	5.0	5.5	5.5	6.5	5.5	--	--	
26	10.0	9.0	9.5	9.5	6.0	5.0	5.5	5.5	5.5	4.0	--	--	
27	9.0	7.5	9.5	8.5	6.0	6.0	5.5	5.0	4.0	3.5	--	--	
28	8.5	7.5	8.5	8.5	7.0	6.0	5.5	5.0	4.0	3.5	--	--	
29	8.5	7.5	9.0	8.5	7.0	6.5	5.5	5.0	--	--	--	--	
30	9.0	7.5	9.0	8.5	7.0	6.0	5.5	5.0	--	--	--	--	
31	9.0	8.5	--	--	6.5	6.0	5.5	5.0	--	--	--	--	
AVE	11.7	10.6	9.2	8.4	7.0	6.5	5.7	5.1	6.1	5.3	--	--	
DAY	APR		MAY		JUN		JUL		AUG		SEP		
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	--	--	12.0	10.5	12.0	11.0	16.5	14.5	21.5	19.0	18.5	16.0	
2	--	--	11.5	10.5	13.0	10.0	17.0	14.5	21.5	19.5	18.5	17.0	
3	--	--	11.0	11.0	14.0	11.5	17.0	15.0	21.5	19.0	18.0	15.5	
4	--	--	11.0	10.5	14.5	12.5	17.0	15.5	21.5	18.5	18.0	15.5	
5	--	--	12.0	10.5	15.0	12.5	17.5	16.0	21.5	19.0	18.0	16.0	
6	--	--	11.5	10.5	15.5	13.0	18.0	16.0	21.5	19.0	17.5	16.0	
7	--	--	11.5	11.5	16.0	13.5	18.0	16.0	21.5	18.5	17.5	15.0	
8	--	--	11.5	11.0	16.0	13.5	18.0	16.5	21.5	18.5	17.0	15.0	
9	--	--	13.0	11.0	15.5	14.0	18.0	16.0	21.5	19.0	17.5	15.5	
10	--	--	13.5	11.5	16.0	14.0	18.0	16.0	22.0	19.5	17.0	15.0	
11	--	--	15.0	13.0	15.5	13.0	18.0	15.5	22.0	19.5	17.5	15.0	
12	--	--	14.5	13.0	14.5	13.5	18.0	15.5	22.0	20.0	17.5	15.5	
13	--	--	14.5	13.0	15.0	13.0	18.0	16.0	21.5	19.5	17.5	16.0	
14	11.0	9.0	14.5	12.5	15.5	13.0	18.5	16.5	21.5	18.5	18.0	16.0	
15	11.5	9.0	14.5	12.5	16.0	13.5	19.0	17.0	21.0	18.5	17.5	16.0	
16	11.0	9.0	14.0	12.0	16.0	14.0	20.0	18.5	20.5	18.0	17.5	15.5	
17	10.5	9.0	13.0	11.0	16.5	14.0	19.5	18.5	20.5	18.0	17.0	15.0	
18	10.0	8.0	13.5	10.5	16.5	14.0	20.0	19.0	20.5	17.5	16.0	14.0	
19	10.5	8.0	14.0	11.5	16.5	14.5	20.5	18.5	20.5	18.0	16.0	13.5	
20	10.0	8.5	14.5	12.5	17.0	14.5	21.5	19.5	20.0	17.0	15.5	13.0	
21	9.5	7.5	13.0	11.0	17.0	15.0	21.5	19.5	20.0	17.0	15.5	13.5	
22	10.0	8.0	14.0	11.0	17.0	15.0	21.5	19.5	20.0	17.0	15.0	13.0	
23	10.5	9.0	14.5	12.0	16.5	14.5	21.5	18.5	20.0	17.5	15.0	13.0	
24	9.5	8.5	15.0	13.0	16.0	14.5	21.0	19.0	20.0	18.0	15.0	13.0	
25	9.5	7.5	15.5	13.0	16.0	14.0	21.5	19.0	20.5	18.5	15.0	14.0	
26	10.0	9.0	15.0	13.5	16.0	15.0	21.5	19.0	20.5	18.5	14.0	13.0	
27	11.0	8.5	14.0	12.5	16.0	14.0	21.0	19.0	20.5	18.5	13.5	12.0	
28	12.0	9.5	12.5	12.0	15.5	13.0	21.0	19.0	20.0	18.0	13.0	12.0	
29	12.0	9.5	12.0	11.0	15.5	13.0	21.5	19.0	19.0	16.5	12.0	11.5	
30	12.0	10.0	12.0	11.0	16.0	14.0	21.5	19.5	18.5	16.5	12.5	11.5	
31	--	--	12.0	11.0	--	--	21.5	19.5	18.5	18.0	--	--	
AVE	--	--	13.2	11.6	15.6	13.5	19.5	17.5	20.7	18.3	16.3	14.4	

11439500 SOUTH FORK AMERICAN RIVER NEAR KYBURZ, CALIF.

LOCATION.--Lat 38°45'49", long 120°19'39", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.29, T.11 N., R.15 E., El Dorado County, Eldorado National Forest, temperature recorder at gaging station on right bank beside U.S. Highway 50, 0.8 mile downstream from Silver Fork of South Fork, and 1.9 miles southwest of Kyburz.

DRAINAGE AREA.--193 sq mi.

PERIOD OF RECORD.--Water temperatures: August 1966 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 22.5°C Aug. 13; minimum, freezing point Feb. 27 to Mar. 3.

Period of record:

Water temperatures: Maximum (1967-69, 1970-71), 24.0°C June 26, 27, July 4, 8, 1968; minimum, freezing point Feb. 27 to Mar. 3, 1971.

REMARKS.--No record July 1, 2, July 9 to Aug. 2.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.5	7.0	6.0	4.0	3.0	1.0	1.0	2.0	1.5	0.0	0.0
2	11.5	9.5	7.5	6.5	3.0	3.0	1.0	1.0	2.0	2.0	0.0	0.0
3	11.5	9.5	7.5	7.0	3.0	2.5	1.0	0.5	2.0	1.5	0.5	0.0
4	12.0	10.5	7.5	7.5	2.5	2.5	0.5	0.5	2.0	1.5	1.0	0.5
5	12.0	10.5	7.5	7.0	2.5	2.5	0.5	0.5	3.0	2.0	2.0	0.5
6	11.5	9.5	7.0	6.5	2.5	2.5	1.0	0.5	2.5	2.5	2.0	0.5
7	10.0	8.5	6.5	6.0	2.5	2.5	1.0	1.0	2.5	2.0	2.0	1.5
8	9.0	7.5	6.5	6.0	2.5	2.5	1.0	0.5	2.5	2.0	3.5	1.5
9	9.0	8.0	7.0	6.5	2.5	2.5	0.5	0.5	2.5	2.0	3.0	2.0
10	10.0	9.0	7.0	6.5	2.5	2.5	0.5	0.5	3.0	2.0	3.5	2.5
11	10.0	9.0	7.0	6.5	2.5	2.5	1.0	0.5	3.5	2.5	4.0	3.0
12	10.0	9.0	7.0	5.5	2.5	2.0	1.0	0.5	3.0	2.5	3.5	1.5
13	10.0	9.0	5.5	5.0	2.0	1.5	0.5	0.5	3.0	2.5	2.0	1.5
14	9.5	8.5	5.5	5.0	1.5	1.5	0.5	0.5	3.0	2.5	1.5	1.5
15	9.0	8.0	5.5	5.5	1.5	1.5	0.5	0.5	3.0	2.5	3.0	1.5
16	9.0	8.0	5.5	5.0	1.5	1.5	0.5	0.5	2.5	2.0	3.5	2.5
17	9.0	8.0	5.0	4.5	1.5	1.0	0.5	0.5	2.5	2.5	4.0	3.0
18	8.5	8.0	4.5	4.5	1.0	1.0	0.5	0.5	2.5	2.0	4.0	2.5
19	8.5	7.5	4.5	4.5	1.0	1.0	1.0	0.5	2.5	2.0	4.0	2.5
20	8.0	8.0	4.5	4.5	1.5	1.0	1.5	1.0	2.0	1.5	4.0	3.0
21	8.5	8.0	5.0	4.5	1.5	1.5	1.5	1.5	2.0	1.5	4.0	3.0
22	8.5	8.0	5.5	5.0	1.5	1.5	1.5	1.5	2.0	2.0	4.0	3.0
23	8.5	7.0	6.5	5.5	1.5	1.5	1.5	1.5	2.0	1.5	4.0	3.5
24	8.0	6.5	5.5	5.5	1.5	1.5	1.5	1.5	2.0	1.5	4.5	3.5
25	6.5	6.0	5.5	5.5	1.5	1.5	1.5	1.5	2.0	1.5	4.0	3.5
26	6.5	6.0	5.5	5.0	1.5	1.0	2.0	1.5	1.5	0.5	3.5	3.5
27	6.0	5.0	5.0	5.0	1.0	1.0	2.0	1.5	0.5	0.0	3.5	3.5
28	5.5	4.5	5.0	4.5	1.0	1.0	1.5	1.5	0.0	0.0	3.5	3.5
29	5.5	4.5	4.5	4.0	1.0	1.0	1.5	1.5	--	--	4.0	3.5
30	6.0	5.0	4.0	4.0	1.0	1.0	1.5	1.5	--	--	4.0	3.5
31	7.0	6.0	--	--	1.0	1.0	1.5	1.5	--	--	3.5	3.5
AVE	8.9	7.8	5.9	5.5	1.9	1.7	1.1	0.9	2.3	1.8	3.0	2.2
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.5	3.0	4.0	4.0	5.0	5.0	--	--	--	--	17.5	13.0
2	3.5	3.5	4.0	4.0	5.0	5.0	--	--	--	--	17.5	13.0
3	3.5	3.5	4.0	4.0	5.5	5.0	13.5	10.5	21.5	18.5	17.0	12.0
4	4.0	3.5	4.0	4.0	6.0	5.5	14.0	11.0	21.5	17.5	17.5	12.0
5	4.0	4.0	4.5	4.0	6.0	6.0	13.5	11.5	21.0	17.5	17.5	12.5
6	4.0	4.0	4.5	4.5	6.5	6.0	14.0	11.5	22.0	18.0	17.5	13.5
7	4.0	4.0	4.5	4.5	6.5	6.5	14.5	12.0	21.5	18.0	17.0	12.0
8	4.0	4.0	4.5	4.5	6.5	6.5	14.5	12.5	21.5	18.0	17.5	12.0
9	4.0	4.0	5.0	4.5	7.0	6.5	--	--	22.0	18.0	18.5	13.5
10	4.0	4.0	5.0	5.0	7.0	7.0	--	--	21.5	18.5	19.0	14.0
11	4.0	4.0	5.0	5.0	7.0	7.0	--	--	22.0	19.0	19.0	14.0
12	4.0	4.0	5.0	4.5	7.0	7.0	--	--	22.0	19.0	19.0	14.0
13	4.0	4.0	4.5	4.5	7.0	7.0	--	--	22.5	19.0	20.0	15.0
14	4.0	4.0	5.0	4.5	7.5	7.0	--	--	21.0	18.5	19.5	15.5
15	4.0	4.0	5.0	5.0	8.5	7.0	--	--	21.0	17.5	19.0	14.5
16	4.0	3.5	5.0	5.0	8.5	8.0	--	--	21.0	16.5	18.0	14.0
17	3.5	3.5	5.0	5.0	9.0	8.5	--	--	21.0	16.5	17.5	13.5
18	3.5	3.0	5.0	5.0	8.5	8.5	--	--	20.5	16.5	15.5	12.5
19	3.5	3.0	5.0	5.0	9.0	8.5	--	--	21.0	17.0	15.0	11.0
20	3.5	3.5	5.0	5.0	9.0	9.0	--	--	20.5	17.0	15.0	11.0
21	3.5	3.5	5.0	5.0	9.5	9.0	--	--	20.0	16.5	15.0	11.5
22	3.5	3.5	5.0	5.0	9.5	9.5	--	--	20.0	16.0	14.0	10.5
23	3.5	3.5	5.5	5.0	9.5	9.5	--	--	19.5	16.5	15.0	10.5
24	3.5	3.5	5.5	5.5	10.0	9.5	--	--	19.0	16.0	14.5	10.5
25	3.5	3.5	6.0	5.5	10.0	10.0	--	--	20.0	17.0	13.0	11.0
26	3.5	3.5	6.0	5.5	10.0	9.0	--	--	20.5	17.0	11.0	9.5
27	3.5	3.5	5.5	5.5	11.5	9.5	--	--	19.0	16.0	11.5	8.0
28	4.0	3.5	5.5	5.0	11.5	9.5	--	--	19.0	15.5	11.0	7.5
29	4.0	4.0	5.0	5.0	12.5	9.5	--	--	18.5	15.5	8.5	7.0
30	4.0	4.0	5.0	5.0	13.0	10.5	--	--	19.0	15.0	8.0	6.5
31	--	--	5.0	5.0	--	--	--	--	18.0	14.0	--	--
AVE	3.8	3.7	4.9	4.8	8.3	7.7	--	--	20.6	17.1	15.8	11.8

## SACRAMENTO RIVER BASIN

11445500 SOUTH FORK AMERICAN RIVER NEAR LOTUS, CALIF.

LOCATION.--Lat 38°49'07", long 120°56'45", in SW $\frac{1}{4}$  sec.11, T.11 N., R.9 E., El Dorado County, temperature recorder at gaging station on left bank, 0.4 mile downstream from Greenwood Creek, 2.4 miles northwest of Lotus, and 3.3 miles northwest of Coloma.

DRAINAGE AREA.--673 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1958 to September 1963, water years 1964-66 (partial-record station).

Water temperatures: December 1959 to September 1968, February 1970 to September 1971.

Sediment records: Water years 1957-62 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 20.0°C July 26; minimum, 3.0°C Jan. 7, 8, Mar. 2.

Period of record:

Water temperatures: Maximum, 29.5°C July 20, 1960; minimum (1959-68, 1970-71), 1.0°C on several days in 1960 and 1962.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	15.0	11.0	9.0	8.5	8.0	5.5	5.0	5.5	4.5	6.0	3.5
2	17.0	14.0	11.5	9.5	8.5	8.0	5.5	4.5	5.0	4.5	6.0	3.0
3	17.5	14.0	10.5	9.0	7.5	8.0	5.0	3.5	5.5	4.0	5.5	4.5
4	18.0	16.0	10.5	9.5	8.5	7.5	4.5	3.5	5.0	3.5	6.0	4.5
5	18.0	15.5	10.5	9.5	8.0	7.5	4.5	3.5	5.5	4.0	7.0	4.0
6	17.5	15.5	10.0	10.0	8.0	7.0	4.5	3.5	6.0	4.0	7.0	3.5
7	16.5	14.0	10.5	9.5	7.5	7.5	4.0	3.0	6.0	4.0	6.5	5.0
8	16.0	13.0	11.0	10.0	7.5	6.5	4.0	3.0	5.5	4.0	7.0	5.0
9	16.0	13.5	10.5	10.0	7.5	6.5	4.5	3.5	5.0	3.5	7.0	4.5
10	17.0	14.0	10.5	9.5	7.5	6.5	4.5	4.0	5.5	3.5	6.5	4.5
11	17.5	15.0	10.5	9.5	7.0	6.5	5.0	4.5	5.5	4.0	6.5	4.5
12	17.5	15.5	11.0	9.5	6.5	6.5	5.0	4.5	5.5	4.0	5.5	5.0
13	17.5	15.0	10.0	8.5	6.5	6.0	5.0	4.5	6.0	4.0	8.0	5.0
14	17.0	15.0	10.0	9.0	6.5	5.5	5.5	4.5	6.5	4.5	5.5	5.0
15	16.5	14.5	10.0	8.5	6.5	6.0	5.0	5.0	7.0	5.0	8.5	5.0
16	16.5	14.0	10.0	9.0	6.5	6.0	5.0	4.5	6.5	4.5	8.5	5.5
17	16.0	14.0	9.5	8.0	6.5	6.0	6.0	5.0	7.0	5.0	8.5	5.5
18	15.0	14.0	9.5	8.0	6.5	6.0	7.0	5.5	6.5	5.0	8.0	5.0
19	15.5	13.0	9.0	8.0	6.0	5.0	6.0	5.0	6.5	5.0	9.0	5.0
20	15.5	14.0	9.0	7.5	5.5	5.0	5.5	4.5	6.5	4.5	9.0	5.0
21	14.0	13.5	9.0	8.0	6.0	5.5	5.5	4.5	6.5	4.0	9.5	7.5
22	14.5	13.5	9.0	8.5	6.0	5.0	5.5	4.0	5.5	4.5	9.0	7.5
23	13.5	12.5	9.5	8.5	5.5	5.0	5.5	4.0	6.5	4.5	7.5	7.0
24	13.0	11.5	9.0	8.0	5.0	4.5	5.0	4.0	6.5	4.5	10.0	7.0
25	12.5	10.5	10.0	9.0	5.0	4.0	5.0	4.0	6.0	4.0	9.5	8.0
26	12.5	10.5	9.5	8.5	5.0	4.5	5.0	4.0	5.5	3.5	9.5	8.0
27	12.0	9.5	9.0	8.5	5.5	5.0	5.0	4.0	4.5	3.5	8.5	7.5
28	12.0	10.0	9.0	8.5	6.0	5.5	5.0	4.0	5.0	3.5	9.5	7.5
29	11.5	9.5	8.5	8.5	6.0	5.5	5.5	4.0	--	--	10.0	7.5
30	10.5	9.5	9.0	8.5	6.0	5.0	5.0	4.0	--	--	9.5	7.5
31	11.5	9.5	--	--	5.5	4.5	5.0	4.0	--	--	10.0	7.0
AVE	15.3	13.2	9.9	8.8	6.6	6.0	5.1	4.2	5.9	4.2	7.9	5.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	7.0	12.0	9.5	10.0	8.5	15.5	12.5	18.0	14.0	15.5	12.0
2	10.5	7.5	11.0	9.5	12.0	8.5	15.5	13.0	18.5	15.0	15.5	12.5
3	10.5	7.5	11.0	9.5	12.0	8.5	16.5	13.0	17.0	13.5	15.5	12.0
4	11.0	7.5	10.0	9.0	12.5	8.5	17.0	13.0	17.5	13.0	15.5	12.5
5	11.5	8.0	10.5	9.0	13.0	9.0	17.0	12.5	17.5	13.5	16.5	12.5
6	9.5	9.0	10.0	8.5	14.0	9.5	17.0	12.5	17.0	13.5	16.5	14.5
7	10.0	8.5	9.5	8.5	13.5	10.0	16.5	13.0	16.5	13.0	16.0	14.0
8	11.0	8.0	9.0	8.5	12.5	10.0	16.5	13.0	17.5	13.0	16.0	13.0
9	10.5	8.0	12.0	8.5	13.5	11.5	17.0	13.5	18.0	14.5	17.0	12.5
10	9.5	8.0	12.5	9.0	14.5	11.5	17.0	13.0	17.5	13.0	17.0	13.0
11	11.0	7.5	12.0	9.5	14.5	11.5	18.0	13.0	17.0	13.5	17.0	12.5
12	11.5	8.0	12.5	10.0	13.5	12.0	18.0	14.0	17.5	13.0	18.0	13.0
13	10.0	8.5	11.5	9.5	14.5	12.0	18.0	13.5	16.5	13.0	16.5	14.0
14	11.0	8.5	11.5	9.5	14.0	12.0	19.5	13.5	16.5	13.0	16.5	13.5
15	11.5	8.5	12.0	9.5	14.0	12.0	18.0	13.5	16.5	12.5	17.0	13.5
16	11.5	9.0	12.0	9.5	14.5	12.0	18.5	13.5	18.0	13.0	17.0	13.0
17	11.0	8.5	11.5	9.5	15.0	12.0	16.5	14.0	16.0	12.5	17.0	13.0
18	11.0	8.5	12.0	9.5	15.0	12.0	18.0	14.0	16.0	12.5	16.5	12.5
19	11.5	8.0	11.5	9.5	14.5	12.5	19.0	14.0	16.0	12.5	16.5	14.0
20	9.5	8.5	11.5	10.0	15.0	12.5	18.0	14.0	15.5	12.0	16.5	14.0
21	10.0	7.5	11.0	9.5	16.0	13.0	18.5	14.0	15.5	12.0	16.5	13.5
22	9.5	7.5	13.0	9.5	15.5	13.0	18.5	14.0	17.0	12.5	16.5	13.0
23	10.0	7.5	13.0	10.0	15.0	13.0	18.5	14.0	17.0	13.0	16.5	13.0
24	9.5	7.5	13.5	10.0	15.0	13.0	18.0	14.0	15.0	12.5	16.0	13.5
25	9.5	7.0	12.0	10.0	15.5	13.0	18.0	14.0	15.5	12.5	14.0	13.0
26	10.5	7.5	11.5	10.0	13.5	12.5	20.0	14.5	15.5	12.5	14.0	12.0
27	11.5	7.5	10.0	9.5	15.0	12.5	18.5	14.5	15.5	12.5	14.5	11.5
28	11.5	8.0	10.5	9.5	14.0	12.5	18.5	14.5	15.5	12.0	14.5	11.5
29	11.5	8.0	10.5	9.0	15.0	12.5	18.0	14.0	16.5	12.0	14.0	12.0
30	12.5	8.5	11.0	9.0	15.5	12.5	17.5	14.0	16.0	14.0	14.5	12.0
31	--	--	10.5	8.5	--	--	18.0	14.0	15.5	13.0	--	--
AVE	10.7	8.0	11.4	9.4	14.1	11.4	17.7	13.6	16.6	13.0	16.0	12.9

## 11446500 AMERICAN RIVER AT FAIR OAKS, CALIF.

LOCATION.--Lat 38°38'08", long 121°13'36", in SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.17, T.9 N., R.7 E., Sacramento County, temperature recorder at gaging station on right bank, 2,100 ft downstream from Nimbus Dam, 2.4 miles east of Fair Oaks, 8.1 miles downstream from South Fork, and at mile 22.2.

DRAINAGE AREA.--1,888 sq mi.

PERIOD OF RECORD.--Chemical analyses: January to December 1906, March 1951 to September 1958, November 1959 to September 1962.

Water temperatures: March 1951 to September 1958, November 1959 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 18.5°C on several days in August and September; minimum, 7.5°C Jan. 13, 14, Feb. 1-3.

Period of record:

Water temperatures (1951-58, 1959-71): Maximum (1951-58, 1959-64, 1965-69, 1970-71), 27.0°C July 27, Aug. 3, 1954; minimum, freezing point on several days in 1957 and 1958.

REMARKS.--Recorder malfunction Oct. 27 to Nov. 3; temperature range, 14.5°C to 15.0°C. Recorder removed July 9 and reinstalled July 14.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	18.0	--	--	12.5	12.0	9.0	9.0	8.0	7.5	9.0	8.5
2	18.5	16.0	--	--	12.0	12.0	9.0	8.5	8.0	7.5	9.0	8.5
3	16.0	15.0	--	--	12.0	12.0	9.0	8.5	8.0	7.5	9.0	9.0
4	15.5	15.0	15.0	15.0	12.0	12.0	9.0	9.0	8.0	8.0	9.5	9.0
5	15.5	15.0	15.0	15.0	12.0	12.0	9.0	8.5	8.5	8.0	9.5	9.0
6	15.5	15.0	15.0	14.5	12.0	11.5	8.5	8.5	8.5	8.0	9.5	9.0
7	16.0	15.0	15.0	14.5	11.5	11.5	8.5	8.5	8.5	8.0	9.5	9.0
8	15.5	14.5	15.0	14.5	11.5	11.0	8.5	8.5	8.5	8.0	9.5	9.0
9	15.0	14.0	15.0	14.5	11.0	11.0	8.5	8.5	8.5	8.0	10.0	9.0
10	15.0	14.0	15.0	15.0	11.0	11.0	8.5	8.0	8.5	8.0	11.0	10.0
11	15.0	14.5	15.0	14.5	11.0	10.5	8.0	8.0	9.5	8.0	10.5	10.0
12	15.0	14.0	15.0	14.5	10.5	10.5	8.0	8.0	8.0	8.0	10.5	10.5
13	15.0	14.5	14.5	14.0	10.5	10.5	8.0	7.5	8.5	8.0	10.5	10.0
14	16.0	14.5	14.0	14.0	10.5	10.5	8.0	7.5	8.5	8.0	10.0	10.0
15	15.5	15.0	14.0	14.0	10.5	10.5	8.0	8.0	9.0	8.5	10.5	10.0
16	16.0	14.5	14.0	14.0	10.5	10.0	8.0	8.0	9.0	8.5	11.0	10.0
17	16.0	14.5	14.0	14.0	10.0	10.0	8.0	8.0	9.0	8.5	11.0	10.0
18	16.0	15.5	14.0	13.5	10.0	10.0	8.0	8.0	9.0	8.5	11.5	10.5
19	15.5	15.5	13.5	13.5	10.0	10.0	8.0	8.0	8.5	8.5	11.5	10.5
20	15.5	15.5	14.0	13.5	10.0	10.0	8.0	8.0	8.5	8.5	11.5	10.5
21	15.5	15.5	14.0	13.5	10.0	10.0	8.0	8.0	9.0	8.5	11.5	10.5
22	15.5	15.0	13.5	13.5	10.0	10.0	8.5	8.0	9.0	8.5	11.5	11.0
23	15.0	15.0	13.5	13.5	10.0	10.0	8.5	8.0	9.0	8.5	11.5	11.0
24	15.0	14.5	13.5	13.5	10.0	9.5	8.5	8.0	9.0	8.5	11.5	11.5
25	15.0	14.5	13.5	13.0	10.0	9.5	8.5	8.0	9.5	9.0	11.5	11.5
26	15.0	14.5	13.5	13.0	9.5	9.5	8.5	8.0	9.0	8.5	12.0	11.5
27	--	--	13.0	13.0	9.5	9.5	8.5	8.0	8.5	8.5	12.0	11.5
28	--	--	13.0	12.5	9.5	9.5	8.0	8.0	9.0	8.5	12.0	11.5
29	--	--	13.0	12.5	9.5	9.0	8.0	8.0	--	--	12.0	11.5
30	--	--	13.0	12.5	9.5	9.0	8.0	8.0	--	--	12.5	11.0
31	--	--	--	--	9.5	9.0	8.0	8.0	--	--	11.5	10.5
AVE	15.7	14.9	14.1	13.8	10.6	10.4	8.3	8.1	8.6	8.2	10.8	10.2
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	11.0	12.5	12.0	13.0	13.0	14.5	14.0	17.0	16.5	18.0	17.5
2	11.5	11.0	12.0	12.0	13.5	13.0	14.5	14.0	17.0	16.5	18.5	18.0
3	11.5	11.0	12.0	12.0	14.0	13.5	14.5	14.5	17.5	16.5	18.5	17.5
4	11.5	11.0	12.0	12.0	13.5	13.5	14.5	14.5	17.5	17.0	18.5	17.0
5	11.5	11.0	12.0	12.0	14.0	13.5	15.0	14.5	17.5	17.0	18.0	17.0
6	11.5	11.0	12.5	12.0	14.0	13.5	14.5	14.5	18.0	17.0	18.0	17.5
7	11.0	10.5	12.5	12.0	14.0	13.5	15.0	14.5	17.5	16.5	18.0	17.0
8	11.0	10.5	12.0	12.0	14.0	13.5	15.0	15.0	17.0	16.5	18.0	17.0
9	11.5	11.0	12.5	12.0	14.0	13.5	--	--	17.0	16.5	18.0	17.0
10	11.5	11.0	13.0	12.5	14.0	13.5	--	--	17.5	16.5	18.0	17.0
11	11.5	11.0	13.0	12.5	14.0	13.5	--	--	17.5	16.5	18.0	17.0
12	11.5	11.5	13.0	12.5	14.0	13.5	--	--	17.5	16.5	18.0	17.0
13	12.0	11.5	13.0	13.0	14.0	13.5	--	--	17.5	16.5	18.0	17.5
14	12.0	11.0	13.0	13.0	14.0	13.5	16.0	15.0	17.5	16.5	18.0	17.5
15	12.0	11.5	13.5	13.0	14.0	14.0	16.0	15.5	17.5	16.5	18.0	16.5
16	12.0	11.5	13.0	13.0	14.0	14.0	16.0	15.5	17.5	16.5	18.0	17.0
17	11.5	11.0	13.5	13.0	14.0	13.5	16.0	15.5	17.5	17.0	18.0	18.0
18	12.0	11.0	13.5	13.0	14.0	13.5	16.5	15.5	17.5	16.5	18.0	16.5
19	12.0	12.0	13.5	13.0	14.0	14.0	16.5	15.5	17.5	16.0	18.5	17.5
20	12.0	11.5	13.5	13.0	14.0	14.0	16.5	15.5	17.5	17.0	18.5	17.0
21	12.0	11.0	13.5	13.0	14.0	14.0	16.5	16.0	17.5	17.0	18.5	17.5
22	12.0	12.0	13.5	13.0	14.0	14.0	17.0	16.0	18.0	17.5	18.5	18.0
23	12.0	12.0	14.0	13.5	14.0	14.0	17.0	16.0	18.5	17.5	18.0	17.5
24	12.0	12.0	14.0	13.5	14.0	14.0	16.5	16.0	18.0	17.5	18.5	17.0
25	12.0	11.5	14.0	13.5	14.0	14.0	17.0	16.5	18.0	17.5	18.0	17.0
26	12.0	12.0	14.0	13.5	14.0	14.0	17.0	16.5	18.0	17.5	17.5	16.5
27	12.0	12.0	13.5	13.0	14.0	13.5	17.0	16.5	18.0	17.5	18.0	17.5
28	12.0	12.0	13.5	13.0	14.0	14.0	17.0	16.5	18.0	17.0	18.0	17.0
29	12.0	12.0	13.0	13.0	14.5	14.0	17.0	16.5	18.0	17.0	18.0	17.5
30	12.5	12.0	13.0	13.0	14.5	14.0	17.5	16.5	18.0	17.0	17.5	16.5
31	--	--	13.0	13.0	--	--	17.5	16.5	18.0	17.5	--	--
AVE	11.8	11.4	13.0	12.7	14.0	13.7	16.1	15.5	17.6	16.9	18.1	17.2

## SACRAMENTO RIVER BASIN

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.  
(International Hydrological Decade Station)

LOCATION.--Lat 38°35'12", long 121°30'16", T.9 N., R.4 E., Sacramento County, at gaging station 1,000 ft upstream from I Street Bridge, in city of Sacramento, and 0.5 mile downstream from American River.

DRAINAGE AREA.--23,508 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): January to December 1906, December 1907 to December 1908, water years 1951-52 (partial-record station), October 1952 to May 1960. Published as "above" in 1906-08.  
Water temperatures: May 1955 to September 1971.  
Sediment records: October 1956 to September 1971.

## EXTREMES, 1970-71:

Water temperatures: Maximum, 26.0°C Aug. 9; minimum, 7.0°C Jan. 3, 4, 6, Mar. 1.  
Sediment concentrations: Maximum daily, 576 mg/l Jan. 19; minimum daily, 20 mg/l Oct. 30, Nov. 5.  
Sediment loads: Maximum daily, 95,000 tons Jan. 19; minimum daily, 811 tons Oct. 17.

## Period of record:

Water temperatures: Maximum (1955-62, 1963-66, 1967-71), 28.0°C on several days in 1969 and 1970; minimum (1955-71), 4.0°C Jan. 30, 31, Feb. 1, 1957.  
Sediment concentrations (1956-71): Maximum daily, 1,960 mg/l Dec. 24, 1964; minimum daily 11 mg/l Nov. 30, 1959 (estimated), and Nov. 28, 1970.  
Sediment loads (1956-71): Maximum daily, 525,000 tons Dec. 24, 1964; minimum daily, 200 tons (estimated) Dec. 14, 1959.

REMARKS.--The chemical-quality data and the maximum-minimum temperature record for the auxiliary station approximately 8 miles downstream, Sacramento River at Freeport, Calif. (sta 11447650), are considered as being part of this IHD station.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	14.0	10.0	8.0	8.0	7.0	13.0	15.0	15.0	20.0	25.0	19.0
2	19.0	15.0	10.0	8.0	8.0	--	12.5	14.0	17.0	20.0	23.0	20.0
3	--	14.0	10.0	7.0	--	10.0	13.0	14.0	16.0	--	22.0	--
4	19.0	14.0	9.5	7.0	9.0	10.0	15.0	14.0	17.0	--	24.0	--
5	--	15.0	11.0	--	9.0	10.0	14.0	14.0	--	20.0	22.5	19.0
6	18.0	14.0	12.0	7.0	--	9.0	13.0	14.0	18.0	20.0	21.5	18.0
7	18.0	--	11.0	8.0	9.0	12.0	13.0	15.0	19.0	--	--	--
8	17.0	16.0	11.0	8.0	10.0	10.0	13.0	14.0	18.0	--	23.0	21.0
9	18.0	14.5	10.5	--	10.0	11.0	12.5	15.0	19.0	--	26.0	22.0
10	19.0	10.5	11.0	8.0	10.0	11.0	13.0	16.0	18.0	--	24.0	18.0
11	18.0	--	11.0	9.0	10.0	12.0	13.5	16.0	22.0	--	23.0	--
12	19.0	10.5	--	9.0	10.0	12.0	15.0	16.5	--	--	23.0	22.0
13	--	13.0	--	8.0	12.0	--	13.0	17.0	18.0	--	--	21.0
14	18.0	12.0	9.0	8.0	--	10.0	14.5	17.0	18.0	--	23.0	21.0
15	17.0	--	9.0	9.0	13.0	9.5	16.0	17.0	20.5	--	23.0	20.0
16	18.0	12.0	10.0	8.0	11.0	11.0	13.0	--	19.0	--	22.0	22.0
17	17.0	12.0	10.0	10.0	10.0	11.0	--	16.0	21.0	--	22.0	20.0
18	--	11.5	10.0	10.0	10.0	12.0	13.0	17.0	21.0	--	21.0	20.0
19	17.0	11.5	--	10.0	10.0	12.0	14.0	17.0	--	--	--	22.0
20	--	10.0	9.0	10.0	--	12.0	13.0	16.5	--	23.0	21.0	--
21	--	--	9.0	11.0	--	12.5	13.0	16.0	22.0	23.0	21.0	18.0
22	15.0	11.5	--	10.0	10.0	13.0	13.0	--	--	23.0	21.0	19.0
23	15.0	11.5	8.0	--	10.0	--	13.0	--	--	--	--	21.0
24	14.0	--	9.0	--	11.0	13.5	13.0	18.0	--	--	21.0	--
25	14.0	13.0	--	--	10.0	12.0	--	--	19.0	23.0	21.0	--
26	14.0	--	8.0	9.0	9.0	--	13.0	17.0	17.0	22.0	--	--
27	14.0	12.0	8.0	9.0	9.0	--	13.0	16.5	18.0	20.0	20.0	17.0
28	14.0	12.0	9.0	9.0	9.0	--	--	16.0	19.0	21.5	19.0	16.0
29	14.0	11.0	9.0	8.0	--	12.5	15.0	--	20.0	21.0	19.0	16.0
30	14.0	10.5	--	--	--	13.0	16.0	15.0	20.0	21.5	19.0	15.0
31	--	--	9.0	9.0	--	13.0	--	15.0	--	--	19.0	--
AVE	--	12.5	9.7	8.7	9.9	11.2	13.6	15.7	--	--	21.9	--

## 11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	16300	45	1980	15100	22	897	53700	335	48600
2	16700	30	1350	15000	24	972	65900	275	48900
3	16500	29	1290	15300	24	991	70500	165	31400
4	16400	29	1280	16000	24	1040	71000	145	27800
5	15900	27	1160	16100	20	869	73200	150	29600
6	15400	27	1120	17300	32	1490	72300	114	22300
7	14900	48	1930	18400	47	2330	71800	125	24200
8	14400	44	1710	20300	56	3070	71100	135	25900
9	14300	24	927	20800	66	3710	70500	117	22300
10	14600	29	1140	19900	90	4840	69700	102	19200
11	14500	30	1170	21300	254	14600	70300	102	19400
12	14400	25	972	23800	230	14800	70400	98	18600
13	14400	28	1090	22100	145	8650	69600	94	17700
14	14500	34	1330	21000	102	5780	68500	84	15500
15	14600	34	1340	20200	57	3110	67200	70	12700
16	14400	24	933	19600	52	2750	66000	101	18000
17	14300	21	811	19600	55	2910	65400	113	20000
18	14300	22	849	20000	54	2920	65200	104	18300
19	14200	23	882	21600	56	3270	64700	103	18000
20	14600	25	986	23000	62	3850	63900	108	18600
21	15100	28	1140	23700	78	4990	63400	109	18700
22	15400	31	1290	23900	71	4580	63100	100	17000
23	15700	28	1190	24300	75	4920	62700	96	16300
24	16200	33	1440	24300	65	4260	62200	87	14600
25	16200	32	1400	24500	58	3840	60100	86	14000
26	16300	36	1580	25100	67	4540	56800	99	15200
27	16290	30	1310	27900	105	7910	53300	82	11800
28	15900	27	1160	30400	162	13300	50400	80	10900
29	15600	35	1470	38100	250	25700	49000	124	16400
30	15500	20	837	47000	425	53900	50000	135	18200
31	15400	21	873	--	--	--	51200	110	15200
TOTAL	473100	--	37940	675600	--	210789	1983100	--	645300
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	51400	127	17600	50600	127	17400	19000	58	2980
2	51300	143	19800	46900	121	15300	18500	66	3300
3	50900	110	15100	44500	126	15100	17800	53	2550
4	48600	99	13000	42700	138	15900	17000	55	2520
5	45000	126	15300	40800	146	16100	17000	58	2660
6	42400	110	12600	39400	164	17400	16700	44	1980
7	40200	87	9440	38100	186	19100	16400	58	2570
8	38400	78	8090	36400	160	15700	16400	38	1680
9	36800	55	5460	34700	143	13400	16300	42	1850
10	35500	65	6230	33400	146	13200	16700	50	2250
11	34600	81	7570	32500	120	10500	17500	47	2220
12	35600	105	10100	32000	120	10400	18500	39	1950
13	38700	105	11000	31400	117	9920	22000	103	6120
14	40100	113	12200	30500	110	9060	30600	223	18400
15	40100	93	10100	29800	133	10700	36400	353	34700
16	43200	70	8160	29000	125	9790	36200	285	27900
17	46500	81	10200	28200	101	7690	35400	198	18900
18	52100	328	46100	27600	96	7150	34400	162	15000
19	61100	576	95000	26600	101	7250	32600	140	12300
20	70500	299	56900	26100	86	6060	30900	122	10200
21	71700	422	81700	24800	72	4820	29500	103	8200
22	71400	364	70200	23600	73	4650	28400	79	6060
23	70500	286	54400	22400	83	5020	28000	65	4910
24	69200	231	43200	21500	78	4530	27800	68	5100
25	68100	182	33500	20800	72	4040	30100	82	6660
26	66400	142	25500	20200	74	4040	36100	122	11900
27	64400	130	22600	19700	72	3830	49700	254	34100
28	62800	136	23100	19300	85	4430	58700	445	70500
29	61300	144	27800	--	--	--	62700	328	55500
30	58400	169	26600	--	--	--	63300	216	36900
31	54800	140	20700	--	--	--	64300	185	32100
TOTAL	1622000	--	815250	873500	--	282480	944900	--	443960

## SACRAMENTO RIVER BASIN

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	62600	160	27000	23600	64	4080	34000	75	6890
2	59500	142	22800	24200	80	5230	34200	65	6000
3	56400	140	21300	25200	65	4420	34400	70	6500
4	53500	138	19900	26400	47	3350	33400	57	5140
5	49300	137	18300	27300	66	4860	32500	46	4040
6	46000	114	14200	28000	70	5290	32100	55	4770
7	44100	120	14300	28800	70	5440	31400	42	3560
8	43100	105	12200	29500	83	6610	30600	38	3140
9	42700	82	9450	30200	86	7010	29000	35	2740
10	41500	100	11200	30800	73	6070	28000	42	3180
11	40300	113	12300	31600	65	5550	27200	46	3380
12	39500	109	11600	32700	67	5820	26900	42	3050
13	38800	84	8800	32100	63	5460	26500	42	3010
14	38300	70	7240	32000	67	5790	26400	40	2850
15	37800	68	6940	32100	74	6410	26200	37	2620
16	37400	67	6770	32300	75	6540	25800	42	2930
17	36700	82	8130	32200	92	8000	25300	37	2530
18	36700	100	9770	32000	88	7600	25000	30	2030
19	34700	83	7780	31800	71	6100	25700	31	2150
20	33500	70	6330	30400	68	5580	25300	35	2390
21	32900	62	5510	29200	74	5830	24200	30	1960
22	31700	55	4740	28400	75	5750	23600	23	1470
23	30400	63	5170	27700	70	5240	23700	25	1600
24	28800	86	6690	27000	71	5180	23600	28	1780
25	27100	55	4020	26000	70	4910	24000	32	2070
26	26200	51	3610	25600	64	4420	23800	35	2250
27	25300	47	3210	25800	56	3900	23900	36	2320
28	24900	44	2960	27000	70	5100	27000	52	3790
29	24700	44	2930	29800	90	7240	26900	40	2910
30	23800	48	3080	32100	72	6240	25900	40	2800
31	--	--	--	33600	85	7710	--	--	--
TOTAL	1148100	--	298230	904900	--	176730	826500	--	95850

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	25100	42	2850	18500	48	2400	26400	42	2990
2	24500	34	2250	18500	44	2200	26300	39	2770
3	23700	38	2430	18700	47	2370	26400	43	3070
4	23400	42	2650	18700	51	2570	26400	46	3280
5	23000	39	2420	19100	45	2320	25700	38	2640
6	22600	33	2010	19900	55	2960	25100	35	2370
7	22100	31	1850	20200	59	3220	24900	35	2350
8	21500	26	1510	20200	48	2620	24900	27	1820
9	20400	27	1520	20500	45	2490	24800	34	2280
10	20400	27	1490	20500	32	1770	25100	40	2710
11	20300	46	2520	20800	30	1680	25400	32	2190
12	20500	37	2050	22000	28	1660	25400	35	2400
13	20600	33	1840	22800	48	2950	25000	38	2570
14	20600	43	2390	23400	53	3350	25200	37	2520
15	20700	37	2070	23700	40	2560	25700	46	3190
16	20500	28	1550	23900	32	2060	25800	47	3270
17	20600	27	1500	24000	36	2330	26700	43	3100
18	20600	22	1220	23900	27	1740	26200	37	2620
19	20600	32	1780	22600	32	1950	24700	37	2470
20	20500	34	1880	23500	34	2160	23200	37	2320
21	20300	37	2030	23600	36	2290	23900	28	1810
22	20100	39	2120	23200	44	2760	24000	21	1360
23	20300	33	1810	22600	46	2810	24100	25	1630
24	20000	31	1670	23100	40	2490	23800	27	1740
25	19400	32	1680	24500	43	2840	23300	24	1510
26	20100	36	1950	25200	35	2380	22500	26	1580
27	20500	35	1940	25600	38	2610	21500	32	1860
28	20100	33	1790	25600	50	3460	20400	31	1710
29	19400	35	1830	25700	42	2910	19700	28	1490
30	18900	38	1940	25900	38	2660	19300	31	1620
31	18600	42	2110	26200	42	2970	--	--	--
TOTAL	650400	--	60650	696400	--	77540	731800	--	69240

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

11530300

3213959



11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (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
NOV. 13...	1355	13.0	22100	134	8000	--	--	--	--
DEC. 09...	1405	10.5	70200	120	22700	--	--	--	--
JAN. 26...	0935	8.0	66700	141	25400	29	40	48	56
MAR. 15...	0910	9.5	36400	352	34600	16	26	38	53
16...	1210	11.0	36400	277	27200	--	--	--	--
29...	1745	13.0	63400	254	43500	--	--	--	--
APR. 02...	1745	12.5	59000	136	21700	--	--	--	--
23...	1025	12.5	30400	56	4600	--	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL 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
NOV. 13...	--	--	96	--	98	--	100	--	--
DEC. 09...	--	61	--	70	--	96	--	100	--
JAN. 26...	63	75	--	80	--	96	--	100	--
MAR. 15...	66	--	88	--	95	--	99	--	100
16...	--	91	--	96	--	100	--	--	--
29...	--	78	--	84	--	94	--	100	--
APR. 02...	--	82	--	88	--	100	--	--	--
23...	--	69	--	76	--	100	--	--	--

## SACRAMENTO RIVER BASIN

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.

LOCATION.--Lat 38°27'20", long 121°30'07", in sec. 14, T.7 N., R.4 E., Sacramento County, at drawbridge at Freeport, approximately 11 miles south of Sacramento.

PERIOD OF RECORD.--Chemical analyses: June 1960 to June 1971 (discontinued).

Water temperatures: June 1960 to September 1971.

## EXTREMES, 1970-71:

Water temperatures: Maximum, 21.5°C on several days during July and August; minimum, 8.0°C on several days during January and February.

## Period of record:

Water temperatures: Maximum, 24.0°C June 16, 17, 1961; minimum, 5.0°C Jan. 24, 27, 1962.

REMARKS.--Chemical-quality samples collected by California Department of Water Resources. Temperature recorder located on right bank 1.9 miles northwest of Freeport, and 7.5 miles southwest of State Capitol building in Sacramento. Records of discharge given for Sacramento River at Sacramento (sta 11447500). Data collected at this site are considered as being part of the International Hydrological Decade Station, Sacramento River at Sacramento (sta 11447500).

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	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 STRON- TIUM (SR) (UG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
OCT.											
07...	1150	14900	16.5	9.5	12	10	10	4.9	550	6.3	1.1
NOV.											
05...	1125	16600	14.0	9.9	28	40	9.2	4.7	60	6.2	1.3
DEC.											
09...	1225	70500	10.5	10.1	17	30	9.3	4.5	50	5.9	1.4
JAN.											
06...	1300	42400	--	--	18	90	10	5.5	100	7.3	1.1
FEB.											
18...	1200	27600	--	--	17	120	11	6.2	80	6.6	1.0
MAR.											
17...	0800	35400	10.0	11.0	16	60	10	4.6	250	5.5	1.1
APR.											
21...	1330	32900	13.0	10.5	17	60	11	5.0	70	5.7	1.0
MAY											
19...	1100	31800	15.5	9.7	19	20	10	4.9	250	6.8	.6
JUNE											
16...	1145	25800	20.0	9.9	18	30	10	4.6	560	6.3	.9

DATE	DIS- SOLVED LITHIUM (LI) (UG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.											
07...	10	58	0	5.0	3.5	.1	--	.2	.13	110	73
NOV.											
05...	10	57	0	4.0	3.0	.1	--	.3	.13	0	86
DEC.											
09...	10	52	0	5.0	2.9	.1	--	.3	.21	0	73
JAN.											
06...	10	58	0	9.0	3.2	.1	--	.2	.31	150	85
FEB.											
18...	10	63	0	7.0	4.1	.1	--	.2	.12	0	85
MAR.											
17...	10	54	0	6.8	3.3	.1	.20	--	.20	50	76
APR.											
21...	0	58	0	5.5	4.5	.0	.20	--	.15	60	79
MAY											
19...	0	66	0	1.5	4.4	.2	.17	--	.12	30	81
JUNE											
16...	0	58	0	7.0	3.5	.3	.08	--	.10	40	80

## 11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHQS)	PH (UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)
OCT. 07...	.10	2940	45	0	48	23	.4	120	7.1	12	--
NOV. 05...	.12	3860	42	0	47	23	.4	114	7.4	6	--
DEC. 09...	.10	13900	42	0	43	23	.4	113	6.9	55	--
JAN. 06...	.12	9730	48	0	48	24	.5	134	7.1	28	--
FEB. 18...	.12	6330	53	1	52	21	.4	134	6.8	--	--
MAR. 17...	.10	7260	44	0	44	21	.4	113	7.7	40	10
APR. 21...	.11	7020	48	0	48	20	.4	117	7.5	20	--
MAY 19...	.11	6960	45	0	54	24	.4	118	8.2	20	--
JUNE 16...	.11	5570	44	0	48	23	.4	118	7.0	7	--

DATE	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDE GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (PC/L)	SUS- PENDE GROSS ALPHA AS U-NAT. (PC/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDE GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	SUS- PENDE GROSS BETA AS CS-137 (PC/L)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L)
DEC. 29...	<.7	2.2	<.2	.7	1.5	1.8	1.9-	2.2	.03

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT MAX	OCT MIN	NOV MAX	NOV MIN	DEC MAX	DEC MIN	JAN MAX	JAN MIN	FEB MAX	FEB MIN	MAR MAX	MAR MIN
1	18.0	18.0	13.0	13.0	10.5	10.0	9.5	9.5	8.0	8.0	10.0	10.0
2	18.0	18.0	13.0	13.0	10.0	10.0	10.0	9.5	8.0	8.0	10.0	9.5
3	18.0	18.0	13.0	13.0	10.0	9.5	10.0	9.5	8.0	8.0	9.5	9.5
4	18.0	18.0	13.0	13.0	9.5	9.0	10.0	9.5	8.0	8.0	9.5	9.5
5	18.0	17.5	13.0	13.0	9.0	9.0	10.0	9.0	8.0	8.0	10.0	9.5
6	17.5	17.5	13.0	13.0	9.0	9.0	9.0	9.0	8.0	8.0	10.0	10.0
7	17.5	17.0	13.0	12.5	9.0	9.0	9.0	9.0	8.0	8.0	10.0	10.0
8	17.0	16.5	12.5	12.5	9.0	9.0	9.0	9.0	8.0	8.0	10.0	10.0
9	16.5	16.0	12.5	12.5	9.0	8.5	9.0	9.0	8.0	8.0	10.0	10.0
10	16.0	16.0	12.5	12.5	8.5	8.5	9.0	9.0	8.0	8.0	10.5	10.0
11	16.0	15.5	12.5	12.0	8.5	8.5	9.0	9.0	8.0	8.0	10.5	10.5
12	15.5	15.5	12.0	12.0	8.5	8.0	9.0	9.0	8.0	8.0	10.5	10.5
13	15.5	15.5	12.0	12.0	8.0	8.0	9.0	9.0	8.0	8.0	11.0	10.5
14	15.5	15.5	12.0	12.0	8.5	8.0	9.0	9.0	8.0	8.0	11.0	11.0
15	15.5	15.5	12.0	12.0	9.0	8.5	9.0	9.0	8.0	8.0	11.0	11.0
16	15.5	15.5	12.0	12.0	9.0	9.0	9.0	8.5	8.5	8.0	11.0	11.0
17	15.5	15.5	12.0	12.0	9.0	9.0	8.5	8.5	8.5	8.5	11.0	11.0
18	15.5	15.5	12.0	12.0	9.0	9.0	8.5	8.5	8.5	8.5	11.0	11.0
19	15.5	15.5	12.0	12.0	9.0	9.0	9.0	8.5	9.0	8.5	11.0	11.0
20	15.5	15.5	12.0	12.0	9.0	9.0	9.0	8.5	9.0	9.0	11.0	11.0
21	15.5	15.0	12.0	12.0	9.0	9.0	9.0	9.0	9.0	9.0	11.5	11.0
22	15.0	15.0	12.0	12.0	9.0	9.0	9.0	9.0	9.5	9.0	11.5	11.5
23	15.0	15.0	12.5	12.0	9.0	9.0	9.0	9.0	9.5	9.5	12.0	11.5
24	15.0	14.5	12.5	12.0	9.0	9.0	9.0	9.0	9.5	9.5	12.0	12.0
25	14.5	14.0	12.0	12.0	9.0	9.0	9.0	8.5	9.5	9.5	12.0	12.0
26	14.0	14.0	12.0	12.0	9.0	9.0	8.5	8.5	9.5	9.5	12.5	12.0
27	14.0	13.0	12.0	11.5	9.0	9.0	8.5	8.5	9.5	9.5	12.5	12.5
28	13.0	13.0	12.0	11.5	9.0	9.0	8.5	8.5	10.0	9.5	12.5	12.5
29	13.0	13.0	12.0	11.5	9.0	9.0	8.5	8.5	--	--	13.0	12.5
30	13.0	13.0	11.5	10.5	9.0	9.0	8.5	8.5	--	--	13.0	13.0
31	13.0	13.0	--	--	9.5	9.0	8.5	8.0	--	--	13.0	13.0
AVE	15.6	15.5	12.3	12.2	9.0	8.9	9.0	8.9	8.6	8.5	11.1	11.0

## SACRAMENTO RIVER BASIN

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	13.0	14.0	13.5	15.0	15.0	19.5	19.0	21.5	21.0	19.5	19.0
2	13.0	13.0	14.0	14.0	15.0	15.0	19.5	19.5	21.5	21.0	19.5	19.0
3	13.0	12.5	14.0	14.0	15.5	15.0	20.0	19.5	21.5	21.0	19.0	19.0
4	13.0	12.5	14.0	14.0	16.0	15.5	20.0	19.5	21.5	21.0	19.0	19.0
5	13.0	13.0	14.0	14.0	17.0	16.0	20.0	19.5	21.5	21.0	19.0	19.0
6	13.0	13.0	14.0	14.0	17.5	17.0	20.5	20.0	21.5	21.0	19.0	18.5
7	13.0	13.0	14.0	14.0	17.5	17.5	20.5	20.0	21.5	21.0	18.5	18.5
8	13.0	12.5	14.0	14.0	18.0	17.5	20.5	20.0	21.5	21.0	18.5	18.0
9	13.0	13.0	14.5	14.0	18.0	18.0	20.5	20.0	21.5	21.0	18.5	18.0
10	13.0	13.0	14.5	14.5	18.0	18.0	20.5	20.0	21.5	21.0	18.0	18.0
11	13.0	12.5	15.0	14.5	18.0	18.0	20.5	20.0	21.0	21.0	18.0	18.0
12	13.0	13.0	15.0	15.0	18.0	18.0	20.5	20.0	21.0	21.0	18.0	18.0
13	13.0	13.0	15.5	15.0	18.0	18.0	21.0	20.5	21.0	21.0	18.5	18.0
14	13.0	13.0	16.0	15.5	18.0	18.0	21.0	20.5	21.0	21.0	18.5	18.0
15	13.0	13.0	16.0	16.0	18.0	18.0	21.0	20.5	21.0	21.0	18.0	18.0
16	13.0	13.0	16.5	16.0	18.5	18.0	21.0	20.5	21.5	21.0	18.0	18.0
17	13.0	12.5	16.5	16.0	18.5	18.5	21.0	20.5	21.0	21.0	18.0	18.0
18	13.0	12.5	16.0	16.0	19.0	18.5	21.0	20.5	21.0	20.5	18.0	17.5
19	12.5	12.5	16.0	15.5	19.0	19.0	21.0	21.0	20.5	20.5	17.5	17.5
20	12.5	12.5	15.5	15.5	19.0	19.0	21.0	21.0	20.5	20.5	17.5	17.5
21	12.5	12.5	16.0	15.5	19.0	19.0	21.0	21.0	20.5	20.5	17.5	17.0
22	12.5	12.5	16.0	15.5	19.0	19.0	21.0	21.0	20.5	20.5	17.0	17.0
23	12.5	12.5	16.0	15.5	19.0	19.0	21.0	21.0	20.5	20.5	17.0	16.5
24	12.5	12.5	16.0	15.5	19.5	19.0	21.0	21.0	20.5	20.5	16.5	16.5
25	12.5	12.5	16.5	16.0	19.0	19.0	21.0	21.0	20.5	20.5	16.5	16.5
26	12.5	12.5	16.5	16.0	19.0	19.0	21.0	21.0	20.5	20.5	16.5	16.5
27	12.5	12.5	16.5	16.0	19.5	19.0	21.0	21.0	20.5	20.5	16.5	16.0
28	13.0	12.5	16.5	16.0	19.5	19.0	21.0	21.0	20.5	20.0	16.0	16.0
29	13.0	13.0	16.5	15.5	19.0	19.0	21.5	21.0	20.0	19.5	16.0	16.0
30	13.5	13.0	15.5	15.0	19.0	19.0	21.5	21.0	19.5	19.5	16.0	15.0
31	--	--	15.0	15.0	--	--	21.5	21.0	19.5	19.5	--	--
AVE	12.9	12.7	15.4	15.0	18.1	17.9	20.7	20.4	20.9	20.7	17.8	17.6

## 11447810 SACRAMENTO RIVER AT GREEN'S LANDING, NEAR COURTLAND, CALIF.

LOCATION.--Lat 38°20'45", long 121°32'42", in NE¼ sec.28, T.6 N., R.4 E., Sacramento County, on left bank, 2.2 miles upstream from Sutter Slough, and 1.6 miles northeast of Courtland.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1958, June to September 1971. Published as "at Snodgrass Slough, near Courtland" in 1953-58.

REMARKS.--Chemical-quality samples collected by California Department of Water Resources. Records of discharge given for Sacramento River at Sacramento (sta 11447500)

## CHEMICAL ANALYSES, JUNE TO SEPTEMBER 1971

DATE	TIME	MEAN DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	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)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
JUNE 16...	1225	25800	20.0	8.8	18	20	9.5	4.5	110	6.1	.9
JULY 21...	1140	20300	22.0	8.2	17	20	9.7	4.4	120	6.7	1.0
AUG. 24...	1330	23100	21.5	8.0	18	20	11	5.9	150	10	.7
SEP. 16...	1140	25800	20.0	8.2	18	20	11	6.0	160	9.3	1.2

DATE	DIS- SOLVED LITHIUM (LI) (UG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
JUNE 16...	0	64	0	5.0	3.6	.2	.09	.10	30	81
JULY 21...	0	57	0	6.5	3.5	.1	.07	.12	60	77
AUG. 24...	10	73	0	9.3	6.8	.4	.11	.12	50	99
SEP. 16...	0	79	0	7.5	6.7	.1	.07	.13	90	99

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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (JTU)
JUNE 16...	.11	5640	42	0	53	23	.4	114	7.1	7
JULY 21...	.10	4220	42	0	47	25	.4	114	8.0	20
AUG. 24...	.13	6180	52	0	60	29	.6	142	7.4	20
SEP. 16...	.13	6900	52	0	65	27	.6	148	7.2	20

LOCATION.--Lat 38°56'54", long 122°54'03", in NE $\frac{1}{4}$  sec.30, T.13 N., R.9 W., Lake County, at outlet of Highland Creek Dam, 500 ft upstream from gaging station, and 4.0 miles southwest of Kelseyville.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-71 (partial-record station). Published as sta 11448900 "above Highland Creek Dam" in 1968.

Water temperatures: November 1966 to September 1971.  
Sediment records: December 1965 to September 1971.

Sediment concentrations: Maximum daily, 86 mg/l Dec. 4; minimum daily, no flow for many days.  
Sediment discharge: Maximum daily, 175 tons Dec. 4; minimum daily, 0 tons on many days.

Sediment concentrations: Maximum daily, 182 mg/l Jan. 5, 1966; minimum daily, no flow for many days in 1966-71.  
Sediment discharge: Maximum daily, 337 tons Jan. 24, 1970; minimum daily, 0 tons on many days in 1966-71.

REMARKS.--No flow Oct. 1 to Nov. 26, May 22 to June 16, July 1-20. Bed material sample taken Oct. 6 and June 3 at gaging station, 500 ft downstream from sampling point; bed at sampling point is concrete outlet from dam with no material over concrete.

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	BICAR-BONATE (HC03) (MG/L)	CAR-BONATE (C03) (MG/L)	DIS-SOLVED	DIS-SOLVED
				CAL-CIUM (CA) (MG/L)	MAG-NE-SIUM (MG)	SODIUM (NA) (MG/L)	TAS-TIUM (TUM) (MG/L)			SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
NOV. 28...	0930	247	10.0	34	27	13	1.3	257	0	9.0	4.7
JAN. 16...	1130	494	7.0	9.7	7.4	3.9	.8	66	0	4.0	2.2
MAY 06...	1100	.33	17.5	24	17	8.7	.9	161	--	12	3.5

DATE	DIS-SOLVED SOLIDS (RESIDUE 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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
NOV. 28...	234	--	.32	156	196	0	211	13	.4	428	7.5
JAN. 16...	83	--	.11	111	--	0	54	13	.2	126	7.1
MAY 06...	150	145	.20	.13	130	0	132	13	.3	273	7.1

[illegible]

## 11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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				0	0	0	80	32	6.7
2				0	0	0	330	30	25
3				0	0	0	496	38	46
4				0	0	0	754	86	175
5				0	0	0	446	53	67
6				0	0	0	58	36	5.6
7				0	0	0	48	23	3.0
8				0	0	0	60	19	3.1
9				0	0	0	52	16	2.2
10				0	0	0	37	16	1.6
11				0	0	0	27	18	1.3
12				0	0	0	21	20	1.1
13				0	0	0	18	21	1.0
14				0	0	0	13	20	.70
15				0	0	0	36	19	1.8
16				0	0	0	146	30	12
17				0	0	0	87	27	6.5
18				0	0	0	63	22	3.7
19				0	0	0	46	21	2.6
20				0	0	0	105	20	5.5
21				0	0	0	141	30	10
22				0	0	0	66	36	6.4
23				0	0	0	45	27	3.3
24				0	0	0	34	24	2.2
25				0	0	0	25	21	1.4
26				0	0	0	21	19	1.1
27				95	10	2.6	18	17	.83
28				246	25	17	36	16	1.5
29				108	30	8.7	143	33	11
30				82	26	5.8	66	31	5.5
31				--	--	--	45	19	2.3
TOTAL	0	--	0	531	--	34.1	3563	--	416.93

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	38	15	1.5	13	13	.46	4.3	7	.08
2	40	18	1.9	11	13	.39	3.8	7	.07
3	29	19	1.5	11	14	.42	3.8	7	.07
4	22	17	1.0	9.8	14	.37	3.8	7	.07
5	20	16	.86	9.0	13	.32	4.1	7	.08
6	16	16	.69	8.4	12	.27	3.8	7	.07
7	15	16	.65	7.8	11	.23	3.8	7	.07
8	14	15	.57	7.2	10	.19	3.8	7	.07
9	12	15	.49	6.8	8	.15	3.8	7	.07
10	12	15	.49	6.4	8	.14	3.8	7	.07
11	15	15	.61	6.0	8	.13	4.3	7	.08
12	36	19	1.8	6.0	8	.13	269	10	8.2
13	55	45	6.4	6.0	8	.13	102	79	23
14	200	37	20	5.7	8	.12	53	40	5.7
15	268	35	26	5.7	8	.12	41	32	3.5
16	517	41	58	5.4	8	.12	32	31	2.7
17	305	58	47	5.4	8	.12	29	30	2.3
18	126	35	12	5.1	8	.11	21	28	1.6
19	82	20	4.4	5.1	8	.11	18	27	1.3
20	60	14	2.3	5.1	8	.11	14	26	.98
21	48	13	1.7	4.8	8	.10	11	24	.71
22	40	13	1.4	4.8	8	.10	9.8	22	.58
23	33	13	1.2	4.6	8	.10	12	20	.65
24	29	13	1.0	4.3	8	.09	13	19	.67
25	25	13	.88	4.1	8	.09	77	18	3.9
26	23	12	.75	3.8	8	.08	369	66	48
27	21	12	.68	4.1	8	.09	92	53	14
28	20	12	.65	4.3	7	.08	52	33	4.6
29	18	12	.58	--	--	--	40	28	3.0
30	15	12	.49	--	--	--	29	26	2.0
31	14	12	.45	--	--	--	22	24	1.4
TOTAL	2168	--	197.94	180.7	--	4.87	1348.9	--	129.59

## SACRAMENTO RIVER BASIN

11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	18	24	1.2	.68	10	.02	0	0	0
2	15	23	.93	.68	13	.02	0	0	0
3	13	23	.81	.44	16	.02	0	0	0
4	12	22	.71	.33	18	.02	0	0	0
5	11	22	.65	.33	17	.02	0	0	0
6	11	21	.62	.33	16	.01	0	0	0
7	11	20	.59	.33	15	.01	0	0	0
8	11	19	.56	.33	14	.01	0	0	0
9	11	18	.53	.33	13	.01	0	0	0
10	20	16	.86	.33	12	.01	0	0	0
11	13	14	.49	.28	11	.01	0	0	0
12	11	12	.36	.28	10	.01	0	0	0
13	9.8	10	.26	.28	9	.01	0	0	0
14	11	8	.24	.23	8	0	0	0	0
15	11	8	.24	.28	7	.01	0	0	0
16	7.8	10	.21	.28	6	0	0	0	0
17	9.8	12	.32	.33	5	0	.01	1	0
18	8.4	13	.29	.33	4	0	.02	1	0
19	7.2	15	.29	.33	4	0	.03	2	0
20	6.4	16	.28	.33	4	0	.03	2	0
21	6.0	16	.26	.23	4	0	.05	3	0
22	5.7	14	.22	0	0	0	.05	3	0
23	5.7	14	.22	0	0	0	.03	2	0
24	5.4	14	.20	0	0	0	.03	2	0
25	5.7	18	.28	0	0	0	.03	2	0
26	5.1	16	.22	0	0	0	.03	2	0
27	4.8	16	.21	0	0	0	.03	2	0
28	4.6	17	.21	0	0	0	.02	1	0
29	4.3	17	.20	0	0	0	.02	1	0
30	2.0	15	.08	0	0	0	.01	1	0
31	--	--	--	0	0	0	--	--	--
TOTAL	277.7	--	12.54	7.29	--	.19	.39	--	0

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	.23	10	.01	1.2	4	.01
2	0	0	0	.33	15	.01	1.1	4	.01
3	0	0	0	.44	25	.03	1.1	4	.01
4	0	0	0	.59	36	.06	.95	4	.01
5	0	0	0	.68	36	.07	.95	4	.01
6	0	0	0	.68	34	.06	.95	4	.01
7	0	0	0	.68	32	.06	.95	4	.01
8	0	0	0	.68	30	.06	.95	4	.01
9	0	0	0	.68	28	.05	.95	4	.01
10	0	0	0	.68	26	.05	.86	4	.01
11	0	0	0	.68	24	.04	.86	4	.01
12	0	0	0	.68	22	.04	.86	4	.01
13	0	0	0	.59	20	.03	.86	4	.01
14	0	0	0	.59	18	.03	1.1	4	.01
15	0	0	0	.59	16	.03	.86	4	.01
16	0	0	0	.59	14	.02	.86	4	.01
17	0	0	0	.59	12	.02	1.5	4	.02
18	0	0	0	.59	10	.02	1.7	4	.02
19	0	0	0	.68	8	.01	1.7	4	.02
20	0	0	0	.86	6	.01	1.7	4	.02
21	.01	1	0	.86	4	.01	1.7	4	.02
22	.03	2	0	.95	4	.01	1.7	4	.02
23	.05	3	0	1.1	4	.01	1.8	4	.02
24	.05	3	0	1.1	4	.01	2.1	5	.03
25	.07	4	0	1.4	6	.02	2.1	5	.03
26	.07	4	0	1.4	6	.02	2.1	5	.03
27	.15	8	0	1.4	6	.02	2.0	5	.03
28	.33	15	.01	1.4	6	.02	1.8	4	.02
29	.33	15	.01	1.4	6	.02	1.7	4	.02
30	.33	15	.01	1.2	4	.01	2.0	5	.03
31	.28	12	.01	1.2	4	.01	--	--	--
TOTAL	1.70	--	.04	25.52	--	.87	40.96	--	.49

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

8145.16

797.56



## 11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM
NOV. 28...	0930	10.0	247	25	17	73	88
JAN. 16...B	1130	7.0	494	34	45	49	61
MAR. 12...	1415	9.0	625	6	10	--	--
MAR. 16...	1100	9.5	32	31	2.7	--	--
AUG. 04...	1400	17.5	.59	36	.06	--	--

DATE	TIME	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	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
NOV. 28...	93	96	98	99	99	99	99	100
JAN. 16...B	80	92	95	98	99	100	--	--
MAR. 12...	--	--	--	85	100	--	--	--
MAR. 16...	--	--	--	100	--	--	--	--
AUG. 04...	--	--	--	89	100	--	--	--

Methods of analysis :

B In native water.

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
OCT. 06...	1100	5	.00	4	10	20	27
JUNE 03...	1045	5	.00	4	11	21	27

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
OCT. 06...	30	32	36	44	49	73	100	100
JUNE 03...	31	33	35	41	51	74	100	100

## SACRAMENTO RIVER BASIN

11452000 CACHE CREEK NEAR CAPAY, CALIF.

LOCATION.--Lat 38°43'44", long 122°06'15", in Canada de Capay Grant, Yolo County, at gaging station 1.8 miles upstream from Clear Lake Water Company's diversion dam, 3.2 miles northwest of Capay, and 5.4 miles northwest of Esparto.

DRAINAGE AREA.--1,044 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1952 (partial-record station), October 1952 to September 1968, water year 1969 (partial-record station), October 1969 to September 1971.  
Sediment records: Water years 1959-62 (partial-record station).

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
NOV. 13...	1230	61	13.5	11.5	18	56	264	0	75	2500	216	0
DEC. 08...	1040	1390	12.0	10.3	10	25	165	0	28	1100	133	0
30...	1315	2530	9.5	11.5	20	14	138	0	13	700	114	1
FEB. 02...	1315	952	10.5	11.2	27	21	190	0	20	1000	178	22
MAR. 02...	1015	166	8.0	12.8	42	53	293	6	60	1700	274	24
APR. 15...	0945	310	16.0	10.0	34	42	236	4	44	1400	212	12
MAY 12...	1045	346	21.0	9.1	27	33	210	4	31	--	176	0
JUNE 16...	0830	507	23.0	7.6	25	13	168	0	14	800	135	0
AUG. 04...	0945	476	25.0	8.7	24	13	151	0	10	800	120	0
SEP. 28...	0945	202	16.5	9.8	24	16	182	1	19	--	137	0

DATE	ALKA- LINITY AS CACO3 (MG/L)	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
NOV. 13...	217	3.6	694	7.4	--	--	--	--	--	--	--
DEC. 08...	135	2.2	390	8.0	140	--	--	--	--	--	--
30...	113	.9	279	7.9	--	--	--	--	--	--	--
FEB. 02...	156	1.1	381	8.3	50	--	--	--	--	--	--
MAR. 02...	250	2.3	712	8.4	3	--	--	--	--	--	--
APR. 15...	200	2.0	544	8.4	4	--	--	--	--	--	--
MAY 12...	179	1.7	464	8.5	4	0	100	0	0	.0	0
JUNE 16...	138	.7	325	8.0	55	--	--	--	--	--	--
AUG. 04...	124	.7	279	8.2	15	--	--	--	--	--	--
SEP. 28...	151	.9	353	8.4	6	--	--	--	--	--	--

## 11453500 PUTAH CREEK NEAR GUENOC, CALIF.

LOCATION.--Lat 38°46'44", long 122°30'59", in Guenoc Grant, Lake County, at gaging station on right bank, just upstream from Coyote Valley damsite, 2.8 miles upstream from Soda Creek, and 3.2 miles downstream from highway bridge at Guenoc.

DRAINAGE AREA.--113 sq mi.

PERIOD OF RECORD.--Water temperatures: March 1960 to September 1971.

Sediment records: Water years 1962-64 (partial-record station), December 1964 to March 1965, water years 1965-71 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 30.0°C July 21; minimum, 5.5°C Jan. 13.

Period of record:

Water temperatures: Maximum, 30.0°C July 20, 1960, July 21, 1971; minimum (1960-65, 1966-71), 4.5°C Dec. 14, 1967.

REMARKS.--No flow Oct. 2.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	17.0	16.0	13.0	11.0	9.5	9.5	9.0	12.0	9.5	12.0	8.0
2	--	--	16.0	13.0	10.0	9.0	9.0	6.5	12.0	10.0	13.0	8.5
3	21.5	16.5	14.5	13.5	10.5	9.5	8.0	6.0	11.0	8.5	14.5	10.5
4	22.0	17.0	14.5	13.5	11.5	10.5	8.0	6.5	12.0	9.5	12.0	9.5
5	20.5	16.5	14.0	13.5	12.0	11.5	8.5	6.5	13.0	10.0	13.0	8.5
6	19.5	16.0	13.5	13.0	12.0	11.5	9.0	6.5	13.0	10.0	13.5	9.0
7	18.0	14.5	14.5	12.0	12.0	11.5	9.0	7.0	12.0	9.5	13.0	9.5
8	20.0	14.5	14.5	13.5	12.0	11.0	9.5	8.0	13.0	9.5	14.0	9.5
9	20.0	14.5	15.5	14.0	11.0	10.0	10.0	8.5	13.0	9.5	13.5	10.0
10	20.5	15.5	15.0	13.0	10.5	9.5	10.0	9.0	14.0	10.0	13.0	10.0
11	20.0	15.5	14.5	13.5	11.0	10.0	9.0	8.5	14.5	11.0	13.0	11.0
12	20.0	16.0	14.5	11.5	10.5	9.0	8.5	6.0	14.5	11.0	12.0	9.5
13	19.5	15.5	14.0	10.5	10.0	9.0	7.0	5.5	15.0	11.0	11.5	8.5
14	18.5	15.5	14.0	11.5	10.0	9.0	8.5	6.5	13.0	11.0	11.0	9.5
15	18.5	15.0	14.0	11.5	10.5	9.5	9.0	8.0	14.0	11.0	13.0	10.0
16	18.5	15.0	14.5	12.0	9.5	9.0	10.0	8.5	12.0	10.5	11.5	9.5
17	17.0	14.0	14.5	11.5	9.5	8.5	11.5	10.0	13.5	10.0	13.0	9.0
18	18.0	15.0	13.5	11.5	9.5	6.5	13.0	10.5	11.5	9.5	13.5	9.0
19	16.5	14.5	13.5	11.0	8.5	6.5	12.0	10.5	11.5	9.0	14.0	9.5
20	16.5	15.0	13.5	11.0	8.5	6.5	11.5	10.0	12.0	8.5	15.0	10.0
21	16.0	15.0	13.5	12.0	9.0	6.5	11.0	8.5	12.0	9.0	15.0	10.5
22	18.0	14.5	13.0	13.0	9.0	7.0	10.0	8.5	12.0	9.0	13.5	11.0
23	16.5	15.0	14.0	13.0	9.5	8.5	10.5	8.5	13.0	9.0	14.0	11.5
24	16.5	13.5	14.5	13.5	9.0	7.0	10.5	8.5	13.5	9.0	14.5	11.0
25	16.0	14.0	14.0	13.0	9.0	6.5	10.5	8.5	11.0	8.0	13.5	11.5
26	15.0	12.0	13.0	10.5	9.0	8.5	11.0	8.5	11.5	8.0	13.0	10.5
27	15.5	11.5	11.0	10.0	9.5	9.0	11.5	9.0	11.0	9.0	13.5	9.5
28	15.5	11.5	10.5	10.0	9.5	9.0	11.5	9.0	11.5	8.5	15.0	10.5
29	15.5	11.5	10.5	10.0	10.0	9.0	11.5	9.0	--	--	16.0	11.0
30	14.0	13.0	10.5	10.0	10.0	8.5	11.5	9.0	--	--	15.0	11.5
31	16.0	13.0	--	--	10.0	8.5	11.0	9.0	--	--	14.5	10.0
AVE	18.0	14.6	13.8	12.1	10.1	8.9	10.0	8.2	12.6	9.6	13.4	9.9
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	10.5	18.0	14.5	18.5	15.5	26.5	21.0	29.0	23.5	25.5	21.5
2	16.0	11.5	16.5	14.5	21.0	14.5	26.5	21.5	29.0	24.0	25.0	22.0
3	17.0	11.5	17.0	13.5	21.5	16.5	26.5	22.0	28.5	24.5	25.0	21.5
4	18.0	12.0	19.0	14.5	23.5	17.0	27.0	21.5	28.0	23.0	25.5	21.0
5	18.0	13.0	20.0	15.0	24.5	18.0	27.0	22.0	28.0	23.5	24.5	21.5
6	15.5	13.5	19.0	14.5	25.0	18.5	28.0	21.5	28.0	24.0	24.5	21.0
7	15.5	12.0	20.0	15.0	25.0	18.5	27.0	22.0	27.0	22.0	24.5	21.0
8	16.5	11.5	18.0	15.5	25.0	19.5	26.5	21.5	27.0	23.5	24.5	20.5
9	14.0	12.0	21.5	14.5	24.0	19.5	26.0	21.5	28.5	23.0	24.5	20.0
10	14.5	10.0	23.5	15.5	24.5	18.0	26.0	21.0	29.5	24.0	24.5	20.5
11	16.0	10.5	24.0	16.5	25.0	19.0	26.5	20.5	29.0	25.0	25.0	20.5
12	17.0	11.5	23.5	18.0	23.5	19.5	27.0	21.5	29.5	26.0	25.5	21.5
13	14.0	13.0	23.0	16.5	24.5	18.5	28.0	22.0	29.0	25.5	26.5	22.0
14	18.5	12.0	24.0	16.5	25.5	19.0	28.5	22.0	28.0	24.5	26.5	22.0
15	19.0	13.5	23.5	16.5	26.5	20.0	29.0	23.5	26.5	23.5	27.0	22.0
16	16.5	13.0	21.5	15.0	26.5	20.5	28.5	23.5	27.0	23.0	26.5	22.0
17	15.0	12.0	21.0	15.5	25.5	20.5	27.0	23.5	26.5	23.0	25.0	22.0
18	17.0	11.0	23.0	16.0	25.0	20.5	29.0	23.5	27.0	23.0	23.5	21.5
19	18.5	12.0	23.5	16.5	25.5	20.5	29.0	23.5	27.0	23.5	25.0	20.0
20	16.5	13.5	23.5	17.0	26.0	20.0	29.0	24.0	26.5	23.5	23.5	20.0
21	17.0	11.0	21.0	15.0	26.0	21.0	30.0	24.0	26.0	23.0	23.0	20.0
22	15.5	13.0	23.5	16.5	25.5	21.0	29.0	24.5	26.5	23.5	23.5	19.5
23	17.0	12.0	25.0	18.5	26.0	21.0	29.0	24.5	27.0	23.5	23.0	19.5
24	16.5	11.0	25.5	19.0	25.0	20.5	29.5	24.5	26.0	23.5	22.0	19.5
25	19.0	12.0	23.5	19.0	25.5	20.5	29.5	24.0	28.0	24.5	21.0	18.5
26	18.5	13.5	21.5	16.5	24.0	21.5	29.0	24.0	27.0	24.0	20.0	18.5
27	20.5	13.5	20.0	17.0	24.5	20.0	29.0	23.5	26.0	23.5	20.0	18.0
28	20.0	14.0	18.0	17.0	24.5	19.5	29.0	24.0	24.5	21.5	19.5	17.0
29	19.5	14.0	19.5	17.0	25.5	20.0	28.5	23.5	25.0	20.5	18.5	17.0
30	20.5	14.0	21.5	16.0	26.0	20.5	28.0	23.5	24.0	21.0	19.0	15.5
31	--	--	19.5	16.0	--	--	29.0	23.5	24.5	20.5	--	--
AVE	17.1	12.3	21.3	16.1	24.6	19.3	28.0	22.8	27.2	23.4	23.7	20.2

## SACRAMENTO RIVER BASIN

11453500 PUTAH CREEK NEAR GUENOC, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.
						% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM
OCT. 08...	1000	14.5	1.2	132	.43	98	98	98	99	100
NOV. 12...	1500	14.5	61	2	.33	--	--	--	--	--
DEC. 07...	1245	12.0	605	14	23	--	--	--	--	--
09...	1530	11.0	518	10	14	--	--	--	--	--
JAN. 12...	1500	7.5	467	8	10	--	--	--	--	--
FEB. 09...	1600	12.5	107	4	1.2	--	--	--	--	--
MAR. 15...	1300	12.0	416	6	6.7	--	--	--	--	--
APR. 08...	1230	15.0	128	4	1.4	--	--	--	--	--
MAY 10...	1100	15.5	52	11	1.5	--	--	--	--	--
JUNE 01...	1455	16.0	27	9	.66	--	--	--	--	--
JULY 08...	1830	26.0	3.9	2	.02	--	--	--	--	--
AUG. 05...	1155	24.0	3.0	6	.05	--	--	--	--	--
SEP. 07...	1500	24.0	1.7	4	.02	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
					% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM
OCT. 08...	1025	14.5	6	1.2	1	4	13	19
JUNE 01...	1555	16.0	6	27	1	3	11	21
					BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
					% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
DATE	1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM	128 MM
OCT. 08...	21	25	30	39	51	67	83	100
JUNE 01...	25	29	35	44	59	74	94	100

## 11453550 HUNTING CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°46'18", long 122°24'26", in NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.28, T.11 N., R.5 W., Lake County, at gaging station 2,400 ft upstream from mouth, 5.3 miles southwest of Knoxville, and 11.2 miles east of Middletown.

DRAINAGE AREA.--37.8 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1971.  
Sediment records: October 1970 to September 1971.

## EXTREMES.--1970-71:

Sediment concentrations: Maximum daily, 441 mg/l Nov. 28; minimum daily, 1 mg/l Jan. 5-9.  
Sediment discharge: Maximum daily, 1,420 tons Nov. 28; minimum daily, 0 tons on many days.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL 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)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
DEC.											
01...	1215	90	9.0	25	30	<25	--	7.2	38	7.1	.7
01...	1345	86	--	--	--	--	--	--	--	--	--
APR.											
08...	1055	13	13.0	38	10	--	0	19	110	13	.5
08...	1100	13	13.0	--	--	--	--	--	--	--	--

DATE	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOLVED ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	AMMONIA (NH <sub>4</sub> ) (MG/L)
DEC.											
01...	223	0	6.0	6.0	.2	--	--	--	--	--	--
01...	--	--	--	--	--	.24	--	.24	--	.00	.00
APR.											
08...	616	0	16	13	.1	--	--	--	--	--	--
08...	--	--	--	--	--	.33	.18	--	.00	.00	.00

DATE	NITRATE (NO <sub>3</sub> ) (MG/L)	PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)
DEC.											
01...	1.0	--	--	--	--	110	201	.27	48.8	174	0
01...	1.2	.13	.07	--	--	--	--	--	--	--	--
APR.											
08...	--	--	--	--	--	190	513	.70	18.0	500	0
08...	--	--	.09	.040	.030	--	--	--	--	--	--

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	TUR- BID- ITY (JTU)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC.								
01...	8	.2	15	--	<.5	--	--	<10
01...	--	--	--	--	--	--	--	--
APR.								
08...	5	.3	1	0	--	.1	60	--
08...	--	--	--	--	--	--	--	--

## SACRAMENTO RIVER BASIN

11453550 HUNTING CREEK NEAR KNOXVILLE, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	ALKA- LITY AS CACO3 (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH
								(UNITS)
NOV. 12...	0820	2.6	11.5	--	--	--	560	--
DEC. 01...	1215	90	9.0	11.2	97	179	235	8.4
FEB. 03...	1400	28	7.5	--	--	--	740	--
MAR. 03...	1400	14	10.5	--	--	--	800	--
29...	1145	20	13.0	--	--	--	674	--
APR. 08...	1055	13	13.0	10.8	102	480	780	8.6
MAY 06...	1205	8.1	17.5	--	--	--	768	--
JUNE 04...	1105	4.9	19.0	--	--	--	850	--
JULY 09...	0630	1.2	21.0	--	--	--	920	--
AUG. 04...	0910	.39	22.5	--	--	--	950	--
SEP. 07...	1300	.29	19.0	--	--	--	1050	--

DATE	TIME	ALDRIN IN BOTTOM DE- POSITS (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/L)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
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## ANALYSES OF ADDITIONAL SAMPLES

DEC. 01...	1345	.00	--	.00	--	.00	--	.00	--	.00	--
APR., 1971 08...	1045	.00	--	.00	--	.00	--	.00	--	.00	--
JULY 09...	0840	--	<.20	--	<1.0	--	<.20	--	<.20	--	<.20

DATE	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)
------	-------------------------	-------------------------	---	------------------	--	---------------------------	---	--------------------------------------	---	-------------------

DEC. 01...	.00	.00	--	.00	--	.00	--	.00	--	.00
APR., 1971 08...	.00	.00	--	.00	--	.00	--	.00	--	.00
JULY 09...	--	--	<.20	--	<.20	--	<.20	--	<.20	--

DATE	LINDANE IN BOTTOM DE- POSITS (UG/KG)	MALA- THION (UG/L)	MALA- THION IN BOTTOM DE- POSITS (UG/KG)	METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM DE- POSITS (UG/KG)	PARA- THION (UG/L)	PARA- THION IN BOT- TOM DE- POSITS (UG/KG)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
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DEC. 01...	--	.00	--	.00	--	.00	--	.00	.00	.00
APR., 1971 08...	--	.00	--	.00	--	.00	--	.00	.00	.00
JULY 09...	<.20	--	<.20	--	<.20	--	<.20	--	--	--

## 11453550 HUNTING CREEK NEAR KNOXVILLE, CALIF.--Continued

SUSPENDED--SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	.79	17	.04	.94	10	.03	130	37	14
2	.73	17	.03	.94	9	.02	303	75	79
3	.73	17	.03	1.0	9	.02	567	257	934
4	.73	17	.03	5.9	15.	.24	887	307	1240
5	.73	17	.03	5.1	10	.14	135	19	7.4
6	.79	17	.04	15	15	.79	75	8	1.6
7	.79	17	.04	7.5	8	.16	55	5	.74
8	.73	17	.03	4.2	7	.08	60	6	.97
9	.73	17	.03	3.1	6	.05	49	3	.40
10	.67	17	.03	2.3	5	.03	37	2	.20
11	.67	16	.03	3.1	5	.04	31	2	.17
12	.67	16	.03	2.6	4	.03	26	2	.14
13	.67	15	.03	2.4	4	.03	24	2	.13
14	.67	15	.03	2.3	4	.02	23	2	.12
15	.67	15	.03	2.1	4	.02	50	20	11
16	.67	14	.03	2.0	4	.02	156	47	22
17	.67	14	.03	2.0	4	.02	75	19	3.9
18	.94	17	.04	1.9	4	.02	97	30	8.3
19	1.1	17	.05	1.7	4	.02	68	19	3.5
20	1.3	13	.05	1.7	3	.01	142	65	48
21	1.3	13	.05	1.7	3	.01	140	43	18
22	1.2	12	.04	1.7	3	.01	72	11	2.1
23	1.3	12	.04	1.7	3	.01	58	7	1.1
24	1.3	12	.04	1.9	3	.02	50	4	.54
25	1.2	12	.04	2.1	3	.02	43	3	.35
26	1.0	11	.03	3.1	3	.03	43	2	.23
27	1.0	11	.03	185	42	169	42	2	.23
28	.94	11	.03	806	441	1420	48	10	2.7
29	.94	10	.03	390	70	86	123	29	12
30	.94	10	.03	241	66	78	56	10	1.5
31	.94	10	.03	--	--	--	45	7	.85
TOTAL	27.51	--	1.07	1701.98	--	1754.89	3710	--	2415.17

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	49	10	1.5	32	5	.43	16	6	.26
2	61	17	3.2	30	5	.41	15	5	.20
3	40	7	.76	28	5	.38	14	5	.19
4	36	2	.19	28	5	.38	14	5	.19
5	34	1	.09	28	5	.38	14	5	.19
6	32	1	.09	27	5	.36	13	5	.18
7	33	1	.09	26	5	.35	13	5	.18
8	32	1	.09	25	5	.34	13	4	.14
9	31	1	.08	25	5	.34	13	4	.14
10	30	4	.32	24	5	.32	12	4	.13
11	44	13	1.5	23	5	.31	12	4	.13
12	53	29	4.1	22	5	.30	98	92	43
13	84	17	5.1	20	5	.27	43	35	4.8
14	269	122	97	21	5	.28	23	14	.87
15	110	25	7.4	21	5	.28	22	12	.71
16	199	67	49	21	5	.28	19	10	.51
17	131	54	20	20	5	.27	16	9	.39
18	89	13	3.1	19	5	.26	14	7	.26
19	72	9	1.7	19	5	.26	13	8	.28
20	61	7	1.2	19	5	.26	12	8	.26
21	54	7	1.0	18	5	.24	12	9	.29
22	49	6	.79	18	5	.24	12	13	.42
23	46	6	.75	18	5	.24	14	8	.30
24	44	5	.59	17	3	.14	14	5	.19
25	41	4	.44	16	4	.17	17	7	.34
26	39	4	.42	16	4	.17	150	95	58
27	37	4	.40	16	3	.13	35	14	1.3
28	35	4	.38	16	3	.13	24	4	.26
29	35	4	.38	--	--	--	20	4	.22
30	33	4	.36	--	--	--	18	4	.19
31	32	4	.35	--	--	--	17	4	.18
TOTAL	1935	--	202.37	613	--	7.92	742	--	114.70

## SACRAMENTO RIVER BASIN

11453550 HUNTING CREEK NEAR KNOXVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	16	4	.17	6.9	7	.13	6.0	5	.08
2	15	5	.20	8.1	8	.17	5.7	5	.08
3	14	6	.23	12	10	.32	5.4	6	.09
4	13	6	.21	11	8	.24	5.2	6	.08
5	13	7	.25	9.2	7	.17	4.7	6	.08
6	13	8	.28	8.1	7	.15	4.4	6	.07
7	13	10	.35	7.8	7	.15	4.0	6	.06
8	12	12	.39	7.4	7	.14	3.6	6	.06
9	12	10	.32	7.4	7	.14	3.4	6	.06
10	17	10	.46	7.4	7	.14	3.4	6	.06
11	12	11	.36	7.2	6	.12	3.0	6	.05
12	11	9	.27	7.2	6	.12	2.9	6	.05
13	11	8	.24	6.9	6	.11	2.9	6	.05
14	13	9	.32	6.9	6	.11	2.7	6	.04
15	11	9	.27	6.9	6	.11	2.7	6	.04
16	9.6	9	.23	6.6	6	.11	2.3	6	.04
17	9.2	9	.22	6.3	6	.10	2.3	5	.03
18	9.2	8	.20	6.3	6	.10	2.0	5	.03
19	8.8	8	.19	6.3	6	.10	1.7	5	.02
20	8.5	8	.18	6.3	6	.10	1.8	5	.02
21	8.1	8	.17	6.3	6	.10	1.8	5	.02
22	7.8	8	.17	6.3	6	.10	1.6	5	.02
23	7.8	8	.17	6.3	6	.10	1.7	5	.02
24	7.8	8	.17	6.6	6	.11	1.7	5	.02
25	7.8	8	.17	6.3	6	.10	1.6	5	.02
26	7.4	8	.16	6.0	6	.10	1.7	5	.02
27	7.4	7	.14	6.9	6	.11	1.7	5	.02
28	7.4	7	.14	9.2	10	.25	1.8	5	.02
29	7.2	7	.14	8.8	7	.17	1.8	5	.02
30	6.9	7	.13	7.8	6	.13	1.6	5	.02
31	--	--	--	7.2	5	.10	--	--	--
TOTAL	316.9	--	6.90	229.9	--	4.20	87.1	--	1.29

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.4	5	.02	.58	4	.01	.45	17	.02
2	1.6	5	.02	.45	4	0	.39	17	.02
3	1.4	5	.02	.45	4	0	.39	17	.02
4	1.3	5	.02	.34	4	0	.45	16	.02
5	1.4	5	.02	.34	4	0	.39	16	.02
6	1.4	5	.02	.34	4	0	.39	16	.02
7	1.4	5	.02	.39	4	0	.34	15	.01
8	1.3	5	.02	.39	4	0	.24	15	.01
9	1.2	5	.02	.39	4	0	.29	15	.01
10	1.2	5	.02	.34	4	0	.29	14	.01
11	1.2	5	.02	.29	4	0	.24	14	.01
12	1.1	5	.01	.24	4	0	.24	13	.01
13	1.1	5	.01	.24	4	0	.29	13	.01
14	1.1	5	.01	.29	4	0	.29	13	.01
15	1.1	5	.01	.29	4	0	.29	12	.01
16	1.0	5	.01	.29	4	0	.24	12	.01
17	.90	5	.01	.29	4	0	.20	12	.01
18	.90	5	.01	.29	4	0	.20	11	.01
19	.90	4	.01	.24	4	0	.16	11	0
20	.80	4	.01	.24	4	0	.20	11	.01
21	.72	4	.01	.29	4	0	.20	11	.01
22	.72	4	.01	.34	4	0	.24	10	.01
23	.58	4	.01	.34	4	0	.24	10	.01
24	.65	4	.01	.34	4	0	.24	10	.01
25	.80	4	.01	.34	4	0	.29	10	.01
26	.72	4	.01	.34	4	0	.34	10	.01
27	.72	4	.01	.29	4	0	.34	9	.01
28	.65	4	.01	.34	4	0	.34	9	.01
29	.58	4	.01	.34	4	0	.39	9	.01
30	.58	4	.01	.34	9	.01	.65	20	.04
31	.58	4	.01	.39	16	.02	--	--	--
TOTAL	30.90	--	.42	10.40	--	.04	9.24	--	.38

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

9413.93  
4509.35



## 11453550 HUNTING CREEK NEAR KNOXVILLE, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (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
DEC. 02...	1200	358	A 67	65	97	100	--
04...	1200	500	A 153	207	94	97	100
MAR. 12...	2000	169	A 193	88	99	100	--

A Single-stage sample.

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
OCT. 07...	1045	12.0	5	.79	4	10	25	42
JUNE 04...	1245	19.0	5	4.9	3	6	15	25

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
OCT. 07...	54	63	71	80	91	97	100
JUNE 04...	30	37	44	55	70	87	100

## SACRAMENTO RIVER BASIN

11453570 ADAMS CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°42'17", long 122°17'44", in NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.21, T.10 N., R.4 W., Napa County, at gaging station 20 ft downstream from road ford, 0.2 mile upstream from mouth, 8.8 miles southeast of Knoxville, and 18 miles southeast of Middletown.

DRAINAGE AREA.--7.42 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1970 (partial-record station), October 1970 to September 1971.  
Sediment records: Water year 1971 (partial-record station).

## CHEMICAL ANALYSES, APRIL 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	DIS- SOLVED IRON (FE) (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)
APR., 1970									
23...	1100	4.0	16.0	41	30	--	20	117	17
DEC.									
01...	1110	7.0	9.0	32	20	--	6.7	72	13
APR., 1971									
07...	1120	2.2	17.5	41	10	10	21	110	19

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	AMMONIA (NH <sub>4</sub> ) (MG/L)
APR., 1970										
23...	.5	600	24	18	12	.2	.31	.34	.03	--
DEC.										
01...	.8	390	0	6.0	13	.2	.20	.20	--	.00
APR., 1971										
07...	.5	525	74	19	10	.1	--	--	--	--

DATE	NITRATE (NO <sub>3</sub> ) (MG/L)	PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	DIS- SOLVED BORON (B) (UG/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)
APR., 1970									
23...	.1	.22	.20	90	--	--	--	531	0
DEC.									
01...	.3	.12	.11	120	336	.46	6.35	312	0
APR., 1971									
07...	--	--	--	60	553	.75	3.28	500	0

DATE	ALKA- LINITY AS CACO <sub>3</sub> (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
APR., 1970									
23...	531	7	.3	896	8.6	--	--	--	--
DEC.									
01...	--	8	.3	--	--	3	--	--	--
APR., 1971									
07...	--	8	.4	--	--	0	0	.2	20

11453570 ADAMS CREEK NEAR KNOXVILLE, CALIF.--Continued  
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	ALKA- LITY AS CAC03 (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH
NOV. 13...	1440	.32	13.5	--	--	--	610	--
DEC. 01...	1110	7.0	9.0	10.0	86	305	--	8.2
FEB. 02...	1130	5.2	9.5	--	--	--	820	--
MAR. 02...	1200	2.9	9.5	--	--	--	850	--
APR. 07...	1120	2.2	17.5	9.4	97	502	862	8.5
MAY 05...	1140	1.6	18.5	--	--	--	820	--
JUNE 03...	1340	.85	24.0	--	--	--	830	--
JULY 08...	1200	.09	27.0	--	--	--	860	--
AUG. 05...	1055	.01	25.5	--	--	--	900	--

DATE	TIME	ALDRIN IN BOTTOM DE- POSITS (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/L)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DOT (UG/L)	DOT IN BOTTOM DE- POSITS (UG/KG)
ANALYSES OF ADDITIONAL SAMPLES											
DEC. 01...	1110	.00	--	.00	--	.00	--	.00	--	.00	--
APR., 1971 07...	1120	.00	--	.00	--	.00	--	.00	--	.00	--
JULY 08...	1315	--	<.20	--	<1.0	--	<.20	--	<.20	--	<.20

DATE	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)
DEC. 01...	.00	.00	--	.00	--	.00	--	.00	--	.00
APR., 1971 07...	.00	.00	--	.00	--	.00	--	.00	--	.00
JULY 08...	--	--	<.20	--	<.20	--	<.20	--	<.20	--

DATE	LINDANE IN BOTTOM DE- POSITS (UG/KG)	MALA- THION (UG/L)	MALA- THION IN BOTTOM DE- POSITS (UG/KG)	METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM DE- POSITS (UG/KG)	PARA- THION (UG/L)	PARA- THION IN BOT- TOM DE- POSITS (UG/KG)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
DEC. 01...	--	.00	--	.00	--	.00	--	.00	.00	.00
APR., 1971 07...	--	.00	--	.00	--	.00	--	.00	.00	.00
JULY 08...	<.20	--	<.20	--	<.20	--	<.20	--	--	--

## SACRAMENTO RIVER BASIN

11453570 ADAMS CREEK NEAR KNOXVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SED- MENT (MG/L)	SUS- PENDE SED- MENT DIS- CHARGE (T/DAY)
NOV. 13...	1300	13.5	.32	24	.02
DEC. 01...	0945	9.0	7.0	5	.09
FEB. 02...	1120	9.5	5.2	89	1.2
MAR. 02...	1200	9.5	2.9	6	.05
APR. 07...	1200	17.0	2.2	10	.06
MAY 05...	1140	18.5	1.6	7	.03
JUNE 03...	1345	24.0	.85	9	.02
JULY 08...	1300	29.5	.09	30	.01
AUG. 05...	1055	25.5	.01	32	.00

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
NOV. 13...	1215	13.5	5	.32	3	7	15	28
JUNE 03...	1400	24.0	5	.85	3	6	13	21

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 128 MM
NOV. 13...	38	48	56	63	72	80	87	100
JUNE 03...	31	39	52	66	73	81	100	--

## 11453580 NEVADA CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°42'42", long 122°17'31", in NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.15, T.10 N., R.4 W., Napa County, at gaging station 150 ft downstream from road ford, 0.6 mile upstream from Adams Creek, 8.4 miles southeast of Knoxville, and 18 miles southeast of Middletown.

DRAINAGE AREA.--7.06 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1970 (partial-record station), October 1970 to September 1971.  
Sediment records: Water year 1971 (partial-record station).

