1970

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 1970

OCTOBER 1969

S	M	T	W	T	F	S
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MARCH 1970

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JUNE 1970

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AUGUST 1970

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SEPTEMBER 1970

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California Department of Water Resources
California Regional Water Quality Control Board, Central Valley Region
California Department of Fish and Game
Imperial Irrigation District
Marin County
Monterey County Flood Control and Water Conservation District
Orange County Water 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
United Water Conservation District
University of California
Ventura County Flood Control District

Water-resources records, 1970, 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

1971

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(Letters after station name designate type of data: (c) chemical, (t) water temperature, (s) sediment)

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WATER RESOURCES DATA FOR CALIFORNIA, 1970

Part 2. Water Quality Records

INTRODUCTION

Water-resources investigations of the U.S. Geological Survey include the collection of water-quality data on the chemical and physical characteristics of surface- and ground-water supplies of the Nation. These data for the 1970 water year for the quality of surface water in California are presented in this report. Data for a few water-quality stations in bordering States are also included. The data were collected by the Water Resources Division of the Geological Survey under the direction of R. Stanley Lord, district chief, Menlo Park, Calif.

The Geological Survey has published the annual series of water-supply papers, "Quality of Surface Waters of the United States," from 1941 through 1967 which contained the chemical-quality, temperature, and suspended-sediment data of the water; each volume included data for an area whose boundaries coincided with those of certain natural drainage areas. The series will be continued through the 1967 water year. The records for California are contained in Parts 9-11 of the water-supply-paper series. (See table 3.) These publications are available in most public libraries. Beginning with the 1963 water year, water-quality records of surface water obtained by the Geological Survey were published in a new series of annual releases on a State-boundary basis. This report, one of that series, is primarily for local and immediate use, and its distribution is limited. These records will be published later in Geological Survey water-supply papers.

Chemical-quality analyses at most stations in this report were analyzed and furnished by the California Department of Water Resources.

COOPERATION

In California the work was done under cooperative agreements with:

California Department of Water Resources
California Regional Water Quality Control Board, Central Valley Region
California Department of Fish and Game
Imperial Irrigation District
Marin County
Monterey County Flood Control and Water Conservation District
Orange County Water 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
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, U.S. Department of the Interior; the Corps of Engineers, U.S. Army; and the Forest Service and the Soil Conservation 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
Santa Cruz County Flood Control and Water Conservation District
Sierra Pacific Power Company
Southern California Edison Company
Yuba County Water Agency

DEFINITION OF TERMS

The terms of water-quality and hydrologic data, as used in the text and tabular data of this report, are defined as follows:

Acre-foot (ac-ft) is a quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or 325,851 gallons. The term is commonly used in measuring volumes of water.

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 stablizing 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 equals 86,400 cubic feet, 1.983471 acre-feet, or 646,317 gallons. A cfs-day represents a runoff of 0.0372 inch from 1 square mile.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds present in a water and will vary with water compositions, concentration of reagent, 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.

Daily mean discharge is the mean discharge for 1 day.

Mean daily discharge is the arithmetic mean discharge for the same day during a specific period of years.

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

Instantaneous discharge (at time of sampling). If the discharge at the time of sampling is reported instead of the daily mean, the heading of the discharge column 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.

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 obtained.

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 ($CaCO_3$).

Micrograms per liter (µg/l, UG/L) is a more precise unit for expressing the concentration of chemical constituents in solution. One thousand micrograms per liter is equivalent to one milligram per liter. See below.

TABLE 1.--Factors for conversion of sediment concentration in parts per million to milligrams per liter*
(All values calculated to three significant figures)

Range of concentration (ppm)	Multiply by	Range of concentration (ppm)	Multiply by
0 - 15,900	1.00	322,000 - 341,000	1.26
16,000 - 46,800	1.02	342,000 - 361,000	1.28
46,900 - 76,500	1.04	362,000 - 380,000	1.30
76,600 - 105,000	1.06	381,000 - 399,000	1.32
106,000 - 133,000	1.08	400,000 - 416,000	1.34
134,000 - 159,000	1.10	417,000 - 434,000	1.36
160,000 - 185,000	1.12	435,000 - 451,000	1.38
186,000 - 210,000	1.14	452,000 - 467,000	1.40
211,000 - 233,000	1.16	468,000 - 483,000	1.42
234,000 - 256,000	1.18	484,000 - 498,000	1.44
257,000 - 279,000	1.20	499,000 - 514,000	1.46
280,000 - 300,000	1.22	515,000 - 528,000	1.48
301,000 - 321,000	1.24	529,000 - 542,000	1.50

*Based on water density of 1.000 g/ml and sediment density of 2.65 g/cc.

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 dissolved constituent per unit volume of water. 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 are determined in the laboratory as parts per million (ppm) and are converted to mg/l by using the factors in table 1.

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

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by sieve or sedimentation methods.

Particle-size classification agrees closely with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology (Lane and others, 1947, p. 937). Their classification is as follows:

Clay:	Smaller than 0.004 mm.
Silt:	Between 0.004 and 0.062 mm.
Sand:	Between 0.062 and 2.0 mm.
Gravel:	Between 2.0 and 64.0 mm.

The particle-size distributions given in this report do not include organic material, most of which was removed prior to analysis.

Sediment is fragmental material that originates from the disintegration of rocks and is transported by, suspended in, or deposited by, water or air, or is accumulated in beds by other natural agencies (Colby, 1963, p. vi). (See also Langbein and Iseri, 1960, p. 17.) 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.

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 volume, that is discharged in a given time.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reaction 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 or from well to well and may 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 the term "runoff," which is that part of precipitation that appears in surface streams. Therefore, streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

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 discharged by dry weight or by volume, that is discharged in a given time. Rates of discharge are usually expressed in tons per day.

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

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

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

Tons per day is a unit expressing rates of discharge of a substance in solution or suspension.

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).

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1969, is called the "1970 water year."

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

DOWNSTREAM ORDER AND STATION NUMBERS

Stations are listed in the same downstream order used in the water-supply papers. Records are listed in a downstream direction along the main stem with all stations on a tributary entering above a main-stem station listed before the station. If a tributary enters between two main-stem stations, it is listed between them. A similar order is followed listing stations on first rank, second rank, and other ranks of tributaries. The indention in the listing of stations in the table of contents of this report indicates the rank of any tributary on which a gaging station or water-quality station is situated and the stream to which it is immediately tributary; each indention represents one rank. This downstream order and system of indention shows which stations are on tributaries between any two stations on a main stem and the rank of the tributary on which each station is situated.

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- 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 11303500, includes the part number "11" plus a 6-digit station number. This complete number appears just to the left of the station name. In this report, the records are listed in downstream order by parts. 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.

SPECIAL NETWORKS

Some of the stations for which data are published in this report are included in special networks. These stations are identified by the network title, set in parentheses, under the station name. These networks are as follows:

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimes 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 continental United States, IHD River Stations provide indices of runoff and of the general distribution of water in the principal river basins.

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 water used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to the 1966 water year, chemical-quality data for irrigation was published in the annual water-supply-paper series, "Quality of Surface Water for Irrigation, Western States."

Pesticide program is a network of a 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.

COLLECTION AND EXAMINATION OF DATA

Water samples for analysis usually are collected at or near points on streams where gaging stations are maintained for measurement of water discharge. Discharge records for streams in California have been released in the report "Water Resources Data for California, 1970, Part 1. Surface Water Records." Most of these records are used in conjunction with the computations of the chemical constituents and sediment loads in this report.

Data on the quality of surface water were collected daily at some sites and less frequently at other sites. The distribution and number of stations in each river or drainage basin are shown in figure 1.

Water-quality information is presented for chemical quality, biological and microbiological, water temperatures, and fluvial sediment. The chemical-quality information 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 maximums and minimums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

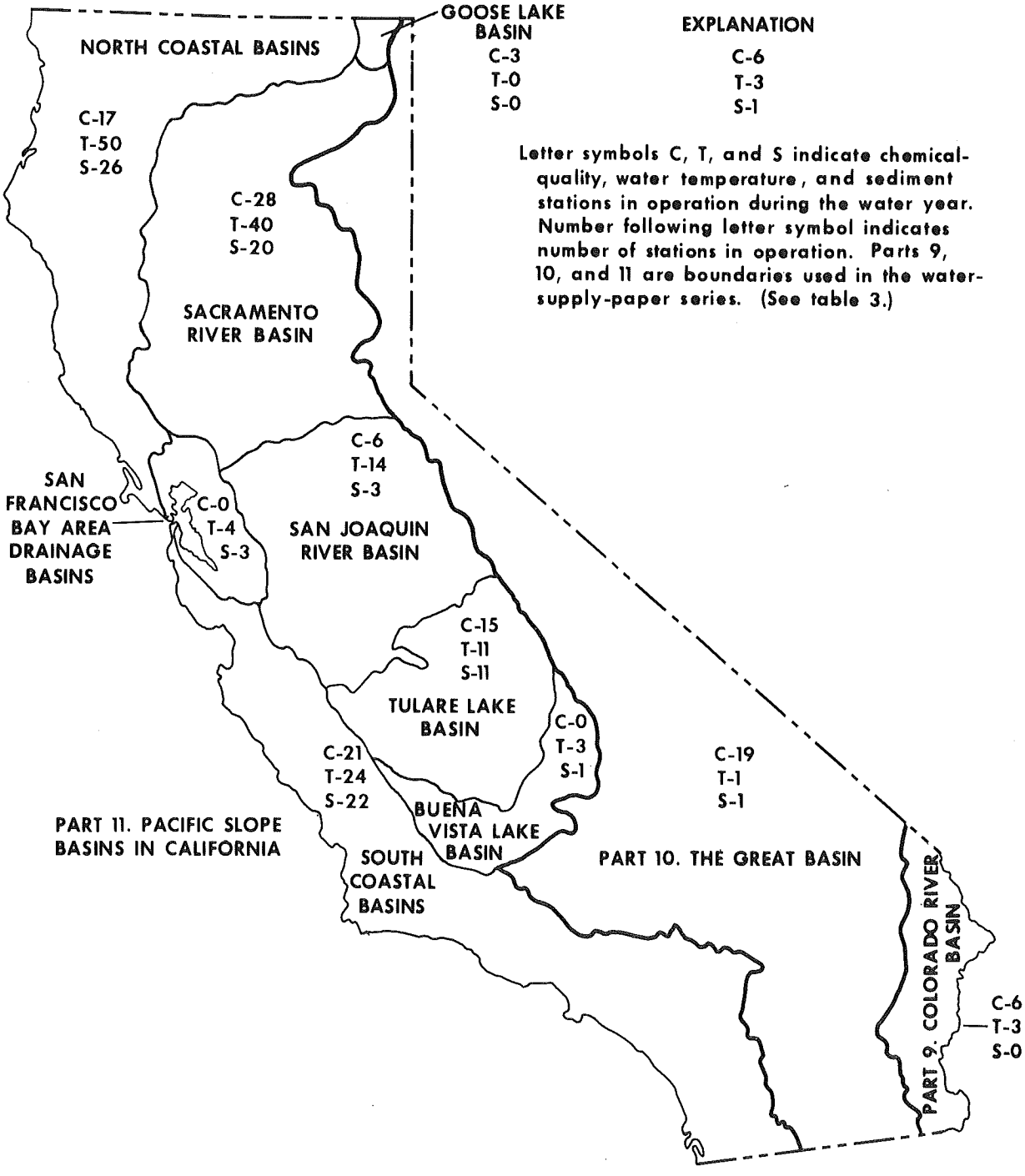

FIGURE 1.--Drainage-basin boundaries and number and distribution of water-quality stations.

Prior to the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the Geological Survey began to report data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/l) and water temperatures in degrees Celsius (centigrade, °C).

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 by writing the Water Resources District Office in Menlo Park.

Temperature

Water temperatures were measured at most of the water-quality stations. For daily stations, the water temperatures were taken at about the same time each day in order that the data would not reflect diurnal variations in water temperature. Most large streams have a small diurnal temperature change; small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature.

At stations where thermographs are located, the reported record consists of maximum and minimum temperatures for each day and the monthly averages.

TABLE 2.--Degrees Fahrenheit (°F) to degrees Celsius (°C)*
(Temperature reported to nearest 0.5°C)

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

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

Sediment

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

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

In addition to the records of 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 in the Russian, Eel, and Mad River basins, samples for the determination of turbidity were collected at the same frequency as samples of suspended sediment. Turbidity, measured in milligrams of silica per liter, is shown in relation to the concentration of suspended sediment of the simultaneously collected sample.

WATER-SUPPLY PAPERS

Table 3 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 3.--Water-supply papers containing records for parts 9-11, water years 1941-67

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	A2015
1948	1133	1958	1574	1968	A2098, A2099
1949	1163	1959	1645	1969	A2148, A2149
1950	1189	1960	1745	1970	A2158, A2159

A In preparation.

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Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurement of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.

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Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3.

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.

_____1941, Methods of analyzing sediment samples: Rept. 4.

_____1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.

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, The development and calibration of visual accumulation tube: Rept. 11.

_____1957, Some fundamentals of particle size analysis: Rept. 12.

_____1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.

_____1961, The single stage sampler for suspended sediment: Rept. 13.

_____1963, Determinations of fluvial sediment discharge: Rept. 14.

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

LOCATION.--Lat 36°00'55", long 114°44'16", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, on state line between Mohave County, Ariz., and Clark County, Nev., downstream from gaging station in Hoover Dam power-house.
DRAINAGE AREA.--167,800 sq mi, approximately.
PERIOD OF RECORD.--Chemical analyses: October 1939 to September 1970.
Water temperatures: October 1941 to September 1965.
REMARKS.--During period October to March samples were collected on or about the fifth, fifteenth, and twenty-fifth of each month and composited for analysis; samples were collected monthly for the remainder of the water year. Records of specific conductance and temperature of individual samples available from U.S. Geological Survey, P. O. Box 4070, Tucson, Ariz., 85717.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DIS-CHARGE (CFS)	SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	SODIUM PLUS PO-TAS-SIUM (NA+K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.											
01-31	8504	10	93	32	--	--	107	169	0	312	94
NOV.											
01-30	7154	9.6	78	40	--	--	111	174	0	312	93
DEC.											
01-31	7374	10	80	40	--	--	113	177	0	315	95
JAN.											
01-31	9799	9.3	92	34	--	--	116	167	0	332	99
FEB.											
01-28	9644	9.2	90	34	--	--	116	164	0	330	98
MAR.											
01-31	12250	9.0	90	33	--	--	117	163	0	329	98
APR.											
21...	A19600	8.8	88	34	110	4.7	--	163	0	322	96
MAY											
19...	A18400	6.3	85	33	--	--	108	140	6	312	94
JUNE											
16...	A15300	8.6	90	33	--	--	110	165	0	316	96
JULY											
21...	19600	8.7	89	34	--	--	106	168	0	306	94
AUG.											
17...	19100	8.7	100	27	--	--	107	164	0	314	93
SEP.											
21...	10500	9.2	96	27	--	--	105	160	0	300	94
ANALYSES OF ADDITIONAL SAMPLES											
OCT.											
23...	12790	--	94	29	105	5.2	--	167	0	310	99
NOV.											
17...	10500	--	93	30	110	5.2	--	168	0	308	99
DEC.											
16...	A 8120	--	91	29	119	5.4	--	167	0	312	104
JAN.											
20...	A12100	--	91	34	114	5.5	--	160	0	318	104

DATE	DIS-SOLVED FLUC-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 (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.											
01-31	--	2.5	--	--	734	1.00	364	226	2.4	1110	8.1
NOV.											
01-30	--	3.0	--	782	729	1.06	360	218	2.5	1140	7.7
DEC.											
01-31	--	3.3	--	797	743	1.08	364	219	2.6	1160	7.8
JAN.											
01-31	--	1.2	--	810	766	1.10	370	233	2.6	1180	7.6
FEB.											
01-28	--	1.5	--	791	760	1.08	364	230	2.6	1170	7.6
MAR.											
01-31	--	2.3	--	800	758	1.09	362	228	2.7	1150	7.5
APR.											
21...	.4	2.6	160	801	747	1.09	360	226	2.5	1150	8.1
MAY											
19...	--	1.3	--	768	715	1.04	348	234	2.5	1130	8.6
JUNE											
16...	--	2.7	--	769	737	1.05	362	227	2.5	1160	8.2
JULY											
21...	--	2.7	--	760	723	1.03	360	222	2.4	1150	8.2
AUG.											
17...	--	2.8	--	780	734	1.06	362	228	2.5	1120	8.2
SEP.											
21...	--	3.0	--	715	713	.97	350	219	2.4	1110	8.0
ANALYSES OF ADDITIONAL SAMPLES											
OCT.											
23...	--	--	--	760	--	1.03	356	219	2.4	1140	8.1
NOV.											
17...	--	--	--	753	--	1.02	358	220	2.5	1120	8.1
DEC.											
16...	--	--	--	769	--	1.05	348	211	2.8	1160	7.8
JAN.											
20...	--	--	--	775	--	1.05	366	235	2.6	1160	7.8

A Daily mean discharge.

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 1970.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)
OCT.											
08...	--	1670	23.3	8.0	85	32	108	5.0	143	0	315
NOV.											
23...	1045	1920	--	9.0	86	33	113	5.0	148	0	325
DEC.											
08...	1000	1640	13.3	9.0	87	33	113	4.0	144	2	325
JAN.											
07...	--	1670	10.6	9.0	87	34	116	5.0	145	2	333
FEB.											
08...	--	1860	10.0	6.0	85	33	116	5.0	142	0	328
MAR.											
08...	--	1390	13.9	8.0	87	33	116	4.0	150	1	329
APR.											
08...	--	1750	17.2	9.0	89	34	112	4.0	146	2	331
MAY											
06...	0925	1790	20.0	7.0	92	33	113	4.0	151	2	332
JULY											
08...	--	1790	26.7	9.0	85	34	111	5.0	137	2	333
AUG.											
08...	--	1730	28.9	9.0	83	34	112	4.0	129	2	328
SEP.											
08...	--	1700	26.7	9.0	82	34	112	5.0	134	0	331

DATE	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 DAY)	HARD-NESS (CA,MG) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT.											
08...	97	.4	1.0	723	3260	344	117	227	2.5	1150	8.2
NOV.											
23...	100	.5	1.1	746	3870	350	121	229	2.6	1190	8.3
DEC.											
08...	100	.5	1.0	746	3300	353	121	232	2.6	1220	8.4
JAN.											
07...	100	.5	1.4	760	3430	357	122	235	2.7	1180	8.4
FEB.											
08...	100	.4	1.3	745	3740	348	116	232	2.7	1200	8.2
MAR.											
08...	98	.4	1.0	752	2820	353	125	228	2.7	1190	8.4
APR.											
08...	100	.3	1.2	755	3570	362	123	239	2.6	1230	8.5
MAY											
06...	98	.4	1.4	759	3670	365	127	238	2.6	1200	8.4
JULY											
08...	100	.5	1.3	749	3620	352	116	236	2.6	1160	8.4
AUG.											
08...	98	.4	.9	735	3430	347	109	238	2.6	1110	8.4
SEP.											
08...	98	.4	1.1	739	3390	345	110	235	2.6	1150	8.3

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 in California, San Bernardino County, Calif., at gaging station on north end of powerplant at Parker Dam, 13 miles northeast of Parker, Ariz., and 14 miles upstream from Headgate Rock Dam.
DRAINAGE AREA.--178,000 sq mi, approximately.
PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1970.
Water temperatures: February 1954 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Minimum, 10.0°C on several days during January.
EXTREMES, 1954-70.--Water temperatures: Maximum (1954-69), 28.0°C Aug. 12, 13, 18, 1955, Sept. 9, 1969; minimum (1954-65, 1966-70), 8.0°C Jan. 12, 1964.
REMARKS.--Prior to October 1968, samples collected 3.9 miles downstream from Parker Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DIS-CHARGE (CFS)	SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	SODIUM PLUS PO-TAS-SIUM (NA+K) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.											
24...	4610	--	87	33	110	--	5.6	153	0	316	103
NOV.											
18...	1840	--	90	33	119	--	5.8	159	0	322	108
DEC.											
17...	4630	--	90	33	117	--	5.8	156	0	320	109
JAN.											
02...	9300	9.6	89	34	--	117	--	159	0	327	102
21...	4590	--	90	34	114	--	5.9	158	0	322	106
FEB.											
11...	1860	8.8	89	34	--	120	--	166	0	328	101
MAR.											
11...	--	--	--	--	--	--	--	--	--	--	--
16...	A13800	7.0	89	34	--	118	--	160	--	340	93
17...	18700	8.9	91	32	--	115	--	151	4	322	98
APR.											
07...	18500	--	89	34	117	--	5.0	159	0	332	100
13...	A14200	6.0	94	31	--	120	--	156	--	345	95
20...	18100	7.0	82	40	114	--	5.0	163	0	334	98
MAY											
11...	A11500	6.0	90	34	--	119	--	158	--	350	93
18...	17800	9.6	91	35	--	113	--	165	0	324	100
JUNE											
08...	A12300	6.0	92	32	--	120	--	162	--	340	95
15...	15500	8.2	92	34	--	114	--	168	0	322	100
JULY											
13...	A14200	8.0	86	35	--	117	--	158	--	340	93
20...	18700	8.8	89	34	--	111	--	162	0	316	98
AUG.											
10...	A13100	7.0	89	31	--	115	--	154	--	330	93
18...	11500	9.3	100	26	--	114	--	156	0	323	98
SEP.											
14...	A10200	7.0	86	35	--	113	--	148	--	340	93
22...	9200	--	84	33	116	--	5.0	141	0	327	101

DATE	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 (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.											
24...	--	--	--	764	--	1.04	354	228	2.5	1170	8.1
NOV.											
18...	--	--	--	782	--	1.06	361	231	2.7	1160	7.6
DEC.											
17...	--	--	--	789	--	1.07	360	232	2.7	1170	7.7
JAN.											
02...	--	1.0	--	--	758	1.03	362	232	2.7	1190	8.1
21...	--	--	--	781	--	1.06	364	234	2.6	1190	8.1
FEB.											
11...	--	2.3	--	--	765	1.04	362	226	2.7	1190	7.4
MAR.											
11...	--	--	--	754	--	1.03	--	--	--	1170	--
16...	--	--	--	768	761	1.04	360	229	2.7	1180	8.1
17...	--	1.8	--	--	750	1.02	360	225	2.6	1170	8.3
APR.											
07...	.6	2.2	160	782	--	1.06	362	232	2.7	1210	8.1
13...	--	--	--	784	769	1.07	360	232	2.7	1190	8.1
20...	.3	2.0	190	822	762	1.12	368	234	2.6	1160	8.0
MAY											
11...	--	--	--	804	771	1.09	365	236	2.7	1200	8.1
18...	--	1.8	--	792	755	1.08	370	235	2.5	1200	8.2
JUNE											
08...	--	--	--	772	766	1.05	360	227	2.7	1200	8.0
15...	--	2.1	--	796	755	1.08	368	230	2.6	1200	8.1
JULY											
13...	--	--	--	792	758	1.08	360	230	2.7	1180	8.0
20...	--	1.2	--	770	738	1.05	360	227	2.5	1180	7.8
AUG.											
10...	--	--	--	780	742	1.06	350	224	2.7	1170	8.0
18...	--	1.0	--	786	748	1.07	356	228	2.6	1150	7.6
SEP.											
14...	--	--	--	772	748	1.05	360	238	2.6	1170	8.0
22...	.6	2.0	100	740	--	1.01	345	229	2.7	1150	8.0

A Daily mean discharge.

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

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	21.0	20.0	15.0	15.0	12.0	11.0	11.0	11.0	12.0	12.0
2	---	---	21.0	20.0	15.0	15.0	12.0	12.0	11.0	11.0	13.0	12.0
3	---	---	20.0	20.0	15.0	14.0	12.0	12.0	11.0	11.0	13.0	13.0
4	---	---	20.0	19.0	14.0	14.0	12.0	12.0	11.0	11.0	13.0	13.0
5	---	---	19.0	19.0	14.0	14.0	12.0	12.0	11.0	11.0	13.0	13.0
6	---	---	19.0	19.0	14.0	14.0	12.0	12.0	11.0	11.0	13.0	13.0
7	24.0	23.0	19.0	19.0	14.0	14.0	12.0	11.0	11.0	11.0	14.0	13.0
8	24.0	23.0	19.0	19.0	14.0	14.0	11.0	11.0	11.0	11.0	14.0	14.0
9	23.0	23.0	19.0	18.0	14.0	13.0	11.0	11.0	11.0	11.0	14.0	14.0
10	23.0	23.0	18.0	18.0	13.0	13.0	11.0	11.0	11.0	11.0	14.0	14.0
11	23.0	22.0	18.0	18.0	13.0	13.0	11.0	10.0	12.0	11.0	14.0	14.0
12	22.0	22.0	18.0	18.0	13.0	13.0	10.0	10.0	12.0	12.0	14.0	14.0
13	22.0	22.0	18.0	18.0	13.0	13.0	10.0	10.0	12.0	12.0	14.0	14.0
14	22.0	22.0	18.0	18.0	13.0	13.0	10.0	10.0	12.0	11.0	14.0	14.0
15	22.0	22.0	---	---	13.0	13.0	10.0	10.0	12.0	11.0	15.0	14.0
16	23.0	22.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	15.0	15.0
17	22.0	22.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	15.0	15.0
18	22.0	22.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	15.0	15.0
19	22.0	22.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	15.0	15.0
20	22.0	22.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	15.0	15.0
21	22.0	21.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	15.0	14.0
22	21.0	21.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	15.0	15.0
23	21.0	20.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	15.0	15.0
24	21.0	20.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	16.0	15.0
25	21.0	21.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	16.0	16.0
26	21.0	21.0	---	---	13.0	13.0	10.0	10.0	12.0	12.0	16.0	16.0
27	21.0	21.0	---	---	13.0	13.0	11.0	10.0	13.0	12.0	16.0	16.0
28	21.0	21.0	---	---	13.0	13.0	11.0	11.0	13.0	12.0	16.0	16.0
29	21.0	20.0	---	---	13.0	12.0	11.0	11.0	---	---	16.0	16.0
30	21.0	20.0	---	---	12.0	12.0	11.0	11.0	---	---	16.0	16.0
31	21.0	20.0	---	---	12.0	11.0	11.0	11.0	---	---	16.0	16.0
MONTH	24.0	20.0	---	---	15.0	11.0	12.0	10.0	13.0	11.0	16.0	12.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	16.0	18.0	18.0	24.0	23.0	25.0	24.0	26.0	26.0	---	---
2	16.0	16.0	18.0	18.0	24.0	23.0	24.0	24.0	26.0	26.0	---	---
3	16.0	16.0	18.0	18.0	24.0	23.0	24.0	24.0	26.0	26.0	---	---
4	16.0	16.0	18.0	18.0	23.0	23.0	25.0	24.0	26.0	26.0	---	---
5	17.0	16.0	18.0	18.0	23.0	23.0	25.0	24.0	27.0	26.0	---	---
6	17.0	16.0	18.0	18.0	23.0	23.0	25.0	24.0	27.0	27.0	---	---
7	17.0	17.0	18.0	17.0	23.0	23.0	24.0	24.0	27.0	27.0	---	---
8	17.0	17.0	18.0	18.0	23.0	23.0	24.0	24.0	27.0	26.0	---	---
9	17.0	17.0	18.0	18.0	23.0	23.0	25.0	24.0	26.0	26.0	---	---
10	18.0	17.0	18.0	18.0	23.0	23.0	26.0	25.0	26.0	26.0	---	---
11	18.0	17.0	18.0	18.0	24.0	23.0	26.0	25.0	26.0	25.0	---	---
12	18.0	18.0	18.0	18.0	24.0	23.0	26.0	26.0	26.0	25.0	---	---
13	18.0	18.0	19.0	18.0	23.0	23.0	26.0	26.0	27.0	26.0	---	---
14	18.0	18.0	20.0	19.0	23.0	23.0	26.0	25.0	27.0	26.0	---	---
15	18.0	18.0	20.0	20.0	23.0	23.0	26.0	25.0	27.0	26.0	---	---
16	18.0	18.0	21.0	20.0	23.0	23.0	26.0	25.0	27.0	26.0	---	---
17	18.0	17.0	21.0	21.0	23.0	23.0	25.0	24.0	26.0	26.0	---	---
18	18.0	17.0	21.0	21.0	24.0	23.0	25.0	25.0	27.0	26.0	---	---
19	18.0	18.0	21.0	21.0	24.0	23.0	25.0	24.0	27.0	26.0	---	---
20	18.0	18.0	21.0	20.0	24.0	24.0	24.0	24.0	27.0	26.0	---	---
21	18.0	18.0	21.0	20.0	24.0	23.0	24.0	24.0	27.0	27.0	---	---
22	18.0	18.0	21.0	21.0	23.0	23.0	25.0	24.0	27.0	26.0	---	---
23	18.0	18.0	21.0	21.0	24.0	23.0	25.0	24.0	27.0	27.0	---	---
24	18.0	18.0	21.0	21.0	24.0	24.0	25.0	24.0	27.0	26.0	---	---
25	18.0	18.0	21.0	21.0	25.0	24.0	26.0	24.0	27.0	26.0	---	---
26	18.0	18.0	22.0	21.0	25.0	24.0	26.0	26.0	26.0	26.0	---	---
27	18.0	17.0	22.0	21.0	24.0	24.0	26.0	26.0	---	---	---	---
28	18.0	17.0	22.0	21.0	24.0	24.0	26.0	26.0	---	---	---	---
29	18.0	18.0	22.0	21.0	24.0	23.0	26.0	26.0	---	---	---	---
30	18.0	18.0	22.0	22.0	25.0	24.0	26.0	26.0	---	---	---	---
31	---	---	23.0	22.0	---	---	26.0	26.0	---	---	---	---
MONTH	18.0	16.0	23.0	17.0	25.0	23.0	26.0	24.0	27.0	25.0	---	---

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

LOCATION.--Lat 34°52'34", long 114°27'18", in SE¼SW¼ 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.--Water temperatures: January 1956 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 33.0°C Aug. 29-31; minimum, 10.0°C on several days during January and February.
EXTREMES, 1956-70.--Water temperatures: Maximum, 33.0°C Aug. 29-31, 1970; minimum, 7.0°C Jan. 13-17, 1964.
REMARKS.--No flow Nov. 25.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	27.0	27.0	19.0	19.0	14.0	14.0	12.0	12.0	10.0	10.0	14.0	14.0
2	27.0	27.0	19.0	19.0	15.0	14.0	12.0	12.0	10.0	10.0	14.0	14.0
3	27.0	26.0	19.0	19.0	16.0	15.0	12.0	12.0	10.0	10.0	14.0	14.0
4	26.0	23.0	19.0	19.0	16.0	16.0	12.0	12.0	11.0	10.0	14.0	14.0
5	23.0	22.0	19.0	19.0	16.0	16.0	12.0	12.0	11.0	10.0	14.0	14.0
6	22.0	21.0	19.0	19.0	16.0	15.0	12.0	12.0	11.0	10.0	14.0	14.0
7	21.0	21.0	19.0	19.0	15.0	15.0	12.0	12.0	12.0	11.0	15.0	14.0
8	22.0	21.0	19.0	19.0	14.0	13.0	12.0	12.0	12.0	12.0	15.0	15.0
9	22.0	21.0	19.0	19.0	14.0	13.0	12.0	11.0	12.0	12.0	16.0	15.0
10	23.0	22.0	19.0	18.0	13.0	13.0	12.0	11.0	12.0	12.0	16.0	15.0
11	23.0	21.0	19.0	18.0	13.0	12.0	11.0	11.0	13.0	12.0	15.0	14.0
12	22.0	21.0	19.0	19.0	13.0	12.0	11.0	11.0	14.0	13.0	15.0	15.0
13	21.0	20.0	20.0	19.0	12.0	12.0	12.0	11.0	14.0	14.0	16.0	15.0
14	20.0	20.0	19.0	19.0	12.0	12.0	12.0	12.0	14.0	14.0	16.0	15.0
15	21.0	20.0	19.0	19.0	12.0	12.0	12.0	11.0	14.0	14.0	17.0	16.0
16	22.0	21.0	19.0	18.0	12.0	12.0	12.0	11.0	15.0	14.0	17.0	16.0
17	22.0	21.0	19.0	18.0	12.0	12.0	13.0	12.0	14.0	14.0	16.0	16.0
18	22.0	20.0	19.0	17.0	12.0	11.0	13.0	13.0	14.0	13.0	16.0	15.0
19	21.0	20.0	17.0	15.0	12.0	12.0	13.0	13.0	13.0	12.0	16.0	15.0
20	21.0	19.0	15.0	15.0	12.0	12.0	13.0	13.0	12.0	11.0	15.0	15.0
21	20.0	19.0	---	---	12.0	12.0	13.0	13.0	12.0	11.0	15.0	15.0
22	19.0	18.0	---	---	13.0	12.0	13.0	13.0	12.0	11.0	16.0	15.0
23	19.0	19.0	---	---	13.0	13.0	13.0	12.0	12.0	12.0	16.0	15.0
24	20.0	19.0	---	---	13.0	12.0	13.0	12.0	12.0	12.0	17.0	16.0
25	21.0	20.0	---	---	12.0	11.0	13.0	12.0	12.0	12.0	17.0	17.0
26	21.0	20.0	---	---	15.0	12.0	13.0	12.0	13.0	12.0	17.0	17.0
27	21.0	21.0	---	---	15.0	15.0	13.0	12.0	13.0	13.0	17.0	16.0
28	21.0	21.0	14.0	14.0	15.0	13.0	12.0	12.0	14.0	13.0	16.0	15.0
29	21.0	20.0	14.0	14.0	13.0	12.0	12.0	10.0	---	---	16.0	16.0
30	20.0	19.0	14.0	14.0	12.0	12.0	10.0	10.0	---	---	16.0	16.0
31	20.0	19.0	---	---	12.0	12.0	10.0	10.0	---	---	16.0	16.0
MONTH	27.0	18.0	---	---	16.0	11.0	13.0	10.0	15.0	10.0	17.0	14.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	16.0	19.0	18.0	27.0	26.0	28.0	27.0	30.0	29.0	32.0	32.0
2	16.0	16.0	20.0	19.0	27.0	26.0	28.0	27.0	31.0	30.0	32.0	31.0
3	17.0	16.0	21.0	20.0	27.0	27.0	29.0	28.0	31.0	29.0	31.0	31.0
4	17.0	16.0	21.0	20.0	27.0	27.0	30.0	29.0	29.0	29.0	31.0	31.0
5	17.0	16.0	22.0	21.0	27.0	27.0	31.0	30.0	30.0	29.0	31.0	30.0
6	17.0	17.0	22.0	21.0	27.0	27.0	31.0	30.0	31.0	29.0	30.0	28.0
7	17.0	17.0	22.0	21.0	27.0	27.0	31.0	29.0	32.0	31.0	28.0	27.0
8	18.0	17.0	22.0	21.0	27.0	27.0	30.0	29.0	32.0	31.0	29.0	28.0
9	18.0	18.0	23.0	22.0	27.0	26.0	29.0	28.0	32.0	31.0	29.0	28.0
10	20.0	18.0	23.0	22.0	26.0	25.0	29.0	29.0	32.0	31.0	31.0	29.0
11	21.0	19.0	23.0	22.0	26.0	24.0	29.0	29.0	31.0	31.0	31.0	31.0
12	21.0	19.0	23.0	22.0	26.0	25.0	30.0	29.0	31.0	30.0	31.0	31.0
13	20.0	19.0	23.0	23.0	25.0	24.0	30.0	29.0	31.0	31.0	31.0	29.0
14	19.0	18.0	24.0	23.0	24.0	24.0	30.0	29.0	32.0	31.0	29.0	28.0
15	18.0	17.0	24.0	23.0	24.0	24.0	30.0	29.0	31.0	31.0	28.0	27.0
16	18.0	18.0	24.0	23.0	25.0	24.0	30.0	29.0	31.0	31.0	27.0	26.0
17	18.0	18.0	25.0	24.0	26.0	25.0	30.0	29.0	31.0	30.0	27.0	26.0
18	18.0	18.0	26.0	25.0	27.0	26.0	31.0	30.0	31.0	31.0	27.0	26.0
19	19.0	18.0	26.0	25.0	28.0	27.0	31.0	30.0	31.0	31.0	27.0	27.0
20	19.0	19.0	26.0	25.0	28.0	27.0	31.0	29.0	31.0	31.0	27.0	26.0
21	19.0	18.0	25.0	24.0	28.0	28.0	29.0	29.0	32.0	31.0	27.0	26.0
22	18.0	18.0	25.0	24.0	28.0	28.0	29.0	29.0	32.0	31.0	26.0	26.0
23	18.0	18.0	25.0	24.0	28.0	28.0	30.0	29.0	32.0	31.0	26.0	26.0
24	19.0	18.0	25.0	24.0	29.0	28.0	30.0	29.0	32.0	32.0	26.0	26.0
25	20.0	19.0	25.0	24.0	29.0	29.0	31.0	29.0	32.0	32.0	26.0	24.0
26	21.0	20.0	24.0	24.0	29.0	29.0	31.0	29.0	32.0	31.0	24.0	23.0
27	20.0	19.0	24.0	23.0	29.0	29.0	31.0	29.0	31.0	31.0	23.0	23.0
28	19.0	18.0	24.0	23.0	29.0	29.0	30.0	29.0	32.0	31.0	23.0	23.0
29	18.0	18.0	24.0	23.0	29.0	28.0	31.0	29.0	33.0	32.0	24.0	23.0
30	18.0	18.0	25.0	24.0	28.0	27.0	31.0	29.0	33.0	32.0	25.0	24.0
31	---	---	26.0	24.0	---	---	31.0	30.0	33.0	32.0	---	---
MONTH	21.0	16.0	26.0	18.0	29.0	24.0	31.0	27.0	33.0	29.0	32.0	23.0

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

LOCATION.--Lat 32°52'17", long 114°28'47", in SE¼NW¼ 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 September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)
OCT.								
22...	1355	5000	19.0	.31	--	--	.02	1.2
NOV.								
19...	1600	1670	15.0	.00	--	--	--	1.2
DEC.								
17...	1345	4600	13.0	.24	--	--	.18	1.9
JAN.								
14...	1200	5140	11.0	--	--	--	--	--
20...	1300	3870	13.6	.27	--	.27	.00	1.8
FEB.								
18...	1030	4450	15.5	.76	--	.86	.13	2.4
MAR.								
17...	1115	8490	17.5	.31	--	.55	.31	2.5
APR.								
22...	1145	8400	18.0	.14	--	.41	.35	1.9
MAY								
19...	1100	7600	25.0	.72	1.1	.74	.03	1.7
JUNE								
16...	1115	6950	25.0	.51	.96	.54	.04	1.8
JULY								
29...	1115	7610	28.5	.66	.94	.66	.00	1.2
AUG.								
13...	1115	7800	39.0	.54	--	.57	.04	1.3
SEP.								
16...	1045	5590	31.0	.36	--	.39	.04	1.0

DATE	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL SOL-UBLE PHOS-PHATE (PO4) (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)
OCT.							
22...	.17	.00	.04	896	1.22	12100	1360
NOV.							
19...	.19	.05	.08	1120	1.52	5050	1700
DEC.							
17...	.20	.04	.08	944	1.28	11700	1420
JAN.							
14...	--	--	--	952	1.29	13200	1360
20...	.09	.04	.04	938	1.28	9800	1400
FEB.							
18...	.17	.05	.06	1000	1.36	12000	1470
MAR.							
17...	.49	.04	.11	--	--	--	--
APR.							
22...	.34	.07	.08	868	1.18	19700	1320
MAY							
19...	.70	.07	.33	902	1.23	18500	1340
JUNE							
16...	.07	.05	.07	904	1.23	17000	1380
JULY							
29...	.05	.03	.05	908	1.23	18700	1340
AUG.							
13...	.09	.01	.01	886	1.20	18700	1330
SEP.							
16...	.08	.01	.01	912	1.24	13800	1360

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)
OCT.												
22...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
NOV.												
19...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
JAN.												
20...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
FEB.												
18...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
MAR.												
17...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
APR.												
22...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
MAY												
19...	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00
JUNE												
16...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

09525500 YUMA MAIN CANAL BELOW COLORADO RIVER SIPHON, AT YUMA, ARIZ.
(Irrigation network station)

LOCATION.--Lat 32°43'39", long 114°37'13", in NW¼NE¼ sec.35, T.16 S., R.22 E., San Bernardino meridian, Yuma County, at gaging station at Colorado River siphon outlet on Arizona side of river, 0.2 mile upstream from bridge on U.S. Highway 80 over Colorado River at Yuma, 0.3 mile west of old Yuma Territorial Prison, and 3.5 miles downstream from siphon-drop powerplant.

PERIOD OF RECORD.--.--Chemical analyses: September 1926 to September 1928, October 1942 to September 1970. Water temperatures: May 1961 to September 1970.

EXTREMES, 1969-70.--Dissolved solids: Maximum, 1,090 mg/l Nov. 20-26; minimum, 867 mg/l Apr. 1-30. Hardness: Maximum, 440 mg/l Nov. 20-26; minimum, 368 mg/l July 1 to Aug. 31.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DIS-CHARGE (CFS)	SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	SODIUM PLUS PO-TAS-SIUM (NA+K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
01-31	415	14	119	20	--	--	152	176	0	356	139	--
NOV.												
01-16	187	15	94	37	--	--	163	181	0	363	152	--
20-26	146	16	108	41	--	--	208	223	0	410	200	--
27-30	202	15	101	44	--	--	177	201	0	390	175	--
DEC.												
01-31	158	15	98	37	--	--	171	184	4	373	157	--
JAN.												
01-31	254	14	94	39	--	--	156	181	2	364	144	--
FEB.												
01-28	424	13	98	36	--	--	164	193	3	366	144	--
MAR.												
01-31	357	11	105	30	--	--	151	180	4	352	132	--
APR.												
01-30	564	9.5	100	32	140	4.4	--	174	0	362	130	.5
MAY												
01-31	598	9.8	100	32	--	--	155	170	0	368	137	--
JUNE												
01-30	519	10	100	31	--	--	160	161	2	371	142	--
JULY												
01-31	561	11	95	32	--	--	155	159	0	365	137	--
AUG.												
01-31	441	12	100	29	--	--	152	150	2	365	136	--
SEP.												
01-30	508	11	100	32	--	--	161	163	4	372	142	--
WTD. AVG.	--	12	101	32	--	--	157	171	2	365	139	--
TIME WTD. AVG.	416	12	101	32	--	--	159	173	2	366	142	--
TOT. LOAD (TONS)	--	4680	41000	12800	--	--	56900	69400	634	149000	56700	--

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	1430	1480	1450	1430	1320	1290	1330	1410	1330	1370	1370
2	1350	1460	1500	1450	1480	1300	1300	1320	1410	1330	1390	1380
3	1360	1480	1490	1450	1480	1290	1300	1350	1380	1320	1340	1350
4	1360	1490	1490	1380	1420	1310	1330	1390	1370	1330	1350	1410
5	1350	1450	1480	1380	1410	1290	1330	1340	1370	1320	1310	1420
6	1370	1430	1470	1390	1380	1340	1320	1350	1450	1330	1280	1420
7	1370	1440	1460	1360	1360	1400	1320	1320	1400	1320	1330	1440
8	1370	1410	1520	1360	1380	1420	1320	1350	1440	1310	1340	1410
9	1380	1430	1640	1350	1380	1490	1310	1360	1380	1360	1340	1420
10	1350	1420	1630	1360	1370	1490	1310	1370	1350	1320	1370	1410
11	1350	1430	1520	1360	1390	1500	1320	1430	1360	1360	1380	1400
12	1360	1430	1470	1380	1370	1480	1340	1360	1370	1390	1380	1360
13	1380	1460	1440	1380	1350	1350	1320	1340	1370	1340	1330	1400
14	1350	1440	1450	1390	1370	1340	1330	1320	1390	1340	1350	1410
15	1350	1430	1480	1380	1430	1360	1320	1340	1360	1350	1390	1430
16	1370	---	1470	1360	1530	1330	1320	1330	1360	1340	1340	1400
17	1380	---	---	1380	1600	1430	1340	1340	1380	1330	1350	1410
18	1390	---	1410	1390	1630	1340	1360	1350	1360	1360	1350	1350
19	1400	---	1430	1400	1490	1310	1360	1330	1380	1360	1300	1370
20	1420	1710	1520	1470	1430	1320	1360	1290	1400	1370	1260	1400
21	1390	1710	1450	1440	1360	1330	1360	1340	1400	1330	1320	1410
22	1380	1690	1440	1490	1340	1310	1350	1330	1380	1320	1370	1400
23	1370	1710	1450	1470	---	---	1350	1370	1350	1340	1370	1400
24	1370	1730	1430	1450	---	---	1360	1410	1390	1350	---	1390
25	1400	1740	1460	1450	---	1310	1360	1400	1360	1400	---	1370
26	1440	1700	1480	1460	1310	1310	1370	1400	1370	1400	---	1400
27	1460	1610	1530	---	1320	1330	---	1400	1390	1370	1320	1420
28	1460	1570	1600	---	1310	1320	---	1380	1410	1350	1340	1410
29	1440	1580	1460	1440	---	1330	---	1410	1400	1380	1300	1400
30	1410	1480	1440	1430	---	1340	1360	1430	1380	1370	1370	1400
31	1420	---	1460	1420	---	1310	---	1450	---	1360	1460	---
MONTH	1380	1530	1490	1410	1410	1360	1330	1360	1380	1350	1350	1400

09525500 YUMA MAIN CANAL BELOW COLORADO RIVER SIPHON, AT YUMA, ARIZ.--Continued

EXTREMES, 1969-70--Continued
Specific conductance: Maximum daily, 1,740 micromhos Nov. 25; minimum daily, 1,290 micromhos Mar. 3, Apr. 1.
Water temperatures: Maximum, 31.0°C on several days during August and September; minimum, 6.0°C Jan. 7.
EXTREMES, 1943-70.--Dissolved solids: Maximum, 1,470 mg/l July 1-31, 1970; minimum, 426 mg/l Dec. 1-31, 1969.
Hardness: Maximum, 520 mg/l July 7, 1962; minimum, 260 mg/l Jan. 1-10, 1953.
Specific conductance: Maximum daily, 1,740 micromhos Nov. 25, 1969; minimum daily, 795 micromhos Jan. 5, 1953.
Water temperatures (1967-70): Maximum, 31.0°C on many days in 1969 and 1970; minimum, 6.0°C Jan. 7, 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	NITRATE (NO3) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (PO4) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.												
01-31	1.4	1.7	.02	--	895	1.29	1060	380	236	3.4	1380	8.2
NOV.												
01-16	1.3	.71	.04	--	916	1.30	483	388	240	3.6	1440	8.1
20-26	1.2	--	--	--	1090	1.48	430	440	258	4.3	1710	8.1
27-30	1.3	--	--	--	1000	1.36	545	434	270	3.7	1560	8.2
DEC.												
01-31	1.4	.84	.01	--	949	1.36	426	396	238	3.7	1470	8.3
JAN.												
01-31	1.5	.84	.03	--	906	1.31	660	396	244	3.4	1400	8.3
FEB.												
01-28	1.6	1.0	.02	--	923	1.27	1070	392	229	3.6	1400	8.3
MAR.												
01-31	9.0	5.0	.06	--	896	1.25	883	386	232	3.3	1350	8.3
APR.												
01-30	1.7	1.0	.05	230	867	1.18	1330	380	238	3.1	1330	8.1
MAY												
01-31	1.4	.86	.07	230	888	1.16	1380	380	240	3.5	1360	8.2
JUNE												
01-30	1.6	.86	.03	230	898	1.24	1280	376	240	3.6	1380	8.3
JULY												
01-31	1.5	.69	.05	210	875	1.32	1470	368	238	3.5	1350	8.2
AUG.												
01-31	1.5	.79	.03	220	873	1.24	1090	368	242	3.4	1340	8.3
SEP.												
01-30	1.3	.89	.05	220	904	1.20	1210	380	240	3.6	1390	8.4
WTD. AVG.	2.0	1.2	.04	--	895	1.25	--	381	238	3.5	1370	8.2
TIME WTD. AVG.	2.1	1.3	.04	--	903	1.26	--	384	239	3.5	1390	8.3
TOT. LOAD (TONS)	830	498	17	--	364000	--	--	--	--	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.0	18.0	13.0	9.0	10.0	16.0	16.0	18.0	25.0	27.0	29.0	31.0
2	26.0	18.0	14.0	8.0	11.0	14.0	16.0	19.0	26.0	27.0	30.0	31.0
3	26.0	18.0	14.0	8.0	10.0	14.0	16.0	19.0	26.0	28.0	30.0	30.0
4	23.0	18.0	14.0	8.0	11.0	14.0	16.0	20.0	26.0	29.0	29.0	30.0
5	21.0	18.0	14.0	8.0	11.0	14.0	16.0	21.0	26.0	29.0	29.0	29.0
6	21.0	18.0	14.0	8.0	11.0	13.0	17.0	21.0	26.0	29.0	30.0	28.0
7	20.0	18.0	14.0	6.0	12.0	14.0	17.0	21.0	27.0	29.0	30.0	27.0
8	17.0	18.0	13.0	7.0	12.0	15.0	17.0	21.0	27.0	29.0	31.0	27.0
9	18.0	18.0	13.0	7.0	13.0	15.0	18.0	21.0	27.0	29.0	31.0	28.0
10	20.0	18.0	13.0	8.0	14.0	16.0	19.0	22.0	26.0	29.0	31.0	28.0
11	22.0	18.0	12.0	9.0	14.0	15.0	19.0	22.0	25.0	28.0	31.0	29.0
12	20.0	18.0	13.0	10.0	14.0	15.0	19.0	22.0	25.0	28.0	31.0	30.0
13	19.0	18.0	13.0	10.0	14.0	13.0	19.0	22.0	24.0	29.0	31.0	29.0
14	19.0	18.0	12.0	11.0	15.0	16.0	19.0	23.0	23.0	29.0	31.0	30.0
15	19.0	18.0	12.0	11.0	15.0	14.0	18.0	23.0	23.0	29.0	30.0	27.0
16	20.0	---	12.0	12.0	15.0	16.0	18.0	23.0	24.0	29.0	30.0	24.0
17	21.0	---	---	12.0	15.0	17.0	17.0	23.0	24.0	29.0	30.0	26.0
18	20.0	---	12.0	12.0	16.0	17.0	17.0	24.0	25.0	29.0	31.0	25.0
19	19.0	---	12.0	12.0	14.0	16.0	17.0	25.0	26.0	29.0	30.0	26.0
20	18.0	13.0	12.0	12.0	13.0	15.0	18.0	24.0	27.0	29.0	30.0	24.0
21	18.0	13.0	13.0	12.0	13.0	14.0	18.0	24.0	27.0	29.0	30.0	25.0
22	18.0	13.0	13.0	13.0	13.0	16.0	17.0	24.0	28.0	29.0	30.0	27.0
23	18.0	13.0	13.0	12.0	---	---	17.0	24.0	27.0	29.0	30.0	24.0
24	18.0	13.0	13.0	12.0	---	---	18.0	24.0	27.0	29.0	---	24.0
25	18.0	13.0	13.0	12.0	---	17.0	18.0	24.0	28.0	29.0	---	24.0
26	19.0	14.0	13.0	12.0	14.0	18.0	19.0	24.0	28.0	29.0	---	22.0
27	19.0	14.0	13.0	---	14.0	18.0	---	24.0	28.0	29.0	29.0	25.0
28	20.0	13.0	13.0	---	14.0	16.0	---	24.0	28.0	29.0	30.0	23.0
29	21.0	13.0	11.0	11.0	---	16.0	---	24.0	28.0	29.0	30.0	21.0
30	19.0	13.0	10.0	10.0	---	16.0	17.0	24.0	27.0	29.0	31.0	22.0
31	18.0	---	9.0	11.0	---	16.0	---	24.0	---	29.0	31.0	---
MONTH	20.0	16.0	12.5	10.0	13.0	15.5	17.5	22.5	26.0	29.0	30.0	26.5

10254450 EAST HIGHLINE CANAL NEAR NILAND, CALIF.

LOCATION.--Lat 33°16'42", long 115°31'32", in SE¼SW¼SW¼ 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 September 1970.
REMARKS.--Records of discharge furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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 (NO2) (MG/L)	AMMONIA (NH4) (MG/L)
OCT.								
22...	1005	.01	18.0	.19	--	--	--	.07
NOV.								
19...	0935	.01	13.0	.00	--	--	--	.00
DEC.								
17...	0815	.01	12.0	.30	--	--	--	.00
JAN.								
19...	1645	10	15.0	.32	--	.32	--	.00
FEB.								
17...	1640	14	18.0	.42	--	.54	.02	.15
MAR.								
16...	1715	36	19.2	.17	--	.49	.03	.41
APR.								
21...	1600	5.7	19.0	.58	--	.87	.01	.37
MAY								
18...	1545	37	28.0	1.1	1.4	1.1	.02	.00
JUNE								
15...	1600	36	27.0	.83	1.5	.94	.01	.14
AUG.								
18...	1600	37	33.0	.54	.95	.58	.03	.05
SEP.								
22...	1600	30	24.0	.42	--	.45	--	.04

DATE	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL SOL-UBLE PHOS-PHATE (PO4) (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)
OCT.								
22...	1.4	.19	.00	.06	952	1.29	.26	1450
NOV.								
19...	1.6	.18	.05	.10	1030	1.40	.28	1610
DEC.								
17...	1.9	.11	.03	.03	1020	1.39	.03	1550
JAN.								
19...	1.4	.06	.05	.05	998	1.36	26.9	1540
FEB.								
17...	2.6	.16	.00	.00	1050	1.43	40.3	1570
MAR.								
16...	2.6	.53	.02	.13	--	--	--	--
APR.								
21...	1.3	.23	.05	.07	976	1.33	15.0	1450
MAY								
18...	1.4	.78	.05	.40	914	1.24	91.3	1400
JUNE								
15...	2.5	.10	.07	.07	914	1.24	88.8	1370
AUG.								
18...	1.6	.20	.02	.02	932	1.27	93.1	1390
SEP.								
22...	1.4	.15	.01	.01	932	1.27	75.5	1410

10254450 EAST HIGHLINE CANAL NEAR NILAND, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)
OCT. 22...	.00	.00	.04	.00	.00	.00	.00	.00
NOV. 19...	.00	.00	.02	.00	.00	.00	.00	.00
JAN. 19...	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 17...	.00	.00	.00	.00	.00	.00	.00	.00
MAY 18...	.00	.00	.00	.00	.00	.00	.00	.00
JUNE 15...	.00	.00	.00	.00	.00	.00	.00	.00
JULY 14...	.00	.00	.00	.00	.00	.00	.00	.00
AUG. 18...	.00	.00	.00	.00	.00	.00	.00	.00
SEPT. 22...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)	MALA-THION (UG/L)	DI-AZINON (UG/L)
OCT. 22...	.00	.00	.00	--	--	--	--	--
NOV. 19...	.16	.00	.00	--	--	--	--	--
JAN. 19...	.00	.00	.00	--	--	--	--	--
FEB. 17...	.00	.00	.01	--	--	--	--	--
MAY 18...	.00	.00	.00	.00	--	--	--	--
JUNE 15...	.00	.00	.00	.00	--	--	--	--
JULY 14...	.00	.00	.00	.00	--	--	--	--
AUG. 18...	.04	.00	.00	.00	--	--	--	--
SEPT. 22...	.00	.00	.00	.00	.00	.00	.00	.00

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

LOCATION.--Lat 32°40'26", long 115°22'12", in SE¼SE¼NW¼ 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 September 1970.
REMARKS.--Records of discharge furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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 (NO2) (MG/L)	AMMONIA (NH4) (MG/L)
OCT.								
22...	1240	2.0	19.5	.67	--	--	--	.07
NOV.								
19...	1450	2.2	17.0	.36	--	--	--	.23
DEC.								
17...	1215	2.2	17.5	.25	--	--	--	.41
JAN.								
20...	0900	3.5	14.0	.57	--	.62	--	.06
FEB.								
18...	0900	2.5	15.5	.49	--	.67	.11	.23
MAR.								
17...	0930	2.0	17.5	.42	--	.76	.11	.44
APR.								
22...	1015	2.0	17.8	.36	--	.68	.11	.41
MAY								
19...	0930	1.6	22.5	1.4	1.8	1.4	.12	.03
JUNE								
16...	0800	1.4	20.5	1.0	1.6	1.1	.07	.18
AUG.								
19...	0730	2.1	27.5	.50	.93	.57	.08	.09
SEP.								
22...	1815	2.9	24.0	.60	--	.63	--	.04

DATE	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL SOL-UBLE PHOS-PHATE (PO4) (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)
OCT.								
22...	1.6	.37	.09	.18	2580	3.51	13.9	3860
NOV.								
19...	2.9	.26	.04	.17	2940	4.00	17.5	4380
DEC.								
17...	3.6	1.7	.13	.24	2480	3.37	14.8	3690
JAN.								
20...	2.5	.32	.14	.14	2840	3.86	26.8	4240
FEB.								
18...	2.7	.28	.09	.08	2630	3.58	18.1	3860
MAR.								
17...	20	.55	.13	.20	--	--	--	--
APR.								
22...	2.6	.65	.18	.24	3220	4.38	17.4	4720
MAY								
19...	1.4	1.9	.22	.80	2260	3.07	10.3	3450
JUNE								
16...	2.1	.37	.07	.26	2880	3.92	10.9	4370
AUG.								
19...	1.5	.26	.05	.13	2060	2.80	11.7	3060
SEP.								
22...	1.3	.18	.03	.03	2500	3.40	19.6	3690

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)
OCT. 22...	.00	.01	.01	.00	.00	.00	.00	.00
NOV. 19...	.00	.01	.00	.00	.00	.00	.00	.00
JAN. 20...	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 18...	.00	.01	.01	.00	.00	.00	.00	.00
MAY 19...	.00	.04	.05	.01	.00	.00	.00	.00
JUNE 16...	.00	.01	.00	.00	.00	.00	.00	.00
JULY 14...	.00	.00	.01	.00	.00	.00	.00	.00
AUG. 19...	.00	.00	.00	.00	.00	.00	.00	.00
SEPT. 22...	.00	.00	.00	.00	.00	.00	.00	.00

DATE	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)	MALA-THION (UG/L)	DI-AZINON (UG/L)
OCT. 22...	.00	.00	.00	--	--	--	--	--
NOV. 19...	.07	.02	.00	--	--	--	--	--
JAN. 20...	.03	.00	.00	--	--	--	--	--
FEB. 18...	.14	.00	.00	--	--	--	--	--
MAY 19...	.07	.00	.00	.00	--	--	--	--
JUNE 16...	.00	.00	.00	.00	--	--	--	--
JULY 14...	.00	.00	.00	.00	--	--	--	--
AUG. 19...	.00	.00	.00	.00	--	--	--	--
SEPT. 22...	.00	.00	.00	.00	.00	.00	.00	.00

10254600 ALAMO RIVER AT DROP NO. 9, NEAR HOLTVILLE, CALIF.

LOCATION.--Lat 32°49'57", long 115°26'09", in SE¼SE¼NE¼ sec.20, T.15 S., R.15 E., Imperial County, at gaging station 3.4 miles northwest of Holtville.
PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1970 (discontinued).
REMARKS.--Records of discharge furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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 (NO2) (MG/L)	AMMONIA (NH4) (MG/L)
OCT.								
22...	1140	326	18.8	.68	--	--	--	14
NOV.								
19...	1200	129	15.0	.00	--	--	--	22
DEC.								
17...	1000	197	12.5	4.5	--	--	--	5.9
JAN.								
20...	1100	197	14.8	.10	--	10	--	13
FEB.								
18...	0730	148	--	--	--	18	2.9	--
MAR.								
17...	0700	227	17.2	--	--	11	3.1	--
APR.								
22...	0845	294	19.0	2.0	--	10	1.2	10
MAY								
19...	0745	302	23.2	2.3	14	8.8	3.3	8.4
JUNE								
16...	0845	248	22.5	2.0	15	8.2	1.8	8.0

DATE	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL SOL-UBLE PHOS-PHATE (PO4) (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)
OCT.								
22...	26	3.5	2.0	2.0	2090	2.84	1840	3140
NOV.								
19...	41	1.6	1.4	1.4	3700	5.03	1290	5300
DEC.								
17...	38	5.7	1.8	4.2	2490	3.39	1320	3650
JAN.								
20...	30	3.2	1.3	2.7	2390	3.25	1270	3570
FEB.								
18...	18	.90	.82	.87	2970	4.04	1190	4280
MAR.								
17...	8.0	4.5	2.4	2.6	--	--	--	--
APR.								
22...	21	2.8	1.1	2.5	2100	2.86	1670	3070
MAY								
19...	20	7.2	2.0	3.1	2220	3.02	1810	3200
JUNE								
16...	29	1.8	.17	.84	2020	2.75	1350	3060

10254600 ALAMO RIVER DROP NO. 9, NEAR HOLTVILLE, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)
OCT. 22...	--	.03	.05	.03	.00	.00	.00
NOV. 19...	.00	.01	.01	.01	.00	.00	.00
JAN. 20...	.00	.02	.02	.01	.00	.00	.00
FEB. 18...	.00	.00	.01	.00	.00	.00	.00
MAY 19...	.00	.02	.01	.02	.00	.00	.00
JUNE 16...	.00	.02	.02	.01	.00	.00	.00

DATE	LINDANE (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)
OCT. 22...	.00	1.1	.03	.00	--	.77	.45
NOV. 19...	.01	.25	.04	.00	--	.04	--
JAN. 20...	.01	2.7	.86	.00	--	.22	.21
FEB. 18...	.00	.23	2.2	.00	--	--	--
MAY 19...	.00	2.0	.28	.00	.00	--	--
JUNE 16...	.00	.90	.00	.00	.00	--	--

10254670 ALAMO RIVER AT DROP NO. 3, NEAR CALIPATRIA, CALIF.

LOCATION.--Lat 33°06'13", long 115°32'38", on line between secs. 19 and 20, T.12 S., R.14 E., Imperial County, at gaging station 2.2 miles southwest of Calipatria.
PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1970 (discontinued).
REMARKS.--Records of discharge furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)
OCT.								
22...	1040	812	18.5	1.4	--	--	2.7	27
NOV.								
19...	1035	348	14.5	3.0	--	--	2.6	29
DEC.								
17...	0845	545	12.5	3.7	--	--	4.6	36
JAN.								
19...	1715	596	14.5	.80	--	8.4	9.8	32
FEB.								
17...	1710	460	16.5	--	--	6.4	--	30
MAR.								
16...	1745	788	19.0	--	--	4.6	--	9.0
APR.								
21...	1630	848	18.0	2.3	--	4.3	2.6	20
MAY								
18...	1615	752	27.0	1.0	8.0	1.8	1.1	21
JUNE								
15...	1630	752	24.5	2.6	12	4.9	3.0	28

DATE	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL SOL-UBLE PHOS-PHATE (PO4) (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)
OCT.							
22...	1.3	.92	.93	2520	3.43	5530	3690
NOV.							
19...	1.1	.34	.43	3640	4.95	3420	5300
DEC.							
17...	2.5	1.4	1.6	2760	3.75	4060	4110
JAN.							
19...	2.6	.59	1.8	2880	3.92	4630	4310
FEB.							
17...	1.2	.57	.64	3660	4.98	4550	5120
MAR.							
16...	2.4	1.0	1.0	--	--	--	--
APR.							
21...	3.8	1.0	2.4	2450	3.33	5610	3570
MAY							
18...	6.7	1.2	1.8	2460	3.35	5000	3640
JUNE							
15...	1.9	.21	.74	2240	3.05	4550	3350

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)
OCT.							
22...	--	.03	.04	.02	.00	.00	.00
NOV.							
19...	.00	.03	.03	.01	.00	.00	.00
JAN.							
19...	.00	.02	.03	.01	.01	.00	.00
FEB.							
17...	.00	.02	.02	.00	.00	.00	.00
MAY							
18...	.00	.02	.02	.02	.00	.00	.00
JUNE							
15...	.00	.02	.02	.01	.00	.00	.00

DATE	LINDANE (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)
OCT.							
22...	.00	1.3	.03	.00	--	.71	.49
NOV.							
19...	.00	1.8	.02	.00	--	.21	.26
JAN.							
19...	.00	.00	.00	.00	--	.10	.07
FEB.							
17...	.00	1.5	15	.03	--	--	--
MAY							
18...	.00	--	--	--	.00	--	.13
JUNE							
15...	.00	.20	.10	.00	.00	--	--

10254730 ALAMO RIVER NEAR NILAND, CALIF.

LOCATION.--Lat 33°12'03", long 115°36'07", in NE¼SW¼NE¼ 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: Water year 1967 (partial-record station), August 1969 to September 1970.
REMARKS.--Records of discharge furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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 (NO2) (MG/L)	AMMONIA (NH4) (MG/L)
OCT.								
22...	0855	984	17.8	.99	--	--	--	1.2
NOV.								
19...	0850	416	14.0	5.5	--	--	--	4.5
DEC.								
17...	0730	653	11.5	3.3	--	--	--	3.7
JAN.								
19...	1610	766	15.0	.50	--	5.2	--	6.1
FEB.								
17...	1600	535	17.0	.00	--	2.0	3.7	2.5
MAR.								
16...	1545	984	20.0	--	--	6.5	4.7	--
APR.								
21...	1500	1060	19.0	1.8	--	4.3	2.0	3.2
MAY								
18...	1500	917	27.0	1.7	8.0	2.1	4.6	.57
JUNE								
15...	1500	861	24.5	2.2	12	4.3	2.9	2.7
AUG.								
18...	1445	747	31.5	1.5	5.5	1.8	3.4	.37
SEP.								
22...	1515	913	23.0	1.0	--	1.6	--	.66

DATE	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL SOL-UBLE PHOS-PHATE (PO4) (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)
OCT.								
22...	28	1.7	1.1	1.1	2430	3.30	6460	3560
NOV.								
19...	34	1.6	.35	.43	3600	4.90	4040	5300
DEC.								
17...	37	3.0	1.3	1.8	2710	3.69	4780	4010
JAN.								
19...	33	2.0	.36	1.2	2580	3.51	5340	3930
FEB.								
17...	30	2.1	1.5	1.5	3240	4.41	4680	4670
MAR.								
16...	9.0	2.1	.88	.88	--	--	--	--
APR.								
21...	20	4.1	1.0	2.4	2360	3.21	6750	3460
MAY								
18...	20	7.3	.68	1.2	2400	3.26	5940	3560
JUNE								
15...	31	1.6	.15	.64	2240	3.05	5210	3330
AUG.								
18...	16	1.2	.19	.25	2490	3.39	5020	3610
SEP.								
22...	18	2.3	.54	1.1	2190	2.98	5400	3220

10254730 ALAMO RIVER NEAR NILAND, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)
OCT.								
22...	--	.03	.12	.03	.00	.00	.00	.01
NOV.								
19...	.00	.04	.54	.01	.00	.00	.00	.00
JAN.								
19...	.00	.06	.09	.01	.03	.00	.00	.00
FEB.								
17...	.00	.04	.06	.01	.04	.00	.00	.01
MAY								
18...	.00	.08	.06	.02	.02	.00	.00	.00
JUNE								
15...	.00	.03	.03	.01	.02	.00	.00	.00
JULY								
14...	.00	.03	.02	.02	.00	.00	.00	.00
AUG.								
18...	.00	.02	.02	.00	.01	.00	.00	.00
SEPT.								
22...	.00	.03	.01	.00	.00	.00	.00	.00

DATE	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)	MALA-THION (UG/L)	DI-AZINON (UG/L)
OCT.								
22...	19	.07	.00	--	.84	.65	--	--
NOV.								
19...	.42	.05	.00	--	.27	.15	.15	--
JAN.								
19...	.04	.12	.00	--	--	.11	--	--
FEB.								
17...	1.1	1.7	.00	--	.08	.10	--	--
MAY								
18...	.23	.09	.00	.00	--	.04	--	--
JUNE								
15...	--	.01	.00	.00	--	--	--	--
JULY								
14...	2.2	.12	.00	.00	--	--	--	--
AUG.								
18...	.24	.08	.00	.00	.31	.37	--	--
SEPT.								
22...	2.2	.08	.00	.00	.62	.59	.00	.00

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

LOCATION.--Lat 32°39'57", long 115°30'08", in NE¼SW¼SE¼ 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 September 1970.
REMARKS.--Records of discharge furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)
OCT.								
22...	1210	108	21.0	2.1	--	--	4.5	.4
29...	--	--	--	--	--	--	--	--
NOV.								
19...	1350	145	19.0	2.6	--	--	4.2	.8
DEC.								
17...	1145	122	15.0	7.4	--	--	3.2	2.5
JAN.								
20...	0830	141	14.5	1.2	--	3.2	2.6	2.3
FEB.								
18...	0820	152	16.0	--	--	5.0	--	2.4
MAR.								
17...	0830	169	18.5	--	--	4.0	--	3.7
APR.								
22...	0945	202	17.5	2.6	--	6.0	4.4	1.3
29...	--	--	--	--	--	--	--	--
MAY								
19...	0900	153	--	1.7	2.8	2.7	1.3	--
JUNE								
16...	0715	117	22.5	2.5	4.8	4.5	2.6	.8
AUG.								
19...	0700	123	30.5	1.5	2.2	1.9	.52	.7
20...	--	--	--	--	--	--	--	--
SEP.								
22...	1745	118	26.5	2.7	--	4.8	2.6	.1

DATE	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL SOL-UBLE PHOS-PHATE (PO4) (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)
OCT.							
22...	4.2	3.2	3.4	4740	6.45	1380	7480
29...	--	--	--	--	6.19	--	7580
NOV.							
19...	12	2.5	2.2	6380	8.68	2500	10300
DEC.							
17...	5.6	.76	6.3	5220	7.10	1720	8340
JAN.							
20...	2.0	.82	1.4	4750	6.46	1810	7510
FEB.							
18...	2.0	1.3	1.3	6190	8.42	2540	9640
MAR.							
17...	2.1	.94	1.1	--	--	--	--
APR.							
22...	3.6	1.6	1.9	4390	5.97	2390	6660
29...	--	--	--	4220	5.74	--	6420
MAY							
19...	4.3	1.5	2.3	4410	6.00	1820	7140
JUNE							
16...	1.8	.46	.89	4380	5.96	1380	6890
AUG.							
19...	1.1	.10	.26	4190	5.70	1390	6460
20...	--	--	--	4000	5.44	--	6240
SEP.							
22...	4.7	3.0	3.0	4250	5.78	1350	6640

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)
OCT.								
22...	--	.45	1.2	.02	.01	--	.00	--
NOV.								
19...	--	--	--	--	--	--	--	--
JAN.								
20...	.00	.07	.13	.01	.00	.00	.00	.01
FEB.								
18...	.00	.03	.07	.01	.00	.00	.00	.00
MAY								
19...	.00	.01	.00	.00	.00	.00	.00	.00
JUNE								
16...	.00	.05	.03	.00	.00	.00	.00	.00
JULY								
14...	.00	.01	.00	.02	.00	.00	.00	.00
AUG.								
19...	.00	.03	.02	.00	.00	.00	.00	.00
SEPT.								
22...	.00	.10	.19	.00	.00	.00	.00	.04

DATE	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)	MALA-THION (UG/L)	DI-AZINON (UG/L)
OCT.								
22...	.00	.00	.00	--	--	--	--	--
NOV.								
19...	.00	.00	.00	--	--	--	--	--
JAN.								
20...	.00	.00	.00	--	--	--	--	--
FEB.								
18...	.00	.00	.00	--	--	--	--	--
MAY								
19...	.00	.00	.00	.00	--	--	--	--
JUNE								
16...	.00	.00	.00	.00	--	--	--	--
JULY								
14...	.00	.00	.00	.00	--	--	--	--
AUG.								
19...	.30	.00	.00	.00	--	--	--	--
SEPT.								
22...	.07	.00	.00	.00	.00	.00	.00	.00

10255450 NEW RIVER NEAR IMPERIAL, CALIF.

LOCATION.--Lat 32°54'50", long 115°36'20", in SW¼SW¼SW¼ sec.23, T.14 S., R.13 E., Imperial County, at gaging station at Keystone Road bridge and 4.6 miles northwest of Imperial.
PERIOD OF RECORD.--Chemical analyses: August 1969 to June 1970 (discontinued).
REMARKS.--Records of discharge furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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 (NO2) (MG/L)	AMMONIA (NH4) (MG/L)
OCT.								
22...	1115	349	17.8	.94	--	--	--	.75
NOV.								
19...	1120	344	16.0	1.8	--	--	--	1.7
DEC.								
17...	0915	301	13.0	2.5	--	--	--	5.9
JAN.								
20...	0730	310	15.0	.60	--	2.3	--	2.2
FEB.								
18...	0700	299	16.0	--	--	7.0	2.6	--
MAR.								
17...	0630	449	18.5	--	--	1.6	2.5	--
APR.								
22...	0745	468	16.5	1.8	--	4.0	1.3	2.8
MAY								
19...	0700	374	24.0	.44	3.3	2.1	2.0	2.1
JUNE								
15...	1715	330	26.0	1.4	5.0	3.2	.68	2.3

DATE	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL SOL-UBLE PHOS-PHATE (PO4) (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)
OCT.								
22...	9.5	1.7	.86	.82	3840	5.22	3620	6090
NOV.								
19...	5.8	1.7	.25	.64	5090	6.92	4730	8000
DEC.								
17...	18	3.4	1.3	2.6	4490	6.11	3650	7080
JAN.								
20...	8.7	2.0	.57	1.3	4820	6.56	4030	7600
FEB.								
18...	8.2	2.2	1.4	1.5	5610	7.63	4530	8710
MAR.								
17...	13	2.5	1.0	1.1	--	--	--	--
APR.								
22...	7.7	3.5	1.2	2.7	3880	5.28	4900	5950
MAY								
19...	2.7	5.0	.79	1.3	3930	5.34	3970	6090
JUNE								
15...	7.0	1.6	.35	.78	3840	5.22	3420	5950

10255550 NEW RIVER NEAR WESTMORLAND, CALIF.

LOCATION.--Lat 33°06'17", long 115°39'49", in SW¼SW¼SW¼ 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.--Chemcial analyses: Water year 1967 (partial-record station), August 1969 to September 1970.
REMARKS.--Records of discharge furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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 (NO2) (MG/L)	AMMONIA (NH4) (MG/L)
OCT.								
22...	0825	619	18.8	.93	--	--	--	.33
NOV.								
19...	0800	390	15.0	.66	--	--	--	.97
DEC.								
17...	0700	483	12.8	2.9	--	--	--	2.2
JAN.								
19...	1415	485	16.0	.50	--	1.5	--	1.3
FEB.								
17...	1400	446	18.0	.76	--	1.6	.02	1.0
MAR.								
16...	1520	615	20.5	--	--	2.9	1.5	--
APR.								
21...	1315	706	18.5	2.0	--	4.1	.90	2.7
MAY								
18...	1300	626	27.0	1.3	5.3	2.3	1.8	1.3
JUNE								
15...	1230	530	23.5	2.4	7.5	4.0	.29	2.1
AUG.								
18...	1415	547	31.5	1.4	4.6	1.6	.71	.33
SEP.								
22...	1345	536	23.0	1.6	--	1.7	--	.12

DATE	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL SOL-UBLE PHOS-PHATE (PO4) (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)
OCT.								
22...	13	1.9	.64	.69	2940	4.00	4910	4620
NOV.								
19...	11	2.2	.22	.79	4760	6.47	5010	7520
DEC.								
17...	22	3.9	1.8	2.3	3780	5.14	4930	5870
JAN.								
19...	19	2.0	.63	1.0	3850	5.24	5040	6020
FEB.								
17...	15	.89	.71	.75	4520	6.15	5440	7090
MAR.								
16...	9.0	1.6	1.4	1.5	--	--	--	--
APR.								
21...	14	3.5	.93	2.1	3380	4.60	6440	5140
MAY								
18...	11	6.1	.76	1.5	3230	4.39	5460	4970
JUNE								
15...	15	2.0	.74	.80	3150	4.28	4510	4840
AUG.								
18...	12	1.9	.74	.74	3120	4.24	4610	4750
SEP.								
22...	10	2.1	.52	.52	3060	4.16	4430	4690

10255550 NEW RIVER NEAR WESTMORLAND, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)
OCT.								
22...	--	.04	.04	.01	.00	.00	.00	.02
NOV.								
19...	.00	.06	.05	.02	.00	.00	.00	.01
JAN.								
19...	.00	.03	.04	.01	.00	.00	.00	.00
FEB.								
17...	.00	.03	.05	.01	.00	.00	.00	.00
MAY								
18...	.00	.04	.04	.02	.01	.00	.00	.00
JUNE								
15...	.00	.04	.02	.01	.00	.00	.00	.00
JULY								
14...	.00	.02	.02	.02	.00	.00	.00	.00
AUG.								
18...	.00	.03	.01	.00	.00	.00	.00	.00
SEPT.								
22...	.00	.01	.01	.00	.00	.00	.00	.00

DATE	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)	MALA-THION (UG/L)	DI-AZINON (UG/L)
OCT.								
22...	1.6	.02	.00	--	.37	.07	--	--
NOV.								
19...	.14	.05	.00	--	.08	.06	--	--
JAN.								
19...	.10	.01	.03	--	.08	.02	--	--
FEB.								
17...	.16	.60	.01	--	--	--	--	--
MAY								
18...	.70	.06	.00	.00	--	.03	--	--
JUNE								
15...	.29	.02	.00	.00	--	--	--	--
JULY								
14...	--	--	--	.00	--	--	--	--
AUG.								
18...	.96	.05	.00	.00	1.2	.92	.21	--
SEPT.								
22...	1.8	.02	.00	.00	3.2	2.5	.00	.00

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: Water year 1967 (partial-record station), October 1967 to September 1970.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey. Records of discharge furnished by Los Angeles Department of Water and Power.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
OCT.									
21...	300	15.0	11.2	18	23	7.0	31	4.0	40
NOV.									
18...	491	12.8	10.6	21	25	7.0	37	4.0	37
DEC.									
16...	462	8.9	11.7	22	24	8.0	37	4.0	33
JAN.									
20...	568	7.8	11.6	20	27	8.0	36	4.0	33
FEB.									
17...	357	7.8	11.8	23	27	7.0	40	5.0	44
MAR.									
17...	350	10.0	11.4	23	28	8.0	43	5.0	37
APR.									
21...	553	12.2	10.2	23	29	11	44	4.0	41
MAY									
19...	539	16.1	9.8	27	30	8.0	45	5.0	39
JUNE									
23...	725	21.1	8.8	23	28	8.0	42	5.0	34
JULY									
21...	768	23.9	8.2	22	26	6.0	39	4.0	30
AUG.									
18...	768	23.9	8.6	22	24	8.0	33	4.0	28
SEP.									
22...	779	26.1	8.8	25	24	6.0	33	4.0	16

DATE	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (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)
OCT.									
21...	15	.5	1.0	570	86	42	1.5	322	8.3
NOV.									
18...	16	.6	.5	500	91	46	1.7	345	8.0
DEC.									
16...	15	.6	.4	640	93	45	1.7	348	8.1
JAN.									
20...	16	.5	.3	500	100	43	1.6	376	8.1
FEB.									
17...	18	.5	1.1	720	96	46	1.8	380	--
MAR.									
17...	20	.5	1.0	520	103	46	1.8	404	8.3
APR.									
21...	19	.6	.3	520	118	44	1.8	427	8.3
MAY									
19...	21	.7	.3	630	108	46	1.9	420	8.3
JUNE									
23...	20	.6	.6	480	103	46	1.8	394	8.3
JULY									
21...	16	.3	.3	410	90	47	1.8	358	8.4
AUG.									
18...	14	.3	.1	410	93	42	1.5	322	8.3
SEP.									
22...	16	.5	1.3	500	85	44	1.6	323	8.0

10343500 SAGEHEN CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°25'54", long 120°14'07", in NE¼NE¼ sec.7, T.18 N., R.16 E., Nevada County, 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 1970.
Sediment records: Water years 1968-70 (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 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
JAN.												
26...	1530	42	2.0	--	17	40	5.3	2.0	2.3	.7	30	0
MAY												
11...	1430	39	8.0	--	20	30	5.6	1.9	2.4	.8	31	0
JUNE												
29...	1015	14	10.0	--	24	10	8.4	2.8	3.5	1.1	47	0
SEP.												
17...	1120	3.3	7.5	9.6	--	5	--	--	--	--	--	--

DATE	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
JAN.											
26...	1.0	.2	.0	--	--	--	.2	--	--	50	44
MAY											
11...	1.0	.4	.0	.36	.36	.00	.2	.32	.11	0	47
JUNE											
29...	1.0	.2	.1	--	--	--	--	--	--	60	64
SEP.											
17...	--	--	--	.35	.35	.00	.0	.04	.02	--	--

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	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)	IMME-DIATE COLI-FORM (COL-ONIES PER 100 ML)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED VANA-DIUM (V) (UG/L)
JAN.												
26...	.06	4.99	21	0	18	.2	7.3	--	--	--	--	--
MAY												
11...	.06	4.95	22	0	19	.2	7.3	--	--	--	--	--
JUNE												
29...	.09	2.42	32	0	18	.3	7.6	--	--	--	--	--
SEP.												
17...	--	--	--	--	--	--	--	.4	26	10	2	6.0

10343500 SAGEHEN CREEK NEAR TRUCKEE, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	AIR TEMP-ERATURE (DEG C)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)
OCT.					
06...	1220	3.8	6.0	--	124
15...	1535	10	16.0	--	118
20...	1540	6.1	6.0	--	114
27...	1545	4.4	7.0	6.0	116
NOV.					
03...	1530	4.4	6.0	18.0	117
09...	1635	5.4	4.0	9.0	112
17...	1115	4.6	2.0	.0	119
DEC.					
01...	1645	4.0	2.0	3.0	121
09...	1315	4.0	2.0	2.0	121
15...	1530	4.4	3.0	9.0	119
22...	0915	19	1.0	.0	72
29...	1135	12	.0	3.0	86
JAN.					
20...	1335	29	2.0	5.0	63
26...	1530	42	2.0	2.0	52
FEB.					
02...	1045	26	6.0	3.0	60
09...	1400	16	4.0	7.0	70
16...	1315	14	4.0	2.0	75
MAR.					
02...	1515	12	2.0	6.0	81
09...	1315	11	3.0	4.0	86
16...	1600	16	5.0	1.0	78
24...	1525	24	6.0	15.0	72
31...	1510	18	5.0	1.0	68
APR.					
07...	1625	34	6.0	11.0	63
13...	1415	27	10.0	9.0	65
MAY					
05...	1535	63	10.0	16.0	54
11...	0835	40	3.0	1.0	56
11...	1430	39	8.0	19.0	54
18...	1525	63	12.0	18.0	52
26...	1035	43	10.0	18.0	53
JUNE					
16...	0800	20	6.0	8.0	69
22...	1115	16	15.0	23.0	77
29...	1015	14	10.0	9.0	78
JULY					
13...	1215	5.9	16.0	22.0	99
28...	1625	4.1	17.0	21.0	115
AUG.					
03...	0830	3.9	8.0	12.0	118
10...	0700	4.1	8.0	9.0	122
19...	1500	3.1	17.5	25.0	123
24...	0730	3.4	7.0	6.5	129
31...	0730	3.3	7.5	9.0	129
SEPT.					
07...	0700	3.4	7.7	8.0	125
15...	1530	3.4	12.0	17.0	128
17...	1120	3.3	7.5	--	--
21...	0630	3.3	5.0	.0	129

10343500 SAGEHEN CREEK NEAR TRUCKEE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 6, 1969	1220	6.0	3.8	1	.01	--	--	--	--	--	--	--	--	--	--	--	
OCT 15.....	1535	16.0	10	11	.36	--	--	--	--	--	--	--	--	--	--	--	
OCT 20.....	1540	6.0	6.1	1	.02	--	--	--	--	--	--	--	--	--	--	--	
OCT 27.....	1545	7.0	4.4	1	.01	--	--	--	--	--	--	--	--	--	--	--	
NOV 3.....	1530	6.0	4.4	1	.01	--	--	--	--	--	--	--	--	--	--	--	
NOV 10.....	1635	4.0	5.4	1	.01	--	--	--	--	--	--	--	--	--	--	--	
NOV 17.....	1115	2.0	4.6	1	.01	--	--	--	--	--	--	--	--	--	--	--	
DEC 1.....	1645	2.0	4.0	1	.01	--	--	--	--	--	--	--	--	--	--	--	
DEC 9.....	1315	2.0	4.0	1	.01	--	--	--	--	--	--	--	--	--	--	--	
DEC 15.....	1530	3.0	4.4	1	.01	--	--	--	--	--	--	--	--	--	--	--	
DEC 22.....	0915	1.0	19	3	.15	--	--	--	--	--	--	--	--	--	--	--	
DEC 29.....	1135	0.0	12	1	.03	--	--	--	--	--	--	--	--	--	--	--	
JAN 20, 1970	1335	2.0	29	5	.39	--	--	--	--	--	--	--	--	--	--	--	
JAN 26.....	1530	2.0	42	4	.50	--	--	--	--	--	--	--	--	--	--	--	
FEB 2.....	1045	6.0	26	4	.28	--	--	--	--	--	--	--	--	--	--	--	
FEB 9.....	1400	4.0	16	3	.13	--	--	--	--	--	--	--	--	--	--	--	
FEB 12.....	0925	1.0	16	2	.09	--	--	--	--	--	--	--	--	--	--	--	
FEB 16.....	1315	4.0	14	4	.15	--	--	--	--	--	--	--	--	--	--	--	
FEB 23.....	1315	2.0	12	7	.23	--	--	--	--	--	--	--	--	--	--	--	
MAR 2.....	1515	2.0	12	4	.13	--	--	--	--	--	--	--	--	--	--	--	
MAR 9.....	1315	3.0	11	4	.12	--	--	--	--	--	--	--	--	--	--	--	
MAR 16.....	1600	5.0	16	5	.22	--	--	--	--	--	--	--	--	--	--	--	
MAR 17.....	1410	5.0	15	3	.12	--	--	--	--	--	--	--	--	--	--	--	
MAR 24.....	1525	6.0	24	11	.71	--	--	--	--	--	--	--	--	--	--	--	
MAR 31.....	1510	5.0	18	5	.26	--	--	--	--	--	--	--	--	--	--	--	
APR 7.....	1625	6.0	34	10	.95	--	--	--	--	--	--	--	--	--	--	--	
APR 18.....	1415	10.0	27	7	.53	--	--	--	--	--	--	--	--	--	--	--	
MAY 5.....	1535	10.0	63	15	2.4	--	--	--	--	--	--	--	--	--	--	--	
MAY 11.....	0835	3.0	40	4	.45	--	--	--	--	--	--	--	--	--	--	--	
MAY 11.....	1345	8.0	39	2	.21	--	--	--	--	--	--	--	--	--	--	--	
JUL 31.....	1505	16.0	3.4	1	.01	--	--	--	--	--	--	--	--	--	--	--	
AUG 13.....	1530	16.5	3.3	2	.02	--	--	--	--	--	--	--	--	--	--	--	

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 1970.
Water temperatures: January 1964 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 19.0°C July 21.
EXTREMES, 1964-70.--Specific conductance (1964-66, 1967-69): Maximum daily, 141 micromhos Feb. 3, 1964; minimum daily, 39 micromhos Dec. 23, 1964.
Water temperatures: Maximum, 20.0°C July 24, 1964; minimum (1964-69), freezing point on several days during winter period each year.
REMARKS.--Records of discharge given for station 10346000 Truckee River at Farad, Calif. Chemical-quality samples collected by Sierra Pacific Power Company. Prior to October 1965 published as "at Farad".

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT. 22...	1500	409	10.0	15	--	8.6	2.8	5.1	1.5	48
NOV. 25...	1050	409	4.5	14	--	9.4	3.0	6.5	1.9	56
JAN. 05...	1435	374	1.0	16	--	9.8	3.1	6.1	1.5	50
FEB. 10...	1430	2230	5.0	13	--	8.6	2.5	5.5	1.6	46
MAR. 18...	1205	1650	5.5	14	0	8.5	2.6	5.6	1.4	44
APR. 22...	1120	658	7.0	18	80	8.8	2.8	4.2	1.2	43
MAY 25...	1100	1170	8.5	16	--	6.3	1.8	3.2	.9	32
JUNE 22...	1535	975	15.5	16	0	7.0	2.0	3.8	1.2	36
JULY 23...	1605	745	19.5	--	0	8.8	2.6	5.3	1.6	50
AUG. 24...	1545	564	17.0	--	--	8.5	2.6	5.3	1.6	44
SEP. 22...	1545	571	13.0	--	--	9.0	2.7	6.0	1.5	53

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)
OCT. 22...	0	3.0	1.9	.0	.33	.33	.00	.0	.03	.03
NOV. 25...	0	3.0	2.0	.2	.21	.23	.03	.0	.04	.00
JAN. 05...	0	4.0	3.8	.2	.00	.04	.05	.4	.07	.07
FEB. 10...	0	4.0	1.8	.0	.26	.26	.00	.0	.28	.19
MAR. 18...	0	6.0	2.4	.0	.65	.65	.00	.0	.26	.17
APR. 22...	0	3.0	2.1	.2	.20	.23	.04	.1	.13	.11
MAY 25...	0	5.0	2.0	--	.16	.16	.00	.0	.30	.17
JUNE 22...	0	4.0	.8	.2	.27	.41	.18	.0	.19	.14
JULY 23...	0	1.0	1.3	--	.16	.19	.04	.1	.16	.07
AUG. 24...	0	3.0	1.6	--	.41	.41	.00	.1	.34	.30
SEP. 22...	0	2.0	2.0	--	.24	.27	.04	.0	.07	.06

10345900 TRUCKEE RIVER AT FLORISTON, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	COLOR (PLAT-INUM-COBALT UNITS)
OCT.										
22...	0	60	.08	66.3	33	24	.4	92	7.5	4
NOV.										
25...	40	70	.10	77.3	36	27	.5	105	7.1	4
JAN.										
05...	0	69	.09	69.7	38	25	.4	103	7.2	2
FEB.										
10...	100	55	.07	331	32	26	.4	90	7.4	2
MAR.										
18...	20	63	.09	281	32	27	.4	91	7.2	10
APR.										
22...	40	79	.11	140	34	21	.3	86	7.8	10
MAY										
25...	70	54	.07	171	23	22	.3	63	6.7	--
JUNE										
22...	0	54	.07	142	26	23	.3	79	6.8	4
JULY										
23...	0	70	.10	141	32	25	.4	104	7.1	4
AUG.										
24...	0	60	.08	91.4	32	25	.4	89	7.2	--
SEP.										
22...	50	66	.09	102	34	27	.5	97	7.1	--

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
1.....	77	94	99	--	87	93	97	88	62	86	94	88
2.....	82	95	106	--	87	92	92	73	63	88	93	89
3.....	83	96	101	--	86	94	89	80	64	89	92	89
4.....	82	95	104	--	86	94	87	78	64	88	93	89
5.....	84	97	100	103	93	91	85	76	63	89	93	89
6.....	81	96	101	--	92	--	84	75	62	89	95	89
7.....	82	97	102	--	91	--	84	79	64	88	94	88
8.....	83	97	102	--	91	99	89	--	64	91	92	89
9.....	82	96	--	--	92	97	89	75	75	89	92	98
10.....	82	96	109	107	91	95	89	74	79	93	92	98
11.....	83	96	104	107	92	93	89	68	78	93	91	98
12.....	82	100	112	107	91	92	88	68	77	94	92	99
13.....	82	100	105	107	91	91	89	68	78	92	91	98
14.....	--	100	104	88	91	92	88	67	76	89	95	98
15.....	--	100	--	89	90	92	88	67	76	91	93	99
16.....	--	100	--	90	89	92	80	75	77	89	94	95
17.....	90	101	102	--	90	--	80	64	82	91	94	96
18.....	90	101	105	--	90	91	81	66	86	90	94	95
19.....	90	100	103	--	91	96	81	67	72	91	94	98
20.....	--	100	--	--	91	95	82	--	73	91	94	97
21.....	95	101	--	--	91	98	82	--	76	93	94	96
22.....	98	100	--	--	92	--	82	74	75	99	94	99
23.....	94	100	--	--	91	--	82	78	79	104	94	96
24.....	94	101	--	--	92	--	82	76	--	94	94	98
25.....	--	101	--	--	95	--	102	61	78	90	93	96
26.....	--	100	--	--	98	--	93	62	88	90	94	96
27.....	92	101	--	--	92	--	89	64	84	93	94	96
28.....	100	100	--	--	92	--	90	--	--	94	94	99
29.....	91	100	--	--	--	--	--	--	88	93	96	96
30.....	91	101	--	--	--	--	--	--	92	93	95	96
31.....	91	--	--	--	--	--	--	--	--	--	89	--
AVERAGE	87	98	--	--	90	--	86	71	74	91	93	94

10345900 TRUCKEE RIVER AT FLORISTON, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.0	8.0	4.5	--	7.0	4.5	5.5	8.0	9.0	12.0	15.0	15.0
2	10.0	7.5	3.0	--	7.0	4.0	5.5	10.0	10.0	12.0	15.0	14.0
3	10.0	8.0	3.0	--	7.0	3.5	6.0	9.0	9.0	14.0	15.5	14.0
4	10.0	8.0	3.0	--	7.0	4.0	6.5	8.0	9.0	15.0	16.0	13.0
5	10.0	8.5	4.0	1.0	5.0	4.0	8.0	10.0	10.0	15.0	16.5	12.0
6	10.0	5.5	5.0	--	5.0	--	8.5	9.0	10.0	15.0	15.5	15.0
7	10.0	5.0	4.0	--	5.0	--	7.0	8.0	12.0	16.0	15.0	15.5
8	10.0	5.5	5.0	--	5.0	4.0	9.0	8.0	10.0	15.0	15.0	15.0
9	9.0	5.5	--	--	5.0	4.0	9.0	7.0	14.0	15.0	14.0	15.0
10	9.0	6.0	5.0	4.5	5.5	4.0	9.0	7.0	--	16.0	18.0	15.5
11	9.0	5.5	5.0	5.0	5.5	4.0	9.0	7.0	--	15.0	17.5	16.0
12	9.0	5.0	5.0	5.0	5.5	4.5	7.0	7.0	--	15.0	17.0	13.0
13	9.0	5.0	5.0	4.5	5.5	4.5	7.5	7.0	--	15.0	16.0	14.0
14	--	5.0	5.0	4.0	4.0	5.5	5.5	8.0	--	18.0	16.5	13.0
15	--	5.0	--	4.0	4.0	5.0	6.0	8.0	--	18.0	17.0	13.5
16	--	5.0	--	4.0	4.0	5.0	6.0	7.0	14.0	14.0	17.0	15.0
17	9.0	4.5	5.0	--	4.0	--	5.5	7.0	15.0	14.0	17.5	15.0
18	7.0	5.0	5.0	--	3.5	5.5	7.0	8.0	15.0	15.0	16.0	16.0
19	7.0	4.5	1.0	--	4.0	6.0	7.5	8.0	15.0	17.0	17.0	12.0
20	--	4.5	--	--	--	6.5	7.5	8.0	15.0	17.0	--	10.0
21	7.5	4.5	--	--	4.5	7.0	6.0	8.0	15.0	19.0	16.0	9.5
22	8.0	4.5	--	--	4.5	--	6.0	8.0	15.0	17.0	15.5	10.0
23	8.0	4.5	--	--	4.5	--	6.5	9.0	15.0	19.5	16.0	10.0
24	8.0	4.5	--	--	5.0	--	6.5	8.0	--	16.0	16.5	10.0
25	--	4.5	--	--	5.0	--	7.0	7.0	13.0	17.0	17.0	12.0
26	--	4.5	--	--	5.0	--	5.0	7.0	10.0	17.0	17.0	12.0
27	8.0	4.5	--	--	4.0	--	3.0	8.0	11.0	16.0	17.5	13.0
28	7.5	4.5	--	--	5.0	--	3.0	--	11.0	16.0	17.0	12.5
29	8.0	4.5	--	--	--	--	--	--	10.0	16.0	16.5	13.0
30	8.5	4.5	--	--	--	--	--	--	9.0	16.0	15.0	11.5
31	8.0	--	--	--	--	--	--	--	--	--	13.0	--
AVG	8.7	5.3	--	--	5.0	--	6.6	7.9	12.0	15.6	16.1	13.1

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 1970.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.											
16...	0655	34	5.0	11.0	--	--	5.6	--	92	--	2.0
NOV.											
19...	0815	14	.0	12.4	--	--	4.9	--	96	--	.8
DEC.											
09...	1535	16	6.1	11.4	--	--	5.9	--	109	--	.8
JAN.											
13...	1505	268	1.1	12.3	--	--	3.7	--	48	--	2.5
FEB.											
10...	1540	116	5.0	12.1	--	--	3.7	--	53	--	.9
MAR.											
10...	1610	190	5.6	12.0	--	--	4.3	--	56	--	1.4
APR.											
15...	1435	193	6.0	11.6	--	--	2.8	--	42	--	.0
MAY											
13...	1755	228	12.0	9.8	7.2	3.5	3.0	.9	46	.0	.0
JUNE											
18...	0700	100	14.0	9.3	--	--	2.2	--	42	--	.9
JULY											
15...	0700	71	17.2	8.4	--	--	2.6	--	42	--	.5
AUG.											
04...	1400	33	20.0	8.3	--	--	3.4	--	73	--	.3
SEP.											
01...	1505	18	20.0	8.7	--	--	3.7	--	61	--	.0

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 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)
OCT.											
16...	--	50	--	--	84	9	75	13	.3	148	7.8
NOV.											
19...	--	0	--	--	71	0	79	13	.3	158	7.8
DEC.											
09...	--	0	--	--	75	0	89	15	.3	172	7.7
JAN.											
13...	--	50	--	--	38	0	39	17	.3	89	7.1
FEB.											
10...	--	20	--	--	40	0	43	17	.3	93	7.4
MAR.											
10...	--	100	--	--	42	0	46	18	.3	98	7.7
APR.											
15...	--	0	--	--	43	9	34	12	.2	78	7.5
MAY											
13...	.0	0	70	43.1	32	0	38	16	.2	76	7.7
JUNE											
18...	--,	50	--	--	36	2	34	12	.2	70	7.8
JULY											
15...	--	50	--	--	32	0	34	15	.2	72	7.6
AUG.											
04...	--	60	--	--	53	0	60	12	.2	114	7.8
SEP.											
01...	--	90	--	--	47	0	50	15	.2	103	7.9

11013500 TIJUANA RIVER NEAR NESTOR, CALIF.

LOCATION.--Lat 32°33'06", long 117°05'00", on line between secs.3 and 4, T.19 S., R.2 W., San Diego County, at gaging station on downstream side of county highway bridge, 1.7 miles south of Nestor, and 2.9 miles upstream from mouth.
DRAINAGE AREA.--1,690 sq mi, of which 1,236 sq mi are in Mexico.
PERIOD OF RECORD.--Water temperatures: October 1969 to September 1970.
Sediment records: October 1969 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 2,730 mg/l Mar. 1; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 50 tons Mar. 1; minimum daily, 0 tons on many days.
REMARKS.--No flow Oct. 1 to Feb. 28, Mar. 3, 4, Mar. 6 to Sept. 30. Sediment and temperature tables omitted for periods of no flow.

TEMPERATURE (°C) OF WATER AND SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

MARCH

DAY	TEMPERATURE (°C)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	15.6	5.0	2730	50
2	16.1	6.3	2180	42
3	--	0	--	0
4	--	0	--	0
5	16.7	6.3	1760	40
6	--	0	--	0
7	--	0	--	0
8	--	0	--	0
9	--	0	--	0
10	--	0	--	0
11	--	0	--	0
12	--	0	--	0
13	--	0	--	0
14	--	0	--	0
15	--	0	--	0
16	--	0	--	0
17	--	0	--	0
18	--	0	--	0
19	--	0	--	0
20	--	0	--	0
21	--	0	--	0
22	--	0	--	0
23	--	0	--	0
24	--	0	--	0
25	--	0	--	0
26	--	0	--	0
27	--	0	--	0
28	--	0	--	0
29	--	0	--	0
30	--	0	--	0
31	--	0	--	0
TOTAL	--	17.6	--	132

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 17.6
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 132

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (°C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE: PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
JUN 13, 1969			3	0	1	3	28	63	81	87	90	93	95	100	--	S

11022500 SAN DIEGO RIVER NEAR SANTEE, CALIF.

LOCATION.--Lat 32°49'29", long 117°03'17", in Ex Mission San Diego Grant, San Diego County, at gaging station on right bank, in Mission Gorge, 0.2 mile upstream from left tributary, and 6 miles west of Santee.
DRAINAGE AREA.--377 sq mi.
PERIOD OF RECORD.--Sediment records: October 1969 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 512 mg/l Mar. 1; minimum daily, 15 mg/l on many days. Sediment loads: Maximum daily, 313 tons Mar. 1; minimum daily, 0 tons on many days.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.84	15	.03	.12	15	0	4.1	30	.33
2	.82	15	.03	.12	15	0	4.7	35	.44
3	.68	15	.03	.21	15	.01	3.5	30	.28
4	.47	15	.02	.40	15	.02	3.0	30	.24
5	.12	15	0	.71	15	.03	2.5	25	.17
6	.08	15	0	.78	15	.03	2.2	25	.15
7	.06	15	0	9.9	49	1.9	2.2	25	.15
8	.17	15	.01	4.2	30	.34	2.1	25	.14
9	.36	15	.01	2.5	25	.17	5.0	40	.54
10	.47	15	.02	7.0	40	.76	3.0	30	.24
11	.39	15	.02	4.0	30	.32	2.3	25	.16
12	.19	15	.01	2.8	25	.19	2.1	25	.14
13	.35	15	.01	2.7	25	.18	2.0	25	.14
14	.62	15	.03	2.6	25	.18	2.0	25	.14
15	.40	15	.02	2.4	25	.16	2.3	25	.16
16	.35	15	.01	5.9	40	.64	2.1	25	.14
17	.47	15	.02	3.4	30	.28	1.7	25	.11
18	.45	15	.02	2.5	25	.17	1.7	25	.11
19	.27	15	.01	2.2	20	.12	1.8	25	.12
20	.31	15	.01	2.0	20	.11	1.7	25	.11
21	.52	15	.02	1.9	20	.10	1.7	25	.11
22	.48	15	.02	1.7	20	.09	2.1	25	.14
23	.39	15	.02	1.6	20	.09	2.2	25	.15
24	.35	15	.01	1.4	20	.08	1.9	25	.13
25	.32	15	.01	1.3	20	.07	1.9	25	.13
26	.11	15	0	1.2	20	.06	2.4	25	.16
27	.31	15	.01	1.1	20	.06	3.7	30	.30
28	.77	15	.03	1.1	20	.06	3.4	30	.28
29	.57	15	.02	.96	20	.05	3.1	30	.25
30	.30	15	.01	1.0	20	.05	3.0	30	.24
31	.14	15	.01	--	--	--	2.8	30	.23
TOTAL	12.13	--	.47	69.70	--	6.32	80.2	--	6.13

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.7	30	.22	.91	20	.05	212	512	313
2	2.5	30	.20	.83	20	.04	157	365	258
3	2.6	30	.21	.72	20	.04	20	140	7.6
4	2.4	30	.19	.93	20	.05	11	90	2.7
5	2.2	30	.18	1.5	20	.08	183	353	287
6	2.0	30	.16	1.1	20	.06	26	170	12
7	1.9	30	.15	1.1	20	.06	23	160	9.9
8	2.0	30	.16	1.0	20	.05	19	140	7.2
9	2.1	30	.17	1.1	20	.06	15	115	4.7
10	2.7	30	.22	6.6	40	.71	26	101	9.0
11	3.8	30	.31	21	85	6.0	16	120	5.2
12	4.0	30	.32	4.5	35	.43	12	100	3.2
13	4.0	30	.32	2.9	30	.23	9.7	80	2.1
14	3.8	30	.31	2.3	25	.16	7.8	70	1.5
15	3.6	30	.29	1.9	20	.10	7.3	60	1.2
16	4.1	30	.33	1.8	20	.10	6.8	55	1.0
17	15	70	3.3	1.7	20	.09	6.5	50	.88
18	5.2	40	.56	1.5	20	.08	6.1	45	.74
19	4.8	40	.52	1.3	20	.07	5.7	40	.62
20	4.6	40	.50	1.1	20	.06	5.5	40	.59
21	4.0	40	.43	1.1	20	.06	4.7	35	.44
22	3.5	40	.38	1.2	20	.06	3.7	30	.30
23	3.3	35	.31	1.4	20	.08	5.3	40	.57
24	2.7	30	.22	1.3	20	.07	5.4	40	.58
25	2.3	30	.19	1.5	20	.08	5.1	40	.55
26	1.9	20	.10	1.7	20	.09	4.4	35	.42
27	1.6	20	.09	1.7	20	.09	4.3	35	.41
28	1.6	20	.09	18	60	13	3.6	30	.29
29	1.4	20	.08	--	--	--	3.4	30	.28
30	1.2	20	.06	--	--	--	3.0	25	.20
31	.93	20	.05	--	--	--	2.9	25	.20
TOTAL	100.43	--	10.62	83.69	--	22.05	821.2	--	932.37

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.6	25	.18	2.3	25	.16	1.1	20	.06
2	2.4	25	.16	2.0	25	.14	1.1	20	.06
3	2.4	25	.16	2.1	25	.14	1.5	20	.08
4	2.4	25	.16	2.3	25	.16	1.8	20	.10
5	2.3	25	.16	2.3	25	.16	1.6	20	.09
6	2.8	25	.19	2.4	25	.16	1.5	20	.08
7	2.5	25	.17	2.0	20	.11	1.5	20	.08
8	2.5	25	.17	1.8	20	.10	1.8	20	.10
9	2.8	25	.19	1.3	20	.07	1.6	20	.09
10	2.9	25	.20	1.9	20	.10	1.1	20	.06
11	3.1	25	.21	1.8	20	.10	.92	20	.05
12	3.2	25	.22	1.5	20	.08	.70	15	.03
13	3.0	25	.20	1.4	20	.08	.51	15	.02
14	2.9	25	.20	1.2	20	.06	.92	15	.04
15	2.7	25	.18	.96	20	.05	.77	15	.03
16	2.4	25	.16	.81	20	.04	.68	15	.03
17	2.5	25	.17	.73	20	.04	.74	15	.03
18	2.4	25	.16	.69	20	.04	.81	15	.03
19	2.4	25	.16	.64	20	.03	.92	20	.05
20	2.5	25	.17	.86	20	.05	1.1	20	.06
21	2.2	25	.15	1.1	20	.06	.98	20	.05
22	2.5	25	.17	1.2	20	.06	.93	20	.05
23	2.8	25	.19	.92	15	.04	1.2	20	.06
24	2.6	25	.18	.77	15	.03	1.5	20	.08
25	2.2	25	.15	.84	15	.03	1.4	20	.08
26	2.0	25	.14	.70	15	.03	1.4	20	.08
27	2.0	25	.14	.77	15	.03	1.3	20	.07
28	3.1	25	.21	.77	15	.03	1.0	20	.05
29	2.8	25	.19	.63	15	.03	.91	20	.05
30	2.5	25	.17	.84	15	.03	.79	20	.04
31	--	--	--	.84	15	.03	--	--	--
TOTAL	77.4	--	5.26	40.37	--	2.27	34.08	--	1.78

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.72	15	.03	.04	15	0	.01	15	0
2	.63	15	.03	.03	15	0	.01	15	0
3	.63	15	.03	.03	15	0	.10	15	0
4	.57	15	.02	.02	15	0	.09	15	0
5	.52	15	.02	.11	15	0	.09	15	0
6	.49	15	.02	.14	15	.01	.03	15	0
7	.46	15	.02	.27	15	.01	.07	15	0
8	.42	15	.02	.35	15	.01	.07	15	0
9	.40	15	.02	.06	15	0	.11	15	0
10	.36	15	.01	.03	15	0	.09	15	0
11	.33	15	.01	.03	15	0	.07	15	0
12	.27	15	.01	.03	15	0	.11	15	0
13	.23	15	.01	.03	15	0	.05	15	0
14	.20	15	.01	.03	15	0	.03	15	0
15	.19	15	.01	.03	15	0	.08	15	0
16	.69	15	.03	.02	15	0	.16	15	.01
17	.50	15	.02	.02	15	0	.29	15	.01
18	.46	15	.02	.02	15	0	.35	15	.01
19	.16	15	.01	.02	15	0	.51	15	.02
20	.06	15	0	.02	15	0	.51	15	.02
21	.03	15	0	.02	15	0	.67	15	.03
22	.03	15	0	.02	15	0	.69	15	.03
23	.03	15	0	.02	15	0	.65	15	.03
24	.02	15	0	.01	15	0	1.1	15	.04
25	.02	15	0	.01	15	0	1.0	15	.04
26	.02	15	0	.02	15	0	.40	15	.02
27	.02	15	0	.01	15	0	.15	15	.01
28	.02	15	0	.01	15	0	.08	15	0
29	.02	15	0	.01	15	0	.19	15	.01
30	.02	15	0	.01	15	0	.06	15	0
31	.04	15	0	.01	15	0	--	--	--
TOTAL	8.56	--	.35	1.48	--	.03	7.82	--	.28

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1337.06
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 987.93

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CALIF.