## CHEMICAL ANALYSES, APRIL 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SILICA (SIO <sub>2</sub> ) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL 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)
APR., 1970									
23...	1320	1.9	17.0	29	30	--	--	41	89
DEC.									
01...	1230	7.7	9.5	25	20	<25	--	21	37
APR., 1971									
07...	1035	.95	15.0	29	10	--	0	39	80

DATE	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)
APR., 1970										
23...	49	1.3	532	16	62	30	.3	.09	.12	.03
DEC.										
01...	27	1.3	249	0	5.0	28	.3	.33	.33	--
APR., 1971										
07...	53	1.8	562	0	54	38	.1	--	--	--

DATE	AMMONIA (NH <sub>4</sub> ) (MG/L)	NITRATE (NO <sub>3</sub> ) (MG/L)	PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	DIS- SOLVED ORTHU PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	DIS- SOLVED BORON (B) (UG/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)
APR., 1970										
23...	--	.1	.15	.14	1400	--	--	--	468	0
DEC.										
01...	.00	1.3	.24	.10	670	269	.37	5.59	204	0
APR., 1971										
07...	--	--	--	--	1600	573	.78	1.47	430	0

DATE	ALKA- LINITY AS CACO <sub>3</sub> (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
APR., 1970										
23...	462	18	1.0	941	8.5	--	--	--	--	--
DEC.										
01...	--	22	.8	--	--	8	--	<.5	--	--
APR., 1971										
07...	--	21	1.1	--	--	3	0	--	.4	20

## SACRAMENTO RIVER BASIN

11453580 NEVADA CREEK NEAR KNOXVILLE, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	ALKA- LINITY AS CaCO3 (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
DEC. 01...	1230	7.7	9.5	10.0	87	198	330	8.0
FEB. 02...	1320	3.1	11.0	--	--	--	790	--
MAR. 02...	1030	1.4	6.0	--	--	--	868	--
APR. 07...	1035	.95	15.0	9.0	89	434	858	7.9
MAY 05...	1110	.78	16.5	--	--	--	860	--
JUNE 03...	1145	.19	19.0	--	--	--	915	--
JULY 08...	1130	.06	22.5	--	--	--	960	--
AUG. 05...	1045	.02	17.5	--	--	--	1000	--

DATE	TIME	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
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## ANALYSES OF ADDITIONAL SAMPLES

DEC. 01...	1230	.00	--	.00	--	.00	--	.00	--	.00	--
APR., 1971 07...	1050	.00	--	.00	--	.00	--	.00	--	.00	--
JULY 08...	1130	--	<.20	--	<1.0	--	<.20	--	<.20	--	<.20

DATE	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)
DEC. 01...	.00	.00	--	.00	--	.00	--	.00	--	.00
APR., 1971 07...	.00	.00	--	.00	--	.00	--	.00	--	.00
JULY 08...	--	--	<.20	--	<.20	--	<.20	--	<.20	--

DATE	LINDANE IN BOTTOM DE- POSITS (UG/KG)	MALA- THION (UG/L)	MALA- THION IN BOTTOM DE- POSITS (UG/KG)	METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM DE- POSITS (UG/KG)	PARA- THION (UG/L)	PARA- THION IN BOTTOM DE- POSITS (UG/KG)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
DEC. 01...	--	.00	--	.00	--	.00	--	.00	.00	.00
APR., 1971 07...	--	.00	--	.00	--	.00	--	.00	.00	.00
JULY 08...	<.20	--	<.20	--	<.20	--	<.20	--	--	--

## SACRAMENTO RIVER BASIN

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11453580 NEVADA CREEK NEAR KNOXVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT DIS- CHARGE (MG/L)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY)
DEC. 01...	1230	9.5	7.7	16	.33
JAN. 05...	1300	6.5	4.0	21	.23
FEB. 02...	1315	11.0	3.1	6	.05
MAR. 02...	1030	6.0	1.4	13	.05
APR. 07...	1015	15.0	.95	18	.05
MAY 05...	1105	16.5	.78	29	.06
JUNE 03...	1140	19.0	.19	8	.00
JULY 08...	1020	18.5	.05	6	.00
AUG. 05...	1020	17.5	.02	18	.00

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM
NOV. 13...	1100	--	5	.00	3	6	15
JUNE 03...	1300	19.0	5	.19	3	7	16

DATE	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
NOV. 13...	29	38	49	63	80	93	100
JUNE 03...	33	53	71	82	90	96	100

## SACRAMENTO RIVER BASIN

11454000 PUTAH CREEK NEAR WINTERS, CALIF.

LOCATION.--Lat 38°30'55", long 122°04'51", in NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.28, T.8 N., R.2 W., Yolo County, temperature recorder at gaging station on left bank, 1 mile downstream from Cold Canyon, 1.3 miles downstream from Monticello Dam, and 6 miles west of Winters.

DRAINAGE AREA.--574 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1952 (partial-record station), October 1952 to September 1966. Water temperatures: November 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 17.0°C Apr. 16; minimum, 9.5°C sometime during period Dec. 31 to Jan. 22, and Feb. 3, Mar. 2.

Period of record:

Water temperatures: Maximum, 22.0°C May 21, 1967; minimum (1966-68, 1969-71), 6.5°C on several days in 1967 and 1968.

REMARKS.--Clock stopped Oct. 26 to Nov. 5; Nov. 21 to Dec. 3, Dec. 31 to Jan. 22; range in temperature, 13.5°C to 13.5°C, 10.5°C to 12.5°C, and 9.5°C to 11.5°C, respectively. Recorder malfunction June 12-28, July 6, 7, 26.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	12.5	--	--	--	--	--	--	10.0	10.0	10.0	10.0
2	12.5	12.5	--	--	--	--	--	--	10.0	10.0	10.0	9.5
3	13.0	12.5	--	--	--	--	--	--	10.0	9.5	10.0	10.0
4	13.0	13.0	--	--	11.5	11.0	--	--	10.0	10.0	10.0	10.0
5	13.0	13.0	--	--	11.5	11.0	--	--	10.0	10.0	10.0	10.0
6	13.0	13.0	13.5	13.5	12.0	11.5	--	--	10.0	10.0	10.5	10.0
7	13.0	13.0	13.5	13.5	12.5	12.0	--	--	10.0	10.0	10.5	10.0
8	13.0	13.0	13.5	13.5	12.5	12.5	--	--	10.0	10.0	10.5	10.0
9	13.0	12.5	13.5	13.5	12.5	12.5	--	--	10.0	10.0	11.0	10.5
10	13.0	13.0	13.5	13.5	12.5	12.5	--	--	10.0	10.0	11.0	11.0
11	13.0	13.0	13.5	13.0	12.5	12.5	--	--	10.0	10.0	11.0	11.0
12	13.0	13.0	13.0	12.5	12.5	11.5	--	--	10.0	10.0	11.0	11.0
13	13.0	13.0	13.0	12.5	11.5	11.5	--	--	10.0	10.0	11.0	11.0
14	13.5	13.0	12.5	12.5	11.5	11.0	--	--	10.0	10.0	11.0	11.0
15	13.0	13.0	12.5	12.5	11.5	11.0	--	--	10.5	10.0	11.0	11.0
16	13.5	13.0	12.5	12.5	11.5	11.0	--	--	10.5	10.5	11.0	11.0
17	13.5	13.5	12.5	12.5	11.5	11.0	--	--	10.5	10.5	11.0	11.0
18	13.5	13.0	12.5	12.5	11.0	11.0	--	--	10.5	10.5	11.0	11.0
19	13.5	13.5	12.5	12.5	11.0	10.5	--	--	10.5	10.5	11.0	11.0
20	13.5	13.5	12.5	12.5	11.5	11.0	--	--	10.5	10.5	11.5	11.0
21	13.5	13.5	--	--	11.5	10.5	--	--	10.5	10.5	12.0	11.5
22	13.5	13.5	--	--	11.0	10.5	--	--	10.5	10.5	12.0	12.0
23	13.5	13.5	--	--	11.0	11.0	10.5	10.5	11.0	10.5	12.0	12.0
24	13.5	13.5	--	--	11.0	11.0	10.5	10.5	11.0	10.5	12.0	12.0
25	13.5	13.5	--	--	11.0	10.5	10.5	10.0	11.0	10.5	12.5	12.0
26	--	--	--	--	10.5	10.5	10.0	10.0	10.5	10.5	12.5	12.0
27	--	--	--	--	10.5	10.5	10.0	10.0	10.5	10.5	12.5	12.0
28	--	--	--	--	10.5	10.5	10.0	10.0	10.5	10.0	13.0	12.5
29	--	--	--	--	10.5	10.5	10.0	10.0	--	--	13.0	12.5
30	--	--	--	--	10.5	10.5	10.0	10.0	--	--	14.0	13.0
31	--	--	--	--	--	--	10.0	10.0	--	--	14.0	13.5
AVE	13.2	13.1	--	--	11.4	11.1	--	--	10.3	10.2	11.4	11.2
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	13.5	12.5	12.0	11.5	11.5	10.5	10.5	12.0	11.5	13.0	12.5
2	14.0	13.5	12.0	12.0	12.0	11.5	10.5	10.5	12.5	12.0	12.5	12.0
3	14.0	13.5	12.5	12.0	12.0	12.0	10.5	10.5	12.0	12.0	12.5	12.0
4	14.5	13.5	12.5	12.0	12.0	11.0	11.0	10.5	12.5	12.0	12.5	12.5
5	14.5	13.5	12.0	12.0	12.0	11.0	11.0	10.5	12.5	12.0	12.5	12.0
6	15.0	14.0	12.0	11.5	12.0	11.5	--	--	12.5	12.0	13.0	12.0
7	15.0	15.0	12.0	11.5	12.0	12.0	--	--	12.5	12.0	12.5	12.5
8	15.0	15.0	12.0	11.5	12.0	12.0	12.0	11.5	12.0	12.0	12.5	12.5
9	15.0	15.0	12.0	11.5	12.0	12.0	12.0	11.5	12.0	12.0	12.5	12.0
10	15.0	15.0	12.0	11.5	12.0	11.0	12.0	11.5	12.0	12.0	12.5	12.5
11	15.0	15.0	12.0	11.5	11.0	11.0	12.0	11.5	12.0	12.0	13.0	12.5
12	15.5	15.0	11.5	11.5	--	--	11.5	11.5	12.5	12.0	12.5	12.5
13	15.5	15.5	11.5	11.0	--	--	11.5	11.5	12.5	12.0	12.5	11.5
14	16.0	15.5	11.5	11.0	--	--	11.5	11.5	12.5	12.0	12.0	11.5
15	16.5	15.5	12.0	11.0	--	--	11.5	11.5	12.5	12.0	12.0	11.5
16	17.0	16.0	11.5	11.0	--	--	11.5	11.5	12.5	12.0	12.0	11.5
17	16.5	15.5	11.5	11.0	--	--	11.5	11.5	12.5	12.0	12.0	11.5
18	16.0	15.5	11.5	11.0	--	--	11.5	11.5	12.5	12.5	12.0	11.5
19	16.5	15.5	11.0	11.0	--	--	11.5	11.5	12.5	12.5	12.0	11.5
20	15.5	15.0	11.5	11.0	--	--	12.0	11.5	12.5	12.5	12.0	11.5
21	15.0	14.5	11.0	11.0	--	--	12.0	12.0	12.5	12.0	12.0	12.0
22	15.0	15.0	11.0	11.0	--	--	12.0	11.5	13.0	12.5	12.0	12.0
23	15.0	14.5	11.0	11.0	--	--	12.0	11.5	12.5	12.5	12.0	12.0
24	14.5	14.0	11.0	11.0	--	--	11.5	11.5	12.5	12.5	12.5	12.0
25	14.0	14.0	12.0	11.0	--	--	12.0	11.5	12.5	12.5	12.0	12.0
26	14.0	13.5	11.5	11.5	--	--	--	--	12.5	12.0	12.5	12.0
27	13.5	13.5	11.5	11.5	--	--	12.5	10.5	12.5	12.5	12.0	12.0
28	13.5	13.0	11.5	11.5	--	--	11.0	10.5	12.5	12.0	12.0	12.0
29	13.0	12.5	11.5	11.5	10.5	10.5	11.5	11.0	13.0	12.5	12.0	12.0
30	13.0	12.5	11.5	11.5	10.5	10.5	12.0	11.0	13.0	12.0	12.0	12.0
31	--	--	11.5	11.5	--	--	11.5	11.0	13.0	12.5	--	--
AVE	14.9	14.4	11.7	11.4	--	--	11.6	11.2	12.5	12.1	12.3	12.0



## 11456000 NAPA RIVER NEAR ST. HELENA, CALIF.

LOCATION.--Lat 38°29'52", long 122°25'37", in Carne Humana Grant, Napa County, temperature recorder at gaging station on right bank, 0.2 mile upstream from highway bridge, 1.3 miles northeast of Zinfandel, and 2.5 miles east of St. Helena.

DRAINAGE AREA.--81.4 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1952-53 (partial-record station), October 1953 to September 1966.

Water temperatures: October 1957 to September 1971.

Sediment records: December 1956 to June 1962.

EXTREMES.--1970-71:

Water temperatures: Maximum, 26.0°C June 16, 17; minimum, 6.5°C Jan. 13.

Period of record:

Water temperatures: Maximum (1961-63, 1964-65, 1966-69, 1970-71), 33.5°C July 18, 1968; minimum (1961-63, 1965-71), 3.5°C Dec. 14, 15, 1967.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	14.0	13.0	11.5	12.0	11.0	11.5	10.5	10.5	9.5	12.5	8.5
2	16.0	14.0	13.0	12.0	11.5	10.5	10.5	8.0	10.5	10.0	12.5	8.0
3	15.5	14.0	13.5	12.5	11.5	10.5	9.0	7.5	11.0	8.5	12.0	11.0
4	15.5	13.5	14.5	13.5	13.0	11.0	9.0	7.0	11.5	9.5	12.5	9.5
5	15.0	13.0	15.0	14.0	13.5	12.5	9.5	7.5	12.5	9.5	13.5	8.5
6	14.0	12.5	14.5	13.5	13.5	13.0	9.5	8.0	13.0	10.0	14.0	8.5
7	13.0	10.5	14.5	13.0	13.5	13.0	9.5	7.5	13.5	10.5	13.0	9.5
8	12.5	10.0	15.0	14.0	13.5	12.0	10.0	8.0	13.0	10.5	14.5	9.5
9	13.0	10.0	16.0	14.5	12.0	10.5	10.5	8.0	13.5	10.0	13.5	10.5
10	13.5	11.0	15.5	14.5	12.0	10.0	11.0	9.5	14.0	10.5	13.0	10.0
11	13.5	11.0	15.0	14.0	12.5	10.5	11.0	9.5	15.0	11.5	13.5	12.5
12	13.5	12.5	14.0	12.5	11.5	9.5	9.5	7.0	15.0	11.5	12.5	9.5
13	13.5	12.0	13.0	11.0	11.0	10.0	8.5	6.5	15.5	12.0	13.5	9.0
14	13.5	12.0	13.5	12.0	11.5	9.5	10.0	8.0	14.0	12.0	11.0	10.0
15	13.5	12.0	13.0	11.5	12.0	11.0	10.0	9.5	15.5	12.0	14.5	10.0
16	12.5	10.5	14.0	12.0	11.0	10.0	10.5	10.0	13.5	11.5	14.0	10.0
17	12.0	9.5	13.5	11.5	11.0	10.0	12.5	10.5	14.5	11.0	14.5	10.0
18	13.0	11.5	11.5	11.5	10.0	9.0	13.0	11.5	13.0	10.0	15.0	9.5
19	13.0	12.0	13.0	11.5	10.0	9.0	13.0	11.5	13.0	10.5	16.0	10.0
20	15.0	12.5	12.5	10.5	9.5	8.0	12.0	10.0	13.5	9.5	16.5	11.0
21	15.5	13.5	13.0	12.0	10.5	8.5	10.5	9.5	13.0	9.5	16.5	11.0
22	16.5	15.0	13.0	12.5	10.0	8.5	11.5	8.5	13.5	10.5	15.0	11.5
23	16.0	14.5	14.0	12.5	11.0	9.5	12.0	9.5	14.0	9.5	14.5	13.0
24	15.0	13.5	14.0	13.5	10.0	8.5	12.0	9.0	14.5	10.0	17.0	12.5
25	14.5	13.0	14.5	14.0	9.5	8.0	11.5	9.0	13.0	9.5	15.0	12.0
26	13.5	12.0	14.0	11.5	10.0	9.5	12.5	9.0	12.5	8.5	14.0	11.5
27	12.0	11.0	12.0	11.0	10.5	10.0	13.0	9.5	11.5	9.0	14.5	10.5
28	12.0	10.5	12.0	11.0	11.0	10.0	11.5	9.5	12.5	9.5	15.5	10.5
29	11.5	10.0	12.0	11.5	11.0	10.0	10.0	9.5	--	--	17.0	11.5
30	12.5	11.0	12.0	11.0	11.0	9.0	12.0	10.0	--	--	16.0	12.0
31	13.0	11.5	--	--	12.0	10.0	11.0	10.0	--	--	15.5	10.0
AVE	13.9	12.0	13.6	12.4	11.4	10.1	10.9	9.0	13.2	10.2	14.3	10.4

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	10.0	16.5	14.5	18.0	14.5	21.0	18.5	22.5	19.5	18.5	16.0
2	17.0	11.0	17.0	14.5	21.0	14.0	21.0	18.0	22.0	20.0	18.5	16.0
3	18.5	12.0	16.0	14.0	20.5	14.5	21.0	18.0	21.5	19.5	18.0	15.0
4	18.5	12.5	16.5	14.5	22.5	16.0	20.0	17.5	20.5	19.5	17.5	14.5
5	18.5	13.0	18.0	14.5	23.5	16.5	20.0	17.5	20.5	18.0	18.5	15.0
6	16.0	13.5	18.5	14.0	24.0	17.0	20.0	18.0	20.5	18.5	18.0	16.5
7	16.0	12.5	20.0	15.0	23.5	17.5	20.5	18.5	20.5	18.0	18.0	15.0
8	17.0	11.5	17.0	15.0	23.5	17.0	20.5	17.5	20.5	19.0	18.0	15.0
9	15.5	13.0	20.0	14.0	22.5	17.0	20.5	18.5	20.5	19.0	18.0	15.0
10	16.0	12.0	21.5	15.0	23.5	17.5	20.0	17.0	21.0	19.5	18.0	14.5
11	17.5	11.5	20.5	16.0	24.0	17.5	21.0	17.5	21.5	20.0	18.0	16.0
12	18.5	12.5	21.5	16.0	21.5	17.5	21.5	18.5	20.5	19.5	18.0	16.0
13	15.5	13.5	22.0	16.5	23.5	16.5	22.0	19.0	20.0	19.0	19.5	17.0
14	19.0	13.0	23.0	16.0	24.5	17.0	22.5	19.5	19.5	18.0	20.5	18.5
15	19.5	13.5	27.5	16.5	25.5	18.5	21.5	19.5	19.5	17.5	20.0	18.5
16	17.5	13.5	21.0	15.0	26.0	19.5	22.0	19.0	19.5	17.5	19.5	18.0
17	17.0	13.0	21.0	15.0	26.0	19.5	21.5	19.5	19.5	17.5	19.0	17.5
18	17.5	11.5	22.5	15.0	24.5	19.0	23.0	19.5	20.0	19.0	18.0	15.5
19	18.5	12.5	27.5	16.0	24.5	19.0	24.0	20.0	22.0	19.0	16.5	14.0
20	17.5	13.5	27.5	16.0	25.5	18.5	23.5	20.5	22.0	19.0	16.0	13.5
21	17.5	11.5	21.0	14.5	25.5	19.0	23.5	20.0	22.0	18.5	16.0	13.5
22	16.5	12.5	22.5	15.5	24.0	19.0	23.5	19.5	22.5	19.5	15.5	13.5
23	18.0	13.0	23.0	17.0	24.5	19.0	22.0	19.5	22.0	19.5	15.5	13.5
24	16.5	12.0	23.0	17.0	24.0	18.5	21.0	18.5	22.0	18.5	15.5	14.0
25	18.0	12.0	21.5	16.5	24.0	18.0	21.5	18.5	21.5	19.5	15.5	14.0
26	18.0	13.5	21.0	16.0	22.0	19.5	23.5	18.5	20.5	18.0	15.5	13.5
27	19.0	13.5	18.0	15.5	22.0	17.5	20.5	19.0	20.0	17.5	14.0	12.0
28	18.0	14.5	17.0	15.5	22.0	16.5	20.0	18.5	19.0	15.5	13.5	11.5
29	18.5	14.0	18.5	15.5	22.0	17.0	21.0	18.5	18.5	15.0	14.0	12.5
30	19.5	14.0	21.0	14.5	21.0	18.0	21.0	18.5	18.5	16.0	13.5	11.5
31	--	--	18.5	14.5	--	--	21.5	19.5	18.5	17.0	--	--
AVE	17.6	12.6	20.2	15.3	23.3	17.5	21.5	18.7	20.6	18.4	17.1	14.9

## SALMON CREEK BASIN

11460920 SALMON CREEK AT BODEGA, CALIF.

LOCATION.--Lat 38°20'54", long 122°58'45", in Estero Americano Grant, Sonoma County, at gaging station, 100 ft upstream from private road bridge, 0.3 mile upstream from small left-bank tributary, and 0.4 mile northwest of Bodega.

DRAINAGE AREA.--15.7 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1964 to September 1971.

Sediment records: Water year 1971 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 21.0°C June 16; minimum, 0.5°C Jan. 4, 5.

Period of record:

Water temperatures: Maximum, 23.5°C Apr. 26, 1965; minimum (1964-66, 1967-71), freezing point on many days during winter period.

REMARKS.--No flow Oct. 1-19, Aug. 4, 5, 9-29, Aug. 31 to Sept. 1, Sept. 4-30.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	14.0	8.0	11.0	8.5	9.5	7.0	8.5	7.0	10.0	4.0
2	--	--	12.0	8.0	11.0	8.0	9.5	3.0	12.0	7.0	9.5	3.0
3	--	--	11.0	9.5	11.5	8.0	7.5	1.0	11.0	3.5	11.0	8.0
4	--	--	12.0	10.5	13.0	11.5	7.0	0.5	10.0	4.0	11.0	6.0
5	--	--	14.0	12.0	14.0	12.0	7.5	0.5	10.5	4.5	10.0	3.5
6	--	--	14.0	12.0	13.0	12.0	7.0	2.0	12.0	6.5	12.0	4.0
7	--	--	14.0	11.0	12.5	11.0	8.0	1.0	9.5	7.5	9.5	5.0
8	--	--	13.0	11.5	14.0	9.5	7.5	1.5	10.0	7.0	12.0	6.5
9	--	--	14.0	12.5	12.0	6.5	7.0	2.5	13.0	6.5	10.5	7.0
10	--	--	12.5	10.5	11.5	5.5	8.5	6.0	15.0	6.0	10.0	7.0
11	--	--	13.0	11.0	12.0	6.5	9.5	7.0	16.0	7.5	11.0	9.5
12	--	--	15.0	9.0	11.0	5.5	7.0	4.5	16.5	8.5	11.0	7.5
13	--	--	11.5	5.0	7.5	5.5	7.5	4.0	16.0	8.5	12.0	5.5
14	--	--	12.0	7.5	8.5	6.0	9.5	7.0	12.0	10.0	10.0	7.0
15	--	--	11.0	7.0	10.0	8.5	9.0	8.5	14.0	9.5	15.0	7.5
16	--	--	13.0	10.0	10.5	8.0	10.0	8.5	12.0	7.5	13.5	6.5
17	--	--	13.0	9.0	10.0	6.0	12.0	9.5	12.0	8.5	16.0	7.0
18	--	--	11.0	7.5	8.5	6.5	16.0	10.0	10.0	5.0	16.5	5.5
19	--	--	11.0	6.0	10.5	4.0	13.5	11.0	11.0	5.5	17.5	6.0
20	11.5	9.0	10.5	5.0	6.5	3.5	14.5	9.5	11.5	4.0	16.5	6.5
21	12.0	11.0	10.5	9.0	10.5	5.5	12.5	7.0	9.0	4.0	15.0	7.5
22	15.0	11.0	10.5	9.5	9.5	4.0	11.0	4.5	11.0	4.5	13.0	9.0
23	12.5	10.0	13.5	10.0	9.5	5.5	11.5	4.0	11.5	4.5	13.5	11.0
24	12.0	7.5	12.5	12.0	9.5	3.0	10.0	4.0	11.0	5.5	16.0	10.5
25	12.0	9.0	13.5	12.5	7.5	2.5	11.0	3.5	10.0	5.0	12.0	11.0
26	12.5	8.0	13.0	8.5	6.5	4.5	12.0	4.0	8.5	3.0	15.0	10.0
27	12.0	6.0	11.0	8.5	7.5	5.5	13.5	5.5	10.0	5.0	15.0	8.0
28	12.0	5.5	11.0	10.0	8.5	6.0	12.0	6.0	9.5	4.0	16.5	7.5
29	12.0	5.5	12.0	9.0	11.5	8.0	11.0	6.5	--	--	17.0	8.0
30	9.5	6.5	12.0	9.5	10.5	6.0	11.5	6.0	--	--	15.5	9.5
31	13.5	9.0	--	--	10.5	7.5	9.5	6.0	--	--	15.5	6.0
AVE	--	--	12.4	9.4	10.3	6.8	10.1	5.2	11.5	6.1	13.2	7.1

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	6.0	13.5	11.0	15.0	11.5	18.5	13.5	18.0	12.0	--	--
2	17.5	7.5	16.5	11.0	16.5	11.0	18.0	14.5	17.5	12.5	--	--
3	18.0	8.0	15.0	11.5	15.0	12.0	18.5	14.0	17.0	12.0	16.0	10.0
4	20.5	8.5	17.0	12.0	16.0	12.0	18.5	13.0	--	--	--	--
5	14.5	11.0	17.0	12.0	18.5	13.0	18.5	13.0	--	--	--	--
6	14.0	9.5	18.0	10.5	18.5	13.0	18.5	13.5	--	--	--	--
7	14.5	8.5	18.0	13.0	18.5	14.0	17.5	13.0	15.5	11.5	--	--
8	16.5	6.0	16.0	13.0	17.5	13.5	18.5	13.5	16.5	10.5	--	--
9	14.5	11.0	19.5	11.5	16.5	14.0	17.5	14.0	--	--	--	--
10	16.5	8.5	17.5	13.5	19.0	15.0	16.5	12.5	--	--	--	--
11	16.5	7.5	16.0	13.0	18.0	13.5	17.0	12.0	--	--	--	--
12	18.0	8.5	17.0	12.0	16.5	15.0	18.0	12.0	--	--	--	--
13	13.0	11.0	18.5	14.0	17.0	13.0	18.5	12.0	--	--	--	--
14	17.5	10.5	18.0	12.0	18.5	13.5	17.0	12.0	--	--	--	--
15	18.0	9.5	18.0	12.5	19.5	14.5	16.0	13.0	--	--	--	--
16	15.5	9.5	16.5	11.5	21.0	15.5	16.0	13.0	--	--	--	--
17	15.0	9.0	17.0	11.0	20.5	15.5	16.5	13.5	--	--	--	--
18	16.0	8.0	17.5	11.5	18.5	16.5	18.5	14.5	--	--	--	--
19	16.0	7.5	18.0	13.0	19.5	17.0	19.0	14.0	--	--	--	--
20	15.5	10.0	17.0	12.5	19.0	16.0	18.0	15.0	--	--	--	--
21	14.5	6.0	16.5	11.0	19.0	15.5	18.0	15.0	--	--	--	--
22	12.5	8.5	17.5	11.5	18.5	17.0	18.0	14.5	--	--	--	--
23	16.0	8.0	15.5	13.0	19.0	17.0	18.0	14.5	--	--	--	--
24	16.0	7.5	17.5	13.0	18.0	15.0	17.0	14.5	--	--	--	--
25	17.5	9.0	16.5	13.5	18.5	15.5	17.5	14.0	--	--	--	--
26	16.0	12.0	17.0	13.5	18.5	16.5	16.5	13.5	--	--	--	--
27	14.5	10.5	16.0	12.5	17.5	14.5	17.5	13.5	--	--	--	--
28	14.0	9.5	15.5	13.5	17.5	14.5	17.5	13.5	--	--	--	--
29	14.0	10.0	18.0	14.0	18.0	13.0	17.0	13.5	--	--	--	--
30	15.0	9.5	16.5	13.0	18.5	14.0	17.0	12.5	14.0	10.0	--	--
31	--	--	15.0	11.0	--	--	17.0	12.0	--	--	--	--
AVE	15.8	8.9	16.9	12.3	18.1	14.4	17.6	13.4	--	--	--	--

## 11460920 SALMON CREEK AT BODEGA, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (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
NOV. 12...	1245	13.5	9.2	17	.42	--	--	--	--
DEC. 01...	0930	10.0	123	150	50	--	--	--	--
01...	1345	10.5	78	133	28	--	--	--	--
04...	1035	12.0	603	778	1270	21	28	35	43
JAN. 13...	1445	7.5	65	34	6.0	--	--	--	--
16...	0915	9.5	729	576	1130	27	35	44	53
FEB. 10...	1100	7.5	6.9	10	.19	--	--	--	--
APR. 06...	1255	12.5	8.7	6	.14	--	--	--	--
JUNE 03...	1715	14.5	1.4	11	.04	--	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	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. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
NOV. 12...	--	--	--	--	--	--	--	--
DEC. 01...	--	--	55	--	--	--	--	--
01...	--	--	40	--	--	--	--	--
04...	53	62	--	76	86	92	93	100
JAN. 13...	--	--	74	--	--	--	--	--
16...	64	76	--	89	98	100	--	--
FEB. 10...	--	--	--	--	--	--	--	--
APR. 06...	--	--	--	--	--	--	--	--
JUNE 03...	--	--	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
					% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM
NOV. 12...	1230	13.5	4	9.2	6	20	36	53
JUNE 03...	1730	14.5	4	1.4	8	26	46	58
		BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM	% FINER THAN 64.0 MM
NOV. 12...		65	73	80	87	90	96	100
JUNE 03...		65	71	78	88	95	100	--

LOCATION.--Lat 39°14'48", long 123°07'45", in NW¼NW¼ sec.18, T.16 N., R.11 W., Mendocino County, at gaging station, 0.1 mile downstream from Cold Creek, and 3.9 miles east of Calpella.

PERIOD OF RECORD.--Chemical analyses: Water years 1951-52 (partial-record station), October 1952 to September 1958.

Water temperatures: March 1964 to September 1971.

Sediment records: March to September 1964, October 1966 to September 1968.  
Turbidity: Water years 1964-71 (partial-record station).

**EXTREMES.--1970-71:**

Water temperatures: Maximum, 29.0°C Aug. 11.

Period of record:

Water temperatures: Maximum (1965-66, 1967-71), 29.0°C Aug. 11, 1971; minimum (1965-67, 1968-70), 4.0°C on several days in 1965 and 1969.

REMARKS.--No thermograph record Nov. 21 to Feb. 10, Feb. 14 to Mar. 26, Aug. 23, 27, 28; probe inoperative. Recorder stopped July 10 to Aug. 4. Where no maximum or minimum is shown, temperature is once-daily reading. Samples for periodic turbidity determinations were collected by Pacific Gas and Electric Company and U.S. Forest Service.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

[illegible]

## 11461500 EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR		MIN	MAY		MIN	JUN		MIN	JUL		MIN	AUG		MIN	SEP		MIN
	MAX	DAILY		MAX	DAILY		MAX	DAILY		MAX	DAILY		MAX	DAILY		MAX	DAILY	
1	10.5	--	7.5	13.0	--	11.5	13.5	--	12.5	23.0	--	17.5	--	--	--	19.5	--	17.0
2	10.5	--	8.5	12.0	--	11.5	15.5	--	12.5	22.5	--	17.5	--	--	--	20.5	--	17.0
3	11.0	--	8.5	12.5	--	11.0	15.5	--	13.5	23.5	--	17.5	--	--	--	20.5	--	16.5
4	11.5	--	9.0	13.5	--	11.5	16.0	--	14.0	23.0	--	17.5	--	--	--	20.5	--	17.0
5	11.5	--	9.5	13.5	--	12.5	17.0	--	14.5	23.5	--	18.0	25.5	--	18.5	20.5	--	17.0
6	11.5	--	10.0	14.0	--	11.5	17.5	--	15.0	24.5	--	17.5	25.2	--	19.0	20.5	--	17.5
7	10.5	--	9.5	14.5	--	12.5	17.5	--	15.5	22.5	--	18.0	25.0	--	18.5	20.5	--	16.5
8	10.5	--	8.5	14.0	--	12.5	17.5	--	15.5	22.0	--	17.5	26.5	--	19.5	20.5	--	16.5
9	11.0	--	10.0	14.5	--	12.5	16.5	--	15.0	22.0	--	18.0	25.5	--	20.0	20.5	--	16.5
10	11.5	--	9.0	15.0	--	13.0	17.0	--	14.5	--	--	--	27.0	--	20.0	20.0	--	16.5
11	12.0	--	9.0	15.5	--	13.5	17.5	--	15.5	--	--	--	29.0	--	20.5	20.0	--	17.0
12	12.5	--	10.0	14.5	--	13.0	16.5	--	15.5	--	--	--	28.5	--	20.5	20.5	--	17.5
13	11.5	--	10.5	15.5	--	13.5	16.5	--	14.5	--	--	--	28.0	--	18.5	21.0	--	18.0
14	13.0	--	10.0	15.0	--	13.0	17.0	--	15.5	--	--	--	27.0	--	18.0	21.0	--	18.0
15	13.5	--	10.5	14.5	--	13.5	17.5	--	16.0	--	--	--	25.5	--	18.0	21.0	--	18.0
16	12.0	--	10.5	13.5	--	12.5	18.0	--	16.5	--	--	--	26.0	--	18.0	20.5	--	17.5
17	11.0	--	9.5	14.0	--	12.0	18.0	--	16.5	--	--	--	24.0	--	18.5	20.0	--	17.0
18	12.0	--	9.0	15.5	--	13.0	18.0	--	16.5	--	--	--	23.5	--	19.0	19.5	--	16.5
19	12.0	--	9.5	15.5	--	13.0	18.0	--	16.5	--	--	--	23.5	--	19.5	18.5	--	15.5
20	11.5	--	10.0	15.5	--	13.5	19.5	--	16.5	--	--	--	24.0	--	19.0	18.0	--	15.5
21	11.5	--	8.5	14.5	--	12.0	20.0	--	17.5	--	--	--	24.0	--	19.0	18.0	--	15.5
22	11.0	--	10.0	15.5	--	13.0	19.5	--	17.5	--	--	--	24.0	--	20.0	18.0	--	15.5
23	12.0	--	10.0	16.5	--	14.5	20.0	--	17.5	--	--	--	--	--	--	18.0	--	16.0
24	11.0	--	9.5	17.0	--	14.5	19.0	--	17.0	--	--	--	24.5	--	19.0	18.0	--	16.0
25	12.5	--	9.5	16.0	--	14.5	19.5	--	16.0	--	--	--	25.0	--	19.5	17.5	--	15.5
26	13.0	--	11.5	16.0	--	13.5	18.5	--	17.0	--	--	--	23.0	--	19.5	17.0	--	14.5
27	13.5	--	11.5	15.5	--	13.5	21.0	--	16.0	--	--	--	--	--	--	16.0	--	14.0
28	13.5	--	12.0	15.5	--	13.5	21.0	--	16.0	--	--	--	--	--	--	16.5	--	14.5
29	13.5	--	12.0	15.0	--	13.0	22.0	--	16.0	--	--	--	22.0	--	17.5	15.5	--	14.5
30	13.5	--	12.0	16.5	--	13.5	22.5	--	17.0	--	--	--	19.0	--	17.0	16.0	--	13.5
31	--	--	--	14.0	--	13.0	--	--	--	--	--	--	20.5	--	16.5	--	--	--
AVE	11.9	--	9.8	14.8	--	12.9	18.1	--	15.6	--	--	--	--	--	--	19.1	--	16.3

## PERIODIC DETERMINATIONS OF TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	WATER TEM- PERA- TURE (DEG C)	DIS- CHARGE (CFS)	TURBIDITY (JTU)	
				TOTAL	RESIDUAL <sup>1/</sup>
Nov. 6, 1970...	0930	12.0	289	52	6
Nov. 13.....	1330	10.5	239	25	3
Nov. 20.....	0900	9.5	275	12	1
Nov. 27.....	0900	11.0	277	14	3
Dec. 4.....	0915	11.0	1940	157	38
Dec. 11.....	0845	9.0	557	56	14
Dec. 18.....	0900	8.0	676	38	16
Dec. 25.....	1030	6.0	504	36	13
Dec. 31.....	0900	8.0	539	36	13
Jan. 8, 1971...	0915	5.0	393	31	4
Jan. 15.....	0915	5.0	1040	55	13
Jan. 22.....	0900	6.5	588	53	8
Jan. 29.....	1030	8.0	434	42	5
Feb. 5.....	0945	6.5	384	40	7
Feb. 12.....	0915	8.5	360	43	7
Feb. 19.....	0915	6.5	354	37	7
Feb. 26.....	1030	5.5	339	30	4
Mar. 5.....	0900	5.5	333	26	3
Mar. 12.....	1000	10.0	2950	153	33
Mar. 19.....	0915	7.5	381	64	8
Mar. 26.....	--	11.0	D 2150	288	13
Apr. 9.....	1100	10.5	245	27	1
May 14.....	0915	13.0	320	18	5
June 11.....	0910	15.5	289	15	5

D Daily mean discharge.

<sup>1/</sup> Turbidity measured after a 7-day settling period.

## RUSSIAN RIVER BASIN

11462500 RUSSIAN RIVER NEAR HOPLAND, CALIF.

LOCATION.--Lat 39°01'36", long 123°07'46", in Rancho de Sanel Grant, Mendocino County, temperature recorder at gaging station on right bank, at abandoned highway bridge, 0.2 mile downstream from McNab Creek, and 4 miles north of Hopland.

DRAINAGE AREA.--362 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1965, water year 1966 (partial-record station).  
Water temperatures: September 1965 to September 1971.

EXTREMES.--Period of record: Water temperatures: Maximum (1965-66, 1968-69), 24.0°C on several days in 1969; minimum (1965-68, 1969-70), 6.0°C Feb. 8, 9, 1966.

REMARKS.--Probe inoperative Nov. 21 to Sept. 21. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

[illegible][illegible]

11463200 BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.

LOCATION.--Lat 38°49'21", long 122°59'07", in SW1/4 sec.4, T.11 N., R.10 W., Sonoma County, temperature recorder at gaging station on right bank, 0.5 mile downstream from small left-bank tributary, 1.9 miles upstream from mouth, and 2.0 miles northeast of Cloverdale.

DRAINAGE AREA.--82.3 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1966 to September 1968, October 1970 to September 1971.

Sediment records: Water years 1964-66 (partial-record station), October 1966 to September 1968.

Turbidity: Water years 1966-68 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 29.5°C July 19, 20, Aug. 2.

Period of record:

Water temperatures (1970-71): Maximum, 29.5°C July 19, 20, Aug. 2, 1971.

REMARKS.--Recorder stopped Oct. 1-13; recorder malfunction Nov. 17 to Dec. 10, Dec. 14 to Mar. 25; probe inoperative Apr. 13 to May 7.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	MAX	UCT DAILY	MIN	MAX	NOV DAILY	MIN	MAX	DEC DAILY	MIN	MAX	JAN DAILY	MIN	MAX	FEB DAILY	MIN	MAX	MAR DAILY	MIN
1	--	--	--	12.5	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	12.5	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	12.5	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--
4	--	--	--	12.0	--	12.0	--	--	--	--	--	--	--	--	--	--	7.5	--
5	--	--	--	12.0	--	12.0	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	12.5	--	12.0	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	12.5	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--
8	--	--	--	12.5	--	12.0	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	13.0	--	12.0	--	--	--	--	--	--	--	7.5	--	--	--	--
10	--	--	--	13.0	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	12.0	--	11.0	11.0	--	9.0	--	--	--	--	--	--	--	--	--
12	--	--	--	11.5	--	10.5	10.0	--	8.0	--	6.5	--	--	--	--	--	--	--
13	--	--	--	10.5	--	10.0	10.5	--	8.5	--	--	--	--	--	--	--	--	--
14	16.5	--	16.0	10.0	--	10.0	--	--	--	8.0	--	--	--	--	--	--	--	--
15	16.0	--	15.5	10.0	--	10.0	--	--	--	--	--	--	--	--	--	--	--	--
16	16.0	--	14.0	10.5	--	10.0	--	--	--	--	--	--	--	--	--	--	--	--
17	15.5	--	13.0	--	10.0	--	--	--	--	--	--	--	--	--	--	--	--	--
18	15.5	--	15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	15.5	--	13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	16.0	--	15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	15.5	--	14.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	14.5	--	13.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	14.0	--	13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	13.0	--	12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	13.0	--	12.0	--	--	--	--	--	--	9.0	--	--	--	--	--	--	--	--
26	13.0	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	10.0
27	12.0	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	10.0
28	11.0	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	9.5
29	11.0	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	14.5	--	10.5
30	11.5	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	10.0
31	12.5	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	8.0
AVE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	14.5	--	8.5	--	--	--	16.0	--	12.0	27.0	--	18.5	28.5	--	21.0	25.5	--	18.5
2	15.5	--	9.5	--	--	--	20.5	--	11.5	26.0	--	19.0	29.5	--	21.5	25.0	--	19.0
3	16.5	--	11.5	--	--	--	21.0	--	13.0	27.0	--	19.0	28.5	--	20.5	25.5	--	18.0
4	17.0	--	11.0	--	--	--	23.0	--	14.0	26.5	--	19.0	28.5	--	21.0	26.0	--	18.5
5	18.0	--	12.0	--	--	--	24.0	--	15.5	27.0	--	19.0	28.5	--	20.5	25.0	--	18.0
6	16.0	--	13.5	--	14.0	--	24.5	--	16.0	27.0	--	19.0	28.5	--	20.5	24.5	--	19.0
7	15.0	--	12.5	--	--	--	24.0	--	16.0	26.5	--	19.0	28.5	--	20.5	24.5	--	17.5
8	16.0	--	11.0	15.5	--	13.0	25.0	--	16.5	26.0	--	18.0	28.0	--	21.0	25.0	--	17.5
9	15.0	--	12.0	21.0	--	12.5	22.0	--	16.5	26.5	--	19.0	25.0	--	21.0	24.5	--	17.5
10	15.0	--	12.0	22.0	--	12.5	25.0	--	16.5	25.5	--	18.0	26.0	--	22.0	25.0	--	18.0
11	15.0	--	12.0	21.5	--	14.0	25.5	--	16.5	26.0	--	17.5	26.0	--	22.5	25.0	--	18.5
12	15.0	--	11.0	21.0	--	14.0	23.0	--	17.5	27.0	--	18.5	25.5	--	21.5	26.0	--	19.0
13	--	--	--	21.0	--	14.0	24.5	--	16.0	28.0	--	19.5	25.0	--	21.5	26.0	--	19.0
14	--	--	--	22.0	--	13.5	25.0	--	16.5	28.5	--	20.0	24.5	--	20.5	26.0	--	19.5
15	--	--	--	21.5	--	14.5	26.5	--	17.5	28.0	--	19.5	24.5	--	20.0	26.0	--	19.5
16	--	--	--	20.0	--	12.5	26.5	--	18.5	28.0	--	19.5	24.0	--	20.0	25.5	--	19.5
17	--	--	--	20.5	--	12.5	26.5	--	18.0	26.5	--	19.5	24.0	--	19.0	24.5	--	19.5
18	--	--	--	21.5	--	13.0	26.5	--	18.5	28.5	--	20.5	24.5	--	19.5	24.0	--	18.0
19	--	--	--	22.0	--	13.5	26.5	--	18.5	29.5	--	21.0	24.0	--	20.0	23.5	--	17.0
20	--	--	--	21.5	--	14.0	27.0	--	18.0	29.5	--	21.0	24.5	--	19.5	22.5	--	16.5
21	--	--	--	20.0	--	12.0	28.0	--	18.5	29.0	--	21.0	25.0	--	20.0	22.0	--	17.5
22	--	--	--	22.0	--	13.0	27.0	--	18.5	29.0	--	20.5	25.0	--	21.0	22.5	--	17.5
23	--	--	--	23.0	--	14.5	26.5	--	18.5	28.5	--	20.5	26.0	--	20.0	21.5	--	17.0
24	--	--	--	23.5	--	15.5	25.0	--	17.5	28.0	--	20.5	27.0	--	20.0	21.5	--	17.0
25	--	--	--	20.0	--	15.0	24.0	--	17.5	27.0	--	20.0	26.5	--	21.0	20.5	--	16.0
26	--	--	--	19.5	--	14.0	21.5	--	19.0	28.0	--	19.5	26.0	--	20.5	19.5	--	16.0
27	--	--	--	17.5	--	13.5	24.0	--	16.5	28.5	--	19.5	26.5	--	20.5	19.5	--	14.5
28	--	--	--	16.0	--	14.5	24.5	--	16.0	28.0	--	20.0	24.5	--	19.0	18.5	--	14.5
29	--	--	--	19.5	--	14.0	25.5	--	16.5	28.5	--	20.0	25.5	--	18.5	16.5	--	15.0
30	--	--	--	20.0	--	12.5	26.5	--	17.5	27.5	--	20.5	23.0	--	18.5	17.5	--	13.5
31	--	--	--	19.5	--	12.5	--	--	--	28.5	--	21.0	25.0	--	19.0	--	--	--
AVE	--	--	--	--	--	--	24.5	--	16.6	27.6	--	19.6	26.0	--	20.4	23.3	--	17.5

## RUSSIAN RIVER BASIN

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CALIF.

LOCATION.--Lat 38°36'48", long 122°50'07", in Sotoyome Grant, Sonoma County, temperature recorder at gaging station on left bank, 2 miles east of Healdsburg, and 3.5 miles upstream from Dry Creek.

DRAINAGE AREA.--793 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): Water years 1951-53 (partial-record station), October 1953 to September 1965, water year 1966 (partial-record station).

Water temperatures: October 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Minimum, 6.0°C Jan. 13.

Period of record:

Water temperatures: Maximum (1965-68, 1969-70), 27.0°C July 2-5, 1970; minimum (1965-69, 1970-71), 6.0°C Dec. 21-23, 1965, Jan. 26, 1966, Jan. 13, 1971.

REMARKS.--Recorder malfunction Oct. 1, 2, Oct. 7 to Dec. 3, Feb. 14 to Mar. 1, June 12 to Aug. 2; recorder stopped Aug. 5-20. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	MAX	UCT DAILY	MIN	MAX	NOV DAILY	MIN	MAX	DEC DAILY	MIN	MAX	JAN DAILY	MIN	MAX	FEB DAILY	MIN	MAX	MAR DAILY	MIN
1	--	--	--	--	--	--	--	--	--	10.0	--	9.5	10.5	--	10.5	--	8.5	--
2	--	--	--	--	--	--	--	--	--	10.0	--	8.5	11.5	--	10.5	12.0	--	10.0
3	20.5	--	16.5	--	--	--	--	9.5	--	8.5	--	6.5	11.0	--	9.0	12.0	--	10.5
4	20.5	--	16.5	--	--	--	12.0	--	10.5	7.5	--	6.5	11.0	--	9.5	11.0	--	10.5
5	20.0	--	16.0	--	--	--	12.5	--	12.0	7.5	--	6.5	11.5	--	10.0	11.5	--	9.5
6	19.5	--	15.5	--	--	--	12.5	--	12.0	7.5	--	7.0	12.0	--	10.5	11.0	--	11.0
7	--	--	--	--	--	--	12.0	--	12.0	8.0	--	7.0	12.0	--	11.5	11.0	--	11.0
8	--	--	--	--	--	--	12.5	--	12.0	8.5	--	7.5	12.0	--	11.0	13.0	--	10.5
9	--	--	--	--	--	--	12.0	--	10.5	9.5	--	8.5	12.5	--	10.5	13.5	--	10.0
10	--	--	--	--	--	--	10.5	--	10.0	9.5	--	9.0	13.0	--	11.0	11.5	--	10.0
11	--	--	--	--	--	--	11.0	--	10.0	9.0	--	8.5	14.5	--	12.0	12.5	--	11.5
12	--	--	--	--	--	--	11.0	--	10.0	9.0	--	7.0	14.5	--	12.5	12.0	--	10.0
13	--	--	--	--	--	--	10.5	--	10.0	7.0	--	6.0	14.5	--	12.0	11.0	--	9.0
14	--	--	--	--	--	--	10.5	--	10.0	7.0	--	6.5	--	--	--	10.0	--	9.5
15	--	--	--	--	--	--	11.5	--	10.5	8.5	--	7.5	--	--	--	12.0	--	9.5
16	--	--	--	--	14.5	--	11.0	--	9.0	9.5	--	8.5	--	--	--	12.0	--	10.5
17	--	--	--	--	--	--	9.0	--	9.0	11.0	--	9.5	--	--	--	12.5	--	9.5
18	--	--	--	--	--	--	9.0	--	8.0	11.5	--	10.5	--	--	--	13.0	--	9.5
19	--	--	--	--	--	--	8.5	--	8.0	11.5	--	10.5	--	--	--	13.5	--	10.0
20	--	--	--	--	--	--	8.5	--	7.5	11.0	--	10.0	--	--	--	14.0	--	10.5
21	--	--	--	--	--	--	8.5	--	7.5	10.5	--	9.0	--	--	--	14.0	--	11.0
22	--	--	--	--	--	--	8.5	--	8.0	9.0	--	8.0	--	--	--	13.0	--	11.5
23	--	--	--	--	--	--	9.5	--	8.5	8.5	--	8.0	--	--	--	13.5	--	12.0
24	--	--	--	--	--	--	9.5	--	8.0	8.5	--	7.5	--	--	--	14.0	--	12.0
25	--	--	--	--	--	--	8.5	--	7.0	9.5	--	7.5	--	--	--	13.5	--	12.0
26	--	--	--	--	--	--	9.0	--	8.5	9.5	--	8.5	--	--	--	12.0	--	11.0
27	--	--	--	--	--	--	10.0	--	9.0	11.0	--	9.0	--	--	--	12.0	--	10.5
28	--	--	--	--	--	--	10.0	--	9.5	11.0	--	10.0	--	--	--	13.0	--	10.5
29	--	--	--	--	--	--	9.5	--	9.0	11.0	--	10.5	--	--	--	14.5	--	11.5
30	--	--	--	--	--	--	9.5	--	9.0	11.0	--	10.5	--	--	--	14.0	--	11.5
31	--	--	--	--	--	--	10.0	--	9.0	11.0	--	10.5	--	--	--	13.5	--	10.5
AVE	--	--	--	--	--	--	10.3	--	9.4	9.4	--	8.4	--	--	--	12.5	--	10.5
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	14.0	--	10.5	16.0	--	13.5	17.0	--	15.0	--	24.0	--	--	--	--	23.0	--	20.5
2	15.0	--	11.5	14.5	--	13.0	20.0	--	15.0	--	--	--	--	23.5	--	23.0	--	21.0
3	15.5	--	12.0	15.0	--	13.0	19.5	--	16.5	--	--	--	25.0	--	22.5	22.5	--	20.0
4	16.5	--	12.5	16.5	--	14.0	21.5	--	17.0	--	--	--	24.5	--	23.0	23.0	--	20.5
5	16.0	--	13.0	18.5	--	14.0	22.5	--	18.5	--	--	--	--	--	--	23.0	--	21.0
6	15.0	--	13.0	18.0	--	14.0	23.0	--	19.0	--	--	--	--	--	--	22.5	--	20.5
7	13.5	--	11.5	19.5	--	15.0	22.5	--	19.0	--	--	--	--	--	--	22.5	--	20.0
8	14.5	--	11.0	--	--	--	22.5	--	19.0	--	--	--	--	--	--	22.5	--	20.5
9	14.0	--	12.5	19.5	--	13.5	21.0	--	19.0	--	--	--	--	--	--	22.5	--	20.5
10	14.0	--	11.5	20.5	--	15.5	23.0	--	18.5	--	--	--	--	--	--	22.5	--	20.5
11	14.5	--	11.0	19.0	--	16.0	22.5	--	18.0	--	--	--	--	--	--	23.5	--	21.0
12	16.0	--	12.0	20.0	--	16.0	--	--	--	--	--	--	--	--	--	24.5	--	21.5
13	15.0	--	13.0	21.5	--	16.5	--	--	--	--	--	--	--	--	--	24.5	--	22.5
14	16.5	--	12.5	21.0	--	16.0	--	--	--	--	--	--	--	--	--	25.0	--	21.0
15	16.5	--	13.0	20.5	--	15.5	--	--	--	--	--	--	--	--	--	25.0	--	21.5
16	15.5	--	13.5	19.0	--	14.5	--	--	--	--	--	--	--	--	--	24.0	--	20.0
17	14.5	--	12.5	19.5	--	13.5	--	--	--	--	--	--	--	--	--	23.0	--	19.5
18	14.5	--	10.5	20.5	--	15.0	--	--	--	--	--	--	--	--	--	22.5	--	18.0
19	16.0	--	12.0	21.0	--	15.5	--	--	--	--	--	--	--	--	--	22.0	--	17.0
20	15.0	--	13.0	20.5	--	15.5	--	--	--	--	--	--	--	21.5	--	21.0	--	17.5
21	14.5	--	11.0	19.0	--	13.5	--	--	--	--	--	--	24.5	--	22.0	22.0	--	17.5
22	13.5	--	12.0	21.5	--	14.5	--	--	--	--	--	--	25.0	--	23.0	22.5	--	17.5
23	15.0	--	12.0	21.5	--	15.0	--	--	--	--	--	--	25.0	--	22.5	22.0	--	17.0
24	14.0	--	11.0	22.0	--	15.5	--	--	--	--	--	--	25.0	--	22.5	21.5	--	16.5
25	15.5	--	12.0	21.0	--	15.5	--	--	--	--	--	--	24.0	--	22.5	21.0	--	15.5
26	16.0	--	13.5	20.0	--	15.5	--	--	--	--	--	--	23.5	--	21.5	19.5	--	15.0
27	16.5	--	13.5	17.5	--	16.5	--	--	--	--	--	--	23.0	--	21.5	19.5	--	14.0
28	15.0	--	13.5	16.5	--	15.5	--	--	--	--	--	--	23.0	--	20.5	19.0	--	14.0
29	15.5	--	13.5	18.5	--	15.5	--	--	--	--	--	--	22.5	--	20.0	18.0	--	14.5
30	17.0	--	13.5	19.0	--	16.0	--	--	--	--	--	--	22.5	--	20.5	18.5	--	13.5
31	--	--	--	17.0	--	15.0	--	--	--	--	--	--	22.0	--	20.5	--	--	--
AVE	15.1	--	12.3	19.1	--	14.9	--	--	--	--	--	--	--	--	--	22.2	--	18.6



## 11464500 DRY CREEK NEAR CLOVERDALE, CALIF.

LOCATION.--Lat 38°44'59", long 123°05'28", in NE¼NE¼ sec.5, T.10 N., R.11 W., Sonoma County, temperature recorder at gaging station on left bank 500 ft downstream from Smith Creek, and 5 miles southwest of Cloverdale.

DRAINAGE AREA.--87.8 sq mi.

PERIOD OF RECORD.--Water temperatures: May 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 29.5°C on several days during June to August; minimum, 5.0°C Jan. 12, 13.

Period of record:

Water temperatures: Maximum (1965-66, 1967-71), 33.5°C Aug. 6, 7, 1966; minimum (1966-71), 3.0°C Dec. 16, 1967.

REMARKS.--Recorder malfunction Oct. 13 to Nov. 17.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	23.0	--	14.5	--	--	--	11.5	--	10.5	10.0	--	9.5	11.0	--	9.5	12.5	--	7.0
2	22.0	--	15.0	--	--	--	11.0	--	9.5	9.5	--	7.5	11.0	--	8.5	13.0	--	7.0
3	22.0	--	17.0	--	--	--	11.0	--	10.0	7.5	--	6.0	10.5	--	7.5	12.5	--	9.5
4	22.0	--	17.0	--	--	--	12.0	--	11.0	7.0	--	6.0	11.0	--	8.0	13.5	--	9.0
5	21.5	--	16.5	--	--	--	12.0	--	12.0	7.0	--	5.5	12.0	--	9.0	13.5	--	7.0
6	21.0	--	15.0	--	--	--	13.0	--	12.0	7.0	--	6.0	13.0	--	10.0	13.5	--	7.5
7	20.0	--	13.5	--	--	--	12.5	--	12.5	7.0	--	5.5	13.0	--	10.0	13.0	--	9.0
8	20.0	--	13.0	--	--	--	12.5	--	11.5	7.5	--	6.5	12.5	--	10.0	15.0	--	9.0
9	20.0	--	13.0	--	--	--	11.5	--	10.5	8.5	--	7.0	12.5	--	9.0	13.0	--	9.0
10	22.0	--	15.5	--	--	--	11.0	--	10.0	9.5	--	8.0	14.0	--	9.5	12.0	--	9.0
11	21.0	--	15.0	--	--	--	10.5	--	9.0	9.0	--	8.5	14.5	--	10.5	13.0	--	11.0
12	21.0	--	16.0	--	--	--	10.0	--	9.0	8.5	--	5.0	14.5	--	10.5	12.0	--	11.0
13	--	15.0	--	--	--	--	9.5	--	9.0	6.5	--	5.0	15.0	--	11.0	12.0	--	11.0
14	--	--	--	--	--	--	10.0	--	9.0	8.5	--	6.5	13.0	--	11.5	12.0	--	11.0
15	--	--	--	--	--	--	10.0	--	9.5	9.0	--	8.5	15.0	--	11.0	11.5	--	10.5
16	--	--	--	--	--	--	9.5	--	9.0	9.0	--	8.5	12.5	--	11.5	12.0	--	11.0
17	--	--	--	--	15.5	--	9.5	--	8.5	10.0	--	9.0	14.5	--	10.0	12.0	--	11.0
18	--	--	--	--	15.0	--	9.0	--	8.0	11.0	--	9.0	12.0	--	9.0	13.0	--	10.5
19	--	--	--	--	14.5	--	8.0	--	6.5	12.5	--	11.5	13.0	--	9.0	12.5	--	11.0
20	--	--	--	--	14.0	--	7.5	--	6.5	12.5	--	11.0	12.5	--	7.5	12.5	--	11.5
21	--	--	--	--	13.0	--	9.0	--	7.5	11.0	--	9.0	12.0	--	8.0	13.0	--	11.5
22	--	--	--	--	12.5	--	9.0	--	8.5	10.5	--	8.5	13.5	--	9.0	13.0	--	12.0
23	--	--	--	--	14.5	--	9.5	--	8.5	10.5	--	8.5	13.5	--	8.0	13.0	--	12.5
24	--	--	--	--	14.0	--	8.5	--	7.0	10.0	--	8.5	13.5	--	9.0	13.0	--	12.5
25	--	--	--	--	14.0	--	7.5	--	6.0	10.0	--	8.5	12.0	--	8.0	13.0	--	12.5
26	--	--	--	--	13.5	--	8.5	--	7.5	10.5	--	8.5	12.5	--	6.5	13.0	--	12.5
27	--	--	--	--	13.5	--	9.0	--	8.0	10.5	--	8.5	11.5	--	8.0	13.0	--	11.5
28	--	--	--	--	12.5	--	9.0	--	8.5	10.5	--	8.5	11.5	--	8.0	13.0	--	11.5
29	--	--	--	--	12.5	--	9.5	--	9.0	10.5	--	9.0	--	--	--	13.0	--	12.0
30	--	--	--	--	12.5	--	10.0	--	9.0	11.0	--	9.5	--	--	--	13.5	--	12.5
31	--	--	--	--	--	--	10.5	--	9.5	11.0	--	9.5	--	--	--	13.0	--	12.0
AVE	--	--	--	--	--	--	10.0	--	9.1	9.5	--	8.0	12.8	--	9.2	12.8	--	10.5
DAY	APR			MAY			JUN			JUL			AUG			SEP		
	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN
1	13.5	--	12.0	16.0	--	14.0	19.5	--	14.5	28.5	--	19.0	28.0	--	19.5	25.5	--	18.0
2	13.5	--	12.0	17.0	--	13.5	23.5	--	14.0	27.5	--	18.0	29.0	--	20.0	24.5	--	18.0
3	14.0	--	12.5	18.0	--	13.5	23.0	--	15.0	28.5	--	18.0	27.5	--	19.5	25.5	--	17.5
4	15.0	--	13.0	20.0	--	14.0	24.5	--	15.0	27.5	--	18.0	28.0	--	20.0	26.0	--	17.5
5	18.5	--	13.0	20.5	--	14.5	25.5	--	16.5	27.5	--	18.0	28.5	--	20.0	25.0	--	17.5
6	15.5	--	13.0	20.5	--	13.5	25.0	--	16.5	28.0	--	18.5	28.5	--	20.0	23.5	--	17.5
7	16.0	--	11.5	22.0	--	15.0	25.0	--	17.0	26.5	--	18.5	28.5	--	19.5	25.0	--	17.0
8	17.0	--	10.5	16.5	--	14.5	26.0	--	16.5	27.5	--	17.5	28.5	--	20.0	25.0	--	17.0
9	15.5	--	12.5	23.0	--	13.5	23.0	--	16.5	27.5	--	19.5	28.0	--	20.0	25.0	--	16.5
10	17.0	--	11.5	24.0	--	14.5	25.5	--	17.5	26.5	--	18.0	29.5	--	21.0	25.0	--	17.0
11	18.0	--	10.5	23.0	--	16.5	26.5	--	17.0	27.5	--	18.5	29.0	--	22.0	26.0	--	18.0
12	18.5	--	11.5	23.0	--	16.5	24.0	--	18.0	28.5	--	18.5	28.0	--	20.5	26.5	--	18.0
13	14.5	--	13.0	23.0	--	16.5	25.5	--	17.0	29.5	--	19.5	27.5	--	20.0	27.0	--	17.5
14	19.5	--	12.5	23.5	--	15.0	26.0	--	17.5	29.5	--	20.0	28.0	--	19.0	27.0	--	18.0
15	19.0	--	12.0	23.5	--	15.0	27.0	--	17.5	28.5	--	19.5	28.0	--	19.0	26.5	--	18.0
16	17.5	--	12.0	22.0	--	14.0	27.0	--	17.5	28.0	--	19.5	27.5	--	19.0	25.5	--	18.0
17	17.5	--	11.5	23.0	--	13.5	26.5	--	18.5	26.5	--	20.0	27.5	--	18.5	25.0	--	19.5
18	18.0	--	10.5	23.5	--	14.5	27.0	--	18.5	29.0	--	21.0	27.5	--	19.0	25.0	--	18.0
19	19.0	--	11.5	23.5	--	15.0	28.0	--	20.0	29.5	--	21.0	26.5	--	19.5	25.0	--	16.0
20	18.5	--	12.0	23.0	--	14.0	28.0	--	19.0	29.5	--	21.0	27.5	--	19.0	23.0	--	16.0
21	18.0	--	10.5	22.0	--	13.0	29.5	--	19.5	28.5	--	20.5	28.0	--	19.5	23.5	--	17.0
22	15.0	--	11.5	24.5	--	14.5	28.0	--	19.5	28.0	--	21.0	28.0	--	20.5	24.0	--	17.5
23	18.0	--	11.5	25.0	--	16.0	27.5	--	20.0	27.0	--	20.0	28.0	--	19.5	23.0	--	16.5
24	18.0	--	10.0	25.5	--	17.0	25.5	--	18.5	26.5	--	19.5	27.5	--	18.5	23.0	--	16.0
25	19.5	--	11.5	22.0	--	16.5	26.5	--	18.5	26.5	--	19.5	28.0	--	20.0	22.5	--	15.5
26	19.0	--	13.0	22.0	--	16.0	26.0	--	20.5	27.0	--	19.0	26.0	--	20.0	22.0	--	16.0
27	21.0	--	13.0	21.5	--	15.5	26.5	--	18.5	27.5	--	19.5	26.5	--	20.0	21.0	--	14.0
28	20.0	--	13.5	18.5	--	16.5	26.5	--	17.5	27.5	--	19.5	25.5	--	18.0	20.5	--	14.5
29	20.5	--	14.0	23.5	--	16.0	27.5	--	18.0	27.5	--	19.5	26.0	--	18.0	17.5	--	16.5
30	21.5	--	14.0	22.0	--	14.0	28.0	--	18.5	28.0	--	19.5	22.5	--	18.0	19.5	--	14.0
31	--	--	--	21.0	--	13.5	--	--	--	28.0	--	19.5	25.0	--	18.0	--	--	--
AVE	17.5	--	12.0	21.8	--	14.8	25.9	--	17.6	27.9	--	19.3	27.5	--	19.5	24.1	--	16.9

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.

LOCATION.--Lat 38°41'55", long 122°57'25", in Tzabaco Grant, Sonoma County, at gaging station 0.3 mile downstream from Pena Creek, and 3 miles west of Geyserville.

DRAINAGE AREA.--162 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1970 to September 1971.

Water temperatures: March 1964 to September 1971.

Sediment records: March 1964 to September 1971.

Turbidity: Water years 1964-71 (partial-record station).

## EXTREMES.--1970-71:

Water temperatures: Maximum, 26.5°C Aug. 11; minimum, 5.0°C Dec. 19.

Sediment concentrations: Maximum daily, 2,700 mg/l Dec. 3; minimum daily, no flow for many days

Sediment discharge: Maximum daily, 81,900 tons Dec. 3; minimum daily, 0 tons on many days.

## Period of record:

Water temperatures: Maximum, 26.5°C Aug. 11, 1971; minimum (1964-66, 1967-71), 5.0°C Jan. 5, Dec. 19, 1970.

Sediment concentrations: Maximum daily, 15,000 mg/l (estimated) Dec. 22, 1964; minimum daily, no flow for many days in 1964, 1966, 1970-71.

Sediment discharge: Maximum daily, 830,000 tons (estimated) Dec. 22, 1964; minimum daily, 0 tons on many days in 1964, 1966, 1968-71.

REMARKS.--No flow Oct. 1-14, Sept. 15-30. No thermograph record Oct. 15-19, Dec. 5 to Jan. 4, probe inoperative; June 18 to July 1, recorder stopped. Where no maximum or minimum is shown, temperature is once-daily reading.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	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)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
NOV.										
19...	1235	28	14.5	--	--	--	--	--	--	--
19...	1810	25	14.5	15	10	26	13	14	1.0	146
19...	2400	24	12.5	--	--	--	--	--	--	--
20...	0600	23	11.5	--	--	--	--	--	--	--
20...	1700	22	14.0	--	--	--	--	--	--	--
JAN.										
25...	1445	408	10.0	--	--	--	--	--	--	--
FEB.										
28...	1240	87	11.5	--	--	--	--	--	--	--
APR.										
02...	1115	338	12.0	--	--	--	--	--	--	--
MAY										
13...	1015	63	17.0	19	20	23	12	12	.9	126
13-14	0600-0600	62	--	--	--	--	--	--	--	--
JULY										
01...	1630	10	24.0	19	30	24	13	11	.9	145

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOLVED ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	AMMONIA (NH4) (MG/L)
NOV.										
19...	--	--	--	--	.00	--	.00	--	--	.00
19...	0	17	6.4	.3	.29	--	.29	--	--	.00
19...	--	--	--	--	.10	--	.10	--	--	.00
20...	--	--	--	--	.25	--	.25	--	--	.00
20...	--	--	--	--	.26	--	.26	--	--	.00
JAN.										
25...	--	--	--	--	--	--	--	--	--	--
FEB.										
28...	--	--	--	--	--	--	--	--	--	--
APR.										
02...	--	--	--	--	--	--	--	--	--	--
MAY										
13...	--	14	4.8	.4	--	--	--	.10	--	--
13-14	--	--	--	--	.16	.18	--	.10	.07	.09
JULY										
01...	0	15	4.9	.4	--	--	--	.00	--	--

## 11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRATE (NO3) (MG/L)	PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHATE (PO4) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS- SOLVED BORON (B) (UG/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)
NOV.										
19...	.4	.05	.02	--	--	--	--	--	--	--
19...	.5	.07	.03	--	--	--	490	171	166	.23
19...	.6	.04	.02	--	--	--	--	--	--	--
20...	.7	.07	.02	--	--	--	--	--	--	--
20...	.4	.06	.03	--	--	--	--	--	--	--
JAN.										
25...	--	--	--	--	--	--	--	--	--	--
FEB.										
28...	--	--	--	--	--	--	--	--	--	--
APR.										
02...	--	--	--	--	--	--	--	--	--	--
MAY										
13...	--	--	--	--	--	--	220	--	149	.20
13-14	--	--	.18	.080	.060	5.5	--	--	--	--
JULY										
01...	--	--	--	--	--	--	350	--	160	.22

DATE	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TOTAL MERCURY (HG) (UG/L)
NOV.									
19...	--	--	--	--	--	--	--	--	--
19...	11.5	118	0	--	20	.6	--	7.9	--
19...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
JAN.									
25...	--	--	--	--	--	--	--	--	1.8
FEB.									
28...	--	--	--	--	--	--	--	--	.4
APR.									
02...	--	--	--	--	--	--	--	--	.1
MAY									
13...	25.3	110	3	--	19	.5	--	--	--
13-14	--	--	--	--	--	--	--	--	--
JULY									
01...	4.32	110	0	119	17	.5	328	8.2	--

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	ALKA- LINITY AS CACO3 (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
NOV.								
19...	0015	32	12.5	8.6	80	105	220	--
19...	1235	28	14.5	11.4	111	116	200	--
19...	1510	27	15.5	10.5	105	115	200	--
19...	1810	25	14.5	9.2	89	115	200	--
19...	2100	24	13.0	8.4	80	114	190	--
20...	0300	24	12.0	8.8	81	105	210	--
20...	0600	23	11.5	8.6	78	102	205	--
20...	0900	23	11.5	9.5	87	115	215	--
20...	1200	22	14.0	10.9	105	116	220	--
MAY								
13...	0600	63	16.0	8.8	88	112	228	7.0
13...	0900	63	16.0	9.6	96	112	230	7.1
13...	1200	63	19.0	10.1	107	111	240	7.1
13...	1500	63	21.0	9.8	109	115	258	7.1
13...	1800	61	20.0	9.4	102	117	250	7.5
13...	2100	61	18.5	7.6	80	108	240	6.9
13...	2400	60	17.0	8.2	84	107	230	6.9
14...	0300	59	16.0	8.4	84	107	220	7.0
14...	0600	61	15.0	8.6	85	117	215	6.9

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	MAX	OCT DAILY	MIN	MAX	NOV DAILY	MIN	MAX	DEC DAILY	MIN	MAX	JAN DAILY	MIN	MAX	FEB DAILY	MIN	MAX	MAR DAILY	MIN
1	--	--	--	17.5	--	14.0	12.0	--	11.0	--	10.0	--	11.5	--	11.0	12.5	--	8.5
2	--	--	--	17.5	--	14.0	11.5	--	10.5	--	--	--	12.0	--	10.0	13.0	--	8.5
3	--	--	--	15.5	--	14.0	11.5	--	11.0	--	--	--	11.0	--	9.0	12.5	--	10.5
4	--	--	--	15.0	--	14.0	13.0	--	11.5	--	--	--	11.5	--	9.5	13.0	--	10.0
5	--	--	--	15.5	--	14.0	--	13.0	--	12.0	--	10.5	13.0	--	10.0	13.0	--	8.5
6	--	--	--	15.5	--	15.0	--	14.0	--	11.5	--	10.5	13.0	--	10.5	13.0	--	9.0
7	--	--	--	15.5	--	14.5	--	14.0	--	11.0	--	10.0	13.0	--	11.0	13.0	--	10.0
8	--	--	--	15.5	--	15.0	--	12.0	--	10.5	--	9.0	13.0	--	11.0	14.0	--	10.0
9	--	--	--	16.0	--	15.0	--	9.0	--	11.0	--	9.5	12.5	--	10.5	13.0	--	10.0
10	--	--	--	15.5	--	14.0	--	8.0	--	11.5	--	10.5	14.0	--	11.0	12.0	--	10.5
11	--	--	--	16.0	--	14.5	--	10.5	--	11.0	--	9.5	14.5	--	11.5	13.5	--	11.5
12	--	--	--	15.0	--	13.5	--	9.5	--	9.5	--	6.5	14.5	--	11.5	12.0	--	10.5
13	--	--	--	14.5	--	13.0	--	8.5	--	8.5	--	6.5	15.0	--	11.5	12.5	--	9.5
14	--	--	--	15.0	--	13.0	--	6.0	--	10.0	--	8.0	13.5	--	12.5	11.0	--	9.5
15	--	--	--	15.0	--	13.0	--	10.0	--	10.5	--	10.0	14.5	--	12.0	13.5	--	10.5
16	--	--	--	16.0	--	13.5	--	10.0	--	11.0	--	10.0	13.0	--	11.0	13.5	--	10.5
17	--	--	--	15.5	--	13.5	--	6.0	--	11.5	--	11.0	14.0	--	11.0	14.5	--	10.0
18	--	--	--	15.0	--	13.0	--	9.0	--	13.0	--	11.0	12.5	--	10.0	14.5	--	10.0
19	--	--	--	15.5	--	12.5	--	5.0	--	13.5	--	12.5	13.0	--	10.0	15.0	--	10.0
20	17.0	--	14.5	15.0	--	11.5	--	--	--	13.5	--	12.5	12.5	--	9.0	15.0	--	10.5
21	16.0	--	15.0	14.5	--	13.5	--	--	--	13.5	--	11.5	12.5	--	9.5	15.0	--	11.0
22	17.0	--	15.0	14.5	--	14.0	--	9.0	--	12.0	--	10.5	13.5	--	10.0	14.0	--	12.0
23	15.5	--	14.0	16.0	--	14.5	--	--	--	11.5	--	10.0	13.5	--	9.5	14.5	--	12.5
24	16.0	--	13.0	16.0	--	15.0	--	--	--	11.0	--	9.5	13.5	--	10.0	15.0	--	12.0
25	16.0	--	14.0	15.0	--	14.0	--	--	--	11.0	--	9.0	12.5	--	9.5	14.0	--	12.5
26	17.0	--	13.0	14.0	--	12.5	--	--	--	11.5	--	9.5	12.0	--	8.5	13.5	--	11.5
27	16.5	--	12.0	12.5	--	12.0	--	--	--	12.0	--	10.0	12.0	--	9.0	14.0	--	10.5
28	17.0	--	12.5	12.5	--	12.0	--	9.5	--	12.0	--	10.0	12.0	--	9.0	15.0	--	11.0
29	17.0	--	12.5	12.0	--	12.0	--	--	--	11.5	--	10.0	--	--	--	16.0	--	11.0
30	15.0	--	13.5	12.0	--	11.5	--	--	--	12.0	--	10.5	--	--	--	15.0	--	11.5
31	18.0	--	15.0	--	--	--	--	11.0	--	12.0	--	10.5	--	--	--	15.0	--	10.0
AVE	--	--	--	15.0	--	13.5	--	--	--	11.5	--	9.9	13.0	--	10.3	13.7	--	10.4
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	16.0	--	10.5	15.5	--	14.0	18.0	--	14.5	--	24.0	--	25.0	--	17.5	23.0	--	17.0
2	16.0	--	11.0	16.0	--	14.0	20.5	--	14.5	23.5	--	17.0	25.0	--	18.0	22.5	--	17.0
3	17.0	--	11.5	17.0	--	14.0	20.0	--	15.0	23.0	--	17.0	24.0	--	17.5	22.0	--	15.5
4	17.5	--	12.0	18.0	--	14.5	22.0	--	15.5	23.0	--	17.0	25.0	--	17.5	22.5	--	16.0
5	17.5	--	13.0	18.5	--	14.5	22.0	--	16.0	23.5	--	17.5	24.0	--	17.5	23.0	--	16.5
6	15.0	--	13.0	18.5	--	13.5	22.0	--	16.0	23.0	--	17.5	23.5	--	17.0	22.0	--	17.0
7	15.0	--	12.0	19.5	--	15.0	21.5	--	16.5	23.0	--	17.5	23.5	--	17.0	22.0	--	16.0
8	16.5	--	11.0	16.5	--	14.5	22.0	--	16.5	23.0	--	17.0	25.0	--	17.5	22.0	--	16.0
9	15.5	--	13.0	20.0	--	13.5	20.5	--	16.5	23.5	--	17.5	25.0	--	18.5	21.0	--	15.5
10	15.5	--	11.5	20.5	--	15.0	22.5	--	16.5	23.0	--	17.0	23.0	--	20.5	22.0	--	16.0
11	16.5	--	11.5	19.5	--	16.0	22.5	--	16.5	23.0	--	16.5	26.5	--	20.5	22.5	--	17.0
12	17.5	--	12.0	20.0	--	16.0	20.5	--	17.0	23.5	--	17.0	25.0	--	19.0	22.5	--	17.0
13	14.5	--	13.5	21.0	--	16.0	22.0	--	16.0	24.0	--	17.5	24.0	--	18.5	23.0	--	17.5
14	18.5	--	12.5	20.5	--	15.0	22.5	--	16.5	23.5	--	18.0	23.5	--	18.0	22.5	--	17.0
15	18.0	--	13.0	20.5	--	15.5	23.0	--	17.0	23.5	--	18.0	25.0	--	18.5	--	--	--
16	17.0	--	12.5	20.0	--	14.5	23.0	--	17.0	23.0	--	18.0	25.0	--	19.5	--	--	--
17	16.5	--	12.5	20.0	--	14.5	23.0	--	17.0	22.0	--	18.0	24.0	--	17.5	--	--	--
18	17.0	--	11.5	20.5	--	15.0	--	22.5	--	23.5	--	18.5	23.5	--	18.0	--	--	--
19	17.5	--	12.0	21.0	--	15.5	--	--	--	25.0	--	18.0	23.0	--	17.5	--	--	--
20	17.0	--	13.0	20.5	--	15.0	--	--	--	24.5	--	18.0	24.0	--	18.0	--	--	--
21	17.0	--	11.5	19.5	--	14.0	--	--	--	24.5	--	18.5	25.0	--	18.0	--	--	--
22	15.0	--	12.5	21.0	--	15.0	--	25.0	--	24.5	--	18.0	25.0	--	19.5	--	--	--
23	17.0	--	12.0	21.0	--	15.5	--	--	--	24.0	--	18.0	25.0	--	18.0	--	--	--
24	16.5	--	11.5	21.5	--	16.5	--	--	--	23.5	--	18.0	24.0	--	18.0	--	--	--
25	18.0	--	12.0	20.0	--	16.0	--	21.5	--	23.5	--	17.5	24.5	--	19.5	--	--	--
26	17.5	--	13.5	19.5	--	15.5	--	--	--	23.5	--	17.5	23.0	--	19.0	--	--	--
27	18.5	--	13.5	18.0	--	15.5	--	--	--	24.0	--	17.5	23.0	--	19.0	--	--	--
28	17.5	--	14.0	17.5	--	16.0	--	24.5	--	23.5	--	17.0	21.5	--	17.0	--	--	--
29	18.0	--	14.0	20.5	--	15.5	--	--	--	24.0	--	17.5	22.0	--	17.0	--	--	--
30	18.5	--	14.0	20.0	--	14.5	--	--	--	24.0	--	17.0	21.5	--	17.0	--	--	--
31	--	--	--	18.5	--	14.0	--	--	--	25.0	--	18.0	22.5	--	17.0	--	--	--
AVE	16.8	--	12.4	19.4	--	15.0	--	--	--	23.6	--	17.6	24.0	--	18.1	--	--	--

## 11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	0	0	0	.05	1	0	1150	380	1180
2	0	0	0	.04	1	0	2610	1090	8290
3	0	0	0	.05	10	0	7470	2700	81900
4	0	0	0	.58	348	.54	7260	2050	47800
5	0	0	0	398	611	744	2430	600	3940
6	0	0	0	149	240	97	1230	290	963
7	0	0	0	102	25	6.9	1020	185	509
8	0	0	0	57	9	1.4	995	105	282
9	0	0	0	73	17	3.4	810	180	394
10	0	0	0	83	16	3.6	640	90	156
11	0	0	0	70	13	2.5	508	55	75
12	0	0	0	91	12	2.9	428	38	44
13	0	0	0	64	6	1.0	372	24	24
14	0	0	0	55	8	1.2	312	20	17
15	.01	1	0	44	15	1.8	708	244	1230
16	.05	1	0	41	5	.55	1680	538	2500
17	.03	1	0	36	4	.39	1260	232	789
18	.05	1	0	32	7	.60	1040	168	472
19	.04	1	0	29	8	.63	792	104	222
20	.06	1	0	26	7	.49	1340	491	2980
21	.15	3	0	23	6	.37	1600	391	1790
22	.26	4	0	21	13	.74	1060	120	343
23	.35	6	.01	20	6	.32	768	79	164
24	.38	7	.01	23	79	5.2	600	55	89
25	.19	5	0	122	273	98	492	42	56
26	.08	3	0	163	117	56	436	29	34
27	.06	2	0	1090	1100	9250	388	19	20
28	.06	1	0	2580	1210	10000	954	445	2430
29	.05	1	0	1110	300	899	2080	923	5690
30	.05	1	0	1110	490	1720	1120	300	907
31	.05	1	0	--	--	--	828	115	257
TOTAL	1.92	--	.02	7612.72	--	22898.53	44381	--	165547

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	685	26	48	230	8	5.0	80	6	1.3
2	620	10	17	220	7	4.2	80	3	.65
3	488	8	11	200	8	4.3	80	4	.86
4	412	8	8.9	193	7	3.6	80	6	1.3
5	351	10	9.5	186	9	4.5	80	6	1.3
6	309	12	10	181	7	3.4	78	5	1.1
7	282	15	11	168	9	4.1	76	6	1.2
8	261	18	13	162	8	3.5	74	5	1.0
9	240	12	7.8	152	9	3.7	72	5	.97
10	230	14	8.7	140	8	3.0	72	4	.78
11	264	48	34	124	8	2.7	75	13	2.6
12	402	124	134	123	10	3.3	2040	1430	12900
13	776	404	896	119	6	1.9	1040	265	919
14	1190	365	1170	119	6	1.9	978	512	1750
15	2020	448	3990	115	4	1.2	725	152	298
16	8000	2380	52800	110	4	1.2	547	115	170
17	4380	1200	14200	108	5	1.5	456	55	68
18	2180	442	2600	104	4	1.1	376	38	39
19	1370	310	1150	102	4	1.1	329	25	22
20	1010	192	524	97	5	1.3	279	18	14
21	810	120	262	94	5	1.3	264	16	11
22	660	90	160	91	8	2.0	254	13	8.9
23	560	82	124	90	4	.97	339	357	442
24	480	38	49	86	4	.93	275	49	41
25	424	26	30	84	16	3.6	725	306	1630
26	380	26	27	84	14	3.2	3430	1260	14500
27	345	23	21	86	4	.93	1400	380	1440
28	315	17	14	87	6	1.4	940	190	482
29	291	12	9.4	--	--	--	695	100	188
30	270	13	9.5	--	--	--	556	44	66
31	240	13	8.4	--	--	--	464	37	46
TOTAL	30245	--	78357.2	3655	--	70.83	16959	--	35047.96

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	379	31	32	88	4	.95	38	4	.41
2	329	25	22	99	4	1.1	39	4	.42
3	293	21	17	109	8	2.4	37	4	.40
4	267	15	11	90	4	.97	37	4	.40
5	249	15	10	84	2	.45	34	3	.28
6	232	15	9.4	83	2	.45	31	4	.33
7	218	9	5.3	79	2	.43	29	4	.31
8	205	6	3.3	76	2	.41	29	4	.31
9	217	15	9.5	75	1	.20	27	4	.29
10	275	36	30	71	1	.19	26	4	.28
11	196	8	4.2	67	1	.18	26	5	.35
12	178	10	4.8	65	2	.35	26	5	.35
13	178	13	6.9	62	2	.33	26	4	.28
14	292	56	46	61	3	.49	26	4	.28
15	198	26	14	60	3	.49	24	4	.26
16	176	25	12	59	3	.48	25	4	.27
17	178	13	6.2	57	4	.62	22	5	.30
18	163	7	3.1	55	5	.74	20	6	.32
19	150	5	2.0	53	3	.43	20	5	.27
20	144	7	2.7	52	2	.28	20	6	.32
21	133	5	1.8	52	8	1.1	19	6	.31
22	129	4	1.4	51	6	.83	18	7	.34
23	123	6	2.0	50	3	.41	17	7	.32
24	114	4	1.2	50	2	.27	16	6	.26
25	111	2	.60	49	3	.40	15	6	.24
26	106	3	.86	49	2	.26	15	6	.24
27	103	2	.56	49	5	.66	15	5	.20
28	103	3	.83	50	4	.54	14	5	.19
29	101	2	.55	49	8	1.1	12	5	.16
30	90	3	.73	35	10	.95	11	5	.15
31	--	--	--	37	3	.30	--	--	--
TOTAL	5630	--	261.93	1966	--	18.76	.714	--	8.84

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	10	5	.14	1.6	5	.02	.09	5	0
2	9.0	3	.07	1.6	4	.02	.08	5	0
3	8.4	3	.07	1.5	5	.02	.07	4	0
4	7.8	4	.08	1.7	6	.03	.06	4	0
5	7.2	4	.08	1.7	7	.03	.05	5	0
6	6.6	4	.07	1.8	8	.04	.04	5	0
7	6.2	4	.07	1.9	9	.05	.04	4	0
8	5.8	4	.06	2.0	11	.06	.03	4	0
9	5.4	4	.06	1.0	13	.04	.03	3	0
10	6.0	4	.06	.75	10	.02	.02	2	0
11	7.0	4	.08	1.0	8	.02	.02	2	0
12	6.2	4	.07	1.4	6	.02	.01	3	0
13	5.4	4	.06	1.4	5	.02	.01	3	0
14	4.8	4	.05	1.5	5	.02	.01	1	0
15	4.5	4	.05	1.2	5	.02	0	0	0
16	4.5	4	.05	.90	6	.01	0	0	0
17	4.0	4	.04	.80	6	.01	0	0	0
18	3.8	4	.04	.70	7	.01	0	0	0
19	3.7	5	.05	.60	8	.01	0	0	0
20	3.6	5	.05	.50	9	.01	0	0	0
21	3.4	4	.04	.44	10	.01	0	0	0
22	3.2	3	.03	.38	11	.01	0	0	0
23	3.1	2	.02	.33	12	.01	0	0	0
24	3.0	2	.02	.28	10	.01	0	0	0
25	2.7	3	.02	.24	8	.01	0	0	0
26	2.7	3	.02	.21	6	0	0	0	0
27	2.5	4	.03	.18	4	0	0	0	0
28	2.4	5	.03	.16	4	0	0	0	0
29	2.2	5	.03	.14	5	0	0	0	0
30	1.9	6	.03	.12	6	0	0	0	0
31	1.8	6	.03	.10	6	0	--	--	--
TOTAL	148.8	--	1.60	28.13	--	.53	.56	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

111342.13

302213.20

11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SED- IMENT (MG/L)	SUS- PENDE SED- IMENT 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
NOV. 27...	1610	12.0	315	1200	1020	32	44	57	72	85	--
DEC. 03...	1630	11.0	12900	4740	165000	24	32	44	56	69	78
04...	1550	13.0	5120	1340	18500	22	30	41	53	65	75
11...	1320	10.5	516	52	72	--	--	--	--	--	--
16...	0820	10.0	1720	567	2630	33	45	57	68	74	85
28...	1800	9.5	2090	1380	7790	22	32	43	54	61	79
31...	1515	11.0	792	96	205	--	--	--	--	--	--
JAN. 14...	0840	8.0	1260	363	1240	--	--	--	--	--	86
16...	1635	10.5	10400	2840	79700	19	28	40	52	65	--
18...	0905	13.0	2300	443	2750	20	33	46	58	69	84
MAR. 12...	1025	12.0	1610	2260	9820	26	38	50	64	76	84

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. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
NOV. 27...	94	--	96	--	99	--	100	--	--	--
DEC. 03...	--	84	--	94	--	99	--	100	--	--
04...	--	85	--	96	--	98	--	100	--	--
11...	91	--	95	--	100	--	--	--	--	--
16...	--	86	--	97	--	100	--	--	--	--
28...	--	84	--	99	--	100	--	--	--	--
31...	91	--	93	--	96	--	100	--	--	--
JAN. 14...	--	90	--	97	--	100	--	--	--	--
16...	78	--	82	--	92	--	96	--	97	100
18...	--	93	--	100	--	--	--	--	--	--
MAR. 12...	--	90	--	100	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
OCT. 13...	1730	--	4	.00	1	2	8	14
JUNE 04...	1745	22.0	6	42	6	14	20	22

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
OCT. 13...	20	26	36	54	77	85	100
JUNE 04...	25	29	39	55	70	84	100

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)	DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)
Nov. 4, 1970...	--	346	160	Jan. 29.....	--	12	6
Nov. 5.....	--	660	190	Jan. 30.....	--	13	5
Nov. 7.....	--	22	14	Jan. 31.....	--	14	4
Nov. 8.....	--	9	5	Feb. 1.....	--	8	4
Nov. 9.....	--	20	8	Feb. 2.....	--	7	3
Nov. 10.....	--	16	9	Feb. 3.....	--	8	3
Nov. 11.....	--	10	3	Feb. 4.....	--	6	5
Nov. 12.....	--	6	3	Feb. 5.....	--	38	5
Nov. 13.....	--	7	6	Feb. 6.....	--	6	2
Nov. 14.....	--	7	4	Feb. 7.....	--	10	2
Nov. 15.....	--	18	5	Feb. 8.....	--	6	2
Nov. 16.....	--	4	30	Feb. 9.....	--	9	2
Nov. 17.....	--	3	2	Feb. 10.....	--	8	3
Nov. 18.....	--	7	2	Feb. 11.....	--	8	3
Nov. 19.....	--	8	2	Feb. 12.....	--	11	4
Nov. 20.....	--	7	2	Feb. 13.....	--	5	1
Nov. 21.....	--	4	2	Feb. 14.....	--	6	1
Nov. 22.....	--	15	2	Feb. 15.....	--	4	1
Nov. 23.....	--	5	2	Feb. 16.....	--	4	1
Nov. 24.....	--	90	60	Feb. 17.....	--	5	1
Nov. 25.....	--	107	60	Feb. 18.....	--	3	13
Nov. 26.....	--	102	60	Feb. 19.....	--	4	1
Nov. 27.....	--	1200	200	Feb. 20.....	--	5	1
Nov. 28.....	0745	1380	220	Feb. 21.....	--	4	1
Nov. 28.....	1615	722	190	Feb. 22.....	--	10	1
Nov. 29.....	--	278	120	Feb. 23.....	--	4	1
Nov. 30.....	1055	220	90	Feb. 24.....	--	3	1
Nov. 30.....	1525	579	150	Feb. 25.....	--	19	2
Dec. 1.....	--	280	110	Feb. 26.....	--	17	3
Dec. 2.....	--	1890	240	Feb. 27.....	--	3	1
Dec. 3.....	1010	1830	230	Feb. 28.....	--	6	1
Dec. 3.....	1630	4740	100	Mar. 1.....	0745	8	1
Dec. 4.....	0910	2280	170	Mar. 1.....	--	4	2
Dec. 4.....	1550	1340	190	Mar. 2.....	--	3	1
Dec. 5.....	--	656	160	Mar. 3.....	--	4	1
Dec. 6.....	--	298	90	Mar. 4.....	--	6	2
Dec. 7.....	--	158	65	Mar. 5.....	--	6	2
Dec. 8.....	--	150	55	Mar. 6.....	--	5	1
Dec. 9.....	--	211	60	Mar. 7.....	--	6	1
Dec. 10.....	--	94	40	Mar. 8.....	--	5	1
Dec. 11.....	--	52	20	Mar. 9.....	--	5	2
Dec. 12.....	--	40	21	Mar. 10.....	--	4	1
Dec. 13.....	--	26	15	Mar. 11.....	--	1	1
Dec. 14.....	--	20	12	Mar. 12.....	--	2260	140
Dec. 15.....	--	14	9	Mar. 13.....	--	274	100
Dec. 16.....	--	567	150	Mar. 14.....	--	199	80
Dec. 17.....	0805	270	100	Mar. 15.....	--	154	79
Dec. 17.....	1545	207	85	Mar. 16.....	--	140	27
Dec. 18.....	--	168	75	Mar. 17.....	--	58	23
Dec. 19.....	--	94	47	Mar. 18.....	--	37	18
Dec. 22.....	--	102	50	Mar. 19.....	--	30	18
Dec. 28.....	--	1380	180	Mar. 20.....	--	17	6
Dec. 31.....	--	96	47	Mar. 21.....	--	17	6
Jan. 1, 1971...	--	15	6	Mar. 22.....	--	12	4
Jan. 8.....	--	18	7	Mar. 23.....	--	57	36
Jan. 9.....	--	10	4	Mar. 24.....	--	24	10
Jan. 10.....	--	8	5	Mar. 25.....	1005	95	600
Jan. 11.....	--	20	8	Mar. 25.....	1545	426	350
Jan. 12.....	--	83	34	Mar. 26.....	--	610	260
Jan. 13.....	--	312	68	Mar. 29.....	--	102	50
Jan. 14.....	--	363	100	Mar. 30.....	--	46	34
Jan. 15.....	--	258	70	Apr. 1.....	--	32	16
Jan. 16.....	--	2840	150	Apr. 2.....	--	25	8
Jan. 17.....	--	1280	180	Apr. 3.....	--	20	11
Jan. 18.....	--	443	130	Apr. 4.....	--	14	9
Jan. 19.....	--	334	99	Apr. 5.....	--	15	12
Jan. 20.....	--	207	73	Apr. 6.....	--	15	6
Jan. 21.....	--	132	52	Apr. 7.....	--	10	4
Jan. 22.....	--	86	38	Apr. 8.....	--	6	5
Jan. 23.....	--	86	37	Apr. 9.....	--	7	4
Jan. 24.....	--	44	21	Apr. 10.....	--	42	26
Jan. 25.....	--	26	14	Apr. 11.....	--	7	5
Jan. 26.....	--	26	12	Apr. 12.....	--	20	4
Jan. 27.....	--	22	8	Apr. 13.....	--	8	3
Jan. 28.....	--	18	9	Apr. 14.....	--	65	35



11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)	DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)
Apr. 16, 1971..	--	28	5	May 27.....	--	5	5
Apr. 17.....	--	10	4	May 28.....	--	4	4
Apr. 18.....	--	7	2	May 29.....	--	8	12
Apr. 19.....	--	4	3	May 30.....	--	10	10
Apr. 20.....	--	7	3	May 31.....	--	3	4
Apr. 21.....	--	6	4	June 1.....	--	4	4
Apr. 22.....	--	3	2	June 2.....	--	4	10
Apr. 23.....	--	6	2	June 3.....	--	4	10
Apr. 24.....	--	5	2	June 4.....	--	4	10
Apr. 25.....	--	2	2	June 5.....	--	3	10
Apr. 26.....	--	3	3	June 6.....	--	4	8
Apr. 27.....	--	2	2	June 7.....	--	4	12
Apr. 28.....	--	4	3	June 11.....	--	5	10
Apr. 29.....	--	2	3	June 14.....	--	4	10
Apr. 30.....	--	3	2	June 18.....	--	6	11
May 1.....	--	4	3	June 22.....	--	7	11
May 2.....	--	4	2	June 25.....	--	6	9
May 3.....	--	6	3	June 28.....	--	5	9
May 4.....	--	4	3	July 1.....	--	5	8
May 5.....	--	2	1	July 2.....	--	3	9
May 6.....	--	2	2	July 5.....	--	4	9
May 7.....	--	2	2	July 9.....	--	4	8
May 8.....	--	2	2	July 12.....	--	4	9
May 9.....	--	1	2	July 16.....	--	4	10
May 10.....	--	1	2	July 19.....	--	5	8
May 11.....	--	1	2	July 23.....	--	2	7
May 12.....	--	2	2	July 26.....	--	6	8
May 13.....	--	2	2	July 30.....	--	5	6
May 14.....	--	3	3	Aug. 2.....	--	4	1
May 15.....	--	3	2	Aug. 6.....	--	8	2
May 16.....	--	3	3	Aug. 9.....	--	13	2
May 17.....	--	4	3	Aug. 13.....	--	5	1
May 18.....	--	9	5	Aug. 16.....	--	6	2
May 19.....	--	3	2	Aug. 20.....	--	9	2
May 20.....	--	2	2	Aug. 23.....	--	12	2
May 21.....	--	13	2	Aug. 27.....	--	4	2
May 22.....	--	6	3	Aug. 30.....	--	6	2
May 23.....	--	3	3	Sept. 3.....	--	4	1
May 24.....	--	2	1	Sept. 6.....	--	5	2
May 25.....	--	3	2	Sept. 10.....	--	2	1
May 26.....	--	2	1	Sept. 13.....	--	3	1

## RUSSIAN RIVER BASIN

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.

LOCATION.--Lat 38°30'03", long 122°55'59", in NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.35, T.8 N., R.10 W., Sonoma County, at gaging station 0.6 mile downstream from Hobson Creek, and 3.4 miles east of Guerneville.

DRAINAGE AREA.--1,340 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): Water years 1951-53 (partial-record station), October 1953 to September 1965, water years 1966-67, 1969-71 (partial-record station). Published as "at Guerneville" in 1961-65.

Water temperatures: January 1964 to September 1971.

Sediment records: Water years 1966-67 (partial-record station), April 1967 to September 1971.

Turbidity: Water years 1967-71 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 27.0°C July 12, 13, Aug. 9, 10; minimum, 6.0°C Jan. 13, 14.

Sediment concentrations: Maximum daily, 1,430 mg/l Jan. 16; minimum daily, 4 mg/l Feb. 21.

Sediment discharge: Maximum daily, 212,000 tons Dec. 4; minimum daily, 3.0 tons Sept. 11.

Period of record:

Water temperatures: Maximum, 28.5°C June 24, 1964, June 23, 1968; minimum (1965-71), 4.5°C Dec. 15, 1967, Jan. 12, 1968.

Sediment concentrations (1969-71): Maximum daily, 1,630 mg/l Jan. 24, 1970; minimum daily, 4 mg/l Feb. 21, 1971.