LOCATION.--Lat 33°12'48", long 117°22'33", in SW¼SE¼SW¼ 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 Oceanside.
DRAINAGE AREA.--558 sq mi (revised).
PERIOD OF RECORD.--Sediment records: October 1968 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 1,220 mg/l Mar. 2; minimum daily, 15 mg/l on several days during September.
Sediment loads: Maximum daily, 943 tons Mar. 2; minimum daily, 0.01 ton Nov. 4.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.32	25	.02	.32	34	.03	1.5	32	.13
2	.32	25	.02	.23	34	.02	1.8	32	.16
3	.32	70	.06	.23	34	.02	2.1	32	.18
4	.23	60	.04	.11	34	.01	2.5	32	.22
5	.16	50	.02	.42	34	.04	2.1	32	.18
6	.16	45	.02	.54	34	.05	2.1	32	.18
7	.85	40	.09	1.8	34	.17	2.1	32	.18
8	1.8	36	.17	6.9	34	.63	2.1	32	.18
9	2.8	36	.27	8.4	34	.77	2.8	32	.24
10	3.3	36	.32	7.6	34	.70	2.8	32	.24
11	3.3	36	.32	3.3	34	.30	2.5	32	.22
12	2.1	36	.20	3.3	34	.30	2.5	32	.22
13	1.8	36	.17	4.3	34	.39	2.1	32	.18
14	2.5	36	.24	4.3	34	.39	1.8	32	.16
15	3.8	36	.37	4.9	34	.45	1.8	32	.16
16	4.3	36	.42	4.9	34	.45	2.5	32	.22
17	3.8	36	.37	3.8	34	.35	2.5	32	.22
18	4.9	36	.48	3.8	34	.35	2.1	32	.18
19	4.3	36	.42	4.3	34	.39	2.1	32	.18
20	3.8	36	.37	4.3	34	.39	2.1	32	.18
21	3.8	36	.37	4.3	34	.39	2.5	32	.22
22	2.5	36	.24	4.3	34	.39	2.8	32	.24
23	1.8	36	.17	4.3	34	.39	2.5	32	.22
24	2.1	36	.20	2.8	34	.26	2.1	32	.18
25	3.3	36	.32	2.8	34	.26	2.1	32	.18
26	3.8	36	.37	2.5	34	.23	2.1	32	.18
27	3.3	36	.32	2.5	34	.23	2.5	32	.22
28	2.1	36	.20	2.1	34	.19	2.1	32	.18
29	1.8	36	.17	1.8	34	.17	1.5	32	.13
30	.85	36	.08	1.5	34	.14	2.5	32	.22
31	.42	36	.04	--	--	--	3.3	32	.29
TOTAL	70.63	--	6.87	96.65	--	8.85	69.9	--	6.07

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.8	32	.33	2.1	28	.16	45	254	74
2	3.3	32	.29	2.1	28	.16	264	1220	943
3	3.3	32	.29	2.5	28	.19	67	506	119
4	3.3	32	.29	2.8	28	.21	16	93	4.0
5	3.3	32	.29	3.3	28	.25	53	316	60
6	3.3	32	.29	3.3	28	.25	66	300	56
7	3.3	110	.98	3.8	28	.29	39	210	22
8	3.3	90	.80	3.8	28	.29	13	80	2.8
9	3.3	70	.62	3.8	28	.29	12	70	2.3
10	3.8	50	.51	8.4	50	1.1	11	50	1.5
11	5.5	50	.74	12	100	3.2	10	50	1.4
12	6.2	50	.84	11	70	2.1	9.4	50	1.3
13	4.9	50	.66	10	60	1.6	13	50	1.8
14	4.3	50	.58	8.4	50	1.1	9.4	50	1.3
15	4.3	40	.46	6.9	50	.93	7.6	50	1.0
16	4.9	40	.53	6.9	50	.93	6.9	40	.75
17	12	80	2.6	6.9	50	.93	6.2	40	.67
18	22	70	4.2	6.9	50	.93	4.9	40	.53
19	13	30	1.1	4.9	50	.66	4.3	40	.46
20	7.6	30	.62	4.9	50	.66	3.8	40	.41
21	4.3	30	.35	4.9	50	.66	2.8	40	.30
22	3.8	30	.31	4.9	40	.53	3.3	40	.36
23	3.8	30	.31	4.9	40	.53	2.8	30	.23
24	3.3	30	.27	3.8	40	.41	2.8	30	.23
25	2.5	30	.20	3.8	40	.41	2.8	30	.23
26	2.5	30	.20	4.3	40	.46	2.8	30	.23
27	2.5	30	.20	4.3	40	.46	2.5	30	.20
28	2.5	30	.20	5.6	40	.60	1.8	30	.15
29	2.5	30	.20	--	--	--	3.8	30	.31
30	2.1	30	.17	--	--	--	3.8	30	.31
31	2.1	30	.17	--	--	--	2.8	30	.23
TOTAL	150.6	--	19.60	151.2	--	20.29	693.5	--	1297.00

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.8	28	.21	2.8	26	.20	3.6	22	.21
2	2.8	28	.21	2.5	26	.18	3.7	22	.22
3	3.3	28	.25	2.1	26	.15	3.8	22	.23
4	2.8	28	.21	1.8	26	.13	4.3	22	.26
5	2.5	28	.19	1.8	26	.13	3.3	22	.20
6	3.3	28	.25	1.9	26	.13	3.3	22	.20
7	3.3	28	.25	1.9	26	.13	3.3	22	.20
8	2.8	28	.21	2.0	26	.14	3.8	22	.23
9	2.8	28	.21	2.1	26	.15	3.8	22	.23
10	3.3	28	.25	2.2	26	.15	4.3	22	.26
11	3.3	28	.25	2.2	24	.14	4.3	22	.26
12	2.5	28	.19	2.3	24	.15	4.3	22	.26
13	2.8	28	.21	2.4	24	.16	3.8	22	.23
14	3.3	28	.25	2.5	24	.16	3.8	22	.23
15	3.3	28	.25	2.5	24	.16	3.8	22	.23
16	3.8	28	.29	2.6	24	.17	4.3	22	.26
17	4.3	28	.33	2.7	24	.17	4.3	22	.26
18	2.8	28	.21	2.7	24	.17	4.3	22	.26
19	2.5	28	.19	2.8	24	.18	4.3	22	.26
20	4.3	28	.33	2.8	24	.18	4.3	22	.26
21	4.3	26	.30	2.9	24	.19	3.8	20	.21
22	3.8	26	.27	2.9	24	.19	2.8	20	.15
23	3.3	26	.23	3.0	24	.19	3.3	20	.18
24	3.3	26	.23	3.1	24	.20	3.3	20	.18
25	3.8	26	.27	3.1	24	.20	3.8	20	.21
26	4.3	26	.30	3.2	24	.21	3.8	20	.21
27	4.3	26	.30	3.3	24	.21	3.3	20	.18
28	3.8	26	.27	3.4	24	.22	3.3	20	.18
29	3.3	26	.23	3.4	24	.22	2.8	20	.15
30	2.8	26	.20	3.5	24	.23	3.3	20	.18
31	--	--	--	3.5	24	.23	--	--	--
TOTAL	99.6	--	7.34	81.9	--	5.42	112.2	--	6.58

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.3	20	.23	2.5	19	.13	3.0	16	.13
2	3.3	20	.18	2.5	19	.13	3.0	16	.13
3	2.5	20	.14	2.5	19	.13	3.0	16	.13
4	2.5	20	.14	2.5	19	.13	3.0	16	.13
5	2.8	20	.15	2.5	19	.13	3.0	16	.13
6	3.3	20	.18	2.6	18	.13	3.1	16	.13
7	3.8	20	.21	2.6	18	.13	3.1	16	.13
8	4.3	20	.23	2.6	18	.13	3.1	16	.13
9	4.9	20	.26	2.6	18	.13	3.1	16	.13
10	4.3	20	.23	2.6	18	.13	3.1	16	.13
11	4.3	20	.23	2.7	18	.13	3.1	16	.13
12	3.8	20	.21	2.7	18	.13	3.1	16	.13
13	3.3	20	.18	2.7	18	.13	3.1	16	.13
14	3.8	20	.21	2.7	18	.13	3.1	16	.13
15	3.8	20	.21	2.7	18	.13	3.1	16	.13
16	3.8	19	.19	2.8	17	.13	3.2	15	.13
17	3.3	19	.17	2.8	17	.13	3.2	15	.13
18	1.8	19	.09	2.8	17	.13	3.2	15	.13
19	1.8	19	.09	2.8	17	.13	3.2	15	.13
20	1.8	19	.09	2.8	17	.13	3.2	15	.13
21	2.1	19	.11	2.9	16	.13	3.2	15	.13
22	2.5	19	.13	2.9	16	.13	3.2	15	.13
23	2.5	19	.13	2.9	16	.13	3.2	15	.13
24	2.5	19	.13	2.9	16	.13	3.2	15	.13
25	2.1	19	.11	2.9	16	.13	3.2	15	.13
26	2.1	19	.11	3.0	16	.13	3.3	15	.13
27	2.5	19	.13	3.0	16	.13	3.3	15	.13
28	2.5	19	.13	3.0	16	.13	3.3	15	.13
29	2.5	19	.13	3.0	16	.13	3.3	15	.13
30	2.5	19	.13	3.0	16	.13	3.3	15	.13
31	2.5	19	.13	3.0	16	.13	--	--	--
TOTAL	93.8	--	4.99	85.5	--	4.03	94.5	--	3.90

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1799.98
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1390.94

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

					PARTICLE SIZE											
					PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED											
DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
JAN 19, 1970		16.0	3	0	3	13	56	92	99	100	--	--	--	--	--	S

11046000 SANTA MARGARITA RIVER AT YSIDORA, CALIF.

LOCATION (revised).--Lat 33°14'13", long 117°23'14", in NE¼SW¼NE¼ sec.10, T.11 S., R.5 W., San Diego County, at gaging station on left bank, 1.7 miles upstream from mouth, and 2.0 miles southwest of Ysidora.
DRAINAGE AREA.--739 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1968 to September 1970.
Sediment records: October 1967 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 1,730 mg/l Mar. 2; minimum daily, no flow for many days during August and September.
Sediment loads: Maximum daily, 5,920 tons Mar. 2; minimum daily, 0 tons on many days during July to September.
EXTREMES, 1967-70.--Sediment concentrations: Maximum daily, 13,000 mg/l Feb. 24, 1969; minimum daily, no flow for many days each year.
Sediment loads: Maximum daily, 534,000 tons Feb. 24, 1969; minimum daily, 0 tons on many days each year.
REMARKS.--No flow Aug. 2 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	--	--	15.0	--	26.0	--	--	--	--
2	--	--	--	--	15.0	--	23.0	--	--	--	--	--
3	24.0	20.5	--	--	--	--	--	--	24.5	--	--	--
4	--	--	19.5	--	--	15.5	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	11.0	--	--	--	--	--	--
7	--	--	--	15.0	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	14.0	--	--	--	--	--
18	--	--	--	--	--	22.0	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	28.5	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

11046000 SANTA MARGARITA RIVER AT YSIDORA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.22	50	.03	.24	130	.08	.21	170	.10
2	.22	50	.03	.24	130	.08	.21	170	.10
3	.22	50	.03	.24	140	.09	.21	180	.10
4	.22	50	.03	.24	140	.09	.21	180	.10
5	.22	60	.04	.24	140	.09	.21	180	.10
6	.22	60	.04	.24	130	.08	.21	170	.10
7	.22	60	.04	.24	130	.08	.21	170	.10
8	.22	60	.04	.24	130	.08	.22	170	.10
9	.22	70	.04	.24	120	.08	.22	160	.10
10	.22	70	.04	.24	120	.08	.22	160	.10
11	.22	70	.04	.23	120	.07	.22	160	.10
12	.22	70	.04	.23	120	.07	.23	150	.09
13	.22	80	.05	.23	110	.07	.23	150	.09
14	.23	80	.05	.23	110	.07	.23	150	.09
15	.23	80	.05	.23	110	.07	.23	140	.09
16	.23	80	.05	.23	110	.07	.24	140	.09
17	.23	90	.06	.23	100	.06	.24	140	.09
18	.23	90	.06	.23	100	.06	.24	130	.08
19	.23	90	.06	.22	100	.06	.24	130	.08
20	.23	90	.06	.22	100	.06	.25	120	.08
21	.23	100	.06	.22	110	.07	.25	120	.08
22	.23	100	.06	.22	120	.07	.25	110	.07
23	.23	100	.06	.22	130	.08	.25	110	.07
24	.24	100	.06	.22	130	.08	.26	100	.07
25	.24	110	.07	.22	140	.08	.26	100	.07
26	.24	110	.07	.22	140	.08	.26	90	.06
27	.24	110	.07	.21	150	.09	.26	90	.06
28	.24	110	.07	.21	150	.09	.27	80	.06
29	.24	120	.08	.21	160	.09	.27	80	.06
30	.24	120	.08	.21	160	.09	.27	70	.05
31	.24	120	.08	--	--	--	.27	70	.05
TOTAL	7.08	--	1.64	6.84	--	2.31	7.35	--	2.58

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.28	60	.05	.28	40	.03	3.1	70	.59
2	.28	60	.05	.28	40	.03	886	1730	5920
3	.28	60	.05	.28	40	.03	350	853	936
4	.29	60	.05	.28	40	.03	98	320	85
5	.29	50	.04	.28	40	.03	245	598	430
6	.29	50	.04	.28	40	.03	226	400	244
7	.29	50	.04	.28	40	.03	123	360	120
8	.29	50	.04	.28	40	.03	65	340	60
9	.29	50	.04	.28	40	.03	45	330	40
10	.29	50	.04	.28	40	.03	35	320	30
11	.29	50	.04	.32	40	.03	33	310	28
12	.29	50	.04	.32	40	.03	24	300	19
13	.29	50	.04	.32	40	.03	18	290	14
14	.29	50	.04	.32	40	.03	18	280	14
15	.29	50	.04	.32	40	.03	17	270	12
16	.29	50	.04	.32	40	.03	15	260	11
17	.29	50	.04	.32	40	.03	12	250	8.1
18	.29	50	.04	.32	40	.03	9.5	240	6.2
19	.29	50	.04	.32	40	.03	5.9	230	3.7
20	.29	50	.04	.32	40	.03	4.9	220	2.9
21	.28	50	.04	.32	40	.03	4.0	210	2.3
22	.28	50	.04	.32	40	.03	3.8	200	2.1
23	.28	50	.04	.32	40	.03	3.5	190	1.8
24	.28	50	.04	.32	40	.03	3.3	180	1.6
25	.28	50	.04	.32	40	.03	3.0	170	1.4
26	.28	50	.04	.32	40	.03	3.0	160	1.3
27	.28	50	.04	.32	40	.03	3.0	150	1.2
28	.28	50	.04	.68	50	.09	2.8	140	1.1
29	.28	50	.04	--	--	--	2.8	130	.98
30	.28	50	.04	--	--	--	2.8	120	.91
31	.28	50	.04	--	--	--	2.6	110	.77
TOTAL	8.85	--	1.28	8.92	--	.90	2268.0	--	7999.95

11046000 SANTA MARGARITA RIVER AT YSIDORA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.4	95	.62	.22	70	.04	.14	50	.02
2	1.7	95	.44	.22	70	.04	.14	50	.02
3	1.4	95	.36	.22	70	.04	.14	50	.02
4	1.4	95	.36	.22	70	.04	.14	50	.02
5	1.5	95	.38	.22	70	.04	.14	50	.02
6	1.2	90	.29	.22	70	.04	.14	50	.02
7	1.1	90	.27	.22	65	.04	.14	50	.02
8	.99	90	.24	.22	65	.04	.14	50	.02
9	.88	90	.21	.22	65	.04	.14	50	.02
10	.77	90	.19	.22	65	.04	.14	50	.02
11	.77	85	.18	.18	65	.03	.14	45	.02
12	.68	85	.16	.18	65	.03	.14	45	.02
13	.68	85	.16	.18	60	.03	.14	45	.02
14	.68	85	.16	.18	60	.03	.14	45	.02
15	.68	85	.16	.18	60	.03	.14	45	.02
16	.68	80	.15	.18	60	.03	.14	45	.02
17	.68	80	.15	.18	60	.03	.11	45	.01
18	.60	80	.13	.18	60	.03	.11	45	.01
19	.60	80	.13	.18	60	.03	.11	45	.01
20	.52	80	.11	.18	55	.03	.11	45	.01
21	.45	75	.09	.18	55	.03	.11	40	.01
22	.45	75	.09	.18	55	.03	.11	40	.01
23	.45	75	.09	.18	55	.03	.11	40	.01
24	.38	75	.08	.18	55	.03	.11	40	.01
25	.38	75	.08	.18	55	.03	.11	40	.01
26	.38	70	.07	.18	55	.03	.11	40	.01
27	.32	70	.06	.18	50	.02	.11	40	.01
28	.32	70	.06	.18	50	.02	.11	40	.01
29	.27	70	.05	.14	50	.02	.11	40	.01
30	.27	70	.05	.14	50	.02	.11	40	.01
31	--	--	--	.14	50	.02	--	--	--
TOTAL	23.58	--	5.57	5.86	--	.98	3.78	--	.46

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.11	40	.01	.01	30	0			
2	.11	40	.01	0	--	0			
3	.11	40	.01	0	--	0			
4	.11	40	.01	0	--	0			
5	.11	40	.01	0	--	0			
6	.08	40	.01	0	--	0			
7	.08	40	.01	0	--	0			
8	.08	40	.01	0	--	0			
9	.08	35	.01	0	--	0			
10	.08	35	.01	0	--	0			
11	.08	35	.01	0	--	0			
12	.08	35	.01	0	--	0			
13	.08	35	.01	0	--	0			
14	.08	35	.01	0	--	0			
15	.08	35	.01	0	--	0			
16	.08	35	.01	0	--	0			
17	.08	35	.01	0	--	0			
18	.08	35	.01	0	--	0			
19	.08	35	.01	0	--	0			
20	.08	30	.01	0	--	0			
21	.08	30	.01	0	--	0			
22	.08	30	.01	0	--	0			
23	.08	30	.01	0	--	0			
24	.06	30	0	0	--	0			
25	.06	30	0	0	--	0			
26	.06	30	0	0	--	0			
27	.06	30	0	0	--	0			
28	.06	30	0	0	--	0			
29	.06	30	0	0	--	0			
30	.04	30	0	0	--	0			
31	.02	30	0	0	--	0			
TOTAL	2.41	--	.23	.01	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 2342.68
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 8015.90

11046000 SANTA MARGARITA RIVER AT YSIDORA, CALIF.--Continued

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
NOV 18, 1969	1630		3	.23	--	4	44	92	99	100	--	--	--	--	--	S

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 (revised).
PERIOD OF RECORD.--Chemical analyses: Water years 1968-69 (partial-record station), October 1969 to September 1970.
EXTREMES, 1969-70.--Specific conductance: Maximum recorded, 1,280 micromhos Oct. 25; minimum recorded, 250 micromhos Oct. 6.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
DEC.											
09...	1050	24	23.0	44	13	100	15	362	0	43	66
JAN.											
14...	1105	512	13.0	57	8.5	37	7.7	187	0	42	42
21...	0945	3570	--	32	3.7	10	2.7	110	0	13	7.6
25...	1115	20700	13.0	52	7.1	5.9	4.7	188	0	10	2.8
26...	1445	2860	15.0	32	4.4	9.5	3.4	108	0	13	6.4

DATE	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 (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)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
DEC.											
09...	--	2.7	650	470	500	.64	30.5	164	0	989	7.4
JAN.											
14...	.6	14	200	320	308	.44	442	177	24	498	6.1
21...	.4	4.1	90	129	131	.18	1240	95	5	251	6.3
25...	.4	4.8	70	206	188	.28	11500	158	4	340	6.4
26...	.4	6.5	70	142	136	.19	1100	98	9	235	6.1

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

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1090	1040	1070	1060	912	1000	910	857	881	---	---	---
2	1060	966	1020	1080	964	1030	951	774	872	---	---	---
3	1060	923	1020	1050	923	1000	938	839	902	---	---	---
4	1130	999	1070	1040	928	994	969	889	925	---	---	---
5	1090	994	1050	1030	884	979	971	864	931	---	---	---
6	1030	951	995	1050	926	997	1000	894	958	---	---	---
7	1020	912	970	1040	912	988	1010	905	971	---	---	---
8	1080	910	1010	997	878	960	1000	898	951	---	---	---
9	1040	938	991	1040	907	980	956	829	907	---	---	---
10	1010	919	975	1040	969	998	964	880	934	---	---	---
11	1040	894	987	1080	928	1010	981	933	956	---	---	---
12	1050	987	1020	1060	994	1030	966	844	917	---	---	---
13	1020	919	975	1030	953	1000	933	768	871	---	---	---
14	1030	921	994	1020	917	984	951	745	878	---	---	---
15	1050	951	1020	1010	364	763	979	894	931	---	---	---
16	997	928	969	1020	946	991	976	910	939	---	---	---
17	1060	951	1010	1050	976	1020	948	871	919	---	---	---
18	1080	994	1040	1030	984	1010	997	905	951	---	---	---
19	1090	984	1030	999	938	974	933	803	880	---	---	---
20	1060	961	995	1000	926	965	868	591	758	---	---	---
21	1030	938	986	974	864	933	890	774	829	---	---	---
22	1030	871	958	969	675	878	883	810	860	---	---	---
23	981	871	938	946	829	899	939	830	902	---	---	---
24	1250	895	1000	923	839	891	976	883	939	---	---	---
25	1280	1140	1210	900	846	870	967	417	840	---	---	---
26	1210	1080	1150	855	770	826	627	372	474	---	---	---
27	1140	1050	1100	898	795	861	635	538	597	---	---	---
28	1080	951	1040	887	808	854	647	591	617	---	---	---
29	1070	889	1000	931	758	852	615	516	558	---	---	---
30	1040	921	991	933	859	906	871	465	590	---	---	---
31	971	846	914	---	---	---	897	539	620	---	---	---
MONTHLY SUMMARY	1280	846	1016	1080	364	948	1010	372	840	---	---	---

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	500	390	450	---	---	---	---	---	---	---	---	---
2	670	270	480	---	---	---	1040	414	663	---	---	---
3	770	370	510	---	---	---	1050	429	616	---	---	---
4	450	326	390	---	---	---	1110	390	610	---	---	---
5	450	320	360	---	---	---	860	453	610	---	---	---
6	400	250	330	---	---	---	1080	559	738	---	---	---
7	410	390	390	550	280	420	1080	562	725	---	---	---
8	---	---	---	550	400	470	810	520	669	704	458	634
9	---	---	---	510	480	500	740	410	530	767	442	591
10	---	---	---	540	480	510	---	---	---	706	476	583
11	---	---	---	560	500	540	---	---	---	520	453	473
12	---	---	---	990	570	700	---	---	---	---	---	---
13	---	---	---	920	700	770	---	---	---	---	---	---
14	---	---	---	940	680	780	---	---	---	---	---	---
15	---	---	---	990	670	820	820	680	750	---	---	---
16	---	---	---	950	650	840	900	820	830	---	---	---
17	---	---	---	1060	630	800	---	---	---	---	---	---
18	---	---	---	960	690	820	---	---	---	---	---	---
19	---	---	---	1070	660	850	---	---	---	---	---	---
20	---	---	---	1090	620	830	---	---	---	530	469	514
21	920	790	880	1040	600	820	---	---	---	599	374	489
22	990	720	850	790	570	680	---	---	---	612	390	521
23	980	740	860	890	740	810	---	---	---	631	372	527
24	910	720	820	---	---	---	780	620	700	614	408	528
25	860	640	754	---	---	---	600	430	520	590	402	511
26	960	540	780	---	---	---	1200	520	700	621	415	519
27	1130	750	960	---	---	---	1240	950	1160	552	387	474
28	---	---	---	---	---	---	---	---	---	622	360	465
29	---	---	---	---	---	---	970	680	830	491	347	442
30	---	---	---	---	---	---	---	---	---	538	342	426
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

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

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	756	649	713	---	---	---	---	---	---	---	---	---
10	677	582	634	---	---	---	---	---	---	---	---	---
11	635	597	618	---	---	---	---	---	---	---	---	---
12	743	655	705	---	---	---	---	---	---	---	---	---
13	759	692	730	---	---	---	---	---	---	---	---	---
14	774	720	742	---	---	---	---	---	---	---	---	---
15	787	709	751	---	---	---	---	---	---	---	---	---
16	760	645	673	---	---	---	---	---	---	---	---	---
17	700	634	668	---	---	---	---	---	---	---	---	---
18	729	671	702	---	---	---	---	---	---	---	---	---
19	902	707	750	---	---	---	---	---	---	---	---	---
20	713	679	698	---	---	---	---	---	---	---	---	---
21	774	669	705	---	---	---	---	---	---	---	---	---
22	857	681	708	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	840	690	770	---	---	---	---	---	---	---	---	---
25	840	630	740	---	---	---	---	---	---	---	---	---
26	880	610	770	---	---	---	---	---	---	---	---	---
27	740	520	670	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	970	900	940
2	---	---	---	---	---	---	---	---	---	970	910	950
3	---	---	---	---	---	---	1060	980	1030	990	900	950
4	---	---	---	---	---	---	1050	980	1010	991	840	957
5	---	---	---	---	---	---	1060	950	1010	994	946	969
6	---	---	---	---	---	---	1020	930	970	999	932	960
7	---	---	---	980	890	910	1020	910	960	1020	932	966
8	---	---	---	---	---	---	980	890	930	967	924	948
9	---	---	---	---	---	---	1000	930	960	982	918	953
10	---	---	---	---	---	---	1030	950	990	976	910	940
11	---	---	---	---	---	---	1020	950	990	958	883	928
12	---	---	---	---	---	---	1010	930	980	982	924	948
13	---	---	---	1060	930	1020	1060	970	1020	982	927	953
14	---	---	---	1070	840	990	1030	970	1000	988	924	966
15	---	---	---	1020	850	950	1060	940	1000	982	938	964
16	1070	1050	1060	1020	900	960	1040	940	990	988	927	957
17	1050	680	880	1020	860	980	1060	950	1010	988	932	959
18	970	660	910	1020	920	960	1040	970	1010	1000	932	967
19	---	---	---	1030	940	980	1050	970	1010	1010	935	968
20	980	910	940	1020	960	990	1100	970	1040	1020	938	972
21	960	880	920	1020	960	990	1020	980	1000	1010	924	967
22	1020	910	960	1020	960	980	1020	920	980	964	910	940
23	---	---	---	1010	950	970	1020	840	970	961	891	935
24	---	---	---	1020	960	980	1040	940	1000	991	918	956
25	950	880	920	1040	900	980	1030	960	1000	1010	880	960
26	---	---	---	1030	960	990	1060	990	1010	1000	915	957
27	---	---	---	1040	950	990	1030	920	980	1000	921	962
28	---	---	---	1040	960	1000	1020	940	990	1040	949	995
29	1000	880	950	1030	950	980	1050	890	990	1000	932	972
30	1000	950	970	1040	950	980	1050	910	990	964	910	942
31	---	---	---	---	---	---	1030	940	990	---	---	---
MONTH	---	---	---	---	---	---	1100	840	993	1040	840	956

11066050 SANTA ANA RIVER AT COLTON, CALIF.

LOCATION.--Lat 34°03'45", long 117°18'30", T.1 S., R.4 W., San Bernardino County, 60 ft downstream from Southern Pacific Railroad bridge, 200 ft downstream from Warm Creek, and 1 mile southeast of Colton.
PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1970.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey. Water discharge computed by combining the discharge of station 11059300 Santa Ana River at E Street, near San Bernardino with that of stations 11060400 Warm Creek near San Bernardino, and 11065000 Lytle Creek at Colton.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
30...	1200	18	23.9	7.6	41	21	110	11	198	0	70	102
NOV.												
24...	1215	13	21.7	8.7	34	23	80	11	219	0	59	64
DEC.												
19...	1245	14	19.4	8.9	38	19	125	12	243	0	59	138
JAN.												
22...	1345	21	20.0	8.9	38	23	102	12	264	0	59	101
FEB.												
19...	1230	17	17.8	9.2	46	21	116	13	221	0	70	128
MAR.												
23...	1200	17	31.1	7.5	44	23	80	12	253	0	68	67
APR.												
28...	1230	14	22.8	8.5	40	21	94	11	165	0	64	99
MAY												
21...	1045	14	28.9	8.3	38	23	114	12	173	0	78	127
JUNE												
25...	1100	14	35.0	6.8	32	27	86	12	304	0	82	73

DATE	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 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)
OCT.												
30...	1.4	70	510	471	22.9	189	27	162	54	3.5	943	7.4
NOV.												
24...	.8	56	400	471	16.5	179	0	180	47	2.6	814	7.0
DEC.												
19...	1.1	34	540	591	22.3	173	0	199	59	4.1	1040	7.5
JAN.												
22...	1.3	47	460	528	29.9	189	0	217	52	3.2	975	7.2
FEB.												
19...	1.3	55	510	621	28.5	119	0	181	54	3.6	1010	7.5
MAR.												
23...	.8	48	420	488	22.4	204	0	208	44	2.4	862	7.2
APR.												
28...	1.0	55	400	476	18.0	186	51	135	51	3.0	852	6.7
MAY												
21...	1.1	46	450	565	21.4	189	47	142	55	3.6	936	6.8
JUNE												
25...	1.0	16	510	484	18.3	191	0	249	48	2.7	918	7.8

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

LOCATION.--Lat 33°58'04", long 117°26'46", in NE¼NE¼SW¼ sec.30, T.2 S., R.5 W., Riverside County, at gaging station on left bank, 300 ft upstream from MWD Crossing, 0.7 miles 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 1970.
EXTREMES, 1969-70.--Specific conductance: Maximum recorded, 1,320 micromhos Nov. 4; minimum recorded, 260 micromhos Mar. 5.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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.							
04...	--	11	22.0	736	1.00	21.9	1050
11...	--	12	17.5	736	1.00	23.8	1140
25...	--	18	15.0	660	.90	32.1	1090
27...	--	14	17.0	652	.89	24.6	1030
NOV.							
01...	--	13	17.0	692	.94	24.3	1080
06...	--	46	15.5	650	.88	80.7	1060
07...	--	243	17.5	494	.67	324	763
08...	--	--	18.0	686	.93	--	1060
21...	--	17	10.0	678	.92	31.1	1100
23...	--	15	15.0	684	.93	27.7	1110
29...	--	12	17.5	688	.94	22.3	1110
DEC.							
06...	--	23	17.0	698	.95	43.3	1110
09...	--	24	19.0	688	.94	44.6	1100
17...	--	47	18.5	666	.91	84.5	1070
30...	--	23	17.0	670	.91	41.6	1090
JAN.							
08...	--	20	16.0	764	1.04	41.3	1090
12...	--	29	14.5	710	.97	55.6	1050
19...	--	25	18.5	704	.96	47.5	1110
29...	--	23	11.0	756	1.03	46.9	1100
30...	--	24	19.8	718	.98	46.5	1080
FEB.							
04...	1310	26	20.2	688	.94	48.3	1060
11...	1355	35	21.4	536	.73	50.7	822
26...	1530	47	22.0	652	.89	82.7	1050
MAR.							
04...	1200	35	18.9	616	.84	58.2	1020
11...	1030	36	18.0	616	.84	59.9	996
19...	1045	32	20.0	664	.90	57.4	1050
30...	1400	20	18.5	672	.91	36.3	1100
APR.							
06...	1410	30	24.0	684	.93	55.4	1090
16...	1430	28	18.5	660	.90	49.9	1080
30...	1350	22	27.0	704	.96	41.8	1080
MAY							
13...	1300	23	28.5	720	.98	44.7	1120
19...	1450	22	30.0	720	.98	42.8	1150
28...	1430	19	20.0	722	.98	37.0	1100
JUNE							
01...	1140	21	30.5	730	.99	41.4	1100
08...	1500	18	24.0	734	1.00	37.1	1140
15...	1300	20	28.5	710	.97	38.3	1170
18...	1310	--	30.2	690	.94	--	1140
22...	1315	--	32.2	692	.94	--	1140
25...	1200	--	32.0	720	.98	--	1160
JULY							
01...	1415	22	32.0	708	.96	42.1	1150
10...	1515	25	31.7	696	.95	47.0	1120
13...	1230	23	32.0	694	.94	43.1	1120
20...	1030	23	27.5	680	.92	42.2	1100
28...	1310	22	30.0	696	.95	41.3	1120
AUG.							
03...	1230	22	31.0	676	.92	40.2	1100
12...	0940	23	--	704	.96	43.7	1120
20...	1130	23	27.0	696	.95	43.2	1090
25...	1120	23	29.0	698	.95	43.3	1120
SEP.							
01...	0915	21	21.5	618	.84	35.0	994
08...	1110	21	26.5	688	.94	39.0	1100
15...	1100	23	24.0	720	.98	44.7	1120
24...	1500	21	28.0	700	.95	39.7	1100

NOTE.--Discharge prior to March 9 furnished by Riverside City Department of Public Works.

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

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1090	1030	1060	1080	1020	1040	1100	1070	1080	1120	992	1080
2	1080	1030	1060	1200	1160	1180	1100	1080	1090	1140	1090	1120
3	1100	1030	1060	1220	1170	1210	1120	1090	1100	1130	1090	1110
4	---	---	---	1320	1200	1240	1120	1080	1100	1120	1070	1100
5	1090	1060	1080	1260	1100	1170	1120	1060	1080	1130	1100	1110
6	1070	1050	1060	---	---	---	1110	1060	1080	1190	1090	1130
7	1070	1050	1060	---	---	---	---	---	---	1130	1120	1120
8	---	---	---	---	---	---	---	---	---	1120	1090	1110
9	---	---	---	950	861	918	1180	1050	1080	1140	1090	1110
10	---	---	---	974	909	933	1080	1010	1040	1090	805	994
11	---	---	---	1210	939	1010	1140	1070	1100	1080	388	903
12	---	---	---	1030	934	949	1180	1100	1130	1080	912	1020
13	---	---	---	1000	919	943	1160	1080	1120	1090	1050	1070
14	---	---	---	1050	906	1000	1130	1080	1110	1090	1010	1070
15	---	---	---	1040	953	988	1170	1100	1140	1100	1000	1050
16	---	---	---	988	950	968	1110	1050	1080	1090	291	767
17	---	---	---	1070	964	986	1140	1050	1110	1030	732	958
18	---	---	---	---	---	---	---	---	---	1090	1030	1060
19	---	---	---	1180	1120	1160	1080	1070	1080	1130	1060	1100
20	---	---	---	1180	1070	1100	1100	1080	1090	1140	1080	1110
21	---	---	---	1140	1050	1100	1100	1070	1090	1130	1080	1110
22	---	---	---	---	---	---	1160	1100	1110	1130	1010	1100
23	---	---	---	---	---	---	1150	1010	1110	1100	1030	1070
24	---	---	---	---	---	---	1100	1060	1070	1090	1030	1070
25	---	---	---	---	---	---	1100	1050	1070	---	---	---
26	---	---	---	1270	1030	1100	1100	1050	1080	---	---	---
27	---	---	---	1120	1090	1100	1110	1040	1070	---	---	---
28	---	---	---	1150	1070	1100	1120	1050	1090	---	---	---
29	---	---	---	1110	1080	1090	1130	1090	1100	---	---	---
30	1150	1100	1130	1100	1070	1080	1120	1090	1100	1160	1110	1140
31	1050	997	1030	---	---	---	1110	1080	1100	1220	1180	1200
MONTH	---	---	---	---	---	---	1180	1010	1092	1220	291	1068

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1210	1130	1180	---	---	---	1090	1030	1060	1120	1040	1080
2	1130	1090	1120	---	---	---	1100	1050	1070	1120	1030	1080
3	1130	1080	1110	---	---	---	1120	1020	1070	1160	1030	1110
4	1100	1020	1060	1110	1030	1050	1110	1030	1070	1140	1060	1100
5	1110	1080	1090	1000	260	446	1140	1040	1080	1100	1060	1080
6	---	---	---	1090	712	974	1120	1070	1080	1070	1020	1040
7	---	---	---	1120	1040	1070	1110	1060	1090	1090	980	1030
8	---	---	---	1110	1040	1070	1060	1010	1040	1050	1030	1030
9	---	---	---	1100	1060	1080	1110	1000	1060	1100	1020	1060
10	---	---	---	1120	1080	1100	1080	1040	1050	---	---	---
11	1050	820	929	1120	724	1020	1040	1020	1030	---	---	---
12	1110	1030	1080	1110	1060	1090	1060	1030	1040	---	---	---
13	1100	1040	1060	1170	1060	1110	1070	1020	1040	---	---	---
14	1050	1000	1020	1180	1060	1120	1080	1040	1060	---	---	---
15	1120	1110	1110	1170	1090	1140	1130	1070	1100	---	---	---
16	1120	1070	1100	1150	1030	1070	1180	1080	1140	---	---	---
17	1120	1070	1080	---	---	---	---	---	---	---	---	---
18	1220	1060	1100	---	---	---	---	---	---	---	---	---
19	1120	1070	1100	1130	1060	1100	---	---	---	1130	1100	1110
20	1110	1070	1090	1120	1010	1060	1130	1080	1100	1110	1050	1080
21	1120	1070	1100	1140	1060	1090	1090	1060	1080	1110	1030	1070
22	1120	1080	1100	1120	1050	1080	1110	1050	1080	1120	1050	1080
23	1120	1070	1090	1120	1060	1100	1150	1060	1090	1110	965	1070
24	1140	1070	1110	1140	1060	1100	1100	1060	1080	1100	1080	1100
25	1160	1080	1120	1140	1070	1110	1150	1070	1100	1120	1050	1090
26	1150	1050	1120	1120	1060	1090	1100	1050	1070	1080	1040	1060
27	1110	1070	1090	1120	1020	1060	1180	1020	1110	1110	1030	1080
28	1090	398	830	1150	1030	1090	1130	1050	1090	1120	969	1070
29	---	---	---	1160	1090	1120	1130	1050	1090	1150	1080	1100
30	---	---	---	1110	1050	1080	1110	1010	1060	1160	1080	1110
31	---	---	---	1080	1030	1060	---	---	---	1140	1070	1100
MONTH	1220	398	1077	1180	260	1056	1180	1000	1075	---	---	---

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

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1100	1050	1080	1150	1050	1090	1110	1040	1070	1120	1060	1090
2	---	---	---	1130	1070	1100	1080	1030	1060	1110	1090	1100
3	---	---	---	---	---	---	1130	1020	1070	1100	1090	1090
4	---	---	---	---	---	---	1100	1070	1080	1110	1090	1100
5	---	---	---	---	---	---	1090	1050	1070	1100	1080	1100
6	---	---	---	---	---	---	1110	1070	1080	1130	1080	1100
7	---	---	---	1110	1080	1100	1120	1040	1080	1140	1090	1110
8	1180	1130	1150	1110	1070	1080	1120	1070	1090	1140	1080	1110
9	1180	1110	1140	1100	1060	1080	1100	1070	1090	1150	1090	1110
10	1180	1110	1140	1150	1060	1080	1110	1060	1090	1120	1100	1110
11	1150	1100	1110	---	---	---	1130	1070	1110	---	---	---
12	1150	1110	1120	---	---	---	1130	1110	1120	1130	1110	1110
13	1180	1100	1140	---	---	---	---	---	---	---	---	---
14	1170	1110	1140	---	---	---	1140	1110	1110	---	---	---
15	1170	1080	1130	---	---	---	1130	1060	1090	1130	1110	1120
16	1140	1100	1120	1140	1050	1090	1110	1060	1080	1150	1090	1130
17	1130	1080	1110	1080	1050	1070	1120	1080	1090	---	---	---
18	1140	1070	1110	1080	1040	1070	1110	1070	1090	---	---	---
19	1130	1040	1100	1090	1070	1080	1100	1060	1080	---	---	---
20	1130	1080	1110	1130	1070	1100	1110	1060	1080	---	---	---
21	1120	1060	1100	1120	1090	1100	1080	1060	1070	1150	1110	1140
22	1140	1040	1110	1130	1050	1100	1090	1050	1070	1170	1100	1130
23	1150	1080	1110	1110	1070	1090	1100	1060	1070	1160	1110	1140
24	1150	1050	1100	1120	1060	1090	1110	1090	1100	1160	1090	1120
25	1160	1100	1130	---	---	---	1140	1070	1110	1190	1080	1130
26	1090	1050	1060	---	---	---	1130	1060	1090	1180	1110	1130
27	---	---	---	1120	1080	1100	1110	1080	1090	1160	1100	1130
28	---	---	---	1110	1090	1090	1090	1080	1090	1190	1110	1140
29	1120	1040	1080	1090	1060	1080	1120	1070	1100	1160	1110	1120
30	1100	1040	1080	1110	1080	1090	1120	1080	1090	1140	1110	1120
31	---	---	---	1110	1070	1090	1140	1090	1120	---	---	---
MONTH	---	---	---	---	---	---	1140	1020	1087	---	---	---
YEAR	1320	260										

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

LOCATION.--Lat 33°57'53", long 117°27'26", in SE¼NE¼SE¼ 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 Riverside Narrows, and 3.3 miles north of Arlington.
PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1970.
EXTREMES, 1969-70.--Specific conductance: Maximum, 1,590 micromhos Nov. 19; minimum, 901 micromhos Dec. 26.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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.							
31...	--	22	--	604	.82	35.9	1210
NOV.							
02...	--	21	--	652	.89	37.0	1200
08...	--	23	24.0	672	.91	41.7	1170
21...	--	24	22.0	704	.96	45.6	1260
26...	--	24	--	670	.91	43.4	1190
28...	--	23	--	636	.86	39.5	1110
30...	--	21	--	636	.86	36.1	1120
DEC.							
02...	--	23	--	656	.89	40.7	1140
04...	--	25	--	666	.91	45.0	1170
09...	--	24	22.0	448	.61	29.0	906
30...	--	23	20.0	636	.86	39.5	1110
30...	1510	23	20.0	470	.64	29.2	994
JAN.							
02...	--	24	--	606	.82	39.3	1010
07...	--	24	--	644	.88	41.7	1090
08...	--	26	21.0	710	.97	49.8	1150
09...	--	24	--	752	1.02	48.7	1240
12...	--	26	--	672	.91	47.2	1130
14...	--	25	--	674	.92	45.5	1130
16...	--	25	--	620	.84	41.8	1070
19...	--	26	--	626	.85	43.9	1110
19...	1515	26	21.5	638	.87	44.8	1130
21...	--	26	--	634	.86	44.5	1130
23...	1230	33	21.0	674	.87	44.9	1120
26...	--	27	--	650	.88	47.4	1130
28...	--	30	--	644	.88	52.2	1150
30...	1200	28	20.5	660	.90	49.9	1160
FEB.							
02...	--	26	--	606	.82	42.5	1080
04...	--	25	--	652	.89	44.0	1120
06...	--	27	--	680	.92	49.6	1170
09...	--	27	--	634	.86	46.2	1070
09...	1700	27	20.0	624	.85	45.5	1200
11...	--	28	--	574	.78	43.4	992
11...	1425	28	21.5	588	.80	44.5	1060
13...	--	27	--	660	.90	48.1	1170
16...	--	27	--	634	.86	46.2	1130
18...	--	28	--	692	.94	52.3	1170
FEB.							
20...	0830	27	--	670	.91	48.8	1180
20...	1030	27	20.0	632	.86	46.1	1110
23...	1100	28	--	554	.75	41.9	1010
25...	1115	27	--	640	.87	46.7	1140
26...	1410	27	22.8	616	.84	44.9	1090
27...	1600	27	--	696	.95	50.7	1150
MAR.							
02...	1530	30	--	560	.76	45.4	940
04...	1230	28	--	636	.86	48.1	1160
11...	0930	28	21.0	700	.95	52.9	1250
19...	1040	36	21.0	636	.86	63.4	1090
30...	1540	32	22.0	640	.87	55.3	1160
APR.							
06...	1430	29	22.5	648	.88	50.7	1160
16...	1400	28	22.0	546	.74	41.3	967
MAY							
13...	1300	27	26.5	736	1.00	53.7	1380
19...	1530	27	26.0	676	.92	49.3	1200
28...	1455	28	25.5	652	.89	49.3	1180
JUNE							
01...	1150	29	26.0	622	.85	48.7	1130
08...	1600	28	25.2	654	.89	49.4	1230
15...	1415	--	25.5	608	.83	--	1130
18...	1430	--	27.0	570	.78	--	1180
22...	1430	29	27.0	672	.91	53.9	1250
JULY							
01...	1600	30	28.0	654	.89	53.0	1130
13...	1330	35	28.0	676	.92	63.9	1080
20...	1040	38	28.0	642	.87	65.9	1150
28...	1400	32	28.5	652	.89	56.3	1160
AUG.							
03...	1400	33	28.5	640	.87	57.0	1140
11...	1200	34	30.5	628	.85	57.7	1040
17...	1425	32	29.2	634	.86	54.8	1110
25...	1200	34	29.2	626	.85	57.5	1050
SEP.							
08...	1100	36	28.0	586	.80	57.0	979
18...	1600	33	28.0	640	.87	57.0	1050
24...	1520	32	28.0	628	.85	54.3	1010

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

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	1110	992	1050	1200	1050	1130
2	---	---	---	---	---	---	1140	1000	1060	1150	993	1060
3	---	---	---	---	---	---	1150	1050	1110	1140	1060	1100
4	---	---	---	1310	1200	1240	1230	1060	1160	1110	976	1030
5	---	---	---	1320	1170	1230	1250	1180	1190	1050	971	1020
6	---	---	---	1220	1110	1160	1180	1180	1180	1120	1040	1090
7	---	---	---	1240	1020	1140	1190	1190	1190	1140	1070	1110
8	---	---	---	1220	1120	1180	1190	1190	1190	1230	1080	1140
9	---	---	---	1180	1030	1130	1200	1120	1170	1320	1210	1250
10	---	---	---	1180	1010	1110	---	---	---	1310	1210	1270
11	---	---	---	1260	1140	1200	---	---	---	1200	1110	1160
12	---	---	---	1340	1110	1200	1310	1200	1270	1240	1070	1160
13	---	---	---	1200	1070	1150	1310	1170	1250	1260	1200	1240
14	---	---	---	1240	1110	1200	1220	1060	1150	1270	1080	1170
15	---	---	---	1230	1150	1190	1230	1060	1140	1130	1060	1090
16	---	---	---	1270	1070	1170	1270	1140	1200	1150	1020	1080
17	---	---	---	1180	1000	1090	1300	1140	1220	1070	969	1020
18	---	---	---	1470	1140	1260	1180	1090	1150	1100	980	1060
19	---	---	---	1590	1400	1500	1110	1070	1090	1130	1030	1090
20	---	---	---	1510	1240	1370	1120	1030	1070	1230	1050	1130
21	---	---	---	1380	1180	1260	1030	953	1000	1240	1120	1190
22	---	---	---	1230	1070	1160	1130	1000	1050	1220	1130	1180
23	---	---	---	1160	1000	1100	1170	1070	1110	1170	1080	1130
24	---	---	---	1110	1010	1060	1210	1050	1140	1130	1040	1100
25	---	---	---	1230	1030	1120	1080	985	1030	1190	983	1070
26	---	---	---	1210	1060	1130	1070	901	1010	1190	1080	1140
27	---	---	---	1170	1060	1120	1080	1040	1060	1180	1100	1150
28	---	---	---	1110	913	1020	1070	969	1020	1200	1110	1160
29	---	---	---	1120	998	1060	1160	1030	1090	1210	1090	1150
30	---	---	---	1120	966	1050	1160	1080	1120	1260	1170	1220
31	---	---	---	---	---	---	1190	1090	1150	1270	1180	1210
MONTH	---	---	---	1590	913	---	1310	901	1124	1320	969	1132

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1160	1040	1090	1350	1150	1280	1450	1250	1330
2	1250	1110	1180	1210	967	1060	1350	1190	1270	1310	1210	1280
3	1350	1160	1220	1380	1200	1250	1420	1250	1320	1370	1200	1300
4	1400	1120	1230	1440	1160	1280	1300	1190	1250	1420	1200	1290
5	1320	1230	1270	1280	1100	1180	1220	1100	1180	1410	1200	1300
6	1310	1210	1260	1350	1250	1300	1270	1000	1200	1260	1070	1180
7	1380	1230	1300	1380	1220	1300	1290	1000	1240	1260	1110	1190
8	1300	1170	1240	1280	1170	1240	1350	1180	1260	1180	1120	1150
9	1220	1080	1160	1330	1160	1250	1330	1220	1280	1230	1060	1130
10	1270	1160	1220	1390	1240	1300	1340	1240	1280	1200	990	1090
11	1240	1010	1120	1420	1210	1300	1290	1190	1240	1200	981	1120
12	1320	1190	1260	1500	1240	1320	1270	1160	1220	1280	1120	1210
13	1330	1170	1260	1530	1340	1420	1330	1130	1240	1380	1120	1230
14	1220	1080	1150	1410	1220	1340	1350	1240	1290	1260	1150	1190
15	1140	1010	1080	1200	1120	1170	1340	1190	1270	1300	1180	1250
16	1220	1070	1140	1210	1050	1140	1290	1060	1240	1320	1160	1260
17	1250	1130	1190	1300	1160	1210	1320	1190	1270	1250	1110	1180
18	1260	1130	1200	1360	1120	1230	1340	1160	1250	1470	1230	1290
19	1350	1130	1210	1240	1090	1190	1240	1090	1160	1380	1160	1260
20	1290	1130	1210	1300	1210	1240	1290	1080	1190	1420	1200	1320
21	1240	990	1180	1270	1170	1220	1300	1180	1240	1410	1180	1290
22	1200	1070	1130	1180	1110	1160	1310	1120	1200	1380	1180	1300
23	1220	1010	1110	1360	1120	1200	1320	1140	1220	1290	1140	1220
24	1330	1220	1250	1390	1240	1330	1380	1180	1270	1200	1090	1150
25	1360	1140	1260	1400	1230	1320	1260	1120	1210	1220	1110	1170
26	1300	1170	1250	1340	1180	1240	1260	1150	1210	1250	1140	1200
27	1370	1290	1320	1260	1110	1190	1360	1100	1260	1340	1200	1260
28	1340	1130	1240	1200	1130	1170	1350	1150	1260	1240	1140	1180
29	---	---	---	1210	1110	1150	1360	1210	1290	1260	1160	1230
30	---	---	---	1300	1160	1240	1380	1220	1310	1290	1140	1210
31	---	---	---	1330	1140	1230	---	---	---	1170	1060	1130
MONTH	1400	990	1208	1530	967	1234	1420	1000	1246	1470	981	1222

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

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1250	1090	1180	1160	1110	1140	1140	1010	1070	1160	1050	1100
2	1250	1120	1190	1200	1110	1170	1100	999	1050	1220	1090	1150
3	1280	1190	1240	1250	1180	1220	1180	1000	1100	1200	1060	1110
4	1270	1160	1220	1260	1170	1230	1170	1100	1140	1140	980	1050
5	1250	1170	1210	1260	1120	1190	1150	1060	1110	1130	1060	1100
6	1230	1140	1180	1160	1070	1130	1150	1060	1110	1120	1010	1080
7	1170	1070	1120	1220	1060	1150	1110	1030	1080	1160	1040	1100
8	1250	1130	1190	1250	1130	1180	1130	1040	1080	1070	940	1030
9	1270	1170	1220	1160	1100	1130	1160	1050	1100	1120	1040	1080
10	1260	1120	1180	1210	1050	1120	1210	1110	1160	1140	1010	1070
11	1200	1090	1160	1170	1050	1110	1220	1130	1170	1120	1040	1080
12	1230	1140	1190	1110	990	1050	1170	1070	1120	1120	1040	1080
13	1210	1150	1180	1190	1090	1140	1100	1010	1070	1130	1000	1090
14	1190	1100	1140	1210	1120	1160	1160	1060	1110	1150	1020	1070
15	1170	1060	1120	1250	1120	1180	1120	1040	1080	1070	1010	1050
16	1190	1120	1160	1250	1140	1190	1110	1050	1080	1110	1010	1060
17	1220	1120	1180	1280	1170	1230	1120	975	1070	1180	1070	1120
18	1260	1130	1210	1230	1080	1170	1200	1080	1120	1200	1020	1100
19	1290	1220	1250	1230	1110	1170	1220	1100	1140	1100	1020	1050
20	1240	1200	1220	1260	1150	1200	1160	1030	1090	1120	990	1060
21	1260	1180	1210	1280	1140	1220	1160	1000	1090	1140	1010	1060
22	1280	1180	1230	1310	1210	1250	1090	987	1050	1040	960	1010
23	1230	1100	1170	1270	1140	1230	1070	973	1020	1040	970	1020
24	1180	1100	1150	1300	1160	1230	1080	940	1040	1050	970	1020
25	1190	1030	1120	1230	1120	1170	1150	1010	1080	1090	1000	1060
26	1150	1090	1130	1160	1060	1100	1180	1090	1130	1060	990	1030
27	1250	1170	1220	1250	1130	1180	1150	1070	1100	1090	960	1010
28	1270	1170	1200	1250	1080	1170	1160	1050	1110	1240	1060	1130
29	1310	1160	1230	1290	1150	1220	1150	1080	1110	1130	1010	1080
30	1160	1110	1130	1280	1090	1190	1180	1010	1110	1150	940	1040
31	---	---	---	1300	1140	1220	1290	1080	1160	---	---	---
MONTH	1310	1030	1184	1310	990	1175	1290	940	1098	1240	940	1069

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 (revised), not including 768 sq mi upstream from Lake Elsinore.
PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1970.
Water temperatures: October 1969 to September 1970.
EXTREMES, 1969-70.--Specific conductance: Maximum recorded, 1,670 micromhos Nov. 7; minimum, 416 micromhos Mar. 10.
Water temperatures: Maximum, 33.0°C May 15; minimum, 2.5°C Dec. 30, Jan. 3.
REMARKS.--Chemical analyses for this station are performed by California Department of Water Resources and Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	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)
OCT.								
03...	--	35	24.3	--	844	1.15	79.8	1370
08...	--	40	21.2	--	828	1.13	89.4	1310
09...	--	52	24.8	--	848	1.15	119	1360
11...	--	41	12.9	--	876	1.19	97.0	1320
15...	--	36	20.7	--	768	1.04	74.6	1340
17...	--	52	22.3	--	900	1.22	126	1330
22...	--	56	19.1	--	828	1.13	125	1340
23...	--	42	16.6	--	844	1.15	95.7	1310
25...	--	64	12.5	--	800	1.09	138	1320
27...	--	64	19.5	--	840	1.14	145	1360
30...	1515	52	21.7	168	794	1.08	111	1300
NOV.								
01...	--	52	12.5	--	698	.95	98.0	1140
06...	--	63	15.5	--	1000	1.36	170	1530
07...	--	119	13.0	--	704	.96	226	1110
08...	--	140	14.6	--	688	.94	260	1070
15...	--	73	16.3	--	852	1.16	168	1370
21...	--	68	--	--	826	1.12	152	1320
22...	--	56	78.0	--	816	1.11	123	1290
23...	--	54	30.0	--	856	1.16	125	1350
24...	1430	48	16.7	156	837	1.14	108	1360
29...	--	50	62.0	--	808	1.10	109	1310
DEC.								
01...	--	61	16.4	--	840	1.14	138	1360
05...	--	68	18.0	--	856	1.16	157	1340
08...	--	76	12.0	--	822	1.12	169	1330
09...	--	130	11.0	--	832	1.13	292	1320
12...	1300	61	15.0	--	836	1.14	138	1320
12...	1600	52	17.4	--	776	1.06	109	1230
19...	--	54	11.6	--	834	1.13	122	1330
19...	1430	52	15.0	155	858	1.17	120	1340
26...	--	70	15.5	--	826	1.12	156	1310
31...	--	68	13.0	--	818	1.11	150	1320
JAN.								
02...	--	63	4.3	--	826	1.12	141	1310
05...	--	63	8.0	--	824	1.12	140	1320
09...	--	64	11.0	--	766	1.04	132	1310
10...	--	106	15.1	--	948	1.29	271	1160
11...	--	109	13.4	--	762	1.04	224	1360
12...	1200	136	13.0	--	836	1.14	307	1230
JAN.								
12...	2040	136	17.0	--	804	1.09	295	1270
14...	--	96	13.5	--	856	1.16	222	1370
15...	--	123	18.5	--	736	1.00	244	1180
16...	0950	123	14.0	--	796	1.08	264	1290
16...	1600	123	16.4	--	834	1.13	277	1330
20...	--	161	14.5	--	820	1.12	356	1300
21...	--	130	18.0	--	954	1.30	335	1460
22...	1600	85	17.2	156	851	1.16	195	1380
23...	--	98	12.5	--	856	1.16	226	1330
28...	--	70	13.0	--	820	1.12	155	1320
29...	--	66	15.9	--	1160	1.58	207	1330
FEB.								
02...	--	66	14.8	--	1030	1.40	184	1330
06...	1730	71	17.8	150	814	1.11	156	1260
09...	1735	78	16.7	150	834	1.13	176	1280
10...	1515	201	15.2	110	594	.81	322	1000
11...	1520	154	14.3	138	648	.88	269	1060
12...	1630	148	14.6	100	546	.74	218	912
12...	1640	151	14.4	80	504	.69	205	841
13...	1640	176	14.6	108	616	.84	293	968
16...	1100	176	15.0	110	678	.92	322	1070
16...	1600	176	14.4	122	728	.99	346	1160
17...	1040	173	14.9	122	716	.97	334	1130
18...	1425	170	14.7	135	800	1.09	367	1240
19...	1000	121	12.3	120	820	1.12	268	1280
19...	1415	104	12.2	151	821	1.12	231	1330
21...	1800	117	10.2	130	800	1.09	253	1270
24...	1430	106	12.5	130	806	1.10	231	1250
26...	1230	100	12.4	140	788	1.07	213	1290
28...	0800	90	13.9	138	752	1.02	183	1250
MAR.								
01...	1600	113	14.0	120	588	.80	179	1030
02...	1630	83	13.5	63	352	.48	78.9	640
03...	1630	130	13.4	86	420	.57	147	756
04...	1030	143	13.4	65	388	.53	150	659
05...	1725	148	13.0	72	420	.57	168	733
06...	1710	148	12.7	85	496	.67	198	832
07...	0840	146	12.8	75	452	.61	178	770
11...	1350	143	14.5	85	480	.65	185	813
12...	1330	140	13.9	90	528	.72	200	869

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	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)
MAR.								
12...	1615	140	13.8	88	528	.72	200	863
13...	1900	138	13.3	100	540	.73	201	886
14...	0900	138	14.0	99	568	.77	212	896
16...	1540	136	14.8	94	532	.72	195	867
19...	1000	136	15.3	90	490	.67	180	834
20...	1615	136	15.2	98	550	.75	202	901
22...	1640	134	14.8	120	672	.91	243	1040
23...	1040	134	15.6	110	640	.87	232	1030
23...	1400	136	15.6	117	618	.84	227	1040
28...	0900	121	16.1	123	660	.90	216	1050
30...	1200	132	16.2	112	672	.91	240	1070
APR.								
04...	0840	119	15.9	132	728	.99	234	1130
06...	1145	119	17.0	132	720	.98	231	1140
13...	1725	89	19.1	138	752	1.02	181	1190
16...	1130	87	17.0	141	744	1.01	175	1260
18...	1115	87	--	132	776	1.06	182	1270
24...	1000	98	16.5	142	778	1.06	206	1300
25...	0830	--	16.8	--	788	1.07	--	1280
25...	1000	98	--	140	794	1.08	210	1310
27...	1115	150	16.5	--	776	1.06	314	1280
28...	1445	170	16.7	158	787	1.07	361	1330
30...	0845	166	15.7	--	774	1.05	347	1280
MAY								
02...	1000	154	--	--	772	1.05	321	1280
06...	1030	175	14.5	140	808	1.10	382	1330
08...	1315	40	23.0	130	796	1.08	86.0	1280
10...	1300	46	19.5	130	782	1.06	97.1	1270
13...	1100	44	14.5	--	764	1.04	90.8	1120
16...	2000	24	26.0	--	810	1.10	52.5	1300
18...	--	53	--	152	795	1.08	114	1340
18...	1400	82	23.5	--	812	1.10	180	1260
21...	1300	61	27.8	149	808	1.10	133	1270
22...	1100	63	21.0	--	798	1.09	136	1280
23...	0830	--	16.2	--	776	1.06	--	1280
25...	1000	27	--	--	770	1.05	56.1	1250
29...	0835	--	--	--	762	1.04	--	1230
JUNE								
01...	1015	--	19.5	--	762	1.04	--	1230
08...	1000	52	17.5	--	772	1.05	108	1240
JUNE								
11...	1230	--	25.0	--	760	1.03	--	1250
15...	1000	52	18.2	--	750	1.02	105	1240
19...	1000	55	19.5	--	762	1.04	113	1260
25...	1330	47	31.7	148	796	1.08	101	1230
25...	1600	--	30.0	--	800	1.09	--	1280
JULY								
01...	1200	44	26.0	--	796	1.08	94.6	1280
10...	1615	24	29.0	--	800	1.09	51.8	1290
14...	1000	54	20.0	--	778	1.06	113	1270
20...	1400	47	29.3	--	776	1.06	98.5	1260
22...	1115	--	--	144	764	1.04	--	1220
23...	1530	31	30.0	154	816	1.11	68.3	1280
28...	1010	37	22.0	--	776	1.06	77.5	1270
29...	0930	--	--	137	818	1.11	--	1250
AUG.								
03...	1640	28	29.0	--	798	1.09	60.3	1290
11...	0900	31	--	--	790	1.07	66.1	1260
11...	1000	30	--	--	806	1.10	65.3	1260
11...	1100	27	--	--	798	1.09	58.2	1260
11...	1200	27	--	--	788	1.07	57.4	1220
11...	2100	17	--	--	834	1.13	38.3	1320
11...	2200	17	--	--	836	1.14	38.4	1320
11...	2300	21	--	--	840	1.14	47.6	1310
12...	0200	24	--	--	788	1.07	51.1	1260
19...	1000	30	--	140	796	1.08	64.5	1260
25...	1400	31	--	--	792	1.08	66.3	1250
28...	1400	--	--	144	806	1.10	--	1250
28...	1445	30	29.4	148	785	1.07	63.6	1250
SEP.								
01...	1350	24	27.2	--	816	1.11	52.9	1280
08...	0930	25	17.0	--	814	1.11	54.9	1280
09...	0945	--	--	140	804	1.09	--	1230
17...	1125	--	--	144	800	1.09	--	1250
18...	1345	--	24.0	--	794	1.08	--	1240
24...	1200	35	20.2	--	794	1.08	75.0	1250
28...	1400	28	27.2	146	771	1.05	58.3	1230

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DIS-SOLVED OXYGEN (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.									
30...	6.8	115	31	129	8.0	361	0	149	1.1
NOV.									
24...	9.1	118	33	125	8.0	379	0	147	.9
DEC.									
19...	9.1	117	33	126	8.0	386	0	150	1.0
JAN.									
22...	7.4	121	33	126	9.0	384	0	155	1.0
FEB.									
19...	9.9	117	32	120	11	372	0	157	1.0
MAR.									
23...	9.3	93	24	90	11	288	0	115	.6
APR.									
28...	10.3	115	34	125	9.0	383	0	149	.8
MAY									
18...	--	113	27	122	8.0	343	0	149	.7
21...	--	111	30	120	8.0	335	0	154	.9
JUNE									
25...	6.2	108	30	123	8.0	335	0	151	.8
JULY									
22...	--	108	26	120	7.2	336	0	128	--
23...	6.9	117	31	119	7.0	348	0	161	.9
29...	--	112	28	118	6.1	340	0	145	.8
AUG.									
19...	--	114	28	118	6.4	346	0	144	.8
28...	--	109	28	116	6.4	346	0	135	--
28...	7.0	113	29	120	6.0	340	0	151	1.0
SEP.									
09...	--	114	28	116	5.9	338	0	138	--
17...	--	110	27	121	6.9	338	0	152	--
28...	7.8	109	28	118	7.0	324	0	146	1.1

DATE	NITRATE (NO3) (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	PH (UNITS)
OCT.								
30...	25	390	415	119	296	40	2.8	7.7
NOV.								
24...	31	350	430	119	311	38	2.6	7.6
DEC.								
19...	24	370	428	111	317	38	2.7	7.9
JAN.								
22...	27	370	438	123	315	38	2.6	7.8
FEB.								
19...	20	370	424	119	305	37	2.5	7.7
MAR.								
23...	11	300	331	95	236	36	2.2	7.8
APR.								
28...	16	380	427	113	314	38	2.6	7.8
MAY								
18...	30	420	393	112	281	40	2.7	8.1
21...	27	400	401	126	275	39	2.6	7.4
JUNE								
25...	30	430	393	118	275	40	2.7	8.1
JULY								
22...	19	--	--	--	276	40	2.7	8.0
23...	26	530	420	135	285	38	2.5	7.9
29...	27	280	394	115	279	39	2.6	7.9
AUG.								
19...	9.7	340	390	106	284	39	2.6	7.9
28...	--	--	387	103	284	39	2.6	7.9
28...	22	490	401	122	279	39	2.6	8.3
SEP.								
09...	22	--	400	123	277	38	2.5	8.2
17...	17	--	386	109	277	40	2.7	8.0
28...	28	420	387	121	266	39	2.6	8.3

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

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1280	1100	1180	1370	1240	1260	1310	1270	1300
2	---	---	---	1250	1050	1150	1320	1230	1270	1330	1280	1300
3	---	---	---	1310	1030	1140	1330	1250	1290	1310	1280	1290
4	---	---	---	1330	1020	1130	1330	1280	1300	1310	1280	1300
5	---	---	---	1340	1140	1160	1360	1310	1330	1320	1270	1300
6	---	---	---	1580	980	1390	1360	1320	1330	1320	1260	1290
7	---	---	---	1670	1090	1290	1340	1290	1310	1290	1260	1280
8	---	---	---	1090	940	1030	1330	1260	1280	1290	1280	1290
9	---	---	---	1120	970	1060	1410	1270	1320	1330	1280	1300
10	---	---	---	1260	1130	1180	1350	1310	1330	1460	1160	1300
11	---	---	---	1300	1230	1270	1350	1310	1320	1360	1280	1340
12	---	---	---	1470	1290	1360	1350	1290	1320	1300	1130	1210
13	---	---	---	1360	1330	1340	1330	1270	1310	1380	1280	1320
14	---	---	---	1360	1320	1340	1320	1300	1310	1370	1280	1320
15	---	---	---	1380	1330	1350	1340	1300	1310	1350	1120	1230
16	---	---	---	1360	1320	1340	1330	1260	1290	1340	966	1250
17	---	---	---	1390	1290	1310	1290	1290	1290	1170	940	1050
18	---	---	---	1300	1150	1270	1320	1300	1310	1110	1010	1080
19	---	---	---	1340	756	1170	1340	1300	1310	1210	1110	1170
20	---	---	---	1360	1330	1340	1330	1300	1320	1500	1210	1270
21	---	---	---	1360	1310	1320	1340	1310	1330	1450	1270	1340
22	---	---	---	1330	1270	1300	1330	1290	1310	1320	1290	1300
23	---	---	---	1350	1280	1310	1320	1280	1300	1340	1290	1310
24	1300	1280	1290	1330	1290	1310	1310	1270	1290	---	---	---
25	1320	1280	1290	1330	1290	1310	1310	1280	1290	---	---	---
26	1300	1290	1290	1350	1310	1320	1320	1280	1290	---	---	---
27	1360	1310	1320	1390	1290	1330	1310	1260	1280	1310	1300	1310
28	1350	1280	1330	1350	1280	1320	1310	1280	1300	1310	1290	1300
29	1380	1300	1350	1390	1060	1290	1310	1230	1280	1300	1270	1290
30	1290	1250	1280	1290	1240	1270	1290	1260	1270	---	---	---
31	1310	1270	1290	---	---	---	1320	1310	1320	---	---	---
MONTH	---	---	---	1670	756	1262	1410	1230	1302	1500	940	1270

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1080	892	984	1080	1040	1060	1330	1270	1290
2	1310	1270	1290	892	584	758	1100	1050	1070	1310	1200	1270
3	1280	1260	1270	946	714	822	1130	1100	1110	1330	1270	1300
4	1290	1270	1280	712	618	670	---	---	---	1360	1290	1320
5	1280	1250	1260	840	640	726	---	---	---	1340	1280	1330
6	1280	1260	1270	900	810	858	1220	1100	1210	---	---	---
7	1290	1260	1280	848	698	756	1240	1190	1220	---	---	---
8	1300	1280	1290	736	686	714	1230	1180	1210	1330	1250	1300
9	1290	1250	1280	802	710	765	1210	1190	1200	---	---	---
10	1330	771	1110	978	416	720	1230	1210	1220	1310	1220	1270
11	1060	736	917	874	810	847	1230	1200	1270	1320	1240	1280
12	845	702	742	914	860	901	1290	1230	1250	1280	1260	1270
13	1020	769	892	960	904	930	1250	1190	1220	---	---	---
14	1020	886	951	938	902	925	1350	1280	1310	1360	1300	1320
15	1370	860	976	944	904	918	---	---	---	1360	1230	1310
16	1260	1020	1100	920	870	892	---	---	---	1380	1220	1290
17	1150	1100	1140	924	874	899	---	---	---	1380	1260	1300
18	1240	1110	1180	920	814	854	---	---	---	1340	1210	1270
19	1390	1210	1290	874	842	853	---	---	---	1330	1320	1310
20	1380	1250	1310	969	893	926	---	---	---	1330	1300	1310
21	1420	1250	1320	1090	963	1020	1350	1310	1330	1320	1250	1280
22	1380	1260	1310	1100	1040	1060	---	---	---	1330	1240	1310
23	1360	1280	1310	1080	1030	1050	1310	1290	1300	1340	1270	1310
24	1390	1250	1310	1050	1020	1030	1310	1280	1300	1300	1260	1280
25	1340	1260	1300	1050	1010	1030	1300	1260	1280	1290	1250	1270
26	1350	1240	1300	1050	1020	1040	1310	1270	1290	1270	1230	1260
27	1350	1260	1290	1050	1030	1040	1340	1260	1300	1290	1260	1270
28	1310	1250	1300	1070	1030	1050	1340	1260	1290	1300	1250	1280
29	---	---	---	1070	1050	1060	1300	1250	1270	1300	1230	1270
30	---	---	---	1080	1060	1070	1340	1270	1290	1310	1280	1290
31	---	---	---	1100	1050	1080	---	---	---	1300	1200	1270
MONTH	1420	702	1195	1100	416	911	---	---	---	1380	1200	1290

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

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1360	1210	1240	1340	1260	1300	1290	1230	1260	1330	1270	1300
2	1270	1200	1230	---	---	---	---	---	---	1330	1260	1290
3	1260	1150	1220	1470	1250	1330	1330	1180	1290	1300	1270	1280
4	1260	1240	1250	1320	1280	1290	1270	1220	1240	1320	1220	1280
5	1270	1230	1250	1340	1270	1290	1310	1280	1300	1380	1220	1270
6	1280	1240	1250	1330	1270	1290	1320	1190	1270	---	---	---
7	1260	1230	1240	1330	1270	1290	1350	1250	1310	---	---	---
8	1250	1160	1220	1320	1270	1290	1260	1190	1210	1310	1220	1270
9	1270	1240	1250	1340	1280	1300	---	---	---	---	---	---
10	1270	1240	1250	1320	1270	1290	1310	1210	1270	---	---	---
11	1260	1240	1250	1280	1270	1280	1330	1180	1260	1270	1210	1240
12	1260	1210	1240	---	---	---	1340	1200	1280	---	---	---
13	1270	1230	1250	1330	1220	1290	1290	1260	1270	---	---	---
14	1280	1230	1250	1340	1210	1300	---	---	---	1300	1230	1280
15	1260	1220	1240	1320	1270	1300	---	---	---	1290	1220	1250
16	1260	1230	1240	1300	1210	1260	---	---	---	---	---	---
17	1280	1230	1250	1300	1250	1260	1310	1200	1260	1320	1220	1270
18	1300	1230	1260	1280	1110	1240	1290	1180	1220	1320	1240	1290
19	1300	1250	1270	---	---	---	1310	1210	1230	1280	1220	1260
20	1320	1250	1280	1300	1240	1270	1290	1240	1260	1280	1240	1260
21	1310	1270	1280	1280	1160	1240	1310	1250	1270	1270	1240	1260
22	1310	1240	1270	---	---	---	1280	1190	1250	1280	1180	1250
23	1300	1210	1260	1320	1230	1280	---	---	---	1280	1070	1240
24	---	---	---	1340	1250	1290	1300	1210	1260	1300	1240	1270
25	1310	1260	1290	1310	1250	1280	1330	1200	1290	1320	1230	1280
26	1310	1250	1270	1270	1260	1260	1320	1260	1270	1300	1230	1270
27	---	---	---	1350	1300	1320	---	---	---	1300	1150	1250
28	1340	1250	1310	1330	1260	1290	1290	1130	1220	1330	1220	1260
29	1330	1190	1290	1280	1250	1260	1300	1050	1240	1300	1250	1270
30	1360	1250	1300	1330	1260	1290	1310	1270	1290	1290	1250	1260
31	---	---	---	1310	1200	1260	1340	1250	1310	---	---	---
MONTH	1360	1150	1257	1470	1110	1282	---	---	---	---	---	---

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	23.5	10.0	18.0	10.0	14.0	4.0	17.5	8.0	14.5	12.5
2	---	---	23.5	10.5	16.0	9.0	12.5	4.5	18.5	10.0	14.5	13.0
3	---	---	22.0	10.5	17.5	12.0	13.0	2.5	19.5	6.5	14.0	13.0
4	---	---	22.5	11.0	17.5	9.0	13.0	3.0	16.0	10.5	13.5	13.0
5	---	---	20.0	13.5	18.5	12.0	12.5	3.5	18.0	9.0	---	---
6	---	---	17.0	13.5	16.5	9.0	13.0	4.0	20.0	8.0	---	---
7	---	---	13.5	12.5	15.5	8.5	15.5	6.0	22.5	8.5	13.5	12.5
8	---	---	16.0	15.0	13.5	9.0	14.0	6.0	21.5	9.0	13.5	12.5
9	---	---	16.0	15.0	16.5	10.5	13.5	7.0	18.0	12.0	13.5	12.5
10	---	---	18.0	15.0	17.0	8.0	16.0	10.0	16.0	13.5	14.0	9.0
11	---	---	19.5	17.5	16.5	7.0	13.5	11.0	16.0	14.5	15.0	13.0
12	---	---	22.0	16.5	16.5	6.5	15.5	11.5	17.0	14.5	14.5	13.5
13	---	---	24.5	14.5	17.0	6.0	16.5	13.0	16.5	13.0	15.0	13.5
14	---	---	23.5	15.5	16.0	6.0	14.0	12.5	16.0	15.0	15.5	13.5
15	---	---	19.0	16.0	15.0	5.5	18.0	12.5	16.5	14.5	18.5	14.0
16	---	---	21.5	14.5	15.0	6.5	15.0	14.0	16.0	14.0	16.0	15.0
17	---	---	21.0	11.0	14.5	8.5	14.5	14.0	15.5	14.0	16.5	14.5
18	---	---	16.0	8.5	15.5	10.5	14.5	13.0	15.5	14.0	17.5	15.5
19	---	---	16.5	8.0	15.5	11.0	14.5	13.5	13.5	11.5	18.0	15.0
20	---	---	16.5	8.0	17.5	13.0	16.5	14.0	12.0	10.5	21.0	15.0
21	---	---	17.5	7.0	17.0	12.0	17.5	13.5	12.5	10.5	16.0	14.5
22	---	---	17.5	8.0	20.5	14.0	17.0	13.5	13.0	11.5	16.0	14.5
23	---	---	18.5	7.5	18.0	12.5	19.0	12.5	18.5	12.5	16.0	14.5
24	---	---	18.5	7.0	18.5	12.0	17.0	13.0	17.0	12.5	16.5	14.0
25	---	---	18.0	7.5	16.5	10.5	19.5	12.0	19.0	12.0	17.5	15.5
26	---	---	17.0	7.5	17.5	9.5	19.0	11.5	20.5	11.0	16.5	15.5
27	---	---	16.0	8.0	13.0	5.0	16.5	9.5	18.5	10.5	18.0	16.0
28	---	---	15.5	8.0	11.0	5.0	17.5	13.0	16.0	13.5	17.0	16.0
29	22.5	15.5	15.0	7.0	13.0	4.0	18.0	10.0	---	---	17.0	15.0
30	22.5	11.5	17.0	10.5	13.0	2.5	15.5	5.0	---	---	17.0	15.5
31	24.0	11.0	---	---	14.0	7.5	19.0	8.5	---	---	17.5	16.0
MONTH	---	---	24.5	7.0	20.5	2.5	19.5	2.5	22.5	6.5	21.0	9.0

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

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	15.5	18.5	16.0	30.0	16.0	29.0	16.0	31.0	16.5	28.5	15.5
2	17.0	15.0	19.5	17.5	30.5	16.5	30.0	17.0	30.5	21.0	27.0	10.5
3	17.0	15.0	20.0	19.0	27.5	17.5	29.5	19.0	28.5	20.0	27.0	12.5
4	---	---	20.5	19.5	27.0	17.5	31.5	19.0	28.5	18.0	25.5	11.5
5	---	---	21.5	17.5	27.0	17.0	30.0	19.5	---	---	26.0	11.0
6	---	---	20.5	13.0	27.5	16.5	30.5	19.0	---	---	31.0	11.0
7	---	---	20.5	13.0	27.5	16.5	26.5	18.0	29.5	21.5	30.0	15.5
8	14.5	13.0	---	---	22.0	15.5	30.0	21.5	30.0	18.0	26.0	13.5
9	---	---	---	---	23.0	16.0	30.5	19.5	31.5	18.5	27.0	14.0
10	---	---	---	---	21.0	16.0	29.5	18.5	29.5	18.0	31.5	15.5
11	---	---	---	---	28.5	15.5	28.0	18.0	29.5	18.5	28.0	16.0
12	---	---	---	---	25.5	17.0	28.5	19.5	30.0	20.0	27.0	18.5
13	---	---	---	---	26.0	15.5	29.0	19.5	31.5	19.5	24.0	16.0
14	---	---	26.0	18.5	27.0	14.0	28.0	17.5	31.0	22.5	25.5	13.5
15	---	---	33.0	14.5	27.5	15.5	29.0	19.5	31.0	22.5	---	---
16	---	---	31.5	20.0	27.0	16.5	29.5	19.5	32.0	22.5	---	---
17	---	---	25.5	17.0	27.5	15.5	30.0	18.5	29.5	21.5	---	---
18	---	---	27.0	17.5	27.5	14.5	30.0	19.0	28.5	19.5	---	---
19	---	---	28.0	10.5	28.5	15.5	31.0	21.5	28.5	18.5	---	---
20	---	---	27.5	15.0	29.0	16.5	30.5	21.0	28.0	18.5	---	---
21	---	---	27.0	14.5	29.0	17.5	28.5	19.0	28.5	20.0	---	---
22	---	---	27.5	14.0	28.5	18.5	30.5	21.5	27.5	17.0	---	---
23	17.0	15.5	26.5	16.0	28.5	17.5	29.5	20.0	29.5	20.0	---	---
24	17.0	15.0	25.5	16.5	29.5	18.5	29.0	17.5	28.0	20.0	---	---
25	17.5	15.5	25.5	16.5	30.0	21.0	29.0	18.0	29.0	19.5	---	---
26	18.0	16.5	21.0	16.0	29.5	18.0	28.5	16.5	28.5	18.5	---	---
27	17.0	16.0	21.0	15.5	29.0	16.0	29.0	18.5	29.0	20.0	26.5	11.0
28	16.5	15.0	21.5	15.0	28.0	15.0	28.0	17.0	28.5	18.5	26.0	11.0
29	16.5	15.0	28.0	15.5	28.0	15.5	31.0	17.0	27.5	18.0	24.0	12.5
30	16.5	15.0	28.0	14.5	28.5	15.0	29.0	19.5	28.0	17.0	25.0	13.5
31	---	---	27.5	17.0	---	---	29.5	15.0	27.5	16.5	---	---
MONTH	---	---	33.0	10.5	30.5	14.0	31.5	15.0	32.0	16.5	---	---

11078000 SANTA ANA RIVER AT SANTA ANA, CALIF.

LOCATION.--Lat 33°44'56", long 117°54'30", in NW¼SW¼SE¼ sec.10, T.5 S., R.10 W., Orange County, at gaging station on Fifth Street Bridge in Santa Ana, and 1.8 miles downstream from Santiago Creek.
DRAINAGE AREA.--1,689 sq mi (revised), (not including 768 sq mi above Elsinore Lake).
PERIOD OF RECORD.--Water temperatures: October 1967 to September 1969.
Sediment records: October 1967 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 8,900 mg/l Feb. 10; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 9,950 tons Mar. 2; minimum daily, 0 tons on many days.
EXTREMES, 1967-70.--Sediment concentrations: Maximum daily, 78,000 mg/l Feb. 25, 1969; minimum daily, no flow for many days each year.
Sediment loads: Maximum daily, 2,670,000 tons Feb. 25, 1969; minimum daily, 0 tons on many days each year.
REMARKS.--No flow Oct. 1 to Nov. 5, Nov. 8 to Jan. 10, 13-15, Jan. 18 to Feb. 9, 12-27, Mar. 6 to Sept. 30. Sediment table omitted for periods of no flow.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	--	0			
2				0	--	0			
3				0	--	0			
4				0	--	0			
5				0	--	0			
6				50	7400	999			
7				40	6500	702			
8				0	--	0			
9				0	--	0			
10				0	--	0			
11				0	--	0			
12				0	--	0			
13				0	--	0			
14				0	--	0			
15				0	--	0			
16				0	--	0			
17				0	--	0			
18				0	--	0			
19				0	--	0			
20				0	--	0			
21				0	--	0			
22				0	--	0			
23				0	--	0			
24				0	--	0			
25				0	--	0			
26				0	--	0			
27				0	--	0			
28				0	--	0			
29				0	--	0			
30				0	--	0			
31				--	--	--			
TOTAL	0	--	0	90	--	1701	0	--	0

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	--	0	0	--	0	38	6400	657
2	0	--	0	0	--	0	498	7400	9950
3	0	--	0	0	--	0	.50	120	.16
4	0	--	0	0	--	0	205	1290	4000
5	0	--	0	0	--	0	95	1720	1570
6	0	--	0	0	--	0	.05	5	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	116	8900	2790	0	--	0
11	25	5200	351	12	3400	110	0	--	0
12	10	3000	81	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	54	7500	1090	0	--	0	0	--	0
17	2.0	650	3.5	0	--	0	0	--	0
18	0	--	0	0	--	0	0	--	0
19	0	--	0	0	--	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	0	--	0	0	--	0	0	--	0
27	0	--	0	0	--	0	0	--	0
28	0	--	0	18	1070	167	0	--	0
29	0	--	0	--	--	--	0	--	0
30	0	--	0	--	--	--	0	--	0
31	0	--	0	--	--	--	0	--	0
TOTAL	91.0	--	1525.5	146	--	3067	836.55	--	16177.16

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1163.55
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 22470.66

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

LOCATION.--Lat 34°09'18", long 117°54'26", in NE¼SE¼ 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: October 1966 to September 1970.
REMARKS.--Records of discharge furnished by Los Angeles County Flood Control District. Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
28...	1445	80	18.3	9.8	42	15	11	4.0	179	9	25	5.0
NOV.												
21...	1400	70	15.6	10.9	40	13	11	4.0	181	0	23	4.0
DEC.												
22...	1215	80	14.4	11.5	47	13	12	4.0	200	0	25	5.0
JAN.												
23...	1300	6.7	11.1	11.5	48	14	11	3.0	206	0	27	4.0
FEB.												
20...	1300	90	12.2	10.5	46	13	10	4.0	199	0	21	5.0
MAR.												
24...	1145	290	13.3	10.7	43	12	9.0	3.0	175	0	22	5.0
APR.												
29...	1215	129	13.9	9.6	47	12	10	4.0	195	0	21	5.0
MAY												
22...	1200	76	18.9	9.0	47	14	10	4.0	201	0	22	5.0
JUNE												
26...	1030	41	24.4	8.4	47	14	10	4.0	201	0	24	5.0
JULY												
24...	1045	30	25.6	8.4	41	15	11	4.0	190	0	26	5.0
AUG.												
29...	1315	42	25.0	8.0	44	15	11	4.0	196	0	26	6.0
SEP.												
25...	1445	42	22.8	8.4	47	13	12	4.0	201	0	24	5.0

DATE	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 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)
OCT.												
28...	.4	3.5	10	179	38.7	167	5	162	12	.4	355	8.4
NOV.												
21...	.4	3.2	20	185	35.0	153	5	148	13	.4	346	8.2
DEC.												
22...	.5	2.9	0	236	51.0	171	7	164	13	.4	378	8.2
JAN.												
23...	.4	1.1	50	216	3.91	177	8	169	12	.4	385	7.9
FEB.												
20...	.4	2.2	40	214	52.0	168	5	163	11	.3	372	8.3
MAR.												
24...	.3	2.8	50	179	140	157	13	144	11	.3	335	8.2
APR.												
29...	.4	3.0	50	190	66.2	167	7	160	11	.3	357	7.9
MAY												
22...	.4	3.0	20	218	44.7	175	10	165	11	.3	367	8.0
JUNE												
26...	.4	1.4	50	201	22.3	175	10	165	11	.3	363	8.1
JULY												
24...	.5	.4	50	186	15.1	164	8	156	12	.4	351	8.2
AUG.												
29...	.5	.4	100	206	23.4	172	11	161	12	.4	365	8.1
SEP.												
25...	.5	.3	70	216	24.5	171	6	165	13	.4	370	8.3

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 1970.
REMARKS.--Records of discharge are given for 11087020 San Gabriel River above Whittier Narrows Dam. Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
28...	1400	106	18.3	88	31	106	6.0	183	0	269	99	.6
NOV.												
21...	1230	97	13.9	85	32	108	7.0	176	0	271	98	.6
DEC.												
22...	1115	101	16.1	71	26	88	7.0	157	0	204	79	.8
JAN.												
23...	1215	84	15.6	86	28	104	8.0	190	0	227	105	.7
FEB.												
20...	1200	68	12.8	86	31	108	6.0	182	0	259	98	.7
MAR.												
24...	1045	26	19.4	89	27	88	8.0	239	0	163	88	.7
APR.												
29...	1100	51	17.8	84	30	106	7.0	180	0	244	101	.6
MAY												
22...	1100	20	25.6	95	29	113	9.0	239	0	214	122	.8
JUNE												
26...	0930	71	26.7	80	31	112	7.0	154	0	280	109	.7
JULY												
24...	1000	87	24.4	84	33	116	7.0	165	0	292	113	.6

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 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)
OCT.											
28...	17	180	678	194	347	197	150	39	2.5	1100	7.7
NOV.											
21...	19	170	742	194	344	200	144	40	2.5	1140	7.8
DEC.											
22...	31	200	640	175	284	155	129	40	2.3	963	6.9
JAN.											
23...	25	230	694	157	330	174	156	40	2.5	1110	7.3
FEB.											
20...	24	210	742	136	342	193	149	40	2.5	1140	7.3
MAR.											
24...	42	340	615	43.2	333	137	196	36	2.1	1030	7.4
APR.											
29...	25	250	704	96.9	333	185	148	40	2.5	1110	7.2
MAY											
22...	32	390	768	41.5	357	161	196	40	2.6	1180	7.4
JUNE											
26...	12	250	705	135	327	201	126	42	2.7	1100	8.3
JULY											
24...	11	250	755	177	345	210	135	42	2.7	1150	8.3

11097500 LOS ANGELES RIVER AT LOS ANGELES, CALIF.

LOCATION.--Lat 34°04'52", long 118°13'36", 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 1970.
REMARKS.--Records of discharge furnished by Los Angeles County Flood Control District. Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
01...	1100	18	21.7	86	27	136	--	167	0	286	111	--
NOV.												
05...	1030	16	15.0	82	33	172	--	175	0	334	122	--
DEC.												
03...	1050	12	13.3	82	26	140	--	179	0	280	102	--
JAN.												
08...	1030	11	8.3	106	46	78	--	191	0	248	104	--
FEB.												
04...	1100	36	11.7	64	24	126	--	165	0	223	94	--
MAR.												
11...	1130	27	13.9	114	31	111	--	190	0	328	95	--
APR.												
01...	1140	12	19.4	88	33	122	--	176	0	297	115	--
MAY												
06...	1035	18	15.6	86	39	65	--	182	0	221	91	--
22...	0900	15	19.4	77	25	140	7.0	162	0	275	122	1.0
SEPT.												
02...	1100	9.1	20.6	86	37	132	--	192	6	296	119	--
30...	0830	12	20.0	99	36	155	9.0	235	0	332	127	.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 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)
OCT.											
01...	20	--	835	40.6	326	189	137	48	3.3	--	8.2
NOV.											
05...	21	--	950	41.0	341	197	144	52	4.1	--	8.0
DEC.											
03...	14	--	815	26.4	312	165	147	49	3.5	--	8.3
JAN.											
08...	21	--	830	24.7	454	297	157	27	1.6	--	8.3
FEB.											
04...	14	--	695	67.6	259	124	135	51	3.4	--	8.1
MAR.											
11...	31	--	905	66.0	412	256	156	37	2.4	--	7.9
APR.											
01...	25	--	872	28.3	355	211	144	43	2.8	--	7.8
MAY											
06...	14	--	690	33.5	375	226	149	27	1.5	--	8.3
22...	20	570	783	31.7	295	162	133	50	3.5	1170	7.4
SEP.											
02...	6.8	--	985	21.7	367	199	167	44	3.0	--	8.4
30...	21	620	930	30.1	395	202	193	45	3.4	1400	7.6

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.
PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1970.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey. Sampled prior to October 1969 at station 11102250. Mission Creek below Whittier Narrows Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
28...	1345	6.8	18.3	8.0	111	30	24	4.0	269	0	165	33
NOV.												
21...	1200	7.7	16.1	7.5	112	27	23	4.0	272	0	163	30
DEC.												
22...	1045	8.2	16.7	8.0	119	28	25	3.0	281	0	172	32
JAN.												
23...	1130	8.8	16.7	8.3	113	27	24	3.0	270	0	166	31
FEB.												
20...	1045	7.7	16.1	8.2	110	27	24	3.0	264	0	161	31
MAR.												
24...	0945	7.6	17.2	8.2	109	26	23	3.0	254	0	160	32
APR.												
29...	1030	5.6	17.8	8.8	113	29	25	3.0	272	0	170	33
MAY												
22...	1030	3.9	20.6	8.1	107	29	24	3.0	261	0	169	33
JUNE												
26...	0845	2.7	21.7	6.6	104	29	25	3.0	254	0	163	33
JULY												
24...	0930	1.8	20.6	6.1	101	28	24	3.0	251	0	159	30
AUG.												
29...	1145	1.5	22.8	8.8	114	31	25	2.0	297	0	159	30
SEP.												
25...	1530	1.8	23.3	7.0	109	30	27	3.0	269	0	169	30

DATE	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 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)
OCT.												
28...	.6	9.8	100	502	9.22	401	180	221	11	.5	793	7.9
NOV.												
21...	.5	11	70	537	11.2	391	168	223	11	.5	819	7.8
DEC.												
22...	.6	12	50	600	13.3	412	181	230	12	.5	857	8.0
JAN.												
23...	.5	12	100	529	12.6	393	172	221	12	.5	829	7.9
FEB.												
20...	.5	11	90	546	11.4	386	169	217	12	.5	816	8.1
MAR.												
24...	.4	10	100	493	10.1	379	171	208	12	.5	791	7.7
APR.												
29...	.5	10	100	536	8.10	401	178	223	12	.5	822	7.8
MAY												
22...	.6	10	100	534	5.62	386	172	214	12	.5	788	8.0
JUNE												
26...	.5	9.3	90	507	3.70	379	171	208	12	.6	768	8.0
JULY												
24...	.6	12	100	517	2.51	367	161	206	12	.5	780	8.1
AUG.												
29...	.6	11	110	552	2.24	412	168	244	12	.5	824	7.9
SEP.												
25...	.6	9.7	110	547	2.66	396	175	221	13	.6	804	8.0

11105850 ARROYO SIMI NEAR SIMI, CALIF.

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.
DRAINAGE AREA.--70.6 sq mi.
PERIOD OF RECORD.--Sediment records: October 1968 to September 1970.
EXTREMES, 1968-69.--Sediment concentrations: Maximum daily, 25,100 mg/l Feb. 25; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 169,000 tons Feb. 25; minimum daily, 0 tons on many days.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 4,730 mg/l Feb. 28; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 3,030 tons Feb. 28; minimum daily, 0 tons on many days.
EXTREMES, 1968-70.--Sediment concentrations: Maximum daily, 25,100 mg/l Feb. 25, 1969; minimum daily, no flow for many days each year.
Sediment loads: Maximum daily, 169,000 tons Feb. 25, 1969; minimum daily, 0 tons on many days each year
REMARKS.--During 1969 water year, no flow Oct. 1 to Nov. 14, Nov. 16 to Dec. 15, 17-24, Dec. 27 to Jan. 12, 15-17, Feb. 3, 4, 9-11, 13, 14, 16-20, Apr. 9 to Sept. 30. During 1970 water year, no flow Oct. 1 to Nov. 5, Nov. 8 to Jan. 10, 12, 13, Jan. 21 to Feb. 8, 13-27, Mar. 11 to Sept. 30. Sediment tables omitted for periods of no flow.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	--	0	0	--	0
2				0	--	0	0	--	0
3				0	--	0	0	--	0
4				0	--	0	0	--	0
5				0	--	0	0	--	0
6				0	--	0	0	--	0
7				0	--	0	0	--	0
8				0	--	0	0	--	0
9				0	--	0	0	--	0
10				0	--	0	0	--	0
11				0	--	0	0	--	0
12				0	--	0	0	--	0
13				0	--	0	0	--	0
14				0	--	0	0	--	0
15				6.0	100	1.6	0	--	0
16				0	--	0	.90	100	.24
17				0	--	0	0	--	0
18				0	--	0	0	--	0
19				0	--	0	0	--	0
20				0	--	0	0	--	0
21				0	--	0	0	--	0
22				0	--	0	0	--	0
23				0	--	0	0	--	0
24				0	--	0	0	--	0
25				0	--	0	6.4	200	3.5
26				0	--	0	9.4	100	2.5
27				0	--	0	0	--	0
28				0	--	0	0	--	0
29				0	--	0	0	--	0
30				0	--	0	0	--	0
31				--	--	--	0	--	0
TOTAL	0	--	0	6.0	--	1.6	16.70	--	6.24

11105850 ARROYO SIMI NEAR SIMI, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	--	0	.70	40	.08	20	400	22
2	0	--	0	.40	30	.03	15	350	14
3	0	--	0	0	--	0	11	300	8.9
4	0	--	0	0	--	0	8.0	250	5.4
5	0	--	0	11	240	33	6.0	200	3.2
6	0	--	0	314	4830	7750	4.0	150	1.6
7	0	--	0	2.6	100	.70	3.0	100	.81
8	0	--	0	.40	50	.05	2.0	75	.41
9	0	--	0	0	--	0	1.0	50	.14
10	0	--	0	0	--	0	8.0	200	4.3
11	0	--	0	0	--	0	1.8	100	.49
12	0	--	0	1.0	50	.14	1.5	50	.20
13	10	300	41	0	--	0	.90	50	.12
14	15	231	29	0	--	0	.60	50	.08
15	0	--	0	1.0	50	.14	.50	50	.07
16	0	--	0	0	--	0	.40	50	.05
17	0	--	0	0	--	0	.30	50	.04
18	63	908	235	0	--	0	.20	50	.03
19	229	4500	7640	0	--	0	.10	50	.01
20	199	2950	3020	0	--	0	.10	50	.01
21	498	5820	12300	15	292	113	3.5	200	1.9
22	53	500	72	96	3500	3250	.50	100	.14
23	5.0	100	1.4	1110	20900	131000	.40	50	.05
24	383	6710	9030	640	7170	16000	.30	50	.04
25	1680	20500	152000	1290	25100	169000	.20	50	.03
26	574	10000	25800	76	1500	308	.10	50	.01
27	98	1500	397	22	450	27	.10	50	.01
28	21	400	34	35	1110	264	.10	50	.01
29	1.8	80	.39	--	--	--	.10	50	.01
30	1.2	60	.19	--	--	--	.10	50	.01
31	.90	50	.12	--	--	--	.10	50	.01
TOTAL	3831.90	--	210600.10	3615.10	--	327746.14	89.90	--	64.08

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.10	50	.01						
2	4.7	300	3.8						
3	1.0	100	.27						
4	.30	50	.04						
5	13	500	18						
6	1.0	300	.81						
7	.20	100	.05						
8	.10	50	.01						
9	0	--	0						
10	0	--	0						
11	0	--	0						
12	0	--	0						
13	0	--	0						
14	0	--	0						
15	0	--	0						
16	0	--	0						
17	0	--	0						
18	0	--	0						
19	0	--	0						
20	0	--	0						
21	0	--	0						
22	0	--	0						
23	0	--	0						
24	0	--	0						
25	0	--	0						
26	0	--	0						
27	0	--	0						
28	0	--	0						
29	0	--	0						
30	0	--	0						
31	--	--	--						
TOTAL	20.40	--	22.99	0	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 7580.00
TOTAL LOAD FOR YEAR (TONS) 538441.15

11105850 ARROYO SIMI NEAR SIMI, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	--	0			
2				0	--	0			
3				0	--	0			
4				0	--	0			
5				0	--	0			
6				32	2280	422			
7				3.6	542	23			
8				0	--	0			
9				0	--	0			
10				0	--	0			
11				0	--	0			
12				0	--	0			
13				0	--	0			
14				0	--	0			
15				0	--	0			
16				0	--	0			
17				0	--	0			
18				0	--	0			
19				0	--	0			
20				0	--	0			
21				0	--	0			
22				0	--	0			
23				0	--	0			
24				0	--	0			
25				0	--	0			
26				0	--	0			
27				0	--	0			
28				0	--	0			
29				0	--	0			
30				0	--	0			
31				--	--	--			
TOTAL	0	--	0	35.6	--	445	0	--	0

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	--	0	0	--	0	120	3775	1700
2	0	--	0	0	--	0	84	2820	1670
3	0	--	0	0	--	0	.32	200	.17
4	0	--	0	0	--	0	66	2570	1710
5	0	--	0	0	--	0	11	1060	88
6	0	--	0	0	--	0	.44	500	.59
7	0	--	0	0	--	0	.10	400	.11
8	0	--	0	0	--	0	.10	400	.11
9	0	--	0	41	1820	603	.10	300	.08
10	0	--	0	72	4210	1340	.03	250	.02
11	4.1	798	26	9.3	2240	72	0	--	0
12	0	--	0	1.1	1160	6.3	0	--	0
13	0	--	0	0	--	0	0	--	0
14	1.1	500	1.5	0	--	0	0	--	0
15	.22	200	.12	0	--	0	0	--	0
16	36	3270	823	0	--	0	0	--	0
17	.10	100	.03	0	--	0	0	--	0
18	.07	90	.02	0	--	0	0	--	0
19	.05	80	.01	0	--	0	0	--	0
20	.03	70	.01	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	0	--	0	0	--	0	0	--	0
27	0	--	0	0	--	0	0	--	0
28	0	--	0	167	4730	3030	0	--	0
29	0	--	0	--	--	--	0	--	0
30	0	--	0	--	--	--	0	--	0
31	0	--	0	--	--	--	0	--	0
TOTAL	41.67	--	850.69	290.4	--	5051.3	282.09	--	5169.08

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 649.76
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 11516.07

11105850 ARROYO SIMI NEAR SIMI, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
JAN 20, 1969	1000	12.0	112	2610	789	29	35	46	54	57	61	63	66	77	92	99	SPWC
JAN 21.....	0345	--	1070	A19100	55200	18	23	27	35	44	56	75	95	100	--	--	VPWC
JAN 24.....	1330	12.0	142	2730	1050	32	40	56	68	77	86	95	100	--	--	--	VPWC
JAN 25.....	0300	--	1700	A17700	81200	17	24	30	38	47	58	73	94	100	--	--	VPWC
JAN 25.....	0740	--	2390	A52800	341000	15	15	21	29	38	50	75	95	100	--	--	SPWC
JAN 25.....	0750	--	3090	A36200	302000	22	30	35	48	60	74	89	98	100	--	--	VPWC
JAN 25.....	0840	--	4540	A52700	646000	19	27	33	43	54	68	88	98	100	--	--	VPWC
FEB 23.....	1515	--	3090	A65800	549000	33	34	47	59	73	80	90	98	100	--	--	VPWC
FEB 25.....	0345	--	5290	A79400	1130000	27	28	34	46	61	72	90	98	100	--	--	VPWC

SUSPENDED SEDIMENT AND PARTICLE-SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
FEB 28, 1970	1200	14.0	390	9080	9560	31	38	46	60	75	89	96	99	100	--	--	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1969
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (°C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
SEP 23, 1968			6	0	2	4	10	37	78	92	96	98	99	100	--	S
JAN 20, 1969	1030		1	96	--	--	3	34	85	97	99	100	--	--	--	S

A. SINGLE-STAGE SAMPLE

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, CALIF.