Sediment discharge (1969-71): Maximum daily, 305,000 tons Jan. 24, 1970; minimum daily, 2.4 tons Oct. 1, 1969.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Temperature recorder stopped Aug. 10-22. Where no maximum or minimum is shown, temperature is once-daily reading.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 23...	0815	258	16.0	7.0	26	16	138	0
DEC. 18...	0840	12600	9.0	10.3	12	5.8	67	0
FEB. 18...	1530	662	11.0	11.1	31	12	163	0
MAR. 25...	1430	2520	13.0	13.5	23	8.2	109	0
MAY 13...	0800	656	18.5	8.6	23	10	144	0
JUNE 17...	0800	288	22.0	7.2	25	8.3	143	0
AUG. 25...	0930	174	24.0	7.8	27	8.2	131	0
SEP. 28...	1400	194	18.5	9.8	23	11	144	0

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)
OCT. 23...	16	123	10	113	.9	307	8.0	25
DEC. 18...	5.8	57	2	55	.5	144	6.9	280
FEB. 18...	9.9	148	14	134	.6	315	8.1	10
MAR. 25...	6.3	93	4	89	.5	220	7.6	80
MAY 13...	6.6	118	0	118	.6	268	8.3	3
JUNE 17...	6.0	128	11	117	.5	270	7.7	30
AUG. 25...	6.6	114	7	107	.4	252	8.2	2
SEP. 28...	10	112	0	118	.6	277	8.3	4

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	MAX	DAILY	MAX	DAILY	MAX	DAILY	MAX	DAILY	MAX	DAILY	MAX	DAILY
1	20.5	-- 19.0	15.5	-- 13.5	11.0	-- 10.5	9.5	-- 9.5	10.5	-- 10.0	10.0	-- 9.5
2	21.0	-- 19.0	15.0	-- 14.5	10.5	-- 10.0	9.5	-- 8.5	11.0	-- 10.5	10.5	-- 10.0
3	21.0	-- 19.0	15.0	-- 15.0	10.0	-- 9.0	8.5	-- 7.0	11.0	-- 10.0	11.5	-- 10.5
4	20.0	-- 18.0	15.0	-- 14.0	12.0	-- 10.0	7.0	-- 7.0	11.0	-- 10.0	11.5	-- 11.0
5	19.0	-- 18.0	15.0	-- 14.0	12.5	-- 12.0	7.0	-- 6.5	11.0	-- 10.5	11.5	-- 10.5
6	18.0	-- 17.5	15.0	-- 14.5	12.5	-- 12.5	7.0	-- 6.5	12.0	-- 11.0	11.0	-- 10.5
7	18.0	-- 17.0	15.0	-- 14.5	12.5	-- 12.0	7.5	-- 7.0	12.5	-- 12.0	11.5	-- 11.0
8	18.0	-- 16.0	15.0	-- 15.0	12.5	-- 12.0	8.0	-- 7.0	12.5	-- 12.0	12.0	-- 11.0
9	17.0	-- 16.0	15.0	-- 15.0	12.5	-- 11.5	8.5	-- 8.0	12.5	-- 12.0	12.0	-- 11.5
10	17.5	-- 16.5	15.0	-- 15.0	11.5	-- 11.0	9.5	-- 8.5	13.0	-- 12.0	12.0	-- 12.0
11	18.0	-- 17.0	15.0	-- 14.5	11.0	-- 11.0	9.5	-- 9.0	13.5	-- 13.0	12.0	-- 11.5
12	18.5	-- 17.5	14.5	-- 14.0	11.0	-- 10.0	9.0	-- 7.5	14.0	-- 13.5	12.5	-- 11.5
13	17.5	-- 16.5	14.0	-- 12.5	10.0	-- 10.0	7.5	-- 6.0	14.0	-- 13.0	11.5	-- 10.5
14	17.0	-- 16.0	12.5	-- 12.5	10.0	-- 10.0	7.0	-- 6.0	14.0	-- 13.5	11.0	-- 10.5
15	16.5	-- 16.0	13.0	-- 12.5	11.0	-- 10.0	8.0	-- 7.0	13.5	-- 13.0	11.5	-- 10.5
16	16.0	-- 15.5	13.5	-- 13.0	11.0	-- 10.5	9.5	-- 8.0	13.5	-- 12.5	11.5	-- 11.0
17	16.0	-- 15.0	14.0	-- 13.5	10.5	-- 8.5	10.5	-- 9.5	13.0	-- 12.0	12.0	-- 11.5
18	16.0	-- 15.0	14.0	-- 13.0	9.0	-- 8.0	12.0	-- 10.5	12.0	-- 11.0	12.5	-- 11.5
19	16.0	-- 15.0	13.0	-- 12.0	8.0	-- 8.0	12.0	-- 11.5	11.5	-- 11.0	13.0	-- 12.0
20	16.0	-- 15.5	13.0	-- 12.5	8.0	-- 7.5	12.0	-- 11.5	11.5	-- 11.0	13.5	-- 12.5
21	16.0	-- 15.5	13.0	-- 12.5	8.0	-- 7.5	12.0	-- 10.5	11.5	-- 11.0	13.5	-- 13.0
22	15.5	-- 15.5	13.5	-- 13.0	8.0	-- 7.5	10.5	-- 9.5	11.5	-- 11.0	13.5	-- 13.0
23	16.0	-- 15.0	14.0	-- 13.0	9.0	-- 8.0	9.5	-- 9.0	11.5	-- 10.0	13.5	-- 13.0
24	15.0	-- 14.5	14.5	-- 14.0	9.0	-- 8.5	9.5	-- 9.0	10.5	-- 9.5	14.0	-- 13.5
25	15.0	-- 14.0	15.0	-- 14.5	8.5	-- 8.0	9.5	-- 9.0	10.5	-- 9.0	14.0	-- 13.0
26	15.0	-- 14.0	15.0	-- 13.0	8.5	-- 8.5	9.5	-- 8.5	10.5	-- 9.0	13.0	-- 12.5
27	14.0	-- 13.0	13.0	-- 12.5	9.0	-- 8.5	10.5	-- 9.5	10.0	-- 9.5	12.5	-- 12.0
28	13.5	-- 12.5	12.5	-- 11.0	9.5	-- 9.0	10.5	-- 10.0	10.0	-- 9.5	13.0	-- 12.5
29	13.0	-- 12.5	11.0	-- 11.0	9.5	-- 9.0	10.5	-- 10.0	--	--	14.0	-- 13.0
30	13.0	-- 13.0	11.0	-- 11.0	9.5	-- 9.0	10.5	-- 10.0	--	--	14.0	-- 13.5
31	13.5	-- 13.0	--	--	9.5	-- 9.0	10.5	-- 10.0	--	--	13.5	-- 11.5
AVE	16.7	-- 15.7	14.0	-- 13.3	10.2	-- 9.6	9.4	-- 8.6	11.9	-- 11.1	12.4	-- 11.6
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	MAX	DAILY	MAX	DAILY	MAX	DAILY	MAX	DAILY	MAX	DAILY	MAX	DAILY
1	13.0	-- 12.5	15.0	-- 14.5	17.5	-- 16.5	23.5	-- 22.5	26.0	-- 23.5	24.0	-- 22.0
2	13.5	-- 13.0	14.5	-- 14.0	17.0	-- 16.5	24.5	-- 22.0	26.5	-- 24.0	25.0	-- 22.0
3	14.0	-- 13.5	14.5	-- 14.0	17.0	-- 17.0	24.0	-- 22.5	26.0	-- 24.0	24.5	-- 22.0
4	14.5	-- 14.0	15.0	-- 14.5	18.5	-- 17.0	24.5	-- 22.5	26.0	-- 23.5	24.5	-- 21.5
5	15.0	-- 14.5	15.5	-- 14.5	20.0	-- 18.5	24.5	-- 23.0	26.0	-- 23.5	24.5	-- 21.5
6	15.0	-- 14.5	16.5	-- 15.0	20.0	-- 19.0	26.5	-- 22.5	25.5	-- 23.5	25.0	-- 21.5
7	14.5	-- 14.0	17.0	-- 16.0	20.5	-- 20.0	26.5	-- 23.0	25.5	-- 23.0	24.0	-- 21.0
8	14.0	-- 13.0	17.0	-- 16.0	20.5	-- 20.0	26.0	-- 23.0	26.0	-- 23.5	24.5	-- 21.0
9	13.5	-- 13.0	17.0	-- 15.5	20.5	-- 20.0	26.0	-- 23.0	27.0	-- 24.0	24.0	-- 21.5
10	13.5	-- 13.0	17.5	-- 17.0	21.0	-- 20.0	26.5	-- 23.0	-- 27.0	--	24.5	-- 21.5
11	13.5	-- 13.0	17.5	-- 17.5	21.0	-- 20.5	26.0	-- 22.5	--	--	25.0	-- 21.5
12	14.0	-- 13.5	17.5	-- 17.0	21.0	-- 20.0	27.0	-- 22.0	-- 26.0	--	26.0	-- 22.0
13	14.0	-- 13.0	18.5	-- 17.0	20.0	-- 19.5	27.0	-- 23.0	--	--	26.0	-- 22.5
14	14.5	-- 13.0	18.5	-- 18.0	21.0	-- 20.0	26.5	-- 23.5	--	--	26.0	-- 24.0
15	15.0	-- 14.0	18.5	-- 18.0	21.5	-- 21.0	26.0	-- 23.5	--	--	26.0	-- 24.0
16	15.0	-- 14.0	18.5	-- 17.5	22.5	-- 22.0	25.5	-- 23.0	--	--	25.5	-- 24.0
17	15.0	-- 14.5	17.5	-- 16.5	23.0	-- 22.5	24.5	-- 23.0	-- 25.0	--	24.5	-- 22.5
18	14.5	-- 13.5	17.5	-- 17.0	23.5	-- 23.0	25.5	-- 23.0	--	--	24.0	-- 21.5
19	14.0	-- 13.5	18.0	-- 17.5	23.5	-- 23.0	25.5	-- 23.5	-- 25.0	--	23.0	-- 21.0
20	14.5	-- 14.0	18.0	-- 18.0	23.5	-- 23.0	26.0	-- 24.0	--	--	22.0	-- 20.0
21	14.5	-- 13.5	18.0	-- 17.0	24.0	-- 23.5	26.0	-- 24.0	--	--	21.5	-- 20.5
22	14.0	-- 13.5	17.5	-- 17.0	24.0	-- 23.5	25.5	-- 23.5	-- 26.0	--	21.5	-- 20.5
23	14.0	-- 13.5	18.0	-- 17.5	24.0	-- 23.0	25.0	-- 23.5	26.0	-- 23.0	21.5	-- 20.5
24	14.0	-- 13.5	18.5	-- 18.0	24.0	-- 23.0	24.5	-- 23.0	26.0	-- 24.0	21.0	-- 20.0
25	14.0	-- 13.5	18.5	-- 18.0	23.0	-- 22.5	24.0	-- 22.5	26.0	-- 24.0	21.0	-- 19.5
26	15.0	-- 14.0	18.0	-- 18.0	23.0	-- 22.5	24.0	-- 22.0	25.0	-- 23.5	20.5	-- 19.5
27	15.0	-- 14.5	18.0	-- 17.0	23.0	-- 22.0	24.0	-- 22.5	24.5	-- 23.0	20.0	-- 18.5
28	15.0	-- 14.5	17.5	-- 16.5	23.5	-- 22.0	24.0	-- 22.5	24.0	-- 22.0	19.5	-- 18.5
29	15.0	-- 14.5	17.0	-- 16.5	23.5	-- 21.5	24.5	-- 22.5	24.0	-- 22.0	19.5	-- 17.5
30	15.0	-- 14.5	17.5	-- 17.0	23.5	-- 22.0	25.0	-- 22.5	23.0	-- 22.0	17.5	-- 17.0
31	--	--	17.5	-- 17.0	--	--	25.5	-- 23.0	23.5	-- 21.5	--	--
AVE	14.3	-- 13.7	17.3	-- 16.6	21.6	-- 20.8	25.3	-- 22.9	--	--	23.2	-- 21.0

## RUSSIAN RIVER BASIN

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	142	16	6.1	142	19	7.3	11500	349	11100
2	148	14	5.6	136	17	6.2	16700	634	31400
3	164	13	5.8	136	16	5.9	24600	706	52700
4	172	12	5.6	348	70	68	56400	1400	212000
5	174	14	6.6	895	238	794	38300	700	72400
6	178	16	7.7	2470	588	3910	19500	401	21100
7	176	15	7.1	1570	153	738	13300	302	10800
8	170	15	6.9	910	67	165	11300	270	8240
9	158	14	6.0	658	48	85	10000	257	6940
10	152	14	5.7	622	43	72	8830	211	5030
11	147	13	5.2	745	48	97	7730	195	4070
12	143	13	5.0	714	44	85	6660	190	3420
13	142	12	4.6	630	38	65	5910	137	2190
14	144	13	5.1	549	32	47	5480	122	1810
15	150	13	5.3	471	27	34	4250	69	844
16	154	14	5.8	411	24	27	9790	344	9380
17	158	15	6.4	366	21	21	10500	285	8080
18	166	17	7.6	330	20	18	12000	341	11500
19	184	23	11	303	19	16	8920	103	2610
20	206	28	16	282	18	14	7430	109	2740
21	224	30	18	267	19	14	13200	326	12200
22	267	31	22	255	20	14	8340	114	2570
23	279	33	25	243	19	12	5870	85	1350
24	297	35	28	246	18	12	4660	70	881
25	236	25	16	363	25	25	3910	60	633
26	212	19	11	1020	262	778	3460	52	486
27	190	14	7.2	1560	335	1940	3090	50	417
28	176	13	6.2	21000	1170	67300	3430	75	842
29	170	17	7.8	16700	439	20700	11900	531	17600
30	164	17	7.5	10600	265	7670	9050	279	6820
31	154	18	7.5	--	--	--	7510	148	3000
TOTAL	5597	--	291.3	64942	--	104740.4	363520	--	525153

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	5560	84	1260	1790	36	174	622	16	27
2	4970	82	1100	1650	30	134	598	14	23
3	4020	62	673	1510	26	106	578	13	20
4	3390	47	430	1380	25	93	582	11	17
5	2950	34	271	1280	24	83	574	10	15
6	2590	32	224	1210	23	75	561	9	14
7	2290	30	185	1140	23	71	546	9	13
8	2070	30	168	1060	23	66	534	9	13
9	1900	30	154	1000	23	62	522	9	13
10	2170	67	511	945	22	56	510	8	11
11	4370	183	2160	905	22	54	513	7	9.7
12	4510	138	1680	855	22	51	4810	338	9500
13	6160	328	5460	825	22	49	11100	784	26100
14	7750	370	7740	790	21	45	5160	250	3480
15	9550	445	11800	755	19	39	5340	217	3130
16	29200	1430	117000	718	17	33	3960	119	1270
17	37500	900	93000	694	14	26	3400	79	725
18	21500	445	25800	670	11	20	2980	60	483
19	15100	295	12000	654	8	14	2560	45	311
20	10700	262	7570	638	7	12	2230	33	199
21	8920	280	6740	610	4	6.6	1980	29	155
22	7970	274	4820	726	9	30	1810	27	132
23	7140	192	3700	2910	170	1340	1890	65	350
24	6560	179	3170	2390	150	1010	2640	191	1390
25	6080	172	2820	986	37	99	2680	212	1820
26	5850	170	2690	740	23	46	19600	1250	68100
27	4470	163	1970	674	21	38	12800	495	18000
28	2900	105	822	650	18	32	7410	232	4640
29	2450	62	410	--	--	--	5550	131	1960
30	2160	43	251	--	--	--	4430	85	1020
31	1950	40	211	--	--	--	3550	72	690
TOTAL	234700	--	316790	30155	--	3864.6	112020	--	143630.7

## 11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2770	58	465	1130	23	70	385	15	16
2	2590	54	378	1160	22	69	376	15	15
3	2350	54	343	1210	20	65	388	18	19
4	2190	55	325	1090	18	53	397	19	20
5	2030	56	307	804	15	33	397	18	19
6	1890	58	296	692	13	24	373	18	18
7	1870	52	256	616	12	20	367	17	17
8	1710	45	208	568	11	17	361	17	17
9	1630	41	180	660	13	23	349	17	16
10	2030	80	438	724	15	29	349	17	16
11	1900	70	359	724	14	27	337	16	15
12	1630	60	264	688	13	24	325	16	14
13	1510	52	212	656	13	23	322	16	14
14	2010	80	434	624	12	20	328	16	14
15	1800	60	292	604	12	20	313	16	14
16	1520	41	168	612	11	18	295	16	13
17	1500	39	158	600	11	18	285	15	12
18	1510	30	122	600	11	18	285	15	12
19	1410	19	72	564	11	17	280	14	11
20	1350	16	58	548	11	16	278	13	9.8
21	1320	16	57	492	11	15	275	13	9.7
22	1250	18	61	464	12	15	265	13	9.3
23	1206	20	65	451	12	15	255	12	8.3
24	1170	22	69	439	13	15	240	12	7.8
25	1120	24	73	433	13	15	218	11	6.5
26	1090	26	77	409	14	15	213	11	6.3
27	1070	25	72	343	14	13	208	11	6.2
28	1090	25	74	433	16	19	198	12	6.4
29	1130	24	73	445	16	19	167	13	5.9
30	1150	23	71	424	15	17	170	13	6.0
31	--	--	--	397	15	16	--	--	--
TOTAL	48740	--	6027	19604	--	778	8999	--	374.2

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	152	13	5.3	158	10	4.3	202	9	4.9
2	138	13	4.8	164	10	4.4	190	10	5.1
3	127	14	4.8	168	11	5.0	178	9	4.3
4	126	14	4.8	174	10	4.7	168	11	5.0
5	127	14	4.8	188	9	4.6	166	13	5.8
6	127	14	4.8	192	10	5.2	172	11	5.1
7	174	13	4.4	192	11	5.7	172	11	5.1
8	117	12	3.8	194	12	6.3	170	9	4.1
9	126	12	4.1	186	12	6.0	174	8	3.8
10	140	11	4.2	166	11	4.9	152	8	3.3
11	142	11	4.2	166	11	4.9	138	8	3.0
12	152	11	4.5	172	12	5.6	142	10	3.8
13	148	11	4.4	192	12	6.2	206	16	8.9
14	144	10	3.9	200	13	7.0	228	18	11
15	152	11	4.5	202	12	6.5	204	16	8.8
16	160	12	5.2	190	12	6.2	156	12	5.1
17	176	13	6.2	176	13	6.2	124	12	4.0
18	192	15	7.8	156	11	4.6	124	12	4.0
19	206	16	8.9	152	9	3.7	132	15	5.3
20	202	16	8.7	158	9	3.8	170	16	7.3
21	190	15	7.7	170	9	4.1	216	17	9.9
22	182	14	6.9	178	13	6.2	166	16	7.2
23	188	11	5.6	184	13	6.5	168	15	6.8
24	190	10	5.1	182	11	5.4	172	14	6.5
25	194	10	5.2	174	9	4.2	174	14	6.6
26	206	9	5.0	176	10	4.8	180	13	6.3
27	210	8	4.5	182	11	5.4	190	9	4.6
28	200	9	4.9	188	10	5.1	194	9	4.7
29	170	10	4.6	196	9	4.8	200	10	5.4
30	158	10	4.3	206	9	5.0	214	10	5.8
31	152	10	4.1	206	9	5.0	--	--	--
TOTAL	5018	--	162.0	5588	--	162.3	5242	--	171.5

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

904325  
1102145.0

## RUSSIAN RIVER BASIN

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (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
NOV.									
06...	1135	14.5	2460	678	4500	56	72	84	94
28...	1450	11.5	23400	1110	70100	40	54	68	81
DEC.									
01...	1425	11.0	11400	309	9510	37	56	68	82
06...	1405	12.5	18200	378	18600	36	53	64	76
17...	1330	9.5	10500	270	7650	37	50	61	71
29...	1405	9.5	13400	646	23400	35	50	62	78
JAN.									
16...	0110	9.5	15300	876	36200	22	32	44	58
17...	1310	10.5	38800	855	89600	37	54	66	79
26...	1300	8.5	5850	170	2690	41	54	64	73
FEB.									
25...	1230	9.5	950	33	85	--	--	--	--
MAR.									
13...	1415	10.5	8620	657	15300	38	54	67	79
15...	0230	10.5	6040	273	4450	--	--	--	--
APR.									
02...	1215	13.0	2570	54	375	--	--	--	--
MAY									
28...	1130	16.5	430	16	19	--	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL 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
NOV.								
06...	98	--	100	--	--	--	--	--
28...	90	--	97	--	--	--	100	--
DEC.								
01...	92	--	97	--	99	--	100	--
06...	88	--	95	--	97	--	100	--
17...	78	85	--	89	--	100	--	--
29...	88	--	99	--	100	--	--	--
JAN.								
16...	73	--	89	--	95	--	100	--
17...	88	--	96	--	98	--	100	--
26...	81	88	--	93	--	100	--	--
FEB.								
25...	--	--	99	--	100	--	--	--
MAR.								
13...	88	--	97	--	98	--	100	--
15...	--	--	90	--	94	--	98	100
APR.								
02...	--	--	95	--	98	--	100	--
MAY								
28...	--	--	94	--	100	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED	BED	BED	BED
					MAT.	MAT.	MAT.	MAT.
					SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.
% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM					
OCT. 12...	1520	18.5	5	144	2	8	24	30
FEB. 25...	1315	9.5	8	945	11	31	70	77
MAY 28...	1200	16.5	5	424	--	1	16	31
		BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
OCT. 12...	34	38	46	57	75	94	100	
FEB. 25...	85	94	99	100	--	--	--	
MAY 28...	36	42	50	64	81	93	100	

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)	DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)
Oct. 4, 1970...	--	12	3	Feb. 7, .....	--	23	7
Oct. 10, .....	--	14	12	Feb. 13, .....	--	22	7
Oct. 12, .....	--	13	4	Feb. 19, .....	--	8	3
Oct. 17, .....	0950	16	5	Feb. 24, .....	--	162	77
Oct. 17, .....	1235	15	5	Feb. 25, .....	--	33	22
Oct. 20, .....	--	28	12	Mar. 3, .....	--	14	21
Oct. 21, .....	--	30	11	Mar. 5, .....	--	10	4
Oct. 23, .....	--	33	13	Mar. 7, .....	--	8	3
Oct. 25, .....	--	25	10	Mar. 9, .....	--	10	4
Oct. 28, .....	--	13	7	Mar. 11, .....	--	7	3
Oct. 29, .....	--	17	6	Mar. 13, .....	--	657	180
Nov. 1, .....	--	19	7	Mar. 15, .....	--	273	97
Nov. 4, .....	--	114	62	Mar. 17, .....	--	87	40
Nov. 5, .....	--	238	80	Mar. 26, .....	--	1700	190
Nov. 6, .....	--	678	190	Mar. 27, .....	--	376	110
Nov. 7, .....	--	90	55	Mar. 29, .....	--	146	58
Nov. 8, .....	--	62	33	Mar. 31, .....	--	76	32
Nov. 11, .....	--	48	25	Apr. 2, .....	--	54	26
Nov. 13, .....	--	38	15	Apr. 5, .....	--	58	18
Nov. 18, .....	1120	19	9	Apr. 9, .....	--	41	16
Nov. 18, .....	1217	21	8	Apr. 13, .....	--	52	26
Nov. 20, .....	--	18	6	Apr. 15, .....	--	60	22
Nov. 22, .....	--	20	8	Apr. 20, .....	--	16	15
Nov. 25, .....	--	25	10	Apr. 26, .....	--	26	20
Nov. 28, .....	1450	1110	200	May 6, .....	--	13	9
Nov. 28, .....	2055	841	190	May 18, .....	--	11	9
Nov. 29, .....	1320	382	150	May 27, .....	--	14	13
Nov. 29, .....	2215	292	100	May 28, .....	--	16	11
Nov. 30, .....	--	260	90	June 3, .....	--	18	10
Dec. 1, .....	--	309	120	June 15, .....	--	16	14
Dec. 2, .....	--	720	150	June 21, .....	--	13	10
Dec. 3, .....	--	604	150	July 6, .....	--	14	16
Dec. 4, .....	--	1320	210	July 12, .....	--	11	13
Dec. 6, .....	1405	378	150	July 22, .....	--	14	4
Dec. 6, .....	1536	374	110	July 23, .....	--	11	13
Dec. 7, .....	--	302	100	July 25, .....	--	10	4
Dec. 8, .....	--	259	100	July 27, .....	--	8	4
Dec. 11, .....	--	192	75	July 29, .....	--	10	2
Dec. 12, .....	--	192	75	Aug. 2, .....	1755	10	4
Dec. 13, .....	--	128	60	Aug. 2, .....	1955	10	13
Dec. 14, .....	--	124	60	Aug. 5, .....	--	9	3
Dec. 17, .....	1330	270	90	Aug. 8, .....	--	12	3
Dec. 17, .....	1436	236	90	Aug. 10, .....	--	11	3
Dec. 20, .....	--	118	45	Aug. 12, .....	--	12	4
Dec. 21, .....	--	259	100	Aug. 17, .....	--	13	3
Dec. 23, .....	--	83	36	Aug. 19, .....	--	9	4
Dec. 27, .....	--	51	19	Aug. 21, .....	--	9	3
Dec. 28, .....	--	56	19	Aug. 22, .....	--	13	4
Dec. 29, .....	--	646	170	Aug. 25, .....	--	9	4
Dec. 30, .....	--	275	95	Aug. 27, .....	--	11	4
Jan. 2, 1971, ..	--	82	38	Aug. 29, .....	--	9	3
Jan. 3, .....	--	58	27	Aug. 31, .....	--	9	2
Jan. 5, .....	--	34	16	Sept. 2, .....	--	10	3
Jan. 8, .....	--	30	11	Sept. 5, .....	--	13	3
Jan. 10, .....	--	68	15	Sept. 9, .....	--	8	3
Jan. 12, .....	--	90	44	Sept. 10, .....	--	8	3
Jan. 16, .....	0110	876	160	Sept. 14, .....	--	18	4
Jan. 16, .....	1548	1740	200	Sept. 16, .....	--	12	4
Jan. 17, .....	--	855	210	Sept. 19, .....	--	15	2
Jan. 21, .....	--	273	100	Sept. 21, .....	--	17	6
Jan. 26, .....	--	170	80	Sept. 24, .....	--	14	3
Jan. 27, .....	--	166	70	Sept. 26, .....	--	13	2
Jan. 30, .....	--	43	15	Sept. 27, .....	--	9	3
Feb. 3, .....	--	26	10	Sept. 30, .....	--	10	5

## GARCIA RIVER BASIN

11467600 GARCIA RIVER NEAR POINT ARENA, CALIF.

LOCATION.--Lat 38°55'35", long 123°37'45", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.3, T.12 N., R.16 W., Mendocino County, temperature recorder at gaging station on left bank, 0.9 mile downstream from North Fork, and 3.5 miles northeast of town of Point Arena.

DRAINAGE AREA.--98.5 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1963 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 21.5°C Aug. 22-24; minimum, 6.0°C Jan. 4, 5.

Period of record:

Water temperatures: Maximum (1963-71), 22.0°C June 22, 1964, Aug. 29, 1968; minimum, 5.0°C Dec. 14-16, 1967.

REMARKS.--Recorder malfunction Feb. 6-8, Mar. 6-9, 22, 27, 28, Apr. 6, Sept. 1-4, 16-24, 28-30.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	14.5	17.0	14.0	12.0	11.0	10.5	9.5	10.5	9.0	11.0	7.5
2	18.0	14.5	16.5	13.5	12.0	11.0	9.5	7.5	10.5	9.0	11.0	7.0
3	17.5	14.5	15.5	14.0	13.0	11.5	7.5	6.5	10.0	7.5	11.0	9.5
4	17.5	15.0	15.0	14.0	13.5	13.0	7.5	6.0	10.0	8.0	11.0	9.0
5	16.5	15.0	15.0	14.0	14.0	13.5	7.5	6.0	11.0	9.0	11.0	7.5
6	17.0	15.0	15.0	14.0	14.0	13.5	8.0	6.5	--	--	--	--
7	17.5	15.0	15.0	14.0	13.5	13.0	9.0	7.0	--	--	--	--
8	17.5	14.0	15.0	14.0	13.0	12.0	10.0	8.0	--	--	--	--
9	17.5	14.5	15.0	14.0	12.0	11.0	10.5	9.0	11.5	9.5	--	--
10	18.0	15.0	15.0	13.0	11.5	10.5	10.5	10.0	12.5	9.5	10.5	9.0
11	18.0	15.0	15.0	13.5	12.0	11.0	10.5	9.5	12.5	9.5	11.0	10.0
12	16.5	15.5	15.0	13.0	11.5	10.5	9.5	7.5	13.0	10.0	11.0	10.0
13	17.5	15.0	14.0	11.5	11.0	10.0	8.0	7.5	13.0	10.5	11.0	9.5
14	16.0	15.0	14.0	12.0	11.0	10.5	9.5	8.0	11.5	10.5	11.0	9.0
15	17.0	15.0	13.5	12.0	11.5	11.0	10.0	9.5	13.0	10.5	12.0	10.0
16	16.5	14.5	15.0	13.0	11.0	10.0	11.5	10.0	11.0	9.5	11.5	10.0
17	16.5	14.5	15.0	13.0	10.0	9.5	12.0	11.5	12.0	10.0	12.0	9.5
18	17.5	15.0	14.5	12.0	10.0	9.0	13.0	12.0	11.0	10.0	12.5	9.0
19	17.0	14.0	14.0	12.0	9.0	8.5	13.0	12.5	11.5	9.0	13.0	9.0
20	17.0	15.0	14.0	11.5	9.5	8.5	12.5	11.0	11.5	8.0	13.0	9.5
21	16.0	15.0	13.0	12.0	10.5	9.5	11.0	9.5	11.0	8.5	13.0	9.5
22	16.0	14.0	13.5	13.0	10.5	9.5	10.5	9.5	12.0	9.5	--	--
23	15.5	15.0	14.5	13.0	10.5	10.0	10.5	9.0	12.5	8.5	13.0	11.5
24	16.0	13.5	14.5	13.5	10.0	8.5	10.0	9.0	11.5	9.0	13.5	11.5
25	16.0	14.0	14.0	13.0	9.0	8.0	10.0	8.5	11.0	8.5	12.5	11.5
26	16.5	13.0	13.0	11.5	9.5	8.5	10.0	8.5	11.0	7.5	12.0	11.5
27	16.0	12.0	12.5	12.0	10.5	9.5	11.0	8.5	10.5	8.5	--	--
28	16.0	12.0	12.5	12.0	10.5	9.5	10.5	8.5	10.5	8.5	--	--
29	16.0	12.5	12.5	12.0	11.0	10.5	10.5	9.0	--	--	13.5	11.0
30	15.0	13.5	12.0	12.0	11.0	10.5	10.5	8.5	--	--	13.0	11.0
31	17.0	15.0	--	--	11.0	10.0	10.0	8.5	--	--	13.0	9.5
AVE	16.8	14.4	14.3	12.9	11.3	10.4	10.1	8.8	11.4	9.1	--	--
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	9.5	14.0	12.0	17.0	12.5	18.5	14.5	20.0	15.5	--	--
2	13.5	10.0	14.0	12.0	18.0	12.5	18.5	14.5	19.5	15.5	--	--
3	14.0	10.5	15.0	12.0	17.0	13.5	18.5	14.0	19.5	15.5	--	--
4	15.0	10.5	16.5	12.0	18.0	13.0	18.5	14.0	20.0	16.0	--	--
5	14.0	11.0	15.0	12.5	18.5	14.0	18.5	14.0	20.0	16.5	20.5	17.0
6	--	--	16.5	11.5	18.5	13.5	19.0	14.5	21.0	16.5	19.5	16.5
7	12.5	11.0	17.0	12.5	18.0	14.0	19.0	14.5	20.5	16.0	20.0	16.0
8	13.5	9.5	14.5	13.0	18.0	13.5	20.0	14.5	20.5	16.0	20.0	16.0
9	12.0	11.0	17.0	12.0	17.5	13.5	19.0	16.0	20.0	16.0	20.0	16.5
10	13.5	10.0	17.0	12.5	18.0	15.0	19.0	14.5	20.0	16.0	20.0	16.5
11	14.0	9.5	15.5	13.0	19.0	13.5	19.0	14.5	20.0	16.0	20.0	17.0
12	14.0	10.0	17.5	13.5	17.0	13.5	19.0	14.5	20.0	16.5	20.0	16.0
13	12.5	11.0	17.5	13.5	19.0	13.5	19.0	14.5	20.5	16.5	20.5	16.0
14	13.0	11.0	17.5	12.5	19.0	14.0	19.0	15.0	20.0	15.5	21.0	16.5
15	14.5	10.5	15.0	13.0	19.0	14.0	20.0	15.0	20.5	16.0	21.0	17.0
16	12.5	10.5	16.0	12.0	19.0	14.0	20.0	15.5	20.5	16.0	--	--
17	13.0	10.0	16.5	11.5	18.0	14.0	20.0	15.5	20.0	16.0	--	--
18	13.5	9.5	17.0	12.0	19.0	14.5	20.5	16.0	20.5	16.0	--	--
19	13.5	9.5	17.0	12.5	19.5	16.0	21.0	16.0	20.0	16.5	--	--
20	13.5	10.5	16.5	12.5	19.5	15.0	20.5	16.0	21.0	16.5	--	--
21	13.5	9.0	16.5	11.5	20.0	15.0	21.0	16.5	21.0	17.5	--	--
22	11.5	10.0	17.5	12.5	20.0	15.5	21.0	16.5	21.5	18.0	--	--
23	14.0	10.0	18.0	13.5	19.5	16.0	19.0	16.0	21.5	17.0	--	--
24	13.5	9.5	16.5	13.0	18.5	15.0	19.0	15.5	21.5	16.5	--	--
25	14.5	10.0	15.5	13.5	18.0	15.5	19.5	15.5	20.5	17.5	19.0	16.0
26	15.0	11.0	17.5	13.5	18.0	16.0	19.0	15.5	21.0	17.0	18.5	16.0
27	15.0	11.0	16.0	13.0	19.0	14.5	18.5	15.0	20.5	17.5	18.5	15.0
28	14.0	11.5	17.5	13.5	19.0	14.5	18.5	15.0	20.0	16.5	--	--
29	15.5	11.5	17.5	13.5	19.0	14.5	19.5	15.5	20.0	16.0	--	--
30	16.0	11.0	16.5	12.5	19.0	14.5	19.5	15.5	18.0	16.0	--	--
31	--	--	16.0	12.0	--	--	19.5	15.5	20.5	16.5	--	--
AVE	13.7	10.3	16.4	12.6	18.5	14.3	19.4	15.1	20.3	16.4	--	--



## 11468000 NAVARRO RIVER NEAR NAVARRO, CALIF.

LOCATION.--Lat 39°10'20", long 123°40'08", in SE $\frac{1}{4}$  sec.7, T.15 N., R.16 W., Mendocino County, temperature recorder at gaging station on right bank, 2.9 miles downstream from North Fork, 5.2 miles upstream from mouth, and 6.8 miles west of Navarro.

DRAINAGE AREA.--303 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): January 1959 to July 1965, water year 1966 (partial-record station).

Water temperatures: October 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 25.0°C June 5, Sept. 14, 15.

Period of record:

Water temperatures: Maximum (1965-68, 1969-71), 25.0°C Aug. 20, June 20, 1967, June 5, Sept. 14, 15, 1971;

minimum (1967-68), 5.5°C Jan. 3-5, 11, 1967.

REMARKS.--Recorder stopped Oct. 1-23, Nov. 4 to Dec. 8, Feb. 1-23; probe inoperative Dec. 9 to Jan. 31, Mar. 9-26, Mar. 30 to May 3, May 5 to June 1, July 6-8, 15-26. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	--	--	--	14.0	--	12.5	--	--	--	--	--	--	--	9.5	--	9.0	--	6.5
2	--	--	--	14.0	--	12.5	--	--	--	--	--	--	--	--	--	9.5	--	9.0
3	--	--	--	13.5	--	12.5	--	--	--	--	--	--	--	--	--	9.5	--	8.5
4	--	--	--	--	13.0	--	--	--	--	--	--	--	--	--	--	9.5	--	9.0
5	--	--	--	--	--	--	--	--	--	5.5	--	--	--	--	--	9.0	--	7.5
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.5	--	7.0
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.5	--	7.5
8	--	--	--	--	--	--	--	12.0	--	--	--	--	--	--	--	10.5	--	8.5
9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	14.5	--	13.5	--	--	--	--	--	--	--	--	--	9.0	--	8.0	--	--	--
25	14.0	--	13.0	--	--	--	--	--	--	--	--	--	9.0	--	8.0	--	--	--
26	14.0	--	13.0	--	--	--	--	--	--	--	--	--	8.0	--	6.5	--	--	--
27	13.0	--	11.5	--	--	--	--	--	--	--	--	--	7.5	--	6.5	11.0	--	10.5
28	12.5	--	11.0	--	--	--	--	--	--	--	--	--	8.5	--	7.5	11.0	--	9.5
29	12.5	--	10.5	--	--	--	--	--	--	--	--	--	--	--	--	11.0	--	9.0
30	11.5	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	11.0	--	10.5
31	14.0	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

DAY	APR			MAY			JUN			JUL			AUG			SEP		
	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN
1	--	--	--	--	--	--	--	--	--	22.5	--	17.5	22.5	--	19.5	22.0	--	19.0
2	--	--	--	--	--	--	21.0	--	17.5	22.0	--	18.5	22.5	--	20.0	22.5	--	19.0
3	--	--	--	--	--	--	21.5	--	18.5	22.0	--	18.5	23.0	--	20.5	23.0	--	17.0
4	--	--	--	17.0	--	14.5	22.5	--	19.5	20.5	--	17.0	23.5	--	19.5	23.5	--	17.5
5	--	--	--	--	--	--	25.0	--	22.5	20.5	--	18.5	23.5	--	21.5	23.5	--	18.5
6	--	11.5	--	--	--	--	24.0	--	21.0	--	--	--	23.0	--	21.0	23.0	--	18.0
7	--	--	--	--	--	--	23.5	--	22.0	--	--	--	23.0	--	20.0	23.0	--	16.5
8	--	--	--	--	--	--	23.0	--	19.5	--	--	--	23.0	--	19.5	22.0	--	16.5
9	--	--	--	--	--	--	22.5	--	19.5	21.5	--	20.0	23.0	--	20.5	23.5	--	17.5
10	--	--	--	--	--	--	22.5	--	21.0	21.0	--	17.5	23.5	--	21.0	23.5	--	17.5
11	--	--	--	--	--	--	23.0	--	19.5	21.0	--	18.0	23.5	--	21.0	24.5	--	19.0
12	--	--	--	--	--	--	22.0	--	20.5	21.0	--	18.0	22.5	--	20.5	24.0	--	18.0
13	--	--	--	--	--	--	23.0	--	18.0	20.5	--	18.5	23.0	--	19.5	24.5	--	18.0
14	--	--	--	--	--	--	22.0	--	20.5	20.5	--	18.5	22.5	--	19.0	25.0	--	18.5
15	--	--	--	--	--	--	21.5	--	18.5	--	--	--	22.5	--	19.5	25.0	--	18.5
16	--	--	--	--	--	--	22.0	--	18.0	--	--	--	22.5	--	19.0	23.5	--	18.5
17	--	--	--	--	--	--	21.5	--	18.0	--	--	--	22.0	--	19.0	22.5	--	18.5
18	--	--	--	--	--	--	22.0	--	18.0	--	--	--	22.0	--	18.5	21.0	--	18.0
19	--	--	--	--	--	--	22.5	--	21.0	--	--	--	21.5	--	18.5	20.0	--	16.5
20	--	--	--	--	--	--	22.5	--	19.0	--	--	--	22.0	--	19.5	20.0	--	15.5
21	--	--	--	--	--	--	23.0	--	19.5	--	--	--	23.0	--	20.5	21.0	--	16.0
22	--	--	--	--	--	--	23.5	--	20.5	--	--	--	23.5	--	21.5	21.0	--	16.0
23	--	--	--	--	--	--	24.0	--	22.0	--	--	--	23.0	--	19.5	20.0	--	17.0
24	--	--	--	--	--	--	22.5	--	19.0	--	--	--	23.0	--	18.5	19.5	--	15.5
25	--	--	--	--	--	--	22.5	--	19.5	--	--	--	22.0	--	19.5	19.5	--	15.5
26	--	--	--	--	--	--	24.0	--	22.0	--	--	--	22.0	--	18.5	19.0	--	15.5
27	--	--	--	--	--	--	22.5	--	19.5	22.0	--	20.0	21.5	--	19.5	19.0	--	14.0
28	--	--	--	--	--	--	22.0	--	18.0	22.0	--	20.0	21.0	--	18.0	18.5	--	14.5
29	--	--	--	--	--	--	22.0	--	18.0	21.0	--	20.0	21.5	--	18.5	18.0	--	16.0
30	--	--	--	--	--	--	22.5	--	18.5	22.0	--	18.5	21.0	--	18.0	18.5	--	14.5
31	--	--	--	--	--	--	--	--	--	22.5	--	19.5	23.0	--	18.0	--	--	--
AVE	--	--	--	--	--	--	22.6	--	19.6	--	--	--	22.5	--	19.6	21.8	--	17.0

## NOYO RIVER BASIN

11468500 NOYO RIVER NEAR FORT BRAGG, CALIF.

LOCATION.--Lat 39°25'42", long 123°44'12", in NE $\frac{1}{4}$  sec. 15, T.18 N., R.17 W., Mendocino County, temperature recorder at gaging station on right bank, 0.7 mile downstream from South Fork, and 3.5 miles east of Fort Bragg.

DRAINAGE AREA.--106 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1959 to September 1965, water year 1966 (partial-record station).  
Water temperatures: December 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 22.0°C Aug. 18, 21-24; minimum, 5.0°C Mar. 2.

Period of record:

Water temperatures: Maximum, 23.0°C July 10, 1970; minimum (1965-69, 1970-71), 2.0°C Dec. 17-21, 1965.

REMARKS.--Recorder malfunction July 24 to Aug. 10.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	12.0	12.5	11.0	11.0	10.0	10.5	9.5	9.0	8.0	7.5	5.5
2	14.0	13.0	12.0	10.5	11.0	10.5	9.5	7.5	8.5	7.5	7.5	5.0
3	14.0	13.0	12.5	11.0	12.0	10.5	7.5	6.5	8.0	6.5	8.5	7.0
4	14.5	13.0	13.0	12.0	12.5	12.0	7.0	6.5	8.0	6.0	8.5	6.0
5	15.5	13.0	13.0	12.0	13.0	12.5	7.0	6.0	9.0	8.0	8.0	5.5
6	14.0	12.0	13.0	12.0	13.0	12.5	7.0	6.0	10.0	9.0	8.0	5.5
7	13.5	10.5	13.0	12.0	13.0	12.5	7.0	6.0	9.5	8.5	8.0	6.0
8	14.0	10.0	13.0	12.5	12.5	11.5	8.0	7.0	9.5	8.5	9.5	7.0
9	13.0	10.0	13.0	12.5	12.0	10.5	9.0	8.0	9.5	8.0	9.0	7.5
10	14.5	11.5	12.5	12.0	11.0	10.0	10.0	9.0	9.5	7.5	8.0	7.0
11	15.0	11.5	13.0	12.0	11.0	10.5	9.5	9.0	9.5	8.0	9.0	8.0
12	13.5	13.0	13.0	11.5	10.5	9.0	9.0	8.0	10.0	8.5	10.0	9.0
13	13.5	12.5	11.5	10.5	10.0	9.0	8.0	7.5	10.5	8.5	9.5	9.0
14	13.0	12.0	11.5	10.5	10.5	9.5	9.5	8.0	10.5	9.0	10.0	9.0
15	13.0	12.0	11.0	10.0	10.5	9.5	10.0	9.5	11.0	9.5	10.5	9.5
16	13.0	12.0	12.0	11.0	10.5	9.5	10.5	10.0	10.0	8.5	10.0	9.5
17	13.5	12.0	12.0	11.0	9.5	9.0	11.5	10.5	10.5	8.5	10.5	9.0
18	14.0	12.0	11.5	10.5	9.5	9.0	12.0	11.5	9.0	8.0	10.0	8.5
19	14.0	12.5	11.0	10.0	9.0	8.0	12.0	12.0	9.0	7.5	10.5	8.5
20	14.5	13.0	10.5	9.5	9.0	8.0	12.0	10.5	8.0	6.0	10.5	8.0
21	14.0	13.0	11.0	10.0	9.5	9.0	10.5	9.5	8.0	6.0	11.0	8.0
22	13.5	12.5	11.5	11.0	9.5	9.0	9.5	9.0	9.0	7.5	10.5	9.0
23	13.0	12.5	12.0	11.5	9.5	9.0	9.5	9.0	9.0	6.5	11.0	10.0
24	13.0	12.0	13.0	12.0	9.0	8.0	10.0	9.0	9.0	7.5	11.0	10.5
25	13.0	11.5	13.0	12.5	8.0	7.0	9.5	8.5	8.5	6.5	11.0	10.5
26	12.5	11.0	12.5	11.0	8.5	7.0	9.0	8.5	7.5	5.5	11.0	10.0
27	11.0	9.5	11.5	11.0	9.0	8.0	9.5	8.5	7.0	6.0	10.5	9.5
28	10.5	8.5	11.5	11.5	10.0	9.0	9.0	8.0	7.5	6.0	11.0	9.5
29	10.5	8.0	11.5	11.0	10.5	10.0	9.0	8.0	--	--	11.0	10.0
30	11.0	9.0	11.0	11.0	10.5	10.0	9.0	8.0	--	--	11.0	9.5
31	12.5	10.5	--	--	11.0	10.5	9.0	7.5	--	--	10.5	9.0
AVE	13.4	11.6	12.1	11.2	10.5	9.7	9.4	8.5	9.1	7.5	9.8	8.2
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	9.0	12.5	11.0	15.5	12.0	19.0	15.0	--	--	18.5	16.5
2	12.0	9.5	12.5	11.5	16.5	12.0	19.0	15.0	--	--	20.0	16.5
3	12.5	10.0	12.0	11.5	15.0	12.0	19.0	15.5	--	--	20.0	15.0
4	13.0	9.5	14.5	11.0	17.0	13.0	18.5	13.5	--	--	20.5	15.0
5	11.5	10.0	13.5	11.5	15.5	14.0	18.5	14.5	--	--	20.0	16.0
6	11.5	9.5	15.0	11.0	17.0	13.0	19.5	14.0	--	--	19.5	15.5
7	11.0	9.0	15.5	12.0	17.5	14.5	18.5	14.0	--	--	20.0	14.0
8	11.0	8.5	14.0	12.5	17.0	13.0	20.0	14.5	--	--	19.5	14.0
9	11.0	10.0	16.0	12.0	17.5	14.0	19.5	16.5	--	--	19.5	14.5
10	11.5	9.5	15.5	12.0	16.0	14.0	19.5	14.5	--	--	20.0	14.5
11	12.0	9.0	14.5	12.5	18.0	13.0	19.5	15.0	21.0	17.5	21.0	16.5
12	12.5	9.0	15.5	12.5	16.0	14.5	19.5	14.0	20.5	17.5	20.5	15.5
13	11.5	10.0	16.0	13.0	18.0	13.0	19.5	14.5	21.0	16.0	20.5	15.5
14	12.0	10.5	16.0	12.0	19.0	14.5	19.5	15.0	21.0	15.0	20.5	16.0
15	13.0	10.0	14.5	12.5	18.5	14.0	20.0	15.0	21.0	15.5	21.0	16.0
16	11.5	10.0	15.0	11.0	19.0	14.0	21.0	15.0	21.0	16.0	20.5	16.5
17	11.0	9.5	15.0	10.5	18.5	14.0	19.5	15.5	21.0	15.5	19.0	16.5
18	12.0	9.0	15.5	11.0	19.0	15.0	21.5	16.0	22.0	15.5	18.0	15.5
19	12.0	8.5	16.0	12.0	17.5	15.5	22.0	16.5	20.5	15.5	18.0	14.0
20	12.0	9.0	15.5	12.0	19.0	15.0	21.5	17.0	21.5	17.5	17.5	13.5
21	11.5	7.5	15.5	11.5	20.0	15.5	21.5	17.0	22.0	18.5	18.5	14.0
22	9.5	8.0	16.5	11.5	20.5	16.0	21.5	17.5	22.0	18.5	17.5	15.0
23	11.5	9.0	17.0	12.0	20.5	17.0	20.5	17.0	22.0	16.0	16.5	14.0
24	12.0	8.5	15.0	12.5	19.0	15.5	--	--	22.0	16.5	16.5	13.5
25	12.5	8.5	14.5	13.0	17.0	15.5	--	--	20.0	17.0	17.5	13.0
26	13.0	10.0	15.0	12.5	17.5	16.0	--	--	20.5	17.0	17.0	13.0
27	12.0	10.0	16.0	12.0	19.0	15.0	--	--	19.5	16.5	16.5	12.0
28	11.5	10.5	16.5	14.0	18.5	14.5	--	--	19.5	15.5	15.5	12.5
29	13.0	10.0	17.0	13.5	19.0	14.0	--	--	20.5	15.5	14.5	12.5
30	14.0	10.0	16.0	12.5	19.5	15.0	--	--	17.5	15.5	15.5	12.0
31	--	--	15.5	12.5	--	--	--	--	20.5	16.0	--	--
AVE	11.9	9.4	15.1	12.0	17.9	14.3	--	--	--	--	18.6	14.6

## 11468600 MIDDLE FORK TENMILE RIVER NEAR FORT BRAGG, CALIF.

LOCATION.--Lat 39°34'22", long 123°41'57", in NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.25, T.20 N., R.17 W., Mendocino County, temperature recorder at gaging station on right bank, 0.8 mile upstream from confluence with North Fork Tenmile River, and 10 miles northeast of Fort Bragg.

DRAINAGE AREA.--32.9 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1964 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 19.5°C Aug. 21, 22; minimum, 5.5°C Jan. 7.

Period of record:

Water temperatures: Maximum, 20.5°C June 14, 18, 1966; minimum (1964-65, 1966-71), 3.5°C Dec. 2, 1969.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	12.0	11.0	10.5	11.0	11.0	9.0	8.5	8.5	8.0	8.0	7.0
2	14.5	12.0	11.0	10.0	11.0	11.0	8.5	7.0	8.0	7.0	8.0	6.5
3	13.5	13.0	11.0	10.0	11.0	11.0	7.0	6.5	7.0	6.5	9.0	8.0
4	14.5	13.0	11.0	11.0	11.0	11.0	6.5	6.0	6.5	6.5	9.0	8.5
5	14.5	12.0	12.0	11.0	11.5	11.0	6.5	6.0	8.0	6.5	8.5	7.0
6	13.5	11.0	12.0	11.5	11.5	11.5	6.0	6.0	8.5	8.0	9.0	7.0
7	12.0	9.5	12.0	11.5	11.5	11.5	6.0	5.5	9.0	8.5	9.0	8.0
8	12.0	10.0	12.0	11.5	11.5	11.5	6.5	6.0	8.5	8.0	10.0	8.5
9	12.0	10.0	12.0	11.5	11.5	11.0	8.0	6.5	8.5	8.0	9.5	9.0
10	13.5	10.5	12.0	11.5	11.0	10.5	8.5	8.0	8.5	7.0	9.5	9.0
11	12.0	11.0	12.0	11.5	10.5	10.5	8.5	8.5	8.5	8.0	9.5	9.0
12	12.0	12.0	12.0	11.0	10.5	10.0	8.5	8.0	9.0	8.0	9.5	9.0
13	12.0	11.5	11.0	10.5	10.0	9.5	8.0	7.0	9.0	8.5	9.5	9.5
14	12.0	11.5	11.0	10.5	10.0	9.5	8.5	8.0	9.0	8.5	9.5	9.5
15	12.0	11.5	11.0	10.5	10.0	10.0	9.0	8.5	9.5	9.0	10.0	9.5
16	12.0	11.5	11.0	10.5	10.0	9.5	9.5	9.0	10.0	9.0	10.0	10.0
17	13.0	11.5	11.0	10.5	10.0	9.5	10.0	9.5	9.5	9.0	10.0	9.5
18	13.5	12.0	10.5	10.5	9.5	9.5	10.5	10.0	9.0	8.5	10.0	9.0
19	12.0	11.0	10.5	10.0	9.5	8.5	10.5	10.5	9.0	8.0	10.0	9.0
20	13.0	12.0	10.0	9.5	8.5	8.5	10.5	10.0	8.0	6.5	10.0	9.0
21	13.0	12.0	10.0	9.5	9.0	8.5	10.0	9.0	8.0	6.5	10.5	9.0
22	13.0	12.0	10.0	10.0	9.0	9.0	9.0	8.5	9.0	8.0	10.0	10.0
23	13.0	12.0	10.5	10.0	9.0	8.0	9.0	8.5	8.5	8.0	10.5	10.0
24	12.0	11.0	11.5	11.0	8.5	8.0	9.0	9.0	8.5	8.0	11.0	10.5
25	11.5	11.0	11.5	11.5	8.0	7.0	9.0	8.5	8.0	6.0	10.5	10.5
26	11.5	11.0	11.5	11.0	8.0	7.0	9.0	8.5	8.0	6.5	10.5	10.5
27	11.0	9.5	11.0	11.0	8.0	7.0	8.5	8.0	8.0	7.0	10.5	10.0
28	10.0	9.0	11.0	11.0	8.0	8.0	8.5	8.0	8.0	7.0	10.0	9.5
29	9.0	8.5	11.0	11.0	9.0	8.0	8.5	8.0	--	--	10.5	9.5
30	9.5	9.0	11.0	11.0	9.0	9.0	8.5	8.0	--	--	10.5	9.5
31	11.0	9.5	--	--	9.5	9.0	8.5	8.0	--	--	9.5	9.0
AVE	12.4	11.1	11.2	10.7	9.9	9.5	8.5	8.0	8.5	7.6	9.7	9.0
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.0	12.0	11.0	15.5	13.5	18.5	15.5	15.5	12.0	17.0	15.0
2	10.5	9.5	11.5	11.0	15.5	12.0	18.5	15.5	15.0	13.0	17.0	15.5
3	11.0	9.5	11.5	11.0	15.0	13.5	18.0	15.5	15.0	12.0	17.0	14.5
4	11.5	10.0	13.5	11.0	16.0	14.0	18.5	15.0	15.0	13.0	17.0	15.0
5	11.0	10.0	13.0	11.0	16.5	14.5	18.5	15.0	15.5	13.5	17.0	15.5
6	10.5	10.0	13.0	10.0	16.5	14.5	18.5	15.0	16.5	13.0	16.5	15.0
7	10.0	9.5	13.5	11.5	16.5	15.0	17.0	14.5	16.5	13.5	17.0	14.0
8	9.5	9.0	13.0	11.5	16.5	14.0	18.0	15.0	17.0	13.5	17.0	14.0
9	9.5	9.5	14.5	11.5	15.5	14.5	16.5	15.0	17.0	14.0	16.5	14.0
10	10.0	9.5	12.0	12.0	16.0	14.5	16.0	13.5	18.5	14.5	16.5	14.0
11	10.5	9.0	14.0	13.0	16.5	14.0	16.5	13.0	18.0	15.5	17.0	14.5
12	11.0	9.5	14.5	13.5	15.5	14.5	16.0	13.0	18.0	15.5	17.0	14.5
13	10.5	10.0	15.0	13.5	16.0	14.0	16.0	13.0	18.0	15.0	17.0	15.0
14	12.0	10.0	14.5	12.0	16.5	14.5	16.0	13.5	18.0	14.5	17.0	15.0
15	11.5	10.0	14.5	13.5	17.0	14.0	16.0	14.0	18.0	15.0	17.0	15.0
16	10.5	10.0	13.5	11.5	17.0	14.0	15.5	13.5	17.0	15.0	17.0	15.0
17	10.0	9.5	14.0	11.0	16.5	14.0	15.0	13.0	18.0	15.0	16.5	15.0
18	10.5	9.5	15.0	11.5	16.0	14.5	16.5	13.0	18.5	15.0	15.5	13.5
19	11.0	9.0	15.0	13.0	16.0	15.0	16.5	14.0	17.0	15.0	15.5	13.0
20	10.5	9.5	14.5	12.0	16.5	14.5	16.5	14.5	18.0	16.0	15.0	13.0
21	10.5	9.0	14.0	11.5	16.5	14.0	16.5	14.5	19.5	17.0	15.0	12.0
22	10.0	9.0	15.0	11.5	16.5	14.5	16.5	15.0	19.5	16.5	15.5	14.0
23	11.0	9.5	16.0	13.5	17.0	15.5	16.5	14.5	19.0	15.0	15.5	14.5
24	11.0	9.0	16.0	14.0	16.5	14.5	16.0	14.5	18.5	15.5	15.0	13.5
25	11.5	9.5	15.5	14.5	15.5	14.5	15.5	14.0	18.0	16.0	15.0	13.0
26	11.5	10.5	15.5	14.0	16.0	15.5	15.5	14.0	17.0	16.0	15.0	13.5
27	12.0	10.0	15.5	13.5	16.5	15.0	16.0	14.0	16.5	15.5	14.5	12.0
28	11.5	11.0	15.5	14.5	16.5	14.0	15.5	14.0	16.5	15.0	14.5	12.0
29	11.5	10.5	16.5	15.0	17.0	14.5	15.0	14.0	16.5	14.5	14.0	13.0
30	13.0	10.5	15.5	14.0	18.0	15.5	15.5	14.0	15.5	14.5	14.0	12.0
31	--	--	15.0	13.5	--	--	15.5	13.5	18.0	15.0	--	--
AVE	10.8	9.7	14.3	12.4	16.3	14.3	16.5	14.2	17.2	14.6	16.0	14.0

## MATTOLE RIVER BASIN

11469000 MATTOLE RIVER NEAR PETROLIA, CALIF.

LOCATION.--Lat 40°18'42", long 124°15'48", in NW $\frac{1}{4}$  sec.11, T.2 S., R.2 W., Humboldt County, at gaging station, 0.2 mile upstream from Clear Creek, 1.5 miles southeast of Petrolia, and 1.7 miles upstream from North Fork.

DRAINAGE AREA.--240 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1959 to September 1968, water years 1969-71 (partial-record station). Water temperatures: November 1965 to September 1971.

EXTREMES.--Period of record: Water temperatures: Maximum (1966-68, 1969-70), 27.0°C June 24, 1968; minimum (1966-70), 3.0°C Jan. 9, 1969.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. No thermograph record Dec. 8 to Jan. 4, recorder stopped; Jan. 5 to Sept. 30, recorder malfunction. Where no maximum or minimum is shown, temperature is once-daily reading.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
FEB. 02...	1215	700	9.5	11.8	19	2.8	5.8	.6	66	0	12
JUNE 22...	1305	114	25.0	--	--	--	--	--	--	--	--
SEP. 14...	1110	34	21.0	12.4	36	5.4	8.7	1.3	116	0	29

DATE	DIS- SOLVED CHLU- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
FEB. 02...	5.1	.5	0	77	.10	146	59	5	54	17
JUNE 22...	--	--	--	--	--	--	--	--	--	--
SEP. 14...	3.8	.0	100	141	.19	12.9	112	17	95	14

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SIL- ICIUM (SE) (UG/L)
FEB. 02...	.3	146	7.9	15	--	--	--	--	--	--
JUNE 22...	--	--	--	--	0	100	0	0	.0	0
SEP. 14...	.4	257	8.2	1	--	--	--	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

[illegible]

## EEL RIVER BASIN

11470500 EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CALIF.

LOCATION.--Lat 39°24'29", long 122°58'13", in SE $\frac{1}{4}$  sec.15, T.18 N., R.10 W., Lake County, Mendocino National Forest, at gaging station, 0.4 mile upstream from Soda Creek, 0.7 mile downstream from Scott Dam, and 9.7 miles north-east of town of Potter Valley.

DRAINAGE AREA.--290 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1963 to September 1971.

Sediment records: Water years 1966-67 (partial-record station).

Turbidity: Water years 1966-67, 1969-71 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 19.5°C Oct. 1; minimum, 5.5°C Jan. 14-18.

Period of record:

Water temperatures: Maximum, 23.0°C on several days in 1967; minimum (1966-71), 4.5°C on several days in 1969.

REMARKS.--Thermograph recorder stopped June 5-14. Samples for periodic turbidity determinations were collected by Pacific Gas and Electric Company and U.S. Forest Service.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	19.0	13.5	13.5	9.0	9.0	6.5	6.5	6.5	6.5	7.0	7.0
2	19.0	18.5	13.5	13.5	9.0	8.5	6.5	6.5	6.5	6.5	7.0	6.5
3	18.5	18.5	13.5	13.5	8.5	8.5	6.5	6.5	6.5	6.5	6.5	6.5
4	18.5	18.0	13.5	13.5	8.5	8.5	6.5	6.5	6.5	6.5	6.5	6.5
5	18.0	18.0	13.5	13.0	8.5	8.5	6.5	6.5	6.5	6.5	6.5	6.5
6	18.0	18.0	13.0	12.0	8.5	8.5	6.5	6.5	7.0	6.5	6.5	6.5
7	18.0	17.0	12.0	12.0	8.5	8.5	6.5	6.0	7.0	6.5	6.5	6.5
8	17.0	17.0	12.0	12.0	8.5	8.5	6.0	6.0	6.5	6.5	6.5	6.5
9	17.0	16.5	12.0	12.0	8.5	8.5	6.0	6.0	7.0	6.5	6.5	6.5
10	16.5	16.5	12.0	12.0	8.5	8.5	6.0	6.0	8.0	7.0	6.5	6.5
11	16.5	16.5	12.0	12.0	8.5	8.5	6.0	6.0	8.5	8.0	6.5	6.5
12	16.5	16.5	12.0	11.5	8.5	8.5	6.0	6.0	8.5	8.0	6.5	6.5
13	16.5	16.5	11.5	11.5	8.5	8.0	6.0	6.0	8.0	8.0	7.0	6.5
14	16.5	16.5	11.5	11.5	8.0	8.0	6.0	5.5	8.0	7.0	7.0	7.0
15	16.5	16.5	11.5	11.5	8.0	8.0	5.5	5.5	7.0	7.0	7.0	7.0
16	16.5	16.5	11.5	11.5	8.0	8.0	5.5	5.5	7.0	7.0	7.0	7.0
17	16.5	16.0	11.5	11.5	8.0	8.0	5.5	5.5	7.0	7.0	8.0	7.0
18	16.0	16.0	11.5	11.5	8.0	8.0	6.5	5.5	7.0	7.0	8.0	8.0
19	16.0	16.0	11.5	11.5	8.0	8.0	6.5	6.5	7.0	7.0	8.0	8.0
20	16.0	16.0	11.5	11.0	8.0	8.0	6.5	6.5	7.0	7.0	8.0	8.0
21	16.0	16.0	11.0	11.0	8.0	7.0	6.5	6.5	7.0	7.0	8.0	8.0
22	16.0	15.5	11.0	11.0	8.0	7.0	6.5	6.5	7.0	7.0	8.0	8.0
23	15.5	15.5	11.0	11.0	7.0	7.0	6.5	6.5	7.0	7.0	8.0	8.0
24	15.5	15.0	11.0	11.0	7.0	7.0	6.5	6.5	7.0	7.0	8.5	8.0
25	15.0	14.5	11.0	11.0	7.0	6.5	6.5	6.5	7.0	7.0	8.0	8.0
26	14.5	14.5	11.0	11.0	6.5	6.5	6.5	6.5	7.0	7.0	8.0	8.0
27	14.5	14.5	11.0	10.5	6.5	6.5	6.5	6.5	7.0	7.0	8.5	8.0
28	14.5	14.0	10.5	10.0	6.5	6.5	6.5	6.5	7.0	7.0	8.5	8.5
29	14.0	14.0	10.0	9.5	6.5	6.5	6.5	6.5	--	--	8.5	8.5
30	14.0	13.5	9.5	9.0	6.5	6.5	6.5	6.5	--	--	8.5	8.5
31	13.5	13.5	--	--	6.5	6.5	6.5	6.5	--	--	9.0	8.5
AVE	16.3	16.1	11.7	11.6	7.9	7.7	6.3	6.2	7.1	6.9	7.4	7.3

11470500 EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR MAX	MIN	MAY MAX	MIN	JUN MAX	MIN	JUL MAX	MIN	AUG MAX	MIN	SEP MAX	MIN
1	9.0	8.5	10.0	10.0	12.0	11.5	16.5	14.5	16.5	15.0	15.5	14.5
2	8.5	8.0	10.0	10.0	12.0	12.0	17.0	14.5	16.5	15.0	15.5	14.5
3	8.5	8.0	10.0	10.0	13.0	12.0	17.0	15.0	16.5	15.0	15.5	14.5
4	8.5	8.0	10.5	10.0	13.5	12.0	17.0	15.0	16.5	15.0	15.5	14.5
5	9.5	8.5	11.0	10.5	--	--	16.5	15.0	16.5	15.0	15.5	14.5
6	8.5	8.5	11.5	11.0	--	--	16.0	15.0	16.5	15.0	15.5	14.5
7	8.5	8.5	11.0	11.0	--	--	15.5	14.5	16.5	15.0	15.5	14.5
8	9.5	8.5	11.0	11.0	--	--	15.5	14.5	16.5	15.0	15.5	15.0
9	10.0	9.5	11.0	11.0	--	--	15.5	14.5	16.5	15.0	15.5	15.0
10	10.0	10.0	11.0	11.0	--	--	15.5	14.5	16.5	15.5	15.5	15.0
11	10.0	10.0	11.5	11.0	--	--	15.5	14.5	16.5	15.5	15.5	15.0
12	10.0	9.5	11.0	11.0	--	--	15.5	14.5	16.5	15.0	15.5	15.0
13	10.0	10.0	11.0	11.0	--	--	15.5	14.5	16.5	15.0	15.5	15.0
14	11.0	10.0	11.5	11.0	--	--	15.5	14.5	16.0	14.5	15.5	15.0
15	11.0	10.5	11.5	11.0	14.5	13.5	15.5	14.5	15.5	14.5	15.5	15.0
16	10.5	10.0	11.0	11.0	14.0	13.5	15.5	14.5	16.0	14.5	15.5	15.0
17	10.0	10.0	11.5	11.0	14.5	13.5	15.5	14.5	15.5	14.5	15.5	15.0
18	10.0	10.0	11.0	11.0	14.5	13.5	15.5	14.5	16.0	14.5	16.0	15.0
19	10.0	9.5	13.0	11.0	14.5	14.0	15.5	14.5	16.0	14.5	15.5	15.0
20	9.5	9.5	11.5	11.0	14.5	13.5	15.5	14.5	16.0	14.5	15.5	15.0
21	9.5	9.5	11.0	11.0	14.5	13.5	15.5	14.5	16.0	14.5	15.5	15.5
22	10.0	9.5	11.5	11.0	14.0	13.5	15.5	14.5	16.0	14.5	15.5	15.5
23	10.0	9.5	11.5	11.0	14.5	14.0	15.5	14.5	16.0	14.5	15.5	15.5
24	10.0	9.5	11.5	11.0	15.0	13.5	15.5	14.5	16.0	15.0	15.5	15.5
25	10.0	9.5	11.5	11.0	16.0	14.5	15.5	14.5	16.0	15.0	15.5	15.5
26	10.0	10.0	13.5	11.0	16.5	15.0	16.5	14.5	16.0	15.0	15.5	15.5
27	10.0	10.0	13.5	11.5	16.5	14.5	16.5	15.0	16.5	15.0	16.0	15.5
28	10.5	10.0	11.5	11.5	16.5	14.5	16.5	15.0	15.5	14.5	16.5	16.0
29	10.5	10.0	11.5	11.5	16.5	14.5	16.5	15.0	16.0	14.5	16.5	16.5
30	10.5	10.0	13.0	11.5	16.5	14.5	16.5	15.0	15.0	14.5	16.5	16.5
31	--	--	13.0	11.5	--	--	16.5	15.0	15.5	14.5	--	--
AVE	9.8	9.4	11.4	10.9	--	--	15.9	14.6	16.1	14.8	15.6	15.1

PERIODIC DETERMINATIONS OF TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	WATER TEM- PERA- TURE (DEG C)	DIS- CHARGE (CFS)	TURBIDITY (JTU)	
				TOTAL	RESIDUAL <sup>1/</sup>
Nov. 6, 1970...	1330	13.5	140	68	3
Nov. 13.....	1240	11.5	290	38	4
Nov. 20.....	1310	11.5	314	13	1
Dec. 4.....	1340	8.5	10000	157	29
Dec. 11.....	1145	8.5	1660	88	23
Dec. 21.....	1200	7.0	1010	72	23
Dec. 25.....	1000	6.5	654	60	23
Jan. 1, 1971...	1000	6.5	1190	40	20
Jan. 8.....	1220	6.0	574	52	24
Jan. 15.....	1045	5.5	2210	46	20
Jan. 22.....	--	6.5	D 2230	100	17
Jan. 29.....	1200	6.5	1010	73	12
Feb. 5.....	1015	6.5	733	48	8
Feb. 12.....	1000	8.0	678	48	10
Feb. 19.....	1030	7.0	531	40	5
Feb. 26.....	1430	7.0	338	42	6
Mar. 5.....	1045	6.5	285	34	3
Mar. 19.....	1430	8.0	833	60	10
Apr. 9.....	1220	10.0	794	47	6
May 13.....	1015	11.0	367	15	6
June 11.....	1015	11.0	355	16	6

D Daily mean discharge.

<sup>1/</sup> Turbidity measured after a 7-day settling period.

## EEL RIVER BASIN

11471000 POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.

LOCATION.--Lat 39°21'42", long 123°07'38", in SW¼NW¼ sec.6, T.17 N., R.11 W., Mendocino County, at gaging station, 100 ft downstream from powerhouse of Pacific Gas and Electric Company, 1.8 miles southwest of Van Arsdale Dam, and 2.9 miles northwest of town of Potter Valley.

PERIOD OF RECORD.--Chemical analyses (revised): Water years 1952-53 (partial-record station), October 1953 to September 1965, water year 1966 (partial-record station). Published as "East Fork Russian River at Potter Valley" in 1952-59.

Water temperatures: March 1964 to September 1971.

Sediment records: March 1964 to May 1968.

Turbidity: Water years 1964-71 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 24.5°C Aug. 10-12; minimum, 5.0°C Jan. 12, 13.

Period of record:

Water temperatures (1964-65, 1966-71): Maximum (1967-71), 24.5°C Aug. 10-12, 1971; minimum, 4.0°C on several days in 1967 and 1968.

REMARKS.--Thermograph recorder stopped Oct. 1-29, Dec. 2-17, Jan. 26, 27, Apr. 9-30, May 30 to June 9, June 25 to July 1, July 15 to Aug. 4. Samples for periodic turbidity determinations were collected by Pacific Gas and Electric Company and U.S. Forest Service.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	14.0	12.0	9.0	8.5	7.0	6.5	7.5	6.5	7.5	5.5
2	--	--	13.5	12.0	--	--	7.0	5.5	7.5	6.5	7.5	6.0
3	--	--	13.5	12.5	--	--	6.0	5.5	7.5	6.5	8.0	7.5
4	--	--	13.5	13.0	--	--	6.0	5.5	7.5	7.0	8.0	7.0
5	--	--	14.0	13.0	--	--	6.0	5.5	8.0	6.5	7.5	5.5
6	--	--	14.0	13.0	--	--	6.5	5.5	8.0	7.0	8.0	6.0
7	--	--	13.5	13.0	--	--	6.5	6.0	8.0	6.5	8.0	7.0
8	--	--	13.0	13.0	--	--	6.5	6.0	8.0	6.5	8.5	7.0
9	--	--	13.0	13.0	--	--	7.0	6.0	8.0	6.5	8.5	7.0
10	--	--	13.0	12.0	--	--	7.0	6.5	8.5	7.0	8.0	7.0
11	--	--	12.5	12.5	--	--	6.5	5.5	8.5	8.0	8.0	7.5
12	--	--	13.0	12.0	--	--	5.5	5.0	8.5	8.0	8.5	8.0
13	--	--	12.0	10.5	--	--	5.5	5.0	8.5	7.5	8.5	8.0
14	--	--	11.5	11.0	--	--	5.5	5.5	8.5	8.0	8.0	7.5
15	--	--	11.5	11.0	--	--	6.5	5.5	8.0	8.0	8.5	7.5
16	--	--	12.0	11.0	--	--	6.5	6.5	8.0	7.5	8.5	7.5
17	--	--	12.0	10.5	--	--	7.0	6.5	8.0	7.5	9.5	7.0
18	--	--	11.5	10.5	7.5	7.5	8.0	7.0	8.0	7.0	9.5	7.0
19	--	--	11.5	10.5	7.5	7.0	8.0	8.0	8.0	7.0	10.0	7.0
20	--	--	11.5	10.0	7.5	7.0	8.0	8.0	8.0	6.5	10.0	7.0
21	--	--	11.5	11.0	7.5	7.0	8.0	7.5	8.0	7.0	10.0	7.0
22	--	--	11.5	11.5	7.5	7.0	8.0	7.5	8.0	7.5	9.5	8.0
23	--	--	11.5	11.5	7.5	7.0	8.0	7.0	8.0	6.5	9.5	9.0
24	--	--	12.0	11.5	7.5	6.5	7.5	7.0	8.0	7.5	10.0	8.5
25	--	--	12.0	12.0	7.0	6.0	7.5	7.0	8.0	7.0	9.5	9.0
26	--	--	12.0	10.5	7.0	6.5	--	--	7.5	6.0	9.5	8.0
27	--	--	10.5	10.0	7.0	7.0	--	--	7.5	6.5	10.5	9.0
28	--	--	10.0	9.5	7.0	6.5	7.5	6.5	7.5	6.5	10.5	8.5
29	--	--	9.5	9.0	7.0	6.5	7.5	6.5	--	--	11.0	8.5
30	12.5	11.5	9.5	9.0	6.5	6.5	7.5	6.5	--	--	10.0	9.0
31	14.0	12.0	--	--	7.0	6.5	7.5	6.5	--	--	11.0	8.5
AVE	--	--	12.1	11.4	--	--	6.9	6.3	8.0	7.0	9.0	7.5



## 11471000 POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	8.0	11.5	11.0	--	--	--	--	--	--	19.0	16.5
2	11.5	8.0	11.5	10.5	--	--	22.5	20.0	--	--	19.5	16.5
3	11.5	8.0	12.0	10.5	--	--	23.0	20.5	--	--	20.0	16.0
4	12.0	8.5	12.5	11.5	--	--	23.0	20.5	--	--	20.0	16.0
5	12.5	8.5	13.0	11.5	--	--	23.0	20.5	23.5	19.0	20.0	16.5
6	11.0	10.0	14.0	11.5	--	--	23.5	21.0	23.0	19.5	19.5	17.0
7	10.5	9.5	14.5	12.0	--	--	22.5	20.0	22.5	19.5	19.5	15.5
8	11.0	8.5	14.5	12.0	--	--	22.0	19.0	22.5	19.0	19.0	16.0
9	--	--	15.5	12.0	--	--	22.0	19.5	23.0	19.0	19.0	16.0
10	--	--	16.0	11.5	18.5	13.5	21.0	18.5	24.5	19.5	19.0	15.5
11	--	--	16.0	11.5	18.5	13.5	21.5	18.0	24.5	20.5	19.0	16.0
12	--	--	15.0	12.0	18.5	14.0	22.0	18.0	24.5	21.0	19.5	16.0
13	--	--	15.5	12.0	18.5	13.5	22.0	19.0	24.0	21.5	19.0	16.0
14	--	--	15.5	11.0	18.5	13.5	21.5	18.0	23.0	19.5	19.0	16.0
15	--	--	15.5	11.5	19.0	14.0	--	--	22.0	19.0	19.0	16.0
16	--	--	15.0	10.5	19.0	14.5	--	--	22.0	18.5	19.0	16.0
17	--	--	15.0	11.0	19.0	14.5	--	--	22.0	18.0	18.5	15.5
18	--	--	15.5	11.0	18.5	14.5	--	--	22.0	18.0	17.5	15.0
19	--	--	16.5	11.5	19.0	15.0	--	--	22.0	18.5	17.5	14.5
20	--	--	16.5	12.5	19.5	15.0	--	--	22.0	18.0	17.5	14.5
21	--	--	15.5	11.0	19.5	15.5	--	--	22.0	18.0	18.0	15.0
22	--	--	16.0	12.0	19.5	15.5	--	--	22.0	19.0	17.5	15.0
23	--	--	17.0	12.5	19.5	16.0	--	--	21.0	18.0	18.0	15.0
24	--	--	17.0	13.0	19.5	15.5	--	--	22.0	18.5	18.0	15.5
25	--	--	17.0	13.0	--	--	--	--	21.5	19.0	17.5	15.0
26	--	--	15.5	12.0	--	--	--	--	22.0	18.5	16.5	15.0
27	--	--	16.5	13.5	--	--	--	--	22.0	18.5	17.0	13.5
28	--	--	15.5	13.5	--	--	--	--	21.0	18.5	16.5	14.5
29	--	--	17.0	13.0	--	--	--	--	21.0	17.5	16.0	14.5
30	--	--	--	--	--	--	--	--	19.5	17.5	17.0	13.0
31	--	--	--	--	--	--	--	--	20.0	16.0	--	--
AVE	--	--	15.1	11.8	--	--	--	--	22.3	18.8	18.4	15.4

## PERIODIC DETERMINATIONS OF TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	WATER TEM- PERA- TURE (DEG C)	DIS- CHARGE (CFS)	TURBIDITY (JTU)	
				TOTAL	RESIDUAL <sup>1/</sup>
Nov. 6, 1970...	1100	13.0	221	33	4
Nov. 13.....	0900	11.0	221	16	2
Nov. 20.....	0900	10.0	261	52	16
Nov. 27.....	0900	9.0	274	58	15
Dec. 4.....	0900	8.0	164	85	22
Dec. 11.....	0900	8.0	297	85	16
Dec. 18.....	0900	7.0	294	49	21
Dec. 25.....	1000	7.0	294	48	21
Jan. 1, 1971...	0900	6.0	296	40	20
Jan. 8.....	0900	6.0	299	40	18
Jan. 15.....	0900	7.0	313	55	11
Jan. 22.....	0900	7.0	310	56	10
Jan. 29.....	0900	7.0	309	55	10
Feb. 5.....	1300	7.0	309	46	10
Feb. 12.....	0900	8.0	310	48	10
Feb. 19.....	0900	8.0	306	40	6
Feb. 26.....	0900	8.0	315	43	7
Mar. 5.....	0900	6.0	316	28	3
Mar. 19.....	0900	7.0	312	120	23
Mar. 26.....	0900	8.0	303	220	30
Apr. 9.....	0900	10.0	166	55	14
June 11.....	0900	11.0	324	18	5

<sup>1/</sup> Turbidity measured after a 7-day settling period.

## EEL RIVER BASIN

11472150 EEL RIVER NEAR DOS RIOS, CALIF.

LOCATION.--Lat 39°37'30", long 123°20'25", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.32, T.21 N., R.13 W., Mendocino County, at gaging station 1,100 ft upstream from Outlet Creek, and 6.3 miles south of Dos Rios.

DRAINAGE AREA.--528 sq mi.

PERIOD OF RECORD.--Chemical analyses (revised): Water year 1958 (partial-record station), October 1958 to September 1971.

Water temperatures: October 1966 to September 1971.

Sediment records: October 1966 to September 1971.

Turbidity: Water years 1967-68 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Minimum, 4.0°C Jan. 5.

Sediment concentrations: Maximum daily, 2,450 mg/l Dec. 3; minimum, 1 mg/l on many days.

Sediment discharge: Maximum daily, 202,000 tons Jan. 16; minimum daily, 0.01 ton on several days.

Period of record:

Water temperatures (1966-67, 1968-71): Minimum, 1.5°C Dec. 29, 1966, Jan. 6, 1970.

Sediment concentrations: Maximum daily, 3,590 mg/l Jan. 21, 1967; minimum daily, 0 mg/l on several days in 1969 and 1970.

Sediment discharge: Maximum daily, 351,000 tons Jan. 24, 1970; minimum daily, 0 tons on several days in 1969 and 1970.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. During period October 1958 to September 1966, chemical-quality station located at lat 39°37'36", long 123°20'36". Flow partly regulated by Lake Pillsbury and by diversion through Potter Valley powerhouse.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 21...	1235	9.6	12.5	10.5	--	--	11	--	120	0	--
NOV. 11...	0900	209	13.0	10.5	20	5.8	6.8	1.1	82	0	13
DEC. 09...	0930	5830	8.0	11.9	--	--	2.9	--	56	0	--
JAN. 06...	1300	978	3.5	13.2	--	--	3.8	--	68	0	--
FEB. 03...	0910	990	5.5	12.8	--	--	3.6	--	68	0	--
MAR. 03...	0900	136	8.0	11.8	21	6.4	5.4	.7	89	0	9.7
APR. 07...	0955	345	11.0	10.7	--	--	4.4	--	80	0	--
MAY 05...	0825	259	14.0	9.9	--	--	4.7	--	83	0	--
JUNE 23...	1205	28	25.0	11.1	--	--	8.3	--	116	0	--
JULY 21...	0645	13	24.0	6.8	--	--	9.8	--	114	0	--
AUG. 18...	0815	7.9	21.0	8.2	--	--	9.8	--	112	0	--
SEP. 15...	0750	8.4	20.0	7.0	--	--	10	--	122	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT. 21...	8.9	.3	.000	600	--	--	--	119	21	98	--
NOV. 11...	4.8	--	.030	400	108	.15	60.9	74	7	67	16
DEC. 09...	1.8	.1	.030	200	--	--	--	48	2	46	--
JAN. 06...	2.2	.3	.010	200	--	--	--	67	11	56	--
FEB. 03...	1.0	.1	.000	--	--	--	--	54	0	56	--
MAR. 03...	3.0	.0	.000	200	129	.18	47.4	79	6	73	13
APR. 07...	3.0	.1	.010	100	--	--	--	68	2	66	--
MAY 05...	1.9	.1	.010	100	--	--	--	79	11	68	--
JUNE 23...	3.7	.0	.000	300	--	--	--	94	0	95	--
JULY 21...	4.7	.0	.000	300	--	--	--	106	12	94	--
AUG. 18...	5.5	.0	.010	500	--	--	--	103	11	92	--
SEP. 15...	6.2	.1	.000	400	--	--	--	109	9	100	--

11472150 EEL RIVER NEAR DOS RIOS, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT. 21...	.4	282	8.3	10	--	--	--	--	--	--
NOV. 11...	.3	181	7.9	50	--	--	--	--	--	--
DEC. 09...	.2	108	7.6	230	--	--	--	--	--	--
JAN. 06...	.2	136	8.0	40	--	--	--	--	--	--
FEB. 03...	.2	122	7.8	70	--	--	--	--	--	--
MAR. 03...	.3	179	8.0	5	--	--	--	--	--	--
APR. 07...	.2	157	7.9	15	--	--	--	--	--	--
MAY 05...	.2	169	7.7	10	0	0	0	0	.0	0
JUNE 23...	.4	221	8.3	2	--	--	--	--	--	--
JULY 21...	.4	240	7.7	1	--	--	--	--	--	--
AUG. 18...	.4	239	8.1	1	--	--	--	--	--	--
SEP. 15...	.4	250	7.9	2	--	--	--	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971  
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	14.0	8.0	9.0	8.0	6.5	10.5	11.0	--	--	--	--
2	20.0	13.0	7.0	6.0	8.0	7.5	11.0	15.0	17.0	--	--	--
3	--	13.0	8.0	5.0	6.0	9.0	13.0	14.0	--	--	--	--
4	--	15.0	10.0	5.0	7.5	8.0	14.0	15.0	--	--	--	--
5	15.5	13.0	10.0	4.0	9.0	8.0	15.5	14.5	--	--	--	--
6	17.0	13.0	10.0	7.0	8.0	8.0	12.0	17.0	--	--	--	--
7	14.5	13.0	10.0	6.5	8.0	8.0	12.0	18.0	--	--	--	24.5
8	--	13.0	10.0	6.5	8.0	8.5	10.0	15.0	20.0	26.0	29.0	--
9	15.0	13.0	8.0	7.0	8.0	9.0	11.5	18.5	--	--	--	--
10	--	13.0	7.0	8.5	10.5	8.0	10.0	17.5	--	--	--	--
11	--	13.0	8.0	8.0	11.5	9.5	12.0	18.5	--	--	--	--
12	16.5	15.0	7.0	5.0	11.0	9.0	12.0	18.0	--	--	--	--
13	--	15.0	7.0	5.0	9.5	7.0	12.0	--	--	--	--	--
14	16.0	14.0	8.0	5.0	10.0	8.0	13.0	18.5	18.0	--	--	--
15	--	13.0	8.0	7.0	11.0	8.5	12.0	--	19.5	27.5	23.0	23.5
16	15.0	13.0	8.0	8.5	8.5	9.0	13.0	18.0	--	--	--	--
17	--	11.0	7.0	8.5	8.5	9.0	11.5	15.5	--	--	--	--
18	17.0	12.0	8.0	10.5	8.0	9.0	9.0	17.0	--	--	--	--
19	--	10.0	7.0	10.0	7.5	9.5	12.0	16.5	--	30.0	--	--
20	16.0	10.0	6.0	10.0	7.0	10.5	11.0	14.0	--	--	--	--
21	14.0	11.0	6.0	7.0	7.0	10.5	11.0	17.5	--	--	--	--
22	13.0	11.0	7.0	8.0	7.5	9.5	11.5	--	--	--	--	27.0
23	13.0	11.0	8.0	7.0	8.0	10.5	10.5	20.0	22.0	--	27.0	22.0
24	13.0	13.0	7.0	6.5	8.5	9.5	11.5	21.5	--	28.0	--	--
25	14.0	12.0	5.0	8.0	7.5	10.0	10.5	21.0	--	--	--	--
26	13.0	10.0	6.0	--	6.0	9.5	11.0	19.0	20.5	--	--	--
27	16.0	10.0	8.0	9.0	6.0	8.5	15.0	--	--	--	--	--
28	12.0	9.0	8.0	8.5	6.5	12.0	14.5	17.0	--	--	--	--
29	13.0	9.0	8.0	9.0	--	10.5	15.0	--	--	--	--	15.0
30	11.0	9.0	8.0	8.0	--	10.0	15.0	16.0	21.0	--	22.0	16.0
31	14.0	--	8.0	8.0	--	8.5	--	--	--	20.0	--	--
AVE	--	12.1	7.8	7.4	8.2	9.0	12.1	16.9	--	--	--	--

## EEL RIVER BASIN

11472150 EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.9	2	.02	5.4	1	.01	3090	230	1920
2	2.6	1	.01	5.4	1	.01	4870	558	7670
3	2.2	1	.01	5.9	1	.02	16600	2450	155000
4	2.2	2	.01	41	40	4.4	23300	2000	136000
5	2.2	3	.02	361	149	174	9860	810	21600
6	2.0	2	.01	463	167	220	6240	540	9100
7	1.8	2	.01	242	42	27	5080	518	7100
8	1.8	2	.01	133	18	6.5	6370	631	11100
9	2.0	2	.01	1040	307	1080	5550	440	6590
10	2.0	2	.01	560	97	201	3660	238	2350
11	2.2	1	.01	302	205	211	2600	143	1000
12	2.4	1	.01	450	192	245	2030	95	521
13	2.4	1	.01	236	12	7.6	1680	66	299
14	2.6	1	.01	142	10	3.8	1440	65	253
15	2.6	1	.01	105	9	2.6	1720	208	1530
16	2.6	1	.01	85	9	2.1	4090	486	5370
17	2.6	1	.01	70	8	1.5	3410	182	1680
18	3.4	6	.06	56	8	1.2	2510	105	712
19	3.4	3	.03	49	7	.93	1960	72	381
20	8.2	1	.02	65	12	2.1	1780	108	519
21	21	10	.57	58	10	1.6	1860	66	331
22	43	8	.93	47	10	1.3	1590	49	210
23	49	30	4.0	41	8	.89	1340	40	145
24	108	20	5.8	1160	291	2000	1170	32	101
25	43	1	.12	1970	398	2190	1030	30	83
26	21	2	.11	1120	120	363	942	24	61
27	13	1	.04	3890	785	14600	918	22	55
28	8.9	1	.02	5570	701	11900	2390	386	4570
29	7.6	1	.02	2630	275	2000	6040	734	12400
30	5.9	1	.02	3370	424	4330	3730	230	2320
31	5.4	1	.01	--	--	--	2550	138	950
TOTAL	379.9	--	11.94	24272.7	--	39577.56	131400	--	391921

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	2080	94	528	1100	40	119	172	10	4.6
2	1910	60	309	1050	39	111	147	9	3.6
3	1510	38	155	978	46	121	142	8	3.1
4	1280	29	100	882	36	86	156	7	2.9
5	1110	24	72	785	34	72	142	5	1.9
6	990	20	53	725	39	76	114	3	.92
7	888	21	50	660	28	50	103	8	2.2
8	813	45	99	595	25	40	103	7	1.9
9	785	60	127	562	20	30	100	3	.81
10	996	105	282	508	20	27	103	5	1.4
11	1770	118	564	495	20	27	886	75	179
12	2110	99	564	540	20	29	10600	1840	59900
13	1920	60	311	710	38	73	9350	694	20000
14	2570	98	680	655	30	53	4120	250	2780
15	11600	1010	41600	630	26	44	3460	155	1450
16	36300	1990	202000	590	20	32	2660	120	862
17	27600	1360	105000	562	19	29	2320	80	501
18	16300	780	34300	463	18	23	1820	55	270
19	9710	710	18600	445	15	18	1520	50	205
20	6270	500	8460	401	15	16	1310	40	141
21	4430	250	2990	345	12	11	935	30	76
22	3330	205	1840	295	16	13	618	55	92
23	2690	180	1310	266	12	8.6	4030	412	4550
24	2250	115	699	232	10	6.3	3420	200	1850
25	1890	92	469	203	10	5.5	5830	664	18900
26	1640	75	332	181	11	5.4	18200	1280	65000
27	1440	58	226	172	11	5.1	8470	580	13300
28	1340	50	181	181	11	5.4	4640	340	4260
29	1250	45	152	--	--	--	3330	150	1350
30	1170	49	155	--	--	--	2790	104	783
31	1130	42	128	--	--	--	2240	64	387
TOTAL	151072	--	422336	15211	--	1136.3	93831	--	196859.33

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

JULY				AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	25	3	.20	9.5	2	.05	14	3	.11
2	25	3	.20	8.4	2	.05	14	3	.11
3	24	3	.19	9.5	2	.05	13	3	.11
4	24	3	.19	9.5	3	.08	17	4	.18
5	22	2	.12	9.5	3	.08	13	4	.14
6	22	2	.12	9.5	4	.10	10	4	.11
7	21	2	.11	9.5	4	.10	9.0	4	.10
8	21	2	.11	9.0	4	.10	8.4	4	.09
9	19	2	.10	9.0	4	.10	8.4	4	.09
10	18	2	.10	8.4	4	.09	8.4	3	.07
11	18	2	.10	7.9	4	.09	8.4	3	.07
12	17	2	.09	8.4	5	.11	8.4	3	.07
13	17	2	.09	8.4	5	.11	8.4	2	.05
14	16	2	.09	8.4	5	.11	8.4	2	.05
15	16	2	.09	8.4	5	.11	8.4	2	.05
16	15	2	.08	8.4	4	.09	7.9	2	.04
17	15	2	.08	7.9	3	.06	22	5	.30
18	14	1	.04	10	4	.11	20	5	.27
19	14	1	.04	27	5	.36	12	5	.16
20	14	1	.04	13	4	.14	11	6	.18
21	13	1	.04	10	3	.08	11	6	.18
22	12	1	.03	10	2	.05	11	6	.18
23	12	1	.03	12	2	.06	12	4	.13
24	12	1	.03	20	4	.22	12	4	.13
25	12	1	.03	25	4	.27	16	4	.17
26	11	1	.03	13	3	.11	12	3	.10
27	10	1	.03	10	3	.08	12	2	.06
28	10	1	.03	9.0	3	.07	22	2	.12
29	19	4	.21	21	4	.23	37	1	.10
30	15	3	.12	13	3	.11	43	1	.12
31	12	2	.06	12	3	.10	--	--	--
TOTAL	515	--	2.82	354.6	--	3.47	418.1	--	3.64

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)  
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

446365.3  
1053808.25

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
NOV.									
06...	--	99	--	100	--	--	--	--	--
09...	--	99	--	100	--	--	--	--	--
DEC.									
03...	76	--	88	--	100	--	--	--	--
04...	75	--	83	--	95	--	100	--	--
05...	78	--	86	--	98	--	100	--	--
JAN.									
15...	77	--	82	--	97	--	100	--	--
16...	76	--	82	--	95	--	100	--	--
18...	78	--	83	--	94	--	100	--	--
21...	--	91	--	93	--	97	--	100	--
MAR.									
14...	--	81	--	86	--	100	--	--	--
23...	--	77	--	83	--	96	--	100	--
26...	64	--	69	--	84	--	99	--	100
29...	--	88	--	100	--	--	--	--	--

DATE	TIME	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
				% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM
MAY 24...	1620	4	70	1	5	12	16
		BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM	% FINER THAN 64.0 MM
MAY 24...	22	28	34	42	66	87	100

LOCATION.--Lat 39°41'20", long 123°21'30", in SW<sup>1</sup> sec.7, T.21 N., R.13 W., Mendocino County, temperature recorder at site of former gaging station on left bank, 1.8 miles upstream from Middle Fork, and 2.1 miles south of Dos Rios.

Sediment records: Water year 1957 (partial-record station), October 1957 to September 1965.

Water temperatures (1962-67): Maximum (1962-66), 29.0°C June 15, 1966; minimum, 3.0°C Dec. 28, 1966.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

[illegible]

## EEL RIVER BASIN

11472900 BLACK BUTTE RIVER NEAR COVELO, CALIF.

LOCATION.--Lat 39°49'15", long 123°04'50", in SE $\frac{1}{4}$  sec.28, T.23 N., R.11 W., Mendocino County, at gaging station 10 ft upstream from highway bridge, 0.5 mile upstream from mouth, and 9.5 miles east of Covelo.

DRAINAGE AREA.--162 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1964 to September 1966.

Specific conductance: October 1966 to September 1968.

Water temperatures: May 1964 to September 1971.

Sediment records: Water year 1966 (partial-record station), December 1966 to September 1971.

Turbidity: Water years 1966-68 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 28.5°C July 20; minimum, freezing point on several days during January and February.

Sediment concentrations: Maximum daily, 6,590 mg/l Jan. 16; minimum daily, 1 mg/l on many days.

Sediment discharge: Maximum daily, 98,000 tons Jan. 16; minimum daily, 0.01 ton on many days.

Period of record:

Water temperatures: Maximum (1965-68, 1969-71), 31.5°C Aug. 23, 1964, Aug. 2, 1967; minimum (1965-71), freezing point on many days in 1965-69, 1971.

Sediment concentrations (1965-71): Maximum daily, 10,600 mg/l Jan. 4, 1966; minimum daily, 0 mg/l on several days in 1969.

Sediment discharge (1965-71): Maximum daily, 249,000 tons Jan. 24, 1970; minimum daily, 0 tons on several days in 1969.