LOCATION.--Lat 34°10'46", long 119°02'20", in Guadalasca 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.
DRAINAGE AREA.--243 sq mi.
PERIOD OF RECORD.--Sediment records: October 1968 to September 1970.
EXTREMES, 1968-69.--Sediment concentrations: Maximum daily, 62,900 mg/l Jan. 25; minimum daily, 40 mg/l on several days in January.
Sediment loads: Maximum daily, 1,700,000 tons Jan. 25; minimum daily, 0.05 ton Jan. 6.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 12,200 mg/l Feb. 10; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 17,500 tons Mar. 1; minimum daily, 0 tons on many days.
EXTREMES, 1968-70.--Sediment concentrations: Maximum daily, 62,900 mg/l Jan. 25, 1969; minimum daily, no flow for many days in 1970.
Sediment loads: Maximum daily, 1,700,000 tons Jan. 25, 1969; minimum daily, 0 tons on many days in 1970.
REMARKS.--During 1970 water year, no flow Apr. 24, June 14, July 8, 14, 15, 19-27, 29, 30, Aug. 1-3, 6, 7, 9-28, Sept. 3, 4.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.7	50	.23	3.8	50	.51	2.5	50	.34
2	1.7	50	.23	3.8	50	.51	2.1	50	.28
3	1.7	50	.23	4.6	50	.62	1.7	50	.23
4	1.7	50	.23	4.6	50	.62	2.5	50	.34
5	1.7	50	.23	4.2	50	.57	2.1	50	.28
6	1.7	50	.23	3.4	50	.46	2.9	50	.39
7	1.7	50	.23	2.9	50	.39	3.4	50	.46
8	1.7	50	.23	2.1	50	.28	3.4	50	.46
9	1.7	50	.23	2.1	50	.28	2.5	50	.34
10	1.7	50	.23	1.7	50	.23	3.4	50	.46
11	4.6	50	.62	.80	50	.11	3.8	50	.51
12	4.2	50	.57	.90	50	.12	2.1	50	.28
13	4.6	50	.62	1.7	50	.23	1.3	50	.18
14	4.6	50	.62	1.7	50	.23	1.3	50	.18
15	4.2	50	.51	3.8	70	.72	.90	50	.12
16	4.2	50	.57	7.4	100	2.0	2.5	50	.34
17	3.8	50	.51	2.9	50	.39	2.5	50	.34
18	3.8	50	.51	3.3	50	.45	1.7	50	.23
19	4.2	50	.57	2.5	50	.34	2.5	50	.34
20	4.6	50	.62	1.7	50	.23	2.9	50	.39
21	4.6	50	.62	.80	50	.11	3.4	50	.46
22	4.6	50	.62	.70	50	.09	2.5	50	.34
23	4.2	50	.57	.70	50	.09	2.5	50	.34
24	4.2	50	.57	.80	50	.11	1.7	50	.23
25	4.2	50	.57	2.5	50	.34	2.1	50	.28
26	3.8	50	.51	2.5	50	.34	7.4	130	2.6
27	3.8	50	.51	2.9	50	.39	11	190	5.6
28	3.8	50	.51	2.5	50	.34	3.8	70	.72
29	4.6	50	.62	2.5	50	.34	1.7	50	.23
30	5.0	50	.68	2.5	50	.34	1.7	50	.23
31	5.0	50	.68	--	--	--	2.1	50	.28
TOTAL	107.6	--	14.54	78.30	--	11.78	87.90	--	17.80

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.1	40	.23	22	500	30	70	1400	265
2	2.5	40	.27	20	450	24	58	1000	157
3	.90	40	.10	17	400	18	42	800	91
4	.80	40	.09	16	350	15	38	700	72
5	.60	40	.06	36	1000	97	34	650	60
6	.50	40	.05	695	12300	39400	30	600	49
7	.80	40	.09	23	500	31	25	500	34
8	1.3	40	.14	13	450	16	22	450	27
9	1.7	40	.18	12	450	15	23	500	31
10	1.7	40	.18	11	400	12	32	600	52
11	1.3	40	.14	11	350	10	16	300	13
12	.70	40	.08	11	300	8.9	16	295	13
13	.80	40	.09	10	250	6.8	17	290	13
14	56	3120	811	10	250	6.8	17	285	13
15	14	260	9.8	10	230	6.2	14	280	11
16	3.0	150	1.2	9.0	200	4.9	14	280	11
17	2.5	100	.68	10	230	6.2	14	275	10
18	6.4	316	12	14	300	11	13	270	9.5
19	779	12000	107000	16	350	15	13	270	9.5
20	1150	13100	90000	17	400	18	12	265	8.6
21	1450	24200	158000	26	700	49	12	265	8.6
22	65	3250	570	81	2650	816	11	260	7.7
23	17	1100	50	2620	29400	457000	11	260	7.7
24	879	12900	48700	1230	19000	81300	10	255	6.9
25	7960	62900	1700000	6030	59300	1340000	10	250	6.8
26	1600	18600	109000	578	8850	17400	9.5	245	6.3
27	153	2700	1490	200	3000	1620	9.0	240	5.8
28	58	1200	188	270	3650	4100	8.5	235	5.4
29	46	1000	124	--	--	--	8.0	230	5.0
30	36	700	68	--	--	--	7.5	225	4.6
31	23	600	37	--	--	--	7.0	220	4.2
TOTAL	14313.60	--	2216063.38	12018.0	--	1942036.8	623.5	--	1018.6

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.5	215	3.8	2.5	100	.68	2.5	90	.61
2	6.0	210	3.4	2.5	100	.68	2.5	90	.61
3	5.5	205	3.0	2.5	100	.68	2.5	90	.61
4	5.0	200	2.7	2.5	100	.68	2.5	90	.61
5	13	400	14	2.5	100	.68	2.5	90	.61
6	6.0	250	4.0	2.5	100	.68	2.5	90	.61
7	4.5	200	2.4	2.5	100	.68	2.5	90	.61
8	4.0	180	1.9	2.5	100	.68	2.5	90	.61
9	3.5	170	1.6	2.5	100	.68	2.5	90	.61
10	3.0	160	1.3	2.5	100	.68	2.5	90	.61
11	2.5	155	1.0	2.5	100	.68	2.5	90	.61
12	2.5	150	1.0	2.5	100	.68	2.5	90	.61
13	2.5	145	.98	2.5	100	.68	2.5	90	.61
14	2.5	140	.94	2.5	100	.68	2.5	90	.61
15	2.5	135	.91	2.5	100	.68	2.5	90	.61
16	2.5	130	.88	2.5	100	.68	2.5	90	.61
17	2.5	125	.84	2.5	100	.68	2.5	90	.61
18	2.5	120	.81	2.5	100	.68	2.5	90	.61
19	2.5	120	.81	2.5	100	.68	2.5	90	.61
20	2.5	115	.78	2.5	100	.68	2.5	90	.61
21	2.5	115	.78	2.5	100	.68	2.5	90	.61
22	2.5	110	.74	2.5	100	.68	2.5	90	.61
23	2.5	110	.74	2.5	100	.68	2.5	90	.61
24	2.5	105	.71	2.5	100	.68	2.5	90	.61
25	2.5	105	.71	2.5	100	.68	2.5	90	.61
26	2.5	105	.71	2.5	100	.68	2.5	90	.61
27	2.5	105	.71	2.5	100	.68	2.5	90	.61
28	2.5	100	.68	2.5	100	.68	2.5	90	.61
29	2.5	100	.68	2.5	100	.68	2.5	90	.61
30	2.5	100	.68	2.5	100	.68	2.5	90	.61
31	--	--	--	2.5	100	.68	--	--	--
TOTAL	107.0	--	54.19	77.5	--	21.08	75.0	--	18.30

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.5	80	.54	2.5	70	.47	2.5	60	.41
2	2.5	80	.54	2.5	70	.47	2.5	60	.41
3	2.5	80	.54	2.5	70	.47	2.5	60	.41
4	2.5	80	.54	2.5	70	.47	2.5	60	.41
5	2.5	80	.54	2.5	70	.47	2.5	60	.41
6	2.5	80	.54	2.5	70	.47	2.5	60	.41
7	2.5	80	.54	2.5	70	.47	2.5	60	.41
8	2.5	80	.54	2.5	70	.47	2.5	60	.41
9	2.5	80	.54	2.5	70	.47	2.5	60	.41
10	2.5	80	.54	2.5	70	.47	2.5	60	.41
11	2.5	80	.54	2.5	70	.47	2.5	60	.41
12	2.5	80	.54	2.5	70	.47	2.5	60	.41
13	2.5	80	.54	2.5	70	.47	2.5	60	.41
14	2.5	80	.54	2.5	70	.47	2.5	60	.41
15	2.5	80	.54	2.5	70	.47	2.5	60	.41
16	2.5	80	.54	2.5	70	.47	2.5	60	.41
17	2.5	80	.54	2.5	70	.47	2.5	60	.41
18	2.5	80	.54	2.5	70	.47	2.5	60	.41
19	2.5	80	.54	2.5	70	.47	2.5	60	.41
20	2.5	80	.54	2.5	70	.47	2.5	60	.41
21	2.5	80	.54	2.5	70	.47	2.5	60	.41
22	2.5	80	.54	2.5	70	.47	2.5	60	.41
23	2.5	80	.54	2.5	70	.47	2.5	60	.41
24	2.5	80	.54	2.5	70	.47	2.5	60	.41
25	2.5	80	.54	2.5	70	.47	2.5	60	.41
26	2.5	80	.54	2.5	70	.47	2.5	60	.41
27	2.5	80	.54	2.5	70	.47	2.5	60	.41
28	2.5	80	.54	2.5	70	.47	2.5	60	.41
29	2.5	80	.54	2.5	70	.47	2.5	60	.41
30	2.5	80	.54	2.5	70	.47	2.5	60	.41
31	2.5	80	.54	2.5	70	.47	--	--	--
TOTAL	77.5	--	16.74	77.5	--	14.57	75.0	--	12.30

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 27718.40
TOTAL LOAD FOR YEAR (TONS) 4159300.08

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.4	60	.55	3.4	50	.46	3.4	60	.55
2	3.4	60	.55	3.4	50	.46	3.4	60	.55
3	3.4	60	.55	3.4	50	.46	3.4	60	.55
4	3.4	60	.55	3.4	50	.46	3.4	60	.55
5	3.4	60	.55	3.4	50	.46	3.4	60	.55
6	3.4	60	.55	12	232	67	3.4	50	.46
7	3.4	60	.55	96	1960	876	3.4	50	.46
8	3.4	60	.55	3.4	250	2.3	3.4	50	.46
9	3.4	60	.55	3.4	250	2.3	3.4	50	.46
10	3.4	60	.55	3.4	250	2.3	3.4	50	.46
11	3.4	60	.55	3.4	200	1.8	3.4	50	.46
12	3.4	60	.55	3.4	200	1.8	3.4	50	.46
13	3.4	60	.55	3.4	200	1.8	3.4	40	.37
14	3.4	60	.55	3.4	200	1.8	3.4	40	.37
15	3.4	60	.55	3.4	200	1.8	3.4	40	.37
16	3.4	60	.55	3.4	150	1.4	3.4	40	.37
17	3.4	60	.55	3.4	150	1.4	3.4	40	.37
18	3.4	50	.46	3.4	150	1.4	3.4	40	.37
19	3.4	50	.46	3.4	150	1.4	3.4	30	.28
20	3.4	50	.46	3.4	150	1.4	3.4	30	.28
21	3.4	50	.46	3.4	100	.92	3.4	30	.28
22	3.4	50	.46	3.4	100	.92	3.4	30	.28
23	3.4	50	.46	3.4	100	.92	3.4	30	.28
24	3.4	50	.46	3.4	100	.92	3.4	30	.28
25	3.4	50	.46	3.4	100	.92	3.4	35	.32
26	3.4	50	.46	3.4	80	.73	3.4	35	.32
27	3.4	50	.46	3.4	80	.73	3.4	40	.37
28	3.4	50	.46	3.4	80	.73	3.4	50	.46
29	3.4	50	.46	3.4	80	.73	3.4	60	.55
30	3.4	50	.46	3.4	80	.73	3.4	70	.64
31	3.4	50	.46	--	--	--	3.4	80	.73
TOTAL	105.4	--	15.79	203.2	--	976.45	105.4	--	13.26

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.4	90	.83	3.4	130	1.2	440	11400	17500
2	3.4	110	1.0	3.4	120	1.1	346	8660	14800
3	3.4	110	1.0	3.4	120	1.1	3.4	300	2.8
4	3.4	90	.83	3.4	110	1.0	203	3230	9830
5	3.4	80	.73	3.4	110	1.0	245	7470	11200
6	3.4	70	.64	3.4	100	.92	11	1000	30
7	3.4	60	.55	3.4	100	.92	8.2	700	15
8	3.4	50	.46	3.4	640	5.9	4.6	230	2.9
9	3.4	60	.55	41	1380	1850	5.0	220	3.0
10	3.4	70	.64	296	12200	13400	4.6	205	2.5
11	3.4	80	.73	116	2910	3020	5.0	200	2.7
12	3.4	360	3.3	3.4	100	.92	4.6	200	2.5
13	3.4	200	1.8	3.4	90	.83	6.6	195	3.5
14	3.4	100	.92	3.4	90	.83	6.6	195	3.5
15	3.4	100	.92	3.4	90	.83	6.6	190	3.4
16	20	1800	97	3.4	80	.73	7.4	190	3.8
17	3.4	1680	15	3.4	80	.73	8.2	190	4.2
18	3.4	500	4.6	3.4	80	.73	6.6	185	3.3
19	3.4	400	3.7	3.4	80	.73	5.8	185	2.9
20	3.4	300	2.8	3.4	70	.64	6.6	185	3.3
21	3.4	200	1.8	3.4	70	.64	5.8	180	2.8
22	3.4	150	1.4	3.4	60	.55	4.2	180	2.0
23	3.4	100	.92	3.4	60	.55	4.6	180	2.2
24	3.4	90	.83	3.4	50	.46	2.1	180	1.0
25	3.4	90	.83	3.4	50	.46	4.2	175	2.0
26	3.4	100	.92	3.4	40	.37	5.8	170	2.7
27	3.4	100	.92	3.8	40	.41	3.8	165	1.7
28	3.4	110	1.0	376	7280	15600	3.0	160	1.3
29	3.4	120	1.1	--	--	--	3.4	155	1.4
30	3.4	130	1.2	--	--	--	4.6	150	1.9
31	3.4	130	1.2	--	--	--	3.0	150	1.2
TOTAL	122.0	--	150.12	911.0	--	33893.55	1379.3	--	53439.5

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.2	150	1.7	2.5	190	1.3	1.8	150	.73
2	4.6	150	1.9	2.1	190	1.1	1.8	150	.73
3	3.8	150	1.5	4.6	190	2.4	1.8	150	.73
4	2.5	150	1.0	3.8	190	1.9	1.8	150	.73
5	1.3	150	.53	3.8	190	1.9	1.8	150	.73
6	.90	150	.36	2.5	190	1.3	3.0	150	1.2
7	5.0	200	2.7	.72	190	.37	3.8	150	1.5
8	4.2	200	2.3	.72	190	.37	.72	140	.27
9	2.1	200	1.1	3.0	180	1.5	.45	140	.17
10	3.0	200	1.6	1.7	180	.83	.45	140	.17
11	5.8	200	3.1	.36	180	.17	.09	140	.03
12	6.6	250	4.5	.36	180	.17	.45	140	.17
13	6.6	250	4.5	.36	180	.17	.45	140	.17
14	5.0	250	3.4	.36	180	.17	0	--	0
15	6.6	250	4.5	.36	180	.17	.18	120	.06
16	6.6	250	4.5	1.3	180	.63	.81	120	.26
17	8.2	255	5.6	2.5	180	1.2	.81	120	.26
18	4.6	260	3.2	1.7	170	.78	.63	120	.20
19	4.2	265	3.0	2.5	170	1.1	.54	120	.17
20	4.6	270	3.4	1.7	170	.78	1.3	120	.42
21	.81	275	.60	1.8	170	.83	.81	120	.26
22	1.3	280	.98	1.8	170	.83	.27	120	.09
23	.90	280	.68	1.8	170	.83	.63	120	.20
24	0	--	0	1.8	170	.83	2.1	120	.68
25	.63	200	.34	1.8	170	.83	3.0	120	.97
26	2.1	200	1.1	1.8	160	.78	1.7	120	.55
27	3.8	200	2.1	1.8	160	.78	.18	120	.06
28	1.3	200	.70	1.8	160	.78	2.5	120	.81
29	.27	200	.15	1.8	160	.78	2.5	120	.81
30	2.1	200	1.1	1.8	160	.78	3.8	120	1.2
31	--	--	--	1.8	160	.78	--	--	--
TOTAL	103.61	--	62.14	56.74	--	27.14	40.17	--	14.33

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.0	120	.97	0	--	0	.72	60	.12
2	3.0	120	.97	0	--	0	.27	60	.04
3	4.2	120	1.4	0	--	0	0	--	0
4	2.1	120	.68	.18	70	.03	0	--	0
5	2.1	120	.68	.18	70	.03	.36	50	.05
6	.72	120	.23	0	--	0	1.3	50	.18
7	1.3	120	.42	0	--	0	.54	50	.07
8	0	--	0	.18	70	.03	.72	50	.10
9	1.7	100	.46	0	--	0	.72	50	.10
10	1.3	100	.35	0	--	0	.36	50	.05
11	2.1	100	.57	0	--	0	.36	50	.05
12	.54	100	.15	0	--	0	.54	50	.07
13	1.3	100	.35	0	--	0	.54	50	.07
14	0	--	0	0	--	0	.54	40	.06
15	0	--	0	0	--	0	2.1	40	.23
16	.18	90	.04	0	--	0	1.7	40	.18
17	2.5	90	.61	0	--	0	2.1	40	.23
18	.63	90	.15	0	--	0	1.3	40	.14
19	0	--	0	0	--	0	1.3	40	.14
20	0	--	0	0	--	0	1.3	40	.14
21	0	--	0	0	--	0	1.3	40	.14
22	0	--	0	0	--	0	1.3	40	.14
23	0	--	0	0	--	0	1.3	40	.14
24	0	--	0	0	--	0	1.3	40	.14
25	0	--	0	0	--	0	1.7	40	.18
26	0	--	0	0	--	0	1.7	40	.18
27	0	--	0	0	--	0	1.7	40	.18
28	.54	80	.12	0	--	0	1.7	40	.18
29	0	--	0	.90	60	.15	1.7	40	.18
30	0	--	0	.90	60	.15	1.7	40	.18
31	.54	80	.12	.45	60	.07	--	--	--
TOTAL	27.75	--	8.27	2.79	--	.46	32.11	--	3.66

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 3089.53
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 88604.67

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMP-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
JAN 14, 1969	1200	--	140	A10500	3970	34	42	50	61	71	82	90	98	100	--	--	VPWC
JAN 19.....	0600	--	423	A12300	14000	44	48	56	64	76	86	92	97	100	--	--	VPWC
JAN 19.....	2100	--	1190	A20000	64300	42	44	51	62	78	91	99	100	--	--	--	VPWC
JAN 19.....	2105	--	1800	A16600	80700	42	44	52	63	75	86	96	100	--	--	--	VPWC
JAN 19.....	2115	--	2600	A79000	555000	17	21	24	30	39	52	74	94	99	100	--	SPWC
JAN 20.....	0800	12.0	760	12800	26300	38	44	54	66	75	84	91	95	99	100	--	VPWC
JAN 21.....	0630	--	4600	A28300	351000	30	34	39	48	58	74	90	98	100	--	--	VPWC
JAN 25.....	0215	--	7300	A100000	1970000	13	14	15	24	35	48	74	93	99	100	--	SPWC
JAN 25.....	1210	14.5	15000	69000	2790000	20	28	34	42	55	67	86	97	100	--	--	SPWC
FEB 1.....	1000	10.0	22	341	20	32	36	43	46	49	56	76	97	100	--	--	SBWC
FEB 18.....	1315	16.0	14	1430	54	8	11	13	15	16	25	38	58	89	100	--	VBWC

A. SINGLE-STAGE SAMPLE

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

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
FEB 28, 1970	1400	15.0	450	7070	8590	25	26	29	35	39	45	57	88	99	100	--	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
JAN 20, 1969	0830	12	2	700	--	1	7	45	83	96	98	99	100	--	--	S
FEB 1.....	1000	10	3	23	3	9	43	85	99	100	--	--	--	--	--	S
MAY 14.....	--	--	3	2.5	--	3	25	74	97	100	--	--	--	--	--	S

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.--Chemical analyses: Water year 1969 (partial-record station).
Water temperatures: October 1968 to September 1970.
Sediment records: October 1968 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 15,800 mg/l Mar. 1; minimum daily, 170 mg/l Jan. 4.
Sediment loads: Maximum daily, 23,600 tons Mar. 1; minimum daily, 12 tons Jan. 4.
EXTREMES, 1968-70.--Sediment concentrations: Maximum daily (1969-70), 15,800 mg/l Mar. 1, 1970; minimum daily, 20 mg/l Jan. 6-12, 1969.
Sediment loads: Maximum daily, 3,300,000 tons (estimated) Feb. 25, 1969; minimum daily, 0.05 ton Jan. 7, 1969.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	13.0	--	--	13.0	--	--	26.0	24.5	--	--
2	--	--	13.0	--	--	12.0	--	--	--	--	--	--
3	--	15.0	12.0	--	--	12.5	--	17.0	--	--	24.0	--
4	--	15.5	12.0	9.0	--	12.0	--	--	--	--	--	19.0
5	--	15.0	12.0	--	11.0	10.0	--	--	21.0	--	--	--
6	--	15.0	12.0	--	--	10.5	14.0	16.0	--	--	19.5	--
7	--	15.0	12.0	9.0	--	--	--	--	--	25.0	--	21.5
8	--	14.0	12.0	--	12.0	13.0	--	--	20.0	--	--	--
9	--	14.0	13.0	9.0	--	--	16.0	--	--	--	--	--
10	--	16.0	12.0	10.0	12.5	--	--	--	--	--	26.0	--
11	--	16.0	11.0	10.5	13.0	14.0	--	18.0	--	--	--	--
12	--	16.0	11.0	11.5	13.0	--	--	--	--	--	--	--
13	--	17.0	--	13.0	14.0	--	15.0	--	--	23.0	--	--
14	--	17.0	11.0	--	14.0	--	--	--	--	--	--	22.0
15	--	17.0	--	--	14.0	15.5	--	--	25.0	--	--	--
16	--	16.0	--	13.0	--	--	--	--	--	21.0	25.0	--
17	17.0	15.0	--	--	--	--	--	--	--	--	--	--
18	--	14.0	11.5	12.0	--	--	--	--	--	--	--	--
19	--	14.0	--	--	--	--	--	17.0	--	--	--	--
20	--	13.0	--	--	--	--	15.0	--	--	--	22.5	--
21	--	14.0	13.0	13.0	--	--	--	--	--	25.0	--	--
22	--	13.0	--	--	11.0	14.0	--	--	--	--	--	21.0
23	--	13.0	--	--	--	--	--	--	26.0	28.5	--	--
24	--	13.0	--	--	--	--	--	--	--	--	--	--
25	--	13.0	--	13.0	--	--	--	--	--	--	--	--
26	--	13.0	--	--	--	--	--	18.0	--	--	--	--
27	--	13.0	--	--	13.0	--	15.0	--	--	24.0	20.5	--
28	--	13.0	11.0	--	13.5	--	--	--	--	--	--	--
29	15.0	12.0	--	--	--	--	--	--	--	--	--	26.5
30	--	12.0	--	--	--	14.0	--	--	27.0	20.0	--	--
31	--	--	--	10.5	--	--	--	--	--	--	28.0	26.5
AVE	--	14.4	--	--	--	--	--	--	--	--	--	--

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	22	530	31	40	500	54	27	480	35
2	22	500	30	38	400	41	27	720	52
3	22	480	29	36	390	38	27	960	70
4	22	470	28	35	340	32	28	1210	91
5	22	460	27	34	390	36	29	1000	78
6	22	450	27	36	6100	593	30	750	61
7	21	440	25	60	2200	356	31	510	43
8	21	430	24	57	1000	154	32	450	39
9	21	420	24	53	1100	157	33	400	36
10	21	410	23	51	1300	179	34	320	29
11	21	400	23	49	1000	132	34	320	29
12	20	380	21	47	700	89	34	320	29
13	20	360	19	45	410	50	35	310	29
14	20	340	18	43	870	101	35	310	29
15	20	320	17	41	1300	144	35	400	38
16	30	300	24	40	1800	194	35	490	46
17	34	280	26	38	870	89	35	580	55
18	34	300	28	36	750	73	34	670	62
19	35	350	33	36	630	61	33	540	48
20	35	400	38	35	630	60	32	400	35
21	35	440	42	34	640	59	32	260	22
22	36	480	47	32	640	55	32	270	23
23	36	520	51	31	700	59	32	290	25
24	37	560	56	30	750	61	31	300	25
25	38	600	62	29	800	63	30	320	26
26	38	640	66	28	900	68	30	330	27
27	39	680	72	28	1000	76	30	350	28
28	39	720	76	28	1100	83	29	360	28
29	40	760	82	27	900	66	29	330	26
30	40	700	76	27	700	51	29	300	23
31	40	600	65	--	--	--	28	270	20
TOTAL	903	--	1210	1144	--	3274	972	--	1207

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	28	240	18	24	300	19	548	15800	23600
2	27	210	15	24	300	19	339	8610	10900
3	27	190	14	27	310	23	99	1900	508
4	27	170	12	28	320	24	125	3500	1180
5	26	270	19	31	330	28	204	5180	2980
6	26	370	26	30	330	27	155	2000	837
7	25	470	32	29	330	26	100	1900	513
8	25	600	41	33	500	45	73	1800	355
9	25	730	49	61	1000	165	58	1400	219
10	45	1100	134	194	6000	3140	48	1200	156
11	35	500	47	101	1800	491	46	910	113
12	30	360	29	63	1000	170	45	940	114
13	27	520	38	43	900	104	45	970	118
14	26	770	54	38	800	82	44	1000	119
15	26	1000	70	41	700	77	44	1000	119
16	27	1300	95	42	650	74	44	1000	119
17	30	800	65	39	650	68	43	1000	116
18	28	330	25	42	650	74	43	1000	116
19	27	380	28	38	650	67	42	1100	125
20	26	430	30	39	600	63	42	1100	125
21	25	410	28	39	600	63	42	1100	125
22	25	390	26	38	600	62	41	1200	133
23	25	370	25	38	600	62	41	1200	133
24	25	350	24	36	550	53	41	1100	122
25	24	330	21	34	500	46	41	1100	122
26	24	320	21	35	450	43	40	1000	108
27	24	310	20	32	400	35	40	1000	108
28	24	310	20	188	7250	4910	39	950	100
29	24	300	19	--	--	--	39	900	95
30	24	300	19	--	--	--	39	850	90
31	24	300	19	--	--	--	39	800	84
TOTAL	331	--	1083	1407	--	10060	2629	--	43652

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	39	750	79	27	740	54	29	2000	157
2	39	700	74	27	760	55	30	2000	162
3	39	650	68	26	790	55	30	1900	154
4	39	600	63	26	810	57	30	1900	154
5	39	500	53	25	840	57	30	1900	154
6	38	450	46	26	860	60	30	1800	146
7	38	460	47	26	910	64	30	1700	138
8	38	480	49	26	960	67	29	1600	125
9	37	500	50	27	1000	73	29	1600	125
10	37	510	51	27	1000	73	29	1600	125
11	36	520	51	27	1100	80	29	1600	125
12	36	530	52	27	1100	80	29	1600	125
13	36	530	52	27	1100	80	29	1600	125
14	35	540	51	28	1000	76	29	1600	125
15	34	550	50	28	1000	76	29	1600	125
16	33	560	50	28	960	73	29	1600	125
17	32	570	49	28	930	70	29	1500	117
18	31	580	49	28	900	68	29	1500	117
19	31	590	49	28	870	66	29	1400	110
20	30	590	48	28	960	73	29	1400	110
21	30	600	49	28	1000	76	29	1300	102
22	30	600	49	28	1100	83	29	1300	102
23	30	610	49	28	1200	91	28	1200	91
24	29	610	48	28	1300	98	28	1200	91
25	29	620	49	28	1400	106	28	1200	91
26	29	630	49	28	1500	113	28	1300	98
27	28	640	48	28	1400	106	27	1300	95
28	28	660	50	28	1450	110	27	1300	95
29	28	690	52	29	1500	117	27	1400	102
30	27	710	52	29	1500	117	26	1400	98
31	--	--	--	29	1550	121	--	--	--
TOTAL	1005	--	1576	851	--	2495	863	--	3609

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	26	1500	105	18	760	37	9.9	1200	32
2	25	1600	108	18	1100	53	9.8	1200	32
3	25	1700	115	18	1400	68	9.7	1200	31
4	25	1800	122	18	1200	58	9.6	1100	29
5	25	1900	128	18	1100	53	9.4	1100	28
6	25	2000	135	18	990	48	9.2	1100	27
7	25	2000	135	18	1100	53	9.0	1100	27
8	24	1900	123	18	1300	63	8.8	1100	26
9	24	1800	117	18	1500	73	8.7	1000	23
10	24	1700	110	18	1600	78	8.6	1000	23
11	24	1600	104	17	1600	73	8.5	1000	23
12	24	1500	97	17	1600	73	8.5	1000	23
13	24	1400	91	17	1600	73	8.5	1000	23
14	24	1300	84	17	1600	73	8.5	1000	23
15	23	1200	75	17	1500	69	8.6	1200	28
16	23	1100	68	17	1500	69	8.7	1400	33
17	23	1300	81	16	1500	65	8.8	1600	38
18	23	1500	93	16	1500	65	8.8	2400	57
19	23	1800	112	16	1500	65	8.9	3200	77
20	23	2100	130	15	1400	57	9.0	4000	97
21	23	2400	149	15	1400	57	9.0	4800	117
22	24	1900	123	15	1400	57	9.1	5710	140
23	24	1400	91	14	1400	53	9.1	4900	120
24	24	1200	78	14	1400	53	9.2	4100	102
25	23	1000	62	13	1300	46	9.3	3300	83
26	22	800	48	13	1300	46	9.4	2500	63
27	21	600	34	12	1300	42	9.5	1700	44
28	20	560	30	12	1300	42	9.6	1400	36
29	19	520	27	11	1300	39	9.8	1100	29
30	19	480	25	11	1200	36	10	1000	27
31	18	460	22	10	1200	32	--	--	--
TOTAL	719	--	2822	485	--	1769	273.5	--	1461

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 12082.5
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 74218

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

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
MAR 1, 1970	1335	13.0	600	25800	41800	26	28	37	50	65	78	91	98	100	--	--	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
NOV 4, 1969	1330	15.5	6	35	--	--	4	32	74	92	98	100	--	--	--	S
SEP 14, 1970	1450	22.0	3	8.5	--	--	4	30	69	93	99	100	--	--	--	S

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 1970.
Water temperatures: October 1969 to September 1970.
EXTREMES, 1969-70.--Specific conductance: Maximum, 2,550 micromhos Jan. 29; minimum, 909 micromhos July 15.
Water temperatures: Maximum recorded, 30.0°C Aug. 12; minimum, 3.5°C Dec. 29.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	930	1080	1140	2110	2290	2130	2010	1140	984	1010	1000	1230
2	930	1070	1120	2200	2310	2110	1850	1150	983	1000	998	1400
3	940	1050	1140	2210	2120	2210	1630	1150	990	1080	994	1460
4	940	1060	1110	2230	2120	2330	1160	1150	1000	1060	996	1430
5	950	1050	1080	2300	2250	2250	1050	1140	1110	1040	997	1380
6	950	1160	1060	2280	2240	2280	1050	1090	1010	1010	994	1340
7	960	1490	1050	2120	2220	2180	1050	1090	1010	1000	987	1320
8	960	1430	1030	2070	2200	2080	1050	1090	1020	1000	994	1270
9	970	1590	1030	2050	2180	2050	1130	1100	1070	1010	999	1120
10	970	1340	1370	2020	2160	2050	1130	1070	1040	1040	998	1060
11	970	1070	1680	2050	2140	2040	1110	1070	1020	1010	997	1080
12	980	1030	1800	2050	2120	1990	1120	1070	1020	976	998	1200
13	980	1030	1910	2060	2100	1940	1120	1050	1020	969	1010	1270
14	990	1090	1970	2070	2080	1920	1160	1010	1000	952	1030	1280
15	990	1320	2020	2080	2060	1940	1140	1080	980	909	1020	1270
16	990	1480	2040	2090	2040	1930	1300	1100	970	919	1000	1260
17	1000	1640	2020	2100	2020	1960	1510	1120	970	964	1030	1160
18	1000	1760	2010	2130	2000	1950	1120	1090	960	984	1000	---
19	1000	1750	2060	2150	2530	1990	1110	1060	960	981	1000	---
20	1010	1710	2010	2180	2400	1920	1110	1040	955	981	1000	---
21	1010	1250	2040	2200	2310	1900	1150	1000	951	977	1030	---
22	1010	1130	2160	2440	2250	1880	1150	1000	951	974	1030	---
23	1010	1110	2110	2420	2180	1860	1150	1000	957	977	1040	---
24	1030	1110	2060	2310	2110	1860	1130	1000	959	978	1040	---
25	1020	1100	2020	2370	2100	1860	1110	1000	959	977	1030	---
26	1030	1120	2090	2370	2070	1920	1130	1000	967	969	1020	---
27	1060	1120	2060	2370	2070	1930	1130	1000	977	972	1020	---
28	1060	1130	2040	2480	2090	1940	1120	1010	983	971	981	---
29	1080	1130	2010	2550	---	1950	1130	1030	989	967	963	---
30	1090	1130	2040	2450	---	2000	1130	996	1000	973	1030	---
31	1090	---	2050	2320	---	2010	---	977	---	993	1140	---
MONTH	996	1251	1720	2220	2170	2011	1208	1060	992	987	1010	---

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	13.0	19.5	15.0	14.5	11.5	12.0	4.0	17.0	7.5	12.5	10.0
2	13.5	13.0	21.0	15.0	15.0	11.0	10.0	3.5	15.0	7.0	17.5	9.5
3	13.5	12.5	20.0	15.0	15.5	11.5	11.0	3.5	16.5	7.5	19.5	9.5
4	13.0	12.5	20.0	15.0	16.0	11.0	11.5	3.0	15.0	9.0	12.5	7.5
5	13.5	13.0	17.0	15.5	14.5	11.0	10.0	3.5	17.0	7.0	20.0	6.0
6	13.5	13.0	16.0	13.5	14.5	11.5	13.0	3.0	19.0	7.5	22.0	7.0
7	13.5	13.0	16.0	13.0	14.5	11.0	15.5	11.0	---	---	22.0	7.5
8	14.0	13.0	20.0	13.0	13.5	11.0	15.5	9.0	---	---	20.5	8.0
9	14.0	13.0	15.0	12.0	14.0	9.5	17.0	10.0	---	---	17.0	9.5
10	14.0	13.5	20.0	14.0	14.5	7.0	19.0	11.5	---	---	18.0	8.0
11	14.0	13.5	22.5	14.5	14.0	6.5	19.0	10.0	---	---	20.0	5.5
12	14.5	13.5	23.0	15.0	16.0	6.5	17.5	17.5	---	---	21.5	7.0
13	14.5	13.5	23.0	15.0	15.5	7.0	---	---	---	---	24.5	9.0
14	14.5	13.5	23.0	14.0	16.0	6.5	---	---	---	---	27.0	8.5
15	15.0	13.5	18.5	16.0	16.0	6.0	---	---	---	---	22.5	9.5
16	15.5	14.0	22.0	14.0	13.5	7.0	---	---	---	---	25.0	8.0
17	16.5	15.0	19.0	10.5	15.0	7.5	---	---	---	---	24.0	8.0
18	15.5	14.5	15.0	8.0	15.0	9.0	---	---	18.0	7.0	18.5	6.0
19	16.5	15.0	13.5	6.0	11.5	9.5	---	---	13.5	4.5	21.0	5.5
20	17.0	16.0	13.5	6.5	15.0	11.5	---	---	14.5	5.5	24.5	7.0
21	17.0	16.5	17.0	10.0	14.0	11.5	18.0	11.5	19.5	6.0	25.5	7.5
22	17.0	17.0	17.0	10.5	17.0	10.0	18.0	10.5	19.5	6.0	26.0	8.0
23	20.5	16.0	16.5	11.0	16.0	9.0	18.0	10.0	20.0	7.0	27.0	8.5
24	19.5	15.0	17.0	10.0	16.5	9.5	17.0	11.5	21.5	8.0	26.5	9.5
25	21.5	15.0	16.0	10.5	12.0	9.0	18.5	10.0	21.5	7.0	26.5	10.0
26	20.0	15.0	15.5	10.5	13.0	7.0	18.0	8.5	22.5	8.0	17.5	12.5
27	20.5	15.0	15.5	10.5	12.0	6.0	14.5	9.0	19.5	8.0	24.5	8.5
28	20.0	15.0	16.0	10.5	10.5	5.0	14.0	6.5	12.0	10.5	25.0	8.0
29	19.5	15.0	15.5	10.0	10.5	3.5	14.0	5.0	---	---	24.5	9.0
30	21.5	14.5	15.0	11.0	12.0	4.0	16.0	5.0	---	---	17.5	10.5
31	21.0	15.0	---	---	13.5	4.0	16.5	7.5	---	---	23.5	7.0
MONTH	21.5	12.5	23.0	6.0	17.0	3.5	---	---	---	---	27.0	5.5

11110000 PIRU CREEK NEAR PIRU, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

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

11111500 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 damsite, and 5 miles northeast of Wheeler Springs.
DRAINAGE AREA.--49.5 sq mi.
PERIOD OF RECORD.--Water temperatures: February 1962 to September 1970.
Sediment records: Water years 1956-66 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 25.5°C Aug. 24, 25, 27-29; minimum, 1.0°C Dec. 30, Jan. 3-6.
EXTREMES, 1962-70.--Water temperatures: Maximum, 29.0°C Aug. 11, 1964; minimum (1962-64, 1965-66, 1967-70), 1.0°C Dec. 30, 1969, Jan. 3-6, 1970.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	8.5	12.0	7.0	8.5	6.5	4.5	3.5	7.0	5.5	7.0	4.5
2	12.0	8.5	12.0	7.0	8.0	6.0	4.5	2.0	6.5	4.5	10.5	6.0
3	11.5	7.0	11.0	7.0	7.0	5.5	3.5	1.0	8.0	4.5	10.5	5.0
4	10.0	5.5	10.5	7.0	8.0	5.5	3.5	1.0	8.5	4.5	8.5	3.0
5	10.0	4.5	9.5	7.0	8.0	5.0	3.5	1.0	8.5	5.0	9.0	3.0
6	10.0	5.0	9.5	9.0	8.0	5.5	3.5	1.0	10.0	5.5	11.0	4.0
7	10.5	5.5	9.0	7.5	7.0	5.5	5.5	3.0	8.0	5.0	10.5	4.5
8	10.0	5.5	9.5	8.0	7.0	4.5	5.5	3.5	9.0	5.5	10.5	5.5
9	11.0	7.0	9.5	8.0	8.0	6.0	5.5	5.0	8.5	7.0	11.0	6.0
10	10.5	7.0	10.5	9.5	7.0	5.5	8.0	5.0	8.0	7.0	10.0	6.5
11	10.0	6.5	11.0	9.0	7.0	4.5	8.0	6.0	10.0	8.0	10.0	4.5
12	9.0	5.0	11.0	9.5	6.5	4.0	9.0	8.0	10.0	8.5	11.5	6.0
13	8.5	4.5	12.0	10.0	6.0	3.5	8.5	6.0	9.5	6.5	13.0	6.0
14	8.5	4.5	12.0	9.5	5.5	3.0	9.0	8.0	9.0	6.5	13.0	7.0
15	9.5	6.0	12.0	10.0	5.0	3.0	9.0	6.5	9.0	4.5	13.0	7.0
16	9.5	7.0	10.0	6.0	6.5	3.5	9.5	8.5	9.0	4.5	13.5	6.5
17	9.5	6.5	8.5	7.0	7.0	4.5	8.5	7.0	9.0	6.0	13.5	8.0
18	8.5	6.0	7.0	4.5	8.5	6.0	8.5	6.0	8.0	4.0	11.0	5.5
19	8.5	5.5	7.0	4.5	8.5	6.0	9.5	8.0	7.0	4.0	10.5	4.0
20	9.0	5.5	7.0	4.5	9.5	8.0	10.0	9.0	8.0	3.5	11.5	5.5
21	8.0	5.5	7.0	4.0	9.5	8.0	10.0	8.0	8.0	4.5	13.0	6.0
22	9.0	5.0	7.0	5.0	9.0	6.5	10.0	9.0	8.5	4.5	13.0	6.0
23	9.0	5.5	7.0	4.5	8.0	6.5	10.0	8.0	9.0	4.5	13.0	6.0
24	8.0	5.5	7.0	3.5	8.5	6.0	9.5	8.0	9.0	5.5	13.5	5.5
25	8.0	5.0	7.0	4.0	10.0	8.0	9.0	6.5	9.5	5.0	14.5	8.0
26	8.5	5.5	8.0	4.0	9.0	3.5	8.5	6.0	10.0	5.5	11.5	8.5
27	12.0	6.0	8.0	5.0	4.0	3.0	10.0	7.0	9.0	5.5	13.5	6.5
28	13.0	9.0	7.0	4.5	4.0	2.0	7.0	5.5	9.0	6.5	13.0	6.0
29	13.5	7.0	6.5	4.0	3.5	2.0	6.0	3.0	--	--	13.0	6.5
30	12.0	6.0	8.5	5.0	4.0	1.0	6.0	3.5	--	--	13.0	6.0
31	9.5	7.0	--	--	4.5	2.0	6.5	4.5	--	--	11.5	5.5
AVE	10.0	6.1	9.1	6.5	7.1	4.8	7.4	5.4	8.7	5.4	11.7	5.8

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	5.5	15.5	8.5	20.5	12.0	20.5	13.5	22.0	14.0	20.0	12.0
2	15.0	6.0	16.0	8.5	21.0	12.0	21.0	14.0	22.0	13.5	21.0	13.5
3	14.0	6.5	14.0	8.5	19.0	13.5	21.0	16.0	21.0	12.0	20.5	12.0
4	13.5	6.5	15.5	8.5	22.0	14.5	23.0	16.5	20.5	11.5	19.5	12.0
5	14.5	7.0	15.5	8.0	21.0	14.5	23.5	18.0	21.0	12.0	19.0	11.5
6	14.0	6.5	14.5	8.0	21.5	13.5	23.5	16.5	22.0	13.0	19.0	11.0
7	15.0	8.5	15.5	8.5	22.0	14.5	23.0	16.0	21.5	13.5	20.0	12.0
8	15.0	8.5	16.0	9.0	20.0	15.0	22.5	16.0	23.5	13.0	21.0	14.0
9	15.5	8.5	17.0	10.5	17.0	14.5	19.0	17.0	21.5	13.0	21.5	14.5
10	15.5	9.5	16.5	10.0	20.0	13.0	21.5	14.5	24.5	14.5	21.5	14.5
11	15.5	9.5	16.0	9.0	20.5	12.0	21.5	14.5	24.5	15.0	22.0	15.0
12	15.0	8.0	16.0	9.5	17.0	12.0	23.0	15.0	25.0	16.0	21.0	14.5
13	13.5	8.0	18.0	10.0	13.5	11.5	23.5	16.0	23.9	15.5	18.5	11.5
14	12.0	6.0	19.0	10.0	18.0	9.5	22.0	14.5	23.5	13.5	18.5	10.5
15	13.0	6.5	19.5	11.0	19.5	11.5	22.0	13.5	24.5	12.0	18.0	10.0
16	10.0	8.0	19.0	10.5	20.5	13.0	23.0	15.0	24.5	14.5	18.0	10.0
17	10.5	8.0	18.5	10.5	20.0	12.0	21.0	13.5	24.5	14.5	17.0	10.0
18	13.5	7.0	19.0	11.0	20.5	12.0	24.5	15.5	24.0	15.5	18.0	10.0
19	14.0	8.5	18.0	10.0	21.0	14.0	24.5	16.5	24.0	14.5	17.0	10.0
20	13.0	8.0	18.5	10.5	22.0	15.0	24.5	16.5	24.0	14.0	18.0	10.5
21	11.5	6.5	19.0	10.5	23.5	16.0	24.5	16.5	24.0	13.0	18.0	10.5
22	13.0	6.0	19.5	11.5	21.5	15.5	23.5	16.0	23.0	13.5	17.0	10.0
23	13.5	6.0	20.5	13.0	21.0	13.5	22.0	15.0	24.0	13.0	16.5	10.0
24	14.5	8.0	20.0	13.0	21.0	13.5	21.5	14.5	25.5	13.0	18.0	10.5
25	15.5	8.5	17.0	12.0	21.5	14.5	21.0	14.5	25.5	13.5	17.0	10.0
26	14.0	9.5	20.0	12.0	21.5	15.5	21.5	14.5	24.5	13.0	15.5	8.5
27	13.5	8.5	20.0	12.0	21.0	13.5	21.5	14.5	25.0	14.0	16.5	9.0
28	11.0	6.0	19.5	12.0	21.0	14.0	19.5	14.5	25.5	14.5	16.0	9.5
29	13.0	6.0	20.0	11.5	19.0	12.0	21.0	14.0	25.5	11.0	16.1	10.0
30	15.0	8.0	20.0	12.0	19.5	12.0	21.0	13.0	25.0	10.0	16.5	10.0
31	--	--	20.5	13.5	--	--	23.5	13.5	25.0	12.0	--	--
AVE	13.6	7.4	17.9	10.4	20.2	13.3	22.2	15.1	23.7	13.4	18.5	11.2

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 on right bank, 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 1970.
Water temperatures: October 1966 to September 1970.
Sediment records: Water years 1956-62 (partial-record station), October 1966 to September 1970.
EXTREMES, 1969-70.--Specific conductance: Maximum daily, 1,360 micromhos July 27.
Water temperatures: Maximum, 29.5°C July 4, 18, 20; minimum, 4.5°C Jan. 4.
Sediment concentrations: Maximum daily, 8,860 mg/l Mar. 1; minimum daily, 2 mg/l on several days.
Sediment loads: Maximum daily, 127,000 tons Feb. 28; minimum daily, 0.01 ton on several days.
EXTREMES, 1966-70.--Specific conductance (1969-70): Maximum daily, 1,360 micromhos July 27, 1970.
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 loads: Maximum daily, 2,950,000 tons Jan. 25, 1969; minimum daily, 0 tons on many days in 1968 and 1969.
REMARKS.--Chemical-quality records partially furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
20...	1630	12	17.2	--	103	29	78	3.0	170	0	312	51
DEC.												
17...	1215	14	--	--	120	29	80	--	206	0	345	47
JAN.												
20...	1545	30	14.4	10.7	108	33	65	2.0	183	0	328	33
MAR.												
05...	1000	734	--	--	77	22	25	--	154	0	187	11
APR.												
15...	1615	43	16.7	9.3	103	30	54	2.0	192	0	288	25
JULY												
09...	1030	15	--	--	94	22	72	--	193	0	228	62
22...	1145	.76	26.7	8.6	135	32	75	4.0	207	0	364	51
SEPT.												
15...	--	.99	--	--	139	28	79	--	228	0	328	73

DATE	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 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)
OCT.												
20...	1.4	.0	810	653	21.2	376	237	139	31	1.7	988	8.1
DEC.												
17...	1.2	--	1330	827	31.3	419	250	169	29	1.7	1060	8.0
JAN.												
20...	1.3	.0	880	701	56.8	405	255	150	26	1.4	1010	8.0
MAR.												
05...	.6	--	240	476	943	283	157	126	16	.6	613	8.1
APR.												
15...	1.1	.0	720	626	72.7	381	223	157	23	1.2	924	8.1
JULY												
09...	1.1	--	1200	671	27.2	325	167	158	33	1.7	950	7.9
22...	1.1	.2	530	814	1.67	469	299	170	26	1.5	1110	8.1
SEP.												
15...	.9	--	1300	875	2.34	462	275	187	27	1.6	1200	7.8

11113000 SESPE CREEK NEAR FILLMORE, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	1100	1100	1100	---	---	875	973	862	869	1270	1210
2	1050	1100	1090	1110	---	---	868	933	866	870	1330	1220
3	1050	1090	1140	1110	---	---	867	935	873	881	1340	1220
4	1060	1110	1110	1110	---	---	874	939	886	905	1350	1220
5	1060	1110	1110	1110	---	---	875	840	893	906	1340	1050
6	1060	940	1110	1110	1070	---	877	893	891	907	1310	996
7	1070	925	1110	1090	1070	690	868	955	886	915	1310	981
8	1070	1110	1120	1080	1070	726	870	882	888	909	1300	968
9	1070	1130	1100	1080	---	748	868	856	894	860	1250	1040
10	1070	1100	1100	790	---	765	870	860	888	880	1300	1080
11	1070	1100	1110	1000	---	781	869	865	902	901	1290	1080
12	1080	1100	1100	889	---	789	874	895	914	963	1280	1150
13	1090	1090	1100	937	---	789	867	895	908	1030	1280	1210
14	1090	1090	1100	996	---	776	867	898	897	1050	1270	1220
15	1090	1110	1110	1010	---	760	865	893	898	1100	1280	1210
16	1080	1100	1100	950	---	743	867	892	900	1200	1290	1170
17	1080	1120	1090	931	---	738	862	882	899	1190	1290	1150
18	1100	1110	1090	984	---	750	866	866	903	1230	1300	1190
19	1100	1110	1100	1000	---	770	860	869	930	1240	1310	1210
20	1100	1110	1030	989	---	809	863	867	835	1260	1300	1200
21	1100	1150	1040	998	---	822	904	858	840	1280	1300	1220
22	1100	1150	1040	---	---	832	987	849	900	1300	1300	1240
23	1090	1140	1060	---	---	842	934	840	855	1330	1260	1220
24	1100	1130	1060	---	---	846	993	836	861	1350	1080	1230
25	1110	1130	1050	---	---	847	975	827	863	1350	1040	1250
26	1110	1120	1080	---	---	851	986	841	860	1350	1120	1280
27	1100	1110	1090	---	---	859	1040	856	870	1360	1220	1290
28	1110	1110	1100	---	---	857	1010	855	836	1340	1220	1270
29	1110	1120	1100	---	---	852	963	857	855	1340	1240	1270
30	1110	1100	1100	---	---	842	934	858	870	1320	1220	1270
31	1110	---	1100	---	---	861	---	863	---	1310	1210	---
MONTH	1085	1100	1091	---	---	797	903	878	880	1119	1264	1177

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	19.5	18.5	13.5	14.0	12.0	10.0	6.0	---	---	---	---
2	22.0	19.0	18.0	13.5	14.0	11.0	10.0	6.0	---	---	---	---
3	21.5	17.5	18.0	14.0	14.5	10.5	9.0	5.5	---	---	---	---
4	20.5	15.5	17.5	14.0	14.0	10.0	9.0	4.5	---	---	---	---
5	20.5	15.0	15.0	14.0	13.5	10.0	9.5	5.0	---	---	---	---
6	19.5	14.5	15.0	13.5	13.5	10.0	9.5	5.0	14.0	9.5	---	---
7	20.5	15.0	14.0	12.5	13.0	9.5	10.0	6.0	15.0	9.5	12.0	9.0
8	20.0	15.0	15.5	13.0	11.5	9.5	9.0	6.0	13.5	10.0	11.5	10.0
9	21.0	16.5	14.5	13.0	13.0	10.0	8.5	7.0	---	---	12.0	10.0
10	21.0	16.0	16.5	14.0	12.0	8.5	9.5	8.0	---	---	12.5	10.0
11	19.5	15.5	18.5	14.5	12.0	8.5	9.5	8.5	---	---	12.0	8.5
12	19.0	14.5	19.0	15.0	12.5	9.0	11.5	9.5	---	---	13.0	10.0
13	18.0	14.0	19.0	15.5	13.0	9.0	11.5	9.0	---	---	15.0	10.0
14	18.5	15.0	18.5	15.0	13.0	9.0	10.5	10.0	---	---	15.5	11.5
15	19.0	15.0	17.0	16.0	13.0	9.0	12.0	10.0	---	---	16.0	12.0
16	19.5	16.0	17.0	14.5	12.5	9.5	12.0	11.0	---	---	16.0	12.0
17	19.0	16.0	17.5	12.5	13.0	10.0	13.5	10.0	---	---	16.0	12.0
18	18.0	14.5	14.5	11.0	13.5	10.5	12.5	9.5	---	---	14.5	10.0
19	17.5	13.5	14.0	10.0	12.0	10.5	13.0	10.0	---	---	14.5	10.5
20	17.5	13.5	14.0	10.5	12.5	11.5	14.5	11.5	---	---	15.0	10.0
21	17.0	13.5	13.5	10.0	12.0	10.5	14.0	11.0	---	---	16.0	10.0
22	17.5	13.5	14.0	10.0	14.0	11.0	---	---	---	---	16.5	10.5
23	18.5	14.5	14.0	10.0	13.0	10.0	---	---	---	---	17.0	10.5
24	17.0	14.5	13.5	10.0	13.0	10.0	---	---	---	---	17.0	11.5
25	17.5	14.0	13.5	10.0	12.0	10.0	---	---	---	---	17.5	12.5
26	18.0	14.0	13.0	10.0	12.0	8.0	---	---	---	---	14.0	13.0
27	18.0	14.5	14.5	10.5	10.5	7.5	---	---	---	---	17.0	11.5
28	17.5	14.0	14.0	10.5	10.0	6.5	---	---	---	---	17.0	11.0
29	17.5	14.0	13.5	10.0	10.0	6.0	---	---	---	---	16.5	12.0
30	17.5	13.0	13.5	10.5	10.0	5.5	---	---	---	---	15.0	12.0
31	18.0	13.5	---	---	10.0	6.0	---	---	---	---	15.5	10.5
MONTH	23.5	13.0	19.0	10.0	14.5	5.5	---	---	---	---	17.5	8.5

11113000 SESPE CREEK NEAR FILLMORE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	10.0	20.0	11.0	26.0	17.0	27.0	17.0	26.0	14.0	28.5	17.5
2	17.0	10.0	20.0	12.0	25.5	16.5	27.0	17.5	26.5	15.5	27.5	17.0
3	17.5	11.0	19.5	12.5	23.5	17.5	27.5	18.5	26.0	15.5	27.0	17.0
4	17.5	11.0	20.0	12.5	24.5	17.0	29.5	19.0	25.5	15.5	26.0	19.5
5	19.0	11.5	19.0	13.5	24.5	17.0	28.5	19.0	26.0	15.5	26.0	17.0
6	18.0	11.5	17.5	13.5	25.0	17.0	28.5	19.0	26.5	15.5	27.0	17.0
7	17.5	13.0	20.5	12.0	25.0	17.0	28.0	17.5	26.5	16.5	27.0	17.0
8	19.0	14.5	20.0	13.0	18.5	17.0	27.5	18.0	26.5	17.0	27.0	19.0
9	19.5	12.5	21.0	14.0	20.0	17.0	23.5	20.0	27.0	17.0	27.5	18.0
10	20.0	13.5	21.0	14.5	25.0	16.5	27.0	18.5	27.0	17.5	28.0	18.0
11	20.5	14.0	20.0	13.5	25.0	19.0	27.0	19.0	27.0	17.0	27.5	17.5
12	20.0	12.5	21.0	15.0	20.5	16.5	27.0	18.5	27.5	19.0	26.0	16.0
13	17.5	13.0	22.0	14.0	19.0	16.0	28.0	18.0	27.5	19.0	25.5	17.5
14	17.0	11.0	23.0	15.0	23.5	14.0	28.0	18.0	27.0	16.5	26.5	17.5
15	17.5	10.5	23.5	15.0	24.0	15.0	28.5	18.0	27.5	19.0	27.0	17.5
16	15.0	11.5	23.5	15.0	20.5	16.0	28.0	18.0	28.5	20.0	27.5	13.5
17	17.5	12.0	23.5	15.0	24.5	15.5	29.0	21.0	28.5	20.5	27.5	19.0
18	18.5	11.5	23.5	16.0	25.5	15.5	29.5	19.5	28.5	19.5	27.5	16.5
19	19.0	12.5	22.5	15.5	25.0	19.5	29.0	20.0	28.5	19.5	26.5	15.0
20	19.0	12.0	21.5	15.0	26.0	14.5	29.5	19.0	28.5	20.5	26.5	15.5
21	21.0	13.5	22.5	15.0	26.5	15.5	28.5	19.0	28.5	18.5	27.0	14.5
22	17.5	13.5	23.5	15.5	26.5	18.0	28.5	19.0	28.5	18.0	27.0	15.0
23	18.5	13.0	23.0	16.5	27.0	18.5	27.5	17.0	28.5	18.5	26.0	15.5
24	22.0	12.5	23.5	17.0	27.0	17.5	28.0	17.0	28.5	19.0	27.0	15.0
25	19.0	13.0	22.0	17.0	27.5	16.5	28.0	17.5	28.5	19.5	25.5	14.5
26	19.0	13.0	18.0	16.5	27.5	14.5	28.0	17.0	28.0	19.0	24.0	13.0
27	20.0	13.0	17.0	15.5	26.0	17.0	28.0	17.0	28.5	19.5	27.0	15.0
28	17.0	11.5	18.5	15.0	25.5	17.0	26.0	17.0	28.5	19.0	28.0	14.5
29	17.0	9.5	22.5	15.0	25.5	17.0	28.0	18.5	29.0	18.0	29.0	15.0
30	19.0	11.0	24.0	15.0	26.5	16.5	26.0	17.0	28.5	17.0	27.0	16.0
31	---	---	24.5	17.0	---	---	26.0	17.5	28.5	17.0	---	---
MONTH	22.0	9.5	24.5	11.0	27.5	14.0	29.5	17.0	29.0	14.0	29.0	13.0

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.6	20	.46	11	7	.21	18	18	.87
2	9.0	20	.49	11	6	.18	18	18	.87
3	9.0	18	.44	11	6	.18	18	18	.87
4	9.0	18	.44	11	5	.15	17	17	.78
5	9.0	18	.44	11	5	.15	16	17	.73
6	9.0	16	.39	37	3300	429	16	17	.73
7	8.6	16	.37	35	713	93	17	17	.78
8	8.6	16	.37	28	70	5.3	17	16	.73
9	9.0	16	.39	24	36	2.3	17	16	.73
10	9.0	14	.34	23	31	1.9	18	16	.78
11	9.0	14	.34	22	28	1.7	17	16	.73
12	9.4	14	.36	21	25	1.4	17	15	.69
13	9.4	14	.36	21	23	1.3	16	15	.65
14	9.8	14	.37	20	22	1.2	16	15	.65
15	11	12	.36	20	21	1.1	14	15	.57
16	11	12	.39	20	21	1.1	14	14	.53
17	12	12	.39	20	21	1.1	14	14	.53
18	12	12	.39	20	20	1.1	14	14	.53
19	12	12	.39	20	20	1.1	14	14	.53
20	12	12	.39	20	20	1.1	14	14	.53
21	12	12	.39	20	20	1.1	14	13	.49
22	12	10	.32	20	19	1.0	14	13	.49
23	12	10	.32	20	19	1.0	14	12	.45
24	12	10	.32	20	19	1.0	14	12	.45
25	12	10	.32	20	19	1.0	14	11	.42
26	12	10	.32	20	19	1.0	14	10	.38
27	12	8	.26	19	19	.97	14	10	.38
28	12	8	.26	19	19	.97	14	9	.34
29	12	8	.26	19	18	.92	16	8	.35
30	12	8	.26	18	18	.87	15	7	.28
31	12	7	.23	--	--	--	15	6	.24
TOTAL	328.4	--	11.13	601	--	554.40	480	--	18.08