REMARKS.--No thermograph record July 22 to Sept. 30; probe inoperative. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	22.5	--	12.0	17.5	--	7.0	5.5	--	4.0	5.5	--	4.0	7.5	--	2.0	6.5	--	1.5
2	22.5	--	11.5	17.5	--	7.0	4.5	--	2.0	6.5	--	1.0	7.5	--	1.0	7.0	--	2.0
3	22.0	--	11.5	13.5	--	8.0	5.0	--	3.5	4.5	--	0.5	5.0	--	0.0	7.5	--	3.5
4	21.5	--	12.0	11.5	--	9.5	8.5	--	4.5	4.5	--	0.0	6.0	--	0.0	5.5	--	3.0
5	21.5	--	11.5	12.5	--	9.5	8.0	--	6.0	5.0	--	0.5	5.0	--	2.0	7.5	--	3.0
6	19.5	--	10.5	11.5	--	8.5	9.0	--	6.5	6.0	--	1.0	8.0	--	3.0	7.5	--	3.0
7	20.0	--	9.0	10.5	--	8.0	7.5	--	5.5	6.5	--	2.0	7.0	--	1.0	7.5	--	3.5
8	20.5	--	9.5	12.0	--	9.5	8.0	--	5.5	6.0	--	2.5	7.0	--	1.5	8.0	--	3.0
9	20.5	--	10.5	11.5	--	8.0	7.5	--	3.5	5.5	--	2.5	7.5	--	2.0	6.5	--	3.5
10	21.0	--	11.0	12.5	--	7.0	6.5	--	3.0	7.0	--	4.5	9.0	--	3.5	5.0	--	3.5
11	21.0	--	10.0	13.0	--	10.0	9.5	--	3.5	4.5	--	2.0	11.0	--	3.5	7.0	--	5.0
12	20.5	--	10.5	12.0	--	6.5	7.5	--	2.5	2.0	--	0.5	11.0	--	4.0	7.0	--	3.0
13	20.5	--	10.0	11.0	--	5.0	6.5	--	3.0	0.5	--	0.0	10.5	--	3.5	7.5	--	3.0
14	19.5	--	9.0	11.0	--	6.5	6.0	--	4.0	1.5	--	0.0	6.5	--	3.5	6.5	--	2.0
15	21.5	--	11.5	9.0	--	6.5	6.5	--	4.5	2.5	--	1.0	9.5	--	3.5	9.5	--	3.5
16	21.5	--	11.5	12.5	--	8.0	5.0	--	3.5	4.5	--	2.0	5.5	--	3.0	7.0	--	5.0
17	20.0	--	11.5	11.5	--	6.0	5.5	--	3.0	6.0	--	4.5	8.5	--	2.5	11.0	--	3.0
18	20.0	--	12.5	11.0	--	6.0	5.5	--	2.0	10.0	--	5.5	4.0	--	0.5	11.5	--	2.0
19	17.5	--	11.0	11.0	--	5.5	5.5	--	1.0	9.0	--	4.5	7.0	--	1.5	12.0	--	3.0
20	18.5	--	12.5	10.5	--	5.0	2.5	--	1.0	9.0	--	3.5	7.0	--	1.5	12.0	--	4.0
21	13.0	--	11.5	9.5	--	7.0	6.0	--	2.5	6.0	--	1.0	5.5	--	2.5	10.5	--	4.0
22	14.0	--	9.0	9.0	--	8.0	5.5	--	1.5	6.5	--	0.5	7.0	--	3.0	7.5	--	6.0
23	13.0	--	10.0	10.5	--	9.0	6.5	--	3.0	7.0	--	1.0	8.0	--	3.0	9.5	--	6.5
24	15.0	--	8.5	12.0	--	10.5	6.0	--	1.5	5.0	--	0.0	7.0	--	4.0	9.5	--	5.5
25	14.5	--	9.5	11.0	--	8.0	5.0	--	0.5	6.0	--	0.0	7.0	--	3.0	8.0	--	5.5
26	16.5	--	7.0	8.5	--	5.5	4.5	--	2.0	7.0	--	1.0	6.5	--	2.5	7.5	--	3.5
27	16.0	--	5.5	7.5	--	5.0	5.5	--	3.5	6.5	--	1.5	4.5	--	2.5	9.5	--	2.0
28	17.0	--	6.0	7.0	--	5.0	5.5	--	4.0	6.0	--	1.0	4.5	--	2.0	12.0	--	3.5
29	17.0	--	6.0	7.0	--	5.5	6.0	--	4.0	6.5	--	1.5	--	--	--	12.5	--	4.0
30	12.0	--	7.5	7.0	--	5.0	6.5	--	4.5	7.0	--	2.0	--	--	--	9.5	--	3.5
31	18.0	--	8.5	--	--	--	6.5	--	5.0	6.5	--	2.0	--	--	--	10.0	--	1.0
AVE	18.6	--	9.9	11.1	--	7.2	6.2	--	3.4	5.7	--	1.7	7.1	--	2.3	8.6	--	3.5



## 11472900 BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR			MAY			JUN			JUL			AUG			SEP		
	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN
1	12.0	--	2.0	10.5	--	6.5	11.0	--	6.5	23.5	--	12.0	--	--	--	--	--	--
2	12.0	--	4.5	10.0	--	7.0	16.0	--	6.0	23.0	--	12.0	--	--	--	--	--	--
3	13.5	--	4.0	9.5	--	6.0	16.5	--	7.0	24.0	--	12.5	--	--	--	--	--	--
4	14.0	--	4.5	14.5	--	7.0	18.5	--	7.5	23.5	--	12.5	--	--	--	--	--	--
5	13.5	--	5.5	14.5	--	8.0	19.5	--	8.5	24.0	--	12.5	--	--	--	--	--	--
6	10.5	--	6.5	15.0	--	6.5	20.5	--	9.5	24.0	--	12.5	--	26.0	--	--	22.5	--
7	9.5	--	5.0	16.0	--	8.5	20.0	--	10.5	24.0	--	13.5	--	--	--	--	--	--
8	8.5	--	3.5	11.5	--	8.5	20.5	--	10.5	23.0	--	12.0	--	--	--	--	--	--
9	8.5	--	5.5	16.5	--	8.0	17.0	--	11.5	23.0	--	13.0	--	--	--	--	25.5	--
10	9.5	--	3.5	17.0	--	7.5	20.5	--	11.0	22.0	--	11.0	--	--	--	--	--	--
11	11.0	--	2.5	16.5	--	8.5	21.0	--	9.5	23.0	--	11.0	--	25.5	--	--	--	--
12	13.0	--	3.5	16.0	--	8.0	18.5	--	12.0	24.0	--	11.5	--	--	--	--	--	--
13	8.0	--	5.5	16.0	--	8.5	20.0	--	10.0	25.0	--	12.5	--	--	--	--	--	--
14	13.5	--	4.5	16.0	--	6.5	21.5	--	10.0	26.0	--	13.5	--	--	--	--	--	--
15	14.5	--	6.5	15.0	--	7.5	22.5	--	11.0	26.0	--	15.0	--	--	--	--	18.5	--
16	10.0	--	5.0	13.5	--	4.5	23.0	--	12.0	27.5	--	15.5	--	--	--	--	--	--
17	7.5	--	3.5	14.5	--	4.0	22.0	--	11.5	26.5	--	16.5	--	--	--	--	--	--
18	10.5	--	1.5	16.0	--	5.5	21.5	--	12.5	26.5	--	18.0	--	--	--	--	--	--
19	12.0	--	3.0	17.0	--	7.0	23.0	--	14.0	28.0	--	17.0	--	--	--	--	--	--
20	8.5	--	2.0	16.0	--	7.0	23.5	--	12.5	28.5	--	17.5	--	--	--	--	--	--
21	9.5	--	0.5	14.5	--	4.0	24.0	--	13.0	28.0	--	17.0	--	--	--	--	--	--
22	7.0	--	3.5	17.5	--	6.0	23.0	--	12.5	--	--	--	--	26.5	--	--	--	--
23	9.0	--	3.5	19.5	--	8.5	23.0	--	13.5	--	--	--	--	--	--	--	--	--
24	8.0	--	1.0	20.0	--	9.5	21.5	--	12.0	--	--	--	--	28.0	--	--	15.0	--
25	12.0	--	1.5	14.5	--	9.5	15.0	--	13.5	--	--	--	--	--	--	--	--	--
26	13.0	--	4.5	15.0	--	7.0	16.0	--	12.5	--	--	--	--	--	--	--	18.5	--
27	15.0	--	6.0	15.5	--	7.0	20.0	--	10.5	--	--	--	--	22.0	--	--	--	--
28	14.5	--	5.0	11.0	--	8.5	20.0	--	8.5	--	--	--	--	--	--	--	--	--
29	14.0	--	5.0	17.0	--	8.5	21.5	--	10.0	--	--	--	--	--	--	--	15.5	--
30	15.0	--	5.5	15.0	--	7.0	23.0	--	10.5	--	--	--	--	--	--	--	--	--
31	--	--	--	14.0	--	5.0	--	--	--	--	--	--	--	--	--	--	--	--
AVE	11.2	--	3.9	15.0	--	7.1	20.1	--	10.7	--	--	--	--	--	--	--	--	--

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	2.5	2	.01	7.5	1	.02	856	904	2590
2	2.5	2	.01	7.5	1	.02	832	1490	3560
3	2.5	2	.01	7.3	1	.02	3130	4680	61300
4	2.5	2	.01	42	87	14	2450	4560	42700
5	2.5	2	.01	221	656	572	630	2200	3740
6	2.5	2	.01	202	240	131	518	1420	1990
7	2.5	2	.01	139	50	19	1040	2910	10500
8	2.5	2	.01	85	10	2.3	928	2640	7220
9	2.5	2	.01	479	722	1290	518	1220	1710
10	2.6	2	.01	273	175	129	273	750	553
11	2.6	2	.01	226	120	93	210	425	241
12	2.6	2	.01	479	198	322	182	360	177
13	2.6	2	.01	174	26	12	174	280	132
14	2.6	2	.01	104	15	4.2	163	220	97
15	2.6	2	.01	80	6	1.3	305	884	1220
16	2.6	2	.01	66	4	.71	531	1230	1940
17	2.6	1	.01	57	2	.31	336	460	417
18	3.3	1	.01	33	2	.18	289	350	273
19	3.7	1	.01	30	4	.32	252	250	170
20	7.0	14	.26	28	6	.45	252	180	122
21	14	41	2.2	25	8	.54	247	160	107
22	21	23	1.3	25	8	.54	215	130	75
23	22	38	2.3	33	8	.71	210	90	51
24	28	18	1.4	236	139	191	210	130	74
25	16	2	.09	904	1200	4020	206	135	75
26	12	2	.06	574	505	783	221	120	72
27	10	2	.05	1270	1640	10400	226	105	64
28	8.9	2	.05	892	1520	4160	459	629	1660
29	8.3	1	.02	740	1150	2300	702	934	2210
30	7.8	1	.02	996	1150	3460	305	470	387
31	7.8	1	.02	--	--	--	273	260	192
TOTAL	213.1	--	7.96	8435.3	--	27907.62	17143	--	145619

## EEL RIVER BASIN

11472900 BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	284	255	196	695	446	837	200	17	9.2
2	263	220	156	685	442	817	193	16	8.3
3	226	175	107	630	438	745	208	36	20
4	226	90	55	570	432	665	218	21	12
5	221	65	39	534	428	617	195	7	3.7
6	226	48	29	534	424	611	188	5	2.5
7	210	35	20	522	420	592	190	4	2.1
8	170	50	23	502	416	564	185	5	2.5
9	210	75	43	486	414	543	180	10	4.9
10	574	1200	2510	502	412	558	180	15	7.3
11	544	840	1230	595	409	657	280	150	113
12	440	440	523	650	407	714	2510	4290	29300
13	378	350	357	645	402	700	796	1430	3350
14	357	410	395	620	392	656	655	1010	1780
15	1590	3350	22600	650	342	600	585	480	758
16	5170	6590	98000	570	200	308	640	606	1130
17	3530	4990	51800	421	95	108	645	465	810
18	2500	4050	27300	343	73	68	575	295	458
19	1550	2300	9630	310	60	50	542	255	373
20	1230	1550	5150	280	48	36	538	215	312
21	1010	1250	3410	268	39	28	530	190	272
22	883	1050	2500	259	32	22	560	245	391
23	766	750	1550	244	25	16	1460	2350	10000
24	670	622	1130	238	21	13	946	850	2170
25	595	536	861	247	18	12	1810	2590	19000
26	518	444	621	218	18	11	2880	4090	38700
27	526	421	598	220	18	11	1100	2000	5940
28	555	442	662	208	18	10	869	1000	2350
29	585	460	727	--	--	--	808	1010	2200
30	615	454	754	--	--	--	784	850	1800
31	685	450	832	--	--	--	718	640	1240
TOTAL	27307	--	233808	12646	--	10569	22168	--	122519.5
DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	665	410	736	307	30	25	156	5	2.1
2	635	284	487	298	25	20	152	5	2.1
3	615	259	430	295	22	18	144	4	1.6
4	605	235	384	286	20	15	138	4	1.5
5	595	217	349	304	19	16	132	4	1.4
6	555	204	306	301	18	15	126	4	1.4
7	542	176	258	301	17	14	125	4	1.4
8	510	173	238	310	16	13	119	4	1.3
9	610	205	342	295	15	12	113	4	1.2
10	600	197	320	298	15	12	107	3	.87
11	466	166	209	307	20	17	101	3	.82
12	438	160	189	304	18	15	97	3	.79
13	470	157	199	304	17	14	93	3	.75
14	490	159	210	283	16	12	89	3	.72
15	478	138	178	268	15	11	87	4	.94
16	466	111	140	259	14	9.8	84	5	1.1
17	450	93	113	235	13	8.2	80	5	1.1
18	403	94	102	226	12	7.3	77	5	1.0
19	373	80	81	223	12	7.2	76	4	.82
20	379	56	57	218	12	7.1	72	4	.78
21	346	42	39	210	11	6.2	69	3	.56
22	340	41	38	200	11	5.9	64	3	.52
23	364	50	49	200	10	5.4	61	2	.33
24	334	30	27	198	10	5.3	60	2	.32
25	316	25	21	200	10	5.4	58	1	.16
26	304	23	19	198	9	4.8	76	3	.62
27	298	23	19	180	9	4.4	74	2	.40
28	298	27	22	198	9	4.8	63	2	.34
29	307	34	28	180	6	2.9	57	2	.31
30	304	35	29	173	6	2.8	54	2	.29
31	--	--	--	162	6	2.6	--	--	--
TOTAL	13556	--	5619	7721	--	319.1	2804	--	27.54

11472900 BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	51	3	.41	13	1	.04	8.5	2	.05
2	48	3	.39	13	1	.04	8.5	2	.05
3	44	4	.48	13	1	.04	8.5	1	.02
4	43	4	.46	13	1	.04	8.1	1	.02
5	42	4	.45	12	1	.03	7.8	1	.02
6	39	4	.42	12	1	.03	7.4	1	.02
7	39	4	.42	11	1	.03	7.1	1	.02
8	37	3	.30	11	1	.03	6.7	1	.02
9	36	3	.29	10	1	.03	6.7	1	.02
10	36	3	.29	9.5	1	.03	6.4	1	.02
11	33	2	.18	12	1	.03	6.4	1	.02
12	32	2	.17	11	1	.03	6.4	1	.02
13	30	2	.16	10	1	.03	6.0	1	.02
14	29	2	.16	9.2	1	.02	6.0	1	.02
15	28	2	.15	8.8	1	.02	5.7	1	.02
16	26	1	.07	8.8	1	.02	5.4	1	.01
17	24	1	.06	8.5	1	.02	5.1	1	.01
18	23	2	.12	8.1	1	.02	4.8	1	.01
19	23	3	.19	8.1	1	.02	4.5	1	.01
20	23	4	.25	7.8	1	.02	4.5	1	.01
21	22	5	.30	7.8	1	.02	4.8	2	.03
22	20	4	.22	7.8	1	.02	4.8	2	.03
23	19	3	.15	7.8	2	.04	4.8	2	.03
24	18	2	.10	7.8	2	.04	4.8	2	.03
25	17	2	.09	7.8	2	.04	4.8	2	.03
26	17	2	.09	7.4	1	.02	5.1	2	.03
27	15	2	.08	7.1	1	.02	6.4	2	.03
28	15	2	.08	7.1	1	.02	6.7	2	.04
29	14	2	.08	6.7	1	.02	11	2	.06
30	14	2	.08	7.4	2	.04	21	2	.11
31	14	2	.08	8.5	2	.05	--	--	--
TOTAL	871	--	6.77	293.0	--	.90	204.7	--	.83
TOTAL DISCHARGE FOR YEAR (CFS-DAYS)									113362.1
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)									546405.22

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL	SUS. SED. FALL
						DIAM. % FINER THAN .002 MM	DIAM. % FINER THAN .004 MM	DIAM. % FINER THAN .008 MM	DIAM. % FINER THAN .016 MM	DIAM. % FINER THAN .031 MM	DIAM. % FINER THAN .062 MM
NOV.											
09...	1640	11.5	856	1340	3100	33	45	59	74	86	94
25...	1500	10.0	1160	2690	8430	31	41	52	65	76	86
30...	1630	6.5	1350	1920	7000	28	31	40	50	59	--
DEC.											
03...	1415	5.0	3180	3890	33400	28	32	44	54	67	75
03...	1620	5.0	4400	5620	66800	32	34	42	56	70	78
07...	1245	7.5	1070	2520	7280	25	35	46	59	73	84
29...	0950	4.5	730	811	1600	21	29	38	47	53	62
JAN.											
11...	1420	4.5	562	726	1100	15	23	32	39	45	50
15...	1635	2.5	2300	4850	30100	28	34	45	57	68	77
16...	0850	4.0	4430	5120	61200	21	28	38	48	59	67
16...	1425	4.5	6930	9060	170000	21	28	37	48	59	68
17...	0930	5.5	2940	4100	32500	21	30	39	52	63	72
17...	1430	6.0	3730	4250	42800	20	24	38	53	66	75
18...	1300	7.5	2060	3770	21000	21	29	39	52	62	72
29...	1255	6.5	575	460	714	--	--	--	--	--	--
MAR.											
12...	1000	5.5	3380	6990	63800	25	26	34	46	58	68
12...	1245	6.0	5450	6650	97900	26	28	37	50	62	70
12...	1715	5.5	5180	3570	49900	22	30	41	52	63	72
13...	0950	4.5	814	1670	3670	18	26	34	43	50	56
23...	0925	7.5	1560	2160	9100	20	27	37	46	56	--
27...	1445	7.5	1050	1740	4930	15	22	30	38	44	49

## EEL RIVER BASIN

11472900 BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

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. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
NOV.											
09...	--	98	--	100	--	--	--	--	--	--	--
25...	--	88	--	95	--	97	--	100	--	--	--
30...	66	--	69	--	78	--	87	--	96	--	100
DEC.											
03...	--	79	--	91	--	98	--	100	--	--	--
03...	--	85	--	96	--	100	--	--	--	--	--
07...	--	86	--	92	--	97	--	99	--	100	--
29...	--	63	--	71	--	89	--	100	--	--	--
JAN.											
11...	--	53	--	57	--	61	--	89	--	100	--
15...	--	83	--	94	--	99	--	100	--	--	--
16...	--	75	--	88	--	99	--	100	--	--	--
16...	--	79	--	92	--	99	--	100	--	--	--
17...	--	79	--	91	--	100	--	--	--	--	--
17...	--	80	--	92	--	99	--	100	--	--	--
18...	--	78	--	89	--	98	--	100	--	--	--
29...	62	--	65	--	72	--	86	--	96	--	100
MAR.											
12...	--	77	--	93	--	99	--	100	--	--	--
12...	--	75	--	91	--	99	--	100	--	--	--
12...	--	75	--	89	--	99	--	100	--	--	--
13...	--	58	--	67	--	91	--	100	--	--	--
23...	63	--	65	--	74	--	86	--	96	--	100
27...	--	50	--	55	--	68	--	84	--	100	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM
UCT.								
04...	1300	--	5	2.5	1	2	5	10
MAR.								
03...	1315	6.5	5	213	1	6	20	27

DATE	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 128 MM
UCT.							
04...	15	23	36	60	76	94	100
MAR.							
03...	35	56	62	83	96	100	--

## 11473000 MIDDLE FORK EEL RIVER BELOW BLACK BUTTE RIVER, NEAR COVELO, CALIF.

LOCATION.--Lat 39°49'35", long 123°05'30", in NW¼ sec.28, T.23 N., R.11 W., Mendocino County, temperature recorder at site of former gaging station, 0.2 mile downstream from Black Butte River, and 8.6 miles east of Covelo.

DRAINAGE AREA.--367 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1964 to September 1966.

Water temperatures: July to November 1961, October 1962 to September 1971.

Sediment records: October 1962 to September 1967.

Turbidity: Water years 1965-67 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 28.5°C Aug. 11; minimum, 2.5°C Jan. 15.

Period of record:

Water temperatures (1962-63, 1965-66, 1967-68, 1969-71): Maximum, 28.5°C Aug. 11, 1971; minimum (1969-71), 2.5°C Jan. 15, 1971.

REMARKS.--Recorder stopped Oct. 1-14, Oct. 30 to Jan. 14, Sept. 4-11, 27-30.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	--	--	7.0	6.5	5.5	4.5
2	--	--	--	--	--	--	--	--	7.0	6.5	6.0	4.5
3	--	--	--	--	--	--	--	--	6.5	5.5	7.0	5.5
4	--	--	--	--	--	--	--	--	6.0	5.5	7.0	6.0
5	--	--	--	--	--	--	--	--	7.0	6.0	6.5	5.0
6	--	--	--	--	--	--	--	--	7.5	6.5	6.5	5.0
7	--	--	--	--	--	--	--	--	7.0	6.0	6.5	5.5
8	--	--	--	--	--	--	--	--	6.5	6.0	7.0	5.5
9	--	--	--	--	--	--	--	--	6.5	6.0	6.5	6.0
10	--	--	--	--	--	--	--	--	8.0	6.5	6.0	5.5
11	--	--	--	--	--	--	--	--	8.0	7.0	7.0	6.0
12	--	--	--	--	--	--	--	--	8.0	7.5	7.0	6.5
13	--	--	--	--	--	--	--	--	8.0	7.0	7.0	6.0
14	--	--	--	--	--	--	--	--	7.5	7.0	6.5	6.0
15	19.5	16.0	--	--	--	--	3.0	2.5	8.0	7.0	7.0	6.5
16	19.5	16.0	--	--	--	--	4.0	3.0	7.0	7.0	7.5	7.0
17	18.5	16.5	--	--	--	--	5.0	4.0	7.0	6.5	8.0	6.5
18	19.5	16.5	--	--	--	--	6.5	5.5	6.5	6.0	8.0	6.5
19	17.5	16.5	--	--	--	--	6.5	5.5	6.5	6.0	8.5	6.5
20	18.0	16.5	--	--	--	--	6.5	5.5	6.0	5.0	8.5	7.0
21	16.5	15.5	--	--	--	--	6.0	5.5	6.0	5.0	8.0	6.5
22	15.5	14.5	--	--	--	--	5.5	5.0	6.5	6.0	7.5	7.5
23	15.0	13.5	--	--	--	--	5.5	5.0	7.0	6.0	8.0	7.5
24	14.0	12.5	--	--	--	--	5.5	4.5	7.0	6.5	8.0	7.0
25	14.5	13.0	--	--	--	--	5.5	4.5	6.5	5.5	8.0	7.5
26	14.5	12.0	--	--	--	--	6.0	5.5	5.5	4.5	8.0	7.0
27	14.0	11.5	--	--	--	--	6.0	5.5	5.0	4.5	7.5	6.0
28	14.0	11.5	--	--	--	--	6.5	6.0	5.5	4.5	8.5	6.5
29	14.5	11.5	--	--	--	--	6.5	6.0	--	--	8.5	7.0
30	--	--	--	--	--	--	7.0	6.5	--	--	8.5	7.0
31	--	--	--	--	--	--	7.0	6.5	--	--	7.5	6.0
AVE	--	--	--	--	--	--	--	--	6.8	6.1	7.3	6.2

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	6.0	10.5	10.0	12.0	11.5	21.5	18.0	27.0	23.0	22.0	20.5
2	9.0	7.0	10.0	10.0	13.0	11.0	21.5	18.5	27.0	23.0	23.0	20.5
3	9.0	7.0	10.0	9.5	14.0	11.5	22.5	19.0	26.5	23.0	23.5	20.0
4	9.5	7.5	12.0	9.5	15.5	12.0	22.0	19.0	26.5	23.0	--	--
5	9.5	7.5	12.0	10.5	16.0	13.0	22.5	19.0	26.5	22.5	--	--
6	9.0	8.0	12.0	10.0	16.5	13.5	22.5	19.0	26.5	22.5	--	--
7	8.5	8.0	12.5	11.0	16.5	14.0	22.5	19.5	26.5	22.5	--	--
8	8.0	7.5	11.5	11.0	16.5	14.0	22.5	19.0	26.5	22.5	--	--
9	8.5	8.0	13.5	11.0	15.5	14.5	22.5	19.5	27.5	22.5	--	--
10	8.0	7.0	14.0	11.0	17.0	14.0	22.0	19.0	28.0	23.0	--	--
11	8.5	6.5	13.0	11.5	17.0	14.0	22.0	18.5	28.5	23.5	--	--
12	9.5	7.0	13.0	11.0	16.5	15.5	23.0	19.0	28.0	23.5	24.0	20.0
13	9.0	8.5	13.0	11.5	17.5	14.5	23.5	19.5	27.5	23.5	24.5	20.0
14	10.5	8.0	13.0	11.0	18.0	14.5	24.5	20.0	26.5	22.5	25.0	20.5
15	10.0	8.5	13.0	11.0	19.0	15.5	25.0	20.5	26.0	22.5	25.0	20.0
16	9.5	8.5	12.0	10.0	19.5	16.0	26.0	21.0	26.5	22.5	25.0	20.0
17	9.0	8.0	12.5	10.0	19.0	17.0	25.5	21.5	26.5	22.5	24.5	20.0
18	9.0	7.0	13.5	10.5	19.0	17.0	26.0	22.5	26.5	22.5	23.5	18.0
19	10.0	8.0	14.0	12.0	20.5	17.0	27.0	22.5	26.5	22.5	22.0	18.5
20	9.0	8.0	14.0	11.5	21.0	17.5	27.0	22.5	25.5	22.5	22.0	18.5
21	8.5	6.5	12.5	10.5	21.0	17.5	27.0	22.5	26.0	22.5	22.5	18.0
22	8.5	7.5	14.5	11.0	20.5	17.5	26.5	22.0	25.5	23.0	22.5	18.5
23	8.5	7.5	15.5	12.5	21.0	18.0	27.0	22.5	26.0	22.0	22.0	18.0
24	8.5	7.0	16.0	13.0	20.5	18.0	26.5	22.5	26.5	22.0	22.0	18.5
25	9.5	7.0	14.5	13.0	19.0	17.5	26.5	22.5	26.0	22.5	20.5	18.0
26	11.0	8.5	13.5	12.0	18.0	17.0	26.5	23.0	26.5	22.5	19.5	18.0
27	11.5	9.5	13.5	11.5	19.5	16.5	26.5	22.5	26.5	22.5	--	--
28	11.5	9.5	13.0	12.5	19.5	16.0	27.0	22.5	24.5	22.0	--	--
29	11.5	9.5	15.0	12.0	20.5	16.5	26.5	22.5	25.0	21.5	--	--
30	12.0	9.5	14.0	12.5	21.0	17.0	26.5	23.0	21.5	21.0	--	--
31	--	--	13.0	11.0	--	--	26.5	23.0	23.5	21.0	--	--
AVE	9.4	7.8	13.0	11.1	18.0	15.3	24.7	20.8	26.3	22.5	--	--

## EEL RIVER BASIN

11473800 ELK CREEK NEAR HEARST, CALIF.

LOCATION.--Lat 39°38'50", long 123°07'13", in NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.30, T.21 N., R.11 W., Mendocino County, at gaging station 900 ft upstream from small left-bank tributary, and 13.5 miles northeast of Hearst.

DRAINAGE AREA.--84.1 sq.mi.

PERIOD OF RECORD.--Water temperatures: October 1964 to September 1971.

Sediment records: Water years 1966-71 (partial-record station).

Turbidity: Water year 1967 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 30.0°C Aug. 11, 12; minimum, 3.5°C Jan. 3-5.

Period of record:

Water temperatures (1965-67, 1968-71): Maximum (1965-67, 1968-69, 1970-71), 34.5°C Aug. 2, 1967; minimum (1966-67, 1969-71), 1.0°C Jan. 3, 6-8, 1970.

REMARKS.--Probe inoperative Oct. 1 to Nov. 6; recorder stopped Feb. 8 to May 5, May 10 to July 21; recorder malfunction Sept. 25, 26. Where no maximum or minimum is shown, temperature is once daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	--	--	--	--	9.5	8.5	8.5	7.5	8.5	6.5	--	--
2	--	--	--	--	9.0	8.0	7.5	5.0	8.5	7.5	--	--
3	--	--	--	--	9.5	8.0	6.0	3.5	8.5	6.0	--	--
4	--	--	--	--	10.5	9.5	6.0	3.5	8.0	6.0	--	--
5	--	--	--	--	11.0	10.0	6.5	3.5	8.5	6.5	--	--
6	--	--	--	--	11.0	10.0	6.5	4.0	10.0	8.0	--	--
7	--	--	14.0	12.0	10.5	10.0	7.0	4.0	9.0	6.5	--	--
8	--	--	15.0	13.0	10.0	9.0	7.5	5.0	--	--	--	--
9	--	--	14.5	12.5	9.0	8.5	7.5	5.5	--	--	--	--
10	--	--	13.5	11.0	9.0	7.5	7.5	7.0	--	--	--	--
11	--	--	14.5	12.5	9.5	8.5	7.5	7.0	--	--	--	--
12	--	--	14.0	11.0	8.5	6.5	7.5	5.5	--	--	--	--
13	--	--	12.5	9.0	8.0	6.5	6.5	4.5	--	--	--	--
14	--	18.5	12.5	9.5	8.5	7.5	8.0	5.5	--	--	--	--
15	--	--	11.5	9.5	8.5	7.5	7.5	6.0	--	--	--	--
16	--	--	14.0	11.0	8.5	7.0	8.5	7.5	--	--	--	--
17	--	--	13.5	9.0	7.5	6.5	9.5	8.5	--	--	--	--
18	--	--	13.5	8.5	7.0	6.0	10.5	9.5	--	--	--	--
19	--	--	13.0	9.0	6.0	4.5	10.0	8.0	--	--	--	--
20	--	--	12.5	8.0	6.5	4.5	10.0	8.0	--	--	--	--
21	--	--	12.5	10.0	7.0	6.5	8.0	6.5	--	--	--	--
22	--	--	12.5	11.5	7.0	6.0	8.0	6.0	--	--	--	--
23	--	--	13.0	12.0	7.5	6.5	8.0	6.5	--	--	--	--
24	--	--	14.0	12.5	7.5	6.0	8.0	7.0	--	--	--	--
25	--	--	14.5	11.5	6.5	5.0	7.5	6.0	--	--	--	--
26	--	--	11.5	9.5	6.0	5.5	8.0	6.0	--	--	--	--
27	--	--	10.5	9.5	7.0	6.0	8.0	6.5	--	--	--	--
28	--	--	10.0	9.0	7.5	7.0	8.0	6.0	--	--	--	--
29	--	--	10.0	9.5	8.0	7.5	8.0	6.0	--	--	--	--
30	--	--	9.5	8.0	8.5	7.5	8.5	6.0	--	--	--	--
31	--	--	--	--	9.0	8.0	8.5	6.5	--	--	--	--
AVE	--	--	12.8	10.4	8.4	7.3	7.9	6.0	--	--	--	--
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	--	--	--	--	--	--	--	--	28.0	21.5	24.0	19.0
2	--	--	--	--	--	--	--	--	28.5	21.5	24.0	19.5
3	--	--	--	--	--	--	--	--	28.0	21.5	24.5	17.5
4	--	--	--	--	--	--	--	--	28.0	22.0	24.5	18.0
5	--	--	--	--	--	--	--	--	27.5	21.5	25.0	18.5
6	--	--	10.5	9.5	--	--	--	--	27.5	21.0	23.5	19.5
7	--	--	12.0	10.0	--	--	--	--	28.0	21.0	24.5	17.5
8	--	--	12.5	10.0	--	--	--	--	28.5	21.0	24.0	17.5
9	--	--	11.5	10.0	--	--	--	--	28.5	21.0	24.5	18.0
10	--	--	--	--	--	--	--	--	29.5	22.0	24.5	18.0
11	--	--	--	--	--	--	--	--	30.0	23.0	24.0	18.5
12	--	--	--	--	--	--	--	--	30.0	23.0	24.0	18.5
13	--	--	--	--	--	--	--	--	29.0	23.0	25.5	19.0
14	--	--	--	--	--	--	--	--	28.5	21.5	26.5	19.0
15	--	--	--	--	--	--	--	--	27.5	21.0	25.5	19.0
16	--	--	--	--	21.5	--	--	--	27.5	20.5	25.0	19.0
17	--	--	--	--	--	--	--	--	27.0	20.5	24.5	18.5
18	--	--	--	--	--	--	--	--	27.5	20.5	24.5	18.0
19	--	--	--	--	--	--	--	--	27.5	21.0	23.0	17.0
20	--	--	--	--	--	--	--	--	26.5	20.5	23.5	17.0
21	--	9.5	--	--	--	--	22.0	--	26.0	21.0	23.0	17.0
22	--	--	--	--	--	--	29.0	21.0	27.5	22.0	23.0	16.5
23	--	--	--	--	--	--	29.5	21.5	27.0	20.5	22.5	16.5
24	--	--	--	--	--	--	29.0	21.5	27.5	20.5	22.5	16.5
25	--	--	--	--	--	--	29.0	21.5	26.5	21.5	--	17.0
26	--	--	--	--	--	--	29.0	22.0	28.0	21.5	--	--
27	--	--	--	--	--	--	28.0	21.5	27.0	21.5	20.0	15.0
28	--	--	--	--	--	--	28.5	21.0	24.5	20.5	19.0	15.5
29	--	--	--	--	--	--	28.5	21.5	25.5	19.5	16.5	15.0
30	--	--	--	--	--	--	28.0	22.0	21.5	19.0	20.0	14.5
31	--	--	--	--	--	--	28.0	21.5	24.5	19.0	--	--
AVE	--	--	--	--	--	--	--	--	27.4	21.1	23.4	17.6

## 11473800 ELK CREEK NEAR HEARST, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT 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
OCT. 14...	1120	18.0	.81	1	.00	--	--	--
NOV. 18...	1115	10.0	23	2	.12	--	--	--
JAN. 21...	1400	6.5	715	622	1200	22	33	40
APR. 21...	1055	9.5	181	17	8.3	--	--	--
MAY 06...	0930	10.5	120	5	1.6	--	--	--
JUNE 16...	1230	21.5	31	2	.17	--	--	--
JULY 21...	0755	22.0	5.8	2	.03	--	--	--
AUG. 18...	0925	20.5	2.2	2	.01	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL 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 1.00 MM
OCT. 14...	--	--	--	--	--	--	--
NOV. 18...	--	--	--	--	--	--	--
JAN. 21...	48	53	59	62	67	80	100
APR. 21...	--	--	--	--	--	--	--
MAY 06...	--	--	--	--	--	--	--
JUNF 16...	--	--	--	--	--	--	--
JULY 21...	--	--	--	--	--	--	--
AUG. 18...	--	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
DEC. 22...	1530	6.0	5	209	1	1	3	7

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
DEC. 22...	10	15	21	30	45	71	100

## 11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.

LOCATION.--Lat 39°42'23", long 123°19'27", in NE¼SE¼ sec.5, T.21 N., R.13 W., Mendocino County, at gaging station 0.6 mile upstream from Eastman Creek, 1.7 miles southeast of Dos Rios, and 1.9 miles upstream from mouth.

DRAINAGE AREA.--745 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1966. Published as "at Dos Rios" in 1958-65.

Specific conductance: October 1966 to September 1967.

Water temperatures: October 1957 to September 1959, October 1960 to September 1971.

Sediment records: Water years 1956-57 (partial-record station), October 1957 to September 1971.

Turbidity: Water years 1965-68 (partial-record station).

## EXTREMES.--1970-71:

Water temperatures: Minimum, 3.0°C Jan. 4, 6, 7.

Sediment concentrations: Maximum daily, 5,170 mg/l Jan. 16; minimum daily, 1 mg/l on many days.

Sediment discharge: Maximum daily, 638,000 tons Jan. 16; minimum daily, 0.02 ton on several days.

## Period of record:

Water temperatures (1968-71): Minimum, freezing point Dec. 22, 1968.

Sediment concentrations: Maximum daily, 11,800 mg/l Jan. 4, 1966; minimum daily, 1 mg/l on many days in

1965-71.

Sediment discharge: Maximum daily, 1,430,000 tons Jan. 4, 1966; minimum daily, 0.02 ton on several days in 1970.

REMARKS.--No thermograph record Oct. 1 to Jan. 4, May 20 to June 2, July 21 to Aug. 23, probe inoperative; Apr. 7, 8, recorder stopped; Aug. 31, Sept. 30, recorder malfunction. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	--	--	--	13.0	--	7.5	--	8.0	--	8.5	--	6.5
2	--	19.5	--	12.0	--	9.5	--	5.0	--	8.0	--	6.5
3	--	--	--	13.0	--	7.0	--	4.0	--	7.5	--	5.5
4	--	--	--	13.0	--	8.0	--	3.0	--	7.0	--	5.5
5	--	15.5	--	13.0	--	9.0	--	4.5	--	4.0	--	8.5
6	--	--	--	12.0	--	9.0	--	4.5	--	3.0	--	9.0
7	--	15.5	--	12.0	--	10.0	--	5.0	--	3.0	--	9.0
8	--	--	--	12.0	--	8.0	--	5.5	--	4.0	--	8.0
9	--	15.5	--	12.0	--	7.0	--	6.0	--	5.0	--	8.5
10	--	--	--	10.0	--	5.0	--	7.0	--	6.0	--	9.5
11	--	--	--	12.0	--	7.0	--	7.0	--	6.0	--	9.5
12	--	16.0	--	13.0	--	7.0	--	6.0	--	4.0	--	9.5
13	--	--	--	11.0	--	5.0	--	4.0	--	3.5	--	10.0
14	--	15.0	--	12.0	--	6.0	--	5.0	--	4.0	--	9.5
15	--	--	--	12.0	--	7.0	--	6.0	--	5.0	--	9.5
16	--	15.0	--	13.0	--	7.0	--	7.0	--	6.0	--	9.0
17	--	--	--	10.0	--	5.0	--	7.0	--	6.5	--	8.0
18	--	18.0	--	10.0	--	7.0	--	7.0	--	5.5	--	8.0
19	--	--	--	9.0	--	4.0	--	7.5	--	6.0	--	7.5
20	--	16.0	--	8.0	--	4.0	--	7.5	--	6.5	--	7.0
21	--	14.0	--	10.0	--	5.0	--	8.0	--	5.5	--	7.0
22	--	14.0	--	10.0	--	5.0	--	7.0	--	5.5	--	7.5
23	--	15.0	--	11.0	--	7.0	--	7.0	--	5.5	--	8.0
24	--	12.0	--	12.0	--	5.0	--	7.5	--	5.5	--	8.0
25	--	13.0	--	11.0	--	3.0	--	7.0	--	5.0	--	7.5
26	--	13.0	--	8.0	--	4.0	--	7.5	--	5.5	--	7.0
27	--	13.0	--	9.0	--	6.0	--	8.0	--	6.5	--	6.5
28	--	16.0	--	7.0	--	7.0	--	8.0	--	6.0	--	6.0
29	--	14.0	--	8.0	--	7.0	--	8.0	--	6.0	--	--
30	--	12.0	--	8.0	--	7.0	--	8.0	--	6.0	--	--
31	--	14.0	--	--	--	8.0	--	8.5	--	6.5	--	--
AVE	--	--	--	10.9	--	6.5	--	6.7	--	5.2	--	8.2



## 11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR			MAY			JUN			JUL			AUG			SEP		
	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN
1	10.5	--	8.0	14.5	--	12.0	--	--	--	23.5	--	18.5	--	--	--	26.0	--	21.0
2	11.5	--	9.0	12.5	--	11.5	--	15.0	--	23.5	--	18.5	--	--	--	27.5	--	19.0
3	12.0	--	9.0	12.5	--	11.5	18.0	--	15.5	25.0	--	19.5	--	--	--	26.5	--	19.0
4	12.5	--	9.5	15.5	--	11.5	20.5	--	14.5	22.5	--	18.5	--	--	--	23.5	--	19.5
5	12.5	--	9.5	15.0	--	12.5	21.5	--	19.5	22.5	--	19.0	--	--	--	24.0	--	19.0
6	12.0	--	10.0	15.5	--	11.5	20.5	--	15.5	23.0	--	19.0	--	--	--	22.5	--	19.0
7	--	10.0	--	16.5	--	13.0	21.5	--	16.5	23.5	--	19.0	--	--	--	23.5	--	18.5
8	--	8.0	--	15.0	--	12.5	22.5	--	16.5	22.5	--	18.5	--	26.0	--	23.5	--	18.0
9	11.5	--	10.0	17.0	--	12.5	19.5	--	16.5	26.5	--	20.5	--	--	--	24.0	--	18.0
10	11.0	--	9.0	17.5	--	13.0	22.0	--	17.5	22.5	--	19.5	--	--	--	24.0	--	18.5
11	11.5	--	8.5	16.0	--	13.5	20.5	--	16.5	22.5	--	18.5	--	--	--	25.0	--	19.0
12	12.5	--	9.0	15.5	--	13.0	22.5	--	17.0	23.0	--	18.5	--	--	--	25.5	--	20.0
13	12.5	--	10.5	16.5	--	13.5	23.0	--	17.0	23.0	--	19.5	--	--	--	25.5	--	20.0
14	13.0	--	10.0	17.0	--	12.5	22.5	--	17.5	25.0	--	20.5	--	--	--	25.5	--	20.0
15	13.5	--	10.5	16.0	--	13.0	22.5	--	17.5	25.5	--	20.5	--	23.0	--	25.0	--	19.5
16	12.5	--	11.0	14.5	--	11.5	20.5	--	17.5	26.0	--	21.0	--	--	--	24.5	--	19.0
17	11.0	--	9.5	15.5	--	11.0	22.0	--	17.0	25.0	--	21.0	--	--	--	24.5	--	19.0
18	11.5	--	8.5	16.5	--	11.5	21.5	--	17.5	26.0	--	21.5	--	--	--	23.5	--	18.0
19	12.5	--	9.0	14.5	--	12.0	25.5	--	20.5	27.5	--	22.0	--	--	--	22.5	--	17.5
20	11.5	--	10.0	--	--	--	27.0	--	20.5	26.0	--	22.0	--	--	--	22.5	--	17.0
21	11.0	--	8.0	--	15.0	--	22.0	--	19.0	--	--	--	--	--	--	22.5	--	17.0
22	10.5	--	9.0	--	--	--	23.5	--	18.5	--	--	--	--	--	--	22.5	--	17.0
23	10.5	--	9.0	--	15.0	--	22.5	--	20.0	--	--	--	--	24.0	--	22.5	--	17.0
24	11.0	--	8.0	--	16.5	--	23.5	--	19.0	--	26.5	--	25.0	--	21.5	22.0	--	17.0
25	13.0	--	8.0	--	17.0	--	22.5	--	18.5	--	--	--	24.0	--	20.5	20.5	--	16.5
26	13.0	--	10.0	--	16.0	--	--	20.0	--	--	--	--	25.5	--	20.5	21.0	--	16.5
27	15.0	--	10.5	--	--	--	--	--	--	--	--	--	25.5	--	20.5	20.0	--	15.5
28	14.5	--	11.5	--	14.0	--	22.0	--	17.5	--	--	--	23.5	--	19.5	19.0	--	15.5
29	15.0	--	11.0	--	--	--	23.5	--	18.5	--	--	--	25.0	--	19.0	19.5	--	17.0
30	15.0	--	11.5	--	14.0	--	22.5	--	18.5	--	--	--	23.0	--	19.0	--	16.5	--
31	--	--	--	--	--	--	--	--	--	--	23.0	--	--	--	--	--	--	--
AVE	12.3	--	9.5	--	--	--	22.1	--	17.5	--	--	--	--	--	--	23.4	--	18.2

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	7.9	1	.02	33	3	.27	5140	846	12500
2	7.9	1	.02	33	2	.18	7400	1360	28800
3	7.9	1	.02	33	2	.18	19100	3300	301000
4	7.9	1	.02	64	7	1.2	27100	4210	360000
5	7.9	1	.02	1110	607	2800	9440	1960	50000
6	7.9	1	.02	1240	370	1240	8330	1500	33700
7	7.9	2	.04	1020	140	386	9920	2250	73800
8	7.2	2	.04	508	60	82	11300	1940	61100
9	7.2	1	.02	3980	2030	28000	7830	1260	26600
10	7.2	1	.02	3070	1170	11300	4680	822	10400
11	7.2	1	.02	1570	522	2430	3240	525	4590
12	7.9	1	.02	2400	738	5010	2480	400	2680
13	7.9	1	.02	1300	175	614	2050	300	1660
14	7.9	1	.02	800	82	177	1750	280	1320
15	7.9	2	.04	550	40	59	1940	419	3240
16	7.9	2	.04	442	22	26	5840	1140	18500
17	7.2	2	.04	358	20	19	3720	525	5270
18	9.3	1	.03	285	18	14	2790	362	2730
19	11	1	.03	240	9	5.8	2320	250	1570
20	20	1	.05	202	11	6.0	2150	195	1130
21	34	1	.09	182	10	4.9	2260	200	1220
22	59	7	1.1	170	6	2.8	1960	160	847
23	89	23	5.5	206	35	19	1740	122	573
24	194	56	33	2570	872	11000	1580	98	418
25	128	1	.35	7090	1540	30900	1390	80	300
26	74	1	.20	4860	910	11900	1320	75	267
27	54	1	.15	7600	1870	59700	1340	90	326
28	47	1	.13	9530	1820	56900	2810	971	15400
29	42	2	.23	4240	921	11200	7330	1360	30800
30	38	2	.21	6130	1410	23500	3360	400	3630
31	35	2	.19	--	--	--	2550	310	2130
TOTAL	965.1	--	41.70	61816	--	257297.33	166160	--	1056501

## EEL RIVER BASIN

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	2440	270	1780	2540	325	2230	797	40	86
2	2450	265	1750	2520	295	2010	743	32	64
3	1930	180	938	2270	220	1350	779	38	60
4	1720	130	604	1950	175	921	870	52	122
5	1600	142	613	1690	170	776	752	35	71
6	1470	70	278	1600	142	613	680	32	59
7	1360	60	220	1500	125	506	664	30	54
8	1340	21	76	1390	125	469	664	25	45
9	1380	75	279	1300	120	421	616	17	28
10	2800	550	5170	1290	95	331	592	30	48
11	4550	580	7130	1840	230	1140	1170	220	695
12	3800	462	4740	2760	480	3580	20200	4430	300000
13	3150	340	2890	2990	515	4160	9470	1720	50500
14	4020	485	5260	2780	455	3420	5020	720	9760
15	14200	2520	134000	2700	308	2250	3790	595	6090
16	43300	5170	638000	2490	198	1330	3220	513	4600
17	33200	4320	401000	2160	175	1020	3590	558	5580
18	26500	3590	266000	1830	135	667	2800	390	2950
19	13700	2100	77700	1680	125	567	2490	320	2150
20	8770	1420	33600	1440	95	369	2320	300	1880
21	6140	998	16500	1290	90	313	2170	255	1490
22	4800	865	11200	1170	75	237	2010	180	977
23	4000	810	8750	1090	60	177	9930	2070	62800
24	3450	710	6610	990	60	160	7940	1420	30400
25	3050	405	3340	1040	55	154	9930	1640	55000
26	2760	310	2310	900	45	109	32700	3390	336000
27	2550	300	2070	900	50	122	10300	1540	42800
28	2320	260	1630	870	38	89	6860	920	17000
29	2240	255	1540	--	--	--	5520	725	10800
30	2280	310	1910	--	--	--	4700	595	7550
31	2460	350	2320	--	--	--	3790	520	5320
TOTAL	209730	--	1640208	48970	--	29491	157077	--	954999

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	3180	478	4100	2090	125	705	779	21	44
2	2840	308	2360	2040	118	650	725	15	29
3	2590	233	1630	1960	100	529	664	12	22
4	2460	240	1590	1900	90	462	648	10	17
5	2460	220	1460	2080	185	1040	648	10	17
6	2520	220	1500	1960	122	646	672	20	36
7	2460	212	1410	1980	155	829	672	25	45
8	2160	120	700	2080	190	1070	672	30	54
9	2270	224	1670	1950	120	632	664	25	45
10	4520	808	10500	1980	122	652	616	20	33
11	3200	250	2160	2040	110	606	592	15	24
12	2800	208	1570	2090	170	959	544	10	15
13	2760	195	1450	2090	120	677	506	7	9.6
14	3150	312	2650	1830	95	469	478	5	6.5
15	3050	210	1730	1680	100	454	450	10	12
16	2960	128	1020	1560	75	316	438	8	9.5
17	3160	292	2490	1370	70	259	426	7	8.1
18	2830	190	1450	1260	65	221	385	6	6.2
19	2680	132	955	1230	68	226	358	6	5.8
20	2640	135	962	1180	60	191	336	5	4.5
21	2520	110	748	1140	46	142	306	5	4.1
22	2330	115	723	1060	53	152	281	4	3.0
23	2510	170	1150	1070	60	173	261	3	2.1
24	2270	95	582	1130	58	177	241	3	2.0
25	2080	72	404	1200	41	133	227	3	1.8
26	1960	90	476	1170	44	139	261	5	3.5
27	1930	98	511	1010	50	136	311	8	6.7
28	2000	100	540	1140	85	262	251	5	3.4
29	2060	102	567	1080	60	175	218	4	2.4
30	2040	130	716	1030	42	117	196	3	1.6
31	--	--	--	880	31	74	--	--	--
TOTAL	78390	--	49774	48260	--	13273	13826	--	473.8

## 11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	184	3	1.5	38	1	.10	23	2	.12
2	173	3	1.4	37	1	.10	23	2	.12
3	165	3	1.3	35	1	.09	22	2	.12
4	153	3	1.2	34	1	.09	22	3	.18
5	146	2	.79	32	2	.17	21	3	.17
6	139	2	.75	31	2	.17	20	3	.16
7	133	2	.72	31	2	.17	19	3	.15
8	126	2	.68	30	2	.16	19	3	.15
9	119	2	.64	29	2	.16	18	3	.15
10	116	2	.63	28	2	.15	18	3	.15
11	110	2	.59	28	2	.15	18	2	.10
12	105	3	.85	29	2	.16	18	2	.10
13	99	3	.80	27	2	.15	17	2	.09
14	93	3	.75	24	2	.13	16	2	.09
15	88	3	.71	23	2	.12	16	2	.09
16	83	3	.67	22	2	.12	15	2	.08
17	78	3	.63	21	2	.11	15	2	.08
18	73	2	.39	21	2	.11	14	3	.11
19	71	2	.38	20	2	.11	13	3	.11
20	66	2	.36	20	2	.11	13	4	.14
21	66	2	.36	20	2	.11	13	4	.14
22	60	2	.32	20	2	.11	13	5	.18
23	58	1	.16	20	2	.11	13	3	.11
24	55	1	.15	20	2	.11	13	3	.11
25	51	1	.14	20	2	.11	13	3	.11
26	49	1	.13	20	2	.11	13	2	.07
27	47	1	.13	19	2	.10	14	2	.08
28	44	1	.12	18	2	.10	15	1	.04
29	43	1	.12	18	2	.10	19	1	.05
30	41	1	.11	19	2	.10	30	2	.16
31	40	1	.11	21	2	.11	--	--	--
TOTAL	2874	--	17.59	775	--	3.80	516	--	3.51
TOTAL DISCHARGE FOR YEAR (CFS-DAYS)									789359.1
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)									4002083.73

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	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
NOV.										
07...	1330	12.0	888	126	302	--	--	--	--	--
09...	1005	12.0	2890	1470	11500	19	27	37	49	60
10...	1045	10.0	2840	1060	8130	17	23	28	33	38
25...	1020	11.0	5720	1290	19900	25	35	44	54	64
28...	1015	7.0	10100	1770	48300	24	27	36	46	56
DEC.										
03...	1115	7.0	12200	3900	128000	23	26	37	47	58
04...	0950	8.0	26500	3960	283000	23	28	40	50	60
JAN.										
07...	1040	4.0	1370	66	244	--	--	--	--	--
16...	1040	--	35600	3740	359000	19	28	35	47	58
18...	1040	--	28000	3440	260000	20	30	40	53	65
FEB.										
04...	1055	5.5	1950	179	942	--	--	--	--	--
MAR.										
12...	1045	7.5	22500	6010	365000	17	20	29	40	49
25...	1320	9.0	7780	1360	28600	16	24	32	41	46
26...	0850	8.5	40400	3830	418000	20	22	37	50	62
APR.										
06...	1255	10.5	2590	206	1440	12	28	40	52	61

## EEL RIVER BASIN

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL 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 2.00 MM
NOV.										
07...	--	85	--	85	--	88	--	100	--	--
09...	69	--	75	--	85	--	96	--	100	--
10...	41	--	43	--	46	--	53	--	88	100
25...	72	--	77	--	86	--	99	--	100	--
28...	63	--	70	--	82	--	94	--	100	--
DEC.										
03...	67	--	76	--	91	--	99	--	100	--
04...	70	--	77	--	90	--	99	--	100	--
JAN.										
07...	--	82	--	83	--	88	--	100	--	--
16...	66	--	73	--	86	--	95	--	100	--
18...	75	--	80	--	90	--	98	--	100	--
FEB.										
04...	--	82	--	84	--	86	--	100	--	--
MAR.										
12...	57	--	66	--	86	--	98	--	99	100
25...	57	--	63	--	78	--	96	--	100	--
26...	70	--	78	--	92	--	99	--	100	--
APR.										
06...	66	--	70	--	76	--	97	--	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM
APR. 06...	1210	10.5	5	2590	1	2	10

DATE	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
APR. 06...	26	42	53	74	84	100

## 11475000 EEL RIVER AT FORT SEWARD, CALIF.

LOCATION.--Lat 40°13'05", long 123°37'54", in SE¼NE¼ sec.8, T.3 S., R.5 E., Humboldt County, at gaging station at bridge, 1.0 mile southeast of Fort Seward, 1.9 miles upstream from Dobbys Creek, and 11.8 miles northeast of Garberville.

DRAINAGE AREA.--2,107 sq mi.

PERIOD OF RECORD.--Water temperatures: November 1960 to September 1971.

Sediment records: October 1965 to September 1971.

Turbidity: Water years 1966-68, 1971 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 29.0°C July 21, 22; minimum, 4.5°C on several days during January.

Sediment concentrations: Maximum daily, 5,410 mg/l Jan. 16; minimum daily, 1 mg/l Sept. 18.

Sediment discharge: Maximum daily, 1,800,000 tons Jan. 16; minimum daily, 0.12 ton Oct. 6-8, Sept. 18.

Period of record:

Water temperatures (1960-64, 1965-71): Maximum, 34.5°C June 25, 1968; minimum, freezing point Dec. 14-17, 1968.

Sediment concentrations: Maximum daily, 13,900 mg/l Jan. 4, 1966; minimum daily, 1 mg/l on many days in 1965-71.

Sediment discharge: Maximum daily, 4,270,000 tons Jan. 4, 1966; minimum daily, 0.06 ton Sept. 23, 24, 1970.

REMARKS.--No thermograph record Oct. 11-28, June 18 to July 20, July 22 to Sept. 3, recorder malfunction; Apr. 7 to June 3, probe inoperative. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	20.5	-- 18.0	16.0	-- 14.0	9.0	-- 8.0	8.0	-- 8.0	8.5	-- 7.5	7.5	-- 5.5
2	20.5	-- 18.0	15.0	-- 14.0	8.5	-- 7.5	8.0	-- 6.5	8.5	-- 7.5	7.5	-- 6.0
3	20.0	-- 18.5	14.5	-- 14.0	8.5	-- 7.5	6.5	-- 5.0	8.5	-- 7.0	8.5	-- 7.0
4	20.0	-- 18.0	14.0	-- 13.5	9.0	-- 8.5	5.0	-- 4.5	7.5	-- 6.0	9.0	-- 7.0
5	20.0	-- 18.0	14.5	-- 13.5	10.0	-- 9.0	5.0	-- 4.5	8.0	-- 7.0	8.5	-- 6.5
6	19.5	-- 17.0	14.0	-- 13.0	10.0	-- 10.0	5.5	-- 4.5	9.5	-- 8.0	9.0	-- 7.0
7	18.0	-- 15.5	13.0	-- 12.0	10.5	-- 10.0	5.5	-- 4.5	9.5	-- 8.0	9.5	-- 8.0
8	19.0	-- 16.0	13.5	-- 13.0	10.0	-- 9.5	6.5	-- 5.0	9.0	-- 7.5	10.0	-- 8.0
9	19.0	-- 17.0	13.5	-- 13.0	9.5	-- 9.0	6.5	-- 6.0	9.0	-- 7.5	9.5	-- 8.0
10	20.0	-- 17.0	13.0	-- 12.0	9.0	-- 8.0	7.0	-- 6.5	9.0	-- 7.5	9.0	-- 7.5
11	-- 18.5	--	13.0	-- 12.5	8.5	-- 8.0	7.5	-- 7.0	9.5	-- 8.0	9.0	-- 8.5
12	--	--	12.5	-- 11.0	9.0	-- 8.0	7.5	-- 6.5	10.0	-- 9.0	8.5	-- 8.0
13	-- 19.0	--	11.0	-- 10.5	8.0	-- 7.5	6.5	-- 4.5	10.0	-- 9.0	9.0	-- 7.5
14	--	--	11.0	-- 10.0	7.5	-- 7.0	6.0	-- 4.5	9.5	-- 9.0	8.0	-- 7.5
15	--	--	10.5	-- 10.0	7.5	-- 7.0	7.0	-- 6.0	10.0	-- 9.0	9.0	-- 7.5
16	--	--	11.5	-- 10.5	8.5	-- 7.5	8.0	-- 7.0	9.5	-- 8.0	9.0	-- 8.5
17	-- 17.5	--	12.0	-- 11.5	8.0	-- 7.5	9.0	-- 8.0	9.0	-- 7.5	9.5	-- 8.5
18	--	--	11.5	-- 11.0	7.5	-- 7.0	9.5	-- 9.0	8.0	-- 7.5	10.0	-- 8.5
19	--	--	11.5	-- 11.0	7.0	-- 7.0	9.5	-- 9.0	8.5	-- 6.0	11.0	-- 9.0
20	-- 17.0	--	12.0	-- 10.5	7.0	-- 6.0	9.5	-- 9.0	8.0	-- 6.5	11.5	-- 9.5
21	-- 14.5	--	12.0	-- 11.0	6.0	-- 5.5	9.0	-- 7.5	8.0	-- 6.5	10.5	-- 9.5
22	-- 15.0	--	11.0	-- 11.0	6.0	-- 5.5	8.0	-- 7.0	7.5	-- 6.5	10.0	-- 9.5
23	-- 14.5	--	12.0	-- 11.0	6.5	-- 6.0	7.5	-- 7.0	8.5	-- 6.5	11.0	-- 10.0
24	-- 14.5	--	13.0	-- 12.0	6.5	-- 6.5	8.0	-- 7.0	8.5	-- 7.0	10.5	-- 10.0
25	-- 14.0	--	12.5	-- 11.0	6.5	-- 6.0	8.0	-- 7.0	8.5	-- 7.0	10.0	-- 9.5
26	-- 14.0	--	11.5	-- 10.0	6.0	-- 5.0	8.0	-- 7.0	8.5	-- 6.5	10.0	-- 9.0
27	-- 14.5	--	10.0	-- 9.5	5.5	-- 5.0	8.5	-- 7.0	7.0	-- 6.0	9.0	-- 8.0
28	-- 15.0	--	9.5	-- 9.0	6.5	-- 5.5	8.5	-- 7.0	7.5	-- 6.0	11.0	-- 9.5
29	13.5	-- 12.5	9.0	-- 9.0	7.0	-- 6.5	8.0	-- 7.0	--	--	12.0	-- 9.5
30	15.0	-- 13.0	9.0	-- 9.0	7.5	-- 7.0	8.0	-- 7.0	--	--	11.0	-- 10.0
31	15.0	-- 13.0	--	--	8.0	-- 7.5	8.0	-- 7.0	--	--	11.0	-- 9.0
AVE	--	--	12.2	-- 11.4	7.9	-- 7.3	7.5	-- 6.5	8.7	-- 7.3	9.6	-- 8.3

## EEL RIVER BASIN

11475000 EEL RIVER AT FORT SEWARD, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	MAX	APR	MIN	MAX	MAY	MIN	MAX	JUN	MIN	MAX	JUL	MIN	MAX	AUG	MIN	MAX	SEP	MIN
		DAILY			DAILY			DAILY			DAILY			DAILY			DAILY	
1	12.0	--	9.5	--	--	--	--	--	--	--	--	--	--	--	--	--	21.5	--
2	13.0	--	10.0	--	13.0	--	--	17.0	--	--	--	--	26.5	--	--	--	--	--
3	14.0	--	11.5	--	13.0	--	--	17.5	--	--	19.5	--	--	--	--	--	--	--
4	13.5	--	11.5	--	14.0	--	19.0	--	16.0	--	--	--	26.5	--	--	24.5	--	19.5
5	13.5	--	12.0	--	15.5	--	20.0	--	17.5	--	22.0	--	--	--	--	25.0	--	20.5
6	12.5	--	11.0	--	16.0	--	21.0	--	18.0	--	--	--	--	--	--	23.5	--	20.0
7	--	12.0	--	--	17.0	--	20.5	--	18.5	--	23.0	--	--	22.0	--	24.0	--	19.0
8	--	11.0	--	--	--	--	20.0	--	18.0	--	--	--	--	--	--	24.5	--	19.0
9	--	10.0	--	--	--	--	19.5	--	18.0	--	--	--	--	21.5	--	24.5	--	20.0
10	--	10.0	--	--	18.5	--	20.5	--	18.0	--	20.0	--	--	--	--	25.0	--	20.5
11	--	10.0	--	--	--	--	21.0	--	18.5	--	--	--	--	26.0	--	25.0	--	21.0
12	--	12.5	--	--	17.5	--	21.0	--	19.0	--	24.0	--	--	--	--	24.5	--	21.0
13	--	12.0	--	--	17.0	--	21.0	--	18.5	--	--	--	--	--	--	24.5	--	21.0
14	--	13.0	--	--	18.5	--	21.0	--	18.5	--	--	--	--	21.5	--	25.0	--	21.0
15	--	14.0	--	--	--	--	21.0	--	18.5	--	25.0	--	--	--	--	25.5	--	21.0
16	--	12.0	--	--	15.0	--	21.5	--	19.0	--	--	--	--	--	--	26.0	--	21.5
17	--	10.0	--	--	--	--	22.0	--	19.5	--	22.5	--	--	21.5	--	25.5	--	21.5
18	--	10.0	--	--	17.5	--	--	--	--	--	--	--	--	--	--	24.5	--	21.0
19	--	12.5	--	--	--	--	--	19.5	--	--	--	--	--	26.0	--	24.0	--	20.5
20	--	12.0	--	--	--	--	--	--	--	--	24.5	--	--	--	--	23.0	--	20.0
21	--	11.5	--	--	--	--	--	24.5	--	29.0	--	25.5	--	--	--	23.5	--	20.5
22	--	10.5	--	--	14.0	--	--	--	--	--	29.0	--	--	22.5	--	23.0	--	19.5
23	--	11.0	--	--	--	--	--	22.5	--	--	--	--	--	--	--	22.5	--	19.5
24	--	11.5	--	--	20.0	--	--	--	--	--	24.0	--	--	26.5	--	21.5	--	19.5
25	--	10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	21.5	--	19.0
26	--	15.0	--	--	17.5	--	--	19.5	--	--	26.5	--	--	--	--	20.5	--	19.0
27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20.5	--	17.5
28	--	15.0	--	--	16.5	--	--	21.0	--	--	25.5	--	--	21.5	--	18.5	--	17.5
29	--	15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	18.0	--	17.0
30	--	16.5	--	--	--	--	--	22.0	--	--	--	--	--	21.0	--	18.0	--	15.5
31	--	--	--	--	15.0	--	--	--	--	--	22.0	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23.2	--	19.7

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	25	3	.20	104	2	.56	19400	1290	67600
2	25	3	.20	98	2	.53	24500	1270	85200
3	25	3	.20	95	2	.51	50200	3500	671000
4	25	3	.20	280	23	20	94700	3960	1010000
5	25	3	.20	1960	426	2610	39600	2130	228000
6	23	2	.12	3840	358	3820	28700	1450	112000
7	23	2	.12	3620	218	2130	26800	2100	161000
8	23	2	.12	2160	126	735	32200	2180	190000
9	25	2	.14	7740	1510	37400	26700	1330	95900
10	25	2	.14	8370	930	21000	18100	810	39600
11	25	2	.14	4110	407	4570	13200	530	18900
12	25	3	.20	6460	436	7600	10500	340	9640
13	25	5	.34	4080	175	1930	8640	260	6070
14	25	5	.34	2180	72	424	7500	240	4860
15	25	5	.34	1480	38	152	7440	653	17500
16	25	5	.34	1200	26	84	18900	1790	90500
17	25	6	.41	1010	18	49	15800	750	32000
18	28	6	.45	846	13	30	11700	420	13300
19	30	5	.41	685	9	17	9140	280	6910
20	66	5	.89	633	7	12	7920	220	4700
21	80	5	1.1	583	7	11	8620	280	6520
22	114	4	1.2	543	6	8.8	7620	185	3810
23	250	8	5.4	784	92	275	6300	130	2210
24	414	18	20	8680	3990	116000	5380	110	1600
25	566	25	38	17100	1950	93300	4480	92	1110
26	366	10	9.9	12300	1080	35900	3870	83	867
27	245	4	2.6	17200	2430	170000	3660	65	642
28	181	3	1.5	36400	2910	286000	6500	526	15900
29	145	2	.78	16200	1080	47200	23200	2470	159000
30	121	2	.65	17300	1530	74000	14800	730	29200
31	107	2	.58	--	--	--	10800	382	11100
TOTAL	3132	--	87.21	178041	--	905279.40	566870	--	3096639

## 11475000 EEL RIVER AT FORT SEWARD, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	9100	255	6270	5480	135	2000	1760	35	166
2	8660	242	5660	5280	132	1880	1590	22	94
3	6960	163	3060	4830	118	1540	1690	109	529
4	5580	108	1630	4220	100	1140	2410	135	878
5	4720	85	1080	3780	83	847	2420	45	294
6	4050	69	755	3440	72	669	1990	28	150
7	3540	56	535	3210	65	563	1710	21	97
8	3190	50	431	2970	64	513	1670	18	81
9	3030	45	368	2740	52	385	1580	15	64
10	3890	131	1600	2540	48	329	1580	29	132
11	9050	551	13500	2570	50	347	3550	196	2280
12	10100	438	11900	3300	131	1230	38200	2530	343000
13	8880	272	6520	4030	177	1920	40900	2120	234000
14	10900	577	18600	4030	137	1490	19700	850	45200
15	36500	3740	458000	3680	96	954	15200	600	24600
16	122000	5410	1800000	3560	88	846	11800	460	14700
17	107000	4000	1160000	3180	76	653	11600	350	11000
18	68800	2780	516000	2800	58	438	8950	275	6650
19	42900	2000	232000	2540	45	309	7420	200	4010
20	28800	1540	120000	2380	41	263	6380	148	2550
21	21000	1040	59000	2100	41	232	5500	120	1780
22	16300	745	37800	1930	37	193	4980	120	1610
23	13000	522	18300	1800	34	165	17000	1420	78500
24	11000	388	11500	1680	30	136	19300	1400	73000
25	9140	295	7280	1630	26	114	21600	1210	90200
26	7340	227	4810	1630	22	97	84200	3450	800000
27	7040	181	3440	1520	30	123	42000	1770	201000
28	6540	160	2830	1720	75	347	24300	1060	69500
29	6060	140	2290	--	--	--	17300	670	31300
30	5700	125	1920	--	--	--	13600	500	18400
31	5560	125	1880	--	--	--	11200	380	11500
TOTAL	606830	--	4503959	84570	--	19723	443080	--	2067265

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	9140	265	6540	2640	26	185	1220	9	30
2	7560	197	4020	2660	26	187	1090	7	21
3	6200	153	2560	2690	30	218	1040	7	20
4	5340	120	1730	2720	26	191	981	6	16
5	4690	107	1350	2600	24	168	947	6	15
6	4690	102	1290	2660	26	187	923	6	15
7	4300	90	1040	2650	26	186	923	7	17
8	3890	76	798	2620	26	184	918	6	15
9	4150	171	2300	2610	25	176	912	5	12
10	9960	696	18600	2470	25	167	905	5	12
11	7540	230	4680	2450	28	185	873	4	9.4
12	5890	110	1750	2540	30	206	835	4	9.0
13	5270	80	1140	2500	46	311	795	4	8.6
14	5790	104	1630	2450	38	251	751	4	8.1
15	5300	83	1190	2210	33	197	712	3	5.8
16	4840	72	941	2060	28	156	679	3	5.5
17	5580	100	1510	1930	24	125	638	2	3.4
18	5210	73	1030	1740	21	99	603	4	6.5
19	4430	52	622	1620	20	87	588	6	9.5
20	4090	46	508	1870	20	101	544	5	7.3
21	4070	44	484	1610	18	78	522	4	5.6
22	3610	42	409	1480	16	64	486	5	6.6
23	3810	41	422	1400	13	49	462	6	7.5
24	3740	38	384	1390	10	38	433	5	5.8
25	3240	34	297	1430	12	46	423	4	4.6
26	2980	29	233	1500	14	57	414	4	4.5
27	2850	30	231	1480	15	60	429	4	4.6
28	2760	25	186	1690	17	78	487	4	5.3
29	2730	20	147	1530	15	62	453	4	4.9
30	2710	28	205	1390	11	41	413	4	4.5
31	--	--	--	1310	11	39	--	--	--
TOTAL	146360	--	58227	63900	--	4179	21399	--	300.0

## EEL RIVER BASIN

11475000 EEL RIVER AT FORT SEWARD, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	375	4	4.1	104	3	.84	58	4	.63
2	348	5	4.7	101	2	.55	63	4	.68
3	325	5	4.4	89	2	.48	63	4	.68
4	315	5	4.3	89	3	.72	63	4	.68
5	300	4	3.2	86	3	.70	63	4	.68
6	290	4	3.1	83	4	.90	63	4	.68
7	270	6	4.4	83	5	1.1	63	4	.68
8	265	5	3.6	83	4	.90	63	4	.68
9	250	4	2.7	80	3	.65	58	3	.47
10	235	3	1.9	75	3	.61	56	3	.45
11	226	3	1.8	75	5	1.0	56	2	.30
12	221	4	2.4	73	5	.99	54	3	.44
13	212	4	2.3	70	4	.76	54	3	.44
14	203	4	2.2	70	4	.76	51	4	.55
15	199	5	2.7	70	4	.76	51	4	.55
16	190	4	2.1	68	4	.73	49	3	.40
17	185	4	2.0	66	3	.53	49	2	.26
18	173	4	1.9	61	3	.49	46	1	.12
19	165	3	1.3	58	3	.47	44	2	.24
20	149	3	1.2	58	3	.47	37	3	.30
21	145	4	1.6	56	2	.30	44	3	.36
22	142	6	2.3	61	2	.33	46	3	.37
23	135	6	2.2	63	4	.68	44	3	.36
24	128	6	2.1	61	5	.82	44	3	.36
25	128	5	1.7	56	6	.91	39	3	.32
26	128	5	1.7	56	6	.91	42	3	.34
27	114	4	1.2	56	6	.91	44	3	.36
28	110	4	1.2	66	6	1.1	44	3	.36
29	110	4	1.2	63	4	.68	66	6	1.1
30	110	4	1.2	56	3	.45	110	16	4.8
31	107	4	1.2	56	4	.60	--	--	--
TOTAL	6253	--	73.9	2192	--	22.10	1627	--	18.64
TOTAL DISCHARGE FOR YEAR (CFS-DAYS)									2124254
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)									10655773.25

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE 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
NOV.										
06...	1115	14.0	3880	361	3780	40	57	69	88	97
25...	0725	12.0	18900	2060	105000	26	39	50	64	83
26...	1025	10.0	13100	1070	37800	30	42	55	69	83
28...	0825	9.0	42700	3300	380000	24	33	46	59	73
DEC.										
02...	1030	8.0	27600	1430	107000	23	32	42	54	67
04...	0725	8.5	115000	4310	1340000	28	33	48	60	75
04...	1635	9.0	76100	3450	709000	24	34	46	58	71
JAN.										
16...	0940	7.0	103000	4280	1190000	21	29	39	52	65
MAR.										
12...	1600	8.0	58500	4560	720000	26	32	42	57	74
13...	0940	7.5	43000	2230	259000	24	34	45	57	70
14...	1125	8.0	19700	827	44000	30	42	55	66	77
26...	0715	9.5	104000	3730	1050000	25	35	48	61	77
26...	1610	9.0	81600	2960	652000	26	37	50	64	79
APR.										
10...	0950	10.0	11400	826	25400	21	33	44	58	70
11...	1005	10.0	7400	237	4740	--	--	--	--	--



## 11475000 EEL RIVER AT FORT SEWARD, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. FALL DIAM.
	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
DATE	.062 MM	.062 MM	.125 MM	.125 MM	.250 MM	.250 MM	.500 MM	.500 MM	1.00 MM
NOV.									
06...	--	99	--	100	--	--	--	--	--
25...	94	--	96	--	100	--	--	--	--
26...	--	92	--	94	--	99	--	100	--
28...	85	--	92	--	100	--	--	--	--
DEC.									
02...	78	--	88	--	99	--	100	--	--
04...	85	--	92	--	100	--	--	--	--
04...	82	--	91	--	99	--	100	--	--
JAN.									
16...	75	--	84	--	98	--	100	--	--
MAR.									
12...	85	--	92	--	100	--	--	--	--
13...	80	--	86	--	98	--	100	--	--
14...	87	--	90	--	99	--	100	--	--
26...	87	--	91	--	99	--	100	--	--
26...	88	--	92	--	100	--	--	--	--
APR.									
10...	--	81	--	83	--	92	--	96	100
11...	--	95	--	100	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

		TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
	DATE				% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM
FEB.								
04...	0800	6.5	7	4300	2	5	12	28
SEP.								
20...	1525	23.0	7	32	1	3	13	29

	RED MAT. SIEVE DIAM.	RED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	RED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
DATE	1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM
FEB.							
04...	67	86	92	95	99	100	--
SEP.							
20...	40	51	62	76	87	98	100

## EEL RIVER BASIN

11475000 EEL RIVER AT FORT SEWARD, CALIF.--Continued

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)	DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)
Oct. 3, 1970...	1435	3	1	Dec. 30.....	1320	664	150
Oct. 8.....	1030	2	1	Dec. 31.....	1335	363	110
Oct. 11.....	1250	2	1	Jan. 1, 1971...	1140	253	90
Oct. 13.....	1755	5	2	Jan. 2.....	1430	246	90
Oct. 17.....	1605	6	1	Jan. 3.....	1335	156	60
Oct. 20.....	1630	5	1	Jan. 4.....	1520	107	45
Oct. 21.....	1520	5	2	Jan. 5.....	1400	86	40
Oct. 22.....	1545	4	3	Jan. 6.....	1530	66	32
Oct. 23.....	1545	9	3	Jan. 7.....	1540	56	30
Oct. 24.....	1335	19	11	Jan. 8.....	1100	48	28
Oct. 25.....	1330	29	20	Jan. 9.....	1525	44	25
Oct. 26.....	1520	7	6	Jan. 10.....	0840	56	29
Oct. 27.....	1605	4	3	Jan. 11.....	1525	549	160
Oct. 28.....	1535	3	2	Jan. 12.....	1400	432	110
Oct. 29.....	1600	2	1	Jan. 13.....	1255	264	90
Oct. 30.....	1540	2	2	Jan. 14.....	1045	487	120
Oct. 31.....	0840	2	1	Jan. 15.....	0940	2780	180
Nov. 1.....	1610	2	1	Jan. 16.....	0940	4280	110
Nov. 3.....	1250	2	1	Jan. 17.....	0900	4340	120
Nov. 4.....	1510	18	15	Jan. 17.....	1300	3330	120
Nov. 5.....	1125	352	140	Jan. 18.....	0940	2980	160
Nov. 6.....	1115	361	120	Jan. 19.....	0800	2080	200
Nov. 7.....	0745	241	19	Jan. 20.....	0930	1580	200
Nov. 8.....	1235	90	10	Jan. 21.....	0930	1070	180
Nov. 9.....	1605	2210	200	Jan. 22.....	0930	769	170
Nov. 10.....	1600	763	180	Jan. 23.....	0930	542	150
Nov. 11.....	1130	411	120	Jan. 24.....	0900	400	120
Nov. 12.....	1320	466	110	Jan. 25.....	0930	303	100
Nov. 13.....	1630	145	70	Jan. 26.....	0930	234	95
Nov. 14.....	1450	66	35	Jan. 27.....	0930	186	75
Nov. 15.....	1105	40	25	Jan. 28.....	0930	161	80
Nov. 16.....	1600	24	14	Jan. 29.....	0930	138	75
Nov. 17.....	1610	16	10	Jan. 30.....	0930	127	65
Nov. 18.....	1505	13	8	Jan. 31.....	0900	124	65
Nov. 19.....	1115	11	6	Feb. 1.....	0930	136	75
Nov. 20.....	1540	7	4	Feb. 2.....	0930	134	65
Nov. 21.....	1435	7	4	Feb. 3.....	0930	120	60
Nov. 22.....	1210	6	4	Feb. 4.....	0930	105	55
Nov. 23.....	1530	84	33	Feb. 5.....	0930	84	35
Nov. 24.....	1535	4910	60	Feb. 6.....	1400	72	35
Nov. 25.....	0725	2060	180	Feb. 7.....	1110	66	34
Nov. 26.....	1025	1070	200	Feb. 8.....	1335	64	30
Nov. 27.....	1530	2860	150	Feb. 9.....	1535	48	28
Nov. 28.....	0825	3300	140	Feb. 10.....	1320	47	25
Nov. 29.....	1015	1060	180	Feb. 11.....	1645	42	24
Nov. 30.....	1520	1060	190	Feb. 12.....	1100	82	35
Dec. 1.....	1530	898	170	Feb. 13.....	0850	171	75
Dec. 2.....	1030	1430	180	Feb. 14.....	1440	127	65
Dec. 3.....	1520	5160	100	Feb. 15.....	1650	92	49
Dec. 4.....	0725	4310	100	Feb. 16.....	1635	84	47
Dec. 4.....	1635	3450	120	Feb. 17.....	1140	78	40
Dec. 5.....	0840	2180	190	Feb. 18.....	1525	54	34
Dec. 6.....	1335	1450	220	Feb. 19.....	1100	46	30
Dec. 7.....	1615	2260	190	Feb. 20.....	1650	40	26
Dec. 8.....	1605	1770	210	Feb. 21.....	1325	42	23
Dec. 9.....	1145	1300	220	Feb. 22.....	1600	36	20
Dec. 10.....	1130	834	170	Feb. 23.....	1250	34	19
Dec. 11.....	1050	522	140	Feb. 24.....	1625	28	17
Dec. 12.....	0850	360	120	Feb. 25.....	1640	26	15
Dec. 13.....	1015	282	100	Feb. 26.....	1555	21	12
Dec. 15.....	1625	383	90	Feb. 27.....	1110	26	15
Dec. 16.....	1020	2210	210	Feb. 28.....	1330	92	36
Dec. 17.....	1545	629	150	Mar. 1.....	1550	28	18
Dec. 18.....	1550	390	110	Mar. 2.....	1710	20	13
Dec. 19.....	1525	256	90	Mar. 3.....	1540	137	60
Dec. 20.....	1120	204	75	Mar. 4.....	1700	102	36
Dec. 21.....	1520	268	95	Mar. 5.....	1630	37	22
Dec. 22.....	1505	174	70	Mar. 6.....	0855	28	15
Dec. 23.....	1520	124	65	Mar. 7.....	1120	20	11
Dec. 24.....	0730	115	55	Mar. 8.....	1645	18	10
Dec. 25.....	0900	96	50	Mar. 9.....	1400	16	10
Dec. 26.....	1000	84	45	Mar. 10.....	1640	12	20
Dec. 27.....	0730	68	35	Mar. 11.....	1630	163	75
Dec. 28.....	0930	137	55	Mar. 12.....	1600	4560	860
Dec. 29.....	1030	2460	200	Mar. 13.....	0940	2230	700

## 475000 EEL RIVER AT FORT SEWARD, CALIF.--Continued

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)	DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)
Mar. 14, 1971..	1125	827	480	May 12.....	1525	30	42
Mar. 15.....	1540	590	90	May 13.....	1530	46	48
Mar. 16.....	1640	419	95	May 14.....	1735	38	40
Mar. 17.....	1625	355	95	May 16.....	1420	28	30
Mar. 18.....	1645	234	95	May 18.....	1550	20	27
Mar. 19.....	1700	85	190	May 22.....	0850	16	20
Mar. 20.....	0915	148	85	May 24.....	1630	10	13
Mar. 21.....	1000	120	75	May 26.....	1650	14	19
Mar. 22.....	1610	117	65	May 28.....	1640	17	21
Mar. 23.....	1610	2280	660	May 31.....	1340	11	16
Mar. 24.....	1635	1140	500	June 2.....	1725	7	12
Mar. 25.....	1625	1280	500	June 5.....	1120	6	10
Mar. 26.....	0715	3730	820	June 7.....	1650	7	11
Mar. 26.....	1610	2960	800	June 9.....	1255	5	10
Mar. 27.....	0940	1820	660	June 12.....	0855	4	10
Mar. 28.....	0920	1110	500	June 14.....	1310	4	9
Mar. 29.....	1125	666	360	June 17.....	1500	2	6
Mar. 30.....	1620	480	300	June 19.....	0845	6	8
Mar. 31.....	1620	364	780	June 21.....	1850	4	8
Apr. 1.....	1635	244	100	June 23.....	1655	6	8
Apr. 2.....	1635	186	95	June 26.....	1100	4	10
Apr. 3.....	1045	146	90	June 28.....	1705	4	9
Apr. 4.....	1005	123	100	June 30.....	1715	17	11
Apr. 5.....	1655	105	70	July 3.....	0830	5	10
Apr. 6.....	1625	104	80	July 5.....	1750	4	9
Apr. 7.....	1410	89	75	July 7.....	1710	6	9
Apr. 8.....	1540	74	70	July 10.....	0825	3	9
Apr. 9.....	1520	138	100	July 12.....	1700	4	10
Apr. 10.....	0950	826	300	July 15.....	1705	5	8
Apr. 11.....	1005	237	200	July 17.....	0745	4	9
Apr. 12.....	1600	98	150	July 20.....	1420	3	9
Apr. 13.....	1630	77	70	July 22.....	1520	6	1
Apr. 14.....	1630	104	80	July 24.....	1015	6	1
Apr. 15.....	1630	80	90	July 26.....	1550	5	2
Apr. 16.....	1600	70	90	July 28.....	1705	4	2
Apr. 17.....	1705	110	110	July 31.....	0825	4	1
Apr. 18.....	1105	74	80	Aug. 2.....	1540	2	1
Apr. 19.....	1655	49	75	Aug. 4.....	1850	3	1
Apr. 20.....	1605	48	75	Aug. 7.....	0820	5	2
Apr. 21.....	1620	44	48	Aug. 9.....	1725	3	2
Apr. 22.....	1600	40	40	Aug. 11.....	1620	19	2
Apr. 23.....	1535	42	40	Aug. 14.....	0820	4	1
Apr. 24.....	1620	42	50	Aug. 17.....	0725	3	1
Apr. 25.....	1005	32	40	Aug. 19.....	1720	3	1
Apr. 26.....	1645	28	36	Aug. 22.....	0935	2	1
Apr. 27.....	1610	32	30	Aug. 24.....	1840	8	2
Apr. 28.....	1615	22	30	Aug. 28.....	0810	6	1
Apr. 29.....	1645	22	33	Aug. 30.....	1500	3	1
Apr. 30.....	1550	29	30	Sept. 1.....	1500	4	1
May 2.....	0940	26	30	Sept. 5.....	0930	4	1
May 3.....	1550	30	32	Sept. 7.....	1705	4	1
May 4.....	1550	26	30	Sept. 11.....	0905	2	2
May 5.....	1830	24	30	Sept. 13.....	1630	6	1
May 6.....	1910	26	21	Sept. 15.....	1850	4	1
May 7.....	1920	26	35	Sept. 18.....	0920	1	1
May 10.....	1615	25	35	Sept. 20.....	1535	3	1

## EEL RIVER BASIN

11475250 EEL RIVER AT SOUTH FORK, CALIF.

LOCATION.--Lat 40°21'04", long 123°54'48", in SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.2, T.1 S., R.2 E., Humboldt County, 0.2 mile upstream from Northwestern Pacific Railroad Bridge, 0.4 mile north of town of South Fork, and 0.5 mile upstream from South Fork.

PERIOD OF RECORD.--Chemical analyses (revised): Water years 1952-53 (partial-record station), October 1953 to September 1971. Published as "near McCann" in 1952-53, and as "at McCann" in 1954-67.

REMARKS.--Records furnished by California Department of Water Resources. Exact sampling location subject to change due to seasonal accessibility to river. Records of discharge given for 11475000 Eel River at Fort Seward.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	MEAN DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)
OCT. 21...	0815	80	13.5	9.8	46	12	8.2	1.4
NOV. 10...	1400	8370	14.0	10.6	--	--	4.0	--
DEC. 08...	1415	32200	10.0	11.8	--	--	2.6	--
JAN. 05...	1445	4720	5.0	13.0	--	--	3.2	--
FEB. 02...	1600	5280	8.5	12.0	--	--	3.5	--
MAR. 02...	1315	1590	7.0	12.0	--	--	4.0	--
APR. 06...	1425	4690	13.0	10.5	--	--	3.8	--
MAY 04...	1830	2720	13.5	10.3	--	--	4.3	--
JUNE 23...	0850	462	20.0	9.5	28	6.9	5.0	1.3
JULY 20...	1350	149	25.5	9.4	--	--	6.6	--
AUG. 17...	1345	66	22.0	10.0	--	--	7.1	--
SEP. 14...	1445	51	23.0	9.0	--	--	7.2	--

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)
OCT. 21...	163	0	37	6.9	.2	200	211	.29	45.6
NOV. 10...	77	0	--	2.3	--	100	--	--	--
DEC. 08...	66	0	--	1.3	--	100	--	--	--
JAN. 05...	84	0	--	3.0	--	100	--	--	--
FEB. 02...	79	0	--	1.9	--	100	--	--	--
MAR. 02...	88	0	--	3.0	--	--	--	--	--
APR. 06...	84	0	--	2.7	--	100	--	--	--
MAY 04...	83	0	--	1.4	--	100	--	--	--
JUNE 23...	111	0	15	2.5	.0	100	114	.16	142
JULY 20...	140	0	--	3.8	--	--	--	--	--
AUG. 17...	150	0	--	4.6	--	400	--	--	--
SEP. 14...	154	0	--	7.1	--	100	--	--	--

11475250 EEL RIVER AT SOUTH FORK, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)
OCT. 21...	166	32	134	10	.3	349	8.2	1
NOV. 10...	78	15	63	--	.2	178	7.3	260
DEC. 08...	57	3	54	--	.1	123	7.8	760
JAN. 05...	73	4	69	--	.2	162	7.8	65
FEB. 02...	74	9	65	--	.2	152	8.1	90
MAR. 02...	88	16	72	--	.2	184	7.7	45
APR. 06...	71	2	69	--	.2	160	8.0	80
MAY 04...	78	10	68	--	.2	164	8.3	40
JUNE 23...	99	8	91	10	.2	217	8.2	1
JULY 20...	132	17	115	--	.2	273	8.1	1
AUG. 17...	146	23	123	--	.3	301	8.1	1
SEP. 14...	154	28	126	--	.3	314	8.2	2

## EEL RIVER BASIN

11475560 ELDER CREEK NEAR BRANSCOMB, CALIF.  
(Hydrologic bench-mark station)

LOCATION.--Lat 39°43'47", long 123°38'34", in NW¼NE¼ sec.29, T.22 N., R.16 W., Mendocino County, at gaging station on right bank, 0.2 mile upstream from mouth, and 5.3 miles north of Branscomb.

DRAINAGE AREA.--6.50 sq mi.

PERIOD OF RECORD.--Chemical analyses: February 1968 to September 1971.

Water temperatures: October 1967 to September 1971.

Sediment records: Water years 1969-71 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 20.0°C July 19, 20.

Period of record:

Water temperatures: Maximum, 21.0°C on several days in 1968 and 1969; minimum (1967-70), 5.0°C on several days in 1968.

REMARKS.--Chemical-quality samples collected 0.2 mile downstream from gaging station. No thermograph record Feb. 9 to May 24, recorder stopped. Where no maximum or minimum is shown, temperature is once-daily reading.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	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)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT.											
06...	1615	.50	10.5	12	0	14	4.5	8.2	.7	75	0
DEC.											
01...	1600	153	9.0	13	20	7.3	2.3	4.8	.6	40	0
JAN.											
12...	1400	48	5.5	14	--	8.3	2.8	5.1	.5	43	0
FEB.											
09...	1315	11	6.5	13	0	9.2	3.0	5.7	.5	47	0
MAR.											
09...	1700	6.8	6.0	--	--	--	--	--	--	--	--
APR.											
07...	1300	22	7.5	--	--	--	--	--	--	--	--
MAY											
24...	2100	8.0	13.0	--	--	--	--	--	--	--	--
24-25	2100-2100	8.0	--	16	120	11	3.5	6.2	.6	59	0
JUNE											
14...	1615	5.5	15.5	16	80	11	3.8	6.5	.3	67	0
JULY											
21...	1030	2.7	17.5	15	1000	14	4.0	7.7	.7	80	0
AUG.											
24...	1800	1.5	17.0	16	1500	13	4.0	7.8	.9	84	0
SEP.											
21...	1700	.96	12.5	15	10	13	4.0	7.7	.9	78	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS- PHATE (PO4) (MG/L)
OCT.											
06...	4.0	2.4	.1	.00	--	.00	--	--	.00	.1	.16
DEC.											
01...	3.0	1.7	.1	.00	--	.00	--	--	.00	.0	.06
JAN.											
12...	3.0	1.4	.0	.35	--	.36	--	--	.01	.5	.99
FEB.											
09...	4.0	1.9	.1	.12	--	.12	--	--	.00	.0	.06
MAR.											
09...	--	--	--	--	--	--	--	--	--	--	--
APR.											
07...	--	--	--	--	--	--	--	--	--	--	--
MAY											
24...	--	--	--	--	--	--	--	--	--	--	--
24-25	2.0	1.8	.1	--	--	.12	.01	.07	.09	--	--
JUNE											
14...	1.0	2.5	.1	--	--	.00	.01	.01	.01	--	--
JULY											
21...	3.5	2.5	.2	--	--	.28	.07	.08	.10	--	--
AUG.											
24...	3.0	1.9	.0	.46	.57	.51	.06	.05	.06	--	--
SEP.											
21...	2.3	3.1	.4	--	--	--	.06	--	--	--	--

11475560 ELDER CREEK NEAR BRANSCOMB, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS- SOLVED ORTHO- PHOS- PHATE (PC4) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (REST- 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)	ALKA- LITY AS CACO3 (MG/L)
OCT. 06...	.10	--	--	20	--	83	.11	.11	54	0	62
DEC. 01...	.06	--	--	0	--	53	.07	21.9	28	0	33
JAN. 12...	.86	--	--	80	--	--	.08	--	32	0	35
FEB. 09...	.04	--	--	0	--	60	.08	1.78	36	0	39
MAR. 09...	--	--	--	--	--	--	--	--	--	--	--
APR. 07...	--	--	--	--	--	--	--	--	--	--	--
MAY 24...	--	--	--	--	--	--	--	--	--	--	--
24-25	.09	.040	.030	50	73	71	.10	1.58	42	0	--
JUNE 14...	.12	.050	.040	0	96	74	.13	1.43	43	0	55
JULY 21...	.15	.070	.050	90	88	88	.12	.64	51	0	65
AUG. 24...	.25	.10	.080	40	76	90	.10	.31	49	0	69
SEP. 21...	--	--	--	200	88	85	.12	.23	49	0	--

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 06...	25	.5	--	--	--	--	--	--	--	--
DEC. 01...	27	.4	--	.2	--	--	--	--	--	--
JAN. 12...	25	.4	84	.1	--	--	--	--	--	--
FEB. 09...	26	.4	96	.2	--	--	--	--	--	--
MAR. 09...	--	--	--	.2	--	--	--	--	--	--
APR. 07...	--	--	--	.3	--	--	--	--	--	--
MAY 24...	--	--	--	.1	--	--	--	--	--	--
24-25	24	.4	108	--	0	2	0	1	4	0
JUNE 14...	25	.4	--	.2	--	--	--	--	--	--
JULY 21...	24	.5	--	--	--	--	--	--	--	--
AUG. 24...	25	.5	--	--	--	--	--	--	--	--
SEP. 21...	25	.5	--	--	--	--	--	--	--	--

## EEL RIVER BASIN

11475560 ELDER CREEK NEAR BRANSCOMB, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	ALKA- LINITY AS CACO3 (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
OCT. 06...	1615	.50	10.5	--	--	--	153	--	14
DEC. 01...	1600	153	9.0	11.0	99	--	57	8.2	30
JAN. 17...	1400	48	5.5	10.8	99	--	--	8.7	21
FEB. 09...	1315	11	6.5	11.8	100	--	--	7.8	9
MAR. 09...	1700	6.8	6.0	11.7	98	--	--	7.8	22
APR. 07...	1300	22	7.5	11.3	99	--	--	7.8	11
MAY 24...	2100	8.0	13.0	10.0	100	41	--	6.7	--
24...	2400	8.0	12.0	10.6	103	41	--	6.9	--
25...	0300	8.0	11.0	11.0	105	45	--	7.5	--
25...	0600	8.0	11.0	10.6	101	45	--	7.9	E11
25...	0900	8.0	11.0	10.6	101	41	--	7.7	--
25...	1200	8.0	11.5	10.8	104	41	--	7.6	--
25...	1500	8.0	12.5	10.6	104	41	--	6.7	--
25...	1800	8.0	12.0	10.8	105	49	--	6.7	--
25...	2100	8.0	11.0	10.8	103	45	--	6.8	--
JUNE 14...	1615	5.5	15.5	9.9	104	--	89	8.1	10
JULY 21...	1030	2.7	17.5	9.2	80	--	106	7.8	--
AUG. 24...	1800	1.5	17.0	8.9	96	--	140	7.7	38
SEP. 21...	1700	.96	12.5	10.0	99	45	158	6.3	--

E Estimated.

DATE	TIME	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)
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## ANALYSIS OF ADDITIONAL SAMPLES

JUNE 14...	1600	.00	.00	.00	.00	.00	.00	.00	.00
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DATE	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
JUNE 14...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TIME	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENED GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED NATURAL URANIUM (U) (UG/L)
JAN. 12...	1400	<.4	<.4	.7	<.4	.03
SEP. 21...	1700	<.8	<.4	.9	<.4	.06



11475560 ELDER CREEK NEAR BRANSCOMB, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		MIN	NOV		MIN	DEC		MIN	JAN		MIN	FEB		MIN	MAR		MIN
	MAX	DAILY		MAX	DAILY		MAX	DAILY		MAX	DAILY		MAX	DAILY		MAX	DAILY	
1	11.0	--	10.5	7.5	--	7.5	9.0	--	9.0	8.5	--	8.5	7.5	--	7.5	--	--	--
2	11.0	--	10.5	7.5	--	7.5	9.0	--	9.0	8.5	--	8.0	7.5	--	7.5	--	--	--
3	11.0	--	10.5	8.0	--	7.5	9.5	--	9.0	8.0	--	7.5	7.5	--	6.5	--	--	--
4	11.0	--	10.5	9.0	--	8.0	10.0	--	9.5	8.0	--	8.0	6.5	--	6.0	--	--	--
5	10.5	--	10.5	9.5	--	8.5	10.0	--	10.0	8.0	--	8.0	6.5	--	6.5	--	--	--
6	10.5	--	10.0	9.5	--	9.5	10.0	--	10.0	8.0	--	8.0	6.5	--	6.5	--	--	--
7	10.5	--	9.5	9.5	--	9.0	10.0	--	10.0	8.0	--	8.0	6.5	--	6.5	--	--	--
8	10.0	--	9.5	9.0	--	9.0	10.0	--	10.0	8.0	--	8.0	6.5	--	6.5	--	--	--
9	10.0	--	10.0	9.5	--	9.0	10.0	--	10.0	8.0	--	8.0	--	6.5	--	--	--	--
10	10.0	--	10.0	9.5	--	9.5	10.0	--	10.0	8.0	--	8.0	--	--	--	--	5.5	--
11	10.0	--	10.0	9.5	--	9.5	10.0	--	10.0	8.0	--	7.0	--	--	--	--	--	--
12	10.0	--	10.0	9.5	--	9.5	10.0	--	9.5	7.0	--	5.5	--	--	--	--	--	--
13	10.0	--	10.0	9.5	--	9.0	9.5	--	9.5	6.0	--	6.0	--	--	--	--	--	--
14	10.0	--	9.5	9.0	--	9.0	9.5	--	9.5	6.0	--	6.0	--	--	--	--	--	--
15	9.5	--	9.5	9.0	--	8.5	9.5	--	9.5	6.5	--	6.0	--	--	--	--	--	--
16	9.5	--	9.5	8.5	--	8.5	9.5	--	9.5	8.0	--	6.5	--	--	--	--	--	--
17	9.5	--	9.5	8.5	--	8.5	9.5	--	9.5	8.0	--	7.5	--	--	--	--	--	--
18	9.5	--	9.5	9.0	--	8.5	9.5	--	9.0	8.5	--	8.0	--	--	--	--	--	--
19	9.5	--	9.5	8.5	--	8.5	9.0	--	9.0	8.5	--	8.5	--	--	--	--	--	--
20	9.5	--	9.5	8.5	--	8.5	9.0	--	9.0	8.5	--	8.5	--	--	--	--	--	--
21	9.5	--	9.5	8.5	--	8.5	9.0	--	9.0	8.5	--	8.5	--	--	--	--	--	--
22	9.5	--	9.0	8.5	--	8.5	9.0	--	9.0	8.5	--	8.5	--	--	--	--	--	--
23	9.0	--	9.0	8.5	--	8.5	9.0	--	9.0	8.5	--	8.0	--	--	--	--	--	--
24	9.0	--	9.0	9.0	--	8.5	9.0	--	9.0	8.0	--	8.0	--	--	--	--	--	--
25	9.0	--	9.0	9.0	--	9.0	9.0	--	8.5	8.0	--	8.0	--	--	--	--	--	--
26	9.0	--	8.0	9.0	--	9.0	8.5	--	8.5	8.0	--	8.0	--	--	--	--	--	--
27	8.5	--	7.5	9.0	--	9.0	8.5	--	8.5	8.0	--	8.0	--	--	--	--	--	--
28	7.5	--	7.5	9.0	--	9.0	8.5	--	8.5	8.0	--	8.0	--	--	--	--	--	--
29	7.5	--	6.5	9.0	--	9.0	8.5	--	8.5	8.0	--	7.5	--	--	--	--	--	--
30	6.5	--	6.5	9.0	--	9.0	8.5	--	8.5	7.5	--	7.5	--	--	--	--	--	--
31	7.5	--	6.5	--	--	--	8.5	--	8.5	7.5	--	7.5	--	--	--	--	--	--
AVE	9.5	--	9.2	8.9	--	8.7	9.3	--	9.2	7.9	--	7.6	--	--	--	--	--	--
DAY	APR		MIN	MAY		MIN	JUN		MIN	JUL		MIN	AUG		MIN	SEP		MIN
	MAX	DAILY		MAX	DAILY		MAX	DAILY		MAX	DAILY		MAX	DAILY		MAX	DAILY	
1	--	--	--	--	--	--	11.0	--	11.0	17.0	--	13.5	18.5	--	15.5	13.5	--	13.0
2	--	--	--	--	--	--	13.0	--	11.0	16.5	--	13.5	18.0	--	15.5	13.5	--	13.0
3	--	--	--	--	--	--	12.5	--	11.0	17.0	--	13.5	17.5	--	15.5	13.5	--	12.5
4	--	--	--	--	--	--	13.5	--	11.5	16.5	--	13.5	17.5	--	15.0	14.0	--	13.0
5	--	--	--	--	--	--	14.5	--	12.0	16.5	--	13.5	17.5	--	15.0	14.5	--	13.5
6	--	--	--	--	--	--	15.0	--	12.0	17.0	--	14.0	18.0	--	15.5	14.5	--	13.5
7	--	7.5	--	--	--	--	15.0	--	13.0	16.5	--	14.0	17.5	--	15.5	14.0	--	13.0
8	--	--	--	--	--	--	14.5	--	12.5	16.5	--	13.5	17.5	--	15.5	14.5	--	13.5
9	--	--	--	--	--	--	13.5	--	13.0	15.5	--	14.5	18.0	--	15.5	14.0	--	13.5
10	--	--	--	--	--	--	15.0	--	13.0	16.0	--	14.0	18.5	--	16.0	14.0	--	13.5
11	--	--	--	--	--	--	15.0	--	12.5	16.5	--	13.5	19.0	--	17.0	14.5	--	14.0
12	--	--	--	--	--	--	14.0	--	13.0	17.0	--	14.0	19.0	--	17.0	15.0	--	14.0
13	--	--	--	--	--	--	14.5	--	12.5	17.5	--	14.5	18.5	--	17.0	15.5	--	14.0
14	--	--	--	--	--	--	15.5	--	12.5	17.5	--	14.5	17.5	--	15.5	15.5	--	14.5
15	--	--	--	--	--	--	16.5	--	13.0	18.5	--	15.5	16.5	--	15.0	15.5	--	14.5
16	--	--	--	--	--	--	16.5	--	12.5	19.0	--	16.0	16.0	--	15.0	15.0	--	14.5
17	--	--	--	--	--	--	16.5	--	12.5	18.5	--	16.5	16.0	--	14.5	15.0	--	14.0
18	--	--	--	--	--	--	15.0	--	13.5	19.0	--	17.0	16.5	--	15.0	14.5	--	13.5
19	--	--	--	--	--	--	15.5	--	13.5	20.0	--	17.0	16.5	--	15.0	13.5	--	12.5
20	--	--	--	--	--	--	17.0	--	13.0	20.0	--	17.5	16.0	--	15.0	13.0	--	12.5
21	--	--	--	--	--	--	17.5	--	13.5	19.5	--	17.5	16.5	--	15.0	13.0	--	12.0
22	--	--	--	--	--	--	17.0	--	14.0	19.0	--	16.0	17.0	--	16.0	12.5	--	11.0
23	--	--	--	--	--	--	17.5	--	14.5	19.0	--	16.0	17.0	--	15.0	12.5	--	11.5
24	--	--	--	--	--	--	16.0	--	14.0	19.0	--	15.5	17.0	--	15.0	12.0	--	11.5
25	--	--	--	13.0	--	11.0	14.5	--	14.0	18.5	--	15.5	17.0	--	15.5	11.5	--	11.0
26	--	--	--	12.0	--	11.5	14.5	--	13.5	18.5	--	16.0	16.5	--	15.5	11.5	--	11.0
27	--	--	--	12.5	--	11.0	15.5	--	13.0	18.5	--	15.5	16.5	--	15.0	11.0	--	10.5
28	--	--	--	12.5	--	12.0	15.5	--	12.0	18.5	--	15.5	15.5	--	14.0	10.5	--	10.5
29	--	--	--	13.5	--	12.0	16.0	--	12.5	18.0	--	15.5	14.5	--	13.5	10.5	--	10.5
30	--	--	--	12.5	--	11.0	16.5	--	13.0	17.5	--	15.5	14.0	--	13.0	10.5	--	10.0
31	--	--	--	11.5	--	11.0	--	--	--	17.5	--	15.0	13.5	--	13.0	--	--	--
AVE	--	--	--	--	--	--	15.1	--	12.8	17.8	--	15.1	16.9	--	15.2	13.4	--	12.6

## EEL RIVER BASIN

11475560 ELDER CREEK NEAR BRANSCOMB, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY)
OCT. 08...	1530	9.5	.50	3	.00
DEC. 16...	1520	9.5	85	3	.69
JAN. 12...	1330	6.0	47	8	1.0
MAR. 10...	1145	5.5	6.8	2	.04
APR. 07...	1730	7.5	22	3	.18
MAY 25...	1520	13.0	8.0	2	.04
JUNE 15...	1120	13.0	5.1	1	.01
JULY 21...	1500	18.0	2.7	2	.01
AUG. 24...	1710	17.0	1.5	2	.01

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL,  
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
MAY 25...	1515	13.0	3	8.0	1	4	9

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
MAY 25...	16	21	28	56	83	96	100

## 11475800 SOUTH FORK EEL RIVER AT LEGGETT, CALIF.

LOCATION.--Lat 39°52'30", long 123°43'10", in NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.3, T.23 N., R.17 W., Mendocino County, temperature recorder at gaging station on right bank near Standish-Hickey State Park, 0.2 mile upstream from Rock Creek, and 0.5 mile northwest of Leggett.

DRAINAGE AREA.--248 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 25.0°C July 27.

Period of record:

Water temperatures: Maximum (1965-69, 1970-71), 26.0°C on several days in 1969; minimum (1965-70), 3.5°C on several days in 1967 and 1968.