11113000 SESPE CREEK NEAR FILLMORE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	15	5	.20	26	4	.28	5240	8860	125000
2	15	4	.16	26	4	.28	2650	3310	25700
3	15	4	.16	26	4	.28	855	1600	3690
4	15	3	.12	26	4	.28	972	1140	4300
5	15	3	.12	26	4	.28	845	1560	3780
6	14	2	.08	26	2	.14	595	450	723
7	15	2	.08	26	2	.14	462	155	193
8	15	2	.08	26	2	.14	380	110	113
9	24	64	11	125	635	756	327	95	84
10	110	432	145	1010	2290	9200	273	80	59
11	47	163	21	778	915	2640	216	60	35
12	43	60	7.0	168	110	50	175	40	19
13	35	35	3.3	96	42	11	159	30	13
14	32	30	2.6	76	33	6.8	156	25	11
15	31	23	1.9	66	24	4.3	150	22	8.9
16	41	226	27	60	15	2.4	142	20	7.7
17	43	60	7.0	56	14	2.1	125	18	6.1
18	39	45	4.7	51	13	1.8	118	16	5.1
19	34	30	2.8	48	12	1.6	108	14	4.1
20	31	21	1.8	43	11	1.3	100	12	3.2
21	28	15	1.1	39	10	1.1	96	11	2.9
22	28	9	.68	37	10	1.0	90	10	2.4
23	27	8	.58	32	9	.78	86	10	2.3
24	28	7	.53	30	9	.73	80	10	2.2
25	28	6	.45	35	8	.76	78	10	2.1
26	28	5	.38	37	8	.80	76	10	2.1
27	28	5	.38	38	8	.82	75	10	2.0
28	28	5	.38	3730	8510	127000	73	10	2.0
29	27	5	.36	--	--	--	71	10	1.9
30	27	4	.29	--	--	--	67	10	1.8
31	26	4	.28	--	--	--	66	10	1.8
TOTAL	932	--	241.51	6763	--	139685.11	14906	--	163778.6

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	64	10	1.7	33	6	.53	13	15	.53
2	60	10	1.6	32	6	.52	11	15	.45
3	59	10	1.6	31	6	.50	9.1	15	.37
4	56	10	1.5	30	6	.49	7.8	15	.32
5	54	10	1.5	29	6	.47	6.8	15	.28
6	53	10	1.4	35	6	.57	7.3	25	.49
7	53	10	1.4	39	6	.63	7.3	20	.39
8	53	10	1.4	39	6	.63	7.8	15	.32
9	52	9	1.3	33	6	.53	8.2	15	.33
10	50	9	1.2	29	6	.47	8.6	15	.35
11	48	9	1.2	27	5	.36	8.6	15	.35
12	44	9	1.1	27	5	.36	9.1	15	.37
13	43	9	1.0	26	5	.35	9.1	15	.37
14	43	9	1.0	25	5	.34	9.6	15	.39
15	43	9	1.0	24	5	.32	9.6	15	.39
16	43	9	1.0	23	5	.31	9.1	12	.29
17	43	8	.93	23	5	.31	9.1	12	.29
18	43	8	.93	23	5	.31	9.1	12	.29
19	42	8	.91	23	5	.31	9.1	12	.29
20	42	8	.91	23	5	.31	8.6	12	.28
21	42	8	.91	22	5	.30	8.6	20	.46
22	40	8	.86	22	5	.30	8.6	15	.35
23	40	8	.86	21	5	.28	7.8	15	.32
24	38	7	.72	18	25	1.2	7.3	15	.30
25	37	7	.70	16	20	.86	7.3	15	.30
26	37	7	.70	16	15	.65	6.8	15	.28
27	38	7	.72	16	15	.65	7.3	15	.30
28	38	7	.72	15	15	.61	11	25	.74
29	35	7	.66	14	15	.57	9.1	20	.49
30	34	7	.64	12	15	.49	6.4	15	.26
31	--	--	--	13	15	.53	--	--	--
TOTAL	1367	--	32.07	759	--	15.06	258.1	--	10.94

11113000 SESPE CREEK NEAR FILLMORE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.5	12	.18	.76	12	.02	.42	10	.01
2	4.9	12	.16	.76	12	.02	.42	10	.01
3	3.7	12	.12	.76	12	.02	.42	10	.01
4	2.5	12	.08	.85	12	.03	2.5	10	.07
5	2.5	12	.08	.85	12	.03	7.3	15	.30
6	2.5	12	.08	.99	12	.03	7.3	15	.30
7	2.5	12	.08	.99	12	.03	11	25	.74
8	3.1	12	.10	.99	12	.03	9.6	20	.52
9	11	25	.74	.99	12	.03	4.3	15	.17
10	11	20	.59	.67	12	.02	3.4	12	.11
11	9.1	15	.37	.67	11	.02	3.1	12	.10
12	3.7	15	.15	.67	11	.02	2.1	11	.06
13	2.0	15	.08	.67	11	.02	1.1	11	.03
14	1.8	15	.07	.67	11	.02	.99	11	.03
15	1.3	15	.05	.58	11	.02	.99	11	.03
16	1.0	15	.04	.58	11	.02	.67	11	.02
17	.85	50	.11	.58	11	.02	.58	11	.02
18	.76	30	.06	.58	11	.02	.85	11	.03
19	.76	20	.04	.58	11	.02	.85	11	.03
20	.76	15	.03	.50	11	.01	.76	11	.02
21	.76	15	.03	.58	11	.02	.67	11	.02
22	.76	15	.03	.67	11	.02	.58	11	.02
23	.76	15	.03	1.3	11	.04	.99	11	.03
24	.76	15	.03	2.7	10	.07	.76	10	.02
25	.76	15	.03	2.7	10	.07	.76	10	.02
26	.76	15	.03	2.0	10	.05	.76	10	.02
27	.76	15	.03	1.3	10	.04	.76	10	.02
28	.76	15	.03	.67	10	.02	.76	10	.02
29	.76	15	.03	.50	10	.01	.76	10	.02
30	.76	15	.03	.50	10	.01	.76	10	.02
31	.76	15	.03	.50	10	.01	--	--	--
TOTAL	79.59	--	3.54	28.11	--	.81	66.21	--	2.82

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 26568.41
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 304354.07

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
FEB 28, 1970	1600	11.0	6500	8280	145000	20	22	28	40	52	65	80	93	99	100	--	VPWC
MAR 2.....	0735	9.0	1380	17400	64800	15	18	21	30	39	53	75	93	99	100	--	VPWC
MAR 3.....	0725	9.0	1000	1360	3670	11	16	22	30	36	45	52	74	100	--	--	SBWC

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 1970.
REMARKS.--Chemical analyses for this station are performed by California Department of Water Resources and Geological Survey. Water discharge given is difference between stations 11113500 Santa Paula Creek near Santa Paula, and 11113920 Santa Clara River at Saticoy.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
21...	1000	149	15.0	10.4	141	48	75	4.0	259	0	429	30
DEC.												
18...	1500	53	--	--	187	51	118	--	299	0	552	57
JAN.												
20...	1500	126	18.9	9.4	161	59	104	5.0	279	0	536	46
MAR.												
06...	0815	105	--	--	96	23	58	--	190	0	260	21
APR.												
15...	1545	94	20.0	8.9	140	49	97	4.0	264	0	458	41
JULY												
09...	1630	135	--	--	141	56	91	--	254	0	492	37
22...	1100	126	24.4	9.2	135	54	83	5.0	213	0	485	32
SEPT.												
15...	1215	58	--	--	165	67	108	--	279	0	591	48

DATE	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 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)
OCT.												
21...	.9	7.1	620	887	357	550	338	212	23	1.4	1200	8.0
DEC.												
18...	.8	18	1000	1280	183	677	432	245	28	2.0	1580	8.0
JAN.												
20...	1.1	16	770	1140	388	645	416	229	26	1.8	1510	8.1
MAR.												
06...	.5	4.0	300	652	185	334	178	156	27	1.4	861	8.0
APR.												
15...	.9	8.6	680	1020	259	551	334	217	28	1.8	1370	8.0
JULY												
09...	.9	--	760	1070	390	582	374	208	25	1.6	1360	7.9
22...	1.0	7.3	690	999	340	559	384	175	24	1.5	1260	8.0
SEP.												
15...	.8	13	970	1270	199	688	459	229	25	1.8	1580	7.9

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CALIF.

LOCATION.--Lat 34°23'44", long 119°04'32", in NW¼SW¼SW¼ sec.27, T.4 N., R.21 W., Ventura County, at gaging station 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 1970.
Water temperatures: April 1969 to September 1970.
EXTREMES, 1969-70.--Specific conductance: Maximum daily, 1,030 micromhos Oct. 23, 24, Sept. 12; minimum daily, 500 micromhos Mar. 1.
Water temperatures: Maximum, 31.0°C July 18, Aug. 7-9.
EXTREMES, April 1969 to September 1970.--Specific conductance: Maximum daily, 1,030 micromhos Oct. 23, 24, 1969; minimum daily, 500 micromhos Mar. 1, 1970.
Water temperatures: Maximum, 31.0°C July 18, Aug. 7-9, 1970.
REMARKS.--Chemical-quality records partially furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)
OCT.											
20...	1715	17	17.8	9.0	106	28	56	2.0	272	0	225
DEC.											
18...	1100	10	--	--	102	25	58	--	241	0	222
JAN.											
20...	1430	5.1	18.3	8.9	107	28	58	2.0	253	0	247
MAR.											
05...	0915	148	--	--	83	18	35	--	164	0	194
APR.											
15...	1500	9.1	20.6	9.5	86	25	46	2.0	203	0	212
JULY											
09...	0930	3.0	--	--	99	24	68	--	264	0	218
22...	1030	3.4	25.0	--	75	29	70	2.0	188	0	234
SEPT.											
15...	1245	2.5	--	--	99	29	73	--	260	0	230

DATE	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (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	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT.											
20...	29	.6	2.0	220	380	157	223	24	1.3	882	8.0
DEC.											
18...	33	.5	--	280	358	160	198	26	1.3	830	7.8
JAN.											
20...	31	.6	1.8	220	382	174	208	25	1.3	935	7.9
MAR.											
05...	19	.5	--	150	281	146	135	21	.9	663	8.0
APR.											
15...	24	.6	.4	190	318	151	167	24	1.1	789	8.1
JULY											
09...	43	.6	.0	310	346	129	217	30	1.6	932	7.9
22...	41	.6	.3	330	307	153	154	33	1.7	839	8.0
SEP.											
15...	48	.6	--	410	366	153	213	30	1.7	992	8.0

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	874	873	845	---	926	500	811	834	837	901	932	882
2	862	881	837	---	922	557	804	837	836	917	917	950
3	870	894	830	---	913	530	791	843	839	941	958	898
4	862	881	821	---	910	631	788	835	841	930	912	891
5	860	920	820	---	905	633	807	872	871	926	916	894
6	863	967	819	---	898	634	812	902	863	931	929	889
7	856	936	821	---	901	651	805	892	859	938	911	886
8	874	947	824	---	897	657	810	878	878	956	899	888
9	886	957	824	---	912	655	867	866	865	961	894	890
10	893	941	---	---	832	---	848	859	850	955	916	899
11	911	920	---	---	703	---	835	860	846	972	910	914
12	914	916	---	---	765	---	851	846	866	999	911	1030
13	936	911	---	---	824	---	863	844	862	---	934	948
14	967	909	---	---	856	734	875	842	855	---	943	964
15	972	910	---	---	866	733	913	846	858	---	920	976
16	976	918	---	907	877	727	919	856	871	---	899	966
17	978	927	---	924	883	736	886	744	857	---	895	950
18	990	932	---	949	891	744	846	---	854	944	904	956
19	1010	940	---	950	904	743	820	---	840	951	928	955
20	1020	921	---	946	898	756	810	---	883	930	939	948
21	1020	935	---	969	898	776	820	852	885	912	1000	934
22	1020	915	---	984	898	798	811	842	893	913	1010	929
23	1030	901	---	948	899	813	806	841	896	910	976	949
24	1030	897	---	942	901	819	801	835	878	895	954	949
25	1010	890	---	940	909	802	804	848	874	896	930	975
26	979	883	---	947	913	823	824	870	891	895	940	984
27	956	876	---	950	920	828	814	866	883	902	937	955
28	929	879	---	943	721	843	820	869	885	962	919	952
29	914	867	---	940	---	854	815	855	904	939	903	964
30	905	849	---	943	---	789	816	855	914	935	885	965
31	900	---	---	934	---	826	---	845	---	942	881	---
MONTH	937	909	---	---	876	725	829	851	867	932	925	937

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	16.0	21.5	13.5	15.0	12.0	---	---	16.5	8.5	13.0	12.5
2	23.0	16.0	21.5	13.5	17.0	11.5	---	---	16.5	8.5	13.5	13.0
3	25.0	15.0	21.0	13.5	17.0	11.5	---	---	17.0	9.0	14.5	12.5
4	23.5	14.5	20.5	13.5	16.0	9.5	---	---	15.5	10.5	14.0	13.5
5	23.5	13.5	16.5	14.0	16.5	10.0	---	---	17.0	9.5	14.0	12.0
6	23.0	14.0	15.0	14.5	16.0	10.0	---	---	17.5	10.0	14.5	12.5
7	24.0	14.0	16.0	13.0	15.5	9.0	---	---	19.0	10.0	15.0	13.5
8	23.5	14.5	18.5	13.5	14.0	9.5	---	---	17.5	10.0	14.5	13.5
9	24.0	15.0	16.0	13.5	15.0	10.0	---	---	13.5	11.5	14.0	13.5
10	24.5	15.0	20.0	15.0	---	---	---	---	15.0	13.0	---	---
11	23.0	15.0	21.0	14.0	---	---	---	---	15.5	13.0	---	---
12	23.0	13.5	22.0	15.0	---	---	---	---	15.5	13.0	---	---
13	22.5	13.5	21.5	15.5	---	---	---	---	16.0	12.0	---	---
14	22.5	14.0	21.5	14.5	---	---	---	---	17.5	10.0	19.5	10.5
15	22.5	15.0	18.0	16.0	---	---	---	---	19.0	10.0	19.5	10.5
16	21.0	16.5	20.0	14.0	---	---	14.5	13.0	19.0	10.0	19.5	11.0
17	22.0	17.0	19.0	12.0	---	---	17.0	12.0	19.5	11.0	19.5	10.5
18	21.0	14.0	17.0	10.0	---	---	15.0	10.5	18.5	9.0	17.0	10.0
19	22.0	13.0	17.0	10.5	---	---	17.0	11.5	16.5	8.5	17.0	8.5
20	21.5	14.0	16.0	10.5	---	---	18.0	13.0	16.0	9.0	19.0	9.0
21	20.5	14.0	17.0	10.0	---	---	17.5	11.5	18.0	9.0	19.5	9.5
22	21.0	13.0	17.5	10.0	---	---	17.5	12.0	18.0	9.0	20.0	10.0
23	21.0	14.0	17.5	10.0	---	---	17.0	12.0	19.5	10.0	20.0	9.5
24	19.0	14.5	17.0	9.5	---	---	16.5	12.5	20.0	11.0	21.0	11.0
25	20.0	13.5	17.0	10.0	---	---	17.5	11.0	20.0	10.0	20.5	12.0
26	20.5	13.5	16.5	10.0	---	---	17.0	10.0	20.0	11.0	14.5	12.5
27	21.0	13.5	18.5	11.5	---	---	14.5	10.5	17.5	11.0	21.0	10.5
28	21.0	13.5	17.5	10.0	---	---	15.0	9.0	14.0	12.0	20.0	10.0
29	20.5	13.5	16.0	9.5	---	---	15.0	7.5	---	---	19.5	10.5
30	21.0	12.5	16.0	11.0	---	---	16.0	7.5	---	---	15.5	10.5
31	21.5	13.0	---	---	---	---	16.5	8.0	---	---	19.5	9.0
MONTH	25.0	12.5	22.0	9.5	---	---	---	---	20.0	8.5	21.0	8.5

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

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

11113900 SATICOY DIVERSION NEAR SATICOY, CALIF.

LOCATION.--Lat 34°17'06", long 119°07'14", in Santa Paula Y Saticoy Grant, Venturay 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 1970.
Water temperatures: April 1969 to September 1970 (discontinued).
EXTREMES, April to September 1969.--Specific conductance: Minimum, 1,120 micromhos Aug. 3.
Water temperatures: Maximum, 29.0°C Sept. 30.
EXTREMES, 1969-70.--Specific conductance: Maximum, 1,720 micromhos Jan. 29; minimum, 1,140 micromhos Nov. 13, 14.
Water temperatures: Maximum, 26.5°C July 3-5, Aug. 8, 9; minimum, 5.0°C Jan. 4.
EXTREMES, April 1969 to September 1970.--Specific conductance: Maximum, 1,720 micromhos Jan. 29, 1970; minimum, 1,120 micromhos Aug. 3, 1969.
Water temperatures: Maximum, 29.0°C Sept. 39, 1969; minimum, 5.0°C Jan. 4, 1970.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), APRIL TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	1260	1400	1320	1260	1190
2	---	---	---	---	---	---	---	1280	1410	1340	1140	1190
3	---	---	---	---	---	---	---	1310	1370	1340	1120	1190
4	---	---	---	---	---	---	---	1320	1350	1340	1160	1190
5	---	---	---	---	---	---	---	1300	1350	1340	1190	1200
6	---	---	---	---	---	---	---	1300	1360	1330	1200	1190
7	---	---	---	---	---	---	---	1320	1360	1330	1200	1180
8	---	---	---	---	---	---	---	1320	1350	1340	1190	1180
9	---	---	---	---	---	---	---	1330	1350	1370	1180	1210
10	---	---	---	---	---	---	---	1340	1370	1410	1180	1260
11	---	---	---	---	---	---	---	---	1370	1350	1180	1230
12	---	---	---	---	---	---	1130	1400	1360	1280	1180	1200
13	---	---	---	---	---	---	1160	1400	1350	1280	1190	1190
14	---	---	---	---	---	---	1170	1400	1350	1400	1190	1180
15	---	---	---	---	---	---	1180	1400	1350	1350	1200	1180
16	---	---	---	---	---	---	1190	1400	1350	1400	1190	1170
17	---	---	---	---	---	---	1200	1400	1360	1350	1180	1180
18	---	---	---	---	---	---	1200	1400	1370	1360	1170	1180
19	---	---	---	---	---	---	1210	1410	1390	1300	1180	1190
20	---	---	---	---	---	---	1220	1410	1390	1230	1190	1200
21	---	---	---	---	---	---	1210	1400	1390	1220	1200	1210
22	---	---	---	---	---	---	1210	1400	1360	1260	1200	1200
23	---	---	---	---	---	---	1220	1390	1370	1290	1200	1210
24	---	---	---	---	---	---	1220	1410	1390	1270	1190	1240
25	---	---	---	---	---	---	1200	1420	1370	1250	1190	1250
26	---	---	---	---	---	---	1210	1410	1370	1210	1190	1280
27	---	---	---	---	---	---	1240	1410	1370	1160	1190	1270
28	---	---	---	---	---	---	1230	1420	1350	1130	1180	1270
29	---	---	---	---	---	---	1230	1430	1340	1160	1190	1290
30	---	---	---	---	---	---	1250	1410	1320	1180	1190	---
31	---	---	---	---	---	---	---	1410	---	1210	1190	---
MONTHLY SUMMARY	---	---	---	---	---	---	---	1373	1364	1293	1186	1210

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	1420	1460	1480	1640	---	1360	1300	1280	1290	1260	---
2	1340	1380	1490	1480	1630	---	1380	1340	1290	1290	1260	---
3	1320	1380	1460	1460	1650	---	1380	1330	1310	1290	1260	---
4	1310	1370	1440	1370	1630	---	1390	1350	1320	1280	1280	---
5	1310	1400	1420	1410	1640	---	1390	1470	1330	1280	1290	1600
6	1300	---	1400	1480	1620	---	1400	1500	1330	1300	1280	1610
7	1280	---	1390	1520	1560	---	1420	1450	1330	1310	1250	1600
8	1280	---	1380	1530	1560	---	---	1430	1370	1320	1260	1580
9	1270	---	1380	1520	---	---	---	1410	1390	1360	1290	1580
10	1270	---	1410	1360	---	---	---	1390	1380	1360	1270	1590
11	1260	1510	1510	1290	---	---	---	1400	1380	1370	1250	1580
12	1260	1470	1550	1380	---	---	---	1420	1390	1360	1200	1560
13	1250	1140	1580	1440	---	---	---	1430	1370	1360	1250	1550
14	1250	1140	1580	1460	---	1380	---	1390	1340	1360	1280	1510
15	1160	1380	1580	1400	---	1390	---	1370	1330	1370	1290	1480
16	1180	1470	1600	1490	---	1400	1530	1330	1360	1350	1300	1480
17	1190	1490	1600	1540	---	1370	1520	1300	1360	1350	1340	1520
18	1270	1570	1590	1520	---	1360	1510	1280	1320	1340	1380	1470
19	1340	1620	1590	1480	---	1340	1480	1280	1320	1310	1420	1480
20	1200	1630	---	1490	---	1300	1480	1290	1320	1310	1450	1470
21	1230	1600	---	1490	---	1310	1520	1300	1320	1320	1480	1460
22	1190	1520	---	1510	---	1300	1500	1280	1320	1320	1470	1470
23	---	1490	---	1540	---	1310	1440	1280	1350	1320	1450	1510
24	---	1490	---	1540	---	1320	1410	1270	1340	1320	1440	1550
25	1400	1490	1530	1570	---	1310	1410	1290	1350	1310	1440	1600
26	1370	1490	1520	1560	---	1330	1390	1320	1310	1300	1450	1680
27	1350	1490	1520	1570	---	1320	1410	1310	1270	1290	1450	1670
28	1360	1500	1520	1650	---	1320	1420	1310	1260	1300	1450	1600
29	1380	1490	1510	1720	---	1310	1440	1290	1270	1290	1440	1570
30	1400	1480	1510	1690	---	1340	1330	1280	1280	1290	1440	1590
31	1420	---	1500	1650	---	1350	---	1260	---	1280	1420	---
MONTH	1293	1456	1500	1502	---	---	---	1343	1329	1319	1348	1552

11113900 SATICOY DIVERSION NEAR SATICOY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, APRIL TO SEPTEMBER 1969

DAY

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVERAGE
APRIL																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	18	22	22	22	23	22	23	23	23	23	19	19	22	22	23	23	22	22	22	--	---
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	16	14	14	13	14	13	14	14	15	15	16	15	14	13	13	15	12	15	16	--	--
MAY																																
MAXIMUM	19	21	19	18	21	19	19	24	25	25	23	21	20	22	20	18	19	21	--	22	22	24	21	22	22	25	26	26	26	24	24	22
MINIMUM	16	15	15	14	13	15	16	16	16	18	18	17	14	15	16	15	17	16	--	18	17	18	17	18	17	17	16	18	15	18	18	16
JUNE																																
MAXIMUM	22	21	22	21	21	22	20	--	22	20	20	21	24	22	24	21	23	24	24	23	19	24	24	24	24	24	24	25	25	25	--	23
MINIMUM	18	18	18	17	18	17	17	--	17	17	17	17	17	16	18	18	17	15	18	19	17	17	18	19	18	18	18	18	18	19	--	18
JULY																																
MAXIMUM	25	25	26	24	23	22	22	24	24	24	22	25	26	24	24	24	25	25	25	24	25	26	24	25	25	24	24	24	25	26	26	24
MINIMUM	19	19	20	20	18	18	17	18	18	19	18	17	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	22	19
AUGUST																																
MAXIMUM	26	26	25	26	26	25	26	26	26	25	25	26	26	25	24	24	25	24	24	24	25	24	24	24	24	24	24	24	23	24	24	25
MINIMUM	20	22	20	20	21	20	20	21	22	22	20	20	20	20	20	19	20	20	20	18	19	18	18	18	18	18	19	19	19	19	20	20
SEPTEMBER																																
MAXIMUM	24	24	24	24	24	23	24	24	24	24	24	23	23	24	23	23	23	24	23	22	22	23	24	24	24	23	23	24	28	29	--	24
MINIMUM	20	20	20	19	19	19	20	20	20	20	20	18	18	20	20	19	18	19	19	19	16	17	19	20	18	17	18	15	16	15	--	19

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	19.5	19.0	14.5	13.5	12.0	10.5	6.5	15.5	10.0	---	---
2	22.0	19.0	19.0	13.0	13.5	11.5	9.5	6.0	14.0	10.0	---	---
3	22.5	17.5	18.5	13.0	14.0	10.5	10.5	6.0	14.0	10.0	---	---
4	21.0	15.0	18.5	15.0	13.5	10.0	9.5	5.0	14.5	11.5	---	---
5	19.5	14.0	17.0	15.0	13.5	10.0	10.5	7.0	15.0	11.0	---	---
6	19.5	15.0	---	---	13.5	10.0	9.5	6.0	15.5	11.0	---	---
7	21.0	14.5	---	---	13.0	9.5	11.0	7.0	15.0	11.5	---	---
8	20.5	14.5	---	---	12.5	10.0	10.5	8.0	15.0	12.5	---	---
9	22.0	16.0	---	---	14.0	10.5	10.0	9.0	---	---	---	---
10	21.5	16.5	---	---	12.5	9.0	14.0	9.5	---	---	---	---
11	20.5	16.5	18.0	14.5	12.0	9.5	13.5	12.0	---	---	---	---
12	19.5	13.0	19.5	16.0	13.5	9.5	15.5	12.0	---	---	---	---
13	19.5	14.5	19.5	17.5	13.5	10.0	15.0	13.5	---	---	---	---
14	19.0	14.0	19.0	17.0	13.0	9.5	15.0	13.5	---	---	22.0	15.0
15	19.5	14.5	19.0	17.0	13.5	9.5	15.0	13.5	---	---	23.0	12.5
16	19.5	16.0	17.0	15.5	13.0	10.0	15.0	14.0	---	---	21.0	11.5
17	20.5	16.5	17.0	14.0	14.0	10.0	19.0	14.5	---	---	21.5	12.0
18	26.0	15.0	14.0	10.0	14.0	11.5	17.5	13.5	---	---	17.5	10.0
19	25.5	13.0	12.0	8.5	13.5	13.0	16.5	13.5	---	---	19.5	8.0
20	18.0	13.5	12.0	9.5	---	---	17.5	14.5	---	---	20.0	9.5
21	18.0	13.5	13.0	9.5	---	---	17.0	14.5	---	---	20.0	10.0
22	18.0	13.5	13.0	10.0	---	---	16.5	14.0	---	---	22.0	10.5
23	---	---	13.5	10.5	---	---	16.0	14.5	---	---	21.5	11.0
24	---	---	13.5	10.5	---	---	15.5	15.0	---	---	21.5	12.5
25	17.5	14.0	14.0	10.5	14.5	12.0	15.5	13.0	---	---	21.5	15.0
26	18.0	13.5	13.5	11.0	14.0	12.0	15.5	12.0	---	---	16.5	14.5
27	18.5	13.5	14.5	11.5	12.0	10.0	14.5	12.0	---	---	22.0	13.0
28	18.5	15.0	14.0	10.5	10.0	8.5	13.5	9.5	---	---	21.0	11.0
29	18.5	15.0	13.0	9.5	11.0	6.5	10.5	6.5	---	---	21.0	12.0
30	19.5	14.0	13.5	10.5	9.5	6.0	11.5	7.0	---	---	20.0	15.0
31	19.0	15.0	---	---	11.0	6.0	13.5	9.5	---	---	20.0	11.0
MONTH	26.0	13.0	19.5	8.5	14.5	6.0	19.0	5.0	---	---	---	---

11113900 SATICOY DIVERSION NEAR SATICOY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	10.5	20.5	12.0	24.5	17.0	25.5	17.0	25.0	19.0	---	---
2	20.5	10.5	21.5	13.0	25.0	17.5	26.0	18.0	24.5	18.5	---	---
3	22.0	12.0	21.0	13.5	24.0	17.5	26.5	19.5	24.5	19.0	---	---
4	21.5	12.0	20.5	15.0	23.5	17.0	26.5	19.5	24.0	19.0	---	---
5	22.0	12.0	22.0	14.5	24.0	17.5	26.5	19.5	23.5	18.0	21.0	19.5
6	22.0	12.5	20.5	15.5	24.5	17.5	25.5	19.0	24.5	18.0	20.5	19.5
7	21.0	14.0	21.5	13.0	23.5	16.5	25.5	18.5	25.5	19.0	21.5	20.0
8	---	---	23.5	14.0	20.0	17.0	24.5	18.0	26.5	19.5	22.0	21.0
9	---	---	23.5	15.0	22.5	15.5	21.5	18.0	26.5	19.5	22.0	21.0
10	---	---	23.5	15.0	25.5	16.0	24.5	17.0	25.5	20.0	22.0	21.0
11	---	---	22.0	14.5	25.5	16.5	24.5	18.0	26.0	19.5	22.0	21.0
12	---	---	22.0	11.0	21.5	16.5	24.0	17.5	24.5	21.5	21.5	21.0
13	---	---	23.5	14.0	23.5	15.5	25.0	18.0	25.0	21.5	21.0	20.5
14	---	---	24.5	15.5	24.0	15.0	25.0	18.0	24.5	20.0	20.5	19.0
15	---	---	25.0	15.0	24.5	16.5	24.5	18.0	24.5	20.0	20.5	18.0
16	17.0	11.5	26.5	16.0	21.5	17.0	25.0	17.5	25.0	21.0	20.5	18.0
17	20.0	11.0	26.0	16.5	23.0	15.0	25.5	18.5	25.0	21.5	20.5	18.5
18	21.5	12.0	24.5	16.5	24.5	16.0	26.0	18.5	24.5	21.0	21.0	19.5
19	23.0	12.5	24.5	16.0	24.0	17.0	26.0	20.0	24.5	21.0	21.0	19.5
20	21.5	14.0	24.0	14.5	24.5	17.0	26.0	20.0	24.0	21.0	20.5	18.5
21	18.5	13.0	24.0	14.5	24.5	17.0	26.0	20.0	24.0	20.0	20.5	18.0
22	19.0	10.0	24.5	15.0	25.0	18.0	25.5	19.0	23.5	19.5	20.0	17.0
23	18.5	11.0	24.0	16.5	24.5	19.0	24.5	19.0	23.5	19.5	21.0	17.5
24	20.0	11.5	22.5	17.0	25.0	17.5	24.5	19.0	23.5	19.5	21.0	17.5
25	21.0	14.0	20.0	17.0	25.5	18.0	24.0	19.0	23.5	20.5	20.0	17.0
26	19.0	12.5	19.5	16.0	25.5	19.0	24.5	18.5	23.5	20.5	16.5	13.5
27	16.5	12.5	19.5	15.5	25.5	17.0	24.0	18.5	23.5	21.0	20.0	14.5
28	18.0	8.5	19.5	15.0	25.0	17.0	24.0	19.5	23.5	20.5	21.0	17.0
29	18.5	9.5	23.5	14.5	24.5	17.0	25.0	19.0	23.0	20.0	21.5	17.0
30	18.5	10.5	24.5	14.5	25.0	16.5	24.5	19.0	24.0	19.5	22.0	18.0
31	---	---	24.5	17.0	---	---	22.5	18.5	24.0	22.0	---	---
MONTH	---	---	26.5	11.0	25.5	15.0	26.5	17.0	26.5	18.0	22.0	13.5

11114000 SANTA CLARA RIVER AT MONTALVO, CALIF.
(Formerly published as 11113920 Santa Clara River at Saticoy)

LOCATION.--Lat 34°14'31", long 119°11'21", in San Miguel Grant, Ventura County, at gaging station on center pier southbound bridge on U.S. Highway 101, and 0.9 mile southeast of Montalvo.
DRAINAGE AREA.--1,612 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1967 to September 1969.
Sediment records: October 1967 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 16,600 mg/l Mar. 1; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 283,000 tons Mar. 1; minimum daily, 0 tons on many days.
EXTREMES, 1967-70.--Sediment concentrations: Maximum daily, 69,200 mg/l Feb. 25, 1969; minimum daily, no flow for many days each year.
Sediment loads: Maximum daily, 20,400,000 tons Feb. 25, 1969; minimum daily, 0 tons on many days each year.
REMARKS.--No flow Dec. 28 to Feb. 1, Feb. 26.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13	10	.35	8.5	10	.23	4.7	20	.25
2	13	10	.35	8.1	10	.22	2.7	20	.15
3	13	10	.35	7.6	10	.21	3.1	20	.17
4	11	10	.30	8.1	10	.22	3.7	20	.20
5	10	10	.27	8.9	10	.24	3.7	20	.20
6	10	10	.27	122	361	294	3.5	20	.19
7	10	10	.27	144	300	181	3.5	20	.19
8	9.4	10	.25	15	200	8.1	3.3	20	.18
9	8.9	10	.24	6.0	150	2.4	3.3	20	.18
10	9.0	10	.24	5.3	100	1.4	3.1	20	.17
11	9.0	10	.24	5.0	50	.68	3.1	20	.17
12	9.0	10	.24	4.7	40	.51	2.9	20	.16
13	9.0	10	.24	4.4	30	.36	2.9	20	.16
14	9.5	10	.26	4.4	30	.36	2.7	20	.15
15	9.5	10	.26	4.4	30	.36	2.7	20	.15
16	9.5	10	.26	4.1	30	.33	2.5	20	.14
17	10	10	.27	3.5	30	.28	2.5	20	.14
18	10	10	.27	3.3	30	.27	2.3	20	.12
19	10	10	.27	3.1	30	.25	2.3	20	.12
20	10	10	.27	2.9	30	.23	2.0	20	.11
21	10	10	.27	3.3	30	.27	1.7	10	.05
22	10	10	.27	3.5	30	.28	1.4	10	.04
23	10	10	.27	3.3	30	.27	1.2	10	.03
24	10	10	.27	3.3	30	.27	1.0	10	.03
25	10	10	.27	3.3	30	.27	.50	10	.01
26	11	10	.30	2.9	30	.23	.40	10	.01
27	11	10	.30	3.1	30	.25	.20	10	.01
28	11	10	.30	2.9	30	.23	0	--	0
29	11	10	.30	3.5	30	.28	0	--	0
30	11	10	.30	5.3	30	.43	0	--	0
31	10	10	.27	--	--	--	0	--	0
TOTAL	317.8	--	8.59	407.7	--	494.43	66.90	--	3.48

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	--	0	5930	16600	283000
2				.42	20	.02	3690	11200	133000
3				.42	20	.02	1250	4500	15200
4				.70	20	.04	1740	5480	46200
5				1.8	30	.15	1740	5980	32100
6				2.5	30	.20	875	3200	7560
7				1.4	30	.11	828	3000	6710
8				.98	30	.08	617	2200	3660
9				18	48	5.7	500	1750	2360
10				575	1440	2620	381	1300	1340
11				1270	4430	19600	234	767	512
12				300	1400	1130	153	480	198
13				213	648	380	150	475	192
14				54	104	24	150	475	192
15				46	45	5.9	152	475	195
16				2.5	30	.20	154	480	200
17				1.0	25	.07	157	490	208
18				.80	20	.04	160	500	216
19				.70	20	.04	155	480	201
20				.60	20	.03	140	440	166
21				.50	20	.03	120	350	113
22				.40	20	.02	108	310	90
23				.30	10	.01	97	260	68
24				.20	10	.01	88	250	59
25				.10	10	0	81	220	48
26				0	--	0	75	180	36
27				.55	20	.03	71	170	33
28				2730	8790	106000	66	140	25
29				--	--	--	62	100	17
30				--	--	--	54	90	13
31				--	--	--	40	80	8.6
TOTAL	0	--	0	5221.87	--	129766.70	20018	--	533920.6

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	25	70	4.7	.40	20	.02	.70	20	.04
2	15	60	2.4	.40	20	.02	1.2	30	.10
3	13	50	1.8	.39	20	.02	1.4	30	.11
4	12	40	1.3	.39	20	.02	1.5	30	.12
5	11	40	1.2	.39	20	.02	1.5	30	.12
6	10	40	1.1	.38	20	.02	1.5	30	.12
7	9.8	40	1.1	.38	20	.02	1.4	30	.11
8	9.2	40	.99	.38	20	.02	1.4	30	.11
9	8.6	40	.93	.37	20	.02	1.3	30	.11
10	8.0	40	.86	.25	20	.01	1.3	30	.11
11	7.5	40	.81	.19	20	.01	1.3	30	.11
12	7.0	40	.76	.18	20	.01	1.3	30	.11
13	6.7	40	.72	.17	20	.01	1.4	30	.11
14	6.4	40	.69	.17	20	.01	1.4	30	.11
15	5.9	40	.64	.25	20	.01	1.5	30	.12
16	5.2	40	.56	.70	20	.04	1.5	30	.12
17	4.5	40	.49	1.4	20	.08	1.6	30	.13
18	3.6	40	.39	1.5	20	.08	1.6	30	.13
19	3.1	40	.33	1.5	20	.08	1.6	30	.13
20	2.7	30	.22	1.5	20	.08	1.5	30	.12
21	2.1	30	.17	1.4	20	.08	1.4	30	.11
22	1.7	30	.14	1.3	20	.07	1.3	30	.11
23	1.4	30	.11	.90	20	.05	1.1	30	.09
24	1.2	30	.10	.50	20	.03	.90	20	.05
25	1.0	30	.08	.39	20	.02	.70	20	.04
26	.85	30	.07	.33	20	.02	.55	20	.03
27	.66	30	.05	.32	20	.02	.47	20	.03
28	.52	30	.04	.32	20	.02	.45	20	.02
29	.46	30	.04	.33	20	.02	.45	20	.02
30	.41	30	.03	.35	20	.02	.46	20	.02
31	--	--	--	.45	20	.02	--	--	--
TOTAL	184.50	--	22.82	17.88	--	.97	35.68	--	2.76

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.46	20	.02	.13	10	0	.07	10	0
2	.47	20	.03	.13	10	0	.07	10	0
3	.47	20	.03	.12	10	0	.06	10	0
4	.47	20	.03	.12	10	0	.06	10	0
5	.48	20	.03	.12	10	0	.06	10	0
6	.48	20	.03	.12	10	0	.06	10	0
7	.48	20	.03	.12	10	0	.06	10	0
8	.49	20	.03	.12	10	0	.05	10	0
9	.49	20	.03	.11	10	0	.05	10	0
10	.49	20	.03	.11	10	0	.05	10	0
11	.49	20	.03	.11	10	0	.05	10	0
12	.48	20	.03	.11	10	0	.05	10	0
13	.48	20	.03	.11	10	0	.05	10	0
14	.47	20	.03	.11	10	0	.05	10	0
15	.46	20	.02	.11	10	0	.05	10	0
16	.44	20	.02	.10	10	0	.05	10	0
17	.42	20	.02	.10	10	0	.05	10	0
18	.40	20	.02	.10	10	0	.05	10	0
19	.39	20	.02	.10	10	0	.05	10	0
20	.37	20	.02	.10	10	0	.05	10	0
21	.35	20	.02	.10	10	0	.05	10	0
22	.34	20	.02	.10	10	0	.05	10	0
23	.32	20	.02	.10	10	0	.05	10	0
24	.30	20	.02	.10	10	0	.05	10	0
25	.27	20	.01	.09	10	0	.05	10	0
26	.23	20	.01	.09	10	0	.05	10	0
27	.15	10	0	.09	10	0	.05	10	0
28	.14	10	0	.09	10	0	.06	10	0
29	.14	10	0	.08	10	0	.08	10	0
30	.13	10	0	.08	10	0	.10	10	0
31	.13	10	0	.07	10	0	--	--	--
TOTAL	11.68	--	.63	3.24	--	0	1.68	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 26286.93
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 664220.98

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: October 1966 to September 1968, water years 1969-70 (partial-record station). Prior to June 13, 1969, at site 450 ft downstream.
Sediment records: October 1968 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 4,800 mg/l Mar. 1; minimum daily, 2 mg/l on many days.
Sediment loads: Maximum daily, 12,800 tons Mar. 4; minimum daily, 0 tons on several days.
EXTREMES, 1968-70.--Sediment concentrations: Maximum daily, 32,000 mg/l (estimated) Jan. 25, 1969; minimum daily, no flow for many days in 1968 and 1969.
Sediment loads: Maximum daily, 2,220,000 tons (estimated) Jan. 25, 1969; minimum daily, 0 tons on many days in 1968-70.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	TEMPERATURE (DEG C)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
OCT.											
21...	1030	16.1	124	35	60	2.0	274	0	253	52	.6
JAN.											
19...	1030	15.0	127	34	56	2.0	292	0	250	46	.6
APR.											
14...	1430	19.4	123	36	59	2.0	279	0	264	45	.6
JULY											
21...	0915	21.1	106	38	62	2.0	240	0	268	50	.6

DATE	NITRATE (NO3) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	ALKALINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.										
21...	20	450	683	454	229	225	22	1.2	1030	7.9
JAN.										
19...	19	400	704	457	217	239	21	1.1	1060	8.0
APR.										
14...	14	450	700	455	226	229	22	1.2	1070	7.9
JULY										
21...	9.5	510	718	421	224	197	24	1.3	1010	7.8

11118500 VENTURA RIVER NEAR VENTURA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.1	10	.08	6.0	5	.08	10	2	.05
2	3.1	10	.08	5.0	5	.07	10	2	.05
3	3.2	10	.09	4.2	5	.06	11	2	.06
4	2.9	10	.08	.83	5	.01	11	2	.06
5	2.7	10	.07	1.3	5	.02	12	2	.06
6	3.4	10	.09	47	166	32	12	2	.06
7	3.7	10	.10	28	37	3.7	12	2	.06
8	4.2	8	.09	7.7	15	.31	13	2	.07
9	4.5	8	.10	7.2	13	.25	13	2	.07
10	4.4	8	.10	6.7	11	.20	13	2	.07
11	3.9	8	.08	5.3	9	.13	13	2	.07
12	4.6	8	.10	2.9	8	.06	12	2	.06
13	5.5	8	.12	1.3	7	.02	12	2	.06
14	6.8	8	.15	3.1	6	.05	11	2	.06
15	7.7	8	.17	4.4	6	.07	11	2	.06
16	8.6	8	.19	5.2	6	.08	14	5	.19
17	4.6	8	.10	4.1	5	.06	30	15	1.2
18	1.1	7	.02	3.0	5	.04	56	24	3.6
19	1.9	7	.04	1.5	4	.02	52	12	1.7
20	2.1	7	.04	2.8	4	.03	26	10	.70
21	2.5	7	.05	4.7	3	.04	13	9	.32
22	3.1	7	.06	6.0	2	.03	11	8	.24
23	3.7	7	.07	7.1	2	.04	18	7	.34
24	4.2	6	.07	7.0	2	.04	13	6	.21
25	4.4	6	.07	6.2	2	.03	11	5	.15
26	4.2	6	.07	4.9	2	.03	10	4	.11
27	4.4	6	.07	6.9	2	.04	10	4	.11
28	4.4	6	.07	8.6	2	.05	9.5	4	.10
29	4.6	6	.07	9.9	2	.05	9.1	4	.10
30	5.0	6	.08	9.9	2	.05	9.0	4	.10
31	7.2	5	.10	--	--	--	5.2	4	.06
TOTAL	129.7	--	2.67	218.73	--	37.66	472.8	--	10.15

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.9	4	.02	9.8	19	.50	681	4800	10500
2	1.9	4	.02	9.7	19	.50	314	1350	1920
3	2.2	4	.02	9.9	20	.53	40	50	5.4
4	2.4	4	.03	9.9	21	.56	399	3810	12800
5	2.6	4	.03	10	21	.57	173	1100	1110
6	3.0	4	.03	13	21	.74	39	104	11
7	2.9	4	.03	18	21	1.0	26	95	6.7
8	2.5	4	.03	17	21	.96	21	50	2.8
9	12	97	17	24	35	2.3	21	25	1.4
10	72	210	87	36	40	3.9	24	15	.97
11	23	8	.50	25	13	.88	21	11	.62
12	15	6	.24	14	10	.38	20	12	.65
13	7.4	5	.10	13	10	.35	19	13	.67
14	8.3	6	.13	9.4	9	.23	21	14	.79
15	8.6	7	.16	7.4	8	.16	18	18	.87
16	27	25	1.8	10	7	.19	16	22	.95
17	16	8	.35	11	6	.18	17	26	1.2
18	14	8	.30	11	5	.15	18	30	1.5
19	15	8	.32	11	4	.12	19	34	1.7
20	14	10	.38	11	4	.12	20	15	.81
21	14	12	.45	10	4	.11	21	10	.57
22	11	15	.45	8.7	4	.09	21	8	.45
23	8.6	15	.35	13	4	.14	22	6	.36
24	8.8	16	.38	12	4	.13	21	6	.34
25	8.8	16	.38	9.1	4	.10	16	4	.17
26	9.0	17	.41	7.0	4	.08	18	4	.19
27	9.3	17	.43	6.3	4	.07	16	4	.17
28	9.5	18	.46	436	3220	6170	18	4	.19
29	9.5	18	.46	--	--	--	21	5	.28
30	9.4	18	.46	--	--	--	20	5	.27
31	9.6	18	.47	--	--	--	17	5	.23
TOTAL	359.2	--	113.19	782.2	--	6185.04	2138	--	26371.25

11118500 VENTURA RIVER NEAR VENTURA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	17	5	.23	17	6	.28	3.9	30	.32
2	16	5	.22	14	6	.23	3.8	30	.31
3	14	5	.19	13	6	.21	4.7	29	.37
4	18	7	.34	6.8	5	.09	5.5	29	.43
5	19	7	.36	2.5	5	.03	6.8	28	.51
6	19	7	.36	2.7	5	.04	7.8	28	.59
7	19	7	.36	5.2	5	.07	8.9	27	.65
8	15	7	.28	5.9	5	.08	9.5	27	.69
9	7.6	7	.14	6.2	5	.08	9.7	26	.68
10	2.3	7	.04	8.3	5	.11	8.7	25	.59
11	5.3	7	.10	7.5	5	.10	7.4	24	.48
12	10	7	.19	6.5	5	.09	1.1	23	.07
13	6.4	7	.12	7.7	5	.10	2.5	25	.17
14	1.5	7	.03	7.5	5	.10	9.8	30	.79
15	1.6	7	.03	7.8	6	.13	13	40	1.4
16	10	7	.19	8.1	6	.13	8.8	35	.83
17	16	7	.30	9.2	7	.17	3.7	30	.30
18	13	7	.25	8.2	8	.18	5.9	29	.46
19	11	7	.21	7.7	8	.17	2.5	28	.19
20	12	7	.23	9.2	9	.22	4.5	26	.32
21	12	7	.23	9.2	9	.22	7.7	25	.52
22	11	7	.21	8.7	10	.23	7.0	24	.45
23	11	7	.21	8.4	12	.27	3.8	23	.24
24	10	7	.19	9.4	14	.36	2.2	22	.13
25	11	7	.21	10	16	.43	1.6	21	.09
26	11	7	.21	9.4	18	.46	3.8	20	.21
27	13	7	.25	8.9	20	.48	6.9	19	.35
28	12	7	.23	8.9	22	.53	4.4	18	.21
29	19	6	.31	11	30	.89	2.0	17	.09
30	19	6	.31	20	40	2.2	.36	16	.02
31	--	--	--	14	35	1.3	--	--	--
TOTAL	362.7	--	6.53	278.9	--	9.98	168.26	--	12.46

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.63	15	.03	.03	49	0	.03	106	.01
2	7.0	16	.30	.24	52	.03	.03	106	.01
3	4.0	17	.18	.20	55	.03	.03	106	.01
4	3.0	19	.15	.14	58	.02	.03	106	.01
5	2.0	21	.11	.42	61	.07	.03	104	.01
6	1.2	24	.08	.78	65	.14	.03	102	.01
7	5.1	27	.37	.86	68	.16	.03	100	.01
8	2.0	31	.17	.90	71	.17	.03	98	.01
9	1.5	35	.14	.91	74	.18	.03	96	.01
10	1.0	35	.09	.82	77	.17	.03	94	.01
11	4.5	34	.41	.87	80	.19	.03	92	.01
12	7.1	34	.65	1.1	83	.25	.03	90	.01
13	5.0	33	.45	1.2	86	.28	.03	88	.01
14	2.9	33	.26	1.2	90	.29	.03	86	.01
15	4.2	33	.37	5.8	94	1.5	.03	84	.01
16	4.2	32	.36	6.3	98	1.7	.02	82	0
17	3.5	32	.30	6.4	102	1.8	.02	80	0
18	2.5	32	.22	6.3	106	1.8	.02	80	0
19	3.2	31	.27	5.3	110	1.6	.02	78	0
20	2.5	31	.21	2.4	110	.71	.02	78	0
21	2.0	30	.16	1.1	110	.33	.02	76	0
22	1.8	30	.15	.84	110	.25	.02	76	0
23	1.6	29	.13	.19	110	.06	.02	74	0
24	1.5	29	.12	.23	110	.07	.02	74	0
25	1.4	28	.11	.89	110	.26	.02	72	0
26	1.4	31	.12	2.0	110	.59	.02	72	0
27	1.4	34	.13	.03	108	.01	.02	70	0
28	1.2	37	.12	.03	108	.01	.02	70	0
29	.74	40	.08	.03	108	.01	.02	70	0
30	.69	43	.08	.03	108	.01	.02	70	0
31	.19	46	.02	.03	108	.01	--	--	--
TOTAL	80.95	--	6.34	47.57	--	12.70	.75	--	.15

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 5039.76
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 32768.12

11118500 VENTURA RIVER NEAR VENTURA, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
MAR 1, 1970	1200	13.0	1130	8030	24500	40	51	64	83	95	98	99	100	--	--	--	VPWC

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 1970.
Sediment records: October 1968 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 7,780 mg/l Mar. 5; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 624 tons Mar. 5; minimum daily, 0 tons on many days.
EXTREMES, 1968-70.--Sediment concentrations: Maximum daily, 59,200 mg/l Feb. 25, 1969; minimum daily, no flow for many days each year.
Sediment loads: Maximum daily, 2,030,000 tons Feb. 25, 1969; minimum daily, 0 tons on many days each year.
REMARKS.--No flow Oct. 1 to Mar. 1, 3, Mar. 9 to Sept. 30. Temperature and sediment tables omitted for periods of no flow.