REMARKS.--Recorder stopped Oct. 1 to Jan. 7; May 28 to June 7; probe inoperative Jan. 23 to Mar. 8, Sept. 27-30; recorder malfunction Aug. 20-24. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	5.5	--	--	--	--	--
8	--	--	--	--	--	--	6.5	5.5	7.5	--	9.5	--
9	--	--	--	--	--	--	7.0	6.5	--	--	11.0	9.5
10	--	--	--	--	--	--	8.0	7.0	--	--	10.5	9.5
11	--	--	--	--	--	--	8.0	7.5	--	--	10.5	10.0
12	--	--	--	--	--	--	7.5	5.5	--	--	11.0	10.5
13	--	17.0	--	--	--	--	5.5	5.0	--	--	11.0	10.5
14	--	--	--	--	--	--	5.5	5.0	--	--	11.0	9.5
15	--	--	--	--	--	--	7.0	5.5	--	--	10.5	9.5
16	--	--	--	--	--	--	8.5	6.5	--	--	10.5	10.5
17	--	--	--	--	--	--	9.5	8.5	--	--	11.0	10.0
18	--	--	--	--	--	--	10.0	9.5	--	--	11.0	10.0
19	--	--	--	--	--	--	10.0	10.0	--	--	11.5	10.5
20	--	--	--	--	--	--	10.0	9.0	--	--	11.0	10.5
21	--	--	--	--	--	--	9.0	8.0	--	--	11.5	10.0
22	--	--	--	--	--	--	8.0	8.0	--	--	11.0	10.5
23	--	--	--	--	--	--	--	--	--	--	11.5	11.0
24	--	--	--	--	--	--	--	--	--	--	11.5	11.0
25	--	--	--	--	--	--	--	--	--	--	11.5	11.0
26	--	--	--	--	--	--	--	--	--	--	11.0	10.0
27	--	--	--	--	--	--	--	--	--	--	10.5	9.5
28	--	--	--	--	--	--	--	--	--	--	11.0	10.0
29	--	--	--	--	--	--	--	--	--	--	11.5	10.5
30	--	--	--	10.0	--	--	--	--	--	--	11.5	10.0
31	--	--	--	--	--	--	--	--	--	--	10.5	9.5
AVE	--	--	--	--	--	--	--	--	--	--	--	--
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	11.0	10.0	13.5	13.0	--	--	21.5	19.5	23.5	22.5	20.5	20.0
2	11.5	10.0	13.0	13.0	--	--	21.5	19.5	23.5	22.0	20.5	19.5
3	11.5	10.5	13.0	12.5	--	--	21.5	19.5	23.5	22.0	20.5	19.5
4	12.0	11.0	13.5	12.5	--	--	21.5	19.5	23.5	22.0	20.0	19.0
5	12.0	11.0	13.5	13.0	--	--	21.5	20.0	23.5	22.0	20.0	19.0
6	11.5	11.0	14.0	13.0	--	--	21.5	20.0	23.5	22.5	20.5	19.5
7	11.0	10.0	14.5	14.0	--	--	21.5	20.0	23.5	22.5	21.0	19.5
8	10.0	10.0	14.5	14.0	19.0	17.5	21.5	20.0	23.5	22.5	20.5	19.0
9	10.0	10.0	15.0	14.5	18.5	17.5	21.5	20.5	24.0	22.5	20.5	19.0
10	10.5	9.5	15.5	15.0	18.5	17.5	22.0	20.0	24.0	22.5	20.5	19.0
11	11.0	9.5	16.0	15.5	19.0	17.5	21.5	20.0	23.5	22.5	20.5	19.5
12	11.5	10.0	16.0	15.5	19.0	18.0	21.5	20.0	24.0	22.5	20.5	19.5
13	11.0	10.5	16.0	15.5	19.0	18.0	21.5	20.0	23.5	22.0	20.5	19.5
14	12.0	10.5	16.0	15.0	19.5	18.0	21.5	20.0	23.5	22.0	20.5	19.5
15	12.0	11.0	15.5	14.0	19.5	18.0	21.5	20.5	23.5	22.0	21.0	19.5
16	11.0	10.0	14.5	13.5	20.5	19.0	22.5	21.0	23.0	21.5	21.0	19.5
17	10.0	9.5	14.5	13.5	20.5	19.0	22.5	22.0	23.0	21.5	21.5	20.0
18	11.0	9.0	14.5	13.5	20.5	19.5	22.5	22.0	23.0	21.5	21.5	20.0
19	11.5	9.5	15.5	14.5	20.5	19.5	23.0	22.0	23.0	21.5	21.0	19.5
20	10.5	9.5	15.5	14.0	20.5	19.5	23.5	23.0	--	--	20.5	19.5
21	10.5	9.5	15.5	14.0	21.0	19.5	24.0	22.5	--	--	20.5	19.5
22	10.0	9.5	15.5	14.0	21.5	19.5	24.5	23.5	--	--	20.5	19.0
23	10.0	9.5	16.0	15.0	22.0	20.0	24.5	23.0	--	--	20.0	19.0
24	10.0	9.5	17.0	15.5	22.0	20.0	24.5	23.0	--	--	20.0	19.0
25	10.5	9.5	17.0	16.5	21.0	20.5	24.5	23.0	22.5	21.5	19.5	19.0
26	11.5	10.5	17.0	15.5	21.0	20.0	24.5	23.5	22.5	21.5	19.5	18.5
27	13.0	11.0	16.5	15.5	21.0	19.0	25.0	23.0	22.5	21.5	--	--
28	13.0	12.5	--	--	21.0	19.0	24.5	23.0	22.5	21.0	--	--
29	13.5	12.5	--	--	21.0	19.0	24.5	23.0	22.5	21.0	--	--
30	13.5	12.5	--	--	21.0	19.0	24.5	23.0	21.5	20.5	--	--
31	--	--	--	--	--	--	24.0	22.5	21.5	20.0	--	--
AVE	11.3	10.3	15.1	14.3	--	--	22.8	21.4	23.1	21.8	20.5	19.3

## EEL RIVER BASIN

11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CALIF.

LOCATION.--Lat 40°10'55", long 123°46'30", in NW $\frac{1}{4}$  sec.30, T.3-S., R.4 E., Humboldt County, at gaging station, at Sylva Dale Campgrounds on U.S. Highway 101, 0.5 mile upstream from Rocky Glen Creek, 4.3 miles southeast of Miranda, and 20 miles upstream from mouth.

DRAINAGE AREA.--537 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1952-53 (partial-record station), October 1953 to September 1971.

Water temperatures: November 1960 to September 1971.

Sediment records: Water years 1955-62 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 29.0°C July 21.

Period of record:

Water temperatures (1960-64, 1965-71): Maximum (1960-61, 1963-64, 1965-68, 1970-71), 34.0°C July 25, 1964; minimum (1960-64, 1965-70), 1.0°C Jan. 20, 21, 1963.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Thermograph recorder stopped Dec. 11 to Feb. 18; May 19 to June 30, Sept. 17-24. Where no maximum or minimum is shown, temperature is once-daily reading.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	HICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 21...	0945	81	13.0	9.7	35	12	10	1.5	151	0	22
NOV. 10...	1445	2900	13.5	10.5	--	--	5.6	--	65	0	--
DEC. 08...	1500	15700	12.0	11.0	--	--	3.8	--	49	0	--
JAN. 05...	1530	2560	5.5	12.6	12	5.1	5.5	.8	61	0	5.3
FEB. 02...	1630	1200	9.5	11.9	--	--	5.4	--	74	0	--
MAR. 02...	1400	688	8.0	12.7	--	--	5.3	--	86	0	--
APR. 06...	1505	1500	13.0	10.8	--	--	5.0	--	74	0	--
MAY 05...	0610	751	14.0	9.8	--	--	5.2	--	74	0	--
JUNE 23...	0930	176	20.0	9.2	--	--	8.0	--	101	0	--
JULY 20...	1445	96	27.0	10.8	--	--	9.1	--	125	0	--
AUG. 17...	1430	62	24.0	16.4	--	--	9.1	--	89	5	--
SEP. 14...	1515	145	24.0	13.5	--	--	9.3	--	104	5	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LINITAS CACO3 (MG/L)	PERCENT SODIUM
OCT. 21...	8.2	.0	.000	100	144	.20	31.5	137	13	124	14
NOV. 10...	4.1	--	.030	100	--	--	--	59	6	53	--
DEC. 08...	3.0	.1	.050	100	--	--	--	44	4	40	--
JAN. 05...	3.4	.0	.010	100	64	.09	442	51	1	50	19
FEB. 02...	3.2	.1	.020	0	--	--	--	60	0	61	--
MAR. 02...	4.0	.1	.020	0	--	--	--	75	4	71	--
APR. 06...	3.6	.1	.020	0	--	--	--	58	0	61	--
MAY 05...	2.8	.1	.020	0	--	--	--	65	4	61	--
JUNE 23...	5.2	.0	.010	0	--	--	--	88	5	83	--
JULY 20...	5.0	.0	.000	0	--	--	--	107	4	103	--
AUG. 17...	7.2	.0	.010	300	--	--	--	88	7	81	--
SEP. 14...	7.1	.1	.000	100	--	--	--	101	7	94	--

## 11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT. 21...	.4	298	8.1	8	--	--	--	--	--	--
NOV. 10...	.3	148	7.4	230	--	--	--	--	--	--
DEC. 08...	.2	98	7.6	800	--	--	--	--	--	--
JAN. 05...	.3	127	8.0	45	--	--	--	--	--	--
FEB. 02...	.3	144	7.9	35	--	--	--	--	--	--
MAR. 02...	.3	175	7.9	10	--	--	--	--	--	--
APR. 06...	.3	137	7.8	20	--	--	--	--	--	--
MAY 05...	.3	152	7.6	4	0	100	0	0	.0	0
JUNE 23...	.4	204	8.2	2	--	--	--	--	--	--
JULY 20...	.4	232	8.3	2	--	--	--	--	--	--
AUG. 17...	.4	198	8.8	1	--	--	--	--	--	--
SEP. 14...	.4	226	8.6	2	--	--	--	--	--	--

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	20.0	-- 16.5	15.0	-- 13.5	11.0	-- 11.0	-- --	--	-- --	--	8.5	-- 6.5
2	20.0	-- 16.5	15.0	-- 13.5	11.0	-- 11.0	-- --	--	-- --	--	8.0	-- 6.5
3	19.5	-- 17.0	14.5	-- 13.5	11.0	-- 10.5	-- --	--	7.5	--	9.0	-- 8.0
4	19.5	-- 16.5	14.5	-- 14.0	10.5	-- 10.5	-- --	--	-- --	--	9.0	-- 7.5
5	19.0	-- 16.5	14.5	-- 14.0	10.5	-- 10.5	-- --	--	-- --	--	8.5	-- 7.0
6	17.5	-- 14.5	14.5	-- 14.0	11.0	-- 10.5	-- 5.5	--	-- --	--	9.0	-- 7.0
7	17.0	-- 13.5	14.0	-- 14.0	10.5	-- 10.5	-- --	--	-- --	--	9.0	-- 7.5
8	17.5	-- 13.5	14.5	-- 14.0	10.5	-- 10.5	-- --	--	-- --	--	9.5	-- 7.5
9	18.0	-- 15.0	14.5	-- 14.0	10.5	-- 10.0	-- --	--	-- --	--	9.5	-- 8.0
10	18.5	-- 15.5	14.0	-- 13.5	10.0	-- 10.0	-- --	--	-- --	--	8.5	-- 8.0
11	19.0	-- 16.0	14.5	-- 13.5	-- --	--	-- --	--	-- --	--	9.0	-- 8.5
12	19.0	-- 16.5	14.0	-- 13.0	-- --	--	-- --	--	-- --	--	10.0	-- 8.5
13	18.5	-- 15.5	13.0	-- 12.5	-- --	--	-- --	--	-- --	--	10.0	-- 9.5
14	17.5	-- 15.0	13.0	-- 12.5	-- --	--	-- --	--	-- --	--	10.0	-- 9.5
15	17.5	-- 15.0	12.5	-- 12.0	-- --	--	-- --	--	-- --	--	11.0	-- 9.5
16	17.5	-- 15.0	14.0	-- 12.5	-- --	--	-- --	--	-- --	--	11.0	-- 9.5
17	16.5	-- 15.0	14.0	-- 13.0	-- --	--	-- --	--	-- --	--	11.5	-- 9.5
18	17.5	-- 15.0	13.0	-- 12.5	-- --	--	-- --	--	-- --	--	12.0	-- 9.5
19	16.5	-- 15.5	12.5	-- 12.0	-- --	--	-- --	--	10.0	-- 8.0	12.0	-- 10.0
20	17.0	-- 15.0	13.0	-- 12.0	-- --	--	-- --	--	10.0	-- 8.5	12.0	-- 10.0
21	16.0	-- 14.5	12.5	-- 12.0	-- --	--	-- --	--	9.5	-- 9.0	11.5	-- 11.0
22	15.5	-- 14.5	12.5	-- 12.5	-- --	--	-- --	--	10.0	-- 9.0	12.0	-- 11.5
23	15.5	-- 14.5	14.0	-- 12.5	-- --	--	-- --	--	10.5	-- 9.0	12.5	-- 11.5
24	15.0	-- 14.0	14.0	-- 12.5	-- --	--	-- --	--	10.0	-- 9.0	12.0	-- 11.5
25	15.0	-- 14.0	12.5	-- 12.5	-- --	--	-- --	--	9.0	-- 8.0	11.5	-- 11.0
26	15.0	-- 13.5	12.5	-- 12.5	-- --	--	-- --	--	9.0	-- 7.0	11.5	-- 10.0
27	14.5	-- 12.5	12.5	-- 12.0	-- --	--	-- --	--	8.5	-- 7.5	12.5	-- 10.5
28	13.5	-- 11.5	12.0	-- 11.5	-- --	--	-- --	--	8.5	-- 7.0	13.0	-- 11.5
29	13.5	-- 11.5	11.5	-- 11.5	-- --	--	-- --	--	-- --	--	12.5	-- 11.5
30	13.5	-- 11.5	11.5	-- 11.0	-- --	--	-- --	--	-- --	--	12.0	-- 10.0
31	14.5	-- 12.5	-- --	-- --	-- --	--	-- --	--	-- --	--	12.5	-- 10.5
AVE	16.9	-- 14.6	13.5	-- 12.8	-- --	--	-- --	--	-- --	--	10.7	-- 9.3

## EEL RIVER BASIN

11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

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	13.0	-- 11.0	16.5	-- 14.0	-- --	--	23.5	-- 20.0	24.0	-- 20.0	21.0	-- 19.5
2	13.0	-- 11.5	15.5	-- 14.5	-- --	--	23.5	-- 20.0	23.5	-- 20.5	21.0	-- 19.0
3	14.0	-- 12.5	15.0	-- 14.5	-- --	--	24.0	-- 19.5	24.0	-- 20.5	20.5	-- 18.5
4	13.5	-- 12.0	15.0	-- 14.0	-- --	--	23.5	-- 19.5	24.5	-- 20.5	22.5	-- 18.5
5	12.5	-- 12.0	16.0	-- 13.5	-- --	--	23.5	-- 20.0	24.0	-- 22.0	22.0	-- 19.5
6	12.0	-- 11.5	16.5	-- 14.5	-- --	--	24.0	-- 19.5	24.5	-- 21.5	21.5	-- 19.0
7	12.0	-- 12.0	17.0	-- 14.5	-- --	--	24.5	-- 19.5	25.0	-- 21.0	21.5	-- 18.0
8	12.0	-- 11.5	17.5	-- 16.0	-- --	--	25.0	-- 20.0	25.5	-- 22.0	21.5	-- 18.0
9	12.0	-- 11.5	17.5	-- 15.5	-- --	--	24.5	-- 21.0	25.5	-- 22.0	22.0	-- 19.0
10	12.5	-- 10.5	19.0	-- 16.5	-- --	--	24.0	-- 19.5	25.0	-- 22.5	22.0	-- 20.0
11	11.5	-- 11.0	20.5	-- 17.0	-- --	--	24.0	-- 20.0	24.0	-- 22.0	22.5	-- 20.5
12	13.5	-- 11.0	19.0	-- 18.0	-- --	--	24.0	-- 20.0	23.5	-- 21.5	22.0	-- 20.0
13	12.5	-- 11.5	19.5	-- 17.0	-- --	--	24.5	-- 20.0	23.0	-- 21.0	22.0	-- 19.0
14	15.0	-- 12.0	19.5	-- 16.0	-- --	--	24.5	-- 20.0	23.0	-- 19.5	23.0	-- 19.0
15	13.5	-- 12.0	18.5	-- 16.0	-- --	--	25.0	-- 20.0	23.5	-- 20.5	23.5	-- 21.5
16	14.5	-- 12.0	16.5	-- 14.5	-- 20.0	--	26.0	-- 20.0	23.5	-- 20.0	23.0	-- 21.0
17	14.0	-- 12.5	17.5	-- 14.0	-- --	--	26.5	-- 23.5	23.0	-- 20.5	-- --	--
18	12.5	-- 11.5	18.5	-- 15.5	-- --	--	26.5	-- 23.5	23.5	-- 20.5	-- --	--
19	13.0	-- 11.0	-- 16.5	--	-- --	--	28.0	-- 23.5	23.0	-- 20.5	-- --	--
20	14.0	-- 11.5	-- --	--	-- --	--	28.5	-- 25.0	24.0	-- 21.5	-- --	--
21	13.0	-- 12.5	-- --	--	-- --	--	29.0	-- 25.5	25.0	-- 23.0	-- --	--
22	13.0	-- 10.5	-- --	--	-- --	--	27.5	-- 26.0	24.5	-- 24.0	-- --	--
23	12.0	-- 11.5	-- --	--	-- --	--	26.0	-- 21.0	24.0	-- 21.0	-- --	--
24	12.5	-- 11.0	-- --	--	-- --	--	25.0	-- 20.0	25.0	-- 22.0	-- 19.0	--
25	12.5	-- 10.0	-- --	--	-- --	--	25.0	-- 20.5	24.0	-- 22.0	20.5	-- 18.5
26	14.0	-- 10.5	-- --	--	-- --	--	25.0	-- 21.5	24.5	-- 22.5	19.5	-- 18.5
27	15.0	-- 12.5	-- --	--	-- --	--	24.0	-- 21.0	24.0	-- 22.5	20.0	-- 18.0
28	15.5	-- 13.0	-- --	--	-- --	--	23.0	-- 20.5	22.5	-- 21.5	19.0	-- 17.0
29	15.0	-- 13.5	-- --	--	-- --	--	24.0	-- 20.5	22.5	-- 20.5	18.0	-- 15.5
30	16.5	-- 13.5	-- --	--	-- 19.5	--	24.5	-- 21.0	21.5	-- 19.5	17.0	-- 14.5
31	--	-- --	-- --	--	-- --	--	24.0	-- 21.0	21.0	-- 19.0	-- --	--
AVE	13.3	-- 11.7	-- --	--	-- --	--	25.0	-- 21.0	23.8	-- 21.2	-- --	--

11477000 EEL RIVER AT SCOTIA, CALIF.  
(International Hydrological Decade Station)

LOCATION.--Lat 40°29'30", long 124°05'55", in SW $\frac{1}{4}$  sec.5, T.1 N., R.1 E., Humboldt County, at gaging station at bridge on U.S. Highway 101, 0.5 mile north of Scotia, and 6 miles upstream from Van Duzen River.

DRAINAGE AREA.--3,113 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1952-53 (partial-record station), October 1953 to September 1971.  
October 1957 to September 1971.

Sediment records: Water years 1955-57 (partial-record station), October 1957 to September 1971.

Turbidity: Water years 1965-68 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 25.0°C Aug. 21, 22; minimum, 5.5°C Jan. 13.

Sediment concentrations: Maximum daily, 7,950 mg/l Jan. 16; minimum daily, 2 mg/l Sept. 9, 10.

Sediment discharge: Maximum daily, 3,680,000 tons Jan. 16; minimum daily, 0.61 tons Oct. 3.

Period of record:

Water temperatures: Maximum (1960-64, 1965-71), 25.0°C Aug. 21, 22, 1971; minimum, 3.5°C Jan. 13, 14, 1963.

Sediment concentrations: Maximum daily, 33,000 mg/l (estimated) Dec. 23, 1964; minimum daily, 1 mg/l on many days in 1958-64, 1966-67, 1970.

Sediment discharge: Maximum daily, 57,000,000 tons (estimated) Dec. 23, 1964; minimum daily, 0.25 tons Aug. 21, 1970.

REMARKS.--Chemical-quality samples collected by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
OCT.											
20...	1525	205	15.5	--	19	0	44	13	750	11	1.6
NOV.											
10...	1630 A	20000	14.0	10.7	18	60	20	6.6	280	5.7	1.9
DEC.											
08...	1330	65200	11.5	10.8	12	30	14	5.6	140	4.9	1.9
JAN.											
05...	1400	10900	5.0	12.6	12	--	17	9.1	230	6.2	1.4
FEB.											
02...	1515	6880	10.0	11.5	11	10	22	7.7	260	5.4	1.1
MAR.											
02...	1215	3600	9.0	13.7	13	220	24	16	310	9.3	3.5
APR.											
06...	1315	7600	13.0	10.6	12	80	21	6.0	200	4.9	.9
MAY											
04...	1745	4400	13.0	10.3	13	60	26	13	140	7.2	1.6
JUNE											
23...	0815	782	19.0	9.5	6.8	10	29	7.8	490	6.5	1.1
JULY											
20...	1315	336	25.0	--	8.2	10	36	9.4	370	7.8	1.2
AUG.											
17...	1305	187	24.0	10.7	9.7	10	36	9.8	510	8.8	1.4
SEP.											
14...	1415	171	23.0	14.7	7.7	10	36	11	640	8.8	1.7

DATE	DIS- SOLVED LITHIUM (LI) (UG/L)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT.											
20...	10	186	0	25	6.0	.2	--	.00	.040	0	212
NOV.											
10...	10	75	0	18	5.5	.2	--	.6	.75	80	116
DEC.											
08...	10	62	0	11	4.1	.2	--	.2	1.6	160	86
JAN.											
05...	10	89	0	15	3.7	.1	--	.2	.14	250	110
FEB.											
02...	10	93	0	16	2.9	.0	--	.00	.19	90	113
MAR.											
02...	0	121	0	33	9.7	.3	.50	--	.25	100	172
APR.											
06...	0	89	0	12	2.5	.0	.00	--	.20	10	103
MAY											
04...	0	121	0	23	7.0	.1	.00	--	.10	100	151
JUNE											
23...	0	130	0	15	4.0	.3	.05	--	.050	100	135
JULY											
20...	0	155	0	20	4.1	.1	.07	--	.050	150	164
AUG.											
17...	0	165	0	8.3	4.7	.1	.11	--	.10	130	161
SEP.											
14...	0	98	30	23	6.9	.2	.01	--	.050	180	174

A Daily mean discharge.

## EEL RIVER BASIN

11477000 EEL RIVER AT SCOTIA, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (JTU)
OCT. 20...	.29	117	164	11	153	13	.4	353	8.3	2
NOV. 10...	.16	8300	77	15	62	13	.3	180	7.7	225
DEC. 08...	.12	15100	58	7	51	15	.3	139	7.1	--
JAN. 05...	.15	3240	80	7	73	14	.3	197	7.7	53
FEB. 02...	.15	2100	86	10	76	12	.3	190	7.8	65
MAR. 02...	.23	1670	130	27	99	13	.4	295	7.5	20
APR. 06...	.14	2110	77	4	73	12	.2	167	7.8	20
MAY 04...	.21	1790	120	19	99	12	.3	253	8.0	5
JUNE 23...	.18	285	100	0	107	12	.3	234	7.3	1
JULY 20...	.22	149	130	1	127	12	.3	270	8.1	1
AUG. 17...	.22	81.3	130	0	135	13	.3	296	8.2	1
SEP. 14...	.24	80.3	140	5	130	12	.3	289	8.4	1

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	15.5	15.0	12.5	10.0	9.5	8.0	8.0	8.0	8.0	7.0	6.0
2	18.5	16.5	15.0	12.5	9.5	9.5	8.0	7.0	8.0	8.0	6.5	6.0
3	17.5	16.5	14.0	13.0	9.5	9.0	7.0	6.5	8.0	7.5	7.0	6.5
4	18.5	16.5	14.0	14.0	9.5	9.5	6.5	6.0	7.5	7.0	7.0	7.0
5	18.5	16.0	14.0	13.5	10.0	9.5	6.0	6.0	7.5	7.5	8.0	7.0
6	16.5	14.0	13.5	13.5	10.5	10.0	6.0	6.0	8.0	7.5	8.0	7.5
7	16.0	13.0	13.5	13.0	10.5	10.5	6.0	6.0	8.5	8.0	8.0	8.0
8	17.0	13.0	13.0	13.0	10.5	10.5	6.5	6.0	8.5	8.5	8.0	8.0
9	17.0	14.0	13.5	13.0	10.5	10.0	7.0	6.5	8.5	8.5	8.5	8.0
10	18.0	15.5	13.0	13.0	10.0	9.5	8.0	7.0	8.5	8.5	8.5	8.0
11	17.5	15.5	13.0	13.0	9.5	9.5	8.0	7.5	9.0	8.5	8.5	8.5
12	16.5	15.0	13.0	12.5	9.5	9.0	8.0	7.0	9.5	9.0	8.5	8.0
13	16.5	13.5	12.5	12.0	9.0	9.0	7.0	5.5	9.5	9.5	8.0	8.0
14	16.0	13.5	12.0	12.0	9.0	9.0	6.0	6.0	9.5	9.5	8.0	8.0
15	16.0	14.0	12.0	12.0	9.0	9.0	6.5	6.0	9.5	9.5	8.0	8.0
16	15.0	14.5	12.0	12.0	9.0	8.5	8.0	6.5	9.5	9.0	8.0	8.0
17	15.0	13.5	12.0	12.0	8.5	8.0	8.5	8.0	9.0	9.0	8.0	8.0
18	16.0	14.5	12.0	12.0	8.0	8.0	9.0	8.0	9.0	8.5	8.5	8.0
19	14.5	13.0	12.0	12.0	8.0	7.5	9.0	8.5	8.5	8.0	9.0	8.5
20	15.0	13.5	12.0	12.0	7.5	7.0	9.5	9.0	8.0	7.5	9.5	9.0
21	15.0	14.0	12.0	12.0	7.0	7.0	9.5	9.0	8.0	7.5	9.5	9.5
22	14.0	13.5	12.0	12.0	7.5	7.0	9.0	8.0	8.0	7.5	9.5	9.5
23	13.5	13.5	12.0	12.0	8.0	7.5	8.0	8.0	8.0	7.5	9.5	9.5
24	13.5	13.5	12.0	12.0	8.0	8.0	8.5	8.0	8.0	8.0	9.5	9.5
25	13.5	13.5	12.0	12.0	8.0	7.0	8.5	8.0	8.0	8.0	9.5	9.5
26	14.0	13.0	12.0	11.0	7.0	7.0	8.0	8.0	8.0	7.5	9.5	9.0
27	13.5	12.0	11.0	10.5	7.0	7.0	8.0	8.0	8.0	7.0	9.0	8.5
28	13.5	11.5	10.5	10.0	7.5	7.0	8.0	8.0	7.0	6.5	9.0	8.5
29	13.5	11.0	10.5	10.0	8.0	7.5	8.0	8.0	--	--	9.5	9.0
30	13.0	11.5	10.0	10.0	8.0	8.0	8.0	7.5	--	--	9.5	9.5
31	15.0	13.0	--	--	8.0	8.0	8.0	7.5	--	--	9.5	9.5
AVE	15.7	13.9	12.5	12.1	8.8	8.5	7.7	7.3	8.4	8.1	8.5	8.2



## 11477000 EEL RIVER AT SCOTIA, CALIF.--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.0	13.5	13.5	14.0	14.0	19.5	18.0	21.0	18.5	21.5	20.0
2	10.0	9.0	13.5	13.0	14.5	14.0	20.0	18.0	22.0	19.0	22.0	20.5
3	11.0	10.0	13.0	12.0	15.5	14.0	21.0	18.5	23.0	21.0	21.5	19.5
4	11.5	11.0	12.5	12.0	17.0	15.0	21.0	19.0	23.5	21.5	22.5	20.0
5	12.0	11.5	12.0	12.0	17.5	17.0	20.5	18.5	24.0	22.0	21.5	20.5
6	12.0	11.0	13.5	12.0	18.5	17.0	21.0	18.5	24.0	22.0	21.0	19.5
7	11.5	11.0	14.5	13.5	18.5	17.0	22.0	19.0	24.0	21.5	21.5	19.0
8	11.0	11.0	14.5	14.0	17.5	16.0	22.5	19.0	24.5	22.0	22.0	19.5
9	11.0	10.0	14.5	14.0	17.5	16.5	22.0	20.5	23.5	22.0	22.0	19.5
10	10.0	10.0	15.0	14.0	17.5	17.0	22.0	19.5	23.5	21.5	22.5	20.0
11	10.0	10.0	15.0	14.0	17.0	16.5	21.0	19.5	21.5	21.0	22.5	20.0
12	10.0	10.0	15.0	14.5	17.5	16.5	21.5	19.0	21.0	20.5	22.5	20.5
13	10.0	10.0	15.5	15.0	19.0	17.5	21.5	19.5	21.5	20.0	21.0	19.0
14	10.0	10.0	15.5	15.0	19.5	18.0	21.0	19.5	22.0	19.0	21.5	18.5
15	11.0	10.0	15.0	14.5	19.5	17.5	20.5	19.5	23.0	21.0	21.5	19.0
16	11.0	11.0	15.0	14.5	19.5	18.0	22.0	19.5	23.0	20.5	21.5	19.5
17	11.0	10.0	15.0	14.0	19.5	18.5	22.5	20.0	23.5	21.5	21.0	19.5
18	10.0	9.5	14.0	13.0	19.0	18.5	22.0	20.0	23.5	21.5	21.5	19.5
19	10.5	10.0	15.0	14.0	19.0	18.5	23.5	20.0	23.5	22.0	20.5	18.0
20	10.5	10.5	15.0	14.0	20.5	18.5	24.0	21.0	24.5	22.0	20.0	18.0
21	10.5	10.5	14.5	13.5	21.5	20.0	24.0	21.5	25.0	22.5	20.0	17.0
22	10.5	10.5	13.5	13.0	22.5	20.5	23.5	21.5	25.0	23.0	19.5	17.5
23	10.5	10.0	15.0	13.5	22.5	20.0	22.0	20.5	24.0	21.5	19.0	18.0
24	10.5	10.0	16.0	15.0	21.0	19.5	22.0	20.0	24.0	21.0	18.5	17.5
25	11.0	10.0	17.0	15.5	20.5	19.5	21.0	19.5	24.0	22.0	18.5	17.0
26	12.0	10.0	17.0	16.0	20.5	19.0	21.0	19.0	24.0	21.5	17.5	16.5
27	12.5	12.0	16.0	15.0	19.5	18.5	20.5	19.5	23.0	21.5	17.0	15.5
28	12.5	12.0	15.5	15.0	20.0	18.0	19.5	18.0	23.0	21.0	16.5	16.0
29	13.0	12.0	15.0	14.5	20.5	18.5	19.0	18.0	23.0	20.5	16.0	15.0
30	13.5	12.5	15.0	14.0	20.0	19.0	21.0	18.0	21.5	20.0	16.5	14.5
31	--	--	14.5	14.0	--	--	20.5	18.5	21.5	20.0	--	--
AVE	11.0	10.5	14.7	13.9	18.9	17.6	21.5	19.4	23.2	21.1	20.3	18.5

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	75	4	.81	235	5	3.2	46500	1570	197000
2	75	4	.81	210	3	1.7	54400	1450	213000
3	75	3	.61	210	3	1.7	86000	3530	1080000
4	75	4	.81	1300	88	309	195000	5170	2810000
5	75	7	1.4	3500	660	6240	87700	2280	540000
6	73	6	1.2	8600	864	20100	61000	1710	282000
7	75	6	1.2	8100	370	8090	59600	2200	354000
8	73	6	1.2	4500	225	2730	67700	2330	426000
9	75	6	1.2	18800	4740	241000	57000	1500	231000
10	77	6	1.2	20000	2950	159000	45000	1210	147000
11	75	5	1.0	9000	1040	25300	34000	980	90000
12	75	5	1.0	13000	1130	39700	25000	850	57400
13	75	5	1.0	8890	900	21600	19000	790	40500
14	75	5	1.0	6400	650	11200	15200	590	24200
15	75	4	.81	4500	455	5530	15000	400	16200
16	75	4	.81	3500	282	2660	37000	1800	180000
17	75	4	.81	2800	150	1130	30000	980	79400
18	80	6	1.3	2400	75	486	21600	600	35000
19	82	7	1.5	2100	37	210	17200	450	20900
20	200	52	28	1950	19	100	15600	610	25700
21	210	56	32	1850	6	30	18200	620	30500
22	350	60	57	1750	6	28	16000	350	15100
23	550	62	92	2600	196	1380	13700	290	10700
24	980	71	188	22000	4330	257000	12300	178	5910
25	1150	70	217	54800	4470	672000	10900	160	4710
26	800	16	35	35900	1710	166000	9810	140	3710
27	550	10	15	38000	3580	482000	9130	95	2340
28	400	12	13	91400	4390	1110000	12300	301	14400
29	340	5	4.6	44900	1720	209000	44100	2650	328000
30	280	5	3.8	37700	1200	122000	31000	1400	117000
31	240	4	2.6	--	--	--	23400	660	41700
TOTAL	7485	--	707.67	450895	--	3564829.6	1190340	--	7423370

## 11477000 EEL RIVER AT SCOTIA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	19800	460	24600	7180	135	2620	4200	132	1500
2	18300	335	16600	6940	128	2400	3580	64	619
3	15300	262	10800	6570	120	2130	3850	62	644
4	12600	238	8100	6070	125	2050	4840	97	1270
5	11000	200	5940	5660	122	1860	4680	102	1290
6	9740	150	3940	5260	112	1590	3960	58	620
7	8770	110	2600	5010	97	1310	3600	34	330
8	7990	100	2160	4700	63	799	3440	28	260
9	7510	93	1890	4390	50	593	3290	26	231
10	7960	340	7590	4130	47	524	3170	41	356
11	13500	2920	117000	3990	46	496	5660	240	3670
12	17500	2380	112000	4290	52	602	49100	3640	650000
13	16600	1100	49300	4860	76	997	75300	4000	813000
14	20700	800	44700	5020	87	1180	35800	1900	184000
15	63700	2930	595000	4780	88	1140	27800	1300	97600
16	173000	7950	3680000	4580	85	1050	20300	930	51000
17	182000	7040	3590000	4310	67	780	19700	690	36700
18	115000	4350	1350000	4010	48	520	15400	920	38300
19	72900	2830	557000	3810	42	432	12100	500	16300
20	46900	2050	260000	3630	42	412	10200	300	8260
21	32200	1280	111000	3330	44	396	9100	250	6140
22	24000	670	43400	3150	40	340	8160	220	4850
23	19200	578	30000	3030	32	262	24300	1470	126000
24	15900	488	20900	2910	33	259	36800	1700	169000
25	13400	358	13000	2920	38	300	30000	1400	124000
26	11500	315	9780	2940	30	238	131000	5690	2050000
27	10200	298	8210	3010	34	276	82700	3000	670000
28	9370	269	6810	3800	125	1280	43500	1800	211000
29	8290	200	4480	--	--	--	29100	1250	98200
30	7740	163	3410	--	--	--	21600	880	51300
31	7390	140	2790	--	--	--	17700	645	30800
TOTAL	999960	--	10693000	124280	--	26836	743930	--	5447240
DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	14200	548	21000	4410	72	857	1930	7	36
2	11800	476	15200	4350	80	940	1790	7	34
3	9880	412	11000	4390	70	830	1670	8	36
4	8920	352	8480	4420	56	668	1600	10	43
5	8130	297	6520	4190	47	532	1550	10	42
6	7730	255	5320	4170	41	462	1470	8	32
7	7380	223	4440	4080	38	419	1410	8	30
8	6310	205	3820	3990	42	452	1400	8	30
9	7270	383	7920	3910	34	359	1410	7	27
10	14200	866	33400	3750	36	365	1380	7	26
11	12000	605	19600	3680	40	397	1330	7	25
12	8710	295	6940	3630	38	372	1290	7	24
13	7720	230	4790	3720	35	352	1240	7	23
14	7670	325	6730	3630	31	304	1150	8	25
15	7490	330	6670	3410	33	304	1070	8	23
16	6910	230	4290	3180	36	309	1030	8	22
17	7740	275	5950	3030	16	131	1000	7	19
18	9040	365	8910	2810	21	159	980	7	19
19	7510	225	4560	2670	20	144	957	6	16
20	7000	155	2930	2590	20	140	919	6	15
21	6860	175	3240	2760	30	224	878	6	14
22	6290	172	2920	2470	34	227	856	5	12
23	6220	165	2770	2330	15	94	781	5	11
24	6320	162	2760	2260	12	73	736	4	7.9
25	5730	142	2200	2230	8	48	718	4	7.8
26	5320	94	1350	2300	12	75	710	4	7.7
27	5010	90	1220	2290	15	93	703	4	7.6
28	4810	92	1190	2310	7	44	689	3	5.6
29	4670	65	820	2360	8	51	693	3	5.6
30	4560	70	862	2220	10	60	659	3	5.3
31	--	--	--	2050	10	55	--	--	--
TOTAL	234000	--	207802	99590	--	9540	33999	--	631.5

## 11477000 EEL RIVER AT SCOTIA, CALIF.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	619	3	5.0	244	7	4.6	191	4	2.1
2	564	4	6.1	226	7	4.3	195	3	1.6
3	537	4	5.8	227	7	4.3	195	3	1.6
4	514	3	4.2	224	7	4.2	191	4	2.1
5	506	3	4.1	215	6	3.5	192	4	2.1
6	492	3	4.0	215	6	3.5	184	4	2.0
7	462	3	3.7	215	6	3.5	177	4	1.9
8	446	3	3.6	215	6	3.5	177	3	1.4
9	437	4	4.7	215	6	3.5	174	2	.94
10	423	4	4.6	215	6	3.5	174	2	.94
11	400	4	4.3	215	5	2.9	174	4	1.9
12	389	4	4.2	215	5	2.9	174	4	1.9
13	385	4	4.2	208	5	2.8	165	5	2.2
14	376	4	4.1	198	5	2.7	156	7	2.9
15	368	4	4.0	194	5	2.6	156	7	2.9
16	360	4	3.9	194	6	3.1	153	7	2.9
17	361	4	3.9	191	7	3.6	153	7	2.9
18	350	4	3.8	191	7	3.6	153	7	2.9
19	342	4	3.7	191	7	3.6	150	7	2.8
20	336	4	3.6	191	11	5.7	150	7	2.8
21	319	4	3.4	191	8	4.1	145	10	3.9
22	310	4	3.3	191	6	3.1	140	10	3.8
23	306	4	3.3	191	6	3.1	138	8	3.0
24	290	5	3.9	191	6	3.1	140	8	3.0
25	273	7	5.2	194	10	5.2	138	6	2.2
26	270	7	5.1	191	10	5.2	130	6	2.1
27	265	7	5.0	191	8	4.1	130	8	2.8
28	265	7	5.0	191	8	3.1	134	45	16
29	258	7	4.9	191	4	2.1	215	33	19
30	255	7	4.8	191	4	2.1	320	5	4.3
31	251	7	4.7	191	4	2.1	--	--	--
TOTAL	11729	--	134.1	6303	--	109.2	5064	--	102.88
TOTAL DISCHARGE FOR YEAR (CFS-DAYS)									3907575
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)									27374302.95

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDIM- ENT (MG/L)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.
					% FINER THAN .002 MM	% FINER THAN .004 MM	% FINER THAN .008 MM	% FINER THAN .016 MM	
NOV.									
05...	0800	14.0	A 3500	766	7240	36	49	64	77
09...	0900	13.0	A 18800	3350	170000	27	38	52	69
10...	1300	13.0	A 20000	2560	138000	22	30	40	52
28...	1600	10.5	88000	3260	775000	29	32	50	63
30...	0800	10.0	36300	1010	99000	26	38	49	61
DEC.									
02...	0800	9.5	50400	1310	178000	27	39	53	67
04...	1400	--	203000	4420	2420000	29	37	54	67
07...	1500	--	65900	2610	464000	30	34	49	63
29...	1600	8.0	55200	2730	407000	25	32	46	59
30...	1630	8.0	29600	1190	95100	20	26	36	44
JAN.									
12...	1600	8.0	17600	1890	89800	56	62	88	95
14...	1600	--	22400	810	49000	50	71	85	95
18...	0800	--	121000	4680	1530000	17	18	27	38
20...	1600	9.5	43700	1980	234000	18	25	34	46
29...	1400	8.0	8200	195	4320	25	34	42	49
MAR.									
01...	1500	6.0	4020	104	1130	--	--	--	--
APR.									
10...	0800	10.0	13300	824	29600	24	34	44	54

A Daily mean discharge.

11477000 EEL RIVER AT SCOTIA, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.
	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
DATE	.031 MM	.062 MM	.062 MM	.125 MM	.125 MM	.250 MM	.250 MM	.500 MM	1.00 MM
NOV.									
05...	85	96	--	99	--	100	--	--	--
09...	85	96	--	98	--	100	--	--	--
10...	61	74	--	78	--	87	--	100	--
28...	80	90	--	97	--	100	--	--	--
30...	70	81	--	92	--	100	--	--	--
DEC.									
02...	79	88	--	94	--	100	--	--	--
04...	82	93	--	98	--	100	--	--	--
07...	77	86	--	94	--	100	--	--	--
29...	74	86	--	94	--	100	--	--	--
30...	53	62	--	71	--	88	--	98	100
JAN.									
12...	99	--	100	--	--	--	--	--	--
14...	99	--	100	--	--	--	--	--	--
18...	52	64	--	83	--	99	--	100	--
20...	57	78	--	90	--	100	--	--	--
29...	53	63	--	73	--	99	--	100	--
MAR.									
01...	--	--	93	--	95	--	100	--	--
APR.									
10...	61	82	--	85	--	99	--	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

[illegible]

## 11477500 VAN DUZEN RIVER NEAR DINSMORES, CALIF.

LOCATION.--Lat 40°29'05", long 123°39'25", in NE¼NW¼ sec.7, T.1 N., R.5 E., Humboldt County, temperature recorder at gaging station on right bank, 10 ft upstream from private road bridge, 0.3 mile upstream from South Fork, and 2.8 miles west of Dinsmores.

DRAINAGE AREA.--85.1 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 25.5°C Aug. 11; minimum, 2.0°C Jan. 6.

Period of record:

Water temperatures: Maximum, 25.5°C Aug. 11, 1971; minimum (1965-68, 1969-71), freezing point on several days in 1965-68.

REMARKS.--Recorder stopped Oct. 30 to Nov. 18, Mar. 5-10, May 10-19, Sept. 17-30; recorder malfunction Jan. 10-18; probe inoperative Dec. 1 to Jan. 5, May 25-28, June 4-18, June 30 to July 13. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	16.0	12.0	--	--	--	--	--	--	7.0	3.0	4.5	2.5
2	16.5	12.0	--	--	--	--	--	--	6.0	3.5	5.0	3.5
3	17.0	12.0	--	--	--	--	--	--	5.0	2.0	5.0	3.0
4	16.0	12.0	--	--	--	--	--	--	5.5	3.0	5.0	3.0
5	15.5	12.0	--	--	--	--	--	--	6.5	5.0	--	--
6	15.0	11.0	--	--	--	--	4.0	2.0	8.0	4.5	--	--
7	13.5	11.0	--	--	--	--	4.5	2.5	7.0	3.0	--	--
8	15.0	10.0	--	--	--	--	4.5	3.0	7.0	3.0	--	--
9	14.5	11.0	--	--	--	--	5.0	3.5	6.5	3.0	--	--
10	15.0	11.0	--	--	--	--	--	--	8.0	4.0	5.0	--
11	15.5	11.0	--	--	--	--	--	--	8.5	4.0	6.5	5.0
12	15.0	11.0	--	--	--	--	--	--	8.0	5.0	6.0	4.5
13	14.0	10.0	--	--	--	--	--	--	7.0	4.0	6.0	5.0
14	13.5	10.0	--	--	--	--	--	--	6.0	5.0	6.5	5.0
15	13.5	10.0	--	--	--	--	--	--	7.0	5.0	7.0	5.0
16	14.0	10.0	--	--	--	--	--	--	6.0	5.0	6.5	6.0
17	12.5	10.0	--	--	--	--	--	--	6.5	5.0	7.0	4.5
18	13.5	11.0	9.0	--	--	--	--	--	5.0	4.0	7.5	4.5
19	12.0	10.5	10.5	7.5	--	--	7.0	6.0	5.5	3.5	9.5	4.5
20	13.0	11.0	10.0	7.0	--	--	6.0	4.0	6.0	3.0	10.0	4.5
21	11.5	10.5	9.5	8.0	--	--	5.0	3.0	5.0	3.5	9.0	5.0
22	11.5	9.5	9.0	8.5	--	--	5.0	2.5	5.5	4.0	7.5	6.5
23	11.5	10.0	9.5	8.5	--	--	6.0	3.0	6.0	4.0	8.5	7.0
24	12.0	9.5	9.5	9.0	--	--	5.5	2.5	6.0	3.0	8.0	7.0
25	12.0	10.5	9.0	8.0	--	--	6.0	2.0	5.0	3.0	7.5	6.0
26	11.0	9.0	8.5	7.5	--	--	6.5	2.5	5.0	2.5	6.5	5.5
27	10.5	8.5	7.5	5.5	--	--	6.5	3.0	3.5	3.0	7.5	5.5
28	10.5	8.5	6.5	6.0	--	--	6.5	3.0	4.0	2.5	8.0	6.0
29	10.5	8.0	7.0	6.5	--	--	6.5	3.0	--	--	9.5	6.5
30	--	--	7.0	6.0	--	--	6.5	3.0	--	--	7.5	6.5
31	--	--	--	--	--	--	7.0	3.0	--	--	8.5	5.5
AVE	13.5	10.4	--	--	--	--	--	--	6.1	3.7	7.2	5.1
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	8.5	5.5	12.0	9.0	13.0	10.0	--	--	23.5	20.0	17.5	16.0
2	9.5	6.0	12.0	9.0	15.5	10.5	--	--	24.0	19.0	--	--
3	10.0	6.0	11.0	8.5	16.0	11.0	--	--	24.5	20.5	18.0	15.0
4	10.5	6.5	12.0	9.0	--	--	--	--	24.0	19.5	19.0	14.5
5	10.5	7.0	14.0	9.0	--	--	--	--	24.5	20.0	19.5	15.5
6	9.0	7.0	15.0	9.5	--	--	--	--	24.5	20.0	20.0	16.0
7	9.0	7.5	16.0	10.0	--	--	--	--	24.5	20.0	18.5	16.0
8	9.0	7.5	14.0	11.5	--	--	--	--	24.0	20.0	19.0	14.5
9	9.0	7.5	17.0	11.5	--	--	--	--	24.0	20.0	19.0	14.5
10	8.5	6.5	--	--	--	--	--	--	25.0	20.5	19.5	15.5
11	9.0	6.5	--	--	--	--	--	--	25.0	20.5	20.0	16.0
12	10.5	6.5	--	--	--	--	--	--	25.5	21.0	--	--
13	9.0	8.0	--	--	--	--	--	--	24.5	21.0	20.0	16.5
14	11.5	7.5	--	--	--	--	--	--	24.0	21.0	21.0	17.0
15	12.0	8.0	--	--	--	--	21.5	16.5	23.0	18.5	21.0	18.0
16	10.0	7.5	--	--	--	--	22.0	17.5	22.5	18.0	21.0	17.0
17	8.0	6.0	--	--	--	--	22.5	18.0	22.5	17.5	--	--
18	10.0	6.5	--	--	15.0	--	22.5	19.0	23.0	17.5	--	--
19	11.0	7.0	15.0	--	20.0	14.0	22.5	21.0	23.5	18.0	--	--
20	9.0	6.5	14.5	11.0	21.0	15.0	23.5	19.5	23.0	18.0	--	--
21	9.5	5.5	15.5	8.5	21.5	15.5	24.0	19.5	23.0	18.0	--	--
22	8.5	6.5	18.0	10.5	21.0	16.0	24.5	20.0	20.0	18.5	15.0	--
23	9.0	7.0	19.0	11.0	19.0	16.5	24.5	20.0	22.0	19.0	--	--
24	9.5	6.0	18.5	11.5	20.0	15.5	23.5	19.5	22.5	17.5	--	--
25	11.5	6.0	--	--	17.5	15.5	23.0	19.0	23.0	17.5	--	--
26	13.0	8.0	--	--	17.5	14.0	23.5	20.0	22.0	18.5	--	--
27	14.0	8.5	--	--	19.0	14.5	23.0	19.5	23.5	19.5	--	--
28	13.0	9.0	--	--	19.5	14.0	23.0	19.0	23.5	18.5	--	--
29	13.5	9.0	14.5	10.5	20.0	12.0	23.5	19.0	20.5	17.5	--	--
30	14.0	9.0	14.0	10.5	--	--	23.5	19.5	20.5	17.5	--	--
31	--	--	13.0	10.0	--	--	23.5	19.5	18.0	16.5	--	--
AVE	10.3	7.0	--	--	--	--	--	--	22.9	18.9	--	--

## EEL RIVER BASIN

11478500 VAN DUZEN RIVER NEAR BRIDGEVILLE, CALIF.

LOCATION.--Lat 40°28'50", long 123°53'23", in NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.12, T.1 N. R.2 E., Humboldt County, at gaging station at bridge on State Highway 36, 0.9 mile upstream from Grizzly Creek, and 5 miles west of Bridgeville.

DRAINAGE AREA.--222 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1958 (partial-record station), October 1958 to September 1971.

Water temperatures: December 1960 to September 1971.

Sediment records: Water years 1955-67 (partial-record station).

Turbidity: Water years 1964-67 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 28.5°C July 21; minimum, 2.0°C Jan. 3, 4.

Period of record:

Water temperatures (1960-64, 1965-71): Maximum, 29.5°C July 1, 2, 1967; minimum, 0.5°C Dec. 18-20, 23, 1965.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.											
20...	1400	27	16.0	11.5	--	--	8.5	--	135	0	--
NOV.											
10...	1215	2150	11.0	11.5	--	--	2.9	--	66	0	--
DEC.											
08...	1230	8740	9.5	11.8	--	--	2.4	--	58	0	--
JAN.											
05...	1300	910	4.0	12.0	--	--	3.4	--	74	0	--
FEB.											
02...	1415	655	8.5	12.2	--	--	2.6	--	64	0	--
MAR.											
02...	1130	509	5.5	13.0	18	4.9	4.0	1.4	69	0	10
APR.											
06...	1155	646	11.0	10.9	--	--	2.8	--	67	0	--
MAY											
04...	1650	495	11.5	10.4	--	--	3.0	--	67	0	--
JUNE											
22...	1505	82	24.0	9.1	--	--	5.1	--	101	0	--
JULY											
21...	1155	35	24.0	9.5	--	--	6.6	--	120	0	--
AUG.											
17...	1145	17	22.0	10.5	--	--	7.1	--	135	0	--
SEP.											
14...	1305	16	22.0	11.0	37	7.4	7.5	1.4	134	0	25

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT.										
20...	6.0	--	100	--	--	--	143	32	111	--
NOV.										
10...	1.7	--	100	--	--	--	64	10	54	--
DEC.										
08...	1.7	--	100	--	--	--	50	2	48	--
JAN.										
05...	1.8	--	100	--	--	--	71	10	61	--
FEB.										
02...	1.7	--	0	--	--	--	58	5	52	--
MAR.										
02...	1.8	.2	0	111	.15	153	65	8	57	12
APR.										
06...	1.9	--	0	--	--	--	55	0	55	--
MAY										
04...	1.4	--	0	--	--	--	62	7	55	--
JUNE										
22...	1.8	--	100	--	--	--	89	6	83	--
JULY										
21...	2.4	--	0	--	--	--	106	8	98	--
AUG.										
17...	4.1	--	100	--	--	--	126	15	111	--
SEP.										
14...	4.0	.1	100	146	.20	6.31	123	13	110	12

## 11478500 VAN DUZEN RIVER NEAR BRIDGEVILLE, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SILF- NIUM (SE) (UG/L)
OCT.										
20...	.3	314	8.0	3	--	--	--	--	--	--
NOV.										
10...	.2	143	7.4	230	--	--	--	--	--	--
DEC.										
08...	.1	110	7.5	800	--	--	--	--	--	--
JAN.										
05...	.2	151	7.7	60	--	--	--	--	--	--
FEB.										
02...	.1	124	8.0	25	--	--	--	--	--	--
MAR.										
02...	.2	148	7.8	50	--	--	--	--	--	--
APR.										
06...	.2	126	7.8	30	--	--	--	--	--	--
MAY										
04...	.2	138	7.7	15	0	100	0	0	.0	0
JUNE										
22...	.2	193	8.3	0	--	--	--	--	--	--
JULY										
21...	.3	230	8.3	2	--	--	--	--	--	--
AUG.										
17...	.3	264	8.3	1	--	--	--	--	--	--
SEP.										
14...	.3	267	8.3	1	--	--	--	--	--	--

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	13.5	13.0	10.5	7.0	7.0	6.5	5.0	8.0	7.5	6.0	2.5
2	17.5	13.0	13.0	10.5	7.0	6.5	5.0	3.0	8.5	6.5	6.0	3.0
3	16.5	14.0	12.5	11.0	7.0	6.0	3.0	2.0	7.0	5.5	6.5	5.0
4	17.5	14.0	12.5	11.5	8.0	5.5	2.5	2.0	8.0	5.5	6.0	4.5
5	17.5	14.5	12.5	11.5	8.5	8.0	4.0	2.5	9.0	7.0	6.5	4.0
6	16.0	13.0	11.5	10.5	9.0	8.5	4.5	4.0	9.5	8.5	8.0	5.0
7	16.0	12.5	11.0	10.0	9.0	8.5	5.5	4.5	9.5	7.5	7.5	6.5
8	16.5	12.0	12.0	11.0	8.5	8.0	6.0	5.5	9.5	7.0	8.0	6.0
9	16.0	12.5	12.0	11.5	8.0	7.5	7.0	6.0	9.5	7.0	8.0	6.5
10	17.5	14.5	11.5	10.0	8.0	7.0	8.0	7.0	11.0	7.0	7.0	6.5
11	17.5	13.0	12.0	11.0	8.0	7.0	7.0	5.0	11.5	8.0	8.0	7.0
12	16.5	13.5	11.5	10.0	7.0	5.5	5.0	3.5	12.0	8.5	7.0	6.0
13	16.0	11.5	10.0	8.5	6.5	6.0	3.5	2.5	11.0	9.0	7.5	6.0
14	15.0	11.0	10.5	9.0	6.5	6.0	5.5	2.5	10.0	8.5	7.5	6.5
15	15.0	12.0	10.5	9.0	7.0	6.5	6.0	5.5	11.0	8.0	8.5	7.0
16	15.0	12.5	12.0	10.0	6.5	5.5	7.0	5.5	9.0	7.5	8.5	7.5
17	15.0	12.5	11.0	10.0	5.5	5.5	8.5	7.0	10.0	7.5	8.5	6.5
18	16.5	13.5	11.0	9.0	5.5	4.5	9.5	8.5	7.5	6.5	9.5	6.5
19	14.5	12.0	10.5	8.5	4.5	3.5	10.0	9.0	8.5	6.0	10.5	7.5
20	16.5	13.0	10.5	8.5	4.5	4.0	9.5	8.0	8.5	5.0	11.0	8.5
21	13.5	12.5	10.0	9.0	5.0	4.5	8.0	7.0	7.5	5.5	11.0	9.0
22	13.5	11.0	10.5	10.0	5.5	5.0	7.0	6.0	8.5	6.5	10.0	9.5
23	13.5	11.5	11.5	10.0	6.0	5.5	8.0	6.5	9.0	6.0	10.5	9.5
24	12.5	11.0	12.0	11.5	6.0	5.5	8.0	7.0	9.0	7.0	11.0	10.5
25	12.5	11.5	12.0	10.5	5.5	5.0	7.0	6.0	7.0	4.5	11.0	10.5
26	12.5	10.0	10.5	9.0	5.5	5.0	8.0	7.0	6.5	3.5	10.5	8.5
27	12.0	9.0	9.0	8.5	5.5	5.5	8.5	6.5	5.0	3.0	10.5	8.0
28	12.0	8.5	8.5	8.0	5.5	5.5	8.5	7.0	5.0	2.5	12.0	9.0
29	11.5	8.5	8.5	8.5	5.5	4.5	8.0	6.5	--	--	12.0	10.0
30	11.5	9.5	8.5	7.0	6.5	5.5	8.5	6.5	--	--	12.0	9.5
31	13.5	10.5	--	--	7.0	6.0	8.5	6.5	--	--	11.0	8.0
AVE	15.0	12.0	11.1	9.8	6.6	5.9	6.8	5.5	8.8	6.5	9.0	7.1

## EEL RIVER BASIN

11478500 VAN DUZEN RIVER NEAR BRIDGEVILLE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	9.0	14.5	12.0	13.5	11.5	21.0	15.5	25.5	18.5	20.5	18.5
2	12.5	11.0	15.0	11.5	15.0	11.5	22.0	15.5	22.5	19.0	21.5	17.5
3	12.5	12.0	12.5	11.0	16.0	12.0	23.0	16.0	25.5	18.5	23.0	17.0
4	13.5	12.0	13.0	11.0	20.5	13.0	23.0	16.0	25.5	19.5	24.5	18.0
5	13.5	12.5	16.0	11.0	18.5	14.5	22.0	16.0	24.5	19.5	23.5	18.5
6	14.0	12.5	17.0	11.5	22.0	15.0	23.5	16.0	26.5	19.5	22.0	17.5
7	13.0	11.5	19.5	13.0	20.0	15.5	24.5	16.5	27.0	19.5	23.0	16.0
8	12.0	11.0	15.0	12.5	21.0	15.0	24.5	16.0	27.0	19.0	23.0	16.5
9	12.0	9.5	18.5	12.5	19.0	15.0	20.5	17.0	25.5	19.5	24.0	18.0
10	9.5	7.5	19.5	13.5	16.5	15.0	24.0	16.0	22.0	20.0	23.5	17.0
11	11.0	9.0	20.5	14.5	16.5	14.0	24.0	16.5	21.0	19.5	22.5	18.5
12	13.0	9.0	19.5	15.0	19.5	14.5	24.0	17.0	20.0	18.5	23.5	18.0
13	12.0	11.0	18.5	13.5	22.0	14.5	25.0	17.5	21.5	18.0	23.0	17.5
14	11.5	10.5	19.0	12.5	22.0	15.0	25.0	17.5	24.0	18.0	23.5	16.5
15	13.5	11.0	15.0	12.0	22.5	15.0	24.0	17.5	25.0	18.5	24.5	17.5
16	11.5	9.5	15.5	10.5	23.0	15.5	26.0	17.5	25.0	19.0	24.0	17.5
17	9.5	8.0	17.0	10.0	22.0	15.5	25.0	18.0	25.0	19.0	22.5	17.5
18	10.5	8.0	18.5	12.0	18.5	16.5	25.0	19.0	25.5	19.0	22.0	16.5
19	12.5	9.0	17.5	12.5	22.0	16.0	27.5	18.5	25.0	19.5	22.0	16.0
20	11.5	8.0	17.0	12.5	24.5	16.0	28.0	19.5	26.0	20.0	21.0	15.5
21	10.5	6.5	17.5	10.5	25.5	17.0	28.5	20.0	24.5	20.5	21.5	15.5
22	9.5	9.0	19.5	12.5	25.5	18.0	28.0	20.5	25.0	20.0	21.0	15.5
23	10.0	8.5	19.5	14.0	21.5	17.5	26.0	19.5	25.0	19.5	20.5	16.5
24	10.5	7.5	20.5	14.5	23.5	16.5	26.5	19.0	26.0	18.5	18.5	17.0
25	13.0	8.5	17.0	14.5	19.0	17.5	25.5	18.5	25.0	20.0	19.5	15.5
26	15.5	11.0	18.5	13.5	19.5	16.5	25.5	18.5	25.0	19.0	19.0	15.5
27	15.5	12.0	14.0	13.0	21.5	15.5	20.5	18.5	24.0	20.0	19.5	15.5
28	14.0	12.0	13.5	12.5	22.5	14.5	21.5	18.0	23.0	19.5	17.5	15.0
29	16.0	11.5	17.0	12.0	23.5	15.5	24.0	17.5	23.0	19.0	16.0	13.5
30	17.0	11.0	15.0	11.5	19.0	16.5	25.5	18.5	20.0	17.5	16.0	12.0
31	--	--	13.5	11.5	--	--	25.0	18.0	22.5	17.5	--	--
AVE	12.4	10.0	16.9	12.4	20.5	15.2	24.5	17.6	24.3	19.1	21.5	16.6



11480500 MAD RIVER NEAR FOREST GLEN, CALIF.

LOCATION.--Lat 40°27'30", long 123°30'35", in SW $\frac{1}{4}$  sec.16, T.1 N., R.6 E., Trinity County, Six Rivers National Forest, at gaging station 0.7 mile downstream from Lamb Creek, and 11.1 miles northwest of Forest Glen.

DRAINAGE AREA.--143 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1971 (partial-record station).

Water temperatures: November 1960 to September 1971.

Sediment records: Water years 1957-71 (partial-record station).

Turbidity: Water years 1964-67, 1971 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 23.0°C July 16, 19; minimum, 2.5°C Jan. 13.

Period of record:

Water temperatures: Maximum (1960-66, 1967-71), 26.0°C June 25, 1961; minimum, freezing point Jan. 5, 6, 1968.

REMARKS.--Recorder malfunction Feb. 4 to Mar. 10. Where no maximum or minimum is shown, temperature is once-daily reading.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOLVED ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)
SEP. 07...	1615	97	17.5	.06	.00	.40	.24

DATE	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	AMMONIA (NH <sub>4</sub> ) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (P <sub>04</sub> ) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
SEP. 07...	.16	.18	.23	.03	.050	.010	3.0

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	MAX	OCT DAILY	MIN	MAX	NOV DAILY	MIN	MAX	DEC DAILY	MIN	MAX	JAN DAILY	MIN	MAX	FEB DAILY	MIN	MAX	MAR DAILY	MIN
1	17.0	--	13.0	13.0	--	10.0	8.5	--	7.5	5.5	--	4.5	6.5	--	4.5	--	--	--
2	17.5	--	13.0	13.0	--	10.0	8.0	--	7.5	5.0	--	4.0	6.0	--	4.0	--	--	--
3	17.0	--	13.0	11.5	--	10.0	7.5	--	6.5	5.0	--	4.0	5.5	--	3.5	--	--	--
4	17.0	--	13.0	12.0	--	11.0	8.5	--	7.5	5.0	--	4.0	--	--	6.0	--	--	--
5	16.0	--	13.0	12.0	--	11.0	7.5	--	7.5	5.0	--	4.0	--	--	--	--	--	--
6	15.5	--	12.5	11.5	--	10.5	8.5	--	7.5	5.0	--	4.0	--	--	--	--	--	--
7	15.5	--	11.5	11.5	--	10.5	8.0	--	7.5	5.0	--	3.5	--	--	--	--	--	--
8	17.0	--	12.5	12.0	--	11.5	7.5	--	7.0	5.5	--	4.0	--	--	--	--	--	--
9	16.5	--	13.5	12.0	--	11.0	7.5	--	7.0	5.5	--	4.5	--	--	--	--	--	--
10	17.0	--	13.5	12.0	--	10.5	7.5	--	7.0	5.5	--	4.5	--	--	--	--	4.5	--
11	16.5	--	12.5	12.0	--	10.5	7.5	--	6.0	4.5	--	4.0	--	--	--	6.5	--	5.0
12	16.0	--	12.5	11.5	--	9.5	7.0	--	6.0	4.5	--	3.0	--	--	--	5.5	--	4.0
13	16.0	--	12.0	10.5	--	8.5	6.5	--	6.0	3.5	--	2.5	--	--	--	6.0	--	5.0
14	15.5	--	11.5	11.0	--	9.5	6.5	--	6.0	4.0	--	3.0	--	--	--	6.0	--	4.5
15	15.5	--	12.0	10.5	--	9.0	6.5	--	5.5	4.0	--	3.0	--	--	--	6.0	--	5.0
16	15.5	--	12.0	11.5	--	10.5	6.5	--	6.0	4.0	--	4.0	--	--	--	5.5	--	5.0
17	14.5	--	12.0	11.0	--	9.5	6.5	--	6.0	4.0	--	4.0	--	--	--	7.0	--	5.0
18	15.0	--	13.5	11.0	--	9.5	6.5	--	5.5	4.5	--	4.0	--	--	--	7.0	--	4.5
19	14.5	--	13.0	10.0	--	8.5	6.5	--	5.5	5.0	--	4.5	--	--	--	7.5	--	4.5
20	14.5	--	13.0	10.0	--	8.5	5.5	--	4.5	5.5	--	5.0	--	--	--	7.5	--	5.0
21	13.5	--	12.5	10.0	--	9.5	6.5	--	5.5	5.5	--	5.0	--	--	--	8.0	--	5.5
22	13.5	--	12.5	10.0	--	9.5	6.5	--	5.5	6.0	--	5.0	--	--	--	6.5	--	6.0
23	13.0	--	12.5	11.0	--	10.0	6.5	--	5.5	6.0	--	5.0	--	--	--	7.5	--	6.5
24	13.0	--	11.5	11.0	--	10.5	6.0	--	5.0	6.0	--	4.5	--	--	--	7.5	--	6.5
25	13.0	--	12.0	10.5	--	9.5	6.0	--	5.0	6.0	--	4.5	--	--	--	7.0	--	6.5
26	12.5	--	10.5	9.5	--	8.5	6.0	--	5.0	6.5	--	4.5	--	--	--	7.0	--	6.5
27	12.0	--	9.5	9.0	--	7.0	6.0	--	5.0	6.0	--	5.0	--	--	--	7.0	--	6.0
28	12.5	--	9.5	8.0	--	7.0	5.5	--	4.5	6.5	--	4.5	--	--	--	8.0	--	6.0
29	12.5	--	9.5	8.0	--	7.5	5.5	--	4.5	6.0	--	4.5	--	--	--	8.0	--	6.5
30	11.5	--	10.0	8.0	--	7.0	6.0	--	5.5	6.5	--	4.5	--	--	--	7.5	--	5.5
31	14.0	--	11.5	--	--	--	6.0	--	5.5	6.5	--	4.5	--	--	--	8.5	--	5.5
AVE	14.9	--	12.1	10.8	--	9.5	6.8	--	6.0	5.3	--	4.2	--	--	--	--	--	--

## MAD RIVER BASIN

11480500 MAD RIVER NEAR FOREST GLEN, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

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	9.0	--	5.5	10.5	--	8.0	13.0	--	9.5	20.0	--	15.0	20.0	--	15.0	15.0	--	13.5
2	9.5	--	6.5	11.0	--	8.0	17.0	--	11.5	20.0	--	14.5	20.5	--	15.5	17.0	--	13.5
3	9.5	--	6.0	9.5	--	8.5	16.5	--	12.5	20.0	--	14.5	19.5	--	15.5	17.5	--	13.0
4	10.0	--	6.0	12.0	--	8.5	18.0	--	12.5	19.5	--	14.0	20.0	--	15.0	18.5	--	13.5
5	10.0	--	6.5	12.5	--	8.5	18.5	--	13.0	19.5	--	14.5	20.0	--	15.5	18.5	--	14.0
6	9.5	--	7.0	13.0	--	8.0	19.0	--	13.5	20.0	--	14.5	20.5	--	16.0	16.5	--	14.0
7	9.0	--	7.0	13.5	--	9.0	19.0	--	14.0	19.5	--	14.5	20.0	--	16.0	17.5	--	12.5
8	8.5	--	6.5	11.0	--	9.0	19.0	--	13.5	20.0	--	14.0	20.0	--	15.5	18.0	--	13.0
9	8.5	--	7.0	14.5	--	9.0	16.0	--	13.5	19.5	--	15.0	20.5	--	15.5	18.0	--	13.5
10	9.5	--	7.0	15.5	--	9.0	18.5	--	13.0	19.5	--	14.0	21.0	--	16.5	18.0	--	13.5
11	10.0	--	7.5	15.5	--	11.0	19.5	--	13.5	20.0	--	14.5	21.0	--	16.0	18.5	--	13.5
12	11.0	--	7.5	16.5	--	12.0	17.5	--	14.0	21.0	--	14.5	20.5	--	15.5	19.0	--	14.5
13	9.5	--	8.5	17.5	--	12.5	18.5	--	13.0	21.5	--	14.5	20.0	--	15.5	19.0	--	14.5
14	12.0	--	7.0	17.0	--	12.5	19.0	--	13.0	22.0	--	15.5	19.0	--	14.5	19.0	--	14.5
15	11.0	--	7.0	13.5	--	10.5	20.0	--	13.5	22.5	--	16.0	19.0	--	14.5	18.5	--	14.5
16	8.5	--	7.0	13.5	--	9.0	19.5	--	13.5	23.0	--	16.5	19.0	--	14.5	18.0	--	14.0
17	8.5	--	6.5	13.5	--	8.5	19.0	--	13.5	22.5	--	17.0	19.5	--	14.5	18.0	--	14.0
18	9.5	--	6.5	15.5	--	10.0	15.5	--	14.0	21.5	--	18.0	20.0	--	15.0	17.0	--	12.5
19	11.5	--	6.5	15.5	--	11.0	19.0	--	13.5	23.0	--	16.5	20.0	--	15.0	17.0	--	12.5
20	9.0	--	6.0	14.0	--	9.5	20.0	--	15.0	20.0	--	15.0	19.5	--	15.0	17.0	--	12.5
21	10.5	--	6.0	14.0	--	8.0	20.0	--	15.0	20.0	--	15.5	18.0	--	16.0	17.5	--	13.5
22	9.0	--	7.0	15.5	--	9.5	19.5	--	14.5	20.0	--	15.0	20.0	--	16.0	17.0	--	13.0
23	9.5	--	6.5	16.5	--	11.0	20.0	--	15.5	21.0	--	16.5	19.5	--	15.0	17.0	--	13.5
24	10.0	--	6.5	16.5	--	11.5	18.0	--	14.5	19.0	--	16.0	22.0	--	15.0	17.0	--	13.5
25	12.0	--	6.5	14.0	--	11.0	15.5	--	13.0	18.0	--	14.5	22.0	--	17.0	16.0	--	13.5
26	11.5	--	7.5	13.0	--	10.5	15.5	--	13.0	20.0	--	15.0	19.0	--	17.5	15.0	--	13.0
27	12.5	--	8.0	15.5	--	10.5	17.5	--	12.5	19.5	--	13.0	20.0	--	15.5	16.0	--	13.0
28	12.5	--	8.0	13.5	--	11.5	18.0	--	12.5	20.0	--	15.5	17.5	--	14.0	15.0	--	13.5
29	12.5	--	8.0	15.5	--	10.5	19.0	--	13.5	20.5	--	16.0	18.5	--	14.0	14.0	--	12.5
30	12.0	--	9.5	14.0	--	11.0	20.0	--	14.5	20.0	--	16.5	16.0	--	14.0	16.0	--	12.0
31	--	--	--	11.5	--	10.0	--	--	--	20.0	--	15.0	15.5	--	13.0	--	--	--
AVE	10.2	--	6.9	14.0	--	9.9	18.2	--	13.4	20.4	--	15.2	19.6	--	15.3	17.2	--	13.4

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SED- IMENT 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.										
07...	1535	15.5	118	5	1.6	--	--	--	--	--
NOV.										
18...	1450	10.5	123	18	6.0	--	--	--	--	--
JAN.										
06...	1415	4.5	448	20	24	--	--	--	--	--
18...	1200	4.5	7390	264	5620	23	38	47	55	61
18...	1640	4.5	7350	253	5020	--	--	--	--	--
17...	0820	5.0	5330	174	2500	38	57	69	77	80
FEB.										
04...	1420	6.0	400	54	58	--	--	--	--	--
MAR.										
10...	1330	4.5	198	28	15	--	--	--	--	--
APR.										
06...	1545	9.0	320	60	52	--	--	--	--	--
MAY										
19...	1215	13.0	123	9	3.0	--	--	--	--	--
JUNE										
18...	1310	15.0	66	10	1.8	--	--	--	--	--
JULY										
21...	1400	19.5	93	16	4.0	--	--	--	--	--
SEP.										
21...	1445	17.0	103	6	1.7	--	--	--	--	--

## 11480500 MAD RIVER NEAR FOREST GLEN, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

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. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
OCT. 07...	--	--	--	--	--	--	--	--	--	--
NOV. 18...	--	--	--	--	--	--	--	--	--	--
JAN. 06...	--	--	--	--	--	--	--	--	--	--
18...	66	--	69	--	74	--	84	--	97	100
18...	--	--	--	--	--	--	--	--	--	--
19...	--	86	--	88	--	92	--	100	--	--
FEB. 04...	--	--	--	--	--	--	--	--	--	--
MAR. 10...	--	--	--	--	--	--	--	--	--	--
APR. 06...	--	97	--	100	--	--	--	--	--	--
MAY 19...	--	--	--	--	--	--	--	--	--	--
JUNE 18...	--	--	--	--	--	--	--	--	--	--
JULY 21...	--	--	--	--	--	--	--	--	--	--
SEP. 21...	--	--	--	--	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	NUMBER OF SAW- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
JAN. 18...	1320	1	7890	1	2	3	4	8	9	45	100
18...	1330	1	7890	--	--	1	5	15	32	51	100
18...	1340	1	7890	--	--	1	6	24	64	100	--

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT  
CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)
Oct. 7, 1970...	1535	5	2
Nov. 18.....	1450	17	20
Jan. 6, 1971...	1415	20	24
Jan. 18.....	1200	264	85
Jan. 18.....	1635	253	90
Jan. 19.....	0820	174	90
Feb. 4.....	1415	54	50
Mar. 10.....	1330	28	29
Apr. 6.....	1540	60	75
May 19.....	1215	9	10
June 18.....	1310	9	15
July 21.....	1600	15	23
Sept. 21.....	1445	6	4

## MAD RIVER BASIN

11480750 MAD RIVER NEAR KNEELAND, CALIF.

LOCATION.--Lat 40°45'50", long 123°53'20", in NW¼NW¼ sec.6, T.4 N., R.3 E., Humboldt County, at gaging station at mouth of Maple Creek, 30 ft upstream from bridge, and 5.4 miles east of Kneeland.

DRAINAGE AREA.--352 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1970 to September 1971.

Water temperatures: November 1965 to September 1971.

Sediment records: Water year 1971 (partial-record station).

Turbidity: Water year 1971 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 26.0°C July 21, 22; minimum, 3.0°C Jan. 13.

Period of record:

Water temperatures: Maximum (1965-69, 1970-71), 28.0°C July 19-22, 1968; minimum, 2.0°C Mar. 2, 1966.

REMARKS.--Chemical-quality samples collected from right bank 150 ft upstream from gaging station. No thermograph record Oct. 1, 2, Sept. 9-30, probe inoperative. Where no maximum or minimum is shown, temperature is once-daily reading.

## CHEMICAL ANALYSES, NOVEMBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED 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)
NOV. 10-11	0900-0900	1200	--	--	--	--	--	--	--	--	--
JULY 13...	1500	107	23.0	5.6	380	--	24	4.0	4.2	.6	88
SEP. 08-09	1900-1700	115	--	6.6	720	20	22	2.9	3.4	.9	87

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOLVED ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)
NOV. 10-11	--	--	--	--	.41	--	--	.41	--	.00
JULY 13...	0	12	1.3	.2	--	--	--	--	.07	--
SEP. 08-09	0	9.5	1.2	.1	.06	.08	.21	.16	.05	.10

DATE	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS- PHATE (PO4) (MG/L)	DIS- SOLVED ORTHOPHOS- PHATE (PO4) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
NOV. 10-11	.00	.5	.20	.06	--	--	--	--	--	--
JULY 13...	--	--	--	--	--	--	--	70	68	96
SEP. 08-09	.13	--	--	.03	.080	.010	1.0	40	--	91

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	TOTAL MERCURY (HG) (UG/L)
NOV. 10-11	--	--	--	--	--	--	--
JULY 13...	.09	19.6	76	4	11	.2	--
SEP. 08-09	.12	28.3	67	0	10	.2	3.9

11480750 MAD RIVER NEAR KNEELAND, CALIF.--Continued

CHEMICAL ANALYSES, NOVEMBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	ALKA- LITY AS CACO3 (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
NOV.									
10...	0900	1620	11.5	6.0	56	82	320	7.8	--
10...	1100	1510	11.5	5.2	48	66	200	7.9	60
10...	1300	1450	12.0	6.2	58	82	280	7.9	--
10...	1500	1390	12.0	4.4	41	74	--	7.9	--
10...	1700	1300	12.0	6.5	61	74	--	7.8	--
10...	1900	1220	12.0	6.3	59	70	280	7.9	--
10...	2100	1160	12.0	8.1	76	53	138	8.1	E30
10...	2300	1050	12.0	7.1	66	53	132	8.1	--
11...	0100	991	12.0	7.0	58	57	132	7.8	--
11...	0300	907	12.5	5.5	52	57	142	7.7	--
11...	0500	907	12.5	8.0	76	62	--	7.6	--
11...	0700	979	12.0	7.7	72	56	153	7.7	--
11...	0900	1080	12.0	7.2	67	49	126	7.6	--
JULY									
12...	2100	107	19.5	8.4	92	45	134	8.1	--
12...	2400	107	18.0	8.2	87	53	132	7.4	--
13...	0300	107	17.0	8.4	87	45	135	7.2	--
13...	0600	107	17.0	8.5	88	53	--	7.6	--
13...	0800	107	17.0	8.8	92	45	132	7.9	--
13...	1000	107	19.0	9.5	103	57	157	7.4	--
13...	1200	107	22.0	10.2	117	45	152	8.2	--
13...	1400	107	22.0	9.8	113	57	148	8.3	--
13...	1600	107	24.0	8.6	104	66	147	8.3	--
13...	1800	107	22.0	8.8	101	--	142	8.8	--
13...	2100	107	20.0	8.0	89	--	131	8.0	E1700
SEP.									
08...	1900	115	21.0	9.0	102	46	148	6.7	800
08...	2100	115	19.5	8.4	92	39	142	6.4	--
08...	2300	115	18.0	8.4	89	36	147	6.2	--
09...	0100	115	18.0	8.8	94	42	142	6.2	E1500
09...	0300	115	17.0	8.9	93	46	148	6.2	--
09...	0500	115	17.0	8.5	89	39	140	6.3	--
09...	0700	115	17.0	9.3	97	42	147	6.4	4100
09...	0900	115	16.5	9.5	98	44	148	6.4	--
09...	1100	115	17.5	9.6	101	55	165	7.4	--
09...	1300	114	20.0	9.7	108	52	160	8.2	625
09...	1500	114	21.5	9.4	107	66	165	8.3	--
09...	1700	114	21.0	9.3	106	50	162	7.8	--

E Estimated.

DATE	TIME	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)
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## ANALYSIS OF ADDITIONAL SAMPLES

SEP. 09...	1300	.00	<.20	.00	<1.0	.00	<.20	.00	<.20	.00
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DATE	DDT IN BOTTOM DE- POSITS (UG/KG)	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)
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SEP. 09...	<.20	.00	<.20	.00	<.20	.00	<.20	.00	<.20	.00
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DATE	LINDANE IN BOTTOM DE- POSITS (UG/KG)	MALA- THION IN BOTTOM DE- POSITS (UG/KG)	METHYL PARA- THION IN BOT- TOM DE- POSITS (UG/KG)	PARA- THION IN BOTTOM DE- POSITS (UG/KG)	2,4-D (UG/L)	2,4-D IN BOTTOM DE- POSITS (UG/KG)	2,4,5-T (UG/L)	2,4,5-T IN BOTTOM DE- POSITS (UG/KG)	SILVEX IN BOTTOM DE- POSITS (UG/KG)
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SEP. 09...	<.20	<.20	<.20	<.20	.00	<1.0	.00	<.30	.00	<.30
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## MAD RIVER BASIN

11480750 MAD RIVER NEAR KNEELAND, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	--	--	13.0	-- 10.0	7.5	-- 7.5	6.5	-- 5.5	7.5	-- 7.0	6.5	-- 4.5
2	--	17.0	13.0	-- 10.0	7.5	-- 7.5	5.5	-- 4.5	8.0	-- 6.0	6.0	-- 4.5
3	17.0	-- 14.0	12.0	-- 10.0	8.0	-- 7.0	4.0	-- 3.5	8.0	-- 6.0	6.5	-- 6.0
4	17.0	-- 14.0	12.5	-- 11.0	8.5	-- 7.0	4.0	-- 3.5	7.0	-- 6.5	6.5	-- 5.5
5	17.0	-- 14.0	11.5	-- 11.0	8.5	-- 8.5	4.5	-- 3.5	8.0	-- 7.0	6.5	-- 5.0
6	16.0	-- 12.0	11.0	-- 10.5	8.5	-- 8.5	4.5	-- 3.5	9.0	-- 8.0	6.5	-- 5.5
7	15.5	-- 11.0	11.0	-- 10.5	8.5	-- 8.5	5.0	-- 3.5	8.5	-- 7.0	7.0	-- 6.0
8	16.0	-- 11.5	11.5	-- 11.0	8.5	-- 8.0	5.5	-- 4.5	7.5	-- 7.0	7.5	-- 6.5
9	15.5	-- 12.0	11.5	-- 11.0	8.0	-- 7.0	6.5	-- 5.5	8.0	-- 7.0	7.5	-- 7.0
10	17.0	-- 13.5	11.0	-- 10.0	8.0	-- 7.5	6.5	-- 6.0	9.5	-- 7.5	7.5	-- 7.0
11	17.0	-- 12.5	11.5	-- 11.0	8.0	-- 7.5	6.0	-- 4.5	9.0	-- 8.0	7.5	-- 7.0
12	16.5	-- 13.0	11.0	-- 9.5	7.5	-- 6.5	4.5	-- 4.0	10.0	-- 8.0	7.0	-- 6.5
13	16.0	-- 11.5	10.0	-- 8.5	7.0	-- 6.5	4.0	-- 3.0	9.5	-- 8.5	7.0	-- 6.5
14	15.0	-- 11.5	10.0	-- 9.0	6.5	-- 6.5	5.0	-- 3.5	9.0	-- 8.5	7.0	-- 6.5
15	15.0	-- 12.0	10.0	-- 9.0	7.0	-- 6.5	6.0	-- 5.5	9.5	-- 8.0	7.5	-- 7.0
16	14.5	-- 12.0	11.0	-- 10.0	7.0	-- 6.0	6.5	-- 5.5	8.0	-- 7.5	7.5	-- 6.5
17	14.0	-- 12.0	10.5	-- 9.5	6.5	-- 6.0	6.5	-- 5.5	8.5	-- 7.5	7.5	-- 6.0
18	14.0	-- 12.5	10.0	-- 9.5	6.5	-- 6.0	7.0	-- 6.5	8.0	-- 7.0	7.5	-- 6.5
19	13.0	-- 12.0	10.5	-- 9.0	6.0	-- 5.0	7.5	-- 7.0	8.0	-- 6.5	8.0	-- 7.0
20	14.5	-- 12.5	10.0	-- 9.0	5.5	-- 5.0	7.5	-- 7.0	7.5	-- 5.5	8.5	-- 7.5
21	12.5	-- 11.5	9.5	-- 9.0	6.0	-- 5.5	7.0	-- 6.5	7.0	-- 6.0	8.5	-- 7.5
22	12.5	-- 11.0	10.0	-- 9.5	6.5	-- 6.0	6.5	-- 6.0	7.5	-- 6.5	8.5	-- 8.0
23	12.5	-- 11.5	11.0	-- 10.0	6.5	-- 6.0	7.0	-- 6.5	8.5	-- 6.5	8.5	-- 7.5
24	12.0	-- 11.0	11.5	-- 11.0	6.0	-- 5.0	7.0	-- 6.5	8.0	-- 7.0	8.5	-- 8.0
25	12.0	-- 11.0	11.5	-- 10.0	5.5	-- 5.0	7.0	-- 6.5	7.0	-- 5.5	8.5	-- 8.0
26	12.5	-- 10.0	10.0	-- 9.0	6.0	-- 5.0	7.0	-- 6.5	6.5	-- 5.0	8.5	-- 7.5
27	12.0	-- 8.5	9.0	-- 8.0	6.0	-- 5.5	7.5	-- 6.5	5.5	-- 4.5	8.5	-- 7.0
28	12.0	-- 8.5	8.5	-- 8.0	6.0	-- 5.5	7.5	-- 6.5	5.0	-- 4.5	9.0	-- 7.5
29	12.0	-- 8.0	8.5	-- 8.0	6.0	-- 5.5	7.5	-- 6.5	--	--	9.0	-- 7.5
30	11.0	-- 9.0	8.5	-- 7.5	6.5	-- 6.0	7.5	-- 6.5	--	--	9.0	-- 7.5
31	14.0	-- 10.5	--	--	6.5	-- 6.5	8.0	-- 6.5	--	--	8.0	-- 6.5
AVE	14.3	-- 11.5	10.7	-- 9.6	7.0	-- 6.5	6.2	-- 5.4	8.0	-- 6.8	7.7	-- 6.7
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	8.5	-- 7.0	12.0	-- 10.0	11.5	-- 11.0	20.5	-- 16.0	24.0	-- 19.0	20.0	-- 18.0
2	9.5	-- 8.0	12.0	-- 10.0	12.5	-- 11.0	20.5	-- 16.0	24.0	-- 19.5	20.0	-- 17.5
3	10.5	-- 8.5	10.5	-- 10.0	15.0	-- 11.0	21.0	-- 16.0	24.0	-- 19.5	21.5	-- 16.5
4	11.0	-- 8.5	10.5	-- 10.0	17.5	-- 12.5	21.0	-- 16.0	24.5	-- 20.0	22.0	-- 17.5
5	17.0	-- 9.5	12.0	-- 10.0	17.0	-- 14.0	20.5	-- 16.5	23.5	-- 20.0	20.5	-- 18.5
6	10.0	-- 8.5	14.0	-- 10.5	19.0	-- 14.0	21.5	-- 16.0	24.5	-- 20.0	19.5	-- 18.0
7	9.5	-- 8.5	14.5	-- 11.5	16.0	-- 14.0	21.5	-- 16.5	24.5	-- 20.0	21.5	-- 16.5
8	9.5	-- 8.0	12.5	-- 11.5	17.5	-- 13.5	21.5	-- 17.5	25.0	-- 19.5	21.5	-- 17.0
9	9.0	-- 7.5	14.5	-- 11.5	16.0	-- 14.0	18.5	-- 17.0	25.0	-- 20.0	--	--
10	8.0	-- 7.0	15.5	-- 11.5	15.0	-- 14.0	20.5	-- 16.0	25.0	-- 20.5	--	--
11	8.5	-- 7.5	16.5	-- 12.5	15.5	-- 13.5	20.5	-- 16.5	24.5	-- 21.0	--	--
12	10.5	-- 8.0	15.5	-- 13.0	17.0	-- 14.5	22.5	-- 16.5	22.5	-- 21.0	--	--
13	9.5	-- 9.5	15.5	-- 12.5	17.5	-- 14.5	23.0	-- 17.5	22.5	-- 20.0	--	--
14	10.0	-- 8.5	15.5	-- 11.5	19.5	-- 14.5	23.0	-- 17.0	23.5	-- 19.0	--	--
15	11.5	-- 9.5	13.0	-- 11.5	20.0	-- 15.0	23.0	-- 18.0	24.0	-- 19.5	--	--
16	10.0	-- 9.5	13.5	-- 10.5	20.5	-- 15.5	23.5	-- 18.5	24.0	-- 19.0	--	--
17	9.5	-- 7.0	14.5	-- 10.0	19.5	-- 15.0	23.5	-- 19.0	23.5	-- 19.0	--	--
18	8.5	-- 7.0	15.5	-- 11.5	16.5	-- 15.5	22.5	-- 19.5	24.0	-- 19.5	--	--
19	9.5	-- 7.5	13.5	-- 12.0	17.0	-- 15.5	25.0	-- 19.0	24.0	-- 20.0	--	--
20	9.0	-- 7.0	14.0	-- 11.0	20.5	-- 15.0	25.5	-- 20.0	24.0	-- 20.0	-- 18.0	--
21	9.0	-- 6.5	14.5	-- 10.0	21.5	-- 16.0	26.0	-- 21.0	22.5	-- 20.0	--	--
22	8.5	-- 7.5	16.5	-- 11.5	21.5	-- 17.0	26.0	-- 21.0	23.0	-- 20.5	--	--
23	8.5	-- 7.0	17.5	-- 12.5	19.5	-- 17.5	24.5	-- 20.5	24.0	-- 19.0	--	--
24	8.5	-- 7.0	17.5	-- 13.5	20.5	-- 16.0	24.5	-- 20.0	24.5	-- 19.5	--	--
25	10.5	-- 7.5	14.5	-- 12.5	17.5	-- 16.5	24.5	-- 20.0	23.5	-- 20.0	--	--
26	12.0	-- 9.0	14.5	-- 12.0	18.0	-- 16.0	24.5	-- 19.5	23.5	-- 20.0	--	--
27	11.5	-- 9.5	15.5	-- 12.5	18.5	-- 15.0	22.5	-- 19.5	23.5	-- 20.0	--	--
28	10.5	-- 9.5	13.5	-- 12.0	19.5	-- 14.5	21.0	-- 19.5	22.0	-- 20.0	--	--
29	12.0	-- 9.5	14.5	-- 11.5	20.0	-- 14.5	22.0	-- 19.0	21.0	-- 19.5	--	--
30	12.5	-- 9.5	14.5	-- 11.0	20.5	-- 16.0	24.0	-- 19.5	19.5	-- 18.5	--	--
31	--	--	12.5	-- 11.0	--	--	24.0	-- 19.0	20.0	-- 17.5	--	--
AVE	9.9	-- 8.1	14.2	-- 11.4	17.9	-- 14.5	22.7	-- 18.2	23.5	-- 19.7	--	--

## 11480750 MAD RIVER NEAR KNEELAND, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

				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		
DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SEDIM- ENT (MG/L)								
OCT. 02...	1515	17.0	131	4	1.4	--	--	--	--	--		
NOV. 25...	1150	11.0	8450	2580	58900	20	24	29	43	53	62	
DEC. 03...	1400	8.0	15000	4750	192000	25	32	42	56	69	81	
03...	1500	8.0	18300	6860	339000	--	--	--	--	--	--	
03...	1600	8.0	19900	9000	484000	--	--	--	--	--	--	
04...	1300	8.0	10700	2580	74500	24	29	42	53	66	76	
JAN. 17...	0915	6.0	21600	2520	147000	25	30	37	54	67	79	
17...	1215	6.0	19100	2590	134000	22	30	40	51	63	73	
17...	1220	6.0	19100	2700	139000	--	--	--	--	--	--	
FEB. 02...	1320	8.0	1070	72	208	--	--	--	--	--	--	
MAR. 15...	1315	7.5	3660	372	3680	25	35	47	60	69	--	
26...	1100	8.0	16900	2470	113000	18	28	38	51	64	74	
26...	1300	8.0	15800	2820	120000	--	--	--	--	--	--	
26...	1400	8.0	15700	2340	99200	20	27	37	50	62	71	
26...	1455	8.0	15700	2770	117000	--	--	--	--	--	--	
MAY 17...	1215	12.0	487	8	11	--	--	--	--	--	--	
JUNE 14...	1210	17.0	181	5	2.4	--	--	--	--	--	--	
AUG. 23...	1435	22.5	118	5	1.6	--	--	--	--	--	--	
SEP. 20...	1145	18.0	117	3	.95	--	--	--	--	--	--	
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. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE 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	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
OCT. 02...	--	--	--	--	--	--	--	--	--	--	--	--
NOV. 25...	--	67	--	77	--	88	--	98	--	100	--	--
DEC. 03...	--	86	--	96	--	99	--	100	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	81	--	91	--	99	--	100	--	--	--	--
JAN. 17...	--	86	--	97	--	99	--	100	--	--	--	--
17...	--	82	--	93	--	98	--	100	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
FEB. 02...	--	--	--	--	--	--	--	--	--	--	--	--
MAR. 15...	78	--	80	--	88	--	95	--	97	--	100	--
26...	--	80	--	93	--	100	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	79	--	91	--	98	--	100	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUNE 14...	--	--	--	--	--	--	--	--	--	--	--	--
AUG. 23...	--	--	--	--	--	--	--	--	--	--	--	--
SEP. 20...	--	--	--	--	--	--	--	--	--	--	--	--

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT  
CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)
Oct. 2, 1970...	1515	4	2
Dec. 3, 1970...	1400	4750	75
Dec. 3, 1970...	1500	6860	80
Dec. 3, 1970...	1600	9000	80
Dec. 4, 1970...	1300	2580	200
Jan. 17, 1971..	0915	2520	200
Jan. 17, 1971..	1215	2590	200
Feb. 2, 1971...	1320	72	43
Mar. 15, 1971...	1315	372	100
Mar. 26, 1971...	1100	2470	190
Mar. 26, 1971...	1400	2340	210
May 17, 1971...	1215	8	13
June 14, 1971...	1210	5	7
Aug. 23, 1971...	1435	5	1
Sept. 20, 1971...	1145	3	2

## MAD RIVER BASIN

11481000 MAD RIVER NEAR ARCATA, CALIF.

LOCATION.--Lat 40°54'35", long 124°03'35", in NW $\frac{1}{4}$  sec.15, T.6 N., R.1 E., Humboldt County, at gaging station 100 ft upstream from bridge on U.S. Highway 299, 1.0 mile downstream from Warren Creek, and 2.8 miles northeast of Arcata.

DRAINAGE AREA.--485 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1958 to September 1971.

Water temperatures: December 1957 to September 1971.

Sediment record: Water years 1955-57 (partial-record station), December 1957 to September 1971.

Turbidity: Water year 1971 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 26.0°C Aug. 22; minimum, 3.0°C Jan. 4-6.

Sediment concentrations: Maximum daily, 4,790 mg/l Nov. 9; minimum daily, 2 mg/l on several days during September.

Sediment discharge: Maximum daily, 249,000 tons Jan. 17; minimum daily, 0.18 ton Sept. 24.

Period of record:

Water temperatures: Maximum (1963-64, 1965-71), 27.0°C July 6, 27, 28, 1968; minimum, 0.5°C Dec. 17-20, 1965.

Sediment concentrations: Maximum daily, 21,900 mg/l Dec. 23, 1964; minimum daily, 1 mg/l on many days in

1958-60, 1962, 1965, 1967-69.

Sediment discharge: Maximum daily, 3,140,000 tons Dec. 22, 1964; minimum daily, 0.01 ton July 31, 1970.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. No thermograph record Nov. 8, Nov. 28 to Dec. 7, Apr. 24, 25, May 24 to June 23, recorder stopped; Sept. 8-14, recorder malfunction. Where no maximum or minimum is shown, temperature is once-daily reading.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV.											
10...	0930	2210	11.0	10.9	--	--	3.2	--	56	0	--
JAN.											
05...	1150	A 1640	4.0	13.3	--	--	2.6	--	53	0	--
MAR.											
01...	1445	1730	8.0	12.1	13	2.8	3.8	1.9	48	0	3.8
MAY											
03...	1430	A 1190	11.0	10.5	--	--	3.1	--	59	0	--
JULY											
19...	1430	40	22.0	10.3	33	5.5	4.4	1.2	114	0	13
SEP.											
14...	0850	28	17.0	10.6	--	--	4.2	--	115	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LINEITY AS CACO3 (MG/L)	PERCENT SODIUM
NOV.										
10...	3.8	--	100	--	--	--	53	7	46	--
JAN.										
05...	2.0	--	100	--	--	--	50	7	43	--
MAR.										
01...	3.4	.9	0	93	.13	435	44	5	39	15
MAY										
03...	1.9	--	0	--	--	--	54	6	48	--
JULY										
19...	4.9	.0	0	124	.17	13.4	106	12	94	8
SEP.										
14...	3.9	--	100	--	--	--	103	9	94	--

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHQS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
NOV.										
10...	.2	124	7.3	230	--	--	--	--	--	--
JAN.										
05...	.2	111	7.8	100	--	--	--	--	--	--
MAR.										
01...	.2	109	7.6	100	--	--	--	--	--	--
MAY										
03...	.2	121	7.5	90	0	0	0	0	.0	0
JULY										
19...	.2	216	8.2	1	--	--	--	--	--	--
SEP.										
14...	.2	212	8.2	2	--	--	--	--	--	--

A Daily mean discharge.