TEMPERATURE (°C) OF WATER AND SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

MARCH

DAY	WATER TEMPERA-TURE (°C)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	0	--	0
2	9.5	16	6010	388
3	--	0	--	0
4	--	4.5	2350	69
5	10.5	28	7780	624
6	--	12	7500	243
7	--	4.0	7000	76
8	--	1.7	6500	30
9	--	0	--	0
10	--	0	--	0
11	--	0	--	0
12	--	0	--	0
13	--	0	--	0
14	--	0	--	0
15	--	0	--	0
16	--	0	--	0
17	--	0	--	0
18	--	0	--	0
19	--	0	--	0
20	--	0	--	0
21	--	0	--	0
22	--	0	--	0
23	--	0	--	0
24	--	0	--	0
25	--	0	--	0
26	--	0	--	0
27	--	0	--	0
28	--	0	--	0
29	--	0	--	0
30	--	0	--	0
31	--	0	--	0
TOTAL	--	66.2	--	1430

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 66.2
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1430

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 (revised).
PERIOD OF RECORD.--Water temperatures: October 1967 to September 1970.
Sediment records: Water year 1967 (partial-record station), October 1967 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 6,770 mg/l Mar. 1; minimum daily, 2 mg/l on several days.
Sediment loads: Maximum daily, 188 tons Jan. 16; minimum daily, 0 tons on several days.
EXTREMES, 1967-70.--Sediment concentrations: Maximum daily, 49,300 mg/l Jan. 25, 1969; minimum daily, 1 mg/l on several days in 1967 and 1968.
Sediment loads: Maximum daily, 69,700 tons Jan. 25, 1969; minimum daily, 0 tons on many days in 1967-68, 1970.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	--	12.0	--	--	14.0	18.0	--	--	--	--	--
2	--	--	--	9.0	14.0	--	--	--	27.0	24.0	--	22.0
3	--	18.0	13.0	4.0	--	14.0	--	--	--	--	--	--
4	21.0	--	--	--	--	9.0	--	21.0	23.0	24.0	21.0	--
5	--	18.0	12.0	9.0	14.0	--	--	--	--	--	--	--
6	--	--	--	--	--	--	20.0	17.0	--	--	--	--
7	--	--	--	11.0	--	--	--	--	--	--	--	22.0
8	--	--	11.0	--	--	--	20.0	--	20.0	26.0	26.0	--
9	--	15.0	--	11.0	13.0	17.0	21.0	19.0	--	--	--	24.0
10	--	--	--	11.0	--	--	21.0	--	24.0	--	--	--
11	18.0	--	12.0	--	--	17.0	--	--	--	23.0	26.0	--
12	--	--	--	15.0	14.0	--	--	21.0	--	--	--	--
13	--	--	12.0	--	14.0	--	17.0	--	--	25.0	--	--
14	--	20.0	--	13.0	--	--	--	--	--	--	27.0	--
15	--	13.0	--	--	--	--	17.0	25.0	22.0	--	27.0	22.0
16	--	--	12.0	--	14.0	20.0	--	--	--	--	--	--
17	--	13.0	--	--	--	--	--	--	--	--	--	--
18	17.0	--	11.0	--	--	--	--	24.0	--	24.0	--	--
19	--	9.0	--	--	14.0	17.0	--	--	--	--	26.0	--
20	--	--	12.0	18.0	--	--	18.0	22.0	21.0	--	--	--
21	--	12.0	15.0	18.0	9.0	--	--	21.0	--	--	--	--
22	--	--	--	--	--	--	18.0	--	--	23.0	22.0	--
23	--	--	--	13.0	--	22.0	--	--	22.0	--	--	21.0
24	13.0	12.0	--	--	17.0	--	--	--	--	26.0	--	--
25	--	--	--	--	--	--	--	22.0	--	--	--	23.0
26	--	13.0	--	16.0	17.0	--	--	--	--	--	22.0	--
27	--	--	11.0	--	14.0	22.0	18.0	--	--	23.0	--	--
28	--	--	--	--	12.0	--	--	--	19.0	--	--	--
29	--	12.0	--	14.0	--	--	18.0	20.0	--	24.0	24.0	12.0
30	19.0	--	--	--	--	--	--	26.0	28.0	--	--	--
31	--	--	--	--	--	17.0	--	26.0	--	22.0	21.0	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

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

TOTAL-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)
1	1.2	99	.32	1.5	630	2.6	2.4	490	3.2
2	1.0	98	.26	1.5	670	2.7	2.2	450	2.7
3	.87	98	.23	1.5	700	2.8	2.2	1700	10
4	.87	97	.23	1.7	750	3.4	2.2	1900	11
5	.87	97	.23	1.9	1300	6.7	2.2	1600	9.5
6	.87	97	.23	2.1	1300	7.4	2.2	1350	8.0
7	1.0	100	.27	1.7	450	2.1	2.2	1200	7.1
8	1.3	200	.70	1.6	750	3.2	2.4	1250	8.1
9	1.3	200	.70	1.6	1000	4.3	2.4	1700	11
10	1.5	300	1.2	1.6	850	3.7	2.4	2250	15
11	1.5	300	1.2	1.6	550	2.4	2.4	2550	17
12	1.5	300	1.2	1.6	400	1.7	2.4	2150	14
13	1.3	200	.70	1.6	300	1.3	2.4	1600	10
14	1.6	400	1.7	1.6	250	1.1	2.4	1200	7.8
15	1.8	450	2.2	1.6	220	.95	2.2	1100	6.5
16	2.0	500	2.7	1.7	250	1.1	2.2	1000	5.9
17	1.6	450	1.9	2.2	250	1.5	2.2	900	5.3
18	1.5	450	1.8	2.9	300	2.3	2.2	800	4.8
19	1.5	300	1.2	2.2	550	3.3	2.4	700	4.5
20	1.5	320	1.3	2.2	1000	5.9	2.4	200	1.3
21	1.5	400	1.6	2.2	1400	8.3	2.6	250	1.8
22	1.5	550	2.2	2.2	1400	8.3	2.4	450	2.9
23	1.5	850	3.4	2.2	1300	7.7	2.2	450	2.7
24	1.5	950	3.8	2.4	1100	7.1	2.2	450	2.7
25	1.5	700	2.8	2.4	900	5.8	2.6	450	3.2
26	1.5	530	2.1	2.4	800	5.2	2.6	450	3.2
27	1.5	470	1.9	2.4	800	5.2	2.6	450	3.2
28	1.5	480	1.9	2.4	780	5.1	2.8	450	3.4
29	1.5	500	2.0	2.4	750	4.9	2.8	500	3.8
30	1.5	550	2.2	2.4	650	4.2	2.8	600	4.5
31	1.5	600	2.4	--	--	--	2.8	850	6.4
TOTAL	43.08	--	46.57	59.3	--	122.25	74.4	--	200.5

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)
1	3.1	1050	8.8	1.7	2000	9.2	5.5	6770	101
2	3.1	950	8.0	1.7	1600	7.3	3.7	3450	34
3	2.6	430	3.0	2.0	1300	7.0	2.7	2300	17
4	2.6	600	4.2	2.0	1000	5.4	2.4	4250	28
5	2.6	1150	8.1	2.0	750	4.1	3.7	3600	36
6	2.8	1400	11	2.0	500	2.7	3.1	2800	23
7	2.8	1600	12	2.2	450	2.7	2.7	2200	16
8	3.7	1100	11	2.2	450	2.7	2.8	1600	12
9	4.2	4270	48	2.4	350	2.3	2.8	1200	9.1
10	3.3	1450	13	2.4	200	1.3	2.8	2000	15
11	3.3	800	7.1	2.6	1400	9.8	2.8	4800	36
12	3.3	2550	23	2.8	2900	22	2.8	4900	37
13	3.3	1550	14	3.7	3300	33	2.8	4500	34
14	5.5	1640	24	2.6	3350	24	2.8	4100	31
15	7.0	1500	28	2.4	2850	18	2.8	3700	28
16	11	6320	188	2.4	1800	12	2.8	3200	24
17	4.2	1400	16	2.4	750	4.9	2.8	2900	22
18	3.1	850	7.1	2.4	250	1.6	2.8	2600	20
19	3.1	1300	11	2.4	100	.65	2.8	2200	17
20	3.1	2350	20	2.4	40	.26	2.8	1800	14
21	2.4	3650	24	2.4	30	.19	2.8	1500	11
22	2.0	2900	16	2.4	100	.65	2.8	1100	8.3
23	2.0	1850	10	2.4	350	2.3	2.8	800	6.0
24	2.6	1400	9.8	2.4	900	5.8	2.8	750	5.7
25	2.0	1550	8.4	2.4	1450	9.4	2.8	600	4.5
26	2.2	2750	16	2.8	1000	7.6	2.8	400	3.0
27	2.4	3800	25	2.3	450	2.8	2.8	250	1.9
28	2.0	4150	22	5.1	4510	62	2.8	300	2.3
29	2.0	4050	22	--	--	--	2.8	400	3.0
30	2.0	3200	17	--	--	--	2.8	550	4.2
31	2.0	2600	14	--	--	--	2.8	650	4.9
TOTAL	101.3	--	649.5	68.9	--	261.65	91.0	--	608.9

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

TOTAL-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)
1	2.8	700	5.3	2.2	180	1.1	2.2	20	.12
2	2.8	850	6.4	2.2	220	1.3	2.4	30	.19
3	2.6	1000	7.0	2.2	300	1.8	2.6	90	.63
4	2.6	1150	8.1	2.2	370	2.2	2.8	180	1.4
5	2.4	1500	9.7	2.2	360	2.1	3.1	180	1.5
6	2.4	2050	13	2.2	330	2.0	3.1	150	1.3
7	2.4	1500	9.7	2.2	270	1.6	3.1	130	1.1
8	2.4	800	5.2	2.4	300	1.9	3.3	120	1.1
9	2.4	450	2.9	2.4	430	2.8	3.5	120	1.1
10	2.4	400	2.6	2.2	550	3.3	3.3	110	.98
11	2.4	550	3.6	2.2	570	3.4	2.4	100	.65
12	2.4	1000	6.5	2.0	430	2.3	2.0	95	.51
13	2.4	1400	9.1	2.0	250	1.4	1.7	85	.39
14	2.4	1200	7.8	2.0	170	.92	1.7	80	.37
15	2.4	550	3.6	2.0	150	.81	1.7	70	.32
16	2.4	350	2.3	2.0	150	.81	1.7	70	.32
17	2.6	300	2.1	2.0	140	.76	1.7	90	.41
18	2.6	250	1.8	2.0	130	.70	1.7	135	.62
19	2.6	250	1.8	2.0	120	.65	1.7	180	.83
20	2.6	300	2.1	2.0	110	.59	1.7	220	1.0
21	2.6	450	3.2	1.7	105	.48	1.7	230	1.1
22	2.4	750	4.9	1.7	100	.46	1.7	225	1.0
23	2.4	750	4.9	2.0	90	.49	1.7	200	.92
24	2.4	650	4.2	1.7	85	.39	1.5	160	.65
25	2.4	450	2.9	2.0	75	.41	1.0	120	.32
26	2.2	300	1.8	2.0	65	.35	1.0	90	.24
27	2.2	200	1.2	2.0	55	.30	1.0	50	.14
28	2.2	150	.89	2.2	50	.30	1.2	35	.11
29	2.2	150	.89	2.2	40	.24	1.0	40	.11
30	2.2	150	.89	2.2	30	.18	.74	55	.11
31	--	--	--	2.2	20	.12	--	--	--
TOTAL	73.2	--	136.37	64.5	--	36.16	59.94	--	19.54

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)
1	.74	50	.10	1.3	3	.01	1.3	12	.04
2	.74	30	.06	1.3	3	.01	1.3	19	.07
3	.87	15	.04	1.3	3	.01	1.3	18	.06
4	1.0	5	.01	1.3	3	.01	1.3	12	.04
5	1.3	5	.02	1.3	4	.01	1.3	10	.04
6	2.2	30	.18	1.3	5	.02	1.2	17	.06
7	1.7	90	.41	1.2	6	.02	1.0	33	.09
8	1.5	270	1.1	1.0	6	.02	1.0	34	.09
9	1.2	280	.91	1.2	6	.02	1.0	32	.09
10	1.3	210	.74	1.3	6	.02	1.0	28	.08
11	1.2	260	.84	1.3	22	.08	1.0	23	.06
12	1.2	375	1.2	1.2	15	.05	1.2	17	.06
13	1.0	435	1.2	1.6	10	.04	1.2	14	.05
14	1.0	380	1.0	1.5	7	.03	1.2	11	.04
15	1.2	295	.96	1.7	8	.04	1.2	8	.03
16	1.3	225	.79	1.7	8	.04	.87	7	.02
17	1.3	125	.44	1.5	7	.03	.87	6	.01
18	1.5	43	.17	1.5	11	.04	.87	6	.01
19	1.7	50	.23	1.7	19	.09	.87	5	.01
20	1.7	45	.21	1.5	16	.06	.50	4	.01
21	2.0	100	.54	1.5	8	.03	.50	4	.01
22	2.0	50	.27	1.2	3	.01	.50	3	0
23	1.5	30	.12	.87	2	0	.50	2	0
24	1.2	4	.01	.87	2	0	.61	2	0
25	1.2	5	.02	.87	2	0	.50	3	0
26	1.2	5	.02	.87	2	0	.50	3	0
27	2.0	112	.60	1.5	4	.02	1.0	3	.01
28	1.3	45	.16	2.0	5	.03	1.3	12	.04
29	1.2	6	.02	1.3	7	.02	.87	10	.02
30	1.3	4	.01	1.2	8	.03	.74	7	.01
31	1.3	3	.01	1.3	9	.03	--	--	--
TOTAL	41.85	--	12.39	41.18	--	.82	28.50	--	1.05

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 747.15
TOTAL TOTAL -SEDIMENT DISCHARGE FOR YEAR (TONS) 2095.70

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

PARTICLE-SIZE DISTRIBUTION OF TOTAL SEDIMENT, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	MEAN DISCHARGE (CFS)	CONCENTRATION (MG/L)	TOTAL SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
NOV 5, 1969	1555	18.0	1.9	1680	8.6	29	31	37	49	66	73	84	96	100	--	--	VPWC
DEC 16.....	0920	7.5	2.2	1010	6.0	--	--	--	--	--	2	2	9	31	92	100	V
JAN 14, 1970	1650	13.0	5.5	2710	40	59	61	70	78	84	88	96	100	--	--	--	VPWC
JAN 20.....	1516	18.0	3.1	2510	21	1	2	2	2	3	4	6	20	47	98	100	VBWC
MAR 4.....	1700	9.0	4.5	12500	152	13	15	18	21	26	32	50	77	86	95	99	SPWC

11141280 LOPEZ CREEK NEAR ARROYO GRANDE, CALIF.

LOCATION.--Lat 35°13'48", long 120°28'22", in SE¼NE¼ sec.16, T.31 S., R.14 E., San Luis Obispo County, at gaging station 0.7 mile upstream from unnamed tributary, 3.2 miles upstream from mouth, and 9.2 miles northeast of Arroyo Grande.
DRAINAGE AREA.--21.6 sq mi (revised).
PERIOD OF RECORD.--Water temperatures: October 1967 to September 1970.
Sediment records: October 1967 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 787 mg/l Jan. 16; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 262 tons Jan. 16; minimum daily, 0.01 ton on several days.
EXTREMES, 1967-70.--Sediment concentrations: Maximum daily, 9,310 mg/l Jan. 19, 1969; minimum daily, 1 mg/l on many days in 1967-70.
Sediment loads: Maximum daily, 30,100 tons Jan. 25, 1969; minimum daily, 0 tons on several days in 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.1	6	.08	5.8	1	.02	5.8	3	.05
2	5.1	6	.08	5.6	1	.02	5.8	2	.03
3	5.0	6	.08	5.6	2	.03	5.8	2	.03
4	3.5	6	.06	5.6	4	.06	5.8	2	.03
5	5.1	7	.10	6.3	2	.03	5.8	2	.03
6	5.0	7	.09	8.0	4	.09	5.8	2	.03
7	5.0	8	.11	5.8	1	.02	5.8	2	.03
8	5.0	10	.14	5.8	1	.02	6.2	4	.07
9	5.0	12	.16	5.8	2	.03	6.5	2	.04
10	5.1	12	.17	5.4	2	.03	6.5	1	.02
11	4.9	9	.12	5.4	2	.03	6.5	1	.02
12	4.8	6	.08	5.4	2	.03	6.5	1	.02
13	5.1	3	.04	5.4	2	.03	6.5	1	.02
14	5.3	2	.03	5.8	2	.03	6.6	1	.02
15	5.4	2	.03	5.8	2	.03	7.0	2	.04
16	8.7	10	.28	5.8	2	.03	6.2	4	.07
17	6.8	3	.06	5.8	4	.06	5.8	4	.06
18	6.5	3	.05	5.8	5	.08	5.8	3	.05
19	5.8	2	.03	5.6	6	.09	6.8	4	.07
20	5.8	2	.03	5.4	6	.09	7.5	5	.10
21	5.8	1	.02	5.4	7	.10	8.2	9	.20
22	5.8	1	.02	5.4	7	.10	7.8	8	.17
23	5.8	2	.03	5.4	7	.10	6.8	4	.07
24	5.8	2	.03	5.4	7	.10	6.5	3	.05
25	5.8	2	.03	5.6	10	.15	9.4	9	.23
26	5.8	2	.03	5.8	9	.14	8.4	3	.07
27	6.5	2	.04	5.7	9	.14	7.6	3	.06
28	5.8	2	.03	5.8	8	.13	7.3	4	.08
29	5.8	2	.03	5.8	7	.11	7.2	4	.08
30	5.8	1	.02	5.9	4	.06	6.8	4	.07
31	5.8	1	.02	--	--	--	6.5	4	.07
TOTAL	172.5	--	2.12	172.1	--	1.98	207.5	--	1.98

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.5	4	.07	7.2	3	.06	75	419	99
2	6.5	7	.12	7.2	2	.04	52	35	4.9
3	6.4	10	.17	7.2	2	.04	32	20	1.7
4	6.5	6	.11	6.5	2	.04	64	271	96
5	6.5	2	.04	6.5	2	.04	63	105	21
6	6.5	1	.02	6.5	2	.04	37	20	2.0
7	6.5	1	.02	6.5	3	.05	29	10	.78
8	6.5	1	.02	6.5	5	.09	23	7	.43
9	8.0	8	.26	6.5	7	.12	20	5	.27
10	11	11	.34	6.5	8	.14	18	4	.19
11	9.4	7	.18	6.5	7	.12	15	6	.24
12	9.4	7	.18	6.5	6	.11	13	9	.32
13	8.7	6	.14	7.2	5	.10	12	12	.39
14	10	149	5.4	6.5	4	.07	12	13	.42
15	12	25	.81	6.5	3	.05	10	12	.32
16	86	787	262	5.8	2	.03	10	9	.24
17	33	25	3.0	6.5	2	.04	10	7	.19
18	12	6	.19	5.8	2	.03	10	7	.19
19	9.4	5	.13	5.8	2	.03	8.7	9	.21
20	9.4	5	.13	5.8	2	.03	8.7	9	.21
21	8.0	5	.11	5.8	2	.03	8.7	9	.21
22	7.2	4	.08	5.8	2	.03	8.7	9	.21
23	6.7	4	.07	5.8	3	.05	8.7	8	.19
24	9.4	15	.38	5.8	3	.05	8.7	7	.16
25	8.0	10	.22	5.7	3	.05	8.7	7	.16
26	8.0	10	.22	5.6	4	.06	8.7	9	.21
27	8.0	10	.22	5.4	3	.04	8.0	11	.24
28	7.2	9	.17	15	128	6.4	8.7	11	.26
29	7.2	6	.12	--	--	--	8.7	10	.23
30	7.2	4	.08	--	--	--	8.7	9	.21
31	7.2	3	.06	--	--	--	8.0	7	.15
TOTAL	354.3	--	275.06	184.9	--	7.98	616.7	--	231.23

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.0	6	.13	4.3	10	.12	3.1	5	.04
2	8.0	6	.13	4.3	13	.15	3.1	6	.05
3	8.0	6	.13	4.4	10	.12	3.1	6	.05
4	8.0	6	.13	4.5	7	.09	3.1	6	.05
5	8.0	6	.13	4.6	3	.04	3.1	7	.06
6	8.0	6	.13	4.5	6	.07	3.1	7	.06
7	8.0	7	.15	4.3	9	.10	3.1	7	.06
8	6.5	7	.12	4.3	12	.14	3.1	8	.07
9	5.8	18	.28	3.9	14	.15	3.1	8	.07
10	5.8	9	.14	3.9	16	.17	3.1	8	.07
11	5.8	7	.11	4.1	18	.20	3.1	9	.08
12	5.7	6	.09	4.3	25	.29	3.1	9	.08
13	5.8	5	.08	4.3	35	.41	3.1	9	.08
14	5.4	4	.06	4.3	36	.42	2.8	10	.08
15	5.4	3	.04	4.3	38	.44	2.8	10	.08
16	5.4	2	.03	4.3	36	.42	2.8	10	.08
17	5.4	1	.01	3.9	34	.36	2.8	11	.08
18	5.3	1	.01	3.9	32	.34	2.8	9	.07
19	5.4	1	.01	3.9	31	.33	2.8	7	.05
20	5.4	1	.01	3.7	30	.30	3.1	5	.04
21	5.4	1	.01	3.4	23	.21	2.8	6	.05
22	5.0	1	.01	3.4	3	.03	2.8	7	.05
23	4.9	3	.04	3.3	3	.03	2.8	7	.05
24	4.9	5	.07	3.5	3	.03	2.8	6	.05
25	5.0	8	.11	3.5	3	.03	3.1	6	.05
26	5.0	7	.09	3.5	4	.04	3.1	6	.05
27	5.0	6	.08	3.5	4	.04	3.1	6	.05
28	5.0	5	.07	3.5	4	.04	3.1	6	.05
29	4.9	4	.05	3.5	4	.04	3.1	6	.05
30	4.5	7	.09	3.5	5	.05	3.1	5	.04
31	--	--	--	3.5	5	.05	--	--	--
TOTAL	178.7	--	2.54	122.1	--	5.25	90.0	--	1.79

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.1	4	.03	1.8	4	.02	2.8	25	.19
2	2.8	4	.03	1.8	4	.02	2.8	30	.23
3	2.8	4	.03	1.8	4	.02	3.1	35	.29
4	2.8	4	.03	2.0	4	.02	3.1	40	.33
5	2.8	6	.05	2.4	4	.03	2.8	44	.33
6	2.8	8	.06	2.4	5	.03	2.8	45	.34
7	2.8	10	.08	2.0	5	.03	2.8	46	.35
8	2.8	12	.09	2.0	4	.02	2.8	46	.35
9	2.8	20	.15	2.0	4	.02	3.1	40	.33
10	2.8	35	.26	2.4	5	.03	2.8	30	.23
11	2.8	53	.40	2.4	5	.03	2.8	25	.19
12	2.8	68	.51	2.4	5	.03	2.8	20	.15
13	2.8	86	.65	2.4	10	.06	2.8	15	.11
14	2.4	85	.55	2.4	20	.13	2.8	9	.07
15	2.4	84	.54	2.4	24	.16	2.8	10	.08
16	2.4	83	.54	3.5	25	.24	2.0	10	.05
17	2.4	82	.53	3.5	26	.25	2.0	50	.27
18	2.0	80	.43	3.5	27	.26	2.0	110	.59
19	2.0	55	.30	2.8	27	.20	2.4	50	.32
20	2.0	29	.16	2.8	28	.21	2.4	20	.13
21	2.0	30	.16	3.1	29	.24	2.4	11	.07
22	2.0	50	.27	3.1	30	.25	2.4	8	.05
23	2.0	60	.32	3.1	25	.21	1.8	6	.03
24	2.0	69	.37	2.8	20	.15	1.8	4	.02
25	2.0	65	.35	2.8	17	.13	1.8	4	.02
26	2.0	65	.35	3.1	17	.14	1.8	4	.02
27	2.0	65	.35	3.1	18	.15	1.7	4	.02
28	1.8	65	.32	3.1	19	.16	1.7	4	.02
29	1.8	65	.32	3.1	19	.16	1.8	4	.02
30	1.8	65	.32	3.1	21	.18	1.8	4	.02
31	1.8	65	.32	3.1	23	.19	--	--	--
TOTAL	73.5	--	8.87	82.2	--	3.77	72.7	--	5.22

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 2327.2
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 547.79

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

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
JAN 14, 1970	1600	13.0	17	1140	52	46	60	76	91	98	100	--	--	--	--	--	SPWC
JAN 16.....	1115	13.0	198	2680	1430	29	37	46	52	58	65	75	92	99	100	--	VPWC
MAR 1.....	1210	13.0	82	460	102	42	54	61	66	70	78	83	92	99	100	--	VBWC
MAR 1.....	1520	13.0	130	833	292	27	36	45	53	62	70	84	95	100	--	--	VBWC
MAR 4.....	1710	11.0	117	862	272	20	27	33	40	46	54	70	90	100	--	--	VBWC

11143000 BIG SUR RIVER NEAR BIG SUR, CALIF.

LOCATION.--Lat 36°14'45", long 121°46'20", in SW¼SW¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.0°C July 3-5; minimum, 7.0°C on several days during December and January.
EXTREMES, 1965-70.--Water temperatures: Maximum (1965-67, 1968-70), 20.0°C on several days in 1966 and 1970; minimum (1965-66, 1967-70), 5.0°C Dec. 15, 1967.
REMARKS.--Recorder stopped Mar. 2 to Apr. 9.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	14.0	12.0	11.0	8.0	8.0	8.0	7.5	11.0	9.5	11.5	11.0
2	15.0	15.0	12.0	11.5	8.0	8.0	8.0	7.5	10.5	9.5	--	--
3	15.0	14.0	12.0	11.5	9.0	8.0	7.5	7.0	11.0	9.0	--	--
4	14.0	13.0	12.0	12.0	9.0	8.5	7.0	7.0	11.0	10.5	--	--
5	13.0	12.0	12.0	12.0	9.0	8.0	7.0	7.0	11.0	10.5	--	--
6	13.0	12.0	12.0	12.0	9.0	8.0	7.5	7.0	11.0	9.5	--	--
7	13.0	12.0	12.0	11.0	9.0	9.0	8.5	7.5	11.0	10.0	--	--
8	13.0	13.0	12.0	11.5	10.0	9.0	9.5	8.5	12.0	11.0	--	--
9	13.0	13.0	12.0	11.0	10.0	9.0	12.0	9.5	12.0	11.5	--	--
10	14.0	13.0	11.0	11.0	9.5	9.0	12.0	11.5	12.0	12.0	--	--
11	14.0	13.0	11.0	11.0	11.0	9.5	12.0	11.5	12.5	12.0	--	--
12	13.0	12.0	11.0	11.0	12.0	11.0	12.0	12.0	12.0	12.0	--	--
13	13.0	12.0	12.0	11.0	12.0	11.0	12.5	12.0	12.0	11.0	--	--
14	12.0	12.0	12.5	12.0	11.0	10.0	12.5	12.0	11.0	10.5	--	--
15	13.0	12.0	13.0	12.0	10.0	9.0	12.5	12.0	11.0	9.5	--	--
16	14.0	13.0	13.0	12.0	9.0	9.0	13.0	12.5	11.0	9.5	--	--
17	14.0	13.0	12.0	10.5	10.0	9.0	13.0	13.0	11.0	9.0	--	--
18	13.0	12.0	10.5	8.5	11.0	10.0	13.0	12.0	10.0	9.0	--	--
19	13.0	12.0	9.0	8.0	12.5	11.0	13.5	13.0	10.0	9.0	--	--
20	12.0	11.0	9.0	8.0	13.0	12.5	14.0	13.5	9.0	8.0	--	--
21	12.0	11.0	9.0	8.5	13.5	12.0	14.0	14.0	10.0	9.0	--	--
22	12.0	12.0	9.0	8.5	12.0	11.5	14.0	14.0	10.0	9.0	--	--
23	13.0	12.0	9.0	9.0	12.0	11.0	14.0	13.5	10.0	8.0	--	--
24	13.0	13.0	9.0	8.5	13.0	12.0	14.0	12.0	11.0	9.5	--	--
25	13.0	12.0	9.0	8.5	13.0	12.0	12.0	11.5	10.5	9.0	--	--
26	13.0	12.0	9.0	8.0	12.0	11.0	12.0	10.5	11.0	9.0	--	--
27	13.0	12.0	8.5	8.0	11.0	9.0	11.0	11.0	11.0	9.0	--	--
28	13.0	12.0	9.0	8.0	9.0	9.0	10.5	9.0	12.0	11.0	--	--
29	13.0	12.0	9.0	8.0	9.0	8.0	9.5	9.0	--	--	--	--
30	12.5	12.0	8.0	8.0	8.0	7.0	10.0	9.0	--	--	--	--
31	12.0	11.0	--	--	8.0	7.0	10.5	9.0	--	--	--	--
AVE	13.2	12.4	10.7	10.0	10.4	9.5	11.2	10.5	11.0	9.9	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	13.0	11.0	17.0	16.0	19.0	17.0	18.0	16.5	18.0	17.0
2	--	--	14.0	12.0	18.0	16.0	19.0	18.0	18.5	17.0	18.0	17.0
3	--	--	14.0	12.5	18.0	16.0	20.0	18.0	18.5	17.5	17.5	16.0
4	--	--	14.0	13.0	18.0	16.0	20.0	18.0	18.0	17.0	17.0	16.5
5	--	--	14.0	13.0	17.0	16.0	20.0	18.0	18.0	16.5	17.0	16.0
6	--	--	13.0	12.0	16.0	15.0	19.0	18.0	19.0	17.0	17.0	16.5
7	--	--	13.0	11.0	16.0	14.0	18.0	17.0	19.0	18.0	17.5	17.0
8	--	--	13.0	12.0	16.0	14.5	18.0	17.0	19.0	17.5	18.0	17.0
9	--	--	13.5	12.0	16.0	14.0	17.5	16.5	19.5	18.0	18.0	17.5
10	14.0	13.0	13.0	12.0	16.5	15.0	17.0	16.0	19.0	18.0	18.5	18.0
11	14.0	12.0	13.0	11.0	16.0	14.5	17.5	16.0	18.0	16.5	18.5	17.0
12	13.0	11.5	12.0	11.0	16.0	14.0	17.5	16.5	18.0	17.0	18.0	17.0
13	12.5	11.0	14.0	11.0	16.0	14.0	18.0	16.0	18.0	17.0	16.5	15.5
14	11.0	10.5	15.0	13.0	15.5	14.0	18.0	16.5	17.5	16.5	15.5	14.5
15	11.0	9.0	16.0	13.0	16.0	12.0	18.0	16.5	17.5	16.0	15.0	14.5
16	11.0	9.5	16.0	13.0	16.0	15.0	18.0	16.0	17.0	16.0	15.5	14.5
17	12.0	10.5	15.5	13.5	16.0	14.0	18.5	16.5	17.5	16.5	16.0	15.5
18	12.0	10.0	15.0	14.0	16.5	14.0	18.5	17.0	17.5	16.5	16.5	15.5
19	12.5	11.0	14.0	13.0	17.0	15.5	19.5	18.0	17.5	16.5	16.5	16.0
20	12.0	10.5	14.0	12.0	18.0	16.0	19.5	18.5	17.5	16.5	16.5	15.5
21	11.0	10.5	15.0	13.0	18.0	16.5	19.5	18.0	17.0	16.5	16.5	16.0
22	11.0	9.0	16.0	14.5	18.0	17.0	18.5	17.5	16.5	15.5	16.0	15.5
23	11.0	9.5	16.0	14.0	18.0	16.0	18.0	17.0	16.5	15.5	17.0	16.0
24	12.0	10.5	15.5	14.0	18.0	16.5	17.5	16.5	17.0	16.0	17.0	16.5
25	12.0	11.0	15.5	14.0	18.0	17.0	17.5	16.5	17.0	16.0	17.0	16.0
26	12.0	11.0	15.0	14.0	18.0	17.0	18.0	17.0	18.0	17.0	16.5	16.0
27	11.0	10.0	15.0	14.0	18.0	17.0	18.0	16.5	17.5	17.0	17.0	16.5
28	11.0	9.0	14.0	13.0	18.0	16.5	18.5	16.5	17.5	17.0	16.5	16.0
29	11.0	9.0	15.0	13.0	17.0	16.0	18.5	17.0	17.5	16.5	16.5	16.0
30	12.0	10.5	16.0	13.0	18.0	16.0	18.5	16.5	17.5	16.5	16.5	16.0
31	--	--	16.5	14.0	--	--	18.5	17.0	18.0	16.5	--	--
AVE	--	--	14.5	12.8	17.0	15.4	18.4	17.0	17.8	16.7	16.9	16.1

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 on downstream pier of highway bridge, 0.2 mile downstream from unnamed tributary, and 8.6 miles west of Templeton.
DRAINAGE AREA.--2.95 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1967 to September 1970.
Sediment records: October 1967 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 1,950 mg/l Jan. 16; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 2,740 tons Jan. 16; minimum daily, 0 tons on many days.
EXTREMES, 1967-70.--Sediment concentrations: Maximum daily, 5,710 mg/l Jan. 19, 1969; minimum daily, no flow for many days each year.
Sediment loads: Maximum daily, 9,770 tons Jan. 19, 1969; minimum daily, 0 tons on many days each year.
REMARKS.--No flow Oct. 1 to Dec. 24, Dec. 26 to Jan. 8, May 18 to Sept. 30. Sediment table omitted for period July 1 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1							0	--	0
2							0	--	0
3							0	--	0
4							0	--	0
5							0	--	0
6							0	--	0
7							0	--	0
8							0	--	0
9							0	--	0
10							0	--	0
11							0	--	0
12							0	--	0
13							0	--	0
14							0	--	0
15							0	--	0
16							0	--	0
17							0	--	0
18							0	--	0
19							0	--	0
20							0	--	0
21							0	--	0
22							0	--	0
23							0	--	0
24							0	--	0
25							18	357	51
26							0	--	0
27							0	--	0
28							0	--	0
29							0	--	0
30							0	--	0
31							0	--	0
TOTAL	0	--	0	0	--	0	18	--	51

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	--	0	3.5	4	.04	62	154	30
2	0	--	0	3.2	4	.03	26	10	.70
3	0	--	0	2.9	3	.02	13	4	.14
4	0	--	0	2.6	3	.02	63	285	123
5	0	--	0	2.4	3	.02	31	12	1.0
6	0	--	0	2.1	3	.02	17	5	.23
7	0	--	0	2.1	3	.02	11	3	.09
8	0	--	0	1.9	3	.02	7.5	2	.04
9	10	162	20	1.9	3	.02	5.8	2	.03
10	.76	57	.33	1.7	3	.01	4.8	2	.03
11	9.0	147	6.1	1.7	3	.01	4.1	2	.02
12	8.3	102	3.0	2.6	3	.02	3.5	2	.02
13	.17	13	.01	23	68	9.4	3.2	2	.02
14	33	631	162	5.8	16	.25	2.9	2	.02
15	6.1	17	.28	4.1	12	.13	2.6	2	.01
16	363	1950	2740	3.5	11	.10	2.4	2	.01
17	73	170	43	4.8	13	.17	2.1	2	.01
18	23	15	.93	3.5	11	.10	1.9	2	.01
19	13	9	.32	3.2	10	.09	1.9	2	.01
20	11	8	.24	2.9	9	.07	1.7	2	.01
21	6.6	5	.09	2.6	9	.06	1.7	2	.01
22	4.4	4	.05	2.4	8	.05	1.7	2	.01
23	3.5	4	.04	2.1	8	.05	1.5	1	0
24	56	130	38	2.1	8	.05	1.5	1	0
25	15	12	.49	1.9	7	.04	1.3	1	0
26	10	8	.22	1.7	7	.03	1.3	1	0
27	9.5	7	.18	1.7	6	.03	1.1	1	0
28	6.6	5	.09	26	60	6.1	1.1	1	0
29	5.4	5	.07	--	--	--	1.1	1	0
30	4.4	4	.05	--	--	--	1.1	1	0
31	4.1	4	.04	--	--	--	.82	1	0
TOTAL	675.83	--	3015.53	119.9	--	16.97	281.62	--	155.42

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.82	1	0	.23	1	0			
2	.82	1	0	.17	1	0			
3	.65	1	0	.17	1	0			
4	.52	1	0	.12	1	0			
5	.65	1	0	.12	1	0			
6	.65	1	0	.09	1	0			
7	.65	1	0	.09	1	0			
8	.65	1	0	.09	1	0			
9	.65	1	0	.06	1	0			
10	.52	1	0	.06	1	0			
11	.52	1	0	.04	1	0			
12	.52	1	0	.04	1	0			
13	.52	1	0	.06	1	0			
14	.39	1	0	.06	1	0			
15	.52	1	0	.04	1	0			
16	.52	1	0	.02	1	0			
17	.39	1	0	.01	1	0			
18	.30	1	0	0	--	0			
19	.30	1	0	0	--	0			
20	.30	1	0	0	--	0			
21	.30	1	0	0	--	0			
22	.30	1	0	0	--	0			
23	.30	1	0	0	--	0			
24	.30	1	0	0	--	0			
25	.30	1	0	0	--	0			
26	.23	1	0	0	--	0			
27	.23	1	0	0	--	0			
28	.23	1	0	0	--	0			
29	.23	1	0	0	--	0			
30	.23	1	0	0	--	0			
31	--	--	--	0	--	0			
TOTAL	13.51	--	0	1.47	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1110.33
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 3238.92

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
JAN 11, 1970	1500	10.0	25	329	22	58	72	85	93	96	98	98	99	100	--	--	SBWC
JAN 14.....	1510	10.0	173	2710	1270	40	43	55	69	79	88	93	98	100	--	--	VPWC
JAN 16.....	0900	12.0	820	4050	8970	33	40	49	62	73	82	93	99	100	--	--	VPWC
JAN 16.....	1400	14.0	254	1370	940	28	35	45	55	67	76	87	96	100	--	--	VPWC

11147070 SANTA RITA CREEK NEAR TEMPLETON, CALIF.

LOCATION.--Lat 35°31'26", long 120°45'54", in Asuncion Grant, San Luis Obispo County, at gaging station 1.6 miles upstream from mouth, and 4 miles west of Templeton.
DRAINAGE AREA.--18.2 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1967 to September 1970.
Sediment records: October 1967 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 2,580 mg/l Jan. 16; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 7,770 tons Jan. 16; minimum daily, 0 tons on many days.
EXTREMES, 1967-70.--Sediment concentrations: Maximum daily, 5,470 mg/l Jan. 19, 1969; minimum daily, no flow for many days each year.
Sediment loads: Maximum daily, 30,500 tons Jan. 19, 1969; minimum daily, 0 tons on many days each year.
REMARKS.--No flow Oct. 1 to Dec. 9, June 27 to Sept. 30. Sediment table omitted for period July 1 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	6.0	10.0	11.0	--	15.0	20.0	--	--	--
2	--	--	--	--	10.0	10.0	--	--	--	--	--	--
3	--	--	--	5.0	10.0	9.0	--	--	--	--	--	--
4	--	--	--	--	--	9.0	--	20.0	--	--	--	--
5	--	--	--	4.0	--	8.0	--	--	19.0	--	--	--
6	--	--	--	--	--	13.0	--	--	--	--	--	--
7	--	--	--	6.0	--	14.0	--	--	--	--	--	--
8	--	--	--	7.0	--	--	13.0	22.0	18.0	--	--	--
9	--	--	--	8.0	11.0	11.0	13.5	--	--	--	--	--
10	--	--	--	9.0	12.0	--	17.0	--	--	--	--	--
11	--	--	--	10.0	12.0	11.0	--	21.0	--	--	--	--
12	--	--	6.0	10.0	13.0	--	--	--	20.0	--	--	--
13	--	--	--	10.0	12.0	15.0	17.0	--	--	--	--	--
14	--	--	7.0	11.0	11.0	--	--	--	--	--	--	--
15	--	--	--	10.0	12.0	13.0	--	22.0	25.0	--	--	--
16	--	--	8.0	12.0	11.0	--	--	--	--	--	--	--
17	--	--	--	12.0	13.0	16.0	13.0	--	--	--	--	--
18	--	--	10.0	11.0	11.0	--	--	--	--	--	--	--
19	--	--	11.0	12.0	11.0	11.0	--	22.0	20.0	--	--	--
20	--	--	12.0	12.0	11.0	12.0	17.0	--	--	--	--	--
21	--	--	12.0	13.0	12.0	--	--	--	--	--	--	--
22	--	--	10.0	13.0	13.0	--	--	23.0	21.0	--	--	--
23	--	--	--	13.5	13.0	--	--	--	--	--	--	--
24	--	--	11.0	12.5	13.0	--	15.0	--	--	--	--	--
25	--	--	12.0	11.0	13.0	--	--	18.0	--	--	--	--
26	--	--	9.0	10.0	12.0	--	--	--	23.0	--	--	--
27	--	--	--	11.0	11.0	--	13.0	--	--	--	--	--
28	--	--	5.0	9.0	11.0	--	--	--	--	--	--	--
29	--	--	--	9.0	--	--	--	18.0	--	--	--	--
30	--	--	6.0	8.5	--	--	--	--	--	--	--	--
31	--	--	--	9.0	--	--	--	--	--	--	--	--
AVE	--	--	--	9.8	11.7	--	--	--	--	--	--	--

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

SUSPENDED-SEDIMENT DISCHARGE,,WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1							0	--	0
2							0	--	0
3							0	--	0
4							0	--	0
5							0	--	0
6							0	--	0
7							0	--	0
8							0	--	0
9							0	--	0
10							.01	1	0
11							.07	4	0
12							.09	4	0
13							.11	4	0
14							.12	4	0
15							.12	4	0
16							.12	4	0
17							.12	3	0
18							.13	2	0
19							.80	14	0
20							2.1	4	.02
21							1.6	5	.02
22							1.2	1	0
23							.51	1	0
24							.36	1	0
25							32	363	64
26							9.4	62	2.3
27							2.6	9	.06
28							1.3	3	.01
29							.85	2	0
30							.66	1	0
31				--	--	--	.55	1	0
TOTAL	0	--	0	0	--	0	54.82	--	66.41

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.48	3	0	18	4	.19	163	739	376
2	.41	3	0	15	4	.16	112	566	189
3	.39	2	0	14	3	.11	63	195	33
4	.35	2	0	13	3	.11	172	927	694
5	.33	2	0	10	2	.05	134	300	123
6	.37	3	0	9.0	2	.05	75	140	28
7	.47	6	.01	8.3	1	.02	53	75	11
8	.47	3	0	7.7	1	.02	42	26	2.9
9	1.2	51	.46	7.1	1	.02	33	10	.89
10	24	297	29	6.6	3	.05	30	9	.73
11	32	97	15	5.8	2	.03	25	7	.47
12	66	368	70	7.3	1	.02	22	5	.30
13	30	64	6.1	36	179	31	19	3	.15
14	82	318	172	25	18	1.4	17	3	.14
15	73	153	30	16	5	.22	16	3	.13
16	763	2580	7770	13	1	.04	14	3	.11
17	227	453	311	17	2	.09	13	3	.11
18	140	140	53	12	1	.03	11	3	.09
19	80	50	11	10	2	.05	10	3	.08
20	43	30	3.5	9.2	2	.05	8.8	6	.14
21	25	15	1.0	8.0	1	.02	7.7	5	.10
22	19	10	.51	7.1	5	.10	7.1	4	.08
23	15	8	.32	6.5	1	.02	7.1	3	.06
24	130	293	130	6.1	2	.03	6.5	3	.05
25	60	40	6.5	5.2	2	.03	6.5	3	.05
26	44	15	1.8	5.0	2	.03	6.0	3	.05
27	41	31	3.5	5.0	15	.20	5.5	3	.04
28	32	22	1.9	50	282	65	5.0	3	.04
29	27	10	.73	--	--	--	3.8	3	.03
30	23	8	.50	--	--	--	3.0	3	.02
31	20	5	.27	--	--	--	2.7	3	.02
TOTAL	2000.47	--	8618.10	352.9	--	99.14	1093.7	--	1460.78

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.7	2	.01	1.3	5	.02	.25	1	0
2	2.4	2	.01	1.3	5	.02	.24	1	0
3	2.4	2	.01	1.1	6	.02	.22	1	0
4	2.4	2	.01	.96	6	.02	.20	1	0
5	2.1	2	.01	.99	6	.02	.18	1	0
6	2.1	2	.01	.96	6	.02	.18	1	0
7	2.1	2	.01	.89	5	.01	.18	1	0
8	1.8	2	.01	.56	5	.01	.19	1	0
9	1.8	2	.01	.45	5	.01	.20	1	0
10	1.7	5	.02	.43	5	.01	.20	1	0
11	1.5	5	.02	.43	5	.01	.20	1	0
12	1.4	6	.02	.43	5	.01	.18	1	0
13	1.4	6	.02	.43	5	.01	.18	1	0
14	1.4	6	.02	.43	6	.01	.16	2	0
15	1.5	5	.02	.40	6	.01	.15	2	0
16	1.8	5	.02	.37	6	.01	.14	2	0
17	2.0	5	.03	.36	7	.01	.13	1	0
18	1.9	5	.03	.36	7	.01	.11	1	0
19	1.7	6	.03	.41	7	.01	.08	1	0
20	1.5	6	.02	.42	7	.01	.07	1	0
21	1.5	6	.02	.41	6	.01	.06	1	0
22	1.6	5	.02	.37	6	.01	.07	1	0
23	1.5	4	.02	.34	5	0	.05	1	0
24	1.5	4	.02	.35	5	0	.05	1	0
25	1.6	4	.02	.41	4	0	.04	1	0
26	1.5	5	.02	.42	3	0	.02	1	0
27	1.5	5	.02	.43	2	0	0	--	0
28	1.5	5	.02	.41	2	0	0	--	0
29	1.2	5	.02	.38	2	0	0	--	0
30	1.2	5	.02	.34	2	0	0	--	0
31	--	--	--	.29	2	0	--	--	--
TOTAL	52.2	--	.54	17.13	--	.28	3.73	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 3574.95
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 10245.25

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 25, 1969	1330	13.0	98	800	212	76	80	91	97	97	100	--	--	--	--	--	SPWC
JAN 10, 1970	0600	9.0	37	538	54	82	94	96	96	96	97	98	99	100	--	--	SBWC
JAN 10.....	1130	12.0	18	209	10	--	--	--	--	--	66	74	89	99	100	--	V
JAN 14.....	2030	11.0	238	1050	675	53	59	73	85	92	96	97	99	100	--	--	SPWC
JAN 16.....	1215	12.0	1570	5420	23000	12	14	17	22	26	34	51	85	96	100	--	VPWC
JAN 16.....	1615	12.0	870	2860	6720	19	24	30	40	48	58	71	80	84	98	100	VPWC
JAN 16.....	1830	12.0	552	864	1290	32	43	53	64	75	84	93	100	--	--	--	VBWC
JAN 17.....	0830	12.0	312	671	565	27	34	42	49	55	61	69	90	100	--	--	VBWC
JAN 20.....	1140	12.0	40	46	5.0	--	--	--	--	--	77	79	84	89	100	--	S
FEB 28.....	1500	12.0	116	731	229	44	56	66	76	84	89	93	99	100	--	--	SBWC
MAR 4.....	1600	9.0	395	2520	2690	40	46	60	69	79	88	95	99	100	--	--	VPWC

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 1970.
Sediment records: March 1958 to September 1959, October 1960 to September 1964, water year 1965 (partial-record station), March 1965 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 952 mg/l Jan. 16; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 27,000 tons Jan. 16; minimum daily, 0 tons on many days.
EXTREMES, 1958-59, 1960-64, 1965-70.--Sediment concentrations: Maximum daily, 6,860 mg/l Nov. 13, 1960; minimum daily, no flow for many days each year.
Sediment loads: Maximum daily, 242,000 tons Jan. 25, 1969; minimum daily, 0 tons on many days each year.
REMARKS.--No flow Oct. 1 to Nov. 10, July 10 to Sept. 30.
REVISIONS (WATER YEARS).--WRD Calif. 1969: 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	8.0	9.0	--	--	13.0	--	--	--
4	--	--	--	--	--	--	13.0	10.0	--	--	--	--
5	--	--	7.0	--	--	10.0	--	--	--	--	--	--
6	--	--	--	3.0	9.0	--	14.0	--	--	--	--	--
7	--	--	--	--	--	--	11.0	11.0	11.0	--	--	--
8	--	--	--	--	--	11.0	--	--	--	--	--	--
9	--	--	--	--	10.0	--	--	--	--	--	--	--
10	--	--	--	--	--	10.0	--	12.0	--	--	--	--
11	--	--	--	--	--	--	12.0	--	12.0	--	--	--
12	--	--	--	8.0	11.0	--	--	--	--	--	--	--
13	--	14.0	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	11.0	12.0	--	10.0	--	--	--	--
15	--	--	--	--	--	--	9.0	--	13.0	--	--	--
16	--	--	--	11.0	--	--	--	--	--	--	--	--
17	--	--	8.0	--	11.0	13.0	--	--	--	--	--	--
18	--	--	7.0	10.0	--	--	--	13.0	--	--	--	--
19	--	--	17.0	--	--	12.0	--	--	--	--	--	--
20	--	8.0	--	--	9.0	--	12.0	27.0	--	--	--	--
21	--	--	--	13.0	--	--	--	--	14.0	--	--	--
22	--	--	--	13.0	--	11.0	--	--	--	--	--	--
23	--	--	--	--	10.0	--	--	--	--	--	--	--
24	--	--	10.0	--	12.0	--	12.0	17.0	--	--	--	--
25	--	--	12.0	10.0	--	--	--	--	--	--	--	--
26	--	--	--	--	11.0	12.0	--	--	--	--	--	--
27	--	--	--	11.5	--	--	--	14.0	17.0	--	--	--
28	--	--	7.0	--	--	--	7.0	--	--	--	--	--
29	--	--	--	7.0	--	--	--	--	--	--	--	--
30	--	5.0	--	--	--	--	--	--	18.0	--	--	--
31	--	--	4.0	9.0	--	11.0	--	13.0	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

11148800 NACIMIENTO RIVER NEAR BRYSON, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	--	0	2.0	1	.01
2				0	--	0	1.7	1	0
3				0	--	0	1.7	2	.01
4				0	--	0	1.5	2	.01
5				0	--	0	1.6	3	.01
6				0	--	0	1.5	3	.01
7				0	--	0	1.7	3	.01
8				0	--	0	1.9	3	.02
9				0	--	0	2.0	3	.02
10				0	--	0	1.9	3	.02
11				3.7	2	.02	2.0	3	.02
12				4.2	2	.02	2.0	3	.02
13				3.6	2	.02	2.1	3	.02
14				3.2	2	.02	2.0	3	.02
15				3.0	2	.02	2.0	3	.02
16				2.5	2	.01	2.0	3	.02
17				2.4	2	.01	2.0	3	.02
18				2.3	2	.01	1.7	1	0
19				2.1	2	.01	104	67	115
20				2.1	2	.01	432	174	215
21				2.3	2	.01	498	193	336
22				2.3	2	.01	401	210	227
23				2.3	2	.01	173	120	56
24				2.0	2	.01	112	105	32
25				2.0	2	.01	984	464	1690
26				2.0	1	.01	486	220	289
27				2.0	1	.01	252	36	24
28				1.7	1	0	170	4	1.8
29				1.7	1	0	123	3	1.0
30				1.9	1	.01	90	2	.49
31				--	--	--	68	2	.37
TOTAL	0	--	0	49.3	--	.23	3926.3	--	2987.92

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	54	2	.29	188	2	1.0	3940	926	10300
2	44	2	.24	167	1	.45	1420	586	2340
3	36	2	.19	152	1	.41	730	350	690
4	31	2	.17	140	1	.38	1380	555	3010
5	26	2	.14	128	1	.35	1250	406	1480
6	22	2	.12	115	1	.31	700	80	151
7	20	2	.11	110	1	.30	520	6	8.4
8	21	2	.11	101	1	.27	434	5	5.9
9	1150	134	949	98	1	.26	353	5	4.8
10	1260	83	403	95	1	.26	298	5	4.0
11	953	75	264	86	1	.23	256	4	2.8
12	924	22	55	113	34	14	225	3	1.8
13	527	8	11	170	107	64	203	2	1.1
14	1150	123	700	200	160	86	182	2	.98
15	1330	124	534	143	56	22	170	2	.92
16	9150	952	27000	125	11	3.7	152	2	.82
17	2220	160	959	155	2	.84	146	2	.79
18	1060	48	137	131	2	.71	134	2	.72
19	682	18	33	119	1	.32	125	1	.34
20	655	12	21	113	1	.31	119	1	.32
21	490	9	12	104	1	.28	113	1	.31
22	397	6	6.4	95	1	.26	107	2	.58
23	329	5	4.4	86	1	.23	101	2	.55
24	1250	60	232	86	3	.70	95	1	.26
25	655	22	39	80	2	.43	92	1	.25
26	475	13	17	76	1	.21	89	1	.24
27	413	11	12	73	1	.20	83	1	.22
28	345	6	5.6	1260	432	3650	76	1	.21
29	284	3	2.3	--	--	--	76	2	.41
30	246	3	2.0	--	--	--	70	3	.57
31	213	2	1.2	--	--	--	73	4	.79
TOTAL	26412	--	31401.27	4509	--	3848.41	13712	--	18009.08

11148800 NACIMIENTO RIVER NEAR BRYSON, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	66	2	.36	34	2	.18	11	1	.03
2	63	1	.17	33	1	.09	9.2	1	.02
3	63	1	.17	32	1	.09	8.2	1	.02
4	58	1	.16	32	1	.09	7.1	1	.02
5	58	2	.31	30	1	.08	6.4	1	.02
6	56	3	.45	28	2	.15	6.6	1	.02
7	55	4	.59	28	3	.23	6.8	1	.02
8	53	3	.43	28	6	.45	6.9	1	.02
9	53	2	.29	28	9	.68	7.2	1	.02
10	51	2	.28	26	12	.84	7.7	1	.02
11	50	2	.27	26	10	.70	8.6	1	.02
12	48	2	.26	25	8	.54	8.0	1	.02
13	46	3	.37	25	8	.54	7.3	1	.02
14	49	4	.53	24	8	.52	7.3	1	.02
15	48	5	.65	23	6	.37	7.8	1	.02
16	47	5	.63	21	4	.23	7.6	1	.02
17	46	5	.62	21	2	.11	7.1	1	.02
18	45	5	.61	19	2	.10	6.8	1	.02
19	43	6	.70	18	2	.10	6.2	2	.03
20	42	6	.68	18	2	.10	5.3	10	.14
21	41	5	.55	18	2	.10	4.6	19	.24
22	41	4	.44	17	2	.09	3.6	10	.10
23	40	3	.32	16	2	.09	3.1	2	.02
24	38	3	.31	15	2	.08	3.0	1	.01
25	38	3	.31	14	1	.04	2.9	1	.01
26	37	3	.30	14	1	.04	3.1	1	.01
27	36	3	.29	14	1	.04	3.3	1	.01
28	36	3	.29	14	1	.04	3.3	1	.01
29	37	3	.30	14	2	.08	3.1	1	.01
30	35	2	.19	13	3	.11	2.8	1	.01
31	--	--	--	11	4	.12	--	--	--
TOTAL	1419	--	11.83	679	--	7.02	181.9	--	.97

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.4	1	.01						
2	1.9	1	.01						
3	1.4	1	0						
4	1.0	1	0						
5	.76	1	0						
6	.51	1	0						
7	.31	1	0						
8	.15	1	0						
9	.05	1	0						
10	0	--	0						
11	0	--	0						
12	0	--	0						
13	0	--	0						
14	0	--	0						
15	0	--	0						
16	0	--	0						
17	0	--	0						
18	0	--	0						
19	0	--	0						
20	0	--	0						
21	0	--	0						
22	0	--	0						
23	0	--	0						
24	0	--	0						
25	0	--	0						
26	0	--	0						
27	0	--	0						
28	0	--	0						
29	0	--	0						
30	0	--	0						
31	0	--	0				--	--	--
TOTAL	8.48	--	.02	0	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 50896.98
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 56266.75

11148800 NACIMIENTO RIVER NEAR BRYSON, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
DEC 25, 1969	1130	12.0	1570	832	3530	5	7	7	7	8	49	79	99	100	--	--	VBWC

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 1970.
Sediment records: October 1965 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 3,640 mg/l Jan. 16; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 33,400 tons Jan. 16; minimum daily, 0 tons on many days.
EXTREMES, 1965-70.--Sediment concentrations: Maximum daily, 7,420 mg/l Dec. 6, 1966; minimum daily, no flow for many days each year.
Sediment loads: Maximum daily, 161,000 tons Dec. 6, 1966; minimum daily, 0 tons on many days each year.
REMARKS.--No flow Oct. 1 to Dec. 19, June 25 to Sept. 30. Sediment table omitted for period July 1 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	--	10.0	11.0	--	--	--	--	--	--
2	--	--	--	--	--	9.0	--	--	--	--	--	--
3	--	--	--	--	13.0	8.0	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	8.0	--	24.0	--	--	--	--
6	--	--	--	--	15.0	15.0	--	--	30.0	--	--	--
7	--	--	--	--	--	15.0	--	--	--	--	--	--
8	--	--	--	--	--	16.0	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	15.0	15.0	17.0	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	14.0	--	--	--	--	--	--
14	--	--	--	12.0	--	--	--	--	--	--	--	--
15	--	--	--	10.0	--	--	--	--	--	--	--	--
16	--	--	--	12.0	--	--	--	--	--	--	--	--
17	--	--	--	11.0	--	--	19.0	--	--	--	--	--
18	--	--	--	12.0	--	15.0	--	--	--	--	--	--
19	--	--	--	12.0	15.0	--	--	--	--	--	--	--
20	--	--	--	13.0	--	--	--	--	--	--	--	--
21	--	--	14.0	13.0	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	31.5	--	--	--	--
23	--	--	--	12.0	--	15.0	--	--	--	--	--	--
24	--	--	--	13.0	17.5	--	--	--	--	--	--	--
25	--	--	--	10.0	--	--	--	--	--	--	--	--
26	--	--	--	15.0	--	--	22.0	--	--	--	--	--
27	--	--	--	14.0	--	--	--	--	--	--	--	--
28	--	--	--	11.5	12.0	--	--	--	--	--	--	--
29	--	--	--	13.0	--	--	--	--	--	--	--	--
30	--	--	--	12.0	--	--	--	--	--	--	--	--
31	--	--	--	--	--	13.0	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1							0	--	0
2							0	--	0
3							0	--	0
4							0	--	0
5							0	--	0
6							0	--	0
7							0	--	0
8							0	--	0
9							0	--	0
10							0	--	0
11							0	--	0
12							0	--	0
13							0	--	0
14							0	--	0
15							0	--	0
16							0	--	0
17							0	--	0
18							0	--	0
19							0	--	0
20							7.4	7	.46
21							32	43	3.9
22							68	57	11
23							32	21	1.8
24							19	9	.46
25							36	24	6.1
26							77	65	15
27							39	25	2.6
28							23	12	.75
29							15	7	.28
30							11	5	.15
31							8.6	5	.12
TOTAL	0	--	0	0	--	0	368.0	--	42.62