11481000 MAD RIVER NEAR ARCATA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	17.5	--	12.0	15.0	--	11.5	--	8.0	--	7.5	--	6.5	8.5	--	7.5	8.5	--	5.5
2	17.5	--	14.5	12.5	--	11.5	--	7.0	--	7.0	--	4.5	9.5	--	7.5	7.0	--	5.5
3	15.0	--	14.0	14.5	--	12.0	--	9.0	--	6.0	--	3.5	7.5	--	6.0	7.5	--	7.0
4	18.5	--	14.5	14.5	--	12.0	--	9.0	--	5.5	--	3.0	8.0	--	6.5	8.0	--	6.0
5	20.0	--	15.0	12.0	--	11.5	--	11.0	--	6.0	--	3.0	8.5	--	7.5	8.0	--	6.0
6	19.0	--	13.0	12.5	--	11.0	--	10.0	--	6.0	--	3.0	9.5	--	8.5	8.0	--	6.5
7	18.5	--	12.0	13.0	--	12.0	--	10.0	--	6.0	--	3.5	9.5	--	8.0	8.0	--	7.5
8	17.5	--	12.5	--	13.0	--	10.0	--	8.5	6.5	--	5.0	9.0	--	8.0	7.5	--	7.0
9	17.0	--	12.5	13.0	--	11.0	--	9.0	--	8.0	--	6.5	9.0	--	7.0	8.0	--	7.5
10	18.5	--	15.0	12.0	--	10.5	--	8.5	--	8.5	--	7.5	10.5	--	7.5	8.0	--	7.5
11	18.5	--	13.5	13.0	--	11.0	--	10.0	--	7.5	--	6.5	11.5	--	8.5	8.0	--	8.0
12	17.5	--	14.0	13.0	--	9.5	--	8.5	--	6.5	--	5.0	11.0	--	8.5	8.0	--	7.0
13	17.0	--	12.0	11.5	--	9.0	--	8.5	--	6.5	--	4.5	10.5	--	9.0	8.5	--	6.5
14	14.5	--	12.5	12.0	--	9.0	--	7.5	--	6.5	--	4.5	9.5	--	8.5	8.5	--	7.0
15	16.0	--	13.0	12.0	--	9.5	--	8.5	--	7.0	--	6.5	11.5	--	8.5	9.0	--	7.5
16	14.0	--	13.0	13.5	--	11.0	--	8.0	--	6.5	--	6.5	9.0	--	8.0	8.0	--	7.5
17	16.0	--	13.0	13.0	--	10.5	--	7.5	--	8.5	--	7.5	10.5	--	8.0	9.0	--	6.5
18	16.5	--	14.0	12.0	--	10.0	--	8.5	--	6.5	--	8.0	8.5	--	7.5	11.5	--	6.5
19	14.5	--	12.5	12.5	--	9.0	--	7.5	--	5.0	--	8.0	9.5	--	7.0	11.5	--	7.0
20	16.5	--	13.5	12.0	--	10.0	--	6.0	--	5.0	--	7.5	9.0	--	6.0	12.0	--	7.5
21	14.0	--	13.0	10.5	--	9.5	--	7.5	--	6.0	--	6.5	7.5	--	6.0	10.5	--	8.0
22	13.5	--	12.5	11.0	--	10.0	--	7.5	--	6.5	--	6.5	9.0	--	7.0	9.5	--	8.5
23	14.0	--	12.0	11.5	--	11.0	--	7.5	--	6.5	--	6.5	10.0	--	7.0	9.0	--	8.5
24	13.5	--	12.5	12.0	--	11.5	--	7.5	--	5.0	--	7.0	9.5	--	8.0	9.5	--	9.0
25	14.0	--	11.0	11.5	--	10.5	--	7.5	--	4.5	--	6.0	8.5	--	6.0	9.5	--	9.5
26	13.5	--	10.0	10.5	--	9.5	--	6.5	--	4.5	--	6.5	8.5	--	5.5	9.5	--	8.0
27	13.5	--	10.0	9.5	--	8.5	--	7.5	--	6.0	--	6.5	6.5	--	5.5	9.5	--	7.5
28	14.0	--	10.0	--	10.0	--	7.5	--	6.5	8.5	--	7.0	6.5	--	5.5	11.5	--	8.5
29	12.0	--	11.0	--	10.0	--	7.5	--	6.5	9.5	--	7.0	--	--	--	11.5	--	9.0
30	15.5	--	11.5	--	10.0	--	8.5	--	7.0	9.5	--	6.5	--	--	--	11.0	--	8.0
31	16.0	--	11.5	--	--	--	8.5	--	7.5	9.5	--	7.0	--	--	--	11.5	--	7.5
AVE	15.9	--	12.6	12.3	--	10.5	--	--	--	7.8	--	5.9	9.1	--	7.3	9.2	--	7.4
DAY	APR			MAY			JUN			JUL			AUG			SEP		
	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN
1	11.0	--	8.0	13.5	--	10.5	--	12.0	--	17.5	--	16.0	22.5	--	19.0	19.0	--	18.5
2	13.5	--	8.5	15.0	--	10.5	--	12.0	--	19.0	--	16.5	21.5	--	19.5	22.5	--	17.5
3	14.0	--	9.5	11.0	--	10.0	--	14.0	--	19.5	--	17.0	22.0	--	19.0	21.5	--	16.5
4	14.5	--	9.5	12.0	--	10.0	--	13.0	--	20.5	--	17.0	21.0	--	19.5	22.5	--	17.5
5	11.0	--	10.0	15.5	--	10.0	--	--	--	19.5	--	17.0	22.0	--	19.0	22.5	--	16.5
6	11.5	--	10.0	18.0	--	10.0	--	--	--	19.0	--	16.5	22.0	--	18.5	21.5	--	15.5
7	12.5	--	9.0	18.0	--	11.0	--	--	--	20.0	--	16.5	23.0	--	19.0	22.0	--	17.5
8	11.0	--	9.0	17.5	--	11.0	--	14.0	--	19.5	--	17.0	23.5	--	19.0	--	--	--
9	11.0	--	9.0	17.0	--	11.0	--	--	--	20.0	--	18.5	24.0	--	18.5	--	--	--
10	10.5	--	8.0	16.5	--	11.5	--	--	--	20.0	--	16.5	22.0	--	20.5	--	--	--
11	12.0	--	8.0	15.0	--	12.5	--	--	--	22.0	--	17.0	20.5	--	19.5	--	--	--
12	13.5	--	8.5	16.5	--	12.5	--	--	--	21.5	--	18.0	20.0	--	19.0	--	--	--
13	11.0	--	10.0	18.5	--	12.0	--	--	--	21.0	--	19.0	22.5	--	18.5	--	--	--
14	11.0	--	9.5	19.5	--	11.0	--	15.0	--	19.5	--	19.0	23.5	--	17.0	--	22.0	--
15	14.0	--	9.0	15.0	--	11.0	--	--	--	20.0	--	19.0	23.5	--	18.5	22.0	--	17.0
16	9.5	--	7.5	16.5	--	10.0	--	--	--	22.0	--	19.0	23.5	--	19.0	22.5	--	17.5
17	7.5	--	6.5	17.5	--	9.5	--	--	--	22.0	--	20.0	22.5	--	19.5	20.0	--	17.5
18	11.0	--	6.5	18.0	--	11.5	--	17.0	--	21.0	--	20.0	24.0	--	19.5	20.5	--	17.5
19	11.5	--	7.0	16.0	--	11.0	--	--	--	22.5	--	19.5	22.5	--	19.5	21.5	--	16.5
20	10.5	--	6.5	16.0	--	10.0	--	14.0	--	24.0	--	21.0	24.0	--	19.5	20.0	--	16.5
21	11.5	--	6.0	17.0	--	9.0	--	--	--	23.5	--	20.5	23.5	--	21.5	18.0	--	13.5
22	9.0	--	7.0	19.5	--	12.0	--	--	--	23.5	--	20.5	26.0	--	20.0	19.0	--	15.0
23	11.0	--	7.0	18.0	--	13.0	--	--	--	22.5	--	19.5	24.0	--	18.5	16.5	--	15.0
24	--	10.0	--	--	14.0	--	18.0	--	15.0	20.0	--	19.0	24.0	--	19.0	16.5	--	14.5
25	--	14.0	--	--	13.0	--	18.0	--	14.5	20.0	--	18.5	23.5	--	20.0	18.0	--	14.0
26	12.5	--	9.5	--	13.0	--	18.5	--	14.0	21.0	--	18.5	22.0	--	19.5	17.5	--	14.0
27	11.5	--	10.0	--	14.0	--	19.0	--	14.5	19.5	--	18.0	20.0	--	19.0	18.5	--	14.0
28	11.0	--	9.5	--	14.0	--	16.5	--	14.0	18.5	--	17.5	19.5	--	17.0	15.5	--	13.5
29	15.0	--	9.0	--	12.0	--	17.0	--	15.0	19.0	--	17.5	21.0	--	18.0	13.5	--	11.0
30	13.0	--	9.0	--	14.0	--	17.5	--	16.0	21.5	--	18.0	20.0	--	17.5	16.0	--	10.5
31	--	--	--	--	12.0	--	--	--	--	20.5	--	18.5	20.5	--	16.0	--	--	--
AVE	11.7	--	8.4	--	--	--	--	--	--	20.6	--	18.3	22.4	--	18.9	--	--	--

## 11481000 MAD RIVER NEAR ARCATA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	33	20	1.8	37	76	7.6	5020	710	9620
2	35	20	1.9	35	72	6.8	7300	1020	20000
3	36	20	1.9	34	78	7.2	13800	3740	219000
4	37	20	2.0	177	136	69	18700	3710	202000
5	41	19	2.1	826	481	1310	10700	1800	52000
6	39	18	1.9	936	485	1250	9170	1620	40100
7	39	16	1.7	796	348	748	13200	2430	97900
8	39	16	1.7	896	605	2450	12400	1880	62900
9	39	16	1.7	7650	4790	110000	8000	1280	27600
10	39	16	1.7	2120	730	4180	5080	790	10800
11	39	17	1.8	1080	480	1400	3590	700	6790
12	39	18	1.9	2520	993	6900	2730	680	5010
13	39	18	1.9	1100	300	891	2310	680	4240
14	39	17	1.8	630	180	306	1970	700	3720
15	38	15	1.5	432	196	229	2280	900	5540
16	39	15	1.6	368	110	109	5400	1680	24500
17	37	15	1.5	326	100	88	4620	920	11500
18	39	18	1.9	266	80	57	3380	660	6020
19	41	24	2.7	233	88	55	2610	470	3310
20	60	170	28	208	62	35	2450	280	1850
21	63	152	26	190	60	31	2370	260	1660
22	67	146	26	204	110	61	2040	240	1320
23	91	214	57	3530	988	13100	1730	340	1590
24	194	388	201	14800	2350	116000	1480	240	959
25	127	312	107	12700	1920	67800	1290	196	683
26	90	196	48	5380	820	11900	1180	184	586
27	72	158	31	8510	1150	34200	1090	150	441
28	60	136	22	8200	920	20400	1680	717	5800
29	52	88	12	3410	560	5160	4680	1300	17900
30	45	84	10	3960	850	10300	3320	510	4570
31	42	90	10	--	--	--	3530	550	5240
TOTAL	1690	--	613.0	81554	--	409050.6	159100	--	855149

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	3270	450	3970	1250	166	560	1870	206	1040
2	2750	391	2900	1200	156	505	1380	96	358
3	2080	360	2020	1100	140	416	2480	435	2910
4	1880	270	1370	1020	134	369	3020	318	2590
5	1640	250	1110	1090	151	444	2360	216	1380
6	1440	170	661	1100	164	487	1790	158	764
7	1280	140	484	1020	94	259	1780	171	822
8	1200	150	486	904	86	210	1800	182	885
9	1170	150	474	888	92	221	1600	140	605
10	3860	1160	13800	844	109	248	1700	290	1330
11	4660	520	6540	808	82	179	5950	1720	27300
12	4320	420	4900	772	84	175	13200	2510	89300
13	3350	420	3800	706	55	105	9800	720	19100
14	3570	560	5400	690	52	97	6740	560	10200
15	8600	2790	70900	904	84	205	4900	450	5950
16	20900	3650	224000	814	53	116	4780	790	10200
17	24500	3720	249000	742	46	92	5080	610	8370
18	21000	2640	150000	742	72	144	4100	600	6640
19	12700	1780	61000	1040	269	755	3470	350	3280
20	7930	1200	25700	850	57	131	3010	250	2030
21	5360	730	10600	790	40	85	2730	260	1920
22	3860	519	5410	784	41	87	3300	340	3030
23	3070	398	3250	802	65	141	9880	2150	57800
24	2460	320	2130	1070	302	872	8200	940	20800
25	2060	256	1420	1730	382	1780	7420	1180	28600
26	1850	286	1430	1310	138	488	17600	3850	184000
27	1620	261	1140	1630	179	788	12200	1540	50700
28	1510	260	1060	2190	262	1550	7600	740	15200
29	1390	199	747	--	--	--	5360	380	5500
30	1330	167	600	--	--	--	4360	420	4940
31	1290	160	557	--	--	--	3740	380	3840
TOTAL	157850	--	856859	28790	--	11509	163200	--	571384

## 11481000 MAD RIVER NEAR ARCATA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3070	309	2560	1310	99	350	275	5	3.7
2	2520	234	1590	1330	80	287	260	9	6.3
3	2130	156	897	1190	78	251	245	20	13
4	1840	170	845	1070	74	214	230	10	6.2
5	1650	178	793	1020	64	176	225	9	5.5
6	1390	118	443	890	53	127	210	8	4.5
7	1220	109	359	709	59	113	197	7	3.7
8	1080	124	362	681	36	66	192	7	3.6
9	2010	118	640	667	39	70	179	7	3.4
10	6160	597	10500	625	32	54	188	6	3.0
11	3470	208	1950	566	33	50	183	6	3.0
12	2520	190	1290	476	31	40	165	5	2.2
13	1760	153	727	632	79	135	165	4	1.8
14	1530	161	665	530	24	34	152	4	1.6
15	1370	114	422	518	21	29	134	4	1.4
16	1440	109	424	597	28	45	125	5	1.7
17	3650	456	4970	560	19	29	116	6	1.9
18	4330	376	4550	512	13	18	116	7	2.2
19	3390	228	2090	454	12	15	143	8	3.1
20	3390	210	1920	426	14	16	147	9	3.6
21	3390	167	1530	421	13	15	129	8	2.8
22	3120	247	2080	399	10	11	112	7	2.1
23	2770	461	3450	377	13	13	108	6	1.7
24	2340	269	1700	355	12	12	96	5	1.3
25	2040	181	997	366	50	49	250	70	76
26	1840	144	715	410	27	30	578	96	150
27	1720	151	701	355	15	14	476	42	54
28	1610	122	530	325	8	7.0	305	31	26
29	1510	102	416	325	8	7.0	230	21	13
30	1400	89	336	300	12	9.7	192	17	8.8
31	--	--	--	280	7	5.3	--	--	--
TOTAL	71660	--	50452	18676	--	2292.0	6123	--	411.1

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	170	13	6.0	60	4	.65	92	3	.75
2	156	10	4.2	68	4	.73	96	3	.78
3	161	9	3.9	68	4	.73	92	3	.75
4	165	8	3.6	72	4	.78	76	3	.62
5	156	7	2.9	72	4	.78	68	3	.55
6	147	6	2.4	64	4	.69	68	3	.55
7	120	6	1.9	56	5	.76	60	3	.49
8	112	6	1.8	48	5	.65	48	3	.39
9	108	6	1.7	44	6	.71	37	3	.30
10	104	6	1.7	40	6	.65	34	4	.37
11	100	6	1.6	37	6	.60	48	5	.65
12	88	7	1.7	48	10	1.3	34	6	.55
13	72	7	1.4	60	10	1.6	48	8	1.0
14	56	7	1.1	68	9	1.7	25	11	.74
15	52	6	.84	68	9	1.7	34	8	.73
16	44	6	.71	60	8	1.3	28	6	.45
17	44	5	.59	56	7	1.1	48	5	.65
18	40	4	.43	52	6	.84	37	4	.40
19	34	4	.37	52	6	.84	48	3	.39
20	25	5	.34	52	5	.70	31	3	.25
21	37	7	.70	56	5	.76	48	2	.26
22	68	7	1.3	64	4	.69	48	2	.26
23	68	6	1.1	68	4	.73	48	2	.26
24	60	6	.97	68	4	.73	34	2	.18
25	40	5	.54	64	5	.86	37	2	.20
26	37	5	.50	60	5	.81	48	2	.26
27	34	4	.37	52	5	.70	60	2	.32
28	72	4	.78	56	4	.60	60	2	.32
29	68	4	.73	56	4	.60	260	104	131
30	52	4	.56	64	3	.52	524	204	289
31	52	4	.56	88	3	.71	--	--	--
TOTAL	2542	--	47.29	1841	--	26.52	2219	--	433.42

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

695245

2758226.93

## MAD RIVER BASIN

11481000 MAD RIVER NEAR ARCATA, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT CHARGE (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	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
OCT.										
24...	0900	12.5	97	416	109	53	70	86	98	99
NOV.										
06...	0800	12.0	832	668	1500	42	54	65	87	98
09...	1420	12.0	9230	4280	107000	18	25	30	43	57
10...	1600	12.0	1620	495	2170	34	49	63	78	90
24...	1500	--	19200	4100	213000	26	27	41	55	72
25...	1600	--	12600	1740	59200	31	42	54	69	85
27...	0900	--	6200	734	12300	32	45	58	72	84
30...	0900	10.0	3260	504	4440	33	50	63	76	86
DEC.										
03...	1000	9.0	7880	818	17400	26	37	49	63	72
04...	1230	9.0	17000	3230	148000	27	30	42	54	68
08...	0830	10.0	11900	1610	51700	25	36	50	65	84
14...	0930	7.5	1690	489	2230	30	40	53	67	80
17...	0830	7.0	4580	884	10900	19	28	35	44	50
JAN.										
08...	1445	6.5	928	168	421	--	--	--	--	--
16...	1700	7.5	27000	6130	447000	25	27	39	50	67
17...	1015	7.5	24400	3110	205000	25	33	45	59	74
17...	1300	--	23500	3660	232000	20	27	36	48	61
MAR.										
04...	1000	7.5	2930	469	3710	32	46	59	73	84
12...	0900	8.0	13100	2310	81700	27	39	51	67	82
18...	1125	6.5	4170	669	7530	18	26	33	41	45
25...	0930	9.5	6100	571	9400	34	48	62	76	87
APR.										
05...	1135	10.0	1670	179	807	27	42	56	70	81

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. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
OCT.										
24...	--	100	--	--	--	--	--	--	--	--
NOV.										
06...	--	100	--	--	--	--	--	--	--	--
09...	69	--	93	--	99	--	100	--	--	--
10...	--	100	--	--	--	--	--	--	--	--
24...	88	--	96	--	100	--	--	--	--	--
25...	95	--	99	--	100	--	--	--	--	--
27...	--	99	--	100	--	--	--	--	--	--
30...	--	99	--	100	--	--	--	--	--	--
DEC.										
03...	--	93	--	97	--	100	--	--	--	--
04...	79	--	87	--	98	--	100	--	--	--
08...	--	96	--	99	--	100	--	--	--	--
14...	--	98	--	100	--	--	--	--	--	--
17...	65	--	73	--	98	--	100	--	--	--
JAN.										
08...	--	88	--	90	--	96	--	100	--	--
16...	79	--	88	--	93	--	94	--	94	100
17...	86	--	93	--	100	--	--	--	--	--
17...	74	--	87	--	98	--	100	--	--	--
MAR.										
04...	--	96	--	98	--	100	--	--	--	--
12...	--	95	--	97	--	99	--	100	--	--
18...	57	--	61	--	76	--	98	--	100	--
25...	--	96	--	98	--	100	--	--	--	--
APR.										
05...	--	90	--	92	--	100	--	--	--	--

## 11481000 MAD RIVER NEAR ARCATA, CALIF.--Continued

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)	DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)
Nov. 9, 1970...	0815	7320	40	Mar. 11.....	0900	1740	620
Nov. 9.....	1615	4080	150	Mar. 12.....	0900	2310	660
Nov. 10.....	0800	472	170	Mar. 13.....	0900	1000	440
Nov. 10.....	1600	495	150	Mar. 14.....	1030	551	340
Nov. 11.....	0800	411	170	Mar. 15.....	0900	431	70
Nov. 12.....	0800	1040	200	Mar. 16.....	0900	378	75
Nov. 12.....	1530	816	180	Mar. 17.....	1100	557	65
Nov. 13.....	0800	277	100	Mar. 18.....	0800	430	75
Nov. 14.....	0800	176	75	Mar. 18.....	1125	669	110
Nov. 15.....	1300	202	80	Mar. 19.....	0900	344	80
Nov. 16.....	0900	115	50	Mar. 20.....	0900	282	80
Nov. 17.....	0900	103	49	Mar. 21.....	1500	282	80
Nov. 18.....	0900	78	43	Mar. 22.....	0900	237	90
Nov. 19.....	1000	94	50	Mar. 23.....	0900	2080	65
Nov. 20.....	1000	59	36	Mar. 24.....	0830	948	480
Nov. 21.....	0900	61	35	Mar. 25.....	0930	571	360
Nov. 23.....	0930	639	28	Mar. 26.....	0830	4230	820
Nov. 24.....	1500	4100	70	Mar. 27.....	0915	1660	560
Nov. 25.....	0800	1920	200	Mar. 28.....	1100	757	400
Dec. 3.....	1000	818	200	Mar. 29.....	0900	588	400
Dec. 3.....	1530	4660	140	Mar. 30.....	0900	459	320
Dec. 4.....	0830	4080	140	Mar. 31.....	0900	397	250
Dec. 4.....	1230	3230	160	Apr. 1.....	0900	317	250
Dec. 4.....	1530	2760	200	Apr. 2.....	0800	252	220
Dec. 5.....	0830	1780	210	Apr. 3.....	0900	153	75
Dec. 6.....	1030	1650	220	Apr. 4.....	0900	162	70
Dec. 7.....	0830	1320	210	Apr. 5.....	0930	138	70
Dec. 7.....	1500	4570	120	Apr. 5.....	1135	179	75
Dec. 8.....	0830	1610	210	Apr. 6.....	0900	119	70
Dec. 8.....	1600	1760	220	Apr. 7.....	0800	109	60
Dec. 19.....	0800	511	120	Apr. 8.....	1000	130	65
Dec. 20.....	0900	232	90	Apr. 9.....	0900	98	60
Dec. 20.....	1100	234	100	Apr. 10.....	0800	708	460
Dec. 21.....	0800	268	85	Apr. 11.....	0900	204	90
Dec. 22.....	0800	273	85	Apr. 12.....	0900	194	90
Dec. 23.....	0930	358	90	Apr. 13.....	0830	148	80
Dec. 24.....	1000	258	75	Apr. 14.....	0900	164	80
Dec. 25.....	0930	198	65	Apr. 15.....	0900	112	70
Dec. 26.....	1000	190	55	Apr. 16.....	0830	99	65
Dec. 27.....	1000	146	55	Apr. 17.....	1000	368	95
Jan. 8, 1971...	1445	168	65	Apr. 18.....	1000	368	80
Jan. 17.....	1015	3110	160	Apr. 19.....	0800	223	85
Jan. 17.....	1105	3480	150	Apr. 20.....	1000	213	80
Feb. 7.....	1600	88	40	Apr. 21.....	1200	164	75
Feb. 8.....	0900	88	42	Apr. 22.....	0800	126	70
Feb. 9.....	0900	112	48	Apr. 23.....	0900	488	75
Feb. 10.....	0900	80	40	Apr. 24.....	1000	278	70
Feb. 11.....	0900	79	38	Apr. 25.....	1800	168	75
Feb. 12.....	1000	69	35	Apr. 26.....	0800	146	70
Feb. 13.....	0900	54	30	Apr. 27.....	0900	160	65
Feb. 14.....	0900	44	26	Apr. 28.....	0900	127	65
Feb. 15.....	1600	64	33	Apr. 29.....	0800	104	60
Feb. 16.....	0800	58	33	Apr. 30.....	0900	88	50
Feb. 17.....	0900	41	23	May 1.....	0900	141	65
Feb. 18.....	1000	56	29	May 3.....	1800	76	46
Feb. 19.....	0900	316	95	May 4.....	0800	72	46
Feb. 20.....	0930	66	36	May 5.....	0800	61	44
Feb. 21.....	0900	41	26	May 6.....	0800	52	42
Feb. 22.....	0900	38	25	May 7.....	0900	62	44
Feb. 23.....	1000	62	36	May 8.....	1100	33	33
Feb. 24.....	1100	95	47	May 9.....	1000	42	34
Feb. 25.....	1000	404	110	May 10.....	0900	32	32
Feb. 26.....	0900	146	70	May 11.....	0900	32	31
Feb. 27.....	1700	215	75	May 12.....	0900	25	23
Feb. 28.....	1000	249	75	May 13.....	0830	104	65
Mar. 1.....	0900	238	80	May 14.....	0900	24	25
Mar. 2.....	1000	94	65	May 15.....	1100	19	20
Mar. 3.....	0900	740	65	May 16.....	0900	30	23
Mar. 4.....	1000	469	75	May 17.....	0900	20	19
Mar. 5.....	1000	214	80	May 19.....	0800	12	18
Mar. 6.....	1000	154	70	May 20.....	0900	14	15
Mar. 7.....	1000	168	70	May 21.....	0900	14	13
Mar. 8.....	1000	186	75	May 22.....	1000	10	11
Mar. 9.....	0900	141	70	May 23.....	1200	26	15
Mar. 10.....	0800	112	60	May 24.....	1330	13	16

## MAD RIVER BASIN

11481000 MAD RIVER NEAR ARCATA, CALIF.--Continued

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)	DATE OF COLLECTION	TIME (24-HOUR)	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (JTU)
May 25, 1971...	1500	77	56	July 7.....	1100	6	11
May 26.....	0900	27	30	July 14.....	1000	7	12
May 27.....	0900	15	20	July 19.....	1405	3	10
May 28.....	1000	8	13	July 21.....	1000	7	4
May 29.....	0900	8	14	July 28.....	0900	4	1
May 30.....	0900	20	20	Aug. 4.....	0900	4	2
May 31.....	1000	7	13	Aug. 11.....	0900	6	3
June 1.....	0900	5	11	Aug. 18.....	0900	6	2
June 2.....	0800	10	14	Aug. 23.....	1100	3	2
June 3.....	1400	46	26	Aug. 25.....	0900	5	2
June 4.....	0800	10	15	Aug. 31.....	0900	3	2
June 8.....	0900	7	10	Sept. 7.....	0900	2	1
June 14.....	1000	4	11	Sept. 14.....	0900	18	9
June 18.....	1300	7	3	Sept. 14.....	1500	4	1
June 20.....	0900	9	19	Sept. 20.....	1430	2	2
June 25.....	1600	88	55	Sept. 21.....	0900	2	1
June 26.....	1000	98	60	Sept. 28.....	0900	2	1
June 27.....	0900	40	45	Sept. 29.....	1300	262	65
June 30.....	1000	17	18	Sept. 30.....	0900	207	100

## 11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY, NEAR ORICK, CALIF.

LOCATION.--Lat 41°10'19", long 123°56'52", in SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.16, T.9 N., R.2 E., Humboldt County, Redwood National Park (south boundary), at gaging station 50 ft upstream from small right-bank tributary, 8.6 miles southeast of Orick, and 17 miles upstream from mouth.

DRAINAGE AREA.--183 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1971 (partial-record station).  
Sediment records: Water year 1971 (partial-record station).

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	ALKA- LINITY AS CACO <sub>3</sub> (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
OCT.									
14...	0900	6.1	10.5	11.1	100	82	255	7.8	--
14...	1000	6.1	11.0	11.2	103	--	--	--	--
14...	1100	6.1	12.0	11.6	108	82	280	8.0	--
14...	1300	6.1	14.0	11.6	114	82	270	8.1	--
14...	1345	6.1	14.5	--	--	--	--	--	E5
14...	1500	6.1	15.0	11.3	113	82	230	8.1	--
14...	1900	6.1	14.0	9.8	96	86	215	8.0	--
14...	2030	6.1	13.5	10.0	97	--	--	--	--
14...	2100	6.1	13.5	10.0	97	78	210	7.9	--
15...	0100	6.1	12.5	10.2	97	86	234	7.8	--
15...	0700	6.1	11.5	10.4	96	86	205	7.6	--
JUNE									
29...	2100	129	19.0	9.4	102	37	137	7.2	E900
29...	2400	126	17.5	10.4	110	29	135	6.7	--
30...	0300	124	16.5	9.8	101	37	138	6.8	E500
30...	0600	124	15.5	10.6	107	33	138	6.6	--
30...	0900	124	15.0	10.4	104	41	--	7.0	E125
30...	1200	124	17.0	10.0	104	37	--	7.5	--
30...	1500	124	20.5	9.4	106	41	195	6.8	E75
30...	1800	124	20.0	9.4	104	41	168	6.4	--
30...	2100	121	19.0	8.8	96	37	166	6.5	55

DATE	DIS- CHARGE (CFS)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (N) (MG/L)	PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (PO <sub>4</sub> ) (MG/L)
OCT.						
14...	6.1	.09	.00	.00	.16	.03
15...	6.1	.12	.00	.00	.08	.03

E Estimated.

## REDWOOD CREEK BASIN

11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY, NEAR ORICK, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM
NOV.							
24...	1050	--	12300	3960	132000	28	38
24...	1155	--	13100	4400	156000	32	34
24...	1245	--	14100	4800	183000	33	36
24...	1505	--	15100	6100	249000	31	37
JAN.							
27...	1500	6.0	942	198	504	--	--
FEB.							
09...	1430	8.0	370	43	43	--	--
MAR.							
08...	1420	8.0	1380	261	972	--	--
APR.							
02...	1220	9.5	1340	246	890	38	55
MAY							
14...	1140	13.0	400	34	37	--	--
JUNE							
30...	1500	18.0	124	9	3.0	--	--
AUG.							
02...	1340	22.0	39	6	.63	--	--

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. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
NOV.							
24...	48	65	81	90	93	99	100
24...	48	65	80	89	92	98	100
24...	48	64	81	91	93	99	100
24...	51	65	81	91	95	100	--
JAN.							
27...	--	--	--	--	--	--	--
FEB.							
09...	--	--	--	--	--	--	--
MAR.							
08...	--	--	--	--	--	--	--
APR.							
02...	65	78	87	93	94	98	100
MAY							
14...	--	--	--	--	--	--	--
JUNE							
30...	--	--	--	--	--	--	--
AUG.							
02...	--	--	--	--	--	--	--



## 11482500 REDWOOD CREEK AT ORICK, CALIF.

LOCATION.--Lat 41°17'20", long 124°03'30", in NE $\frac{1}{4}$  sec.4, T.10 N., R.1 E., Humboldt County, at gaging station at bridge on U.S. Highway 101 at Orick, 0.9 mile downstream from Prairie Creek.

DRAINAGE AREA.--278 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1958 to September 1966.

Water temperatures: October 1965 to September 1971.

Sediment records: Water years 1955-56 (partial-record station), March 1970 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 22.5°C Aug. 6; minimum, 5.0°C on several days during January to March.

Sediment concentrations: Maximum daily, 5,490 mg/l Nov. 24; minimum daily, 1 mg/l Oct. 7, 8, 11, 12, 25.

Sediment discharge: Maximum daily, 298,000 tons Nov. 24; minimum daily, 0.03 ton Oct. 7, 8, 11, 12.

Period of record:

Water temperatures: Maximum (1969-71), Maximum, 23.0°C Sept. 18, 1970; minimum, 1.0°C Dec. 14, 1967.

Sediment concentrations: Maximum daily, 5,490 mg/l Nov. 24, 1970; minimum daily, 1 mg/l on many days in 1970.

Sediment discharge: Maximum daily, 298,000 tons Nov. 24, 1970; minimum daily, 0.03 ton Oct. 7, 8, 11, 12, 1970.

REMARKS.--No thermograph record Nov. 5-12, Feb. 5 to Apr. 11, probe inoperative. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	18.5	-- 15.5	15.5	-- 13.5	9.0	-- 8.5	8.0	-- 7.0	8.5	-- 8.0	-- 5.0	--
2	16.5	-- 15.0	15.5	-- 13.5	9.0	-- 8.5	7.0	-- 5.5	8.5	-- 7.0	-- 7.0	--
3	16.0	-- 15.5	15.0	-- 13.5	9.0	-- 8.5	5.5	-- 5.0	8.0	-- 7.5	-- 6.5	--
4	17.0	-- 15.5	15.0	-- 14.0	9.5	-- 8.5	5.5	-- 5.0	8.5	-- 8.0	-- 5.5	--
5	18.0	-- 15.0	--	--	10.0	-- 9.5	5.5	-- 5.0	--	-- 8.5	-- 5.5	--
6	17.0	-- 14.0	--	--	10.0	-- 10.0	5.5	-- 5.0	--	-- 7.5	-- 5.0	--
7	16.5	-- 12.5	-- 12.0	--	10.0	-- 9.5	7.0	-- 6.0	--	-- 6.5	-- 5.5	--
8	17.0	-- 13.0	--	--	9.5	-- 9.0	8.0	-- 7.0	--	-- 7.5	-- 5.0	--
9	17.5	-- 14.5	-- 12.0	--	9.0	-- 8.5	9.0	-- 8.0	--	-- 8.0	-- 5.5	--
10	18.0	-- 15.0	--	--	9.0	-- 8.5	9.0	-- 8.5	--	-- 10.0	-- 7.0	--
11	17.5	-- 14.5	--	--	9.0	-- 8.5	8.5	-- 7.5	--	-- 10.0	-- 7.5	--
12	17.0	-- 15.0	--	--	8.5	-- 7.0	7.5	-- 6.0	--	-- 10.0	-- 7.5	--
13	17.0	-- 13.5	11.0	-- 10.0	8.0	-- 7.0	6.0	-- 5.5	--	-- 10.0	-- 7.5	--
14	17.0	-- 13.0	11.0	-- 10.5	8.0	-- 7.5	7.0	-- 6.0	--	-- 10.0	-- 7.0	--
15	15.5	-- 14.5	11.5	-- 10.5	8.5	-- 8.0	8.0	-- 7.0	--	-- 7.0	-- 8.0	--
16	15.0	-- 14.5	12.0	-- 11.5	8.0	-- 7.0	10.0	-- 8.0	--	-- 8.0	-- 6.5	--
17	16.0	-- 14.0	11.5	-- 11.0	7.0	-- 6.5	10.0	-- 9.5	--	-- 9.0	-- 7.0	--
18	16.5	-- 15.0	11.5	-- 10.5	7.0	-- 6.5	10.5	-- 10.0	--	-- 8.0	-- 7.0	--
19	15.5	-- 14.0	11.5	-- 10.5	6.5	-- 6.0	10.5	-- 9.5	--	-- 8.0	-- 9.0	--
20	16.5	-- 15.0	11.0	-- 10.0	6.5	-- 6.0	9.5	-- 8.5	--	-- 8.0	-- 9.0	--
21	15.0	-- 14.0	11.0	-- 10.0	7.5	-- 6.5	8.5	-- 8.0	--	-- 8.0	-- 10.0	--
22	15.0	-- 13.5	11.5	-- 10.5	7.5	-- 7.0	8.5	-- 8.0	--	-- 8.5	-- 8.0	--
23	15.5	-- 14.5	12.5	-- 10.5	7.5	-- 7.0	9.0	-- 8.5	--	-- 7.0	-- 10.5	--
24	15.0	-- 14.0	12.5	-- 12.0	7.0	-- 6.0	8.5	-- 8.0	--	-- 9.0	-- 10.5	--
25	15.0	-- 14.0	12.0	-- 11.0	6.5	-- 6.0	8.5	-- 8.0	--	-- 6.5	-- 9.0	--
26	15.5	-- 13.5	11.0	-- 10.0	6.5	-- 5.5	8.5	-- 8.0	--	-- 6.0	-- 9.0	--
27	14.5	-- 12.0	10.0	-- 9.5	7.0	-- 6.5	8.5	-- 8.0	--	-- 5.0	-- 8.5	--
28	14.5	-- 12.0	9.5	-- 9.5	7.5	-- 7.0	8.5	-- 7.5	--	-- 6.0	-- 9.0	--
29	14.5	-- 12.0	10.0	-- 9.5	8.0	-- 7.0	8.5	-- 7.5	--	--	-- 10.0	--
30	14.0	-- 12.0	10.0	-- 9.0	8.5	-- 8.0	8.5	-- 8.0	--	--	-- 9.5	--
31	16.0	-- 14.0	--	--	8.5	-- 8.0	9.0	-- 8.0	--	--	-- 9.0	--
AVE	16.1	-- 14.0	--	--	8.2	-- 7.5	8.1	-- 7.3	--	-- 8.0	-- 7.6	--
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	-- 10.0	--	11.5	-- 10.5	13.0	-- 11.5	17.5	-- 14.5	21.5	-- 15.5	17.5	-- 16.0
2	-- 9.5	--	12.0	-- 10.0	14.5	-- 12.0	19.0	-- 15.0	19.5	-- 16.0	19.5	-- 16.0
3	-- 9.0	--	11.0	-- 10.5	14.0	-- 12.5	18.0	-- 15.0	21.0	-- 16.5	20.0	-- 14.5
4	-- 8.5	--	11.0	-- 10.0	16.5	-- 13.0	18.5	-- 15.0	18.5	-- 16.5	19.0	-- 15.5
5	-- 9.5	--	12.0	-- 10.5	15.0	-- 14.0	18.5	-- 15.5	22.0	-- 16.5	17.0	-- 15.5
6	-- 11.0	--	14.0	-- 10.5	16.0	-- 14.0	18.5	-- 14.5	22.5	-- 17.0	19.5	-- 15.0
7	-- 10.0	--	14.5	-- 11.0	16.0	-- 14.0	19.0	-- 14.5	22.0	-- 16.0	19.5	-- 14.0
8	-- 9.5	--	12.5	-- 11.0	17.0	-- 14.0	19.0	-- 14.5	22.0	-- 16.5	18.5	-- 14.5
9	-- 9.0	--	13.5	-- 10.5	15.5	-- 14.0	17.5	-- 15.5	19.0	-- 17.0	19.5	-- 15.0
10	-- 8.0	--	14.5	-- 11.0	15.5	-- 14.0	19.0	-- 14.0	19.0	-- 17.0	20.0	-- 15.0
11	--	--	13.5	-- 12.0	16.0	-- 14.5	19.5	-- 15.0	18.5	-- 17.0	20.0	-- 15.5
12	11.0	-- 9.0	14.0	-- 12.0	16.0	-- 14.5	19.0	-- 15.5	17.5	-- 16.5	19.5	-- 15.0
13	10.5	-- 9.5	15.0	-- 12.0	16.5	-- 14.5	18.5	-- 15.5	19.0	-- 16.0	20.0	-- 14.5
14	11.0	-- 9.5	15.0	-- 11.5	18.0	-- 14.5	18.0	-- 15.5	21.5	-- 15.0	19.5	-- 14.5
15	12.0	-- 9.5	12.5	-- 11.5	18.5	-- 15.0	19.0	-- 15.0	21.5	-- 16.5	20.0	-- 14.5
16	10.0	-- 8.5	13.5	-- 11.0	18.5	-- 15.0	19.5	-- 15.0	20.5	-- 15.5	20.0	-- 14.5
17	8.5	-- 7.5	14.0	-- 10.0	17.5	-- 13.5	20.0	-- 15.0	21.5	-- 16.0	17.0	-- 15.0
18	9.5	-- 7.5	14.5	-- 11.0	16.5	-- 15.0	17.5	-- 15.0	21.0	-- 16.0	18.0	-- 14.5
19	9.5	-- 8.0	13.0	-- 11.5	16.5	-- 15.0	20.0	-- 15.0	18.5	-- 16.5	18.5	-- 15.0
20	9.5	-- 8.0	14.5	-- 10.5	18.0	-- 15.0	21.0	-- 15.5	21.0	-- 17.0	18.5	-- 14.5
21	9.5	-- 7.5	14.0	-- 11.0	18.5	-- 15.5	21.5	-- 15.5	20.0	-- 17.5	19.0	-- 14.0
22	8.5	-- 8.0	15.5	-- 12.0	20.0	-- 16.0	21.0	-- 16.5	20.5	-- 17.0	17.5	-- 15.0
23	9.5	-- 8.0	15.5	-- 12.5	18.5	-- 16.0	17.5	-- 16.5	20.5	-- 16.0	16.5	-- 15.0
24	10.0	-- 7.5	15.5	-- 13.5	18.5	-- 15.0	18.5	-- 16.0	20.0	-- 16.0	16.5	-- 15.0
25	10.5	-- 8.0	14.0	-- 12.5	17.5	-- 15.5	19.5	-- 16.0	19.5	-- 16.5	18.5	-- 14.5
26	12.0	-- 9.5	15.0	-- 12.5	17.5	-- 15.0	19.0	-- 16.0	20.0	-- 16.0	16.0	-- 14.0
27	10.5	-- 10.0	15.0	-- 13.0	17.0	-- 15.0	17.0	-- 16.0	17.5	-- 15.0	17.0	-- 14.0
28	10.5	-- 10.0	13.5	-- 12.5	18.5	-- 14.0	17.5	-- 15.5	18.0	-- 15.5	15.0	-- 14.0
29	11.5	-- 9.5	13.5	-- 12.0	18.0	-- 14.0	17.5	-- 15.5	19.0	-- 15.5	14.5	-- 13.0
30	12.0	-- 9.5	14.5	-- 11.5	16.5	-- 15.0	21.0	-- 15.5	16.5	-- 15.5	15.0	-- 12.5
31	--	--	13.0	-- 12.0	--	--	20.0	-- 15.5	18.5	-- 15.0	--	--
AVE	--	--	13.7	-- 11.4	16.8	-- 14.3	18.9	-- 15.3	19.9	-- 16.2	18.2	-- 14.6

## REDWOOD CREEK BASIN

11482500 REDWOOD CREEK AT ORICK, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	12	2	.06	43	2	.23	4310	1750	20400
2	12	2	.06	36	2	.19	5460	2270	34000
3	12	2	.06	34	2	.18	11900	3400	155000
4	12	2	.06	161	219	101	10900	3700	109000
5	12	3	.10	660	364	692	5570	2550	38300
6	12	2	.06	957	318	843	4550	1720	21100
7	11	1	.03	844	80	182	5560	2240	36100
8	11	1	.03	1190	497	3450	5040	1850	25200
9	11	2	.06	4740	3950	52500	3910	1000	10600
10	11	2	.06	1770	835	3990	3090	650	5420
11	11	1	.03	1280	206	873	2660	480	3450
12	11	1	.03	2180	557	3350	2260	390	2380
13	11	2	.06	1180	355	1130	2050	400	2210
14	11	2	.06	771	235	489	1840	390	1940
15	11	2	.06	566	145	222	2000	748	4040
16	11	2	.06	650	170	298	3560	1340	12900
17	11	2	.06	515	112	156	3260	990	8710
18	15	3	.12	435	78	92	2640	750	5350
19	18	3	.15	356	59	57	2180	510	3000
20	87	16	4.9	329	50	44	2180	560	3300
21	99	11	2.9	307	48	40	2630	700	4970
22	188	20	11	385	10	10	2050	270	1490
23	210	22	17	5860	2660	52900	1730	150	701
24	400	10	11	17100	5490	298000	1490	220	885
25	208	1	.56	9080	4520	115000	1330	410	1470
26	140	2	.76	3970	2050	22000	1200	580	1880
27	103	2	.56	5400	2900	52100	1100	490	1460
28	79	2	.43	6260	2750	46500	2380	1630	17600
29	60	2	.32	3490	1700	16000	4720	2700	34400
30	50	2	.27	3650	2150	21200	3100	1020	8540
31	43	3	.35	--	--	--	3360	810	7350
TOTAL	1893	--	51.26	74199	--	692219.60	110010	--	583146

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	2820	600	4570	964	58	151	1460	107	422
2	2260	520	3170	908	87	213	1280	109	377
3	1830	380	1880	852	100	230	2100	299	1770
4	1560	270	1140	806	98	213	2730	330	2430
5	1370	150	555	924	87	217	2320	258	1620
6	1220	110	362	876	67	158	1840	118	586
7	1110	90	270	799	37	80	1850	201	1000
8	1000	100	270	750	30	61	1860	160	804
9	940	85	216	715	33	64	1650	140	624
10	2810	1480	13200	687	34	63	1890	350	2270
11	3480	1100	10300	668	24	43	5620	1890	28600
12	3260	700	6160	662	22	39	9280	2800	69800
13	2610	420	2960	644	21	37	6600	430	7660
14	2880	450	3500	650	32	56	4530	480	5870
15	5880	2710	52800	900	120	292	3540	340	3250
16	11800	4370	147000	764	67	138	3300	684	6450
17	16200	3250	145000	701	116	220	3220	600	5220
18	15100	2150	87700	694	125	234	2600	480	3370
19	7160	1520	30000	908	178	436	2210	830	4950
20	4790	960	12400	743	28	56	1900	1140	5850
21	3540	790	7550	722	30	58	1680	1150	5220
22	2820	625	4760	715	61	118	2610	1740	14800
23	2360	485	3090	729	42	83	6660	1650	30000
24	2030	397	2180	876	194	561	5510	830	12300
25	1740	328	1540	1270	386	1340	5220	1620	29700
26	1540	269	1120	1070	125	361	9600	1750	45400
27	1410	205	780	1200	142	460	6560	340	6020
28	1290	151	526	1500	198	802	4520	300	3660
29	1200	104	337	--	--	--	3490	320	3020
30	1110	70	210	--	--	--	3030	370	3030
31	1040	51	143	--	--	--	2600	365	2560
TOTAL	110160	--	545689	23697	--	6784	113260	--	308633

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2140	250	1440	948	50	128	283	7	5.3
2	1800	200	972	908	47	115	275	7	5.2
3	1590	190	816	892	44	106	263	6	4.3
4	1450	185	724	836	44	99	255	6	4.1
5	1340	150	543	785	41	87	243	6	3.9
6	1260	120	408	743	30	60	239	6	3.9
7	1180	110	350	701	28	53	232	5	3.1
8	1110	225	674	662	25	45	225	5	3.0
9	1660	1030	4620	638	30	52	218	5	2.9
10	2610	625	4400	596	44	71	214	5	2.9
11	1710	220	1020	566	26	40	214	5	2.9
12	1470	150	595	578	24	37	204	5	2.8
13	1310	110	389	668	22	40	200	4	2.2
14	1260	98	333	555	21	31	193	4	2.1
15	1140	100	308	525	20	28	183	4	2.0
16	1270	200	686	550	19	28	176	4	1.9
17	2680	950	6870	520	18	25	169	4	1.8
18	3010	460	3740	480	17	22	169	3	1.4
19	2310	300	1870	450	16	19	183	3	1.5
20	2210	340	2030	425	15	17	176	3	1.4
21	1900	210	1080	405	15	16	162	3	1.3
22	1770	348	1660	385	14	15	151	3	1.2
23	2050	220	1220	365	13	13	148	4	1.6
24	1740	120	564	351	12	11	144	5	1.9
25	1520	120	492	351	11	10	455	30	37
26	1400	123	465	380	10	10	578	40	62
27	1280	125	432	347	10	9.4	410	30	33
28	1190	126	405	324	9	7.9	299	15	12
29	1100	100	297	315	9	7.7	247	10	6.7
30	1010	50	136	303	8	6.5	218	7	4.1
31	--	--	--	287	8	6.2	--	--	--
TOTAL	49470	--	39539	16839	--	1215.7	7126	--	219.4
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	204	5	2.8	68	3	.55	83	3	.67
2	190	5	2.6	66	3	.53	103	5	1.4
3	179	5	2.4	64	3	.52	73	4	.79
4	169	5	2.3	64	3	.52	66	3	.53
5	158	5	2.1	64	3	.52	60	3	.49
6	144	5	1.9	60	3	.49	55	3	.45
7	144	5	1.9	60	3	.49	50	3	.41
8	137	5	1.8	57	3	.46	47	3	.38
9	134	5	1.8	51	3	.41	47	3	.38
10	134	5	1.8	51	3	.41	43	3	.35
11	130	4	1.4	53	3	.43	40	3	.32
12	124	4	1.3	50	3	.41	40	3	.32
13	118	4	1.3	47	4	.51	36	3	.29
14	115	4	1.2	50	4	.54	33	3	.27
15	112	4	1.2	50	4	.54	33	3	.27
16	106	4	1.1	47	4	.51	32	2	.17
17	103	4	1.1	45	4	.49	30	2	.16
18	98	4	1.1	43	4	.46	32	2	.17
19	98	4	1.1	43	4	.46	29	2	.16
20	93	4	1.0	36	4	.39	26	2	.14
21	88	3	.71	35	4	.38	27	2	.15
22	83	3	.67	43	4	.46	25	2	.14
23	80	3	.65	48	4	.52	23	2	.12
24	78	3	.63	47	4	.51	20	2	.11
25	78	3	.63	43	4	.46	22	2	.12
26	75	3	.61	42	4	.45	68	5	.92
27	73	3	.59	42	4	.45	228	10	6.2
28	71	3	.58	42	4	.45	127	5	1.7
29	71	3	.58	42	4	.45	590	30	48
30	71	3	.58	43	4	.46	757	46	94
31	71	3	.58	68	4	.73	--	--	--
TOTAL	3529	--	40.01	1564	--	14.96	2845	--	159.58
TOTAL DISCHARGE FOR YEAR (CFS-DAYS)									514592
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)									2177711.53

## REDWOOD CREEK BASIN

11482500 REDWOOD CREEK AT ORICK, CALIF.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE 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
NOV.										
04...	0905	14.0	144	410	159	40	55	72	84	93
09...	0825	12.0	5700	5610	86300	19	22	38	51	65
23...	0845	12.0	3200	2350	20300	20	29	39	54	70
24...	0935	12.5	15400	3760	158000	16	25	33	46	59
30...	1000	9.0	3170	1520	13000	12	20	27	34	41
DEC.										
11...	1220	9.0	2640	497	3540	21	34	46	57	67
22...	1005	7.0	2120	293	1680	--	--	--	--	--
JAN.										
16...	1030	10.0	8100	3280	71700	16	17	28	37	47
17...	1500	10.0	14300	2580	99600	21	25	40	51	65
18...	0945	10.0	16200	2190	95800	25	31	49	62	75
20...	0930	9.0	4900	1000	13200	18	27	38	50	60
FEB.										
17...	0850	9.0	701	225	426	--	--	--	--	--
25...	0950	6.5	1330	474	1700	19	35	52	70	84
MAR.										
11...	1155	7.5	7660	1830	37800	19	30	41	51	63
11...	1420	7.5	5580	1540	23200	24	33	47	59	73
APR.										
17...	0900	7.5	2260	632	3860	31	44	55	67	77
18...	0935	8.0	3060	551	4550	31	45	56	69	77

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. FALL 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
NOV.										
04...	--	95	--	97	--	98	--	100	--	--
09...	76	--	90	--	100	--	--	--	--	--
23...	81	--	85	--	92	--	96	--	100	--
24...	69	--	78	--	98	--	100	--	--	--
30...	49	--	56	--	80	--	98	--	100	--
DEC.										
11...	77	--	82	--	96	--	100	--	--	--
22...	67	--	70	--	87	--	98	--	100	--
JAN.										
16...	--	56	--	67	--	87	--	99	--	100
17...	76	--	82	--	99	--	100	--	--	--
18...	86	--	90	--	99	--	100	--	--	--
20...	73	--	78	--	96	--	100	--	--	--
FEB.										
17...	--	99	--	100	--	--	--	--	--	--
25...	--	90	--	92	--	96	--	100	--	--
MAR.										
11...	--	82	--	87	--	98	--	100	--	--
11...	84	--	89	--	100	--	--	--	--	--
APR.										
17...	88	--	91	--	96	--	99	--	100	--
18...	89	--	92	--	99	--	100	--	--	--

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CALIF.

LOCATION.--Lat 41°55'41", long 122°26'35", in SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.17, T.47 N., R.5 W., Siskiyou County, at gaging station on left bank, 0.1 mile downstream from Bogus Creek, 0.6 mile downstream from Iron Gate Dam, and 5.9 miles northeast of Hornbrook.

DRAINAGE AREA.--4,630 sq mi, approximately (not including Lost River or Lower Klamath Lake basins).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1971.

Water temperatures: October 1962 to September 1971.

EXTREMES, 1970-71:

Water temperatures: Maximum, 22.0°C Aug. 1, 12; minimum, 1.0°C on several days during January.

Period of record:

Water temperatures: Maximum, 23.0°C Aug. 6, 1967; minimum, 1.0°C on several days in 1971.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. Clock stopped Mar. 26-31, Apr. 22 to May 3; range in temperature, 5.0°C to 6.5°C, and 8.5°C to 10.0°C, respectively.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.											
06...	1030	1330	14.0	9.1	--	--	18	--	100	0	--
NOV.											
16...	1130	3070	8.0	9.8	--	--	29	--	108	0	--
DEC.											
14...	1130	5000	4.0	12.4	--	--	17	--	88	0	--
JAN.											
12...	1215	3290	1.5	13.0	--	--	20	--	89	0	--
FEB.											
17...	1030	3460	5.0	11.8	12	6.3	18	2.6	88	0	29
MAR.											
15...	1210	3790	4.0	12.7	--	--	16	--	81	0	--
APR.											
13...	1015	7160	10.0	10.8	--	--	11	--	72	0	--
MAY											
10...	1245	6900	12.0	12.1	--	--	11	--	62	0	--
JUNE											
03...	0955	4880	15.0	10.6	--	--	12	--	66	0	--
JULY											
06...	1145	836	19.5	11.7	--	--	12	--	77	0	--
AUG.											
05...	0945	1000	22.0	8.7	11	6.2	12	2.1	83	0	10
SEP.											
21...	1155	1720	17.0	9.8	--	--	15	--	89	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT.											
06...	4.7	2.1	.14	200	--	--	--	72	0	82	--
NOV.											
16...	6.7	4.2	.11	100	--	--	--	77	0	89	--
DEC.											
14...	4.6	4.0	.060	100	--	--	--	62	0	72	--
JAN.											
12...	4.9	4.6	.060	200	--	--	--	66	0	73	--
FEB.											
17...	3.4	.5	.060	0	--	--	--	56	0	72	40
MAR.											
15...	4.0	.6	.000	100	--	--	--	62	0	66	--
APR.											
13...	2.8	.5	.010	100	--	--	--	45	0	59	--
MAY											
10...	1.9	1.1	.060	100	--	--	--	43	0	51	--
JUNE											
03...	3.9	.0	.050	0	--	--	--	48	0	54	--
JULY											
06...	3.6	.3	.050	100	--	--	--	49	0	63	--
AUG.											
05...	4.1	2.0	.040	200	104	.14	281	53	0	68	32
SEP.											
21...	2.2	1.7	.16	0	--	--	--	60	0	73	--

## KLAMATH RIVER BASIN

11517530 KLAMATH RIVER BELOW IRON GATE DAM, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHQS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT. 06...	.9	208	7.8	3	--	--	--	--	--	--
NOV. 16...	1.4	276	7.6	7	--	--	--	--	--	--
DEC. 14...	.9	201	7.4	20	--	--	--	--	--	--
JAN. 12...	1.1	225	7.8	7	--	--	--	--	--	--
FEB. 17...	1.0	195	7.4	8	--	--	--	--	--	--
MAR. 15...	.9	188	8.0	10	--	--	--	--	--	--
APR. 13...	.7	145	7.8	25	--	--	--	--	--	--
MAY 10...	.7	136	7.5	10	0	0	0	0	.0	0
JUNE 03...	.8	155	7.6	10	--	--	--	--	--	--
JULY 06...	.7	160	7.3	4	--	--	--	--	--	--
AUG. 05...	.7	164	8.3	7	--	--	--	--	--	--
SEPT. 21...	.8	190	7.3	2	--	--	--	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	14.0	10.5	10.0	5.0	5.0	2.0	2.0	3.0	3.0	4.5	4.5
2	14.0	14.0	10.0	10.0	5.0	5.0	2.0	1.5	3.5	3.0	4.5	4.0
3	14.0	14.0	10.0	10.0	5.0	4.5	1.5	1.5	3.5	3.5	4.0	4.0
4	14.0	14.0	10.0	10.0	5.0	4.5	1.5	1.5	3.5	3.5	4.0	4.0
5	14.0	14.0	10.0	10.0	5.0	5.0	1.5	1.5	4.0	3.5	4.0	4.0
6	14.0	14.0	10.0	10.0	5.0	4.5	1.5	1.0	4.0	3.5	4.0	4.0
7	14.0	14.0	10.0	10.0	4.5	4.5	1.0	1.0	4.0	4.0	4.0	4.0
8	14.0	13.5	10.0	9.5	4.5	4.0	1.0	1.0	4.0	4.0	4.0	4.0
9	13.5	13.5	9.5	9.5	4.5	4.0	1.0	1.0	4.0	4.0	4.0	4.0
10	13.5	13.5	9.5	8.5	4.0	4.0	1.0	1.0	4.0	4.0	4.0	4.0
11	13.5	13.5	8.5	8.5	4.0	4.0	1.5	1.0	4.0	4.0	4.0	4.0
12	13.5	13.5	8.5	8.5	4.0	3.5	1.5	1.5	4.0	4.0	4.0	4.0
13	13.5	13.5	8.5	8.0	3.5	3.5	1.5	1.5	4.0	4.0	4.0	3.5
14	13.5	13.5	8.0	8.0	3.5	3.5	1.5	1.5	4.0	4.0	3.5	3.5
15	13.5	13.0	8.0	7.5	3.5	3.0	1.5	1.5	4.0	4.0	4.0	3.5
16	13.0	13.0	7.5	7.5	3.0	3.0	2.0	1.5	4.0	4.0	4.0	3.5
17	13.0	13.0	7.5	7.5	3.0	3.0	2.0	2.0	4.5	4.0	4.0	3.5
18	13.0	12.5	7.5	7.5	3.0	3.0	3.0	3.0	4.5	4.5	4.0	4.0
19	13.0	12.5	7.5	7.5	3.0	2.5	3.0	3.0	4.5	4.5	4.0	4.0
20	12.5	12.5	7.5	7.0	3.0	2.5	3.0	2.5	4.5	4.5	4.0	4.0
21	12.5	12.0	7.0	6.5	3.0	2.5	2.5	2.0	4.5	4.5	4.0	4.0
22	12.0	12.0	7.0	6.5	2.5	2.5	2.5	2.5	4.5	4.5	4.5	4.0
23	12.0	11.5	6.5	6.5	2.5	2.0	2.5	2.5	4.5	4.5	5.0	4.5
24	11.5	11.5	6.5	6.5	2.0	2.0	2.5	2.5	5.0	4.5	5.0	5.0
25	11.5	11.5	6.5	6.0	2.0	2.0	2.5	2.5	5.0	4.5	5.0	5.0
26	11.5	11.5	6.0	6.0	2.0	2.0	2.5	2.5	5.0	4.5	--	--
27	11.5	11.0	6.0	5.0	2.0	2.0	2.5	2.5	4.5	4.5	--	--
28	11.0	11.0	5.0	5.0	2.0	2.0	2.5	2.5	4.5	4.5	--	--
29	11.0	11.0	5.0	5.0	2.0	2.0	3.0	2.5	--	--	--	--
30	11.0	10.5	5.0	5.0	2.0	2.0	3.0	3.0	--	--	--	--
31	10.5	10.0	--	--	2.0	2.0	3.0	3.0	--	--	--	--
AVE	12.8	12.7	8.0	7.8	3.4	3.2	2.1	1.9	4.2	4.1	4.2	4.0

11517530 KLAMATH RIVER BELOW IRON GATE DAM, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	MAX	APR	MIN	MAX	MAY	MIN	MAX	JUN	MIN	MAX	JUL	MIN	MAX	AUG	MIN	MAX	SEP	MIN
1	6.5	6.0	--	--		13.0	12.5	18.0	17.0	22.0	20.5	19.0	18.5					
2	7.0	6.5	--	--		14.0	12.5	18.0	17.0	21.5	21.0	18.5	18.5					
3	7.0	7.0	--	--		14.0	13.0	18.0	17.0	21.0	20.0	18.5	18.5					
4	7.0	7.0	10.0	10.0		14.0	13.0	18.5	17.5	20.5	20.0	18.5	18.5					
5	7.5	7.0	10.0	10.0		14.0	13.5	18.5	17.5	20.5	20.0	18.5	18.5					
6	8.0	7.5	10.5	9.5		14.0	13.5	18.0	17.5	20.5	20.0	18.5	18.5					
7	8.0	8.0	11.5	10.0		15.0	14.0	18.5	18.0	20.5	20.0	18.5	18.0					
8	8.0	8.0	11.5	10.5		14.5	14.0	18.5	18.0	20.5	20.0	18.0	18.0					
9	8.0	8.0	11.0	10.5		14.5	14.5	18.5	18.0	21.5	20.5	18.0	18.0					
10	8.0	8.0	11.0	11.0		15.5	14.0	18.5	18.0	21.5	20.5	18.0	18.0					
11	8.5	8.0	11.5	11.0		15.0	14.5	18.5	18.0	21.5	21.0	18.0	17.5					
12	8.5	8.0	12.0	11.5		15.0	14.5	19.0	18.5	22.0	20.5	18.0	18.0					
13	8.5	8.5	13.0	11.5		16.0	14.5	19.0	19.0	21.5	21.0	18.0	17.5					
14	9.0	8.5	12.5	12.0		16.0	14.5	19.0	19.0	21.5	21.0	18.0	18.0					
15	9.0	9.0	13.0	12.5		16.5	15.0	19.5	19.0	21.5	21.0	18.0	17.5					
16	9.0	9.0	13.0	12.5		16.5	15.5	20.0	19.0	21.0	20.5	17.5	17.5					
17	9.0	9.0	13.0	12.5		16.0	15.5	20.0	19.5	21.0	20.5	17.5	17.0					
18	9.0	9.0	13.5	12.5		16.0	15.5	19.5	19.0	21.0	20.5	17.0	17.0					
19	9.0	9.0	14.0	13.0		16.0	15.5	19.5	19.0	21.0	20.5	17.0	16.5					
20	9.0	8.5	13.5	12.5		17.0	16.0	19.5	19.0	21.0	20.0	16.5	16.5					
21	9.0	8.5	12.5	12.0		16.5	16.0	19.5	19.5	20.0	20.0	16.5	16.0					
22	--	--	13.0	12.0		17.0	16.0	20.0	19.5	20.5	20.0	16.0	16.0					
23	--	--	13.5	12.5		18.0	16.5	21.0	20.0	20.0	20.0	16.0	16.0					
24	--	--	14.0	12.5		17.5	17.0	21.0	19.5	20.0	20.0	16.0	16.0					
25	--	--	14.0	13.0		17.0	16.5	20.5	20.0	20.0	20.0	16.0	16.0					
26	--	--	13.5	12.0		16.5	16.5	20.5	20.0	20.0	20.0	16.0	15.5					
27	--	--	14.0	12.5		17.0	16.0	21.0	20.0	20.0	20.0	15.5	15.5					
28	--	--	14.5	13.0		17.0	16.5	21.0	20.0	20.0	20.0	15.5	15.0					
29	--	--	14.0	13.5		17.0	16.5	20.5	19.5	20.0	19.0	15.0	14.0					
30	--	--	14.0	13.0		17.5	17.0	20.0	19.5	19.5	19.0	14.5	14.5					
31	--	--	13.0	12.5		--	--	21.0	20.0	19.0	19.0	--	--					
AVE	--	--	12.7	11.8		15.8	15.0	19.4	18.8	20.7	20.2	17.2	17.0					

## KLAMATH RIVER BASIN

## 11516600 COTTONWOOD CREEK AT HORN BROOK, CALIF.

LOCATION.--Lat 41°55'06", long 122°33'45", in SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec.17, T.47 N., R.6 W., Siskiyou County, temperature recorder at gaging station on right bank, 0.5 mile upstream from Rancheria Gulch, and 0.6 mile northwest of Hornbrook.

DRAINAGE AREA.--89.8 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1964 to September 1971 (discontinued).

EXTREMES.--1970-71:

Water temperatures: Maximum, 22.5°C Aug. 10, 11; minimum, freezing point Feb. 26, Mar. 1, 2.

Period of record:

Water temperatures (1964-71): Maximum (1964-65, 1966-71), 30.0°C July 7, 8, 1968; minimum, freezing point on several days during most years.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	10.5	11.0	6.5	5.5	4.0	3.5	2.5	5.0	2.0	3.5	0.0
2	19.0	10.5	11.0	6.5	6.0	5.0	3.0	1.0	4.5	3.0	2.5	0.0
3	18.5	10.0	9.5	7.0	5.5	2.5	2.0	1.0	3.5	0.5	5.5	2.0
4	18.0	10.5	11.0	9.0	5.5	3.0	2.0	1.0	5.5	3.0	4.0	2.0
5	17.5	12.5	11.0	9.0	6.5	5.0	1.5	1.0	6.5	4.0	5.0	1.0
6	14.5	9.5	10.5	8.5	7.0	5.5	2.0	1.0	6.0	3.5	5.5	1.0
7	15.0	8.0	10.5	8.5	5.5	5.0	2.5	1.5	5.0	2.0	6.0	2.5
8	16.0	8.0	10.0	9.5	7.0	5.5	3.0	2.0	5.0	1.5	6.0	1.5
9	16.0	10.0	10.0	9.0	7.0	5.0	4.5	2.0	5.5	2.0	5.0	1.5
10	18.0	11.5	9.5	7.5	7.0	5.0	4.5	3.5	7.0	4.0	5.5	3.0
11	17.0	9.5	9.5	8.5	6.5	4.5	4.0	3.0	6.5	3.0	6.5	4.0
12	18.0	12.5	9.0	7.5	4.5	2.5	3.0	2.0	6.0	3.5	4.5	1.5
13	16.0	9.0	7.5	5.5	5.0	3.0	2.5	1.5	6.5	3.0	6.5	2.5
14	15.5	8.0	8.0	6.5	6.0	4.5	2.0	1.0	6.0	3.0	6.0	3.0
15	15.0	8.0	8.0	6.0	6.0	4.0	3.0	2.0	6.0	3.0	7.5	3.5
16	14.5	7.0	9.0	8.0	5.5	3.5	3.5	2.5	5.0	2.0	4.0	2.5
17	13.5	7.0	8.0	6.5	5.5	3.5	4.5	3.0	5.5	3.0	6.5	1.5
18	16.0	11.0	7.0	6.0	4.5	3.0	6.0	4.5	3.5	2.0	7.0	1.5
19	12.0	9.5	7.5	6.0	3.0	1.5	6.5	5.0	4.5	2.0	8.0	2.0
20	14.0	10.0	6.0	5.0	3.5	1.5	5.5	3.5	4.5	0.5	9.0	2.5
21	10.5	8.5	7.5	6.0	5.5	3.5	4.5	2.5	4.0	1.5	9.5	4.0
22	10.0	6.5	8.5	7.5	5.0	4.0	5.0	2.5	6.0	3.5	7.5	5.5
23	10.5	8.0	9.5	8.5	5.0	4.0	6.0	4.5	5.0	2.5	8.5	5.5
24	9.5	6.0	10.5	9.5	4.5	1.5	5.5	3.0	7.0	4.0	9.0	5.5
25	10.0	7.5	10.0	8.0	2.5	1.5	5.5	3.5	4.5	2.0	7.0	6.0
26	9.5	5.5	8.0	7.0	2.5	1.0	5.0	2.5	3.5	0.0	7.0	5.5
27	9.0	4.0	7.5	4.0	3.0	1.5	5.5	2.5	3.0	1.0	6.5	5.0
28	9.5	4.5	6.5	4.0	4.0	2.0	5.0	2.5	3.0	1.0	7.5	6.0
29	9.5	4.0	7.0	5.5	4.5	2.5	5.0	2.5	--	--	7.5	6.5
30	9.5	5.0	6.5	4.5	6.0	3.5	5.0	2.0	--	--	7.5	7.0
31	11.5	7.0	--	--	5.0	3.5	5.0	2.0	--	--	7.0	6.0
AVE	13.9	8.4	8.8	7.0	5.2	3.4	4.1	2.4	5.1	2.4	6.4	3.3
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	6.0	9.0	8.0	9.0	7.0	17.5	13.5	21.5	17.5	15.5	13.0
2	8.0	6.5	9.5	8.0	13.0	8.0	17.0	13.0	21.0	17.0	15.0	12.5
3	8.0	6.5	9.5	9.0	12.5	8.5	17.0	13.0	21.5	17.5	15.0	11.0
4	8.5	7.0	9.5	8.5	13.5	9.5	17.0	13.0	21.0	17.5	16.0	11.5
5	9.0	7.0	9.5	8.5	14.5	9.0	17.0	13.0	21.0	17.0	17.0	12.5
6	9.0	7.5	9.5	7.5	15.0	10.0	17.0	13.5	21.0	17.0	15.5	12.0
7	8.5	7.5	10.5	8.0	15.5	11.0	17.0	12.5	21.0	16.5	15.0	11.0
8	8.0	7.0	10.5	9.5	15.0	10.0	17.5	13.0	21.5	16.5	15.0	11.0
9	8.0	7.0	11.0	9.0	13.5	11.5	16.5	14.0	22.0	17.0	15.5	11.0
10	7.5	6.5	11.0	9.0	13.5	11.0	16.0	12.0	22.5	17.5	15.5	12.0
11	7.5	6.5	11.0	9.0	15.0	10.0	16.0	12.0	22.5	18.0	16.0	12.0
12	8.0	7.0	10.5	9.5	14.0	11.0	17.0	13.0	22.0	18.0	16.0	12.0
13	7.5	6.5	10.0	8.5	15.0	10.5	18.0	13.0	22.0	17.5	16.0	12.5
14	8.0	6.5	10.5	8.0	14.5	10.0	19.0	14.0	20.5	16.0	15.5	12.0
15	8.5	7.0	10.0	8.5	15.5	10.5	20.5	16.0	20.0	15.5	15.5	12.0
16	8.0	7.0	9.5	8.0	15.5	11.0	21.0	17.0	20.0	15.5	15.5	12.0
17	7.5	6.5	9.0	6.5	15.0	11.5	20.5	17.5	19.5	15.0	14.5	11.5
18	7.5	6.0	9.5	7.0	16.0	13.0	18.5	17.0	20.0	15.0	14.0	10.5
19	8.5	6.0	9.5	8.0	16.5	13.0	20.5	15.5	20.0	15.5	13.5	10.0
20	8.0	7.0	9.5	7.5	18.0	13.0	21.0	17.0	19.5	15.0	14.0	10.0
21	7.5	6.0	8.5	7.0	18.0	14.0	19.5	16.0	19.0	15.5	14.0	10.5
22	7.5	6.5	10.5	7.5	18.0	14.0	19.5	15.5	18.5	15.5	13.5	10.0
23	7.5	6.5	11.5	9.0	17.5	14.0	19.5	16.5	18.0	13.5	14.0	10.0
24	6.5	5.5	12.0	9.0	16.0	13.0	20.5	16.5	18.5	13.5	13.5	10.5
25	8.0	5.5	12.0	10.0	15.5	14.0	20.5	16.5	19.5	14.5	13.0	10.5
26	9.0	6.5	11.0	9.0	14.5	13.5	21.5	17.0	20.0	16.0	12.0	10.5
27	9.0	7.0	11.5	9.5	15.0	11.5	22.0	17.5	19.5	17.0	11.0	9.5
28	9.0	7.0	12.5	10.5	15.0	11.0	22.0	17.5	19.5	15.5	11.0	9.5
29	9.5	7.0	12.5	10.5	15.5	11.0	22.0	18.0	19.5	14.5	10.0	8.5
30	9.5	7.5	11.5	9.0	17.0	11.5	21.5	17.5	16.5	14.0	9.0	7.5
31	--	--	9.5	8.0	--	--	21.0	17.5	15.5	12.5	--	--
AVE	8.1	6.6	10.4	8.5	15.1	11.2	19.1	15.1	20.1	15.9	14.2	11.0



11517500 SHASTA RIVER NEAR YREKA, CALIF.

LOCATION.--Lat 41°49'23", long 122°35'40", in SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec.24, T.46 N., R.7 W., Siskiyou County, at gaging station on right bank, 0.5 mile upstream from mouth, and 7 miles north of Yreka.

DRAINAGE AREA.--793 sq mi.

PERIOD OF RECORD.--Chemical analyses: December 1958 to September 1971.

Water temperatures: June 1965 to September 1971.

Sediment records: Water years 1955-56, 1958-62 (partial-record station).

EXTREMES, 1970-71:

Water temperatures: Maximum, 29.0°C July 16, 27, 28, Aug. 11; minimum, 1.5°C Jan. 3, 4.

Period of record:

Water temperatures: Maximum, 30.0°C on several days in 1966-68; minimum, 1.5°C on several days in 1967, 1969, and 1971.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV. 16...	1100	230	9.0	11.2	--	--	45	--	304	0	--
JAN. 12...	1130	301	5.0	12.0	--	--	32	--	279	0	--
MAR. 15...	1250	396	8.0	11.5	28	32	34	2.7	267	8	11
MAY 10...	1325	543	18.0	10.5	--	--	27	--	250	0	--
JULY 06...	1250	83	22.0	10.0	--	--	36	--	325	0	--
SEP. 21...	1300	94	15.0	10.5	31	29	41	6.2	316	13	1.3

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM
NOV. 16...	27	--	500	--	--	--	207	0	249	--
JAN. 12...	19	--	500	--	--	--	200	0	229	--
MAR. 15...	18	.9	400	277	.38	664	201	0	232	27
MAY 10...	13	--	500	--	--	--	174	0	205	--
JULY 06...	20	--	500	--	--	--	234	0	267	--
SEP. 21...	25	.1	500	358	.49	90.9	221	0	281	30

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
NOV. 16...	1.4	526	8.3	5	--	--	--	--	--	--
JAN. 12...	1.0	482	8.2	5	--	--	--	--	--	--
MAR. 15...	1.0	487	8.4	50	--	--	--	--	--	--
MAY 10...	.9	412	8.3	10	0	0	0	0	.0	0
JULY 06...	1.0	524	8.3	2	--	--	--	--	--	--
SEP. 21...	1.3	572	8.6	1	--	--	--	--	--	--

## SACRAMENTO RIVER BASIN

11517500 SHASTA RIVER NEAR YREKA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	11.5	11.5	8.5	6.5	5.5	5.0	3.0	6.5	4.5	6.0	3.0
2	16.5	11.5	11.0	9.0	6.5	6.0	3.5	2.0	6.0	4.0	6.0	2.5
3	16.5	12.0	9.5	9.0	6.0	4.0	2.5	1.5	5.5	3.5	7.5	5.5
4	16.5	12.0	10.0	9.0	5.5	4.0	3.0	1.5	6.5	4.5	7.5	5.5
5	16.5	13.0	11.5	9.5	7.5	5.5	3.5	2.0	8.0	6.5	8.0	4.5
6	14.0	11.0	11.0	10.0	9.0	7.5	4.0	2.0	8.5	6.5	8.0	5.0
7	13.0	9.0	11.0	10.0	8.5	7.0	4.5	3.0	8.0	6.0	8.5	6.0
8	14.0	9.5	10.5	10.0	7.0	6.5	6.0	4.0	7.0	5.0	9.0	5.5
9	14.0	11.0	11.0	10.0	7.0	6.0	7.0	5.0	7.0	5.0	7.5	6.0
10	15.0	11.5	10.0	9.0	7.0	6.5	7.0	6.0	8.0	6.0	7.5	6.5
11	15.0	11.5	10.5	9.5	7.5	6.0	6.5	5.5	9.0	6.5	8.0	7.0
12	15.0	12.5	10.0	9.0	6.0	5.0	5.5	4.0	8.0	6.5	7.0	5.5
13	14.0	10.5	9.0	7.5	5.5	5.0	4.0	2.5	7.5	5.5	7.0	5.0
14	13.0	9.5	8.5	7.5	6.0	5.0	4.5	3.0	7.0	5.5	8.0	6.0
15	13.0	9.0	8.0	7.0	6.5	4.5	5.0	4.5	6.5	5.0	8.5	6.0
16	12.5	9.0	9.0	8.0	5.0	4.0	5.5	4.0	5.5	4.5	7.0	5.5
17	12.0	9.5	9.5	8.0	6.0	5.0	6.5	5.5	6.5	4.5	7.0	4.5
18	13.0	11.0	8.5	8.0	5.5	4.0	7.5	6.5	5.5	4.0	8.0	4.5
19	11.5	10.5	8.5	7.5	4.5	3.5	8.5	7.5	5.5	3.5	9.5	5.5
20	12.0	10.0	8.0	7.5	5.0	4.0	8.0	6.0	5.5	2.5	10.5	6.5
21	10.0	9.0	8.5	7.5	5.5	4.5	6.0	4.5	5.5	3.5	11.0	7.5
22	10.0	8.5	9.5	8.5	5.5	4.5	5.5	4.0	6.5	4.5	9.5	8.0
23	10.0	9.0	10.0	9.5	6.0	4.5	6.5	5.0	7.0	5.5	9.5	7.5
24	10.0	8.0	10.5	10.0	5.0	3.5	6.5	5.0	7.5	5.5	8.5	7.5
25	10.0	9.0	10.0	9.0	4.0	3.0	6.5	5.5	6.5	4.5	8.5	7.0
26	10.5	8.5	9.0	8.0	4.0	3.0	6.5	4.5	5.5	3.5	7.5	5.5
27	9.5	7.5	8.0	5.0	4.5	3.0	6.5	4.5	5.5	4.0	7.5	5.0
28	9.5	7.0	6.5	4.5	5.0	3.5	6.0	4.5	5.5	3.5	10.0	6.5
29	9.0	7.0	7.5	6.5	4.5	3.5	6.0	4.0	--	--	11.0	8.0
30	9.0	7.5	7.0	6.0	6.0	4.5	6.0	4.0	--	--	10.0	7.5
31	10.0	8.0	--	--	6.5	5.0	6.0	4.0	--	--	10.0	6.5
AVE	12.6	9.8	9.4	8.3	6.0	4.7	5.7	4.1	6.7	4.8	8.4	5.9
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	7.0	14.5	12.0	13.5	11.0	24.0	17.5	28.0	20.0	19.0	15.0
2	12.0	8.0	15.5	11.0	17.0	13.0	23.0	17.5	28.0	20.5	19.0	14.0
3	12.5	8.0	14.0	12.5	18.0	15.0	24.0	17.0	28.0	21.0	20.0	13.0
4	13.0	8.5	12.5	12.5	19.0	15.5	24.0	17.0	26.5	20.0	21.0	14.0
5	13.0	9.0	13.0	11.5	21.0	15.5	24.0	17.0	27.0	19.5	21.5	15.0
6	11.5	9.5	14.0	10.5	21.5	16.0	24.0	17.0	27.0	19.5	19.0	14.5
7	11.0	8.5	17.5	13.0	22.0	16.5	24.5	16.0	26.5	19.5	19.5	13.0
8	11.0	8.0	16.0	14.0	21.5	16.0	24.5	17.0	27.0	19.0	20.0	13.0
9	10.0	8.0	16.5	13.0	20.0	16.5	22.0	16.0	28.0	23.5	20.0	14.0
10	10.0	7.0	17.5	13.5	21.0	16.0	22.5	15.0	28.0	21.5	20.5	14.0
11	9.0	7.0	19.0	15.0	22.0	15.5	23.5	15.5	29.0	22.0	21.0	14.5
12	10.0	7.0	18.0	14.5	21.0	16.0	24.5	16.0	28.0	21.0	21.0	15.0
13	10.0	8.5	17.5	14.0	21.0	15.0	25.5	17.0	27.5	20.5	21.0	15.0
14	12.5	8.0	17.5	13.0	21.5	14.5	26.5	17.5	25.5	18.5	19.5	15.0
15	13.5	9.0	16.5	13.5	22.5	15.5	28.0	20.0	25.0	18.0	19.5	13.5
16	12.0	9.0	16.0	11.5	23.5	16.0	29.0	21.0	25.0	17.5	19.0	14.0
17	10.5	8.5	15.0	10.5	22.0	16.5	27.0	22.0	25.0	18.0	17.0	12.5
18	12.5	8.0	16.0	11.5	22.5	17.0	23.5	21.0	25.5	18.0	17.5	12.0
19	14.5	7.5	17.5	13.5	24.0	17.5	28.0	20.0	25.0	19.0	17.5	12.0
20	10.5	8.0	17.0	11.0	25.5	17.5	27.5	21.5	24.5	17.5	17.0	12.5
21	11.5	7.0	15.5	10.5	25.5	18.5	28.0	21.0	23.0	18.0	17.0	12.0
22	11.5	8.5	18.5	11.5	25.0	19.0	28.0	20.0	22.5	17.0	17.0	12.0
23	12.5	8.5	21.0	13.5	24.5	18.5	28.0	21.0	22.5	15.0	17.0	12.0
24	11.0	8.0	21.0	15.5	23.0	17.5	28.5	21.0	24.0	16.0	17.0	12.5
25	13.5	8.0	17.5	14.0	19.5	17.5	28.5	20.5	24.5	17.5	15.5	12.5
26	16.0	10.5	17.0	13.5	20.5	16.5	28.5	21.0	26.0	19.0	13.5	11.5
27	17.0	11.0	18.5	15.0	20.5	15.5	29.0	21.0	25.0	20.0	14.0	11.0
28	17.0	11.5	20.0	15.5	21.5	14.5	29.0	22.0	24.0	18.5	13.0	11.0
29	16.5	10.5	19.5	14.5	22.5	15.5	28.0	22.0	23.0	17.0	11.0	9.5
30	17.0	11.0	14.5	12.5	24.0	16.5	27.5	20.5	18.0	15.5	11.5	9.5
31	--	--	12.5	11.5	--	--	26.0	21.0	19.0	14.0	--	--
AVE	12.4	8.5	16.7	12.9	21.5	16.0	26.1	19.0	25.3	18.8	17.9	13.0

## 11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CALIF.

LOCATION.--Lat 41°51'14", long 123°13'52", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.3, T.46 N., R.12 W, Siskiyou County, Klamath National Forest, temperature recorder at gaging station on left bank, 0.4 mile upstream from Bittenbender Creek, 1.4 miles downstream from Grider Creek, and 2.2 miles west of Seiad Valley.

DRAINAGE AREA.--6,940 sq mi, approximately (not including Lost River or Lower Klamath Lake basins).

PERIOD OF RECORD.--Chemical analyses: December 1958 to September 1966.

Water temperatures: October 1963 to September 1971.

Sediment records: Water years 1955-56 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 25.0°C Aug. 10-12; minimum, 0.5°C Jan. 14.

Period of record:

Water temperatures: Maximum, 29.5°C July 26, 1970; minimum (1963-64, 1966-71), 0.5°C on several days in 1967, 1968, and 1971.

REMARKS.--Recorder malfunction Mar. 3-31.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	12.5	10.5	9.0	5.0	4.0	4.5	3.5	4.0	4.0	5.0	4.5
2	15.5	12.5	10.5	9.0	4.5	4.0	3.5	2.0	4.0	4.0	4.5	4.5
3	15.5	12.5	10.0	9.5	4.5	4.0	2.0	2.0	4.0	4.0	--	--
4	15.5	12.5	10.0	9.5	4.0	4.0	2.0	2.0	4.0	4.0	--	--
5	15.5	13.0	10.0	9.5	4.5	4.0	2.0	2.0	5.0	4.0	--	--
6	14.0	12.5	10.0	9.5	5.0	4.5	2.0	2.0	5.5	5.0	--	--
7	13.0	10.5	10.0	9.0	5.0	5.0	2.0	1.5	5.0	4.5	--	--
8	13.5	11.0	9.5	9.0	5.0	5.0	2.5	2.0	4.5	4.5	--	--
9	14.5	12.0	9.0	9.0	5.0	5.0	3.5	2.5	4.5	4.5	--	--
10	15.0	13.0	9.0	8.5	5.0	4.5	4.0	3.5	5.0	4.5	--	--
11	14.0	12.0	8.5	8.5	5.0	4.0	4.0	3.0	5.0	5.0	--	--
12	14.5	12.0	8.5	8.0	4.0	3.0	3.0	2.0	5.0	5.0	--	--
13	13.5	11.5	8.0	7.0	3.0	3.0	2.5	1.0	5.0	4.5	--	--
14	12.5	10.0	7.0	7.0	3.5	3.0	1.0	0.5	4.5	4.5	--	--
15	12.5	10.0	7.0	7.0	3.5	3.5	2.0	1.0	5.0	4.5	--	--
16	12.5	10.0	8.0	7.0	3.5	3.0	3.0	2.0	5.0	4.5	--	--
17	12.5	10.0	7.5	7.0	4.0	3.5	4.0	3.0	5.0	4.5	--	--
18	13.0	11.5	7.5	7.0	3.5	3.0	5.5	4.0	5.0	4.5	--	--
19	12.0	11.0	7.0	7.0	3.0	2.5	5.5	5.5	4.5	4.5	--	--
20	12.0	11.0	7.0	7.0	2.5	2.5	5.5	4.5	5.0	4.5	--	--
21	11.5	10.0	7.0	7.0	3.5	2.5	4.5	3.5	5.0	5.0	--	--
22	10.5	10.0	7.5	7.0	3.5	3.5	3.5	3.5	6.0	5.0	--	--
23	10.5	10.0	7.5	7.5	3.5	3.5	4.5	3.5	6.0	6.0	--	--
24	10.0	9.5	8.0	7.5	3.5	2.5	5.0	4.5	6.0	6.0	--	--
25	10.0	9.5	8.0	7.5	2.5	2.0	4.5	4.5	6.5	6.0	--	--
26	10.0	9.0	7.5	7.0	2.0	2.0	4.5	4.0	6.0	5.5	--	--
27	9.0	8.0	7.0	4.5	2.5	2.0	4.0	4.0	5.5	5.0	--	--
28	9.5	8.0	4.5	4.5	2.5	2.0	4.0	4.0	5.0	5.0	--	--
29	9.5	8.0	5.0	4.5	3.0	2.5	4.0	4.0	--	--	--	--
30	9.0	8.5	5.5	5.0	3.5	3.0	4.0	4.0	--	--	--	--
31	10.5	9.0	--	--	4.5	3.5	4.0	4.0	--	--	--	--
AVE	12.5	10.7	8.1	7.5	3.8	3.4	3.6	3.0	5.0	4.7	--	--
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	6.5	11.0	10.0	13.0	11.5	19.5	16.5	23.0	20.0	18.5	16.0
2	8.5	7.0	11.0	10.0	14.5	12.0	19.0	16.5	24.0	20.5	18.5	16.0
3	8.5	7.5	11.5	10.5	15.0	13.0	19.0	16.0	23.0	20.5	18.5	15.0
4	9.0	7.5	11.0	10.5	16.0	14.0	19.0	16.0	23.0	20.0	19.5	16.0
5	10.0	8.0	11.0	10.0	16.0	14.0	19.0	16.0	23.0	19.5	20.0	16.5
6	10.0	8.5	12.0	10.0	16.0	14.0	19.5	16.5	23.0	19.5	19.0	16.0
7	9.0	8.5	13.0	11.0	16.0	14.0	19.0	16.0	23.0	20.0	18.0	15.0
8	9.5	8.5	13.0	12.0	16.5	14.0	19.0	16.0	23.0	19.5	18.5	15.5
9	9.5	8.0	12.5	11.0	16.0	14.5	18.5	16.0	24.0	20.0	18.5	15.0
10	8.0	7.5	13.0	11.0	16.5	14.5	17.5	14.5	25.0	21.0	18.5	15.5
11	8.5	7.5	13.5	11.5	16.0	14.0	18.5	14.5	25.0	22.0	19.0	16.0
12	9.0	8.0	13.5	12.0	16.0	14.5	19.5	15.5	25.0	21.5	19.0	15.5
13	9.0	9.0	12.5	10.5	15.5	13.5	20.5	16.5	23.5	20.5	19.5	16.0
14	10.0	9.0	13.0	11.0	16.0	13.0	21.0	17.0	22.0	18.5	19.0	16.0
15	10.5	9.5	13.0	12.0	17.0	13.5	22.5	19.0	21.5	18.0	19.0	15.5
16	10.0	8.5	12.5	11.0	17.0	14.0	23.5	20.0	21.0	17.5	19.0	15.5
17	8.5	8.0	12.5	10.5	16.5	14.0	24.0	21.0	22.0	18.0	18.0	15.5
18	10.0	8.0	13.5	11.5	15.5	14.0	21.0	19.0	22.5	18.5	17.0	14.5
19	10.0	8.5	14.0	12.5	17.5	14.0	22.0	18.5	22.5	19.5	17.0	13.5
20	10.0	8.5	13.5	12.0	17.5	14.5	23.0	20.0	21.5	19.0	17.0	13.5
21	9.5	8.0	12.5	10.5	18.5	15.0	24.0	20.5	22.0	20.0	17.0	14.5
22	9.5	8.5	14.0	12.0	18.5	16.0	23.0	20.0	21.5	19.5	17.0	14.0
23	9.0	8.5	15.0	13.0	18.0	15.5	23.5	20.5	20.5	17.5	17.0	14.0
24	9.0	8.0	15.0	13.0	17.0	15.0	23.5	20.0	21.5	18.0	16.5	13.5
25	10.5	8.5	14.5	12.5	16.0	14.5	23.0	19.5	22.5	19.0	15.5	13.5
26	11.0	9.5	13.0	11.5	15.5	14.0	24.0	20.5	23.0	20.0	14.0	13.0
27	11.0	9.5	14.5	12.5	15.0	12.5	24.0	20.5	23.0	21.5	14.0	12.5
28	11.0	10.0	15.0	13.5	16.5	13.0	24.5	21.0	22.5	19.5	13.0	12.0
29	10.5	9.5	14.5	13.5	17.5	14.0	24.5	21.0	21.5	18.5	12.0	10.0
30	11.0	9.5	14.0	12.0	19.0	15.5	24.5	21.5	19.0	17.0	12.0	10.5
31	--	--	12.0	11.5	--	--	23.0	20.5	17.0	16.0	--	--
AVE	9.6	8.4	13.0	11.5	16.4	14.0	21.5	18.3	22.4	19.4	17.3	14.5

## KLAMATH RIVER BASIN

11522500 SALMON RIVER AT SOMES BAR, CALIF.

LOCATION.--Lat 41°22'40", long 123°28'35", in NE $\frac{1}{4}$  sec.3, T.11 N., R.6 E., Siskiyou County, Klamath National Forest, temperature recorder at gaging station on left bank, at Somes Bar, and 1.0 mile upstream from mouth.

DRAINAGE AREA.--751 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1958 to September 1964.

Water temperatures: October 1965 to September 1971.

Sediment records: Water years 1955-56 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 24.5°C Aug. 11, 12; minimum, 3.0°C Jan. 4, 5, 13, 14.

Period of record:

Water temperatures: Maximum (1965-66, 1967-71), 32.0°C Sept. 4, 5, 1966; minimum, freezing point Dec. 14, 15, 1967.

REMARKS.--Recorder stopped Oct. 19-26, Nov. 24 to Dec. 1; recorder malfunction Apr. 5-7. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	17.5	--	15.0	11.0	--	10.0	--	7.0	--	7.0	--	6.0	6.0	--	5.5	4.5	--	3.5
2	17.5	--	15.0	11.0	--	10.0	7.0	--	7.0	6.0	--	4.5	6.5	--	6.0	4.5	--	3.5
3	17.0	--	15.0	11.0	--	10.0	7.0	--	7.0	4.5	--	3.5	6.0	--	4.5	5.5	--	4.5
4	17.0	--	15.0	11.5	--	10.0	8.0	--	7.0	3.5	--	3.0	6.5	--	5.5	5.5	--	5.0
5	16.5	--	15.0	11.0	--	11.0	8.0	--	8.0	3.5	--	3.0	7.5	--	6.5	5.0	--	4.0
6	16.0	--	14.5	11.0	--	10.5	8.5	--	8.0	4.0	--	3.5	8.0	--	7.5	6.0	--	4.5
7	15.0	--	13.0	10.5	--	10.0	8.5	--	8.0	4.5	--	4.0	7.5	--	6.5	6.5	--	5.5
8	15.0	--	13.0	10.5	--	10.0	8.5	--	8.0	5.5	--	4.5	6.5	--	6.0	6.5	--	5.5
9	15.5	--	13.5	10.5	--	10.0	8.5	--	8.0	6.0	--	5.5	7.0	--	6.0	6.0	--	5.5
10	16.0	--	14.0	10.0	--	9.5	8.0	--	7.5	6.5	--	6.0	8.0	--	7.0	6.5	--	6.0
11	15.5	--	14.0	10.5	--	9.5	8.0	--	7.5	6.5	--	4.5	8.0	--	7.0	7.0	--	6.0
12	15.5	--	13.5	10.0	--	8.5	7.5	--	6.5	5.0	--	4.0	8.0	--	7.0	6.5	--	5.0
13	14.5	--	13.0	8.5	--	7.5	7.0	--	6.0	4.0	--	3.0	8.0	--	7.0	7.0	--	6.0
14	14.0	--	12.0	8.5	--	7.5	7.5	--	7.0	4.0	--	3.0	7.5	--	6.5	6.5	--	5.5
15	14.0	--	12.0	9.0	--	8.0	8.0	--	7.5	5.5	--	4.0	7.5	--	7.0	7.5	--	6.0
16	13.5	--	12.0	9.5	--	9.0	8.0	--	6.5	6.0	--	5.5	7.0	--	5.5	6.5	--	5.5
17	13.5	--	12.0	9.0	--	8.0	7.0	--	7.0	6.5	--	6.0	7.0	--	6.0	6.5	--	5.0
18	14.5	--	13.0	8.0	--	7.5	7.0	--	6.0	8.0	--	6.5	6.5	--	5.5	6.5	--	4.5
19	--	--	--	7.5	--	6.5	6.0	--	5.0	8.5	--	7.5	6.0	--	5.5	7.0	--	5.0
20	--	--	--	7.0	--	6.5	5.0	--	5.0	7.5	--	6.5	5.5	--	4.5	7.5	--	5.5
21	--	--	--	7.5	--	7.0	6.0	--	5.0	6.5	--	6.0	6.0	--	5.0	8.0	--	6.5
22	--	--	--	8.0	--	7.5	6.0	--	5.5	6.0	--	5.5	7.0	--	6.0	7.5	--	7.0
23	--	--	--	9.0	--	8.5	6.0	--	5.5	6.5	--	5.5	7.0	--	6.0	7.5	--	6.5
24	--	--	--	--	9.5	--	5.5	--	4.5	6.5	--	6.0	7.0	--	6.5	8.0	--	7.0
25	--	--	--	--	--	--	5.0	--	4.5	6.0	--	6.0	7.0	--	5.5	7.5	--	7.0
26	--	--	--	--	--	--	5.0	--	4.5	6.0	--	6.0	5.5	--	4.5	7.0	--	6.5
27	10.5	--	9.0	--	--	--	6.0	--	5.0	6.5	--	6.0	5.0	--	3.5	7.5	--	6.0
28	10.0	--	9.5	--	--	--	6.0	--	5.5	6.5	--	6.0	4.5	--	3.5	9.0	--	7.0
29	10.0	--	9.5	--	--	--	6.5	--	5.5	6.5	--	6.0	--	--	--	8.5	--	7.0
30	9.5	--	9.0	--	--	--	7.0	--	6.5	6.5	--	6.0	--	--	--	8.5	--	6.5
31	11.0	--	9.5	--	--	--	7.5	--	7.0	6.5	--	6.0	--	--	--	8.0	--	6.0
AVE	--	--	--	--	--	--	7.0	--	6.4	5.9	--	5.1	6.8	--	5.8	6.8	--	5.6
DAY	MAX	APR	MIN	MAX	MAY	MIN	MAX	JUN	MIN	MAX	JUL	MIN	MAX	AUG	MIN	MAX	SEP	MIN
		DAILY			DAILY			DAILY			DAILY			DAILY			DAILY	
1	8.5	--	6.0	9.5	--	8.5	10.5	--	8.0	17.0	--	14.0	22.0	--	19.5	18.5	--	17.5
2	9.0	--	7.0	10.5	--	8.5	12.5	--	9.5	17.0	--	14.5	22.5	--	20.0	19.0	--	16.5
3	9.5	--	7.0	10.0	--	8.5	13.0	--	10.0	17.0	--	15.0	22.5	--	20.5	19.5	--	16.5
4	9.0	--	7.5	10.5	--	8.5	13.5	--	10.5	17.0	--	14.5	22.5	--	20.0	19.5	--	16.5
5	--	--	--	10.5	--	8.5	13.5	--	10.5	17.5	--	15.0	22.5	--	20.0	20.0	--	17.0
6	--	--	--	11.0	--	7.5	14.0	--	11.0	17.5	--	15.5	22.0	--	20.0	19.5	--	17.5
7	--	--	--	11.5	--	9.0	13.5	--	11.0	17.5	--	15.5	22.5	--	20.0	19.5	--	16.5
8	8.0	--	7.5	10.5	--	9.0	13.5	--	10.5	17.5	--	15.0	23.0	--	20.5	19.5	--	16.5
9	8.0	--	6.5	11.5	--	8.0	12.5	--	11.0	17.5	--	15.5	23.5	--	20.5	19.5	--	16.5
10	7.0	--	6.0	11.5	--	8.5	14.0	--	11.0	16.5	--	14.0	24.0	--	21.5	19.5	--	16.5
11	7.5	--	6.0	11.5	--	9.0	14.0	--	11.0	17.0	--	14.5	24.5	--	22.0	20.0	--	17.0
12	8.5	--	6.5	10.5	--	8.5	13.0	--	11.0	18.0	--	15.0	24.5	--	22.0	20.0	--	17.0
13	8.5	--	7.5	10.5	--	8.0	13.5	--	11.0	18.5	--	16.0	23.5	--	21.5	20.0	--	17.0
14	10.0	--	8.0	11.0	--	8.0	13.5	--	10.5	19.5	--	16.5	22.5	--	20.5	20.0	--	17.0
15	10.0	--	8.0	10.0	--	8.5	14.5	--	11.5	20.5	--	18.0	22.0	--	19.5	20.0	--	16.5
16	9.0	--	6.5	9.5	--	7.5	14.5	--	12.0	21.0	--	18.5	21.5	--	18.5	20.0	--	16.5
17	6.5	--	6.0	10.0	--	6.5	14.5	--	12.0	21.5	--	19.0	21.5	--	18.5	19.5	--	16.5
18	8.5	--	5.5	11.0	--	8.0	13.5	--	12.0	21.0	--	18.5	22.0	--	19.5	18.5	--	16.0
19	9.5	--	6.5	11.5	--	9.0	15.5	--	12.0	21.5	--	18.5	22.5	--	19.5	18.0	--	15.0
20	8.5	--	6.5	11.0	--	9.0	15.5	--	12.5	22.0	--	20.0	22.0	--	19.5	18.5	--	15.0
21	8.5	--	5.5	11.0	--	7.5	16.0	--	13.0	22.0	--	19.5	22.0	--	20.0	18.0	--	15.0
22	8.0	--	6.5	12.5	--	8.5	16.0	--	13.5	22.0	--	20.0	22.5	--	20.0	18.0	--	15.0
23	8.0	--	6.5	13.0	--	10.0	16.0	--	14.0	22.5	--	20.0	21.0	--	20.0	18.0	--	15.0
24	8.0	--	6.0	13.0	--	10.0	15.0	--	13.0	22.0	--	20.0	22.0	--	19.0	17.5	--	15.0
25	10.0	--	6.5	11.5	--	9.0	14.5	--	12.5	21.5	--	19.5	22.0	--	19.5	16.5	--	15.0
26	11.0	--	8.0	11.0	--	9.0	14.5	--	12.0	22.0	--	20.0	22.5	--	19.5	15.0	--	13.5
27	11.0	--	8.5	12.5	--	9.0	13.5	--	11.5	21.5	--	20.0	23.5	--	21.0	14.5	--	13.0
28	10.5	--	8.5	13.5	--	10.0	14.0	--	11.0	22.0	--	20.0	21.5	--	19.5	14.0	--	13.0
29	9.5	--	7.5	12.5	--	9.5	15.5	--	12.5	22.5	--	20.0	21.5	--	19.0	13.0	--	10.5
30	10.5	--	8.0	11.5	--	8.5	16.5	--	13.5	22.0	--	20.5	19.5	--	17.5	12.0	--	10.0
31	--	--	--	9.0	--	7.5	--	--	--	21.5	--	20.0	19.0	--	17.0	--	--	--
AVE	8.9	--	6.9	11.1	--	8.5	14.1	--	11.5	19.8	--	17.5	22.3	--	19.9	18.2	--	15.5

## 11523000 KLAMATH RIVER AT ORLEANS, CALIF.

LOCATION.--Lat 41°18'13", long 123°32'00", in SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.31, T.11 N., R.6 E., Humboldt County, Six Rivers National Forest, at gaging station at Orleans, 25 ft upstream from highway bridge, and 0.2 mile downstream from Cheenitch Creek.

DRAINAGE AREA.--8,475 sq mi (not including Lost River or Lower Klamath Lake basins).

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1971.

Water temperatures: October 1965 to September 1971.

Sediment records: Water years 1955-59, 1967 (partial-record station), January 1967 to September 1971.

Prior to October 1966 published as "at Somesbar".

## EXTREMES.--1970-71:

Water temperatures: Minimum, 2.5°C Jan. 4.

Sediment concentrations: Maximum daily, 2,700 mg/l Jan. 17; minimum daily, 4 mg/l Aug. 23-25.

Sediment discharge: Maximum daily, 1,190,000 tons Jan. 17; minimum daily, 23 tons Aug. 24, 25.

## Period of record:

Water temperatures: Maximum (1965-69), 28.0°C on several days in 1967-68; minimum (1965-66, 1967-71), freezing point Dec. 22, 23, 1968.

Sediment concentrations (1967-71): Maximum daily, 3,220 mg/l Feb. 23, 1968; minimum daily, 2 mg/l on several days in 1968.

Sediment discharge (1967-71): Maximum daily, 1,190,000 tons Jan. 17, 1971; minimum daily, 7.7 tons Oct. 9, 1968.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. No thermograph record Mar. 17-23, recorder malfunction; July 28 to Aug. 9, recorder stopped. Where no maximum or minimum is shown, temperature is once-daily reading.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 19...	1110	2110	13.0	11.6	--	--	17	--	115	0	--
NOV. 09...	1245	24100	10.5	12.1	--	--	4.8	--	67	0	--
DEC. 07...	1215	57500	7.0	13.0	--	--	4.6	--	65	0	--
JAN. 04...	1425	11100	4.0	14.1	--	--	7.5	--	88	0	--
FEB. 01...	1200	18700	6.0	13.6	--	--	4.9	--	77	0	--
MAR. 01...	1215	11600	5.5	13.6	--	--	7.2	--	84	0	--
APR. 05...	1235	24000	10.0	12.1	--	--	6.4	--	78	0	--
MAY 03...	1100	19100	10.5	11.7	10	5.8	4.2	1.2	64	0	2.1
JUNE 21...	1050	8850	15.0	11.2	--	--	3.0	--	55	0	--
JULY 19...	1155	3810	21.0	9.3	--	--	5.7	--	81	0	--
AUG. 16...	1115	2250	21.0	9.9	--	--	8.4	--	103	0	--
SEP. 13...	1125	2180	19.0	10.0	18	8.0	13	2.1	108	0	12

## KLAMATH RIVER BASIN

11523000 KLAMATH RIVER AT ORLEANS, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT. 19...	6.6	--	100	--	--	--	88	0	94	--
NOV. 09...	1.6	--	0	--	--	--	49	0	55	--
DEC. 07...	2.1	--	0	--	--	--	53	0	53	--
JAN. 04...	3.2	--	100	--	--	--	78	6	72	--
FEB. 01...	1.9	--	0	--	--	--	70	7	63	--
MAR. 01...	3.3	--	0	--	--	--	66	0	69	--
APR. 05...	1.8	--	100	--	--	--	61	0	64	--
MAY 03...	.7	.5	100	53	.07	2730	50	0	52	15
JUNE 21...	.2	--	100	--	--	--	44	0	45	--
JULY 19...	2.6	--	0	--	--	--	63	0	66	--
AUG. 16...	4.8	--	200	--	--	--	79	0	84	--
SEP. 13...	4.4	.5	100	112	.15	659	78	0	89	26

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT. 19...	.8	215	7.7	10	--	--	--	--	--	--
NOV. 09...	.3	118	7.4	110	--	--	--	--	--	--
DEC. 07...	.3	125	7.6	360	--	--	--	--	--	--
JAN. 04...	.4	176	7.8	35	--	--	--	--	--	--
FEB. 01...	.3	142	7.8	70	--	--	--	--	--	--
MAR. 01...	.4	163	7.8	45	--	--	--	--	--	--
APR. 05...	.4	147	7.9	80	--	--	--	--	--	--
MAY 03...	.3	114	7.7	50	0	100	0	0	.0	0
JUNE 21...	.2	98	8.3	6	--	--	--	--	--	--
JULY 19...	.3	144	8.0	10	--	--	--	--	--	--
AUG. 16...	.4	188	7.8	1	--	--	--	--	--	--
SEP. 13...	.6	206	8.0	1	--	--	--	--	--	--

## KLAMATH RIVER BASIN

11523000 KLAMATH RIVER AT ORLEANS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	18.5	--	15.0	13.0	--	11.5	7.0	--	5.0	7.0	--	6.5	7.0	--	6.5	5.0	--	4.0
2	18.0	--	15.5	12.5	--	12.0	5.0	--	4.5	6.5	--	4.0	6.5	--	5.5	5.0	--	4.0
3	19.0	--	15.0	12.5	--	12.0	5.5	--	5.0	4.0	--	3.5	5.5	--	4.5	5.5	--	4.5
4	18.0	--	15.0	13.0	--	12.0	6.0	--	5.0	3.5	--	2.5	6.0	--	5.0	6.0	--	5.0
5	17.5	--	15.0	13.0	--	12.0	7.0	--	6.5	3.5	--	3.0	6.5	--	5.5	6.0	--	5.0
6	17.0	--	15.0	12.0	--	11.0	8.0	--	7.0	4.0	--	3.5	7.5	--	6.5	6.0	--	5.0
7	16.0	--	13.5	11.5	--	11.0	8.0	--	8.0	4.5	--	4.0	6.5	--	6.0	7.0	--	6.5
8	16.5	--	13.0	11.5	--	11.5	8.5	--	8.0	5.5	--	4.5	6.0	--	5.5	7.5	--	6.0
9	16.5	--	14.0	11.5	--	10.5	8.5	--	8.5	6.5	--	5.5	5.5	--	5.0	6.5	--	6.0
10	17.5	--	14.5	11.5	--	11.0	8.5	--	8.5	7.0	--	6.5	6.0	--	5.0	6.5	--	6.5
11	17.5	--	14.5	11.5	--	11.0	8.5	--	7.5	7.0	--	6.5	7.5	--	6.5	7.0	--	6.5
12	17.5	--	15.0	11.0	--	9.5	7.5	--	6.0	6.5	--	4.0	7.5	--	7.5	7.0	--	6.0
13	16.5	--	14.0	10.0	--	9.5	6.0	--	5.0	4.0	--	3.0	8.0	--	7.5	6.5	--	6.0
14	16.0	--	13.5	10.5	--	9.5	6.0	--	5.5	4.0	--	3.0	8.0	--	7.0	6.5	--	5.5
15	15.0	--	13.0	10.5	--	10.0	6.5	--	6.0	5.5	--	4.0	7.5	--	7.0	7.5	--	6.5
16	15.5	--	12.5	11.0	--	10.5	6.5	--	6.0	7.0	--	5.5	7.5	--	7.0	7.5	--	5.0
17	15.0	--	12.5	11.0	--	10.5	6.0	--	6.0	7.5	--	7.0	7.5	--	7.0	--	5.5	--
18	15.5	--	14.0	10.5	--	10.0	6.0	--	5.5	8.5	--	7.5	7.5	--	7.0	--	--	--
19	14.5	--	13.5	10.5	--	9.5	5.5	--	4.5	9.5	--	8.5	7.0	--	5.5	--	--	--
20	14.5	--	13.5	10.5	--	8.5	4.5	--	3.5	9.5	--	9.0	6.0	--	4.5	--	--	--
21	13.5	--	12.5	9.5	--	9.0	5.0	--	3.5	9.0	--	7.5	5.5	--	4.5	--	--	--
22	12.5	--	12.0	9.5	--	9.5	5.5	--	5.0	7.5	--	7.0	7.0	--	5.5	--	--	--
23	13.0	--	12.5	10.0	--	9.5	5.5	--	5.5	7.5	--	7.0	7.5	--	6.5	--	--	--
24	12.5	--	11.5	11.0	--	10.0	5.5	--	5.0	8.0	--	7.5	7.5	--	7.0	8.5	--	8.5
25	12.5	--	12.0	11.0	--	11.0	5.0	--	3.5	8.0	--	7.0	7.5	--	5.5	8.5	--	8.5
26	12.0	--	11.0	11.0	--	10.0	4.0	--	3.5	7.5	--	7.5	6.0	--	5.0	8.5	--	8.0
27	11.5	--	10.0	10.0	--	7.0	4.5	--	4.0	7.5	--	7.0	5.0	--	3.5	8.5	--	8.0
28	11.0	--	10.0	7.0	--	6.5	5.0	--	4.5	7.5	--	7.0	5.0	--	4.0	9.0	--	8.5
29	11.0	--	9.5	7.5	--	7.0	6.0	--	5.0	7.5	--	7.5	--	--	--	8.5	--	8.5
30	10.5	--	10.0	7.5	--	7.0	6.5	--	6.0	7.5	--	7.0	--	--	--	8.5	--	8.0
31	12.5	--	10.5	--	--	--	7.0	--	6.5	7.0	--	7.0	--	--	--	8.5	--	7.5
AVE	15.0	--	13.0	10.8	--	10.0	6.3	--	5.6	6.6	--	5.8	6.7	--	5.8	--	--	--
DAY	APR			MAY			JUN			JUL			AUG			SEP		
	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN
1	9.0	--	8.0	12.0	--	11.0	13.5	--	11.5	20.0	--	17.5	--	--	--	18.5	--	17.5
2	10.0	--	8.5	12.0	--	10.5	15.0	--	12.5	20.5	--	17.5	--	--	--	19.0	--	17.0
3	10.0	--	8.5	12.0	--	11.0	16.0	--	13.5	20.5	--	18.0	--	--	--	20.0	--	16.5
4	10.5	--	9.0	11.5	--	11.0	16.5	--	14.0	20.5	--	17.5	--	30.0	--	20.5	--	17.0
5	11.0	--	9.5	12.0	--	10.5	16.5	--	14.5	21.0	--	18.0	--	--	--	20.5	--	17.5
6	10.5	--	9.5	12.5	--	10.0	17.0	--	14.5	21.0	--	18.0	--	--	--	20.0	--	18.0
7	10.0	--	9.0	13.0	--	11.5	17.0	--	15.0	21.0	--	18.0	--	28.0	--	20.0	--	17.0
8	9.0	--	9.0	13.0	--	12.0	16.5	--	14.5	21.0	--	18.0	--	--	--	20.5	--	16.5
9	9.5	--	8.0	13.0	--	11.5	15.5	--	14.5	20.0	--	18.0	--	--	--	20.5	--	16.5
10	8.0	--	7.0	14.0	--	11.5	16.5	--	14.5	19.5	--	17.0	26.0	--	23.0	20.5	--	17.0
11	8.5	--	8.0	14.0	--	12.0	16.5	--	14.5	20.0	--	17.5	27.0	--	23.0	21.0	--	17.5
12	10.0	--	8.0	13.5	--	12.0	16.0	--	14.5	21.0	--	17.5	26.0	--	22.5	21.5	--	18.0
13	10.0	--	9.5	13.0	--	11.5	16.0	--	14.0	22.5	--	18.5	25.0	--	21.0	22.0	--	18.0
14	11.0	--	10.0	13.5	--	11.5	16.0	--	13.5	23.5	--	19.5	24.0	--	20.5	22.0	--	18.0
15	11.5	--	10.0	13.0	--	12.0	17.5	--	14.5	24.5	--	21.0	23.0	--	19.5	21.0	--	17.5
16	10.5	--	8.5	12.5	--	11.0	17.5	--	15.0	25.5	--	21.5	23.0	--	19.5	21.0	--	17.5
17	8.5	--	8.0	12.5	--	10.5	17.5	--	15.0	26.0	--	22.5	23.0	--	20.5	20.5	--	17.5
18	10.0	--	8.0	14.0	--	11.5	16.5	--	15.0	25.0	--	23.0	24.0	--	20.5	19.5	--	16.5
19	11.0	--	9.0	14.5	--	12.5	18.0	--	15.0	25.5	--	22.0	23.5	--	20.5	19.0	--	16.0
20	10.5	--	9.0	13.5	--	12.5	19.0	--	16.0	26.5	--	23.0	23.5	--	21.5	19.0	--	16.0
21	9.5	--	8.0	13.0	--	11.0	19.5	--	16.5	27.0	--	23.5	23.5	--	20.5	19.0	--	16.0
22	9.5	--	9.0	15.0	--	11.5	19.5	--	17.5	26.5	--	23.5	23.0	--	19.5	19.0	--	16.0
23	10.0	--	9.0	16.0	--	13.5	19.5	--	18.0	26.5	--	23.5	23.0	--	19.5	19.0	--	16.0
24	10.0	--	8.5	16.0	--	14.0	18.0	--	17.0	26.5	--	23.0	23.5	--	20.0	17.5	--	16.0
25	11.5	--	9.0	15.5	--	12.5	17.5	--	15.5	26.0	--	23.0	23.5	--	21.0	16.5	--	15.0
26	12.5	--	10.5	13.5	--	12.0	17.0	--	15.0	26.0	--	23.0	24.0	--	21.0	15.5	--	13.5
27	12.5	--	11.0	14.5	--	12.0	16.0	--	14.5	25.5	--	23.0	24.5	--	22.0	15.0	--	13.0
28	12.5	--	11.0	15.0	--	13.5	17.0	--	14.0	--	--	--	23.0	--	21.0	14.0	--	13.0
29	12.0	--	10.5	15.0	--	13.5	18.0	--	15.0	--	--	--	22.0	--	20.0	13.0	--	10.5
30	12.5	--	10.5	14.5	--	12.5	19.5	--	16.5	--	20.0	--	21.0	--	18.5	12.0	--	10.0
31	--	--	--	12.5	--	11.5	--	--	--	--	25.0	--	19.5	--	17.5	--	--	--
AVE	10.4	--	9.0	13.5	--	11.8	17.1	--	14.8	23.3	--	20.2	--	--	--	18.9	--	16.1

## KLAMATH RIVER BASIN

11523000 KLAMATH RIVER AT ORLEANS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	1990	9	48	3020	15	122	19500	230	12100
2	1990	7	38	3020	18	147	17900	225	10900
3	2030	5	27	3000	18	146	20500	458	27500
4	2030	5	27	3090	14	117	23000	290	18000
5	2000	5	27	5060	216	3150	21200	210	12000
6	1980	5	27	6580	114	2030	25400	280	19200
7	1980	5	27	5710	41	632	51900	984	152000
8	1990	6	32	9810	227	10400	53400	620	89400
9	2010	8	43	23800	527	36400	34500	400	37300
10	2040	8	44	13000	204	7160	25800	140	9750
11	2040	7	39	11100	220	6920	21700	200	11700
12	2100	7	40	14900	189	7660	19000	150	7700
13	2040	7	39	11200	87	2630	17000	110	5050
14	2030	7	38	8650	62	1450	15400	165	6860
15	2040	15	83	7470	48	968	15400	179	7940
16	2650	22	122	7200	41	797	22700	380	23300
17	2060	29	161	6670	38	684	21000	190	10800
18	2090	39	220	6250	31	523	17800	185	8890
19	2110	48	262	6020	29	471	14800	180	7190
20	2500	66	446	5840	24	378	13600	95	3490
21	2640	56	399	5690	26	399	12800	105	3630
22	2970	31	249	6370	70	1200	11500	100	3110
23	3680	84	835	22000	1570	122000	10700	90	2600
24	4630	76	950	83900	2090	463000	10000	90	2430
25	3200	20	173	70100	1010	191000	9380	95	2410
26	2980	14	113	36600	650	64200	8860	55	1320
27	2740	11	81	28200	440	33500	8620	45	1050
28	2690	10	73	26600	380	27300	9590	77	1990
29	3020	9	73	21000	275	15600	13600	161	5910
30	3020	9	73	19000	225	11500	14000	138	5220
31	3030	11	89	--	--	--	17000	162	7440
TOTAL	75650	--	4898	480850	--	1012484	597550	--	518180

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	17200	122	5670	19200	160	8290	11400	52	1600
2	14900	90	3620	17000	142	6520	11000	50	1490
3	12800	84	2900	17600	134	6370	11100	55	1650
4	11300	61	1860	16700	126	5680	11400	84	2590
5	10600	64	1830	16500	108	4810	11100	46	1380
6	9700	69	1810	16300	110	4840	10800	44	1280
7	9270	57	1430	15700	110	4660	10900	38	1120
8	9250	53	1320	15000	126	5100	10800	36	1050
9	9360	62	1570	14500	120	4700	10500	36	1020
10	12600	109	3710	14200	120	4600	11300	50	1530
11	13500	94	3430	15500	140	5860	16800	166	7710
12	13200	80	2850	17500	146	6900	30000	457	37000
13	13100	67	2370	19200	161	8350	28600	281	21700
14	12500	60	2030	19000	135	6930	23000	179	11100
15	22100	446	36800	21300	173	9950	19700	142	7550
16	65700	1440	312000	19600	160	8470	18700	130	6560
17	157000	2700	1190000	17600	131	6230	18500	142	7090
18	153000	2640	1130000	16200	94	4110	17200	130	6040
19	96900	1220	319000	15100	86	3510	16000	89	3840
20	65000	980	172000	14100	77	2930	15300	100	4130
21	46800	650	82100	13400	79	2860	14800	90	3600
22	37200	570	57300	13000	85	2980	17400	144	7300
23	32000	500	43200	12600	78	2650	50300	839	116000
24	28300	380	29000	12500	76	2570	51900	730	102000
25	25500	310	21300	12800	69	2380	43300	575	67200
26	23400	255	16100	12000	70	2270	86500	1240	291000
27	21700	248	14500	12100	82	2680	57000	785	142000
28	20500	230	12700	11800	69	2200	50600	395	54000
29	19700	215	11400	--	--	--	44200	400	47700
30	18600	194	9740	--	--	--	39700	580	62200
31	18500	170	8490	--	--	--	35600	440	42300
TOTAL	1021180	--	3502030	438000	--	139400	815400	--	1062730



11523000 KLAMATH RIVER AT ORLEANS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	31000	305	25500	17500	90	4250	16300	82	3610
2	26900	350	25400	16200	74	3240	14900	63	2530
3	25000	300	20300	19000	110	5640	14800	46	1840
4	24600	470	31200	20900	112	6320	15500	49	2050
5	24100	490	31900	21200	122	6980	16100	54	2350
6	25700	500	34700	19800	118	6310	16600	56	2510
7	24100	500	32500	19800	114	6090	17200	61	2830
8	21500	340	19700	24900	134	9010	16300	44	1940
9	23900	240	15400	29400	240	19100	14800	31	1240
10	28300	190	14500	30000	234	19000	13500	28	1020
11	23100	134	8360	31600	240	20500	13100	47	1660
12	20100	126	6840	34000	216	19800	11800	37	1180
13	19900	146	7840	33900	164	15000	10500	33	936
14	23300	154	9690	28300	200	15300	9930	33	1020
15	24500	198	13100	24400	199	13100	9380	33	836
16	25000	320	21600	22800	153	9420	9480	38	973
17	25000	225	15200	20400	172	9470	9430	40	1020
18	23600	190	12100	18900	160	8160	9430	38	968
19	22500	135	8200	18700	110	5550	9550	36	928
20	22400	142	8590	17700	70	3350	9150	31	766
21	21500	127	7370	15900	65	2790	8730	25	589
22	20600	126	7010	15400	68	2830	8480	22	504
23	20100	111	6020	17600	62	2950	8050	20	435
24	19300	120	6250	20700	75	4190	7420	19	381
25	17700	130	6210	21200	124	7100	8580	26	602
26	17500	115	5430	18700	90	4540	10000	32	864
27	18100	128	6260	16400	72	3190	8530	23	530
28	18100	152	7430	18700	63	3180	7100	21	403
29	18100	106	5180	21000	100	5670	6500	19	333
30	17700	92	4400	21600	104	6070	6670	18	324
31	--	--	--	18600	106	5320	--	--	--
TOTAL	673100	--	424180	675200	--	253420	337810	--	37172

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	6400	17	294	2570	8	56	2190	10	59
2	6000	20	324	2600	7	49	2340	10	63
3	5700	20	308	2610	5	35	2350	8	51
4	5410	15	219	2560	6	41	2310	20	125
5	5200	15	211	2510	7	47	2270	10	61
6	5000	10	135	2480	3	54	2240	10	60
7	4780	10	129	2430	10	66	2220	10	60
8	4640	10	125	2390	10	65	2210	8	48
9	4540	12	147	2360	9	57	2190	8	47
10	4450	12	144	2340	9	57	2190	8	47
11	4300	12	139	2300	9	56	2190	8	47
12	4140	12	134	2280	9	55	2180	8	47
13	4020	18	195	2280	8	49	2180	6	35
14	3920	27	286	2270	8	49	2160	6	35
15	3900	20	211	2260	8	49	2270	10	61
16	3870	15	157	2240	8	48	2390	25	161
17	3820	50	516	2220	8	48	2390	18	116
18	3970	160	1720	2220	8	48	2370	10	64
19	3800	60	616	2210	12	72	2360	10	64
20	3690	6	60	2190	17	101	2380	15	96
21	3610	6	58	2190	15	89	2380	12	77
22	3570	6	58	2190	6	35	2370	10	64
23	3370	7	64	2180	4	24	2380	10	64
24	3210	7	61	2160	4	23	2390	10	65
25	3070	7	58	2120	4	23	2390	10	65
26	2960	6	48	2100	5	28	2550	15	103
27	2890	5	39	2100	10	57	2700	30	219
28	2830	5	38	2090	25	141	3200	80	691
29	2770	5	37	2070	12	67	4000	150	1620
30	2700	6	44	2050	11	61	3900	54	569
31	2620	9	64	2160	10	58	--	--	--
TOTAL	125150	--	6639	70730	--	1708	73640	--	4884

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

5384260

6967725

## KLAMATH RIVER BASIN

11523000 KLAMATH RIVER AT ORLEANS, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (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
NOV.											
23...	1530	--	22600	1970	120000	11	20	31	45	58	71
25...	1530	--	66400	924	166000	14	26	39	54	67	80
27...	1600	--	29900	437	35300	--	--	--	--	--	--
DEC.											
02...	1115	4.5	18000	227	11000	15	26	38	51	59	69
07...	0900	--	38700	1060	111000	7	13	20	28	34	44
08...	1530	--	50900	607	83400	16	29	43	58	70	79
JAN.											
17...	0900	--	143000	1470	568000	15	26	39	52	63	86
18...	0900	--	164000	2660	1180000	16	17	34	48	63	77
19...	1600	--	71400	1060	204000	14	28	42	58	72	89
22...	0900	--	37400	568	57400	--	--	--	--	--	--
MAR.											
12...	0900	--	29800	529	42600	21	31	46	58	69	88
23...	0900	--	51100	685	94500	17	26	37	49	61	77
26...	1730	--	91000	1440	354000	15	19	28	39	48	62
APR.											
09...	1100	9.5	22300	228	13700	19	30	41	53	62	74
28...	1200	12.0	18300	160	7910	18	27	39	50	56	--
JULY											
18...	1600	25.0	3940	573	6100	28	46	64	87	97	--

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. SIEVE 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. SIEVE DIAM. % FINER THAN 2.00 MM
NOV.										
23...	--	79	--	99	--	100	--	--	--	--
25...	--	83	--	97	--	100	--	--	--	--
27...	95	--	97	--	100	--	--	--	--	--
DEC.										
02...	--	73	--	78	--	93	--	100	--	--
07...	--	53	--	94	--	100	--	--	--	--
08...	--	83	--	98	--	100	--	--	--	--
JAN.										
17...	--	91	--	99	--	100	--	--	--	--
18...	--	85	--	99	--	100	--	--	--	--
19...	--	92	--	99	--	100	--	--	--	--
22...	74	--	79	--	91	--	96	--	100	--
MAR.										
12...	--	90	--	97	--	100	--	--	--	--
23...	--	81	--	98	--	100	--	--	--	--
26...	--	67	--	90	--	100	--	--	--	--
APR.										
09...	--	78	--	90	--	100	--	--	--	--
28...	66	--	68	--	79	--	90	--	94	100
JULY										
18...	99	--	100	--	--	--	--	--	--	--

## 11525500 TRINITY RIVER AT LEWISTON, CALIF.

LOCATION.--Lat 40°43'10", long 122°48'09", in SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec.17, T.33 N., R.8 W., Trinity County, at gaging station on right bank, 400 ft upstream from Deadwood Creek, and 0.8 mile northeast of Lewiston.

DRAINAGE AREA.--719 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), December 1953 to September 1968, water years 1969-71 (partial-record station).

Water temperatures: September 1951 to September 1955, October 1957 to September 1958, July 1959 to September 1971.

Sediment records: Water years 1955-61 (partial-record station).

## EXTREMES, 1970-71:

Water temperatures: Maximum, 12.0°C on many days during June to August; minimum, 5.0°C Mar. 12.

Period of record:

Water temperatures: Maximum (1951-55, 1957-58, 1959-63, 1964-71), 26.0°C July 20, 21, 28, 29, 1960; minimum, 1.0°C on several days in 1952.

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

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)
NOV.										
09...	0855	245	9.5	10.5	--	--	4.2	--	56	0
JAN.										
04...	1030	153	5.0	11.4	--	--	2.2	--	49	0
FEB.										
01...	0845	157	6.0	11.0	4.7	6.2	2.1	.6	46	0
MAR.										
01...	0955	150	5.5	12.0	--	--	2.2	--	48	0
MAY										
03...	0730	824	6.5	10.9	--	--	2.0	--	46	0
JULY										
19...	0800	150	12.0	11.3	--	--	2.3	--	48	0
SEP.										
13...	0750	238	9.0	9.7	4.4	6.8	2.3	.8	49	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
NOV.										
09...	--	5.7	.8	.000	0	42	0	46	--	.3
JAN.										
04...	--	2.1	.6	.000	--	44	4	40	--	.1
FEB.										
01...	.0	1.4	.6	.000	0	37	0	38	11	.1
MAR.										
01...	--	1.5	.0	.000	0	41	2	39	--	.1
MAY										
03...	--	.8	.1	.000	0	38	0	38	--	.1
JULY										
19...	--	2.1	.0	.000	0	40	1	39	--	.2
SEP.										
13...	1.3	1.0	.0	.000	0	39	0	40	11	.2

DATE	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
NOV.									
09...	105	7.6	6	--	--	--	--	--	--
JAN.									
04...	88	8.0	3	--	--	--	--	--	--
FEB.									
01...	92	7.9	3	--	--	--	--	--	--
MAR.									
01...	86	7.5	4	--	--	--	--	--	--
MAY									
03...	83	7.1	2	0	100	0	0	.0	0
JULY									
19...	84	7.4	2	--	--	--	--	--	--
SEP.									
13...	84	7.5	1	--	--	--	--	--	--

## KLAMATH RIVER BASIN

11525500 TRINITY RIVER AT LEWISTON, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.0	8.0	8.0	7.0	7.0	7.0	6.5	6.5	6.0	7.0	5.5
2	9.0	8.5	8.0	8.0	7.0	7.0	7.0	6.5	6.5	6.0	6.5	5.5
3	9.0	8.5	8.0	8.0	7.0	6.0	7.0	6.5	6.5	5.5	7.0	5.5
4	9.0	8.5	8.0	8.0	6.0	6.0	6.5	6.0	6.0	5.5	7.0	5.5
5	9.0	8.5	8.0	8.0	6.0	6.0	6.5	6.0	6.5	6.0	7.5	5.5
6	9.0	8.5	8.0	8.0	6.0	6.0	6.5	6.0	6.5	6.0	7.0	6.0
7	9.0	8.5	8.0	8.0	6.0	6.0	6.5	5.5	6.5	6.0	7.0	6.0
8	9.0	8.5	8.0	8.0	6.0	6.0	6.5	6.0	7.0	6.0	7.5	6.0
9	8.5	8.5	8.0	8.0	6.0	6.0	7.0	6.0	7.0	6.0	7.0	6.0
10	9.0	8.5	8.0	8.0	6.0	6.0	7.0	6.5	7.0	6.0	7.0	6.0
11	9.0	8.5	8.5	8.0	6.0	6.0	7.0	6.5	6.5	6.0	7.0	6.5
12	9.0	8.5	8.5	8.0	6.0	6.0	7.0	6.5	7.0	6.0	6.5	5.0
13	9.0	8.5	8.0	8.0	6.0	6.0	7.0	6.0	7.0	6.0	7.5	6.0
14	9.0	8.5	8.0	8.0	6.0	6.0	7.0	6.5	7.0	6.0	6.5	5.5
15	9.0	8.5	8.0	8.0	6.0	6.0	6.5	6.0	7.0	6.0	7.0	6.0
16	9.0	8.5	8.0	8.0	6.0	6.0	6.5	6.0	6.5	6.0	6.5	6.0
17	8.5	8.5	8.0	8.0	6.0	6.0	6.5	6.0	7.0	6.0	8.0	6.0
18	9.0	8.5	8.0	8.0	6.0	6.0	6.5	6.0	6.0	5.5	8.0	6.0
19	8.5	8.5	8.0	8.0	6.0	6.0	7.0	6.5	7.0	5.5	8.0	6.0
20	8.5	8.5	8.0	8.0	6.0	6.0	6.5	6.0	6.5	5.5	8.0	6.5
21	8.5	8.5	8.0	8.0	6.0	6.0	6.5	6.0	6.5	5.5	8.0	6.5
22	8.5	8.5	8.0	8.0	6.0	6.0	7.0	6.5	7.0	5.5	7.5	6.5
23	8.5	8.5	8.0	7.5	6.0	6.0	7.0	6.5	7.0	5.5	8.5	7.0
24	8.5	8.0	7.5	7.5	6.0	6.0	7.0	6.5	7.0	6.0	8.0	7.0
25	8.5	8.0	7.5	7.5	6.0	6.0	7.0	6.5	7.0	5.5	7.0	7.0
26	8.0	8.0	7.5	7.5	6.0	6.0	7.0	6.0	7.0	5.5	8.0	7.0
27	8.0	8.0	7.5	7.0	6.0	6.0	7.0	6.0	7.0	5.5	8.5	6.5
28	8.0	8.0	7.0	7.0	6.0	6.0	6.5	6.0	7.0	5.5	8.0	6.5
29	8.0	8.0	7.0	7.0	6.0	6.0	6.5	6.0	--	--	8.5	6.5
30	8.0	8.0	7.0	7.0	6.0	6.0	6.5	6.0	--	--	8.5	6.5
31	8.0	8.0	--	--	6.5	6.0	6.5	6.0	--	--	9.0	6.5
AVE	8.7	8.4	7.9	7.8	6.1	6.1	6.7	6.2	6.8	5.8	7.5	6.1
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	7.0	7.5	7.0	8.5	8.0	11.5	8.5	10.5	10.0	10.0	9.5
2	9.0	7.0	7.0	6.5	9.0	7.5	11.5	9.0	11.5	10.0	10.0	9.0
3	9.5	7.0	7.5	7.0	9.0	8.0	12.0	9.0	11.5	10.0	10.5	9.0
4	9.5	7.5	7.5	7.0	9.0	8.0	11.5	9.0	12.0	10.0	10.5	8.5
5	10.0	7.5	7.5	7.0	9.0	7.0	11.5	9.0	11.5	10.0	10.0	8.5
6	9.0	7.5	8.0	6.5	9.0	7.0	11.5	9.0	11.5	10.0	10.0	9.0
7	9.0	7.0	7.5	6.5	9.0	7.0	11.5	9.0	11.5	10.0	10.5	9.0
8	8.0	7.0	7.5	7.0	9.0	7.0	11.5	9.0	11.0	10.0	10.0	9.0
9	8.0	7.0	7.5	6.0	9.0	7.5	11.0	9.0	11.5	10.5	10.0	8.5
10	9.0	7.0	7.5	6.0	9.5	7.5	11.5	9.0	11.5	10.5	9.5	8.0
11	8.5	6.5	8.0	7.0	9.5	7.5	11.5	9.0	11.5	10.0	9.0	8.0
12	8.0	6.5	8.0	7.0	9.0	7.5	11.5	9.0	12.0	10.0	9.0	8.0
13	7.5	7.0	8.0	7.0	10.0	7.5	11.0	9.0	11.5	10.0	9.5	8.0
14	9.0	6.5	8.0	6.5	9.5	7.5	11.5	9.0	11.5	10.0	9.0	8.0
15	8.5	6.0	8.0	7.0	11.0	8.0	11.5	9.0	11.5	10.0	9.0	8.0
16	8.0	6.0	8.0	6.5	11.0	8.5	11.5	9.5	11.5	10.0	9.5	8.5
17	8.0	7.0	8.5	7.0	11.0	8.5	12.0	9.5	11.0	10.0	10.0	8.5
18	8.0	6.0	8.5	6.5	11.0	8.5	12.0	10.0	10.5	10.0	10.0	8.5
19	7.5	6.0	8.0	7.0	10.5	8.5	12.0	10.5	11.0	9.5	9.5	8.0
20	7.5	6.5	8.5	7.5	11.5	8.5	12.0	10.0	11.0	9.5	9.0	8.0
21	8.0	6.0	8.5	7.0	11.0	8.0	11.5	10.0	11.0	10.0	9.0	8.0
22	7.0	6.5	8.5	7.0	12.0	8.5	12.0	10.0	11.0	9.5	9.0	8.0
23	7.5	6.0	8.5	7.0	11.5	8.5	11.5	10.0	11.0	9.5	9.0	8.0
24	7.5	6.5	8.5	7.5	11.5	8.5	11.5	10.0	10.5	9.5	9.5	8.0
25	7.5	6.0	8.5	8.0	9.5	9.0	11.5	10.0	10.5	9.5	9.5	8.0
26	7.5	6.5	8.5	7.0	11.5	8.5	11.5	10.0	11.0	9.5	10.0	9.0
27	8.0	7.0	8.5	7.5	11.5	8.5	11.5	10.0	11.5	9.5	10.0	9.0
28	7.5	7.0	8.5	7.5	12.0	8.5	12.0	10.0	11.0	9.5	9.5	8.5
29	7.5	7.0	8.5	7.5	12.0	9.0	12.0	10.0	11.5	9.5	9.0	8.5
30	7.5	6.5	9.0	7.5	11.5	8.5	10.5	9.5	10.5	9.5	9.0	8.0
31	--	--	8.5	7.5	--	--	10.0	9.5	11.0	9.5	--	--
AVE	8.2	6.7	8.1	7.0	10.3	8.0	11.5	9.5	11.2	9.8	9.6	8.4

## 11527000 TRINITY RIVER NEAR BURNT RANCH, CALIF.

LOCATION.--Lat 40°47'20", long 123°26'20", in S½ sec.19, T.5 N., R.7 E., Trinity County, Trinity National Forest, temperature recorder at gaging station on left bank 500 ft upstream from Cedar Flat Creek, 700 ft upstream from highway bridge at Cedar Flat, and 2.3 miles southeast of town of Burnt Ranch.

DRAINAGE AREA.--1,439 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1966.

Water temperatures: October 1961 to September 1964, October 1966 to September 1967, October 1968 to September 1971.

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

EXTREMES.--1970-71:

Water temperatures: Maximum, 26.0°C Aug. 11; minimum, 4.0°C Jan. 4, 13, 14.

Period of record:

Water temperatures (1962-64, 1966-67, 1968-71): Maximum, 27.0°C Aug. 17-19, 24, 1967; minimum (1962-63, 1966-67, 1968-71), 1.0°C Dec. 28, 29, 1966.

REMARKS.--Recorder stopped June 26 to July 29, Sept. 18-24.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	15.5	14.0	11.5	10.0	9.5	7.5	6.0	6.5	6.5	5.5	4.5
2	19.0	16.0	14.0	11.5	10.0	9.5	6.0	5.0	6.5	5.5	6.5	4.5
3	19.0	15.5	14.5	12.0	9.5	8.0	5.0	4.5	6.5	5.0	6.5	5.5
4	18.5	15.5	14.0	13.0	9.5	8.0	4.5	4.0	7.5	6.0	6.5	5.5
5	18.0	15.5	14.0	13.0	10.0	9.5	5.0	4.5	8.0	7.0	6.5	5.5
6	16.5	14.5	13.5	13.0	11.0	10.0	5.0	4.5	8.0	6.5	7.5	5.0
7	16.5	13.0	13.5	12.5	10.0	9.5	5.5	4.5	6.5	6.5	7.5	6.5
8	17.5	13.5	13.5	13.0	10.0	9.5	6.0	5.0	7.5	6.5	8.0	6.5
9	17.5	14.5	13.5	12.5	10.0	9.5	7.0	5.5	6.5	6.0	7.5	6.5
10	17.5	14.5	13.0	12.5	10.0	9.5	7.0	6.5	7.0	6.0	7.5	6.5
11	18.0	14.5	13.5	12.5	10.0	9.0	6.5	5.5	7.0	6.5	7.0	6.0
12	17.0	14.0	13.0	12.0	9.0	7.5	5.5	5.0	7.5	6.5	7.5	6.0
13	16.5	13.5	12.0	11.5	8.5	7.5	5.0	4.0	7.5	7.0	8.0	6.5
14	16.0	13.0	13.0	11.5	8.5	8.0	5.0	4.0	7.5	6.5	8.0	6.5
15	16.0	12.5	12.5	11.5	9.0	8.0	5.5	5.0	7.5	6.5	8.0	7.0
16	16.0	12.5	12.0	11.0	8.0	8.0	6.0	5.0	6.5	6.0	7.5	7.0
17	16.0	12.5	12.0	11.0	8.0	7.5	6.5	6.0	7.0	6.0	9.0	6.5
18	15.5	14.0	12.0	11.0	7.5	7.0	8.0	6.5	6.0	6.0	9.5	6.0
19	15.0	13.5	11.5	10.5	7.5	6.5	8.0	7.5	6.5	6.0	10.5	6.0
20	15.5	14.0	11.5	11.0	7.0	6.5	8.0	6.5	6.5	4.5	10.5	7.0
21	14.5	14.0	12.0	11.5	7.5	6.5	7.0	6.5	6.5	5.0	10.0	7.5
22	14.0	13.0	12.0	11.5	8.0	7.5	7.0	6.0	7.0	5.5	8.5	8.0
23	14.0	13.5	12.0	12.0	8.5	7.5	7.0	6.5	7.5	6.0	9.5	8.5
24	14.0	12.5	12.5	12.0	8.0	7.0	7.0	6.5	7.0	6.5	9.0	8.5
25	14.0	12.5	12.5	11.5	7.0	6.5	6.5	6.0	6.5	5.5	9.0	8.0
26	13.5	12.0	11.5	10.5	7.5	6.5	6.5	6.0	6.5	5.0	8.5	8.0
27	13.0	10.5	11.0	9.0	7.5	7.0	6.5	6.5	5.5	5.0	9.0	7.5
28	13.0	10.5	9.5	8.5	7.0	7.0	6.5	6.0	5.0	5.0	11.0	8.0
29	12.5	10.5	10.0	9.0	7.5	6.5	6.5	6.0	--	--	11.0	8.0
30	14.0	11.0	10.0	9.5	8.0	7.0	6.5	6.0	--	--	9.0	7.5
31	14.0	12.0	--	--	8.0	7.5	6.5	6.0	--	--	10.0	6.5
AVE	15.8	13.4	12.4	11.4	8.6	7.9	6.3	5.6	6.8	5.9	8.4	6.7
DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	7.5	12.0	10.0	14.0	10.5	--	--	24.0	21.0	22.0	20.5
2	11.5	8.0	12.0	10.0	15.5	11.5	--	--	24.5	21.0	22.0	20.0
3	12.5	9.0	11.0	10.0	15.5	11.5	--	--	24.0	21.0	23.0	20.0
4	13.0	8.5	12.0	10.5	15.5	13.0	--	--	24.5	21.0	23.5	20.5
5	13.0	9.0	12.5	10.0	16.0	12.5	--	--	24.5	21.5	23.0	20.5
6	11.0	9.5	13.5	9.5	16.5	12.5	--	--	24.5	21.5	21.5	20.5
7	10.5	8.5	14.0	10.5	16.0	14.0	--	--	25.0	21.5	23.0	19.5
8	9.5	8.5	12.0	10.0	16.5	13.0	--	--	25.0	21.5	23.0	20.0
9	9.5	8.5	14.0	10.0	15.5	14.0	--	--	25.0	22.0	23.0	20.0
10	9.5	8.0	15.0	10.0	16.5	14.5	--	--	25.5	22.0	23.0	20.0
11	9.5	8.0	14.0	11.0	17.0	14.0	--	--	26.0	22.5	23.0	20.5
12	12.0	8.5	13.5	11.0	16.5	14.0	--	--	25.0	22.5	23.5	20.5
13	10.0	9.5	13.5	10.0	16.5	13.5	--	--	24.5	21.5	24.0	21.0
14	11.5	9.0	14.0	9.0	17.0	13.5	--	--	24.0	20.5	24.0	21.0
15	12.5	9.5	11.5	10.0	17.0	13.5	--	--	24.0	20.5	23.5	20.5
16	10.0	8.0	11.5	9.5	17.0	14.0	--	--	24.0	20.5	23.5	20.5
17	8.0	8.0	13.0	9.0	17.0	13.5	--	--	24.0	20.5	23.0	20.5
18	10.5	8.0	13.5	9.0	16.0	15.0	--	--	24.5	21.0	--	--
19	12.5	9.0	13.5	10.0	17.0	15.0	--	--	24.0	21.0	--	--
20	10.0	8.0	12.5	10.0	18.0	14.5	--	--	23.0	21.0	--	--
21	10.5	7.5	13.5	9.0	18.0	15.0	--	--	23.0	21.5	--	--
22	10.0	8.5	15.0	10.0	17.5	15.5	--	--	23.5	21.5	--	--
23	9.5	8.5	15.5	11.0	17.5	15.0	--	--	24.5	21.5	--	--
24	10.5	8.5	15.5	12.0	17.5	14.5	--	--	24.5	21.5	--	--
25	12.5	8.0	13.5	11.5	16.0	15.0	--	--	24.5	22.0	17.0	16.0
26	13.5	9.0	13.5	10.5	--	--	--	--	24.5	22.0	16.0	15.0
27	13.5	10.0	15.0	11.0	--	--	--	--	24.0	22.5	16.5	14.5
28	13.5	10.0	13.0	12.0	--	--	--	--	23.5	21.5	16.0	14.5
29	12.5	9.5	14.0	11.0	--	--	--	--	23.0	21.5	15.0	13.0
30	14.0	9.5	13.0	11.0	--	--	24.5	22.0	21.5	21.0	15.5	12.5
31	--	--	12.5	11.0	--	--	24.0	21.5	22.0	20.0	--	--
AVE	11.2	8.6	13.3	10.3	16.5	13.7	--	--	24.1	21.4	--	--

## KLAMATH RIVER BASIN

11528500 HAYFORK CREEK NEAR HYAMPOM, CALIF.

LOCATION.--Lat 40°37'34", long 123°26'01", in SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec.19, T.3 N., R.7 E., Trinity County, Trinity National Forest, temperature recorder at gaging station on right bank, 1.2 miles upstream from mouth, and 1.3 miles northeast of Hyampom.

DRAINAGE AREA.--378 sq mi.

PERIOD OF RECORD.--Water temperatures: December 1960 to September 1971.

EXTREMES.--Period of record:

Water temperatures (1960-68): Maximum (1960-61, 1962-66, 1967-68), 28.5°C July 13, 1961; minimum, freezing point on several days in 1962 and 1968.

REMARKS.--Recorder stopped Oct. 1 to Nov. 17, May 29 to June 21, July 31 to Sept. 30; recorder malfunction Nov. 18 to Jan. 7, Apr. 6 to May 25. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	--	--	--	--	--	--	--	--	--	--	--	--	6.5	--	6.0	5.5	--	5.0
2	--	--	--	--	--	--	--	--	--	--	--	--	6.5	--	6.0	5.5	--	5.0
3	--	--	--	--	--	--	--	--	--	--	--	--	6.5	--	6.0	6.5	--	5.5
4	--	--	--	--	--	--	--	--	--	--	--	--	7.5	--	6.5	6.5	--	5.5
5	--	--	--	--	--	--	--	--	--	--	--	--	7.5	--	6.5	6.5	--	5.5
6	--	--	--	--	--	--	--	--	--	--	--	--	7.0	--	6.5	6.5	--	5.5
7	--	--	--	--	--	--	--	--	--	--	--	--	6.5	--	6.0	6.5	--	5.5
8	--	--	--	--	--	--	--	--	--	5.0	--	4.0	6.5	--	5.5	7.5	--	6.5
9	--	--	--	--	--	--	--	--	--	6.0	--	5.0	7.0	--	6.0	7.5	--	7.0
10	--	--	--	--	--	--	--	--	--	6.0	--	6.0	7.0	--	6.5	7.0	--	6.0
11	--	--	--	--	--	--	--	--	--	6.0	--	6.0	7.5	--	6.5	7.5	--	7.0
12	--	--	--	--	--	--	--	--	--	6.0	--	5.0	7.5	--	7.0	7.0	--	6.0
13	--	10.0	--	--	--	--	--	--	--	5.0	--	3.5	7.5	--	7.0	7.0	--	6.0
14	--	--	--	--	--	--	--	--	--	5.0	--	3.5	7.5	--	7.0	7.0	--	6.0
15	--	--	--	--	--	--	--	--	--	5.5	--	4.5	7.5	--	7.0	7.5	--	6.5
16	--	--	--	--	--	--	--	--	--	5.5	--	4.5	7.5	--	6.5	7.5	--	7.0
17	--	--	--	--	8.5	--	--	--	--	7.0	--	5.5	7.0	--	6.5	8.0	--	7.0
18	--	--	--	--	--	--	--	--	--	7.5	--	7.0	6.5	--	6.0	8.0	--	7.0
19	--	--	--	--	--	--	--	--	--	8.0	--	7.5	6.5	--	6.0	8.0	--	7.0
20	--	--	--	--	--	--	--	--	--	8.0	--	7.0	6.0	--	5.5	8.5	--	7.0
21	--	--	--	--	--	--	--	--	--	7.5	--	7.0	6.0	--	5.5	8.5	--	8.0
22	--	--	--	--	--	--	--	--	--	7.0	--	6.5	7.0	--	6.0	8.0	--	8.0
23	--	--	--	--	--	--	--	--	--	7.0	--	6.5	7.0	--	6.5	9.0	--	8.0
24	--	--	--	--	--	--	--	--	--	7.0	--	7.0	7.0	--	6.5	9.0	--	8.0
25	--	--	--	--	--	--	--	--	--	7.0	--	6.5	7.0	--	6.0	8.5	--	8.0
26	--	--	--	--	--	--	--	--	--	7.0	--	6.0	6.0	--	5.5	8.0	--	7.5
27	--	--	--	--	--	--	--	--	--	7.0	--	6.0	5.5	--	5.0	8.0	--	7.0
28	--	--	--	--	--	--	--	--	--	6.5	--	6.0	5.5	--	5.0	9.0	--	7.5
29	--	--	--	--	--	--	--	--	--	6.5	--	6.0	--	--	--	9.0	--	8.5
30	--	--	--	--	--	--	--	--	--	6.5	--	6.0	--	--	--	8.5	--	8.0
31	--	--	--	--	--	--	--	--	--	6.5	--	6.0	--	--	--	8.5	--	7.0
AVE	--	--	--	--	--	--	--	--	--	--	--	--	6.8	--	6.2	7.6	--	6.7
DAY	APR			MAY			JUN			JUL			AUG			SEP		
	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN	MAX	DAILY	MIN
1	9.0	--	7.5	--	--	--	--	--	--	20.0	--	18.5	--	--	--	--	--	--
2	9.5	--	8.5	--	--	--	--	--	--	20.5	--	18.5	--	--	--	--	--	--
3	10.5	--	9.0	--	--	--	--	--	--	21.0	--	19.0	--	--	--	--	--	--
4	11.0	--	9.0	--	--	--	--	--	--	20.5	--	19.0	--	--	--	--	--	--
5	11.0	--	10.0	--	--	--	--	--	--	20.5	--	19.0	--	--	--	--	--	--
6	--	10.5	--	--	--	--	--	--	--	20.5	--	19.0	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	21.0	--	19.5	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	21.0	--	19.5	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	21.0	--	20.0	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	20.5	--	19.0	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	20.5	--	19.0	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	20.5	--	18.5	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	21.0	--	19.0	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	22.0	--	20.0	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	23.0	--	21.0	--	--	--	--	--	--
16	--	--	--	--	--	--	--	16.5	--	23.5	--	22.0	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	24.0	--	22.5	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	24.0	--	23.0	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	24.5	--	23.0	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	24.5	--	23.5	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	25.0	--	23.0	--	--	--	--	--	--
22	--	--	--	--	--	--	21.0	--	20.0	24.5	--	23.0	--	--	--	--	15.0	--
23	--	--	--	--	--	--	21.5	--	20.0	24.5	--	23.0	--	--	--	--	--	--
24	--	--	--	--	--	--	20.0	--	19.0	24.0	--	23.0	--	--	--	--	--	--
25	--	--	--	--	--	--	20.0	--	18.5	24.0	--	22.5	--	--	--	--	--	--
26	--	--	--	16.0	--	15.0	19.0	--	18.0	24.0	--	22.5	--	--	--	--	--	--
27	--	--	--	16.0	--	14.5	18.5	--	17.5	23.5	--	22.5	--	23.5	--	--	--	--
28	--	--	--	16.0	--	15.5	18.0	--	17.0	24.0	--	22.0	--	--	--	--	--	--
29	--	--	--	--	--	--	18.0	--	17.0	24.0	--	22.5	--	--	--	--	--	--
30	--	--	--	--	--	--	19.5	--	18.0	24.0	--	23.0	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	22.5	--	21.0	--	--	--	--	--	--

## 11528700 SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.

LOCATION.--Lat 40°39'00", long 123°29'35", in NW¼SW¼ sec.10, T.3 N., R.6 E., Trinity County, Trinity National Forest, temperature recorder at gaging station on left bank, 0.3 mile downstream from Big Creek, 3.0 miles northeast of Hyampom, and 3.5 miles downstream from Hayfork Creek.

DRAINAGE AREA.--764 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1965 to September 1971.

Sediment records: October 1966 to September 1970.

EXTREMES.--1970-71:

Water temperatures: Maximum, 25.5°C Aug. 11; minimum, 1.5°C Jan. 13.

Period of record:

Water temperatures: Maximum, 29.0°C June 30, July 1, 3, 1967, Aug. 1, 2, 1968; minimum, freezing point on several days in 1965, 1967-68.

REMARKS.--Recorder stopped Oct. 1-9, Apr. 13 to May 18, June 1-15, June 25 to July 28; recorder malfunction May 24, 25. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	--	--	14.5	9.0	7.5	6.5	7.0	5.0	7.5	5.5	4.5	1.5
2	--	--	14.0	9.0	6.5	6.0	6.0	3.5	7.5	4.5	4.0	1.5
3	--	--	13.0	9.0	6.5	6.0	4.5	2.5	6.0	5.0	5.0	3.0
4	--	--	12.5	10.0	8.0	6.0	4.0	2.5	6.5	5.0	4.5	2.0
5	--	--	12.0	10.0	8.5	8.0	4.0	2.5	8.5	6.5	5.5	2.0
6	--	--	10.5	9.5	9.5	8.5	4.5	2.5	9.5	7.0	6.5	3.0
7	--	--	10.5	9.0	9.0	8.5	5.0	3.5	7.5	6.0	7.0	4.0
8	--	--	11.0	10.0	8.5	8.0	5.5	4.0	7.0	5.0	8.0	4.5
9	--	16.0	11.0	10.5	8.5	8.0	6.5	5.0	7.5	5.5	6.5	4.0
10	19.5	12.0	10.5	9.5	8.0	7.5	7.5	6.0	8.5	6.0	5.5	3.5
11	18.5	11.5	11.5	10.0	9.0	7.0	6.0	4.5	8.0	6.0	6.5	4.0
12	19.0	11.5	10.5	8.5	7.0	5.5	4.5	2.5	8.5	6.5	4.0	3.5
13	18.5	10.5	9.0	7.5	6.5	5.0	2.5	1.5	8.0	6.5	6.0	3.5
14	18.0	9.5	10.0	7.5	7.5	6.5	3.5	2.0	7.0	6.0	5.5	4.0
15	17.5	9.5	9.5	7.5	8.0	6.5	4.0	3.5	8.0	6.0	6.0	4.5
16	17.5	10.0	11.5	9.0	6.5	6.0	6.0	4.0	6.0	5.5	5.5	4.5
17	16.5	10.0	11.5	9.5	7.0	6.0	7.5	6.0	7.0	5.0	7.0	4.5
18	17.5	12.5	11.5	9.0	6.5	5.5	8.5	7.5	5.0	4.5	7.5	4.0
19	14.5	12.0	11.0	8.5	6.0	4.5	8.5	8.0	6.0	3.5	8.0	4.5
20	15.5	12.5	10.5	8.0	4.5	4.0	8.5	7.0	5.5	3.0	8.5	5.0
21	13.5	11.5	10.0	8.5	6.0	4.0	7.5	6.0	5.0	3.5	9.0	6.0
22	12.5	10.5	10.5	9.5	6.0	5.5	7.0	6.0	6.5	4.0	8.0	7.0
23	12.0	10.5	11.0	10.0	7.0	5.5	7.5	6.5	6.5	5.0	8.5	7.5
24	12.5	10.0	11.5	10.5	6.5	4.5	7.5	6.0	7.0	4.5	8.5	7.0
25	13.0	10.5	11.0	9.0	5.5	4.0	7.0	5.5	5.5	3.0	7.5	7.0
26	14.0	9.5	9.0	8.5	5.5	4.0	7.5	5.5	5.0	2.0	7.0	5.5
27	13.0	7.5	8.5	6.0	5.5	5.0	7.5	5.5	3.5	2.0	7.5	5.0
28	13.0	7.5	7.0	6.0	6.5	6.0	7.0	5.5	3.5	2.0	8.5	6.0
29	13.0	7.5	7.5	7.0	7.0	6.0	6.5	5.0	--	--	9.5	7.0
30	12.0	8.5	8.0	7.0	7.5	7.0	7.0	5.0	--	--	7.5	5.5
31	15.0	10.5	--	--	8.0	7.0	7.0	5.0	--	--	8.5	5.5
AVE	--	--	10.7	8.8	7.1	6.1	6.2	4.7	6.7	4.8	6.8	4.5
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	9.0	5.5	--	--	--	--	--	--	23.0	17.0	18.5	17.0
2	10.5	7.0	--	--	--	--	--	--	24.0	17.5	20.0	16.5
3	11.5	7.5	--	--	--	--	--	--	24.0	17.0	22.0	16.5
4	11.5	7.5	--	--	--	--	--	--	24.5	17.5	23.0	16.0
5	12.0	7.5	--	--	--	--	--	--	24.0	18.0	22.5	16.5
6	10.5	8.5	--	--	--	--	--	--	24.0	17.5	20.5	16.5
7	9.0	7.5	--	--	--	--	--	--	24.5	17.5	23.0	15.0
8	8.5	7.0	--	--	--	--	--	--	25.0	17.5	23.5	15.0
9	9.0	7.0	--	--	--	--	--	--	24.5	18.0	23.0	15.5
10	8.5	6.0	--	--	--	--	--	--	25.0	18.5	23.5	16.0
11	9.5	6.5	--	--	--	--	--	--	25.5	19.5	24.0	16.5
12	11.0	7.0	--	--	--	--	--	--	25.0	19.5	24.0	17.0
13	--	--	--	--	--	--	--	--	24.0	18.0	24.5	17.0
14	--	--	--	--	--	--	--	--	23.0	16.5	25.0	17.5
15	--	--	--	--	--	--	--	--	23.0	16.5	25.0	16.5
16	--	--	--	--	21.0	14.0	--	--	23.0	15.5	25.0	17.0
17	--	--	--	--	21.0	13.5	--	--	23.5	16.0	24.0	17.0
18	--	--	10.0	--	18.0	15.0	--	--	24.0	16.5	23.5	15.0
19	--	--	16.0	10.5	21.5	15.0	--	--	23.5	16.5	22.5	14.5
20	--	--	15.5	10.5	22.5	14.5	--	--	23.5	16.5	23.0	15.5
21	--	--	15.5	8.5	23.0	15.0	--	--	23.5	17.5	23.5	15.5
22	--	--	17.5	10.0	22.5	15.0	20.0	--	22.0	18.0	24.0	14.5
23	--	--	19.0	11.5	22.0	16.0	--	--	23.5	16.5	24.0	15.0
24	--	--	--	--	22.0	15.0	--	--	24.0	16.5	20.5	15.5
25	--	--	--	--	--	--	--	--	23.5	17.0	20.5	16.0
26	--	--	15.5	11.5	--	--	--	--	25.0	18.0	17.5	15.0
27	--	--	16.5	11.0	--	--	--	--	25.0	19.5	19.5	15.5
28	--	--	16.0	12.5	--	--	--	--	21.5	17.5	18.5	15.0
29	--	--	17.5	11.5	--	--	25.0	21.0	22.5	17.5	16.0	13.5
30	--	--	16.0	10.5	--	--	23.5	19.0	18.5	16.5	16.5	13.0
31	--	--	15.5	10.0	--	--	23.5	18.0	20.5	16.5	--	--
AVE	--	--	--	--	--	--	--	--	23.5	17.4	22.0	15.8

## KLAMATH RIVER BASIN

11530000 TRINITY RIVER AT HOOPA, CALIF.

LOCATION.--Lat 41°03'00", long 123°40'15", in SE¼NW¼ sec.25, T.8 N., R.4 E., Humboldt County, in Hoopa Valley Indian Reservation, at gaging station at Hoopa, 0.4 mile upstream from Supply Creek.

DRAINAGE AREA.--2,854 sq mi (revised).

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1971.

Water temperatures: November 1956 to September 1971.

Sediment records: Water years 1955-56 (partial-record station), October 1956 to September 1971.

Prior to October 1964, published as "near Hoopa".

## EXTREMES.--1970-71:

Water temperatures: Minimum, 2.0°C Jan. 6-8.

Sediment concentrations: Maximum daily, 3,350 mg/l Jan. 17; minimum daily, 1 mg/l Oct. 7, 12, 13, 27, 28.

Sediment discharge: Maximum daily, 796,000 tons Jan. 17; minimum daily, 1.2 tons Oct. 7, 12, 13.

## Period of record:

Water temperatures: Maximum (1963-66, 1968-69), 27.0°C July 16, 1965; minimum (1964-71), 2.0°C on several days in 1967-68, 1971.

Sediment concentrations: Maximum daily, 20,400 mg/l Dec. 23, 1964; minimum daily, 1 mg/l on many days in 1957-64, 1968-70.

Sediment discharge: Maximum daily, 8,900,000 tons Dec. 23, 1964; minimum daily, 1.0 tons on several days in 1960.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. No thermograph record Apr. 7 to June 7, Sept. 24-29, recorder stopped; Aug. 9 to Sept. 23, recorder malfunction. Where no maximum or minimum is shown, temperature is once-daily reading. Measurement of suspended sediment made at bridge on State Highway 96, 1.0 mile downstream from gaging station. No appreciable inflow between sampling point and gaging station except during periods of heavy runoff.

REVISIONS (water years).--WRD Calif. 1970: 1969.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 19...	1015	522	13.0	10.0	--	--	4.4	--	102	0	--
NOV. 09...	1145	10000	12.0	10.4	--	--	2.8	--	90	0	--
DEC. 03...	1110	11500	9.0	10.5	--	--	2.1	--	72	0	--
JAN. 04...	1325	6080	4.0	13.6	--	--	2.6	--	91	0	--
FEB. 01...	1100	10100	6.5	12.3	18	5.8	2.5	.9	81	0	4.3
MAR. 01...	1125	4130	5.0	12.8	--	--	2.4	--	84	0	--
APR. 05...	1055	9920	10.0	10.5	--	--	2.6	--	86	0	--
MAY 03...	1010	7380	11.0	10.7	--	--	2.4	--	73	0	--
JUNE 21...	0940	2570	17.0	9.6	--	--	2.6	--	73	0	--
JULY 19...	1030	1660	21.0	8.4	--	--	2.6	--	66	0	--
AUG. 16...	1015	706	20.0	9.9	--	--	3.8	--	102	0	--
SEP. 13...	1020	650	20.0	9.8	25	7.7	4.4	1.3	107	0	12



## 11530000 TRINITY RIVER AT HOOPA, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT. 19...	6.6	.0	.10	100	--	--	--	102	18	84	--
NOV. 09...	2.6	--	.030	0	--	--	--	82	8	74	--
DEC. 03...	2.4	.1	.070	100	--	--	--	64	5	59	--
JAN. 04...	2.3	.1	.000	0	--	--	--	84	9	75	--
FEB. 01...	2.2	.1	.010	0	83	.11	2260	69	3	66	7
MAR. 01...	1.5	.0	.000	0	--	--	--	76	7	69	--
APR. 05...	2.6	.1	.000	0	--	--	--	72	1	71	--
MAY 03...	1.0	.1	.000	0	--	--	--	65	5	60	--
JUNE 21...	1.9	.0	.000	0	--	--	--	62	2	60	--
JULY 19...	3.3	.2	.000	0	--	--	--	58	4	54	--
AUG. 16...	4.0	.0	.020	100	--	--	--	92	8	84	--
SEP. 13...	4.6	.6	.000	0	106	.14	186	94	6	88	9

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT. 19...	.2	206	8.3	2	--	--	--	--	--	--
NOV. 09...	.1	181	7.3	350	--	--	--	--	--	--
DEC. 03...	.1	136	7.7	420	--	--	--	--	--	--
JAN. 04...	.1	170	8.0	55	--	--	--	--	--	--
FEB. 01...	.1	147	8.2	65	--	--	--	--	--	--
MAR. 01...	.1	156	7.8	45	--	--	--	--	--	--
APR. 05...	.1	148	7.9	70	--	--	--	--	--	--
MAY 03...	.1	136	7.5	70	0	0	0	0	.0	0
JUNE 21...	.1	133	7.7	8	--	--	--	--	--	--
JULY 19...	.1	124	7.5	190	--	--	--	--	--	--
AUG. 16...	.2	194	8.0	1	--	--	--	--	--	--
SEP. 13...	.2	202	8.0	1	--	--	--	--	--	--

## KLAMATH RIVER BASIN

11530000 TRINITY RIVER AT HOOPA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	17.0	-- 15.0	11.5	-- 10.5	8.0	-- 7.5	8.0	-- 7.5	8.0	-- 7.0	6.0	-- 5.5
2	17.0	-- 15.0	11.5	-- 10.5	7.5	-- 7.0	7.5	-- 6.5	8.0	-- 7.0	6.0	-- 5.5
3	16.5	-- 14.5	11.5	-- 10.5	7.0	-- 7.0	6.5	-- 5.5	7.0	-- 6.5	6.5	-- 6.0
4	16.0	-- 14.5	12.0	-- 11.0	7.5	-- 7.0	5.5	-- 5.0	7.0	-- 6.5	7.0	-- 6.5
5	16.0	-- 14.0	12.0	-- 11.0	8.0	-- 7.5	5.5	-- 5.0	8.0	-- 6.5	7.0	-- 6.0
6	15.0	-- 13.5	11.0	-- 10.5	8.5	-- 8.0	5.0	-- 2.0	8.5	-- 7.5	7.5	-- 6.0
7	14.5	-- 12.5	11.0	-- 10.5	8.5	-- 8.0	3.0	-- 2.0	8.0	-- 7.5	7.5	-- 6.5
8	15.0	-- 12.5	11.0	-- 10.5	8.0	-- 8.0	3.0	-- 2.0	7.5	-- 7.0	8.0	-- 7.0
9	15.0	-- 13.0	11.0	-- 10.0	8.0	-- 8.0	4.0	-- 3.0	7.5	-- 6.5	7.5	-- 7.0
10	15.5	-- 13.5	10.5	-- 10.0	8.0	-- 8.0	4.5	-- 3.5	8.0	-- 7.0	7.0	-- 7.0
11	15.0	-- 13.5	11.0	-- 10.0	8.0	-- 8.0	4.0	-- 3.5	8.5	-- 6.5	7.5	-- 7.0
12	15.0	-- 13.5	11.0	-- 10.0	8.0	-- 7.0	4.5	-- 3.5	8.5	-- 7.5	7.0	-- 6.5
13	14.5	-- 13.0	10.0	-- 9.5	7.0	-- 7.0	4.0	-- 3.0	8.5	-- 8.0	7.0	-- 6.5
14	14.0	-- 12.5	10.0	-- 9.5	7.5	-- 7.0	4.5	-- 3.0	8.0	-- 7.5	7.5	-- 7.0
15	14.0	-- 12.0	9.5	-- 9.0	8.0	-- 7.5	4.0	-- 3.5	8.5	-- 7.5	8.0	-- 7.0
16	13.0	-- 12.0	10.5	-- 9.5	8.0	-- 7.5	6.0	-- 4.0	7.5	-- 7.0	7.5	-- 7.0
17	13.0	-- 12.0	11.0	-- 10.0	7.5	-- 7.0	6.5	-- 6.0	7.5	-- 7.0	8.0	-- 7.0
18	14.0	-- 12.5	11.0	-- 9.5	7.5	-- 7.0	7.0	-- 7.0	7.0	-- 7.0	8.0	-- 7.0
19	13.0	-- 12.0	10.0	-- 9.0	7.0	-- 6.5	7.5	-- 7.0	7.0	-- 6.5	8.0	-- 7.0
20	13.0	-- 12.0	9.5	-- 9.0	7.0	-- 6.0	7.5	-- 7.5	7.0	-- 6.0	8.0	-- 7.5
21	12.5	-- 12.0	9.5	-- 9.0	6.5	-- 6.0	8.5	-- 7.0	6.5	-- 6.0	8.5	-- 7.5
22	12.0	-- 11.5	10.0	-- 9.5	7.0	-- 6.5	8.0	-- 7.0	7.0	-- 6.0	8.0	-- 8.0
23	12.0	-- 11.5	10.0	-- 10.0	7.0	-- 6.5	7.5	-- 7.0	7.5	-- 6.5	8.0	-- 8.0
24	11.5	-- 11.0	11.5	-- 10.0	7.0	-- 6.5	8.0	-- 7.5	7.5	-- 7.0	8.0	-- 8.0
25	12.0	-- 11.0	10.5	-- 10.0	7.0	-- 6.5	7.5	-- 7.0	7.0	-- 6.5	8.0	-- 8.0
26	11.5	-- 11.0	10.0	-- 9.0	6.5	-- 6.0	7.5	-- 7.0	6.5	-- 6.0	8.0	-- 7.5
27	11.0	-- 10.0	9.0	-- 8.5	6.5	-- 6.0	7.5	-- 7.5	6.0	-- 5.5	8.0	-- 7.0
28	11.0	-- 10.0	8.5	-- 7.0	7.0	-- 6.5	8.0	-- 7.5	6.0	-- 5.5	8.5	-- 8.0
29	11.0	-- 9.5	8.0	-- 7.0	7.0	-- 6.5	8.0	-- 7.5	--	--	9.0	-- 8.5
30	10.5	-- 9.5	8.0	-- 8.0	7.5	-- 7.0	8.0	-- 7.0	--	--	9.0	-- 8.0
31	12.0	-- 10.5	--	--	8.0	-- 7.5	8.0	-- 7.0	--	--	9.0	-- 8.0
AVE	13.6	-- 12.3	10.4	-- 9.6	7.5	-- 7.0	6.3	-- 5.5	7.5	-- 6.7	7.7	-- 7.1

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	9.0	-- 8.0	--	--	-- 15.0	--	20.0	-- 16.5	24.5	-- 20.5	--	--
2	10.0	-- 9.0	-- 12.5	--	--	--	20.0	-- 16.5	24.5	-- 21.0	--	--
3	10.0	-- 9.0	--	--	-- 15.0	--	21.0	-- 17.5	24.0	-- 21.0	--	--
4	10.5	-- 9.0	-- 12.5	--	--	--	20.5	-- 17.0	24.5	-- 21.0	--	--
5	10.5	-- 9.0	--	--	-- 15.5	--	20.5	-- 17.0	24.5	-- 21.5	--	--
6	10.0	-- 9.0	--	--	--	--	21.0	-- 17.0	24.5	-- 21.0	--	--
7	-- 9.5	--	--	--	--	--	20.5	-- 17.0	24.5	-- 21.5	--	--
8	-- 10.0	--	-- 13.0	--	16.5	-- 13.0	20.5	-- 17.0	25.0	-- 21.5	--	--
9	--	--	-- 13.5	--	15.5	-- 14.0	19.5	-- 18.5	--	--	--	--
10	-- 10.0	--	--	--	17.0	-- 14.5	20.5	-- 17.0	--	--	--	--
11	--	--	--	--	17.5	-- 14.5	20.5	-- 17.0	--	--	--	--
12	--	--	-- 13.5	--	16.5	-- 14.5	21.0	-- 17.0	--	--	--	--
13	-- 10.0	--	--	--	17.0	-- 14.5	21.5	-- 17.5	--	--	--	--
14	--	--	-- 13.0	--	17.5	-- 14.5	22.5	-- 18.0	--	--	--	--
15	-- 10.0	--	--	--	17.5	-- 14.5	23.5	-- 19.5	--	--	--	--
16	--	--	-- 13.0	--	18.0	-- 14.5	24.5	-- 20.5	--	--	--	--
17	-- 10.0	--	--	--	17.5	-- 14.5	24.5	-- 21.0	--	--	--	--
18	--	--	-- 13.0	--	15.5	-- 15.0	24.0	-- 22.0	--	--	--	--
19	--	--	--	--	18.5	-- 15.0	24.0	-- 21.0	--	--	--	--
20	-- 11.0	--	--	--	19.0	-- 15.5	25.0	-- 21.5	--	--	--	--
21	--	--	-- 13.0	--	20.5	-- 16.0	25.5	-- 22.0	--	--	--	--
22	--	--	--	--	20.0	-- 17.0	25.0	-- 21.5	--	--	--	--
23	-- 11.0	--	-- 13.0	--	20.0	-- 17.0	25.0	-- 21.5	--	--	-- 17.0	--
24	--	--	--	--	19.0	-- 16.5	25.0	-- 21.0	-- 21.0	--	--	--
25	--	--	-- 13.5	--	18.0	-- 16.5	24.5	-- 21.0	--	--	--	--
26	--	--	--	--	17.0	-- 15.5	25.0	-- 21.5	--	--	--	--
27	--	--	--	--	17.0	-- 14.5	24.5	-- 21.0	--	--	--	--
28	-- 11.5	--	-- 13.5	--	17.5	-- 14.5	24.0	-- 20.5	--	--	--	--
29	--	--	--	--	18.5	-- 15.0	24.0	-- 20.5	--	--	--	--
30	--	--	--	--	19.5	-- 16.0	24.5	-- 21.0	--	--	9.5	-- 7.0
31	--	--	--	--	--	--	23.5	-- 21.5	--	--	--	--
AVE	--	--	--	--	--	--	22.8	-- 19.3	--	--	--	--

## 11530000 TRINITY RIVER AT HOOPA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	424	3	3.4	666	8	14	16900	190	8670
2	418	3	3.4	666	7	13	14300	160	6180
3	418	3	3.4	658	5	8.9	18500	840	61700
4	430	4	4.6	866	42	98	33200	1360	128000
5	433	7	8.2	2080	859	5540	21900	420	24800
6	434	2	2.3	3140	950	8050	22500	370	22500
7	434	1	1.2	2630	410	2910	33900	1410	165000
8	446	3	3.6	2600	90	632	47100	1870	247000
9	460	4	5.0	10600	1110	33500	33500	680	61500
10	468	3	3.8	8000	230	4970	23100	360	22500
11	457	2	2.5	5000	75	1010	16700	250	11300
12	450	1	1.2	6000	72	1170	12600	197	6700
13	450	1	1.2	4200	74	839	10100	150	4090
14	450	2	2.4	3200	71	613	7900	111	2370
15	450	2	2.4	2800	63	476	7400	98	1960
16	450	8	9.7	2420	42	274	15100	312	12800
17	506	10	14	2200	30	178	13200	220	7840
18	514	10	14	2020	23	125	10300	180	5010
19	530	15	21	1890	20	102	8140	150	3300
20	542	20	35	1780	19	91	7430	137	2750
21	754	20	41	1700	18	83	7050	123	2340
22	826	4	8.9	1960	45	238	6330	100	1710
23	1060	16	48	7330	583	19500	5830	70	1100
24	1310	19	70	30300	1490	128000	5410	67	979
25	1090	5	15	33400	960	86600	5100	89	1230
26	906	2	4.9	20700	480	26800	4870	96	1260
27	802	1	2.2	16300	477	22700	4700	98	1240
28	754	1	2.0	20600	200	11100	5210	114	1670
29	706	3	5.7	14200	120	4600	8490	209	4680
30	682	4	7.4	16300	320	14100	7650	58	1200
31	682	6	11	--	--	--	7550	26	530
TOTAL	18836	--	358.4	226206	--	374334.9	441960	--	823909
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	7700	25	520	10100	943	25700	4130	172	1920
2	7420	47	942	9880	940	25100	3950	150	1600
3	6630	91	1630	9080	830	20300	4190	160	1810
4	5940	96	1540	8360	730	16500	4500	200	2430
5	5670	92	1410	7840	640	13500	4300	160	1860
6	5340	84	1210	7520	560	11400	4070	130	1430
7	5070	76	1040	7260	480	9410	4090	110	1210
8	4900	72	953	6890	388	7220	4100	90	996
9	4920	80	1060	6610	320	5710	4090	76	839
10	6800	207	4110	6440	292	5080	4260	140	1610
11	10800	664	19300	7040	270	5130	7160	521	9900
12	9950	560	15000	7760	236	4940	18300	1570	82000
13	8090	521	11400	8180	220	4860	20600	1230	70900
14	7490	480	9710	7840	290	6140	13900	550	20600
15	13300	597	25400	7920	339	7250	10500	340	9640
16	49600	3100	456000	7320	310	6130	9400	320	8120
17	87000	3350	796000	6640	276	4950	10700	1200	34700
18	88200	2980	719000	6140	240	3980	9250	900	22500
19	64700	2000	349000	5980	213	3440	8120	760	16700
20	46400	1460	183000	5380	210	3050	7700	700	14600
21	34000	1200	110000	5060	240	3280	7600	680	14000
22	24800	990	66300	4810	294	3820	8200	1450	32100
23	19400	830	43500	4580	330	4080	24000	1350	87500
24	15300	660	27300	4520	340	4150	23100	1030	64200
25	12100	530	17300	4810	320	4160	26100	616	46700
26	10700	460	13300	4440	290	3480	66900	2530	475000
27	10100	430	11700	4470	250	3020	47100	980	125000
28	9970	395	10600	4410	200	2380	32800	650	57600
29	9780	360	9510	--	--	--	24800	550	36800
30	9780	540	14300	--	--	--	20100	540	29300
31	10100	840	22900	--	--	--	16400	570	25200
TOTAL	611950	--	2944935	187280	--	218160	454410	--	1298765

## KLAMATH RIVER BASIN

11530000 TRINITY RIVER AT HOOPA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	12700	540	18500	6860	88	1630	3850	63	655
2	11000	480	14300	6950	87	1630	3650	65	641
3	10100	450	12300	7320	180	3560	3640	67	658
4	9760	480	12600	7340	332	6580	3700	50	500
5	9880	400	10700	7360	330	6560	3780	41	418
6	9920	315	8440	7160	330	6380	3850	45	468
7	9680	300	7840	6980	320	6030	3930	50	531
8	9040	300	7320	7680	290	6010	3840	54	560
9	9370	310	7840	7600	310	6360	3620	51	498
10	11700	736	23500	7160	330	6380	3340	48	433
11	10500	520	14700	7400	310	6190	3320	51	457
12	10400	370	10400	8040	300	6510	3200	55	475
13	10200	272	7490	8080	240	5240	3080	49	407
14	10200	230	6330	6910	186	3470	3040	43	353
15	10100	190	5180	6410	190	3290	2940	38	302
16	10100	160	4360	6010	226	3670	2940	37	294
17	10200	130	3580	5560	200	3000	2940	36	286
18	10100	110	3000	5270	162	2310	2840	36	276
19	10000	91	2460	5240	130	1840	2780	36	270
20	10000	85	2300	5200	95	1330	2700	31	226
21	10000	290	7830	4900	72	953	2680	25	181
22	8890	280	6720	4650	61	766	2590	22	154
23	7440	470	9440	4770	54	695	2550	22	151
24	6980	420	7920	5150	56	779	2370	22	141
25	6700	360	6510	5450	83	1220	2430	29	190
26	6660	290	5210	5200	88	1240	3170	37	329
27	6660	230	4140	4650	80	1000	2930	24	190
28	6750	190	3460	4660	74	931	2390	16	103
29	6770	150	2740	5020	76	1030	2150	13	75
30	6700	110	1990	4770	72	927	2030	12	66
31	--	--	--	4280	67	774	--	--	--
TOTAL	278500	--	239100	190030	--	98285	92270	--	10288

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2000	11	59	1030	13	36	738	6	12
2	2010	11	60	1030	8	22	762	7	14
3	1970	11	59	938	3	7.6	778	7	15
4	1910	11	57	906	3	7.3	762	7	14
5	1850	11	55	874	3	7.1	738	7	14
6	1810	11	54	850	4	9.2	714	6	12
7	1760	14	67	834	4	9.0	698	6	11
8	1710	20	92	818	5	11	698	6	11
9	1700	20	92	794	6	13	682	5	9.2
10	1660	19	85	738	7	14	666	5	9.0
11	1570	18	76	762	5	10	658	5	8.9
12	1500	18	73	762	3	6.2	642	5	8.7
13	1460	16	63	834	4	9.0	646	5	8.7
14	1460	16	63	762	6	12	625	4	6.8
15	1460	15	59	738	8	16	608	4	6.6
16	1470	14	56	714	5	9.6	584	4	6.3
17	1470	13	52	698	3	5.7	569	4	6.1
18	1800	39	223	698	3	5.7	552	4	6.0
19	1690	67	306	682	4	7.4	537	3	4.3
20	1490	53	213	674	4	7.3	530	3	4.3
21	1480	43	172	658	4	7.1	534	2	2.9
22	1410	34	129	658	4	7.1	534	2	2.9
23	1310	28	99	666	4	7.2	533	3	4.3
24	1240	24	80	658	5	8.9	530	5	7.2
25	1170	22	69	650	5	8.8	530	7	10
26	1120	21	64	634	7	12	620	7	12
27	1090	16	47	642	9	16	690	8	15
28	1070	9	26	634	7	12	698	10	19
29	1030	6	17	610	6	9.9	938	25	63
30	994	9	24	626	5	8.5	1300	14	49
31	1010	11	30	706	6	11	--	--	--
TOTAL	46674	--	2621	23278	--	333.6	20094	--	373.2

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

2591488  
6011463.1

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.	SUS. SED. FALL DIAM.
	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
DATE	.016 MM	.031 MM	.062 MM	.125 MM	.250 MM	.500 MM	1.00 MM
NOV.							
06...	70	83	91	99	100	--	--
09...	54	65	72	83	99	100	--
24...	43	50	75	93	100	--	--
DEC.							
08...	36	46	71	92	100	--	--
JAN.							
16...	43	55	64	73	90	100	--
17...	41	52	61	70	92	99	100
28...	--	--	46	52	78	99	100
MAR.							
12...	36	44	55	59	80	97	100
22...	48	59	68	74	91	99	100
24...	50	59	67	71	85	100	--

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
					% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM
OCT. 06...	1000	14.0	5	434	2	8	26	41
		BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
		% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM	% FINER THAN 64.0 MM
DATE		1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM
OCT. 06...	46	50	52	56	63	72	88	100

## KLAMATH RIVER BASIN

11530300 BLUE CREEK NEAR KLAMATH, CALIF.

LOCATION.--Lat 41°27'00", long 123°53'40", in NE¼NW¼ sec.12, T.12 N., R.2 E., Humboldt County, temperature recorder at gaging station on left bank, 600 ft downstream from West Fork, 3.0 miles upstream from mouth, and 9.2 miles southeast of Klamath.

DRAINAGE AREA.--120 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1965 to September 1971.

EXTREMES.--1970-71:

Water temperatures: Maximum, 21.5°C July 21, 22, Aug. 10; minimum, 4.0°C Jan. 12, 13.

Period of record:

Water temperatures: Maximum, 27.0°C July 23, 1970; minimum, 4.0°C Feb. 15, Mar. 3, 1967, Jan. 12, 13, 1971.

REMARKS.--Recorder malfunction Sept. 16-21. Where no maximum or minimum is shown, temperature is once-daily reading.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	-- 13.0	12.5	-- 11.0	8.0	-- 7.5	8.0	-- 7.5	7.5	-- 7.0	7.5	-- 5.5
2	19.0	-- 13.0	12.5	-- 11.0	8.0	-- 7.5	8.0	-- 7.0	7.5	-- 6.5	6.5	-- 5.5
3	16.5	-- 13.5	12.5	-- 11.0	9.0	-- 8.0	7.0	-- 6.5	7.0	-- 5.5	7.0	-- 6.5
4	17.0	-- 13.5	13.0	-- 12.0	9.5	-- 9.0	7.0	-- 6.5	7.0	-- 6.5	7.0	-- 5.5
5	17.0	-- 13.5	12.5	-- 11.5	9.5	-- 9.5	6.5	-- 6.0	8.0	-- 7.0	7.5	-- 6.0
6	15.5	-- 12.0	11.5	-- 10.5	9.5	-- 9.5	7.0	-- 6.0	8.0	-- 7.0	8.5	-- 6.5
7	15.5	-- 10.5	11.5	-- 10.5	9.5	-- 9.0	7.5	-- 6.5	7.5	-- 6.5	8.0	-- 7.0
8	17.5	-- 10.5	11.5	-- 11.0	9.5	-- 9.0	7.5	-- 7.0	7.5	-- 6.5	8.5	-- 6.5
9	17.0	-- 12.5	11.5	-- 11.0	9.0	-- 8.5	8.0	-- 7.5	8.0	-- 6.5	8.0	-- 7.0
10	17.5	-- 12.5	11.5	-- 10.5	9.5	-- 9.0	8.0	-- 7.5	9.0	-- 7.5	8.0	-- 7.5
11	18.0	-- 12.0	11.5	-- 10.5	9.5	-- 8.5	7.5	-- 6.0	8.5	-- 7.5	8.0	-- 7.0
12	17.0	-- 12.0	10.5	-- 10.0	8.5	-- 8.0	6.0	-- 4.0	9.0	-- 7.5	7.5	-- 7.0
13	16.5	-- 11.0	10.0	-- 9.5	8.5	-- 8.0	4.5	-- 4.0	8.5	-- 7.5	8.0	-- 7.0
14	15.5	-- 10.5	10.5	-- 10.0	8.5	-- 8.0	5.5	-- 4.5	8.0	-- 7.5	8.0	-- 7.0
15	15.0	-- 11.0	11.0	-- 10.0	8.5	-- 8.0	6.5	-- 5.5	8.0	-- 7.0	8.5	-- 7.0
16	14.5	-- 11.5	11.0	-- 10.5	8.0	-- 7.0	7.0	-- 5.5	7.5	-- 6.5	8.0	-- 7.0
17	15.0	-- 11.5	10.5	-- 10.0	8.0	-- 7.0	7.5	-- 6.5	8.0	-- 7.0	8.5	-- 7.0
18	14.5	-- 12.5	10.5	-- 9.5	8.0	-- 7.5	8.5	-- 7.5	7.0	-- 6.5	8.5	-- 6.5
19	13.5	-- 12.0	10.0	-- 9.5	7.5	-- 7.0	8.5	-- 8.5	7.5	-- 6.0	9.5	-- 7.0
20	14.0	-- 13.0	10.0	-- 9.5	7.5	-- 7.0	8.5	-- 7.5	7.0	-- 5.5	9.5	-- 7.5
21	13.0	-- 12.0	10.5	-- 10.0	7.5	-- 7.0	7.5	-- 6.5	7.5	-- 6.5	9.5	-- 7.5
22	12.5	-- 11.5	10.5	-- 10.5	8.5	-- 7.5	7.5	-- 6.5	8.0	-- 7.5	8.5	-- 7.5
23	12.5	-- 11.5	11.5	-- 10.5	8.5	-- 8.0	7.5	-- 6.5	8.5	-- 7.0	8.5	-- 7.5
24	12.0	-- 11.0	11.5	-- 11.5	8.0	-- 7.0	7.5	-- 7.5	8.5	-- 7.5	8.5	-- 8.0
25	12.5	-- 11.5	11.5	-- 10.5	8.0	-- 7.0	7.5	-- 6.5	7.5	-- 6.0	8.5	-- 8.0
26	11.5	-- 10.5	10.5	-- 9.5	8.0	-- 7.0	7.5	-- 6.5	7.0	-- 6.0	8.0	-- 7.0
27	11.5	-- 10.0	10.0	-- 9.0	8.0	-- 7.5	8.0	-- 7.0	6.0	-- 5.0	8.5	-- 7.5
28	12.0	-- 10.0	10.0	-- 9.0	8.0	-- 7.5	8.0	-- 7.0	6.5	-- 5.0	9.5	-- 8.0
29	12.0	-- 10.0	10.0	-- 9.5	8.0	-- 8.0	8.0	-- 7.0	--	--	9.5	-- 8.0
30	12.0	-- 10.5	10.0	-- 8.0	8.5	-- 8.0	8.0	-- 7.0	--	--	8.5	-- 7.5
31	13.0	-- 11.5	--	--	8.5	-- 8.0	8.0	-- 7.0	--	--	9.0	-- 7.0
AVE	14.8	-- 11.7	11.1	-- 10.2	8.5	-- 7.9	7.4	-- 6.5	7.7	-- 6.6	8.3	-- 7.0
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	9.5	-- 7.5	10.5	-- 8.5	10.5	-- 9.0	17.0	-- 12.5	20.5	-- 15.5	17.0	-- 16.0
2	10.0	-- 7.5	11.5	-- 8.5	12.5	-- 9.5	17.0	-- 12.5	20.5	-- 16.0	18.0	-- 15.5
3	10.5	-- 8.0	9.5	-- 9.0	12.5	-- 10.0	17.0	-- 12.5	20.5	-- 16.0	19.0	-- 14.5
4	11.0	-- 8.0	9.5	-- 9.0	14.5	-- 10.0	17.0	-- 12.5	21.0	-- 16.5	19.5	-- 15.0
5	11.0	-- 8.5	11.0	-- 9.0	15.0	-- 11.0	17.5	-- 12.5	21.0	-- 16.5	17.5	-- 16.0
6	9.0	-- 8.0	11.5	-- 8.0	15.0	-- 10.5	17.5	-- 12.5	21.0	-- 16.5	19.0	-- 15.5
7	9.0	-- 8.0	10.0	-- 9.0	17.5	-- 11.0	17.5	-- 12.5	20.5	-- 16.0	19.0	-- 14.5
8	8.5	-- 8.0	12.0	-- 9.0	15.0	-- 10.5	16.5	-- 12.0	21.0	-- 16.0	19.5	-- 14.5
9	8.5	-- 7.0	12.0	-- 9.0	12.0	-- 11.0	14.5	-- 12.5	21.0	-- 16.0	19.0	-- 14.5
10	7.5	-- 7.0	13.0	-- 9.0	14.0	-- 11.0	16.5	-- 11.5	21.5	-- 17.0	19.0	-- 15.0
11	8.5	-- 7.0	13.0	-- 9.5	15.0	-- 11.0	17.5	-- 12.5	20.5	-- 17.0	19.5	-- 15.0
12	9.5	-- 7.0	11.5	-- 9.0	13.5	-- 11.5	17.5	-- 12.5	18.0	-- 17.0	19.5	-- 15.5
13	9.0	-- 8.0	12.0	-- 8.5	14.5	-- 11.0	18.0	-- 13.0	18.0	-- 16.5	19.5	-- 15.5
14	10.0	-- 8.0	12.0	-- 8.0	15.5	-- 10.5	18.5	-- 13.5	20.5	-- 15.0	19.0	-- 15.5
15	10.5	-- 8.0	9.5	-- 8.5	16.0	-- 10.5	19.0	-- 14.0	20.5	-- 15.5	19.5	-- 15.5
16	8.5	-- 7.5	10.5	-- 8.0	16.0	-- 11.0	19.5	-- 14.0	20.5	-- 15.5	--	--
17	7.5	-- 6.0	11.5	-- 7.5	14.5	-- 11.5	19.0	-- 14.5	20.5	-- 15.5	--	--
18	9.0	-- 6.5	12.5	-- 8.5	12.5	-- 11.5	16.0	-- 14.5	20.5	-- 15.5	--	--
19	10.0	-- 7.0	11.0	-- 9.0	15.5	-- 11.5	20.0	-- 14.5	20.5	-- 16.0	--	--
20	8.0	-- 7.0	12.0	-- 8.5	16.5	-- 11.5	21.0	-- 14.5	21.0	-- 16.0	--	--
21	9.5	-- 6.5	12.5	-- 7.5	17.5	-- 12.0	21.5	-- 17.0	19.0	-- 16.0	-- 15.5	--
22	8.5	-- 7.5	13.5	-- 8.5	17.0	-- 12.5	21.5	-- 17.0	20.0	-- 16.0	18.5	-- 14.5
23	8.5	-- 7.0	14.0	-- 9.5	14.5	-- 13.0	20.5	-- 16.0	20.5	-- 15.5	18.0	-- 14.5
24	9.5	-- 7.0	13.5	-- 10.0	13.5	-- 12.0	21.0	-- 16.0	21.0	-- 15.5	16.5	-- 15.5
25	11.5	-- 7.5	11.0	-- 10.0	13.5	-- 12.0	20.5	-- 16.0	21.0	-- 16.0	16.5	-- 15.0
26	11.5	-- 8.0	12.5	-- 9.0	15.0	-- 12.0	20.5	-- 15.5	21.0	-- 17.0	15.5	-- 14.5
27	11.0	-- 8.5	13.5	-- 9.5	14.0	-- 11.5	18.5	-- 15.5	19.5	-- 17.0	16.0	-- 14.0
28	10.0	-- 8.5	11.0	-- 10.0	15.5	-- 10.5	19.5	-- 15.5	17.5	-- 16.5	15.0	-- 14.0
29	10.5	-- 8.0	11.5	-- 9.5	16.0	-- 11.0	20.0	-- 15.5	18.0	-- 15.5	14.5	-- 12.5
30	11.0	-- 8.0	12.5	-- 8.5	16.5	-- 12.0	20.5	-- 15.5	17.0	-- 16.0	14.0	-- 11.5
31	--	--	10.5	-- 9.0	--	--	20.0	-- 15.5	17.5	-- 15.5	--	--
AVE	9.5	-- 7.5	11.7	-- 8.8	14.7	-- 11.1	18.6	-- 14.1	20.0	-- 16.1	17.8	-- 14.8

11530500 KLAMATH RIVER NEAR KLAMATH, CALIF.  
(International Hydrological Decade Station)

LOCATION.--Lat 41°30'45", long 123°58'30", in SW¼ sec.17, T.13 N., R.2 E., Del Norte County, at gaging station, 2.8 miles upstream from Turwar Creek, and 3.3 miles east of Klamath.

DRAINAGE AREA.--12,100 sq mi (not including Lost River or Lower Klamath Lake basins).

PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1971.  
Water temperatures: November 1965 to September 1971.  
Sediment records: Water years 1955-56 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 23.0°C July 23.

Period of record:

Water temperatures: Maximum (1966-68, 1970-71), 25.5°C on several days in 1968; minimum (1965-70), 3.5°C Jan. 5, 1970.

REMARKS.--Chemical-quality samples collected by California Department of Water Resources. No thermograph record Oct. 1 to Feb. 23, recorder stopped. Recorder malfunction Mar. 1, 2, 6, 8, 9, June 2-23, Sept. 5-19, 22-30. Where no maximum or minimum is shown, temperature is once-daily reading.

# CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED SILICA (SIG2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
OCT. 19...	1425	3180	13.0	10.8	28	0	20	9.7	170	13	2.1
NOV. 09...	1500	12800	11.5	11.5	20	170	12	5.6	100	3.8	1.0
DEC. 07...	1545	84900	9.0	12.1	13	10	12	5.2	60	3.6	.9
JAN. 06...	1010	20800	.5	12.5	17	170	15	7.7	100	5.3	1.0
FEB. 01...	1600	A36500	8.5	12.6	15	130	15	6.7	80	4.1	1.0
MAR. 01...	1630	A20400	6.5	12.7	17	50	15	6.3	510	6.0	1.1
APR. 06...	0910	A41700	10.0	11.4	16	40	16	6.6	20	4.8	1.0
MAY 03...	1355	A29400	11.0	10.9	15	60	13	5.7	180	3.7	.8
JUNE 22...	0825	A13200	17.0	9.9	12	30	12	5.0	800	3.2	.6
JULY 20...	0900	5990	22.0	--	13	10	16	6.1	90	4.3	1.2
AUG. 17...	0840	3640	20.5	9.0	15	10	19	7.4	170	6.9	1.3
SEP. 13...	1425	3590	21.0	9.7	18	10	19	8.8	200	9.3	1.9

DATE	DIS- SOLVED LITHIUM (LI) (UG/L)	RICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 19...	10	120	0	13	5.3	.1	--	.00	.070	20	150
NOV. 09...	10	56	0	9.0	2.0	.2	--	.2	.78	0	83
DEC. 07...	10	62	0	7.0	1.4	.0	--	.04	.94	0	74
JAN. 06...	10	83	0	7.0	1.9	.1	--	.2	.11	--	98
FEB. 01...	10	75	0	7.0	1.4	.1	--	.1	.21	80	88
MAR. 01...	10	80	0	7.0	2.0	.1	.10	--	.31	50	95
APR. 06...	0	79	0	7.0	2.0	.0	.10	--	.40	60	93
MAY 03...	0	71	0	3.8	1.6	.1	.00	--	.18	50	79
JUNE 22...	0	66	0	4.8	2.2	.7	.02	--	.090	30	74
JULY 20...	0	86	0	8.8	2.1	.1	.02	--	.17	80	94
AUG. 17...	0	109	0	7.5	3.0	.1	.03	--	.12	70	114
SEP. 13...	10	118	0	12	4.9	.1	.02	--	.11	110	132

A Daily mean discharge.

## KLAMATH RIVER BASIN

11530500 KLAMATH RIVER NEAR KLAMATH, CALIF.--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (JTU)
OCT. 19...	.20	1290	90	0	98	23	.6	227	7.9	1
NOV. 09...	.11	2870	53	7	46	13	.2	126	7.5	170
DEC. 07...	.10	17000	52	1	51	13	.2	120	7.5	60
JAN. 06...	.13	5500	69	1	68	14	.3	167	7.6	45
FEB. 01...	.12	8670	65	3	62	12	.2	136	7.8	57
MAR. 01...	.13	5230	63	0	66	17	.3	154	7.8	20
APR. 06...	.13	10500	67	2	65	13	.3	143	7.8	60
MAY 03...	.11	6270	56	0	58	12	.2	123	7.9	30
JUNE 22...	.10	2640	51	0	54	12	.2	112	7.3	10
JULY 20...	.13	1520	65	0	71	12	.2	144	8.1	40
AUG. 17...	.16	1120	78	0	89	16	.3	186	8.1	1
SEP. 13...	.18	1280	84	0	97	19	.4	208	7.9	3

DATE	TIME	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDE D GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDE D GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED NATURAL URANIUM (U) (UG/L)
JAN. 18...	1600	<.5	54	2.0	31	.01

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

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	--	--	--	--	--	--	--	--	--	--	--	--	--	8.5	--	--	6.5	--
2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.0	--	7.0
4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.0	--	6.0
5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.0	--	6.5
6	--	--	--	--	--	--	--	--	--	--	0.5	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	9.0	--	--	--	--	--	--	--	10.0	--	6.0
8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.0	--	7.0
11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.5	--	7.5
12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.5	--	7.0
13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.5	--	7.0
14	--	--	--	--	--	--	--	--	--	--	4.0	--	--	--	--	7.0	--	7.0
15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.0	--	7.0
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.0	--	8.0
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.0	--	7.5
18	--	--	--	--	--	--	--	--	--	--	8.0	--	--	--	--	8.0	--	8.0
19	--	13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	8.5	--	7.5
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.0	--	8.0
21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.0	--	8.5
22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.0	--	9.0
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.0	--	8.5
24	--	--	--	--	--	--	--	--	--	--	--	--	8.0	--	7.0	9.0	--	8.5
25	--	--	--	--	--	--	--	--	--	--	--	--	7.5	--	7.0	9.0	--	8.5
26	--	--	--	--	--	--	--	--	--	--	--	--	7.0	--	5.0	9.0	--	8.0
27	--	--	--	--	--	--	--	--	--	--	--	--	6.0	--	5.0	8.0	--	8.0
28	--	--	--	--	--	--	--	--	--	--	--	--	6.0	--	5.5	9.5	--	8.0
29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.5	--	9.5
30	--	--	--	--	9.0	--	--	--	--	--	--	--	--	--	--	9.5	--	9.0
31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.0	--	8.5
AVE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.5	--	7.7



## 11530500 KLAMATH RIVER NEAR KLAMATH, CALIF.--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

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	9.0	-- 8.5	11.5	-- 11.0	12.0	-- 11.5	18.0	-- 17.0	21.0	-- 20.5	19.5	-- 19.0
2	9.5	-- 9.0	11.5	-- 11.0	--	--	18.5	-- 17.5	21.0	-- 20.5	19.0	-- 19.0
3	10.0	-- 8.5	11.0	-- 11.0	--	--	18.5	-- 17.5	21.0	-- 20.5	19.5	-- 18.5
4	10.0	-- 9.5	11.0	-- 11.0	--	--	18.5	-- 17.5	21.0	-- 21.0	20.0	-- 19.0
5	10.5	-- 10.0	11.0	-- 11.0	--	--	18.5	-- 17.5	21.0	-- 21.0	20.0	-- 19.0
6	10.5	-- 10.0	11.5	-- 11.0	--	--	18.5	-- 17.5	21.0	-- 21.0	--	--
7	10.0	-- 9.5	12.0	-- 11.5	--	--	18.5	-- 18.0	21.5	-- 21.0	--	--
8	9.5	-- 9.5	12.0	-- 11.5	--	--	18.5	-- 18.0	21.5	-- 21.0	--	--
9	9.5	-- 9.0	12.0	-- 11.5	--	--	18.5	-- 18.0	21.5	-- 21.0	--	--
10	9.0	-- 8.5	12.5	-- 11.5	--	--	18.0	-- 17.5	21.5	-- 21.5	--	--
11	9.0	-- 8.5	12.5	-- 12.0	--	--	18.0	-- 17.5	21.5	-- 21.5	--	--
12	9.5	-- 9.0	12.5	-- 12.0	--	--	18.5	-- 17.5	21.5	-- 21.0	--	--
13	10.0	-- 9.5	12.0	-- 12.0	--	--	19.0	-- 18.0	21.0	-- 21.0	-- 21.0	--
14	10.5	-- 10.0	12.0	-- 11.5	--	--	19.5	-- 18.5	21.0	-- 21.0	--	--
15	11.0	-- 10.5	12.0	-- 11.5	--	--	20.0	-- 19.0	21.0	-- 21.0	--	--
16	11.0	-- 9.5	11.5	-- 11.5	--	--	20.5	-- 19.5	21.5	-- 21.0	--	--
17	9.5	-- 8.5	12.0	-- 11.0	--	--	21.0	-- 20.5	21.0	-- 20.5	--	--
18	9.5	-- 8.5	12.5	-- 11.5	--	--	21.0	-- 20.5	21.0	-- 20.5	--	--
19	10.0	-- 9.5	12.5	-- 12.0	--	--	21.5	-- 20.5	21.0	-- 21.0	--	--
20	10.0	-- 9.5	12.5	-- 12.5	--	--	21.5	-- 21.0	21.5	-- 21.0	18.0	-- 15.5
21	9.5	-- 9.0	12.5	-- 12.0	--	--	22.0	-- 21.5	21.5	-- 21.0	18.5	-- 16.5
22	9.5	-- 9.0	12.5	-- 12.0	--	17.0	22.0	-- 21.5	21.5	-- 21.0	--	--
23	9.5	-- 9.0	14.0	-- 12.5	--	--	23.0	-- 21.5	21.5	-- 21.0	--	--
24	9.5	-- 9.0	14.0	-- 13.5	18.0	-- 17.0	21.5	-- 21.0	21.5	-- 21.0	--	--
25	10.0	-- 9.0	14.0	-- 12.5	17.0	-- 16.0	21.5	-- 21.0	22.0	-- 21.0	--	--
26	11.0	-- 10.0	12.5	-- 12.0	16.0	-- 15.0	21.5	-- 21.0	22.0	-- 21.0	--	--
27	11.5	-- 11.0	13.0	-- 12.5	15.5	-- 15.5	21.0	-- 20.5	22.0	-- 21.0	--	--
28	11.5	-- 11.0	13.0	-- 12.5	16.0	-- 15.0	20.5	-- 20.5	21.0	-- 20.5	--	--
29	11.5	-- 11.0	13.0	-- 12.5	17.0	-- 15.5	20.5	-- 20.5	20.5	-- 20.5	--	--
30	11.0	-- 11.0	13.5	-- 12.5	17.5	-- 16.0	21.0	-- 20.5	20.5	-- 19.0	--	--
31	--	--	12.5	-- 11.5	--	--	21.0	-- 20.5	20.0	-- 19.5	--	--
AVE	10.1	-- 9.5	12.3	-- 11.8	--	--	20.0	-- 19.3	21.2	-- 20.8	--	--

## SMITH RIVER BASIN

11532500 SMITH RIVER NEAR CRESCENT CITY, CALIF.

LOCATION.--Lat 41°47'22", long 124°03'14", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.10, T.16 N., R.1 E. (unsurveyed), Del Norte County, Six Rivers National Forest, at gaging station, 0.5 mile downstream from South Fork, and 8 miles east of Crescent City.

DRAINAGE AREA.--609 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1952-53 (partial-record station), October 1953 to September 1971.

Water temperatures: October 1965 to September 1971.

Sediment records: Water years 1955-56 (partial-record station).

EXTREMES.--1970-71:

Water temperatures: Maximum, 22.0°C July 21-23.

Period of record:

Water temperatures: Maximum (1966-69, 1970-71), 23.0°C on several days in 1968 and 1969; minimum (1966-70), 3.5°C Jan. 6, 1970.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources. No thermograph record Nov. 21 to Jan. 5, Jan. 16 to Mar. 10, Apr. 8 to June 16, probe inoperative. Where no maximum or minimum is shown, temperature is once-daily reading.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.											
20...	0715	357	11.5	11.0	--	--	2.6	--	72	0	--
NOV.											
09...	1630	9350	12.0	12.2	--	--	1.4	--	52	0	--
DEC.											
08...	0800	22100	9.5	12.6	--	--	1.5	--	46	0	--
JAN.											
05...	0830	4400	5.0	13.6	--	--	1.6	--	47	0	--
FEB.											
02...	0825	3340	6.5	13.5	--	--	1.3	--	50	0	--
MAR.											
02...	0745	3060	5.5	13.1	--	--	1.5	--	54	0	--
APR.											
06...	0725	4700	8.5	12.7	--	--	1.5	--	47	0	--
MAY											
04...	1410	3360	10.0	11.9	4.9	6.6	1.8	.6	49	0	.0
JUNE											
21...	1620	1060	18.0	10.5	--	--	2.0	--	56	0	--
JULY											
20...	0700	590	19.0	9.8	--	--	2.1	--	72	0	--
AUG.											
16...	1505	378	20.0	10.6	--	--	2.4	--	80	0	--
SEP.											
13...	1545	328	20.0	10.8	9.0	12	5.3	.5	83	0	5.6

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM
OCT.										
20...	3.6	--	0	--	--	--	75	16	59	--
NOV.										
09...	.4	--	0	--	--	--	45	2	43	--
DEC.										
08...	2.1	--	0	--	--	--	38	0	38	--
JAN.										
05...	1.7	--	--	--	--	--	45	6	39	--
FEB.										
02...	3.8	--	0	--	--	--	44	3	41	--
MAR.										
02...	2.5	--	0	--	--	--	48	4	44	--
APR.										
06...	1.7	--	0	--	--	--	39	0	39	--
MAY										
04...	1.6	.4	0	41	.06	372	39	0	40	9
JUNE										
21...	2.0	--	0	--	--	--	49	3	46	--
JULY										
20...	2.4	--	0	--	--	--	60	1	59	--
AUG.										
16...	3.7	--	0	--	--	--	75	9	66	--
SEP.										
13...	3.0	.1	0	70	.10	62.0	71	3	68	14

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH  (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT. 20...	.1	156	8.1	1	--	--	--	--	--	--
NOV. 09...	.1	94	7.7	110	--	--	--	--	--	--
DEC. 08...	.1	80	7.8	160	--	--	--	--	--	--
JAN. 05...	.1	88	7.9	30	--	--	--	--	--	--
FEB. 02...	.1	89	8.0	25	--	--	--	--	--	--
MAR. 02...	.1	97	7.7	7	--	--	--	--	--	--
APR. 06...	.1	82	7.7	30	--	--	--	--	--	--
MAY 04...	.1	83	7.9	5	0	0	0	0	.0	0
JUNE 21...	.1	103	8.3	0	--	--	--	--	--	--
JULY 20...	.1	126	7.6	1	--	--	--	--	--	--
AUG. 16...	.1	144	8.0	1	--	--	--	--	--	--
SEP. 13...	.3	148	8.3	1	--	--	--	--	--	--

[illegible]

## SMITH RIVER BASIN

11532500 SMITH RIVER NEAR CRESCENT CITY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971--Continued

DAY	MAX	APR	MIN	MAX	MAY	MIN	MAX	JUN	MIN	MAX	JUL	MIN	MAX	AUG	MIN	MAX	SEP	MIN
		DAILY			DAILY			DAILY			DAILY			DAILY			DAILY	
1	7.5	--	6.0	--	--	--	--	--	--	16.5	--	15.5	20.0	--	19.5	17.5	--	17.5
2	8.0	--	5.5	--	--	--	--	--	--	16.5	--	16.0	20.0	--	19.5	17.5	--	17.0
3	7.0	--	5.5	--	--	--	--	--	--	17.0	--	16.5	20.0	--	20.0	17.0	--	16.5
4	7.5	--	5.5	--	--	--	--	--	--	17.0	--	16.0	20.0	--	20.0	17.0	--	16.0
5	7.5	--	5.5	--	--	--	--	--	--	18.0	--	16.0	20.0	--	20.0	17.0	--	17.0
6	7.5	--	6.5	--	--	--	--	--	--	17.0	--	15.5	20.5	--	20.0	17.0	--	16.5
7	7.5	--	7.5	--	--	--	--	--	--	17.0	--	16.0	21.0	--	20.0	17.0	--	16.5
8	--	7.5	--	--	--	--	--	--	--	17.0	--	16.0	21.0	--	20.5	17.0	--	16.5
9	--	--	--	--	--	--	--	--	--	16.5	--	16.0	21.0	--	20.5	17.0	--	16.5
10	--	--	--	--	--	--	--	--	--	16.0	--	14.5	21.0	--	20.5	17.0	--	16.5
11	--	--	--	--	--	--	--	--	--	15.5	--	14.5	21.0	--	20.5	17.5	--	17.0
12	--	--	--	--	--	--	--	--	--	16.0	--	15.5	20.5	--	20.5	17.5	--	17.0
13	--	--	--	--	--	--	--	--	--	17.0	--	16.0	20.5	--	20.0	18.0	--	17.0
14	--	--	--	--	--	--	--	--	--	17.5	--	17.0	20.0	--	19.5	17.0	--	16.5
15	--	--	--	--	--	--	--	--	--	18.0	--	17.5	20.0	--	19.5	18.0	--	16.0
16	--	--	--	--	--	--	--	13.5	--	19.0	--	17.5	20.0	--	19.5	17.5	--	16.5
17	--	--	--	--	--	--	--	16.0	--	15.0	--	18.5	20.0	--	19.5	17.0	--	16.5
18	--	--	--	--	--	--	--	15.5	--	14.5	--	19.5	20.0	--	19.5	17.0	--	16.0
19	--	--	--	--	11.0	--	--	15.0	--	14.5	--	19.5	20.0	--	20.0	16.0	--	15.5
20	--	--	--	--	--	--	--	16.0	--	14.5	--	19.5	20.0	--	20.0	15.5	--	15.5
21	--	--	--	--	--	--	--	17.0	--	16.0	--	22.0	20.5	--	20.0	15.5	--	15.5
22	--	--	--	--	--	--	--	17.0	--	16.5	--	22.0	20.5	--	20.0	16.5	--	15.5
23	--	--	--	--	--	--	--	17.0	--	16.5	--	22.0	20.5	--	19.5	16.0	--	15.5
24	--	--	--	--	--	--	--	17.0	--	15.5	--	21.5	20.5	--	20.0	16.0	--	15.0
25	--	--	--	--	--	--	--	16.0	--	14.5	--	21.0	20.5	--	20.0	15.0	--	14.0
26	--	--	--	--	--	--	--	14.5	--	13.5	--	21.0	20.5	--	20.0	14.5	--	13.5
27	--	--	--	--	--	--	--	14.5	--	13.5	--	20.5	20.5	--	20.0	14.5	--	13.5
28	--	--	--	--	--	--	--	14.0	--	13.5	--	20.0	20.0	--	19.5	13.5	--	12.5
29	--	--	--	--	--	--	--	16.5	--	13.5	--	20.0	19.5	--	19.0	12.5	--	11.0
30	--	--	--	--	--	--	--	16.5	--	13.5	--	20.0	19.0	--	18.0	12.0	--	10.5
31	--	--	--	--	--	--	--	--	--	--	--	20.0	18.0	--	17.5	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	18.7	--	17.9	20.2	--	19.8	16.3

11532600 WEST BRANCH MILL CREEK NEAR CRESCENT CITY, CALIF.

LOCATION.--Lat 41°42'05", long 124°05'43", in SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.8, T.15 N., R.1 E., Del Norte County, Redwood National Park, at bridge in Red Alder Campground, 6.3 miles southeast of Crescent City.

DRAINAGE AREA.--6.46 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1971 (partial-record station).

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	AMMONIA (NH <sub>4</sub> ) (MG/L)	NITRATE (NO <sub>3</sub> ) (MG/L)	NITRATE (N) (MG/L)	PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
NOV.									
05...	1145	--	--	--	--	--	--	--	180
05-06	0900-0900	.43	.43	.00	--	.08	.04	.02	--
06...	--	.28	.28	.00	1.2	--	.11	.05	--

DATE	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	AMMONIA (NH <sub>4</sub> ) (MG/L)	NITRATE (N) (MG/L)	PHOS- PHATE (PO <sub>4</sub> ) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (PO <sub>4</sub> ) (MG/L)
NOV.						
05-06	.43	.43	.00	.08	.04	.02

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	ALKA- LINITY AS CAC03 (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
NOV.									
05...	0900	--	11.0	10.4	95	57	61	7.2	--
05...	1000	--	--	--	--	--	--	--	1
05...	1100	--	11.0	10.2	94	57	61	7.1	--
05...	1300	--	11.0	10.1	93	41	61	6.7	--
05...	1500	--	11.0	10.3	95	41	61	7.6	--
05...	1600	--	--	--	--	--	--	--	3
05...	1700	--	11.0	10.4	95	41	60	7.0	--
05...	1900	--	11.0	10.4	95	41	66	7.1	--
05...	2100	--	11.0	10.2	94	25	68	6.8	7
05...	2300	--	11.0	10.4	95	41	63	6.8	--
06...	0100	--	11.0	10.1	93	41	66	7.7	--
06...	0300	--	10.5	10.5	95	33	56	6.9	--
06...	0500	--	10.5	10.5	95	41	59	7.1	--
06...	0700	--	10.5	10.4	94	49	60	6.8	--
06...	0900	--	10.5	10.4	94	57	60	6.8	--
JUNE									
08...	2100	4.8	10.5	10.0	91	78	70	6.1	35
08...	2400	4.8	10.5	10.0	91	82	70	6.0	--
09...	0300	4.8	10.0	10.4	93	74	70	7.2	23
09...	0600	4.8	10.5	10.4	94	82	69	6.1	--
09...	0900	4.8	11.0	10.4	95	82	70	7.2	21
09...	1200	4.8	11.0	11.0	101	90	68	7.0	--
09...	1500	4.8	11.5	10.4	96	82	66	7.1	24
09...	1800	4.8	11.0	10.4	95	90	68	7.2	--
09...	2100	4.8	11.0	9.8	90	82	62	6.9	52

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	OIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	OIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	OIS- SOLVED CHLO- RIDE (CL) (MG/L)
SALTON SEA BASIN												
10256000 WHITEWATER RIVER AT WHITE WATER, CALIF. (LAT 33°56'48", LONG 116°38'24") <u>1/</u>												
DEC., 1970												
14...	1330	16	15.0	9.2	45	12	12	4.0	181	0	30	4.0
MAR., 1971												
22...	1115	6.4	19.5	8.4	45	13	13	4.0	185	0	32	5.0
JUNE												
28...	1400	.87	25.5	7.5	46	12	14	4.0	186	0	36	5.0
AUG.												
25...	1200	1.0	29.0	--	37	11	15	5.0	178	0	32	4.3
SEP.												
13...	1015	4.2	24.5	7.5	40	13	14	4.0	176	0	37	5.0
MOJAVE RIVER BASIN												
10261100 MOJAVE RIVER AT THE FORKS, NEAR CEDAR SPRINGS, CALIF. (LAT 34°20'38", LONG 117°14'15") <u>1/</u>												
NOV., 1970												
06...	1315	6.4	15.0	9.7	26	6.0	40	3.0	129	0	44	12
JAN., 1971												
22...	1315	200	10.5	10.5	19	5.0	13	1.0	78	0	12	10
APR.												
21...	1200	25	13.0	9.5	19	6.0	19	1.0	103	0	12	7.0
JULY												
14...	1230	3.0	29.5	7.3	23	5.0	40	3.0	118	0	54	10
10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CALIF. (LAT 34°34'23", LONG 117°19'11") <u>1/</u>												
NOV., 1970												
06...	1430	34	18.0	7.4	45	10	44	4.0	190	0	44	30
JAN., 1971												
22...	1430	49	16.0	8.5	41	10	42	3.0	182	0	44	26
APR.												
21...	1400	38	15.0	8.4	39	9.0	37	3.0	172	0	38	22
JULY												
14...	1130	24	30.0	5.6	36	8.0	39	3.0	161	0	44	23
SANTA MARGARITA RIVER BASIN												
11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CALIF. (LAT 33°23'54", LONG 117°15'44") <u>1/</u>												
DEC., 1970												
17...	1130	5.0	13.0	9.8	104	39	127	4.0	319	0	186	174
MAR., 1971												
24...	1600	3.9	17.0	9.5	99	39	120	3.0	330	0	167	153
JUNE												
30...	1430	1.2	26.5	8.3	96	37	150	3.0	336	0	167	192
VENTURA RIVER BASIN												
11114500 MATILIJIA CREEK ABOVE RESERVOIR, NEAR MATILIJIA HOT SPRINGS, CALIF. <u>1/</u> (LAT 39°29'41", LONG 119°19'48")												
NOV., 1970												
04...	0945	--	15.0	10.3	93	36	58	3.0	238	0	223	59
JAN., 1971												
20...	1245	--	15.0	10.7	93	28	32	2.0	176	0	246	10
APR.												
19...	1115	--	16.0	10.3	103	30	40	2.0	207	0	256	17
JULY												
12...	1730	--	25.5	7.9	92	29	49	3.0	171	0	266	24
SANTA MARIA RIVER BASIN												
11138100 CUYAMA RIVER BELOW TWITCHELL DAM, CALIF. (LAT 34°56'40", LONG 120°17'30") <u>1/</u>												
JAN., 1971												
21...	0830	51	12.0	11.2	113	43	74	3.0	248	0	315	57
APR.												
19...	1615	6.8	22.0	14.5	127	72	113	5.0	196	0	555	75

1/ Records furnished by California Department of Water Resources,

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESIDUE 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)	ALKALI- LINEITY AS CACO3 (MG/L)	SPECIFIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
SALTON SEA BASIN--Continued 10256000 WHITEWATER RIVER AT WHITE WATER, CALIF.--Continued											
DEC., 1970											
14...	.8	2.3	0	198	.27	8.55	162	14	148	353	8.0
MAR., 1971											
22...	.8	2.0	0	210	.29	3.63	166	14	152	367	8.2
JUNE											
28...	.8	1.6	10	201	.27	.47	201	48	153	368	8.1
AUG.											
25...	1.0	--	20	--	.29	.57	140	0	146	338	8.1
SEP.											
13...	.8	1.8	10	193	.26	2.19	154	10	144	344	7.8
MOJAVE RIVER BASIN--Continued 10261100 MOJAVE RIVER AT THE FORKS, NEAR CEDAR SPRINGS, CALIF.--Continued											
NOV., 1970											
06...	2.3	2.4	120	220	.30	3.80	90	0	106	358	7.9
JAN., 1971											
22...	.3	3.0	60	128	.17	69.1	68	4	64	194	7.4
APR.											
21...	.8	.0	20	123	.17	8.30	72	0	84	220	8.2
JULY											
14...	1.9	.2	130	202	.27	1.64	78	0	97	337	7.5
10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CALIF.--Continued											
NOV., 1970											
06...	.5	5.8	100	299	.41	27.4	154	0	156	489	7.8
JAN., 1971											
22...	.4	6.5	90	270	.37	35.7	144	0	149	461	7.8
APR.											
21...	.6	2.5	60	242	.33	24.8	135	0	141	415	8.1
JULY											
14...	.4	4.0	100	241	.33	15.6	123	0	132	407	7.6
SANTA MARGARITA RIVER BASIN--Continued 11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CALIF.--Continued											
DEC., 1970											
17...	.4	.0	90	801	1.09	10.8	420	158	262	1320	7.9
MAR., 1971											
24...	.5	.5	130	767	1.04	8.08	408	137	271	1250	8.2
JUNE											
30...	.4	.0	200	859	1.17	2.78	392	116	276	1370	8.3
VENTURA RIVER BASIN--Continued 11114500 MATILILJA CREEK ABOVE RESERVOIR, NEAR MATILILJA HOT SPRINGS, CALIF.--Continued											
NOV., 1970											
04...	.6	.3	1000	635	.86	--	380	185	195	992	7.8
JAN., 1971											
20...	.5	.5	350	504	.69	--	347	203	144	757	8.0
APR.											
19...	.7	.0	510	572	.78	--	381	211	170	829	8.1
JULY											
12...	.6	.7	740	584	.79	--	349	209	140	825	8.0
SANTA MARIA RIVER BASIN--Continued 11138100 CUYAMA RIVER BELOW TWITCHELL DAM, CALIF.--Continued											
JAN., 1971											
21...	.6	.7	340	747	1.02	103	459	256	283	1090	8.2
APR.											
19...	.7	.0	310	1120	1.52	20.6	613	452	141	1490	8.3

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
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WALKER LAKE BASIN  
10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CALIF. (LAT 38°19'40", LONG 119°12'50")1/

APR., 1971												
14...	1240	168	9.5	9.3	25	4.3	16	115	0	3.5	80	0
MAY												
13...	1130	184	--	9.0	--	--	--	--	--	--	--	--
SEP.												
23...	1345	97	14.5	7.2	25	3.0	12	109	0	2.7	75	0

10296000 WEST WALKER RIVER BELOW LITTLE WALKER RIVER, NEAR COLEVILLE, CALIF. (LAT 38°22'47", LONG 119°26'57")1/

APR., 1971												
14...	1145	263	5.5	10.5	9.6	1.0	2.5	38	0	.6	28	0
MAY												
13...	1000	585	--	9.7	--	--	--	--	--	--	--	--
SEP.												
23...	1300	66	13.0	9.8	16	2.7	5.9	65	0	2.1	51	0

CARSON RIVER BASIN  
10305500 EAST FORK CARSON RIVER NEAR MARKLEEVILLE, CALIF. (LAT 38°41'20", LONG 119°45'44")1/  
(Formerly published as sta 10308200)

APR., 1971												
14...	1015	557	4.5	11.0	11	2.3	4.4	48	0	1.6	37	0
JULY												
12...	1625	497	18.0	8.0	--	--	--	--	--	--	--	--
SEP.												
23...	1140	92	--	9.4	12	2.7	6.6	58	0	2.5	--	--

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CALIF. (LAT 38°46'10", LONG 119°49'55")1/

APR., 1971												
14...	0930	245	3.0	11.2	6.6	2.1	2.2	27	0	.7	25	3
MAY												
13...	0800	366	--	10.8	--	--	--	--	--	--	--	--
SEP.												
23...	0900	20	8.0	9.7	9.3	1.2	3.6	43	0	.5	28	0

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
PYRAMID AND WINNEMUCCA LAKES BASIN								
10346000 TRUCKEE RIVER AT FARAD, CALIF. (LAT 39°25'41", LONG 120°01'59") <u>1/</u>								
APR., 1971								
15...	0745	1230		5.5	10.7	9.4	3.6	41
SEP.								
23...	1645	1060		14.5	8.3	9.2	3.8	42

1/ Records furnished by California Department of Water Resources.



## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	ALKA- LINITY AS CACO <sub>3</sub> (MG/L)	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
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WALKER LAKE BASIN--Continued  
10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CALIF.--Continued

APR., 1971											
14...	94	.8	226	8.1	20	--	--	--	--	--	--
MAY											
13...	--	--	220	--	--	0	0	0	0	.1	0
SEP.											
23...	89	.6	197	8.1	55	--	--	--	--	--	--

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

APR., 1971											
14...	31	.2	70	7.5	2	--	--	--	--	--	--
MAY											
13...	--	--	120	--	--	0	0	0	0	.0	0
SEP.											
23...	53	.4	121	8.1	2	--	--	--	--	--	--

CARSON RIVER BASIN--Continued  
10305500 EAST FORK CARSON RIVER NEAR MARKLEEVILLE, CALIF.--Continued

APR., 1971											
14...	39	.3	96	7.6	6	--	--	--	--	--	--
JULY											
12...	--	--	--	--	--	0	100	0	0	.0	10
SEP.											
23...	48	.4	112	7.9	13	--	--	--	--	--	--

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CALIF.--Continued

APR., 1971											
14...	22	.2	50	7.3	5	--	--	--	--	--	--
MAY											
13...	--	--	42	--	--	0	100	0	0	.1	0
SEP.											
23...	35	.3	74	7.7	1	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS HARD- (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO <sub>3</sub> (MG/L)	PERCENT SODIUM	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)
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PYRAMID AND WINNEMUCCA LAKES BASIN--Continued  
10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued

APR., 1971								
15...	3.1	31	0	34	--	83	7.5	4
SEP.								
23...	3.3	--	--	34	--	78	7.7	2

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BICAR- BONATE (HCO3) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)			
TULARE LAKE BASIN												
11208602 FRANKLIN CREEK NEAR HAMMOND, CALIF. (LAT 36°25'50", LONG 118°35'00")												
JULY, 1971												
06...	1300	12.0	7.9	101	16	.08	.26	.14	.12			
AUG.												
09...	1215	13.5	7.6	100	18	.29	.55	.45	.10			
SEP.												
07...	1115	8.0	8.8	102	23	.08	.34	.17	.17			
27...	1330	6.0	9.1	100	30	.10	.31	.12	.19			
11208603 WHITE CHIEF CREEK NEAR HAMMOND, CALIF. (LAT 36°26'00", LONG 118°35'20")												
JULY, 1971												
06...	1500	14.0	7.3	96	30	.09	.19	.15	.04			
AUG.												
09...	1315	15.0	7.0	95	54	.03	.23	.19	.04			
SEP.												
07...	1215	12.0	8.5	108	48	.22	.39	.34	.05			
27...	1445	3.5	9.8	101	52	.09	.19	.17	.02			
11208606 SPRING CREEK NEAR HAMMOND, CALIF. (LAT 36°26'40", LONG 118°35'50")												
JULY, 1971												
06...	1710	8.0	8.8	101	54	.08	.24	.15	.09			
AUG.												
09...	1445	10.0	8.2	99	70	.08	.31	.25	.06			
SEP.												
07...	1445	10.0	8.5	102	92	.26	.44	.38	.06			
27...	1630	5.0	9.3	99	98	.08	.21	.13	.08			
11208619 MOSQUITO CREEK NEAR HAMMOND, CALIF. (LAT 36°27'00", LONG 118°37'00")												
JULY, 1971												
07...	0815	9.0	8.5	99	6	.02	.18	.12	.06			
AUG.												
09...	1645	13.5	7.8	100	8	.22	.40	.33	.07			
SEP.												
07...	1700	10.0	8.1	96	8	.05	.34	.17	.17			
28...	0900	4.5	9.4	97	5	.15	.53	.18	.35			
DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM SIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
11222700 KINGS RIVER AT PEOPLES WEIR, NEAR KINGSBURG, CALIF. (LAT 36°29'06", LONG 119°32'22") <sup>1/</sup>												
MAR.												
02...	0850	945	9.0	11.1	6.7	1.3	3.1	.6	28	0	2.0	2.4
JULY												
06...	1320	1550	19.0	9.6	4.5	.5	2.2	.7	18	0	1.5	.0
DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM SIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
SAN JOAQUIN RIVER BASIN												
11313050 DELTA-MENDOTA CANAL NEAR MENDOTA, CALIF. (LAT 36°47'11", LONG 119°32'22") <sup>1/</sup>												
MAR.												
03...	1305	1483	10.5	13.0	33	14	63	1.9	96	0		
APR.												
29...	0700	2114	14.5	9.4	--	--	--	--	--	--		
MAY												
11...	0745	1596	19.0	10.6	39	19	90	--	135	0		
JULY												
06...	1520	2618	24.5	7.1	15	6.5	17	1.6	65	0		

<sup>1/</sup> Records furnished by California Department of Water Resources.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED URTHO- PHOS- PHORUS (P) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LITY AS CACO3 (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH
								(UNITS)

TULARE LAKE BASIN--Continued  
11208602 FRANKLIN CREEK NEAR HAMMOND, CALIF.--Continued

JULY, 1971								
06...	.06	.040	.020	18	5	13	45	7.2
AUG.								
09...	.16	.050	.020	18	3	15	60	6.6
SEP.								
07...	.09	.030	.010	27	8	19	26	6.8
27...	.02	.030	.000	32	7	25	75	7.3

## 11208603 WHITE CHIEF CREEK NEAR HAMMOND, CALIF.--Continued

JULY, 1971								
06...	.06	.040	.020	36	11	25	90	7.0
AUG.								
09...	.16	.050	.020	54	10	44	140	6.9
SEP.								
07...	.12	.040	.020	56	17	39	120	6.7
27...	.08	.050	.010	58	15	43	120	7.2

## 11208606 SPRING CREEK NEAR HAMMOND, CALIF.--Continued

JULY, 1971								
06...	.07	.030	.020	46	2	44	100	6.4
AUG.								
09...	.17	.040	.020	70	13	57	150	7.8
SEP.								
07...	.12	.060	.020	84	9	75	175	7.3
27...	.05	.040	.000	100	20	80	180	7.4

## 11208619 MOSQUITO CREEK NEAR HAMMOND, CALIF.--Continued

JULY, 1971								
07...	.10	.030	.020	6	1	5	14	6.8
AUG.								
09...	.11	.050	.020	4	0	7	20	6.2
SEP.								
07...	.12	.040	.010	5	0	7	21	7.3
28...	.03	.030	.030	5	1	4	35	7.3

DATE	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED (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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH
												(UNITS)

## 11222700 KINGS RIVER AT PEOPLES WEIR, NEAR KINGSBURG, CALIF.--Continued

MAR.												
02...	.7	0	38	.05	97.0	22	0	23	23	.3	58	7.4
JULY												
06...	.3	0	34	.05	142	13	0	15	25	.3	40	7.0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED (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)	ALKA- LITY AS CACO3 (MG/L)
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SAN JOAQUIN RIVER BASIN--Continued  
11313050 DELTA-MENDOTA CANAL NEAR MENDOTA, CALIF.--Continued

MAR.										
03...	82	86	4.2	200	330	.45	1320	140	61	79
APR.										
28...	--	--	--	--	--	--	--	--	--	--
MAY										
11...	--	112	5.7	--	--	--	--	175	64	111
JULY										
06...	20	19	2.4	0	127	.17	898	64	11	53

DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
MAR.										
03...	49	2.3	602	8.1	--	--	--	--	--	--
APR.										
28...	--	--	352	7.7	0	100	0	0	.0	0
MAY										
11...	--	3.0	771	8.3	--	--	--	--	--	--
JULY										
06...	36	.9	220	7.9	--	--	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SI02) (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
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## 11337705 GOOSE LAKE AT WILLOW RANCH, CALIF. (LAT 41°54'14", LONG 120°21'55")

OCT., 1970										
07...	1045	479400	45	10	3.4	760	54	1140	150	140
MAY, 1971										
13...	1250	858300	44	8.8	3.5	300	26	502	58	61

## 11337715 GOOSE LAKE NEAR EVERLY RANCH, NEAR WILLOW RANCH, CALIF. (LAT 41°52'17", LONG 120°29'49")

OCT., 1970										
07...	1215	479400	48	12	3.6	687	50	1060	125	125
MAY, 1971										
13...	0935	858300	43	7.7	3.4	300	26	524	53	61

## 11337720 GOOSE LAKE AT WEST SHORE LOG LANDING, NEAR WILLOW RANCH, CALIF. (LAT 41°57'51", LONG 120°29'37")

OCT., 1970										
07...	0820	479400	43	11	3.8	685	50	1040	145	120
MAY, 1971										
13...	1020	858300	42	7.9	3.3	280	25	468	59	58

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)
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## 11337705 GOOSE LAKE AT WILLOW RANCH, CALIF.--Continued

OCT., 1970									
07...	255	1.3	1.8	--	.00	.2	4.2	--	5100
MAY, 1971									
13...	100	.6	--	.66	--	--	--	--	2500

## 11337715 GOOSE LAKE NEAR EVERLY RANCH, NEAR WILLOW RANCH, CALIF.--Continued

OCT., 1970									
07...	260	1.3	1.9	--	.00	.4	2.4	--	4400
MAY, 1971									
13...	110	.6	--	.30	--	--	--	--	4100

## 11337720 GOOSE LAKE AT WEST SHORE LOG LANDING, NEAR WILLOW RANCH, CALIF.--Continued

OCT., 1970									
07...	225	1.1	1.4	--	.00	.2	2.1	--	4500
MAY, 1971									
13...	100	.6	--	.43	--	--	--	--	2300

DATE	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)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINIT- AS CAC03 (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	PH (UNITS)
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## 11337705 GOOSE LAKE AT WILLOW RANCH, CALIF.--Continued

OCT., 1970									
07...	2330	1980	3.17	39	0	1180	94	53	9.0
MAY, 1971									
13...	--	854	1.16	36	0	508	90	22	8.6

## 11337715 GOOSE LAKE NEAR EVERLY RANCH, NEAR WILLOW RANCH, CALIF.--Continued

OCT., 1970									
07...	1930	1840	2.62	45	0	1070	93	45	8.9
MAY, 1971									
13...	--	868	1.18	33	0	518	91	23	8.5

## 11337720 GOOSE LAKE AT WEST SHORE LOG LANDING, NEAR WILLOW RANCH, CALIF.--Continued

OCT., 1970									
07...	1930	1790	2.62	43	0	1090	93	45	9.0
MAY, 1971									
13...	--	810	1.10	33	0	482	90	21	8.6

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL RESI- DUAL CHLO- RINE (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)
SACRAMENTO RIVER BASIN									
11341300 SACRAMENTO RIVER ABOVE LAKE SISKIYOU, NEAR MT. SHASTA, CALIF. (LAT 41°17'13", LONG 122°22'31")									
NOV., 1970									
11...	1515	177	7.0	10.3	97	--	--	.14	--
JAN., 1971									
26...	0940	133	2.5	12.1	101	--	--	.10	--
MAR.									
25...	1000	192	3.0	11.5	98	--	--	.35	.000
MAY									
12...	1200	--	6.0	10.9	100	--	--	.28	--
JUNE									
16...	1420	167	14.0	9.1	100	--	--	.24	--
JULY									
14...	0815	37	13.0	9.2	100	--	--	.25	.000
AUG.									
10...	1315	17	21.0	7.5	95	--	--	.32	.000
SEP.									
15...	1540	8.8	17.0	8.6	101	--	.15	.12	.000
11341305 DEER CREEK NEAR MT SHASTA, CALIF. (LAT 41°18'01", LONG 122°22'53")									
NOV., 1970									
10...	1345	3.7	7.0	10.1	95	--	--	.14	--
MAR., 1971									
24...	1320	--	5.0	11.0	99	--	--	1.4	.000
MAY									
11...	0810	39	6.0	10.9	100	--	--	.38	--
JUNE									
16...	0945	5.0	10.5	9.8	100	--	--	.23	--
JULY									
13...	1045	2.5	12.0	9.3	99	--	--	.25	.000
AUG.									
10...	0720	1.2	15.5	8.4	95	--	--	.25	.000
SEP.									
15...	0740	.95	10.0	9.7	99	--	.15	.13	.000

DATE	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	FECAL COLI- FORM (COL. PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
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## 11341300 SACRAMENTO RIVER ABOVE LAKE SISKIYOU, NEAR MT SHASTA, CALIF.--Continued

NOV., 1970								
11...	--	.05	.000	--	100	8.0	--	20
JAN., 1971								
26...	--	.00	.000	--	116	7.8	32	428
MAR.								
25...	.10	--	.050	.030	116	7.6	1	27
MAY								
12...	.00	--	.050	.030	70	7.9	0	35
JUNE								
16...	.02	--	.020	--	85	7.9	0	26
JULY								
14...	.01	.01	.020	--	136	8.0	2	800
AUG.								
10...	.13	.1	.020	--	174	8.2	1	550
SEP.								
15...	.03	.03	.040	--	194	8.3	1	300

## 11341305 DEER CREEK NEAR MT SHASTA, CALIF.--Continued

NOV., 1970								
10...	--	.02	.000	--	197	8.1	--	48
MAR., 1971								
24...	.00	--	.10	.030	111	7.4	0	52
MAY								
11...	.00	--	.050	.020	108	7.9	0	96
JUNE								
16...	.00	--	.030	--	157	8.0	2	240
JULY								
13...	.07	.07	.020	--	180	8.1	1	1200
AUG.								
10...	.04	.04	.040	--	192	8.1	12	4600
SEP.								
15...	.02	.02	.040	--	194	8.2	4	3500

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL RESI- DUAL CHLO- RINE (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)
SACRAMENTO RIVER BASIN--Continued									
11341310	SCOTT CAMP CREEK AT DIVERSION DAM, NEAR MT SHASTA, CALIF. (LAT 41°16'22", LONG 122°20'47")								
NOV., 1970									
12...	0830	11	4.5	11.0	96	--	--	.35	--
JAN., 1971									
27...	1545	8.5	2.0	12.4	102	--	--	.08	--
MAR.									
26...	0945	110	3.0	12.0	101	--	--	.95	.000
MAY									
12...	1615	77	6.5	10.9	101	--	--	.30	--
JUNE									
16...	1530	14	11.5	9.5	100	--	--	.20	--
JULY									
15...	0750	4.0	11.0	9.7	100	--	--	.51	.000
AUG.									
10...	1515	2.1	15.0	8.8	99	--	--	.31	.000
SEP.									
15...	1500	1.6	11.0	9.8	101	--	.17	.14	.000
11341315	CASTLE LAKE CREEK AT ROAD CROSSING, NEAR MT SHASTA, CALIF. (LAT 41°16'07", LONG 122°20'15")								
NOV., 1970									
12...	0945	12	5.5	10.9	97	--	--	.08	--
JAN., 1971									
27...	1455	8.4	2.5	12.1	101	--	--	.03	--
MAR.									
26...	0815	97	3.0	12.0	101	--	--	.45	.000
MAY									
12...	1430	60	6.5	10.9	101	--	--	.32	--
JUNE									
17...	0800	6.5	11.0	9.6	99	--	--	.25	--
JULY									
15...	0830	1.5	12.5	9.4	100	--	--	.36	.000
AUG.									
11...	1500	.34	17.0	7.1	84	--	--	.36	.000
SEP.									
15...	1320	.22	13.0	8.2	88	--	.25	.19	.000
11341325	WAGON CREEK NEAR MT SHASTA, CALIF. (LAT 41°17'31", LONG 122°19'24")								
NOV., 1970									
10...	1225	43	8.0	10.1	96	--	--	.48	--
JAN., 1971									
26...	1145	72	4.0	11.8	103	--	--	.34	--
MAR.									
24...	1415	87	8.0	10.6	102	--	--	.90	.000
MAY									
11...	1015	73	11.0	9.6	99	--	--	.22	--
JUNE									
16...	1045	49	12.0	9.5	100	--	--	.43	--
JULY									
13...	1355	25	14.5	9.0	100	--	--	.31	.000
AUG.									
10...	0930	20	12.5	9.4	100	--	--	.42	.000
SEP.									
13...	1630	19	15.5	8.8	100	--	.69	.18	.000
11341341	BIG SPRINGS CREEK ABOVE HATCHERY, NEAR MT SHASTA, CALIF. (LAT 41°18'32", LONG 122°19'44")								
OCT., 1970									
01...	0915	--	7.0	10.4	98	--	--	.35	--
NOV.									
10...	0800	--	7.0	10.3	97	--	--	.58	--
MAR., 1971									
24...	0840	16	7.0	10.7	101	--	--	.35	.000
MAY									
12...	0840	16	8.5	10.3	100	--	--	.15	--
JUNE									
15...	0800	15	8.0	10.4	100	--	--	.19	--
JULY									
13...	0730	16	7.5	10.5	100	--	--	.28	.000

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	FECAL COLI- FORM (COL. PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
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## SACRAMENTO RIVER BASIN--Continued

11341310 SCOTT CAMP CREEK AT DIVERSION DAM, NEAR MT SHASTA, CALIF.--Continued

NOV., 1970								
12...	--	.02	.000	--	44	8.0	13	30
JAN., 1971								
27...	--	.00	.000	--	48	7.7	1	7
MAR.								
26...	.10	--	.10	.030	33	6.9	3	39
MAY								
12...	.01	--	.050	.020	25	7.4	0	26
JUNE								
16...	.02	--	.030	--	39	7.3	1	150
JULY								
15...	.04	.04	.020	--	76	7.7	0	500
AUG.								
10...	.05	.05	.030	--	94	7.9	7	2300
SEP.								
15...	.03	.03	.060	--	104	8.0	2	330

11341315 CASTLE LAKE CREEK AT ROAD CROSSING, NEAR MT SHASTA, CALIF.--Continued

NOV., 1970								
12...	--	.02	.000	--	46	7.7	--	17
JAN., 1971								
27...	--	.00	.000	--	46	7.8	11	192
MAR.								
26...	.10	--	.10	.030	39	7.0	4	82
MAY								
12...	.00	--	.040	.020	28	6.9	0	27
JUNE								
17...	.02	--	.040	--	41	7.2	1	84
JULY								
15...	.06	.06	.020	--	56	7.5	0	240
AUG.								
11...	.06	.06	.030	--	70	--	7	3000
SEP.								
15...	.06	.06	.040	--	82	7.0	0	670

11341325 WAGON CREEK NEAR MT SHASTA, CALIF.--Continued

NOV., 1970								
10...	--	.3	.080	--	120	8.0	32	400
JAN., 1971								
26...	--	.3	.060	--	104	8.1	4	54
MAR.								
24...	.20	--	.15	.10	102	7.6	10	1360
MAY								
11...	.30	--	.090	.070	116	8.0	12	2800
JUNE								
16...	.27	--	.070	--	116	8.1	30	2600
JULY								
13...	.55	.5	.12	--	121	7.9	100	3000
AUG.								
10...	.61	.6	.080	--	120	7.9	60	4900
SEP.								
13...	.51	.5	.12	--	117	8.0	36	4200

11341341 BIG SPRINGS CREEK ABOVE HATCHERY, NEAR MT SHASTA, CALIF.--Continued

OCT., 1970								
01...	--	.07	.12	--	--	--	28	--
NOV.								
10...	--	.1	.12	--	96	7.5	6	20
MAR., 1971								
24...	.20	--	.20	.15	97	7.2	1	260
MAY								
12...	.10	--	.17	.15	97	7.7	3	1000
JUNE								
15...	.09	--	.15	--	96	7.8	22	400
JULY								
13...	.09	.09	.15	--	85	7.5	16	460

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL RESI- DUAL CHLO- RINE (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)
SACRAMENTO RIVER BASIN--Continued									
11341342 BIG SPRINGS CREEK BELOW HATCHERY, NEAR MT SHASTA, CALIF. (LAT 41°18'22", LONG 122°19'29")									
OCT., 1970									
01...	0945	--	7.0	9.5	90	--	--	.47	--
NOV.									
10...	0900	--	6.5	9.7	90	--	--	.45	--
MAR., 1971									
24...	1020	9.3	7.5	10.0	95	--	--	.60	.000
MAY									
12...	1015	9.3	9.0	9.3	92	--	--	.45	--
JUNE									
15...	0845	7.1	8.5	9.6	93	--	--	.66	--
JULY									
13...	0800	5.8	8.0	9.8	94	--	--	.48	.000
AUG.									
10...	1115	4.4	11.0	8.6	89	--	--	.56	.010
SEP.									
15...	0930	2.6	8.0	9.4	90	--	.55	.31	.000
11341344 COLD CREEK ABOVE LAKE SISKIYOU, NEAR MT SHASTA, CALIF. (LAT 41°17'22", LONG 122°19'11")									
OCT., 1970									
01...	1030	20	8.5	10.6	102	--	--	.34	--
NOV.									
10...	1025	26	7.0	10.2	95	--	--	.37	--
JAN., 1971									
27...	1015	29	4.5	11.7	103	--	--	.32	--
MAR.									
24...	1600	24	10.0	10.2	102	--	--	.75	.000
MAY									
11...	1210	19	13.0	9.4	101	--	--	.42	--
JUNE									
16...	1145	16	12.5	9.4	100	--	--	.42	--
JULY									
13...	1610	14	16.5	8.6	100	--	--	.36	.010
AUG.									
11...	1630	10	17.5	8.1	95	--	--	.35	.010
SEP.									
15...	1015	13	9.5	10.2	101	--	.38	.23	.000
11341360 LAKE SISKIYOU NEAR MT SHASTA, CALIF. (LAT 41°16'46", LONG 122°19'43")									
NOV., 1970									
10...	1545	--	10.5	7.9	81	--	--	.22	--
10...	1600	--	11.0	7.9	81	--	--	.14	--
JAN., 1971									
27...	1130	--	3.0	11.4	96	--	--	.23	--
27...	1215	--	2.0	12.5	102	--	--	.27	--
MAR.									
25...	1415	--	4.0	11.6	101	--	--	.55	.000
25...	1505	--	5.0	11.8	105	--	--	.90	.000
MAY									
11...	1400	--	6.5	10.0	93	--	--	.28	--
11...	1430	--	11.0	10.7	110	--	--	.18	--
JUNE									
14...	1545	--	7.5	9.7	92	--	--	.24	--
14...	1620	--	16.5	9.9	114	--	--	.26	--
JULY									
14...	1500	--	8.0	8.5	82	--	--	.66	.000
14...	1530	--	21.5	8.6	110	--	--	.45	.000
AUG.									
09...	1500	--	8.0	8.2	79	--	--	.40	.000
09...	1640	--	25.5	7.9	108	--	--	.33	.000
SEP.									
14...	1415	--	20.0	8.6	106	--	.22	.19	.000
14...	1430	--	7.5	7.5	71	--	.24	.17	.000
11341365 SACRAMENTO RIVER ABOVE SEWAGE EFFLUENT, NEAR MT SHASTA, CALIF. (LAT 41°16'49", LONG 122°19'21")									
NOV., 1970									
11...	1000	--	10.5	9.8	99	.00	--	.29	--
JUNE, 1971									
15...	1410	--	16.0	9.0	101	.00	--	.26	--
JULY									
14...	1040	--	16.5	8.8	100	.00	--	.26	.000
AUG.									
11...	0815	--	8.5	10.2	98	.00	--	.29	.000
SEP.									
14...	0915	--	11.5	10.0	101	.00	.29	.20	.000



## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	FECAL COLI- FORM (COL. PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
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## SACRAMENTO RIVER BASIN--Continued

11341342 BIG SPRINGS CREEK BELOW HATCHERY, NEAR MT SHASTA, CALIF.--Continued

OCT., 1970								
01...	--	.1	.29	--	--	--	8	120
NOV.								
10...	--	.1	.22	--	99	7.4	4	90
MAR., 1971								
24...	.20	--	.30	.20	100	7.0	1	1200
MAY								
12...	.20	--	.30	.25	106	7.3	46	2800
JUNE								
15...	.16	--	.30	--	99	7.8	14	620
JULY								
13...	.16	.1	.22	--	98	7.3	16	1100
AUG.								
10...	.19	.1	.25	--	100	7.6	48	3400
SEP.								
15...	.24	.2	.24	--	99	7.6	16	2500

11341344 COLD CREEK ABOVE LAKE SISKIYOU, NEAR MT SHASTA, CALIF.--Continued

OCT., 1970								
01...	--	.1	.19	--	--	--	150	510
NOV.								
10...	--	.1	.12	--	107	7.7	89	400
JAN., 1971								
27...	--	.2	.090	--	101	8.1	30	80
MAR.								
24...	.20	--	.20	.15	103	7.3	25	620
MAY								
11...	.20	--	.20	.12	105	7.9	64	3900
JUNE								
16...	.16	--	.20	--	105	8.1	46	800
JULY								
13...	.25	.2	.20	--	105	7.8	100	4600
AUG.								
11...	.31	.3	.16	--	108	7.8	128	8900
SEP.								
15...	.15	.1	.15	--	112	8.0	200	8000

11341360 LAKE SISKIYOU NEAR MT SHASTA, CALIF.--Continued

NOV., 1970								
10...	--	.09	.030	--	118	7.6	--	16
10...	--	.09	.030	--	118	7.7	--	18
JAN., 1971								
27...	--	.1	.030	--	104	7.7	8	860
27...	--	.05	.040	--	100	7.8	0	420
MAR.								
25...	.00	--	.10	.030	113	7.5	1	35
25...	.00	--	.10	.030	112	7.6	0	60
MAY								
11...	.00	--	.060	.030	98	7.6	0	78
11...	.03	--	.060	.030	85	7.9	2	290
JUNE								
14...	.03	--	.050	--	89	7.4	0	190
14...	.00	--	.040	--	85	8.3	0	12
JULY								
14...	.05	.05	.040	--	89	7.4	0	450
14...	.03	.03	.020	--	98	8.4	0	110
AUG.								
09...	.08	.08	.030	--	88	7.5	0	1100
09...	.04	.04	.030	--	116	8.4	0	790
SEP.								
14...	.03	.03	.040	--	121	8.5	0	1100
14...	.07	.07	.050	--	88	7.4	0	480

11341365 SACRAMENTO RIVER ABOVE SEWAGE EFFLUENT, NEAR MT SHASTA, CALIF.--Continued

NOV., 1970								
11...	--	.1	.040	--	121	8.0	7	60
JUNE, 1971								
15...	.01	--	.050	--	97	8.2	0	330
JULY								
14...	.02	.02	.050	--	110	8.0	5	1700
AUG.								
11...	.02	.02	.040	--	103	7.9	1	2100
SEP.								
14...	.09	.09	.060	--	116	7.9	0	2800

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL RESI- DUAL CHLO- RINE (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)
SACRAMENTO RIVER BASIN--Continued									
11341370	MT SHASTA SEWAGE EFFLUENT AT WEIR, NEAR MT SHASTA, CALIF. (LAT 41°16'51", LONG 122°19'16")								
NOV., 1970									
11...	1445	--	9.0	--	--	1.8	--	--	--
JUNE, 1971									
15...	1330	.76	22.0	--	--	4.8	--	--	--
JULY									
14...	1010	.49	21.0	--	--	2.3	--	--	--
SEP.									
14...	0815	.55	18.0	--	--	3.1	--	--	--
16...	0815	--	16.5	--	--	3.2	--	--	--
11341375	MT SHASTA SEWAGE EFFLUENT AT RIVER, NEAR MT SHASTA, CALIF. (LAT 41°16'48", LONG 122°19'21")								
NOV., 1970									
11...	1020	--	--	--	--	1.1	--	8.3	--
JUNE, 1971									
15...	1530	--	21.0	--	--	3.9	--	--	--
JULY									
14...	1130	--	20.0	--	--	.70	--	--	--
SEP.									
14...	0930	--	15.5	--	--	1.9	--	--	--
11341380	SACRAMENTO RIVER BELOW SEWAGE EFFLUENT, NEAR MT SHASTA, CALIF. (LAT 41°16'47", LONG 122°19'21")								
NOV., 1970									
11...	1045	--	10.5	9.8	99	.00	--	.28	--
MAY, 1971									
13...	0930	--	9.5	10.3	101	--	--	.22	--
JUNE									
15...	1435	--	16.0	9.0	101	.00	--	.40	--
JULY									
14...	1115	--	17.0	8.8	101	.00	--	.35	.000
AUG.									
11...	0845	--	8.5	10.2	98	.00	--	.25	.000
SEP.									
14...	1000	--	11.5	10.0	101	.00	.34	.28	.000
11341440	SACRAMENTO RIVER AT SHASTA RETREAT, NEAR DUNSMUIR, CALIF. (LAT 41°14'13", LONG 122°16'32")								
OCT., 1970									
02...	0745	--	13.0	--	--	--	--	.05	--
NOV.									
12...	1450	332	9.5	10.2	98	--	--	.18	--
JAN., 1971									
28...	0810	--	4.5	11.8	101	--	--	.18	--
MAR.									
23...	1345	--	6.0	11.3	100	--	--	.55	.000
MAY									
13...	1400	--	10.5	10.3	101	--	--	.22	--
JUNE									
17...	1245	--	15.0	9.3	101	--	--	.29	--
JULY									
15...	1410	171	16.0	9.2	101	--	--	.35	.000
AUG.									
12...	0715	151	9.5	10.3	99	--	--	.27	.000
SEP.									
16...	0900	136	8.5	10.7	101	--	.20	.12	.000
11341460	SACRAMENTO RIVER AT SODA CREEK ROAD, NEAR DUNSMUIR, CALIF. (LAT 41°09'39", LONG 122°17'33")								
OCT., 1970									
02...	0930	126	8.0	11.1	101	--	--	.16	--
NOV.									
13...	0825	329	7.5	10.8	97	--	--	.17	--
JAN., 1971									
28...	0900	362	4.0	12.0	99	--	--	.79	--
MAR.									
23...	1015	566	6.0	11.4	99	--	--	.65	--
MAY									
13...	1500	1280	11.5	10.1	100	--	--	.20	--
JUNE									
17...	1315	410	16.0	9.6	104	--	--	.40	--
JULY									
15...	1545	184	19.0	9.0	105	--	--	.44	.000
AUG.									
12...	0945	161	12.5	10.2	103	--	--	1.3	.000
SEP.									
16...	1415	147	14.0	10.2	106	--	.18	.12	.000

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	FECAL COLI- FORM (COL. PER 100 ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
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## SACRAMENTO RIVER BASIN--Continued

11341370 MT SHASTA SEWAGE EFFLUENT AT WEIR, NEAR MT SHASTA, CALIF.--Continued

NOV., 1970								
11...	--	--	--	--	--	--	--	--
JUNE, 1971								
15...	--	--	--	--	--	--	--	--
JULY								
14...	--	--	--	--	--	--	--	--
SEP.								
14...	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	0	2500

11341375 MT SHASTA SEWAGE EFFLUENT AT RIVER, NEAR MT SHASTA, CALIF.--Continued

NOV., 1970								
11...	--	--	--	--	187	--	0	0
JUNE, 1971								
15...	--	--	--	--	--	--	0	0
JULY								
14...	--	--	--	--	--	--	0	0
SEP.								
14...	--	--	--	--	--	--	0	26000

11341380 SACRAMENTO RIVER BELOW SEWAGE EFFLUENT, NEAR MT SHASTA, CALIF.--Continued

NOV., 1970								
11...	--	.1	.070	--	121	8.0	3	420
MAY, 1971								
13...	.00	--	.060	.040	88	8.1	17	400
JUNE								
15...	.01	--	.060	--	89	8.0	0	210
JULY								
14...	.03	.03	.050	--	109	8.0	2	2800
AUG.								
11...	.01	.01	.030	--	105	7.8	2	1100
SEP.								
14...	.06	.06	.11	--	117	8.0	0	2500

11341440 SACRAMENTO RIVER AT SHASTA RETREAT, NEAR DUNSMUIR, CALIF.--Continued

OCT., 1970								
02...	--	.1	.10	--	--	--	6	12
NOV.								
12...	--	.09	.050	--	126	7.8	--	220
JAN., 1971								
28...	--	.1	.050	--	118	7.6	18	120
MAR.								
23...	.10	--	.15	.10	111	7.3	6	243
MAY								
13...	.00	--	.070	.050	86	7.6	10	650
JUNE								
17...	.04	--	.050	--	99	7.5	0	940
JULY								
15...	.08	.08	.080	--	122	7.6	2	1200
AUG.								
12...	.06	.06	.040	--	123	7.6	4	1400
SEP.								
16...	.08	.08	.090	--	127	7.8	6	3600

11341460 SACRAMENTO RIVER AT SODA CREEK ROAD, NEAR DUNSMUIR, CALIF.--Continued

OCT., 1970								
02...	--	.09	.10	--	--	--	2	52
NOV.								
13...	--	.09	.040	--	121	7.7	--	220
JAN., 1971								
28...	--	.09	.030	--	99	7.8	24	200
MAR.								
23...	.10	--	.15	.10	100	7.4	81	1500
MAY								
13...	.00	--	.070	.050	86	8.0	13	850
JUNE								
17...	.03	--	.050	--	99	8.1	8	1100
JULY								
15...	.04	.04	.080	--	123	8.3	2	1400
AUG.								
12...	.04	.04	.040	--	125	8.1	28	2000
SEP.								
16...	.06	.06	.10	--	132	8.3	0	640

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
SACRAMENTO RIVER BASIN--Continued											
11345500 SOUTH FORK PIT RIVER NEAR LIKELY, CALIF. (LAT 41°13'51", LONG 120°26'10") <u>1/</u>											
OCT., 1970											
07...	0930	38	7.0	11.5	11	4.5	7.4	3.3	69	0	1.6
JUNE, 1971											
04...	0840	1020	10.5	10.7	8.4	4.1	5.0	2.2	.56	0	.0
11365000 PIT RIVER NEAR MONTGOMERY CREEK, CALIF. (LAT 40°50'36", LONG 122°00'58") <u>1/</u>											
NOV., 1970											
17...	0930	5250	8.0	11.3	--	--	8.7	--	68	0	--
JAN., 1971											
13...	1200	5740	4.0	12.9	--	--	6.8	--	73	0	--
MAR.											
16...	0850	7960	6.5	11.7	--	--	7.2	--	71	0	--
MAY											
11...	0905	10300	12.0	12.6	9.5	4.2	7.2	1.4	65	0	1.2
JULY											
07...	0955	5120	17.5	10.0	--	--	8.9	--	76	0	--
SEP.											
22...	0910	7240	15.0	10.0	9.1	6.2	9.3	1.8	80	0	.0
11368000 MCCLLOUD RIVER ABOVE SHASTA LAKE, CALIF. (LAT 40°57'30", LONG 122°13'07") <u>1/</u>											
NOV., 1970											
16...	0800	439	8.0	11.3	--	--	3.8	--	62	0	--
JAN., 1971											
12...	0900	465	5.0	11.1	--	--	2.4	--	55	0	--
MAR.											
15...	0840	1450	6.0	12.6	11	2.8	2.4	.5	48	0	2.1
MAY											
10...	0820	647	10.0	10.8	--	--	3.2	--	56	0	--
JULY											
06...	0810	359	15.0	10.1	13	2.8	3.6	.9	60	0	2.6
SEP.											
21...	0805	296	11.5	10.6	--	--	5.1	--	61	0	--

1/ Records furnished by California Department of Water Resources.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (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)	ALKALINITY AS CaCO3 (MG/L)	PERCENT SODIUM
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## SACRAMENTO RIVER BASIN--Continued

## 11345500 SOUTH FORK PIT RIVER NEAR LIKELY, CALIF.--Continued

OCT., 1970										
07...	1.9	.1	0	100	.14	10.3	46	0	57	24
JUNE, 1971										
04...	.0	.3	100	86	.12	237	38	0	46	21

## 11365000 PIT RIVER NEAR MONTGOMERY CREEK, CALIF.--Continued

NOV., 1970										
17...	3.1	--	100	--	--	--	53	0	56	--
JAN., 1971										
13...	4.3	--	100	--	--	--	54	0	60	--
MAR.										
16...	2.3	--	100	--	--	--	50	0	58	--
MAY										
11...	1.0	.1	--	90	.12	2500	41	0	53	27
JULY										
07...	2.4	--	--	--	--	--	53	0	62	--
SEP.										
22...	3.9	.1	100	104	.14	2030	48	0	66	29

## 11368000 MCCLLOUD RIVER ABOVE SHASTA LAKE, CALIF.--Continued

NOV., 1970										
16...	2.3	--	0	--	--	--	51	0	51	--
JAN., 1971										
12...	2.1	--	--	--	--	--	45	0	45	--
MAR.										
15...	.0	.0	0	53	.07	208	39	0	39	12
MAY										
10...	1.1	--	0	--	--	--	39	0	46	--
JULY										
06...	.9	.0	0	74	.10	71.7	44	0	49	15
SEP.										
21...	1.4	--	0	--	--	--	44	0	50	--

DATE	SODIUM AD-SORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TURBIDITY (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BARIUM (BA) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)
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## 11345500 SOUTH FORK PIT RIVER NEAR LIKELY, CALIF.--Continued

OCT., 1970										
07...	.5	126	8.1	55	--	--	--	--	--	--
JUNE, 1971										
04...	.4	98	7.5	25	0	100	0	0	.0	0

## 11365000 PIT RIVER NEAR MONTGOMERY CREEK, CALIF.--Continued

NOV., 1970										
17...	.5	140	8.0	7	--	--	--	--	--	--
JAN., 1971										
13...	.4	133	7.8	10	--	--	--	--	--	--
MAR.										
16...	.4	126	8.1	13	--	--	--	--	--	--
MAY										
11...	.5	116	7.8	4	0	0	0	0	.0	0
JULY										
07...	.5	144	7.7	7	--	--	--	--	--	--
SEP.										
22...	.6	141	7.8	1	--	--	--	--	--	--

## 11368000 MCCLLOUD RIVER ABOVE SHASTA LAKE, CALIF.--Continued

NOV., 1970										
16...	.2	114	7.9	4	--	--	--	--	--	--
JAN., 1971										
12...	.2	102	7.9	1	--	--	--	--	--	--
MAR.										
15...	.2	89	7.4	4	--	--	--	--	--	--
MAY										
10...	.2	96	7.8	1	0	0	0	0	.0	0
JULY										
06...	.2	104	7.9	1	--	--	--	--	--	--
SEP.										
21...	.3	109	7.6	2	--	--	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
SACRAMENTO RIVER BASIN--Continued											
11375810 COTTONWOOD CREEK NEAR OLINDA, CALIF. (LAT 40°23'06", LONG 122°28'31") <sup>1/</sup>											
NOV., 1970											
12...	1400	--	11.5	10.3	26	15	11	1.6	123	0	26
JAN., 1971											
18...	1530	--	11.0	11.4	--	--	3.0	--	83	0	--
MAR.											
09...	0950	--	7.0	12.1	--	--	6.0	--	112	0	--
MAY											
24...	1045	--	20.0	10.1	20	12	5.3	.9	115	0	9.6
JULY											
14...	0955	--	23.5	8.6	--	--	7.2	--	145	0	--
SEP.											
21...	0930	16	13.0	11.1	--	--	9.6	--	74	0	--

11381620 MILL CREEK AT MOUTH, NEAR LOS MOLINOS, CALIF. (LAT 40°02'34", LONG 122°05'57")<sup>1/</sup>

NOV., 1970											
10...	1400	463	11.0	11.2	--	--	8.4	--	32	0	--
JAN., 1971											
12...	1140	291	5.5	13.4	--	--	10	--	49	0	--
MAR.											
10...	1400	178	10.0	11.6	--	--	13	--	53	0	--
MAY											
18...	1420	449	15.5	11.0	7.1	2.6	6.6	1.3	32	0	9.7
JULY											
09...	1305	312	21.0	9.3	--	--	7.8	--	33	0	--
SEP.											
24...	1250	115	20.0	11.7	14	8.3	14	2.9	82	0	12

<sup>1/</sup> Records furnished by California Department of Water Resources.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESIDUE 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)	ALKALINITY AS CACO3 (MG/L)	PERCENT SODIUM
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## SACRAMENTO RIVER BASIN--Continued

## 11375810 COTTONWOOD CREEK NEAR OLINDA, CALIF.--Continued

NOV., 1970										
12...	12	3.0	0	162	.22	--	128	27	101	16
JAN., 1971										
18...	1.5	--	100	--	--	--	72	4	68	--
MAR.										
09...	5.1	--	100	--	--	--	97	5	92	--
MAY										
24...	3.4	.0	0	108	.15	--	100	6	94	10
JULY										
14...	7.3	--	0	--	--	--	130	11	119	--
SEP.										
21...	7.6	--	200	--	--	--	54	0	61	--

## 11381620 MILL CREEK AT MOUTH, NEAR LOS MOLINOS, CALIF.--Continued

NOV., 1970										
10...	11	--	300	--	--	--	39	13	26	--
JAN., 1971										
12...	14	--	400	--	--	--	44	4	40	--
MAR.										
10...	15	--	500	--	--	--	47	4	43	--
MAY										
18...	5.1	.0	200	79	.11	95.8	28	2	26	32
JULY										
09...	7.0	--	200	--	--	--	36	9	27	--
SEP.										
24...	16	.0	400	150	.20	46.6	69	2	67	30

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
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## 11375810 COTTONWOOD CREEK NEAR OLINDA, CALIF.--Continued

NOV., 1970										
12...	.4	289	8.3	70	--	--	--	--	--	--
JAN., 1971										
18...	.2	153	8.0	380	--	--	--	--	--	--
MAR.										
09...	.3	213	8.1	4	--	--	--	--	--	--
MAY										
24...	.2	213	8.2	1	--	--	--	--	--	--
JULY										
14...	.3	263	7.7	1	--	--	--	--	--	--
SEP.										
21...	.6	145	7.8	3	--	--	--	--	--	--

## 11381620 MILL CREEK AT MOUTH, NEAR LOS MOLINOS, CALIF.--Continued

NOV., 1970										
10...	.6	130	7.3	55	--	--	--	--	--	--
JAN., 1971										
12...	.7	143	7.8	1	--	--	--	--	--	--
MAR.										
10...	.8	163	7.8	2	--	--	--	--	--	--
MAY										
18...	.5	98	7.5	1	10	0	0	10	.0	0
JULY										
09...	.6	119	7.7	3	--	--	--	--	--	--
SEP.										
24...	.7	218	7.8	1	--	--	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
SACRAMENTO RIVER BASIN--Continued											
11383800 SACRAMENTO RIVER NEAR HAMILTON CITY, CALIF. (LAT 39°45'06", LONG 121°59'40") <u>1/</u>											
NOV., 1970											
18...	1200	13100	11.0	10.7	--	--	6.9	--	57	0	--
JAN., 1971											
14...	1355	15800	6.5	12.4	--	--	6.5	--	69	0	--
MAR.											
17...	1245	11300	10.0	11.3	13	5.5	6.6	.8	70	0	5.1
MAY											
18...	1135	18200	11.5	12.5	--	--	5.8	--	66	0	--
JULY											
08...	1420	11300	16.0	11.4	--	--	4.7	--	54	0	--
SEP.											
23...	1300	10300	14.5	11.0	8.6	4.5	6.4	1.0	63	0	.0
11384000 BIG CHICO CREEK NEAR CHICO, CALIF. (LAT 39°46'35", LONG 121°45'10") <u>1/</u>											
NOV., 1970											
18...	0930	40	9.0	11.8	14	8.8	11	.8	92	0	4.8
JAN., 1971											
14...	1250	260	6.5	13.6	--	--	3.6	--	44	0	--
MAR.											
17...	1205	278	8.0	12.6	6.6	4.2	3.4	.6	49	0	.0
MAY											
18...	1230	62	14.0	11.7	--	--	7.5	--	82	0	--
JULY											
08...	1335	35	22.0	9.6	--	--	12	--	94	0	--
SEP.											
23...	1210	24	18.0	10.2	--	--	14	--	107	0	--

1/ Records furnished by California Department of Water Resources.



## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LITY AS CACO3 (MG/L)	PERCENT SODIUM
SACRAMENTO RIVER BASIN--Continued										
11383000 SACRAMENTO RIVER NEAR HAMILTON CITY, CALIF.--Continued										
NOV., 1970										
18...	3.8	--	100	--	--	--	50	3	47	--
JAN., 1971										
14...	3.9	--	100	--	--	--	53	0	57	--
MAR.										
17...	4.8	.6	100	92	.13	2810	55	0	57	20
MAY										
18...	2.5	--	0	--	--	--	46	0	54	--
JULY										
08...	2.4	--	0	--	--	--	45	1	44	--
SEP.										
23...	2.4	.2	100	85	.12	2360	40	0	52	25

## 11384000 BIG CHICO CREEK NEAR CHICO, CALIF.--Continued

NOV., 1970										
18...	8.5	.0	200	113	.15	12.2	71	0	75	25
JAN., 1971										
14...	4.3	--	100	--	--	--	45	9	36	--
MAR.										
17...	3.0	.0	100	60	.08	45.0	34	0	40	18
MAY										
18...	5.9	--	100	--	--	--	59	0	67	--
JULY										
08...	7.6	--	200	--	--	--	72	0	77	--
SEP.										
23...	9.6	--	200	--	--	--	83	0	88	--

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
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## 11383800 SACRAMENTO RIVER NEAR HAMILTON CITY, CALIF.--Continued

NOV., 1970										
18...	.4	129	7.8	20	--	--	--	--	--	--
JAN., 1971										
14...	.4	137	7.6	20	--	--	--	--	--	--
MAR.										
17...	.4	138	7.1	45	--	--	--	--	--	--
MAY										
18...	.4	116	7.8	7	0	100	0	0	.0	0
JULY										
08...	.3	113	7.5	8	--	--	--	--	--	--
SEP.										
23...	.4	118	7.7	6	--	--	--	--	--	--

## 11384000 BIG CHICO CREEK NEAR CHICO, CALIF.--Continued

NOV., 1970										
18...	.6	178	8.2	1	--	--	--	--	--	--
JAN., 1971										
14...	.2	85	7.9	1	--	--	--	--	--	--
MAR.										
17...	.3	84	7.1	4	--	--	--	--	--	--
MAY										
18...	.4	148	8.0	0	0	100	0	0	.0	0
JULY										
08...	.6	187	8.3	2	--	--	--	--	--	--
SEP.										
23...	.7	208	8.1	1	--	--	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
SACRAMENTO RIVER BASIN--Continued									
11424000 BEAR RIVER NEAR WHEATLAND, CALIF. (LAT 39°00'01", LONG 121°24'21"1/									
OCT.									
01...	0745	7.2	18.5	9.0	16	5.9	79	0	6.2
27...	1330	7.2	16.5	--	--	--	--	--	--
DEC.									
04...	1320	12400	11.5	12.0	8.0	2.8	36	0	4.3
08...	1300	1610	11.0	--	--	--	--	--	--
22...	1300	1580	10.0	11.0	--	--	--	--	--
APR.									
05...	1520	1030	16.5	10.5	8.5	2.8	32	0	3.4
MAY									
04...	1045	450	14.5	10.4	5.9	2.8	30	0	3.4
AUG.									
04...	1445	20	28.5	9.0	16	4.2	63	0	4.9

DATE	TIME	DIS- CHARGE (CFS)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)
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11455125 RECLAMATION DISTRICT NO. 2068 DRAIN Z AT HACKMAN ROAD AND ROAD 105, NEAR CLARKSBURG, CALIF.  
(LAT 38°27'08", LONG 121°40'28")

OCT., 1970								
01...	0945	4.0	--	3.1	.54	.012	2.5	2.5
MAY, 1971								
06...	1215	7.0	--	2.5	1.0	.10	1.5	1.4
JULY								
20...	1030	10	--	2.1	.44	.070	1.7	1.6
AUG.								
16...	0915	7.0	--	2.5	1.2	.030	1.3	1.3
SEP.								
27...	1005	3.0	--	4.9	.96	.030	3.9	3.9

11455135 RECLAMATION DISTRICT NO. 2068 DRAIN X AT MIDWAY ROAD, NEAR CLARKSBURG, CALIF.  
(LAT 38°24'57", LONG 121°40'15")

OCT., 1970								
01...	1000	7.0	--	2.9	.90	.006	2.0	2.0
MAY, 1971								
06...	1145	7.0	--	1.4	.71	.010	.66	.6
JULY								
20...	1130	1.5	--	1.5	.59	.080	.91	.8
AUG.								
16...	0930	9.0	--	1.8	.86	.030	.92	.9
SEP.								
27...	--	9.0	--	1.5	.80	.030	.74	.7

11455145 RECLAMATION DISTRICT NO. 2068W PUMP NO. 5 SPILL, NEAR COURTLAND, CALIF.  
(LAT 38°19'44", LONG 121°41'22")

OCT., 1970								
01...	1015	30	--	1.8	1.6	.009	.21	.2
MAY, 1971								
06...	1130	--	--	.90	.68	.010	.22	.2
JULY								
20...	1400	12	--	1.2	.46	.010	.71	.7
AUG.								
16...	0950	17	--	1.7	1.1	.010	.55	.5
SEP.								
27...	1035	22	--	1.6	.77	.020	.80	.7

1/ Records furnished by California Department of Water Resources.

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)
SACRAMENTO RIVER BASIN--Continued 11424000 BEAR RIVER NEAR WHEATLAND, CALIF.--Continued									
OCT. 01...	--	--	--	--	75	10	65	.4	177
27...	.10	.01	.10	.080	--	--	--	--	189
DEC. 04...	--	--	--	--	34	4	30	.3	88
08...	.10	.3	.040	.020	--	--	--	--	75
22...	.40	.3	.020	.000	--	--	--	--	71
APR. 05...	--	--	--	--	30	4	26	.3	72
MAY 04...	--	--	--	--	27	2	25	.3	73
AUG. 04...	--	--	--	--	61	9	52	.3	144

DATE	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT. 01...	7.9	2	--	--	--	--	--	--
27...	--	10	--	--	--	--	--	--
DEC. 04...	7.5	220	--	--	--	--	--	--
08...	--	35	--	--	--	--	--	--
22...	--	20	--	--	--	--	--	--
APR. 05...	7.4	25	--	--	--	--	--	--
MAY 04...	7.5	7	0	0	0	0	.0	0
AUG. 04...	7.9	1	--	--	--	--	--	--

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SPECI- FIC COND- UCTANCE PER MICRO- MHOS)	PH (UNITS)
11455125 RECLAMATION DISTRICT NO. 2068 DRAIN Z AT HACKMAN ROAD AND ROAD 105, NEAR CLARKSBURG, CALIF.--Continued							
11455125 - RECLAM DR Z AT HCKMN RD NR CLARKSBURG CALIF (LAT 38 27 08 LONG 121 40 28)							
OCT., 1970 01...	.27	290	244	.33	2.64	426	--
MAY, 1971 06...	.40	540	482	--	--	771	--
JULY 20...	.60	450	364	.50	9.83	533	--
AUG. 16...	1.0	490	362	--	--	588	--
SEP. 27...	.25	280	298	.41	2.41	501	--

## 11455135 RECLAMATION DISTRICT NO. 2068 DRAIN X AT MIDWAY ROAD, NEAR CLARKSBURG, CALIF.--Continued

OCT., 1970 01...	.12	360	312	.42	5.90	545	--
MAY, 1971 06...	.32	310	288	--	--	519	--
JULY 20...	.62	350	300	.41	1.22	433	--
AUG. 16...	.40	270	222	--	--	333	--
SEP. 27...	.46	230	250	.34	6.08	396	--

## 11455145 RECLAMATION DISTRICT NO. 2068W PUMP NO. 5 SPILL, NEAR COURTLAND, CALIF.--Continued

OCT., 1970 01...	.82	410	246	.33	19.9	411	--
MAY, 1971 06...	.57	380	294	--	--	449	--
JULY 20...	.80	280	248	.34	8.04	363	--
AUG. 16...	.70	270	268	--	--	410	--
SEP. 27...	.54	200	232	.32	13.8	369	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)
SACRAMENTO RIVER BASIN--Continued							
11455235 ULATIS CREEK AT LEWIS ROAD, NEAR ELMIRA, CALIF. (LAT 38°22'25", LONG 121°53'44")							
OCT., 1970							
01...	1115	3.0	.00	.00	.00	.003	.00
MAY, 1971							
06...	0945	3.0	--	.90	.75	.010	.1
JULY							
21...	0930	6.0	--	.91	.79	.020	.1
AUG.							
16...	1100	4.0	--	.73	.47	.000	.2
SEP.							
27...	0930	5.0	--	1.6	.39	.030	1.2
11455255 SWEENEY CREEK AT WEBER ROAD, NEAR DIXON, CALIF. (LAT 38°24'08", LONG 121°51'39")							
OCT., 1970							
01...	1100	60	--	.70	.18	.006	.5
MAY, 1971							
06...	1010	18	--	2.3	.98	.010	1.3
JULY							
21...	0715	45	--	3.1	1.8	.060	1.2
AUG.							
16...	1035	40	--	1.5	.63	.020	.9
SEP.							
27...	0945	22	--	1.1	.20	.010	.9
11455257 GIBSON CANYON CREEK AT SOUTHERN PACIFIC RAILROAD, NEAR ELMIRA, CALIF. (LAT 38°23'28", LONG 121°52'21")							
OCT., 1970							
01...	1110	5.0	--	2.0	1.8	.003	.01
MAY, 1971							
06...	1020	3.0	--	1.8	.85	.010	.9
JULY							
21...	0730	9.0	--	1.3	1.2	.020	.1
AUG.							
16...	1045	5.0	--	1.1	.97	.000	.1
SEP.							
27...	0940	6.0	--	.68	.68	.000	.00
11455261 ULATIS CREEK AT BROWNS ROAD, NEAR ELMIRA, CALIF. (LAT 38°18'24", LONG 121°47'37")							
OCT., 1970							
01...	1045	40	--	1.2	.60	.009	.5
MAY, 1971							
06...	1050	9.0	--	1.3	.71	.020	.6
JULY							
20...	1545	14	--	3.0	1.3	.11	1.6
AUG.							
16...	1020	20	--	2.3	.95	.030	1.3
SEP.							
27...	1120	13	--	.99	.39	.040	.6
11455265 ALAMO CREEK AT BROWNS DAM, NEAR ELMIRA, CALIF. (LAT 38°19'44", LONG 121°51'32")							
OCT., 1970							
01...	1130	12	--	2.4	1.3	.003	1.1
MAY, 1971							
06...	1030	8.0	--	2.9	.75	.030	2.1
JULY							
21...	0945	17	--	2.7	2.4	.030	.3
AUG.							
16...	1110	28	--	3.4	1.9	.050	1.5
SEP.							
27...	1220	12	--	1.5	.70	.11	.8
11455272 RECLAMATION DISTRICT NO. 2068 DRAIN V AT SWAN ROAD, NEAR DIXON, CALIF. (LAT 38°21'29", LONG 121°44'20")							
OCT., 1970							
01...	1030	55	--	1.7	.90	.006	.8
MAY, 1971							
06...	1115	16	--	2.2	.70	.050	1.5
JULY							
20...	1445	42	--	2.9	1.3	.12	1.5
AUG.							
16...	1010	18	--	3.0	1.2	.050	1.8
SEP.							
27...	1120	12	--	3.4	1.0	.040	2.4

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
SACRAMENTO RIVER BASIN--Continued							
11455235 ULATIS CREEK AT LEWIS ROAD, NEAR ELMIRA, CALIF.--Continued							
OCT., 1970							
01...	.065	150	171	.23	1.39	313	--
MAY, 1971							
06...	.30	170	238	--	--	385	8.0
JULY							
21...	.080	200	354	.48	5.73	320	--
AUG.							
16...	.050	170	186	--	--	303	--
SEP.							
27...	.27	150	212	.29	2.86	339	--
11 11455255 SWEENEY CREEK AT WEBER ROAD, NEAR DIXON, CALIF.--Continued							
OCT., 1970							
01...	.14	180	165	.22	26.7	321	--
MAY, 1971							
06...	.25	130	232	--	--	428	--
JULY							
21...	.20	200	246	.33	29.9	344	--
AUG.							
16...	.14	180	258	--	--	342	--
SEP.							
27...	.10	150	204	.28	12.1	357	--
11455257 GIBSON CANYON CREEK AT SOUTHERN PACIFIC RAILROAD, NEAR ELMIRA, CALIF.--Continued							
OCT., 1970							
01...	1.1	280	352	.48	4.75	588	--
MAY, 1971							
06...	1.2	130	328	--	--	519	--
JULY							
21...	.24	260	374	.51	9.09	331	--
AUG.							
16...	1.1	170	372	--	--	587	--
SEP.							
27...	.73	180	304	.41	4.92	498	--
11455261 ULATIS CREEK AT BROWNS ROAD, NEAR ELMIRA, CALIF.--Continued							
OCT., 1970							
01...	.036	170	232	.32	25.1	414	--
MAY, 1971							
06...	.32	240	342	--	--	505	--
JULY							
20...	.70	350	294	.40	11.1	534	--
AUG.							
16...	.35	230	278	--	--	418	--
SEP.							
27...	.22	200	312	.42	11.0	534	--
11455265 ALAMO CREEK AT BROWNS DAM, NEAR ELMIRA, CALIF.--Continued							
OCT., 1970							
01...	1.4	230	266	.36	8.62	456	--
MAY, 1971							
06...	.81	290	330	--	--	526	8.1
JULY							
21...	1.7	320	218	.30	10.0	433	--
AUG.							
16...	.55	230	232	--	--	390	--
SEP.							
27...	.73	270	314	.43	10.2	526	--
11455272 RECLAMATION DISTRICT NO. 2068 DRAIN V AT SWAN ROAD, NEAR DIXON, CALIF.--Continued							
OCT., 1970							
01...	.036	280	285	.39	42.3	493	--
MAY, 1971							
06...	.61	420	420	--	--	658	--
JULY							
20...	.57	390	356	.48	40.4	550	--
AUG.							
16...	.35	300	326	--	--	583	--
SEP.							
27...	.36	320	352	.48	11.4	587	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	NITRATE (N) (MG/L)	NITRATE (N) (MG/L)
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## SACRAMENTO RIVER BASIN--Continued

11455283 NOONAN DRAIN AT HAY ROAD, NEAR ELMIRA, CALIF. (LAT 38°18'57", LONG 121°53'02")

OCT., 1970								
01...	1140	1.5	--	6.6	.84	.006	5.6	5.6
MAY, 1971								
06...	1040	4.0	--	1.9	.52	.000	1.3	1.3
AUG.								
16...	1115	5.0	--	.82	.47	.000	.35	.3
SEP.								
27...	1115	4.0	--	.43	.35	.010	.08	.07

11455580 ALONZO DRAIN AT CORDELIA ROAD, NEAR FAIRFIELD, CALIF. (LAT 38°13'50", LONG 122°03'56")

OCT., 1970								
01...	1200	.50	--	2.9	1.1	.17	1.8	1.6
JUNE, 1971								
29...	1040	1.0	--	11	.66	.030	10	10
JULY								
21...	1030	.50	--	25	.69	.060	24	24
AUG.								
16...	1045	1.0	--	11	.49	.010	11	11
SEP.								
27...	1115	1.0	--	10	.44	.030	10	10

11455600 RAINES DRAIN AT CHADBOURNE ROAD, NEAR FAIRFIELD, CALIF. (LAT 38°12'46", LONG 122°04'56")

OCT., 1970								
01...	1250	3.0	.00	.00	.00	.003	.00	.00
JUNE, 1971								
29...	1030	5.0	--	1.4	.60	.010	.76	.8
JULY								
21...	1045	5.0	--	.74	.52	.020	.22	.2
AUG.								
16...	1035	4.0	--	.68	.58	.000	.10	.1
SEP.								
27...	1140	2.0	--	.25	.23	.020	.02	.00

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA (NH4) (P) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (P04) (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
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## MAD RIVER BASIN

11480390 MAD RIVER ABOVE RUTH RESERVOIR, NEAR FOREST GLEN, CALIF. (LAT 40°18'51", LONG 123°21'44")

SEP.											
07...	1130	2.0	17.0	.05	.35	.32	.03	.35	.03	.050	1.0

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA (NH4) (P) (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (P04) (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
------	------	-------------------------	-----------------------------	--	---	---	---	---	-----------------------------------	---	---

11480410 MAD RIVER BELOW RUTH RESERVOIR, NEAR FOREST GLEN, CALIF. (LAT 40°21'30", LONG 123°25'27")

SEP.											
07...	1400	93	15.0	30	.19	.37	.23	.14	.05	.03	.060

DATE	TIME	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)
SEP.										
07...	1400	.00	<.20	.00	<1.0	.00	<.20	.00	<.20	.00

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)
------	---	--	--	--	--	---	---------------

SACRAMENTO RIVER BASIN--Continued  
11455283 NOONAN DRAIN AT HAY ROAD, NEAR ELMIRA, CALIF.--Continued

OCT., 1970							
01...	.078	180	222	.30	.90	376	--
MAY, 1971							
06...	.10	140	220	--	--	312	--
AUG.							
16...	.020	180	184	--	--	285	--
SEP.							
27...	.33	150	206	.28	2.22	327	--

## 11455580 ALONZO DRAIN AT CORDELIA ROAD, NEAR FAIRFIELD, CALIF.--Continued

OCT., 1970							
01...	.039	1500	830	1.13	1.12	1330	--
JUNE, 1971							
29...	.060	1000	660	.90	1.78	1100	7.9
JULY							
21...	.040	1400	790	1.07	1.07	1210	--
AUG.							
16...	.010	2600	736	--	--	1210	--
SEP.							
27...	.070	1400	816	1.11	2.20	1330	--

## 11455600 RAINES DRAIN AT CHADBOURNE ROAD, NEAR FAIRFIELD, CALIF.--Continued

OCT., 1970							
01...	.039	240	251	.34	2.03	476	--
JUNE, 1971							
29...	.30	700	490	--	--	770	8.0
JULY							
21...	.060	430	286	.39	3.86	464	--
AUG.							
16...	.050	230	184	--	--	340	--
SEP.							
27...	.080	190	188	.26	1.02	315	--

DATE	IMME- DIATE COLI- FORM (COL. PER 100 ML)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
------	--	---	--	---	--	--	--	------------------------------------	---	--

## 11480410 MAD RIVER BELOW RUTH RESERVOIR, NEAR FOREST GLEN, CALIF.--Continued

SEP. 07...	350	0	0	0	0	3	1	3.2	3.2	20
DATE	DDT IN BOTTOM DE- POSITS (UG/KG)	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)
SEP. 07...	<.20	.00	<.20	.00	<.20	.00	<.20	.00	<.20	.00
DATE	LINDANE IN BOTTOM DE- POSITS (UG/KG)	MALA- THION IN BOTTOM DE- POSITS (UG/KG)	METHYL PARA- THION IN BOT- TOM DE- POSITS (UG/KG)	PARA- THION IN BOTTOM DE- POSITS (UG/KG)	2,4-D (UG/L)	2,4-D IN BOTTOM DE- POSITS (UG/KG)	2,4,5-T (UG/L)	2,4,5-T IN BOTTOM DE- POSITS (UG/KG)	SILVEX IN BOT- TOM DE- POSITS (UG/L)	SILVEX IN BOT- TOM DE- POSITS (UG/KG)
SEP. 07...	<.20	<.20	<.20	<.20	.00	<.60	.00	<.20	.00	<.20





## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/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)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
KLAMATH RIVER BASIN											
11519500 SCOTT RIVER NEAR FORT JONES, CALIF. (LAT 41°38'28", LONG 123°00'54") <sup>1/</sup>											
NOV., 1970											
16...	1515	355	9.0	10.4	16	12	3.0	.9	103	0	4.3
JAN., 1971											
12...	1600	858	3.5	11.5	--	--	2.9	--	112	0	--
MAR.											
15...	1515	1170	8.0	11.2	--	--	3.0	--	115	0	--
MAY											
10...	1600	2370	12.0	11.2	--	--	2.0	--	68	0	--
JULY											
06...	1545	514	20.0	9.9	17	11	2.8	.9	103	0	3.0
SEP.											
21...	1600	130	18.0	12.8	--	--	5.1	--	174	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	NITRATE (NO3) (MG/L)	DIS- SOLVED BORON (B) (UG/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)	ALKA- LINITY AS CACO3 (MG/L)	PERCENT SODIUM
NOV., 1970										
16...	3.0	1.2	100	95	.13	91.1	90	6	84	7
JAN., 1971										
12...	3.6	--	100	--	--	--	101	9	92	--
MAR.										
15...	7.4	--	100	--	--	--	98	4	94	--
MAY										
10...	.5	--	0	--	--	--	53	0	56	--
JULY										
06...	1.7	1.7	0	99	.13	137	86	2	84	6
SEP.										
21...	3.0	--	0	--	--	--	153	10	143	--

DATE	SODIUM AD- SORP- TION RATIO	SPECI- FIC COND- UCTANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
NOV., 1970										
16...	.1	176	8.3	3	--	--	--	--	--	--
JAN., 1971										
12...	.1	194	8.1	8	--	--	--	--	--	--
MAR.										
15...	.1	194	8.1	9	0	0	0	0	.0	0
MAY										
10...	.1	130	8.1	30	--	--	--	--	--	--
JULY										
06...	.1	174	8.0	1	--	--	--	--	--	--
SEP.										
21...	.2	294	8.2	2	--	--	--	--	--	--

<sup>1/</sup> Records furnished by California Department of Water Resources.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT 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
PESCADERO CREEK BASIN											
11162540 BUTANO CREEK NEAR PESCADERO, CALIF. (LAT 37°14'01", LONG 122°21'56")											
NOV., 1970											
12...	1545	--	2.4	17	.11	--	--	--	--	--	--
28...	1350	11.0	68	632	116	44	59	70	78	84	87
29...	1020	11.0	196	1210	640	27	35	43	52	64	72
29...	1315	12.0	143	849	328	27	38	46	56	65	73
DEC.											
02...	1000	11.0	68	426	78	--	--	--	--	--	--
REDWOOD CREEK BASIN											
11162800 REDWOOD CREEK AT REDWOOD CITY, CALIF. (LAT 37°26'58", LONG 122°13'57")											
NOV., 1970											
29...	0950	11.0	12	209	6.8	--	--	--	--	--	--
DEC.											
02...	0925	10.0	29	442	35	44	54	62	69	76	80
02...	1225	10.0	23	506	31	49	62	71	78	83	87
MAR., 1971											
26...	1055	12.5	7.3	99	2.0	--	--	--	--	--	--
MATADERO CREEK BASIN											
11166000 MATADERO CREEK AT PALO ALTO, CALIF. (LAT 37°25'18", LONG 122°08'04")											
NOV., 1970											
28...	1350	12.0	46	350	43	54	66	75	84	90	--
28...	1400	12.0	48	240	31	--	--	--	--	--	--
28...	1610	12.0	13	170	6.0	--	--	--	--	--	--
DEC.											
02...	0920	--	121	428	140	51	59	69	77	86	93
02...	1025	--	79	334	71	56	66	76	84	91	--
02...	1510	--	31	107	9.0	--	--	--	--	--	--
ALAMEDA CREEK BASIN											
11176200 ARROYO MOCHO NEAR PLEASANTON, CALIF. (LAT 37°41'26", LONG 121°52'20")											
NOV., 1970											
28...	1545	11.0	127	2050	703	77	87	95	98	99	--
DEC.											
02...	1340	9.5	486	2150	2820	59	71	82	92	98	--
MAR., 1971											
26...	1200	15.0	79	392	84	56	67	77	85	91	--
ARROYO DEL HAMBRE BASIN											
11182400 ARROYO DEL HAMBRE AT MARTINEZ, CALIF. (LAT 38°00'12", LONG 122°07'44")											
NOV., 1970											
28...	1420	11.0	5.5	813	12	88	92	96	98	99	--
29...	1010	10.0	22	1240	74	66	73	84	90	95	--
DEC.											
02...	0945	9.5	50	1860	251	48	58	67	78	90	97
MAR., 1971											
26...	0940	12.0	55	3270	486	54	54	60	74	87	--
26...	1050	12.0	35	2020	191	55	60	70	83	91	--
PACHECO CREEK BASIN											
11183600 WALNUT CREEK AT CONCORD, CALIF. (LAT 37°56'43", LONG 122°02'55")											
NOV., 1970											
28...	1315	11.0	265	352	252	65	77	84	89	92	--
28...	1510	11.5	340	604	554	42	49	59	72	84	--
29...	1110	10.5	461	716	891	61	65	71	80	87	--
DEC.											
02...	1055	9.5	535	903	1300	--	--	--	--	--	--
SAN JOAQUIN RIVER BASIN											
11337500 MARSH CREEK NEAR BYRON, CALIF. (LAT 37°52'24", LONG 121°43'34")											
DEC., 1970											
01...	1115	11.0	15	26	1.1	--	--	--	--	--	--
02...	0935	9.5	78	636	134	60	77	90	98	100	--
02...	1135	10.0	88	707	168	61	80	91	96	99	--

SAN JOAQUIN RIVER BASIN--Continued  
11337500 MARSH CREEK NEAR BYRON, CALIF.--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE 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
SACRAMENTO RIVER BASIN										
11386500 GRINDSTONE CREEK NEAR ELK CREEK, CALIF. (LAT 39°40'38", LONG 122°31'51")										
OCT. 06...	0930	17.0	.40	4	.00	--	--	--	--	--
NOV. 03...	1010	15.0	20	2	.11	--	--	--	--	--
30...	1445	9.0	373	484	487	37	52	65	79	89
DEC. 04...	1115	6.0	2240	4500	27200	29	41	58	73	87
JAN. 05...	1450	4.0	148	72	29	26	46	60	74	83
FEB. 02...	1015	6.0	373	333	335	29	41	55	72	82
MAR. 09...	0945	6.5	97	7	1.8	--	--	--	--	--
APR. 22...	1710	12.5	148	54	22	--	--	--	--	--
JUNE 03...	1015	15.5	65	6	1.1	--	--	--	--	--
JULY 08...	1110	24.5	A 24	3	.19	--	--	--	--	--
AUG. 04...	0945	25.0	5.0	2	.03	--	--	--	--	--
SEP. 01...	1140	26.0	3.4	5	.05	--	--	--	--	--
NAPA RIVER BASIN										
11458000 NAPA RIVER NEAR NAPA, CALIF. (LAT 38°22'06", LONG 122°18'08")										
NOV., 1970										
06...	1330	15.0	73	165	33	--	--	--	--	--
30...	1510	11.5	718	264	512	--	--	--	--	--
30...	1640	11.5	844	337	768	--	--	--	--	--
DEC. 01...	1200	11.0	819	192	425	18	26	39	51	63
04...	1330	12.5	8810	2200	52300	20	23	32	40	51
04...	1515	12.5	6800	1720	31600	24	33	42	56	71
11...	1300	11.0	481	52	68	--	--	--	--	--
JAN., 1971										
11...	1225	9.5	385	47	49	--	--	--	--	--
FEB. 08...	1110	10.5	112	45	14	--	--	--	--	--
MAR. 04...	1250	10.5	67	12	2.2	--	--	--	--	--
25...	1050	12.0	118	21	6.7	--	--	--	--	--
APR. 05...	0940	14.5	145	22	8.6	--	--	--	--	--
MAY 04...	0920	14.5	58	43	6.7	--	--	--	--	--
JUNE 02...	1245	18.0	17	12	.55	--	--	--	--	--

A Daily mean discharge.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. FALL DIAM.	SUS. SED. SIEVE DIAM.	SUS. SED. SIEVE DIAM.
	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
DATE	.062 MM	.062 MM	.125 MM	.125 MM	.250 MM	.250 MM	.500 MM	.500 MM	1.00 MM

SACRAMENTO RIVER BASIN--Continued  
11386500 GRINDSTONE CREEK NEAR ELK CREEK, CALIF.--Continued

[illegible]

	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.
	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.
	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
DATE	.062 MM	.125 MM	.125 MM	.250 MM	.250 MM	.500 MM	.500 MM	1.00 MM	1.00 MM	2.00 MM	2.00 MM

11458000 NAPA RIVER BASIN--Continued  
NAPA RIVER NEAR NAPA, CALIF.--Continued

NOW., 1970	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
30...	81	--	86	--	96	--	100	--
30...	65	--	--	--	--	--	--	--
DEC.	--	--	--	--	--	--	--	--
01...	--	78	--	96	--	99	--	100
04...	--	61	--	69	--	73	--	96
04...	--	86	--	95	--	99	--	100
11...	70	--	--	--	--	--	100	--
JAN., 1971	--	--	--	--	--	--	--	--
11...	80	--	--	--	--	--	--	--
FEB.	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--
MAR.	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
APR.	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--
JUNE	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PEN- DED SED- IMENT (MG/L)	SUS- PEN- DED SED- IMENT (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
NAPA RIVER BASIN--Continued											
11458200 REDWOOD CREEK NEAR NAPA, CALIF. (LAT 38°19'04", LONG 122°20'35")											
NOV., 1970											
12...	1030	12.0	2.2	3	.02	--	--	--	--	--	--
29...	0930	10.5	103	149	41	--	--	--	--	--	--
29...	1115	11.0	86	172	40	--	--	--	--	--	--
30...	1600	10.5	70	107	20	33	50	67	81	91	--
DEC.											
01...	1300	10.5	21	12	.68	--	--	--	--	--	--
04...	1100	12.5	346	435	406	21	37	51	64	75	--
11...	1100	9.0	21	6	.34	--	--	--	--	--	--
JAN., 1971											
07...	1340	6.0	14	6	.23	--	--	--	--	--	--
FEB.											
16...	1320	10.0	3.3	5	.04	--	--	--	--	--	--
MAR.											
25...	0940	11.0	5.1	13	.18	--	--	--	--	--	--
APR.											
05...	1350	13.5	8.8	9	.21	--	--	--	--	--	--
JUNE											
01...	1240	13.0	.80	11	.02	--	--	--	--	--	--
WALKER CREEK BASIN											
11460800 WALKER CREEK NEAR TOMALES, CALIF. (LAT 38°12'35", LONG 122°51'35")											
NOV., 1970											
12...	0950	12.0	.13	5	.00	--	--	--	--	--	--
29...	0830	13.0	811	1360	2980	27	36	41	53	61	69
29...	1125	--	674	1080	1970	31	40	48	56	65	72
29...	1550	12.0	463	985	1230	23	31	38	45	52	59
29...	1725	12.0	414	834	932	29	36	41	50	58	65
DEC.											
04...	1245	13.0	1340	2170	7850	16	22	27	34	41	46
04...	1710	--	1150	1560	4840	19	27	34	41	48	55
08...	1250	13.0	176	230	109	--	--	--	--	--	54
JAN., 1971											
13...	1145	6.5	143	138	53	--	--	--	--	--	--
16...	1130	9.5	316	971	828	31	42	51	64	72	81
FEB.											
08...	1645	11.0	13	5	.18	--	--	--	--	--	--
APR.											
06...	1605	12.0	21	11	.62	--	--	--	--	--	--
06...	1615	12.0	21	16	.91	--	--	--	--	--	--
JUNE											
03...	1315	14.0	1.5	8	.03	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	TEMP- ERATURE (DEG C)	NUMBER OF SAM- PLING POINTS	DIS- CHARGE (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
NAPA RIVER BASIN								
11458000 NAPA RIVER NEAR NAPA, CALIF. (LAT 38°22'08", LONG 122°18'08")								
NOV., 1970								
06...	1330	15.0	5	73	--	2	7	21
JUNE, 1971								
02...	1255	18.0	5	17	--	1	5	13
11458200 REDWOOD CREEK NEAR NAPA, CALIF. (LAT 38°19'04", LONG 122°20'35")								
NOV., 1970								
12...	1030	12.0	5	2.2	--	--	--	1
JUNE, 1971								
01...	1220	13.0	5	.80	--	1	1	2
WALKER CREEK BASIN								
11460800 WALKER CREEK NEAR TOMALES, CALIF. (LAT 38°12'35"), LONG 122°51'35")								
NOV., 1970								
12...	1015	12.0	3	.13	2	8	30	54
JUNE, 1971								
03...	1345	14.0	5	1.5	1	6	24	34

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	SUS. SED. SIEVE DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. SIEVE DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. SIEVE DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. SIEVE DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. SIEVE DIAM. % FINER THAN	SUS. SED. FALL DIAM. % FINER THAN	SUS. SED. SIEVE DIAM. % FINER THAN
DATE	.062 MM	.125 MM	.125 MM	.250 MM	.250 MM	.500 MM	.500 MM	1.00 MM	1.00 MM	2.00 MM	2.00 MM

NAPA RIVER BASIN--Continued  
11458200 REDWOOD CREEK NEAR NAPA, CALIF.--Continued

NOV., 1970	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
29...	96	--	97	--	99	--	100	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
30...	96	--	98	--	98	--	99	--	100	--	--
DEC.	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
04...	85	--	87	--	92	--	96	--	98	--	100
11...	--	--	--	--	--	--	--	--	--	--	--
JAN., 1971	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
FEB.	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
MAR.	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
APR.	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
JUNE	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--

WALKER CREEK BASIN--Continued  
11460800 WALKER CREEK NEAR TOMALES, CALIF.--Continued

NOV., 1970	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
29...	--	75	--	89	--	98	--	100	--	--	--
29...	--	78	--	92	--	99	--	100	--	--	--
29...	--	66	--	83	--	98	--	100	--	--	--
29...	--	74	--	91	--	99	--	100	--	--	--
DEC.	--	--	--	--	--	--	--	--	--	--	--
04...	--	59	--	85	--	98	--	100	--	--	--
04...	--	64	--	88	--	99	--	100	--	--	--
08...	--	60	--	79	--	98	--	100	--	--	--
JAN., 1971	--	--	--	--	--	--	--	--	--	--	--
13...	53	--	56	--	67	--	86	--	90	--	100
16...	--	85	--	96	--	100	--	--	--	--	--
FEB.	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
APR.	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
JUNE	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN	BED MAT. SIEVE DIAM. % FINER THAN
DATE	1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM	128 MM	

NAPA RIVER BASIN--Continued  
11458000 NAPA RIVER NEAR NAPA, CALIF.--Continued

NOV., 1970									
06...	32	40	49	64	84	97	100	--	--
JUNE, 1971									
02...	19	26	39	61	88	100	--	--	--

11458200 REDWOOD CREEK NEAR NAPA, CALIF.--Continued

NOV., 1970									
12...	3	8	14	24	38	54	87	100	--
JUNE, 1971									
01...	4	10	19	31	43	60	100	--	--

WALKER CREEK BASIN--Continued  
11460800 WALKER CREEK NEAR TOMALES, CALIF.--Continued

NOV., 1970									
12...	62	67	71	76	84	93	100	--	--
JUNE, 1971									
03...	36	38	41	47	60	70	100	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS  
PERIODIC DETERMINATIONS OF TURBIDITY, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE OF COLLECTION	TIME (24-HOUR)	WATER TEM- PERA- TURE (DEG C)	DIS- CHARGE (CFS)	TURBIDITY (JTU)	
				TOTAL	RESIDUAL <sup>1/</sup>
RUSSIAN RIVER BASIN					
11462000	EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF. (LAT 39°11'45", long 123°11'30") <sup>2/</sup>				
Nov. 6, 1970..	1030	16.0	90	5	1
Nov. 13.....	1415	15.0	90	20	3
Nov. 20.....	1000	15.0	90	10	1
Nov. 27.....	0945	13.0	90	5	2
Dec. 4.....	1020	12.0	.36	14	7
Dec. 11.....	0945	12.0	3090	59	19
Dec. 18.....	1000	10.0	.28	10	4
Dec. 25.....	1115	9.0	.12	15	8
Dec. 31.....	0945	9.0	1830	28	13
Jan. 15, 1971.	1015	6.5	430	30	7
Jan. 22.....	0945	8.0	2870	80	17
Jan. 29.....	1100	9.0	14	120	46
Feb. 5.....	1030	7.5	14	91	27
Feb. 12.....	0945	8.0	14	84	26
Feb. 19.....	1000	8.0	14	71	23
Feb. 26.....	1100	8.5	20	48	12
Mar. 5.....	0930	8.0	63	34	7
Mar. 12.....	1030	9.0	70	30	7
Mar. 19.....	1000	8.5	418	52	9
Mar. 26.....	--	9.0	346	49	12
Apr. 9.....	1130	9.0	390	31	5
May 14.....	1000	10.5	342	26	11
June 11.....	1015	12.0	306	30	16

DATE OF COLLECTION	TIME (24-HOUR)	WATER TEM- PERA- TURE (DEG C)	TURBIDITY (JTU)			
			SURFACE		10-FOOT DEPTH	
			TOTAL	RESIDUAL <sup>1/</sup>	TOTAL	RESIDUAL <sup>1/</sup>
EEL RIVER BASIN						
11470000 LAKE PILLSBURY NEAR POTTER VALLEY, CALIF. (LAT 39°24'30", long 122°57'30") <sup>2/</sup>						
Nov. 6, 1970.....	1310	13.0	19	3	53	7
Nov. 13.....	1050	11.5	16	1	28	4
Nov. 20.....	1210	11.0	10	1	13	3
Dec. 4.....	1250	10.0	77	13	86	16
Dec. 11.....	1025	6.0	61	16	120	28
Dec. 21.....	1130	6.0	65	25	60	22
Dec. 25.....	1015	5.0	55	25	60	26
Jan. 1, 1971.....	1030	5.0	40	23	42	21
Jan. 8.....	1130	6.0	55	24	55	31
Jan. 15.....	1000	5.5	50	25	50	24
Jan. 22.....	1100	9.0	90	14	130	21
Jan. 29.....	1130	8.5	63	12	63	21
Feb. 5.....	1000	6.0	50	7	49	8
Feb. 12.....	1030	7.0	48	12	47	10
Feb. 19.....	1000	7.0	40	7	39	5
Feb. 26.....	1400	7.0	--	--	41	3
Mar. 5.....	1200	7.0	35	2	40	5
Mar. 19.....	1130	9.5	33	6	38	8
Apr. 19.....	1110	12.0	30	7	35	7
May 13.....	1110	17.0	15	5	28	8
June 11.....	1000	10.0	18	6	14	6

<sup>1/</sup> Turbidity measured after a 7-day settling period.

<sup>2/</sup> Samples collected by Pacific Gas and Electric Company and U.S. Forest Service.



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