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	7.0	5	.09	99	27	7.2	1620	1400	6270
2	6.6	4	.07	88	34	8.1	1060	1130	3450
3	5.2	4	.06	73	44	8.7	586	270	427
4	4.4	4	.05	73	44	8.7	703	458	1310
5	4.0	4	.04	73	42	8.3	900	483	1260
6	4.0	3	.03	66	39	6.9	534	260	375
7	4.0	3	.03	66	36	6.4	360	210	204
8	3.6	3	.03	68	32	5.9	280	140	106
9	15	17	1.8	62	26	4.4	240	70	45
10	356	258	278	64	17	2.9	212	40	23
11	206	188	137	62	11	1.8	181	40	20
12	287	206	178	62	6	1.0	163	40	18
13	117	93	29	85	92	23	150	41	17
14	178	126	126	158	191	82	137	46	17
15	406	460	504	99	108	29	129	54	19
16	2630	3640	33400	83	49	11	121	61	20
17	1920	903	5020	91	70	19	113	66	20
18	1330	310	1110	88	90	21	102	67	18
19	920	310	770	80	18	3.9	97	65	17
20	790	330	704	77	14	2.9	91	57	14
21	559	100	151	75	24	4.9	88	46	11
22	414	100	112	73	37	7.3	85	38	8.7
23	352	100	95	70	53	10	85	16	3.7
24	811	515	1390	68	68	12	85	12	2.8
25	550	250	371	66	52	9.3	85	13	3.0
26	368	209	208	64	19	3.3	83	17	3.8
27	301	181	150	64	11	1.9	80	24	5.2
28	228	245	151	170	209	206	77	34	7.1
29	163	149	66	--	--	--	75	42	8.5
30	133	90	32	--	--	--	66	47	8.4
31	109	50	15	--	--	--	62	49	8.2
TOTAL	13181.8	--	44999.20	2267	--	516.8	8650	--	13720.4

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	66	47	8.4	34	16	1.5	8.6	22	.51
2	62	45	7.5	37	16	1.6	8.0	23	.50
3	59	42	6.7	41	16	1.8	7.6	25	.51
4	62	38	6.4	34	16	1.5	7.0	26	.49
5	62	34	5.7	32	16	1.4	5.2	27	.38
6	59	30	4.8	30	16	1.3	5.6	29	.44
7	55	25	3.7	28	16	1.2	5.6	27	.41
8	51	21	2.9	29	15	1.2	4.8	26	.34
9	55	15	2.2	25	14	.95	4.8	25	.32
10	51	11	1.5	21	13	.74	4.0	24	.26
11	46	12	1.5	20	13	.70	4.0	23	.25
12	48	16	2.1	20	12	.65	3.6	22	.21
13	46	23	2.9	20	12	.65	2.7	20	.15
14	48	32	4.1	22	11	.65	2.7	19	.14
15	46	42	5.2	22	11	.65	3.0	18	.15
16	42	55	6.2	20	10	.54	2.7	17	.12
17	42	67	7.6	19	10	.51	2.7	16	.12
18	46	61	7.6	15	9	.36	2.7	15	.11
19	44	54	6.4	12	8	.26	2.7	14	.10
20	41	47	5.2	11	6	.18	2.2	12	.07
21	39	40	4.2	12	5	.16	1.5	9	.04
22	36	34	3.3	12	4	.13	.86	6	.01
23	41	29	3.2	13	5	.18	.39	4	0
24	39	24	2.5	12	8	.26	.13	1	0
25	42	19	2.2	11	10	.30	0	--	0
26	37	16	1.6	10	12	.32	0	--	0
27	36	16	1.6	10	14	.38	0	--	0
28	37	16	1.6	9.8	15	.40	0	--	0
29	34	16	1.5	9.8	16	.42	0	--	0
30	36	16	1.6	10	18	.49	0	--	0
31	--	--	--	9.8	20	.53	--	--	--
TOTAL	1408	--	121.9	611.4	--	21.91	93.08	--	5.63

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 26579.28
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 59428.46

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
JAN 16, 1970	0830	12.0	2680	2390	17300	8	10	13	17	21	27	36	65	96	100	--	VBWC
JAN 16.....	1230	12.0	5540	5610	83900	9	10	14	20	27	34	50	72	92	99	100	VPWC
JAN 16.....	1655	13.0	3050	3960	32600	5	7	10	13	17	23	38	70	98	100	--	VPWC
JAN 24.....	1400	13.0	1010	452	1230	--	--	--	--	--	28	40	71	96	100	--	V
JAN 28.....	1350	11.5	245	223	148	--	--	--	--	--	8	11	42	93	100	--	S

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
AUG 12, 1970	1330		5	0	1	2	9	24	41	68	79	87	90	100	--	S

11151870 ARROYO SECO NEAR GREENFIELD, CALIF.

LOCATION.--Lat 36°14'15", long 121°28'50", in NE¼SE¼ sec.36, T.19 S., R.4 E., Monterey County, at gaging station 0.6 mile downstream from Rocky Creek, and 14.5 miles southwest of Greenfield.
DRAINAGE AREA.--113 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1962 to September 1970.
Sediment records: October 1962 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 798 mg/l Jan. 16; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 16,500 tons Jan. 16; minimum daily, 0 tons on several days.
EXTREMES, 1962-70.--Water temperatures (1964-66): Minimum, 4°C Dec. 18, 20-24, 1965.
Sediment concentrations: Maximum daily, 3,040 mg/l Dec. 6, 1966; minimum daily, no flow Aug. 25-27, 1966, Aug. 17, 1968.
Sediment loads: Maximum daily, 84,800 tons Dec. 6, 1966; minimum daily, 0 tons on many days in 1966, 1968, and 1969.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	14.0	9.0	--	--	--	11.0	--	24.0	22.0	26.0	23.0
2	--	--	7.5	--	--	11.0	--	--	--	--	--	--
3	--	14.0	7.0	5.0	--	10.0	--	--	--	--	--	22.0
4	19.0	13.0	9.0	--	--	10.0	--	--	22.0	25.0	25.0	--
5	--	--	7.0	--	--	8.0	15.0	12.0	--	--	--	--
6	--	12.0	8.0	4.0	--	8.0	--	--	--	24.0	--	20.0
7	19.0	--	7.0	4.0	--	10.0	--	--	--	22.0	--	--
8	--	--	--	5.0	--	10.0	--	--	--	--	25.0	--
9	--	--	--	8.0	--	11.0	--	--	--	26.0	--	21.0
10	--	--	--	--	--	12.0	--	--	23.0	--	25.0	--
11	18.0	--	8.0	--	--	11.0	--	--	--	--	--	--
12	--	11.0	9.0	--	--	11.0	14.0	--	--	26.0	22.0	19.0
13	--	--	9.0	--	--	14.0	12.0	19.0	22.0	--	--	--
14	14.0	--	9.0	--	--	12.0	--	--	--	--	--	--
15	15.0	14.0	--	--	--	11.0	--	--	--	25.0	--	22.0
16	15.0	14.0	--	12.0	--	13.0	--	--	--	--	21.0	--
17	15.0	12.0	7.5	--	--	13.0	--	--	23.0	--	--	20.0
18	--	10.0	9.0	--	--	11.0	--	21.0	--	26.0	--	--
19	14.0	10.0	8.0	12.0	--	10.0	15.0	--	--	--	25.0	21.0
20	--	9.0	11.0	--	--	11.0	--	--	24.0	--	--	--
21	15.0	--	11.0	--	--	12.0	--	--	--	--	20.0	--
22	--	--	--	--	--	12.0	12.0	--	--	--	--	21.0
23	--	9.0	10.0	--	--	14.0	--	21.0	--	--	--	--
24	--	9.0	10.0	--	--	14.0	--	--	26.0	--	--	21.0
25	--	--	--	--	--	--	--	--	--	25.0	--	--
26	14.0	9.0	9.0	--	--	--	--	--	--	--	--	21.0
27	--	9.0	7.0	--	--	--	13.0	23.0	26.0	--	--	--
28	--	9.0	6.0	--	--	--	--	--	--	23.0	--	20.0
29	--	9.0	--	--	--	12.0	12.0	--	--	--	--	--
30	--	9.0	6.0	--	--	13.0	--	--	21.5	23.0	--	20.0
31	14.0	--	--	--	--	14.0	--	24.0	--	--	--	--
AVE	--	--	--	--	--	11.5	--	--	--	--	--	--

11151870 ARROYO SECO NEAR GREENFIELD, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.6	1	.01	16	1	.04	13	1	.04
2	4.6	1	.01	15	1	.04	13	1	.04
3	4.5	1	.01	15	1	.04	13	1	.04
4	4.8	1	.01	15	1	.04	13	1	.04
5	5.0	1	.01	17	1	.05	14	3	.11
6	5.3	1	.01	32	3	.26	14	1	.04
7	5.7	2	.03	22	1	.06	14	3	.11
8	5.9	1	.02	21	1	.06	15	4	.16
9	6.1	1	.02	19	1	.05	16	4	.17
10	6.4	1	.02	16	1	.04	16	3	.13
11	6.6	1	.02	14	1	.04	17	4	.18
12	6.9	1	.02	13	2	.07	18	6	.29
13	7.1	1	.02	13	1	.04	19	3	.15
14	7.8	2	.04	13	1	.04	18	3	.15
15	10	1	.03	13	1	.04	17	2	.09
16	22	4	.24	13	1	.04	17	1	.05
17	22	1	.06	13	1	.04	16	1	.04
18	17	1	.05	13	1	.04	16	3	.13
19	15	1	.04	13	1	.04	108	18	14
20	15	1	.04	13	2	.07	190	15	8.9
21	14	1	.04	13	1	.04	313	25	36
22	14	1	.04	13	1	.04	163	12	6.3
23	14	1	.04	13	1	.04	81	1	.22
24	15	1	.04	13	2	.07	70	2	.38
25	16	1	.04	13	1	.04	765	39	129
26	17	1	.05	13	1	.04	238	6	3.9
27	17	1	.05	13	2	.07	129	1	.35
28	17	1	.05	13	1	.04	93	1	.25
29	16	1	.04	13	1	.04	76	1	.21
30	16	1	.04	13	1	.04	65	1	.18
31	15	1	.04	--	--	--	58	1	.16
TOTAL	353.3	--	1.18	449	--	1.60	2628	--	201.81

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	53	1	.14	213	5	2.9	2320	165	1030
2	50	1	.14	192	5	2.6	1230	82	279
3	47	1	.13	173	5	2.3	790	17	39
4	45	1	.12	160	3	1.3	1020	15	55
5	44	1	.12	145	5	2.0	896	6	15
6	42	2	.23	134	6	2.2	713	5	9.6
7	41	1	.11	124	2	.67	605	3	4.9
8	53	2	.29	114	1	.31	529	1	1.4
9	733	40	154	110	9	2.7	476	3	3.9
10	640	31	65	108	2	.58	441	3	3.6
11	625	31	65	101	4	1.1	406	1	1.1
12	455	8	9.8	165	11	6.1	371	2	2.0
13	292	6	4.7	339	32	38	342	1	.92
14	916	75	257	295	5	4.0	317	1	.86
15	794	23	57	218	2	1.2	292	1	.79
16	5330	798	16500	193	2	1.0	271	1	.73
17	1560	70	295	241	3	2.0	251	1	.68
18	824	15	33	192	4	2.1	238	1	.64
19	585	9	14	174	2	.94	222	1	.60
20	512	11	15	161	2	.87	210	1	.57
21	420	6	6.8	149	1	.40	199	1	.54
22	355	4	3.8	139	1	.38	190	1	.51
23	307	8	6.6	129	2	.70	182	1	.49
24	978	62	214	121	1	.33	171	2	.92
25	565	8	12	113	1	.31	165	1	.45
26	449	5	6.1	108	1	.29	158	1	.43
27	430	6	7.0	105	1	.28	150	1	.41
28	355	6	5.8	641	56	135	145	1	.39
29	307	5	4.1	--	--	--	139	1	.38
30	271	2	1.5	--	--	--	134	7	2.5
31	243	5	3.3	--	--	--	131	3	1.1
TOTAL	18321	--	17741.78	5057	--	212.56	13704	--	1458.41

11151870 ARROYO SECO NEAR GREENFIELD, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	124	2	.67	56	3	.45	34	7	.64
2	119	2	.64	54	3	.44	32	7	.60
3	114	2	.62	52	3	.42	30	8	.65
4	109	3	.88	51	3	.41	28	9	.68
5	105	4	1.1	50	3	.41	27	8	.58
6	101	4	1.1	50	3	.41	28	8	.60
7	98	4	1.1	52	3	.42	28	8	.60
8	95	4	1.0	52	3	.42	27	8	.58
9	92	4	.99	52	3	.42	33	8	.71
10	89	4	.96	51	3	.41	33	8	.71
11	86	4	.93	50	3	.41	30	6	.49
12	83	5	1.1	50	4	.54	28	3	.23
13	84	7	1.6	50	5	.68	27	1	.07
14	88	7	1.7	49	5	.66	28	1	.08
15	84	7	1.6	47	5	.63	28	2	.15
16	80	7	1.5	45	5	.61	26	2	.14
17	77	7	1.5	42	5	.57	25	3	.20
18	74	7	1.4	41	5	.55	24	5	.32
19	71	8	1.5	42	4	.45	22	6	.36
20	70	6	1.1	43	3	.35	23	7	.43
21	70	4	.76	44	2	.24	21	6	.34
22	72	2	.39	42	2	.23	19	5	.26
23	68	2	.37	40	2	.22	18	4	.19
24	65	2	.35	39	2	.21	17	3	.14
25	63	2	.34	39	2	.21	17	6	.28
26	62	2	.33	40	1	.11	18	9	.44
27	65	2	.35	39	1	.11	18	11	.53
28	64	2	.35	39	1	.11	18	7	.34
29	61	3	.49	38	2	.21	18	4	.19
30	58	3	.47	37	2	.20	18	2	.10
31	--	--	--	36	3	.29	--	--	--
TOTAL	2491	--	27.19	1412	--	11.80	743	--	11.63

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	17	6	.28	3.7	4	.04	1.0	4	.01
2	15	5	.20	3.5	3	.03	1.1	6	.02
3	14	4	.15	3.3	2	.02	1.0	16	.04
4	12	3	.10	3.3	2	.02	1.0	5	.01
5	11	3	.09	3.2	3	.03	1.0	3	.01
6	9.9	3	.08	2.9	4	.03	1.3	2	.01
7	9.2	2	.05	2.8	8	.06	1.5	2	.01
8	8.7	2	.05	2.7	10	.07	1.5	3	.01
9	8.5	3	.07	2.7	7	.05	1.5	4	.02
10	8.2	4	.09	2.7	5	.04	1.2	3	.01
11	8.1	6	.13	2.4	7	.05	1.3	2	.01
12	7.7	8	.17	2.4	9	.06	1.3	1	0
13	7.5	7	.14	2.2	6	.04	1.2	1	0
14	7.0	6	.11	2.1	4	.02	1.2	1	0
15	6.6	5	.09	2.1	3	.02	1.2	2	.01
16	6.4	5	.09	2.1	2	.01	1.2	1	0
17	6.1	5	.08	2.1	2	.01	.90	1	0
18	5.9	5	.08	2.1	3	.02	1.0	1	0
19	5.7	5	.08	1.8	4	.02	1.0	2	.01
20	5.3	4	.06	1.8	2	.01	1.1	2	.01
21	5.0	4	.05	1.8	1	0	1.3	2	.01
22	4.7	4	.05	1.7	1	0	1.5	2	.01
23	4.5	4	.05	1.7	1	0	1.6	3	.01
24	4.6	5	.06	1.7	1	0	1.7	4	.02
25	4.7	6	.08	1.6	1	0	1.6	2	.01
26	4.5	3	.04	1.4	1	0	1.6	1	0
27	4.3	2	.02	1.2	1	0	1.5	2	.01
28	3.9	1	.01	1.1	1	0	1.4	3	.01
29	3.7	1	.01	1.1	2	.01	1.4	2	.01
30	3.6	1	.01	1.1	3	.01	1.4	2	.01
31	3.7	1	.01	1.0	3	.01	--	--	--
TOTAL	227.0	--	2.58	67.3	--	.68	38.50	--	.29

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 45491.10
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 19671.51

11151870 ARROYO SECO NEAR GREENFIELD, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
JAN 16, 1970	1020	12.0	9980	1410	38000	9	13	18	24	31	38	48	65	84	100	--	VBWC
JAN 16.....	1220	12.0	6600	1420	25300	13	14	19	24	29	35	43	60	84	100	--	VBWC

11152500 SALINAS RIVER NEAR SPRECKELS, CALIF.

LOCATION.--Lat 36°37'52", long 121°40'17", in Nacional Grant, Monterey County, at gaging station on downstream side of 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. Prior to Oct. 1, 1969, temperature and sediment sampling site was 14 miles upstream.
DRAINAGE AREA.--4,156 sq mi.
PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1966, water years 1967-70 (partial-record station).
Water temperatures: December 1966 to September 1970.
Sediment records: Water years 1950-51 (partial-record station), December 1966 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 3,100 mg/l Mar. 4; minimum daily, 6 mg/l Jan. 5.
Sediment loads: Maximum daily, 14,100 tons Mar. 7; minimum daily, 0.05 ton Aug. 7-9.
EXTREMES, 1966-70.--Sediment concentrations: Maximum daily, 18,900 mg/l Feb. 25, 1969; minimum daily, no flow for several days in 1968.
Sediment loads: Maximum daily, 2,790,000 tons Feb. 26, 1969; minimum daily, 0 tons on several days in 1968.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DISCHARGE (CFS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
NOV.								
05...	1330	A 294	14.0	10.7	--	27	182	0
MAY								
05...	1640	3.8	19.0	18.9	90	125	431	0
AUG.								
25...	1535	12	22.0	15.9	55	65	240	0

DATE	CHLORIDE (CL) (MG/L)	NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	HARDNESS (CA,MG) (MG/L)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV.							
05...	23	--	100	213	149	509	8.0
MAY							
05...	128	7.2	--	401	354	1280	8.3
AUG.							
25...	66	2.0	--	260	197	761	8.3

A Daily mean discharge.

11152500 SALINAS RIVER NEAR SPRECKELS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	--	13.0	8.0	12.0	13.0	19.0	--	--	--	19.0	20.0
2	18.0	--	--	13.0	12.0	12.0	20.0	22.0	23.0	23.0	--	--
3	17.0	--	--	14.0	11.0	13.0	20.0	--	--	--	20.0	19.0
4	16.0	--	12.0	14.0	13.0	12.0	21.0	--	23.0	21.0	--	--
5	14.0	15.0	12.0	8.0	12.0	11.0	16.0	21.0	--	19.0	19.0	20.0
6	20.0	16.0	11.0	8.0	13.0	13.0	18.0	--	20.0	--	20.0	--
7	15.0	13.0	14.0	8.0	13.0	15.0	17.0	17.0	--	--	--	23.0
8	14.0	13.0	13.0	8.0	12.0	15.0	19.0	--	19.0	18.0	23.0	--
9	16.0	13.0	11.0	9.0	13.0	14.0	17.0	23.0	--	--	--	22.0
10	16.0	13.0	10.0	16.0	14.0	14.0	18.0	21.0	20.0	19.0	24.0	--
11	16.0	16.0	13.0	11.0	15.0	17.0	22.0	--	--	--	--	25.0
12	20.0	16.0	14.0	11.0	16.0	18.0	19.0	22.0	19.0	20.0	20.0	--
13	16.0	17.0	16.0	12.0	15.0	15.0	15.0	--	--	--	--	17.0
14	15.0	16.0	15.0	12.0	15.0	16.0	15.0	--	20.0	22.0	21.0	--
15	14.0	16.0	12.0	11.0	13.0	15.0	18.0	23.0	--	--	--	24.0
16	18.0	15.0	16.0	9.0	16.0	18.0	18.0	24.0	17.0	23.0	21.0	--
17	18.0	12.0	13.0	10.0	13.0	16.0	17.0	--	--	--	--	25.0
18	17.0	12.0	15.0	13.0	11.0	16.0	20.0	22.0	19.0	21.0	22.0	--
19	14.0	12.0	13.0	14.0	11.0	18.0	16.0	--	--	--	--	20.0
20	13.0	11.0	16.0	15.0	16.0	18.0	19.0	23.0	20.0	23.0	18.0	--
21	--	13.0	15.0	15.0	16.0	18.0	17.0	16.0	--	--	--	21.0
22	20.0	12.0	17.0	14.0	13.0	16.0	--	--	23.0	22.0	17.0	--
23	21.0	11.0	15.0	17.0	12.0	20.0	--	21.0	--	--	--	20.0
24	--	12.0	12.0	15.0	14.0	20.0	20.0	--	19.0	21.0	18.0	--
25	--	12.0	14.0	13.0	16.0	21.0	20.0	23.0	--	--	--	22.0
26	--	11.0	15.0	12.0	18.0	20.0	--	--	20.0	20.0	20.0	--
27	--	12.0	9.0	14.0	16.0	15.0	--	24.0	--	--	--	23.0
28	--	13.0	8.0	12.0	14.0	19.0	19.0	--	18.0	20.0	23.0	--
29	--	12.0	9.0	12.0	--	16.0	19.0	23.0	--	--	--	22.0
30	15.0	9.0	9.0	11.0	--	17.0	--	--	18.0	19.0	20.0	--
31	17.0	--	9.0	10.0	--	18.0	--	22.0	--	--	--	--
AVE	--	13.2	12.8	11.9	13.8	16.1	18.4	--	--	--	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	476	110	141	298	170	137	170	90	41
2	450	100	122	298	130	105	164	83	37
3	440	95	113	294	120	95	154	76	32
4	430	105	122	294	120	95	151	69	28
5	461	105	131	294	120	95	125	54	18
6	445	105	126	313	200	169	97	42	11
7	450	100	122	326	315	277	90	42	10
8	456	180	222	321	300	260	87	37	8.7
9	461	300	373	313	270	228	84	34	7.7
10	466	220	277	313	230	194	67	32	5.8
11	425	180	207	313	145	123	77	28	5.8
12	420	150	170	305	130	107	70	41	7.7
13	461	135	168	309	95	79	60	35	5.7
14	478	160	206	309	90	75	58	33	5.2
15	488	140	184	321	100	87	58	37	5.8
16	461	150	187	321	110	95	49	11	1.5
17	500	170	230	321	110	95	37	12	1.2
18	535	115	166	275	170	126	35	12	1.1
19	478	100	129	283	140	107	33	52	4.6
20	430	90	104	279	420	316	56	42	6.4
21	321	88	76	283	340	260	47	31	3.9
22	302	90	73	283	270	206	45	13	1.6
23	283	115	88	279	225	169	27	14	1.0
24	286	110	85	279	185	139	31	30	2.5
25	290	110	86	275	180	134	22	30	1.8
26	294	105	83	272	145	106	18	15	.73
27	302	105	86	220	120	71	180	200	97
28	298	110	89	216	125	73	95	170	44
29	298	130	105	224	140	85	70	33	6.2
30	294	140	111	180	100	49	56	11	1.7
31	298	170	137	--	--	--	52	9	1.3
TOTAL	12477	--	4519	8611	--	4157	2365	--	405.93

11152500 SALINAS RIVER NEAR SPRECKELS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	52	33	4.6	814	250	549	167	498	388
2	37	19	1.9	1030	270	751	2100	1630	8870
3	35	8	.76	1090	280	824	1550	3080	12900
4	31	10	.84	994	275	738	1330	3100	11100
5	29	6	.47	517	270	377	1620	2210	9990
6	29	22	1.7	347	225	211	1640	1300	5760
7	33	8	.71	279	215	162	1720	3030	14100
8	35	8	.76	244	210	138	1480	1100	4400
9	47	8	1.0	216	280	163	1260	660	2250
10	72	12	2.3	193	340	177	1130	460	1400
11	151	294	120	176	300	143	1020	410	1130
12	268	160	116	158	250	107	914	325	802
13	386	130	135	173	220	103	834	440	991
14	272	160	118	148	190	76	762	370	761
15	239	690	785	209	175	99	716	250	483
16	779	1010	2450	173	160	75	664	225	403
17	2910	1290	10600	142	150	58	613	225	372
18	1980	1170	6520	139	155	58	565	260	397
19	2090	1380	7790	133	170	61	517	265	370
20	1820	690	3390	116	190	60	430	235	273
21	1620	530	2320	105	190	54	342	250	231
22	1440	500	1940	97	200	52	290	360	282
23	1350	440	1600	90	170	41	258	280	195
24	1320	610	2170	82	135	30	230	210	130
25	1880	850	4250	72	110	21	206	205	114
26	1560	400	1680	62	105	18	183	250	124
27	1570	480	2030	58	200	31	161	275	120
28	1300	260	913	62	210	35	142	130	50
29	774	320	669	--	--	--	125	110	37
30	553	250	373	--	--	--	113	75	23
31	425	240	275	--	--	--	103	75	21
TOTAL	25087	--	50259.04	7919	--	5212	23185	--	78467

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	91	75	18	3.8	200	2.1	33	65	5.8
2	81	55	12	3.7	200	2.0	33	50	4.5
3	73	65	13	3.8	160	1.6	35	75	7.1
4	67	50	9.0	3.8	110	1.1	31	105	8.8
5	58	40	6.3	3.8	105	1.1	33	90	8.0
6	54	30	4.4	4.7	110	1.4	31	75	6.3
7	45	20	2.4	6.9	120	2.2	27	65	4.7
8	39	25	2.6	4.7	120	1.5	31	55	4.6
9	33	30	2.7	3.8	120	1.2	39	45	4.7
10	29	35	2.7	3.8	140	1.4	37	40	4.0
11	24	50	3.2	3.8	200	2.1	33	50	4.5
12	18	55	2.7	3.8	240	2.5	33	60	5.3
13	13	40	1.4	3.8	250	2.6	29	55	4.3
14	10	35	.95	3.8	250	2.6	22	50	3.0
15	12	35	1.1	9.6	260	6.7	18	50	2.4
16	9.2	35	.87	19	210	11	19	60	3.1
17	10	40	1.1	13	180	6.3	22	105	6.2
18	8.0	60	1.3	14	175	6.6	22	255	15
19	9.2	65	1.6	18	130	6.3	19	390	20
20	8.0	65	1.4	19	70	3.6	14	400	15
21	8.0	140	3.0	24	90	5.8	12	250	8.1
22	8.0	135	2.9	26	65	4.6	12	60	1.9
23	5.8	135	2.1	27	35	2.6	10	55	1.5
24	5.8	135	2.1	27	65	4.7	8.0	70	1.5
25	5.8	135	2.1	29	100	7.8	5.8	80	1.3
26	6.9	135	2.5	33	105	9.4	2.9	90	.70
27	6.9	132	2.5	35	110	10	1.3	80	.28
28	5.8	130	2.0	35	90	8.5	2.1	65	.37
29	4.7	150	1.9	35	75	7.1	1.3	55	.19
30	3.3	175	1.8	35	75	7.1	1.3	45	.16
31	--	--	--	35	75	7.1	--	--	--
TOTAL	752.9	--	111.62	491.6	--	140.6	617.7	--	153.30

11152500 SALINAS RIVER NEAR SPRECKELS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.3	54	.19	1.3	23	.08	8.0	40	.86
2	1.3	53	.19	1.3	22	.08	8.0	40	.86
3	1.3	52	.18	1.3	21	.07	6.9	40	.75
4	1.3	51	.18	1.3	20	.07	5.8	40	.63
5	1.3	50	.18	1.3	18	.06	4.7	40	.51
6	1.3	49	.17	1.3	16	.06	3.8	40	.41
7	1.3	48	.17	1.3	15	.05	2.1	40	.23
8	1.3	47	.16	1.3	14	.05	2.1	40	.23
9	1.3	46	.16	1.3	13	.05	2.1	40	.23
10	1.3	45	.16	9.3	12	.30	2.1	40	.23
11	1.3	44	.15	27	11	.80	2.1	40	.23
12	1.3	43	.15	31	10	.84	2.1	40	.23
13	1.3	42	.15	35	10	.95	2.1	40	.23
14	1.3	41	.14	37	10	1.0	2.1	40	.23
15	1.3	40	.14	24	10	.65	2.1	40	.23
16	1.3	39	.14	14	12	.45	2.1	40	.23
17	1.3	38	.13	13	16	.56	2.1	40	.23
18	1.3	37	.13	13	20	.70	2.1	40	.23
19	1.3	36	.13	12	30	.97	2.9	40	.31
20	1.3	35	.12	9.2	40	.99	2.1	40	.23
21	1.3	34	.12	6.9	40	.75	2.9	40	.31
22	1.3	33	.12	5.8	40	.63	2.9	40	.31
23	1.3	32	.11	6.9	40	.75	2.1	40	.23
24	1.3	31	.11	8.0	40	.86	2.1	40	.23
25	1.3	30	.11	10	40	1.1	2.1	40	.23
26	1.3	29	.10	19	40	2.1	2.1	40	.23
27	1.3	28	.10	19	40	2.1	2.1	40	.23
28	1.3	27	.09	21	40	2.3	2.1	40	.23
29	1.3	26	.09	22	40	2.4	2.1	40	.23
30	1.3	25	.09	14	40	1.5	2.1	40	.23
31	1.3	24	.08	10	40	1.1	--	--	--
TOTAL	40.3	--	4.24	378.8	--	24.37	90.0	--	9.78

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 82015.3
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 143463.88

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 14, 1969	1310	15.0	479	185	239	22	28	33	38	43	50	64	82	100	--	--	SBWC
JAN 11, 1970	0915	11.0	151	579	236	--	--	--	--	--	53	73	94	100	--	--	S
JAN 17.....	0920	10.0	2700	1120	8160	20	27	32	38	44	51	80	100	--	--	--	VBWC
JAN 20.....	1245	15.0	1760	1560	7410	24	30	37	42	45	50	77	98	100	--	--	VBWC
MAR 2.....	1530	12.0	2360	907	5780	18	24	29	34	40	48	78	98	100	--	--	VBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
OCT 14, 1969	1345	15.0	5	479	--	1	31	85	98	100	--	--	--	--	--	S

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

LOCATION.--Lat 37°05'34", long 121°43'02", in Las Uvas Grant, Santa Clara County, at gaging station 0.6 mile downstream from Little Uvas Creek, 0.9 mile upstream from Hay Canyon, and 4.4 miles southwest of Morgan Hill.
DRAINAGE AREA.--21.0 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1965 to September 1970.
Sediment records: Water year 1965 (partial-record station), October 1965 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 1,150 mg/l Jan. 16; minimum daily, 0 mg/l Feb. 8.
Sediment loads: Maximum daily, 4,580 tons Jan. 16; minimum daily, 0 tons on many days.
EXTREMES, 1965-70.--Sediment concentrations: Maximum daily, 2,400 mg/l Jan. 21, 1967; minimum daily, 0 mg/l Feb. 8, 1970.
Sediment loads: Maximum daily, 22,200 tons Jan. 21, 1967; minimum daily, 0 tons on many days in 1965-70.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	13.5	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	12.0	--	--	--	--	--	--	--
3	--	--	--	--	--	--	13.5	--	21.5	--	--	--
4	16.5	--	--	--	13.0	--	--	--	--	--	23.0	--
5	--	--	--	--	--	--	--	15.5	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	6.0	10.0	12.0	--	--	--	18.0	--	--
8	--	--	--	8.0	11.0	--	--	--	--	--	--	--
9	--	--	--	9.0	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	11.5	--	11.0	--	--	--	--	--	--	--
13	--	--	--	12.0	--	--	--	--	--	--	--	--
14	--	--	--	11.0	--	13.0	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	13.0	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	12.0	--	14.0	--	--	--	--	--	--
19	--	--	12.0	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	14.0	--	--	--	--	--	--	--	--	--
22	--	--	--	13.0	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	12.0	12.0	--	--	--	--	--	--	--	--
25	--	--	--	12.0	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	11.0	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	8.0	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	7.0	13.0	--	--	--	--	--	--	30.0	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.20	9	0	1.8	2	.01	1.1	3	.01
2	.07	9	0	1.4	2	.01	.78	3	.01
3	.13	9	0	1.0	2	.01	.59	3	0
4	.10	9	0	.97	2	.01	.71	3	.01
5	.14	9	0	2.9	8	.10	.77	3	.01
6	.25	9	.01	3.7	9	.09	.98	3	.01
7	.06	7	0	2.3	4	.02	1.2	3	.01
8	.10	7	0	2.2	4	.02	1.3	3	.01
9	.09	7	0	1.9	4	.02	1.4	3	.01
10	.12	6	0	1.8	3	.01	2.2	5	.03
11	.22	6	0	1.6	3	.01	2.9	4	.03
12	.29	6	0	1.6	3	.01	3.0	3	.02
13	.19	5	0	1.6	3	.01	3.0	3	.02
14	.18	5	0	1.3	3	.01	2.1	3	.02
15	2.1	13	.15	1.4	3	.01	1.8	3	.01
16	7.9	20	.62	1.3	3	.01	1.6	3	.01
17	2.3	5	.03	1.4	3	.01	1.5	3	.01
18	1.6	4	.02	1.2	3	.01	1.4	3	.01
19	1.4	4	.02	1.1	3	.01	52	539	172
20	1.2	4	.01	1.1	3	.01	232	954	765
21	1.2	4	.01	1.1	3	.01	241	965	924
22	1.3	4	.01	1.2	3	.01	68	303	63
23	1.3	4	.01	1.2	3	.01	28	60	4.5
24	1.4	3	.01	1.2	3	.01	102	290	100
25	1.5	3	.01	1.2	3	.01	250	619	557
26	1.5	3	.01	1.1	3	.01	88	30	7.1
27	1.5	3	.01	1.1	3	.01	53	2	.29
28	1.4	3	.01	1.2	3	.01	37	2	.20
29	1.1	2	.01	1.3	3	.01	28	2	.15
30	1.3	2	.01	1.1	3	.01	24	2	.13
31	1.9	2	.01	--	--	--	21	3	.17
TOTAL	34.04	--	.97	45.27	--	.50	1252.33	--	2593.78

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	18	2	.10	52	2	.28	610	618	1330
2	16	1	.04	50	1	.14	133	117	44
3	15	1	.04	46	1	.12	84	25	5.7
4	14	1	.04	43	1	.12	177	75	57
5	12	1	.03	42	2	.23	115	42	13
6	11	1	.03	40	4	.43	100	25	6.8
7	11	1	.03	39	8	.84	84	15	3.4
8	11	4	.12	36	0	0	75	14	2.8
9	185	610	776	34	1	.09	66	12	2.1
10	112	165	67	33	1	.09	59	10	1.6
11	106	128	46	31	1	.08	53	8	1.1
12	80	47	11	35	8	.92	48	6	.78
13	74	14	2.8	54	14	2.3	44	4	.48
14	601	579	1620	40	6	.65	41	3	.33
15	253	125	91	34	4	.37	39	3	.32
16	973	1150	4580	43	9	1.4	36	4	.39
17	556	261	466	52	10	1.5	34	5	.46
18	232	36	23	37	4	.40	31	5	.42
19	158	22	9.4	33	4	.36	30	5	.41
20	133	18	6.5	31	3	.25	28	5	.38
21	453	147	187	29	3	.23	27	5	.36
22	278	38	29	27	3	.22	26	5	.35
23	206	21	17	26	3	.21	25	5	.34
24	333	117	145	25	3	.20	24	5	.32
25	191	6	3.1	24	3	.19	22	5	.30
26	124	4	1.3	23	3	.19	21	6	.34
27	128	20	7.8	23	3	.19	20	6	.32
28	97	3	.79	38	11	1.3	20	6	.32
29	82	3	.66	--	--	--	20	6	.32
30	69	3	.56	--	--	--	19	6	.31
31	61	3	.49	--	--	--	18	6	.29
TOTAL	5593	--	8091.83	1020	--	13.30	2129	--	1475.04

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	17	6	.28	8.2	4	.09	2.6	12	.08
2	17	6	.28	7.6	4	.08	2.2	12	.07
3	17	6	.28	7.3	4	.08	2.2	12	.07
4	16	6	.26	6.8	4	.07	2.3	12	.07
5	16	6	.26	6.9	4	.07	2.4	11	.07
6	15	6	.24	6.7	4	.07	2.9	11	.09
7	14	6	.23	6.7	4	.07	2.8	11	.08
8	14	6	.23	6.7	5	.09	2.8	10	.08
9	14	6	.23	7.0	5	.09	4.1	10	.11
10	13	6	.21	6.5	5	.09	3.1	10	.08
11	13	6	.21	6.1	6	.10	3.0	9	.07
12	13	6	.21	6.2	6	.10	2.6	9	.06
13	13	6	.21	6.0	6	.10	2.6	9	.06
14	14	5	.19	5.5	7	.10	3.3	8	.07
15	13	5	.18	5.1	7	.10	2.5	8	.05
16	13	5	.18	4.9	7	.09	2.6	8	.06
17	13	5	.18	4.9	8	.11	2.8	7	.05
18	12	5	.16	4.8	8	.10	2.7	7	.05
19	13	5	.18	5.0	8	.11	2.2	7	.04
20	12	5	.16	4.7	8	.10	2.1	6	.03
21	11	5	.15	4.5	9	.11	2.1	6	.03
22	11	5	.15	4.4	9	.11	1.8	6	.03
23	11	5	.15	4.5	9	.11	2.3	5	.03
24	11	5	.15	4.3	10	.12	2.1	5	.03
25	10	5	.14	4.1	10	.11	2.0	5	.03
26	11	4	.12	3.7	10	.10	2.2	4	.02
27	10	4	.11	3.9	10	.11	1.8	4	.02
28	9.8	4	.11	4.0	11	.12	2.3	4	.02
29	9.1	4	.10	3.9	11	.12	2.0	3	.02
30	8.9	4	.10	3.8	11	.11	1.7	3	.01
31	--	--	--	3.3	12	.11	--	--	--
TOTAL	384.8	--	5.64	168.0	--	3.04	74.1	--	1.58

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.5	3	.01	.70	4	.01	.40	10	.01
2	1.4	2	.01	.64	4	.01	.51	10	.01
3	1.4	2	.01	.90	4	.01	.12	10	0
4	1.2	2	.01	.88	4	.01	.26	10	.01
5	1.5	1	0	.84	4	.01	.29	10	.01
6	1.6	1	0	.50	4	.01	.26	11	.01
7	1.0	1	0	.64	4	.01	.47	11	.01
8	1.6	1	0	.55	4	.01	.16	11	0
9	1.0	1	0	.55	5	.01	.37	11	.01
10	1.5	1	0	.63	5	.01	.13	11	0
11	1.5	1	0	.32	5	0	.23	11	.01
12	1.4	1	0	.13	5	0	.21	11	.01
13	1.4	1	0	.27	6	0	.38	11	.01
14	1.0	1	0	.42	6	.01	.53	11	.02
15	1.4	2	.01	.32	6	.01	.15	11	0
16	1.1	2	.01	.57	7	.01	.18	12	.01
17	1.3	2	.01	.54	7	.01	.10	12	0
18	1.1	2	.01	.32	7	.01	.16	12	.01
19	1.0	2	.01	.56	7	.01	.21	12	.01
20	1.1	2	.01	.36	8	.01	.47	12	.02
21	.97	2	.01	.37	8	.01	.46	12	.01
22	.76	2	0	.25	8	.01	.49	12	.02
23	.83	2	0	.37	8	.01	.30	12	.01
24	.97	3	.01	.62	9	.02	.19	12	.01
25	1.0	3	.01	.33	9	.01	.23	12	.01
26	.76	3	.01	.44	9	.01	.13	12	0
27	1.0	3	.01	.18	9	0	.18	12	.01
28	.70	3	.01	.46	10	.01	.20	12	.01
29	.64	3	.01	.38	10	.01	.14	12	0
30	.49	3	0	.63	10	.02	.30	12	.01
31	.83	3	.01	.64	10	.02	--	--	--
TOTAL	34.95	--	.18	15.31	--	.30	8.21	--	.26

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 10759.01
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 12186.42

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

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
DEC 19, 1969	1330	12.0	16	303	13	33	43	55	70	84	96	98	99	100	--	--	SBWC
DEC 19.....	1700	12.0	155	1710	716	61	77	86	96	97	99	99	100	--	--	--	SPWC
DEC 21.....	1100	14.0	740	2440	4880	35	47	59	75	87	95	98	99	100	--	--	SPWC
DEC 24.....	0930	12.0	79	174	37	--	--	--	--	--	91	94	98	100	--	--	S
JAN 9, 1970	1400	9.0	39	93	9.8	--	--	--	--	--	93	98	100	--	--	--	S
JAN 14.....	1700	11.0	637	498	857	26	34	43	53	64	73	84	97	100	--	--	VBWC
JAN 16.....	1110	13.0	1250	1240	4190	22	30	39	49	60	70	84	98	100	--	--	VBWC
JAN 24.....	0955	12.0	275	83	62	--	--	--	--	--	52	56	60	92	100	--	S

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	128	METHOD OF ANALYSIS
NOV 1, 1969	1200	13.5	4	1.8	2	3	7	12	19	29	40	53	92	100	S

11159000 PAJARO RIVER AT CHITTENDEN, CALIF.

LOCATION.--Lat 36°54'01", long 121°35'48", in Salsipuedes Grant, Santa Cruz County, at gaging station on downstream side of right bank pier of 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-recrod station), October 1953 to September 1966, water years 1967-69 (partial-record station), November 1969 to September 1970.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DISCHARGE (CFS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
NOV.												
05...	1430	22	14.0	9.1	--	--	160	--	469	5	--	138
JAN.												
07...	1600	A 31	8.5	10.5	--	--	121	--	240	0	--	113
MAR.												
06...	1005	1340	11.5	9.7	--	--	28	--	163	0	--	22
APR.												
07...	0900	59	15.5	9.3	64	47	66	2.4	274	21	133	65
MAY												
05...	0930	29	16.5	10.5	--	--	109	--	444	0	--	114
JULY												
09...	0930	7.7	18.5	8.9	--	--	176	--	533	0	--	176
AUG.												
04...	0920	18	18.0	9.4	95	85	233	4.6	539	0	346	204
SEP.												
04...	1420	6.6	24.5	9.1	--	--	189	--	548	0	--	177

DATE	NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	ALKALINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
NOV.											
05...	--	900	--	--	521	128	393	40	3.1	1540	8.4
JAN.											
07...	--	600	--	--	384	187	197	41	2.7	1190	7.7
MAR.											
06...	--	200	--	--	161	27	134	27	1.0	424	7.8
APR.											
07...	4.3	400	530	84.4	352	92	259	29	1.5	922	8.8
MAY											
05...	--	600	--	--	535	171	364	31	2.1	1360	8.1
JULY											
09...	--	900	--	--	584	147	437	40	3.2	1790	8.3
AUG.											
04...	1.7	1200	1280	62.2	586	144	442	46	4.2	1890	8.1
SEP.											
04...	--	1000	--	--	542	92	449	43	3.5	1700	8.0

A Daily mean discharge.

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: Water years 1952-53 (partial-record station), October 1953 to September 1966. Water temperatures: January 1966 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Minimum, 3.0°C Jan. 5.
EXTREMES, 1967-70.--Water temperatures: Maximum (1967-69), 30.5°C Aug. 29, 1968; minimum (1968-70), 3.0°C Jan. 5, 1970.
REMARKS.--Probe inoperative Apr. 7 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	14.5	16.5	11.5	10.5	6.5	7.5	4.0	11.0	8.0	11.0	8.0
2	20.0	13.5	16.5	11.5	10.0	6.5	7.5	4.0	10.5	8.0	10.0	8.0
3	19.0	13.0	16.5	12.0	11.0	7.0	7.5	4.0	10.5	7.5	10.5	8.0
4	20.0	13.0	15.0	12.5	11.5	7.5	7.5	4.0	12.0	8.5	10.0	7.5
5	19.5	12.5	13.0	12.0	10.5	7.0	7.0	3.0	12.0	9.0	10.5	7.0
6	19.0	12.5	15.5	11.5	10.5	7.0	7.0	3.5	11.0	8.0	11.0	8.0
7	18.5	12.5	14.0	11.5	11.0	8.0	7.0	5.5	12.0	8.0	11.5	8.5
8	18.0	13.5	14.0	11.0	11.0	8.5	8.0	7.5	12.0	9.0	13.0	9.0
9	19.0	13.0	15.0	10.5	11.5	8.0	10.0	8.0	11.5	10.0	11.5	8.5
10	20.0	14.5	15.0	10.5	10.0	9.0	11.0	9.5	12.5	10.0	13.0	10.0
11	18.5	13.0	15.0	10.5	12.0	10.0	10.0	9.5	12.5	10.0	12.0	10.0
12	18.0	12.0	15.5	11.0	12.0	11.5	11.0	10.0	13.0	10.0	14.0	10.0
13	15.0	12.5	15.0	11.0	13.0	11.5	11.0	10.5	12.0	10.0	15.5	11.0
14	15.0	13.0	15.0	12.5	13.5	10.0	11.0	10.5	12.5	9.5	15.5	10.0
15	15.0	14.0	15.0	13.0	12.5	10.0	11.0	10.5	12.5	8.5	15.0	10.0
16	17.0	14.0	16.0	9.5	12.5	10.0	11.5	11.0	11.0	9.5	16.0	10.5
17	16.5	13.0	13.5	8.0	13.0	11.0	12.0	11.0	11.5	8.0	15.0	9.5
18	16.0	11.5	12.0	8.0	13.0	11.5	11.5	10.5	12.0	8.0	14.0	9.0
19	16.0	11.0	13.0	8.0	13.0	12.5	12.0	11.0	11.5	7.0	14.0	9.0
20	16.0	11.0	13.0	8.5	14.0	13.0	12.5	12.0	11.5	6.5	14.0	10.0
21	16.0	11.0	12.5	8.5	13.0	10.0	12.5	12.5	12.0	7.5	14.0	11.0
22	14.0	13.0	12.5	8.5	11.0	10.0	13.0	12.5	12.0	7.5	14.0	11.0
23	14.5	13.0	12.5	8.0	11.5	9.5	12.5	12.0	11.0	7.5	15.0	11.0
24	17.0	13.0	12.5	8.0	12.5	11.0	12.0	10.5	13.5	9.0	15.5	11.0
25	16.5	11.5	12.0	8.0	12.5	10.0	11.0	10.0	13.0	8.0	16.0	11.0
26	15.0	13.0	12.0	8.0	10.0	8.5	11.0	9.5	13.0	8.5	17.0	11.0
27	15.5	13.0	12.0	8.0	9.0	7.0	11.5	8.5	12.0	8.0	17.0	10.0
28	16.5	12.0	12.0	7.5	8.5	6.5	9.5	7.0	12.0	10.5	16.5	10.0
29	16.0	11.0	11.0	7.0	8.0	5.5	9.0	7.0	--	--	16.5	9.5
30	16.0	11.0	11.0	6.5	7.5	4.5	10.0	8.0	--	--	15.5	10.0
31	16.5	11.5	--	--	7.5	4.5	10.0	7.5	--	--	16.0	8.5
AVE	17.1	12.6	13.8	9.8	11.2	8.8	10.2	8.5	11.9	8.6	13.9	9.5

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	9.0	--	--	--	--	--	--	--	--	--	--
2	16.0	9.5	--	--	--	--	--	--	--	--	--	--
3	16.5	9.5	--	--	--	--	--	--	--	--	--	--
4	17.0	10.0	--	--	--	--	--	--	--	--	--	--
5	17.5	10.5	--	--	--	--	--	--	--	--	--	--
6	16.5	11.0	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

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 on downstream side of 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 to September 1970.
Sediment records: February to September 1970.
EXTREMES, February to September 1970.--Sediment concentrations: Maximum daily, 4,720 mg/l Mar. 1; minimum, 1 mg/l on several days.
Sediment loads: Maximum daily, 4,800 tons Mar. 1; minimum daily, 0.01 ton on many days.

TEMPERATURE (°C) OF WATER, FEBRUARY TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	--	--	11.0	9.0	10.0	15.0	--	--	--
2	--	--	--	--	--	9.0	9.0	10.0	15.0	16.0	--	13.0
3	--	--	--	--	--	10.0	10.0	12.0	16.0	--	16.0	--
4	--	--	--	--	--	10.0	10.0	13.0	15.0	--	--	--
5	--	--	--	--	--	8.0	10.0	12.0	15.0	--	--	--
6	--	--	--	--	--	9.0	11.0	11.0	--	15.0	15.0	--
7	--	--	--	--	--	10.0	10.0	11.0	--	--	--	17.0
8	--	--	--	--	--	11.0	10.0	12.0	13.0	15.0	--	--
9	--	--	--	--	--	9.0	10.0	12.0	--	16.5	--	--
10	--	--	--	--	--	10.0	11.0	11.0	--	--	17.0	14.0
11	--	--	--	--	--	10.0	10.0	10.0	13.0	--	--	--
12	--	--	--	--	--	10.0	9.0	10.0	--	--	--	--
13	--	--	--	--	--	11.0	10.0	11.0	--	17.0	18.0	--
14	--	--	--	--	--	11.0	9.0	12.0	--	--	--	10.0
15	--	--	--	--	--	10.0	8.0	13.0	13.0	--	--	--
16	--	--	--	--	--	11.0	8.0	15.0	--	15.0	--	--
17	--	--	--	--	--	11.0	10.0	15.0	--	--	17.0	15.0
18	--	--	--	--	--	10.0	10.0	14.0	13.0	--	--	--
19	--	--	--	--	--	9.0	10.0	13.0	--	--	--	--
20	--	--	--	--	8.0	9.0	10.0	13.0	--	16.0	16.0	--
21	--	--	--	--	9.0	9.0	9.0	11.0	--	--	--	13.0
22	--	--	--	--	8.0	10.0	9.0	13.0	16.0	--	--	--
23	--	--	--	--	8.0	10.0	9.0	14.0	--	15.0	--	--
24	--	--	--	--	10.0	10.0	10.0	14.0	--	--	17.0	12.0
25	--	--	--	--	9.0	11.0	10.0	14.0	15.0	--	--	--
26	--	--	--	--	10.0	10.0	10.0	14.0	--	--	--	--
27	--	--	--	--	9.0	10.0	8.0	14.0	--	15.0	13.0	--
28	--	--	--	--	11.0	10.0	8.0	14.0	--	--	--	12.0
29	--	--	--	--	--	10.0	8.0	13.0	16.0	--	--	--
30	--	--	--	--	--	10.0	9.0	14.0	--	15.0	--	--
31	--	--	--	--	--	10.0	--	15.0	--	--	15.0	--
AVE	--	--	--	--	--	10.0	9.5	12.6	--	--	--	--

11160300 ZAYANTE CREEK AT ZAYANTE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, FEBRUARY TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				27	16	1.2	264	4720	4800
2				23	14	.87	57	259	50
3				21	12	.68	38	30	3.1
4				19	10	.51	140	2400	1470
5				18	8	.39	73	256	58
6				17	8	.37	46	44	5.5
7				16	6	.26	38	20	2.1
8				15	6	.24	32	16	1.4
9				15	6	.24	29	12	.94
10				14	6	.23	27	18	1.3
11				13	6	.21	24	12	.78
12				20	8	.43	23	11	.68
13				22	10	.59	21	7	.40
14				17	6	.28	19	7	.36
15				15	6	.24	19	7	.36
16				14	6	.23	18	7	.34
17				20	6	.32	16	6	.26
18				17	6	.28	16	4	.17
19				14	5	.19	14	7	.26
20				12	5	.16	14	3	.11
21				12	2	.06	13	2	.07
22				11	3	.09	12	2	.06
23				11	2	.06	12	4	.13
24				10	4	.11	12	2	.06
25				9.8	2	.05	11	4	.12
26				9.8	2	.05	11	3	.09
27				11	3	.09	9.8	3	.08
28				34	243	27	9.8	2	.05
29				--	--	--	9.4	2	.05
30				--	--	--	8.9	6	.14
31				--	--	--	8.4	2	.05
TOTAL				457.6	--	35.43	1045.3	--	6396.96

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.0	6	.13	4.7	2	.03	2.6	5	.04
2	7.7	2	.04	4.5	2	.02	2.6	5	.04
3	7.4	3	.06	4.3	4	.05	2.6	5	.04
4	7.2	3	.06	4.3	2	.02	2.4	5	.03
5	7.2	4	.08	4.3	2	.02	2.5	3	.02
6	6.9	3	.06	4.3	3	.03	2.5	3	.02
7	6.9	2	.04	4.1	1	.01	2.6	3	.02
8	6.9	4	.07	4.1	2	.02	2.6	2	.01
9	6.6	2	.04	4.1	2	.02	2.9	2	.02
10	6.6	2	.04	4.1	4	.04	2.6	3	.02
11	6.6	4	.07	4.0	2	.02	2.5	3	.02
12	6.6	3	.05	4.0	2	.02	2.4	3	.02
13	6.4	3	.05	4.0	3	.03	2.5	2	.01
14	6.6	3	.05	3.8	3	.03	2.5	2	.01
15	6.4	3	.05	3.6	3	.03	2.4	1	.01
16	6.4	3	.05	3.4	3	.03	2.4	1	.01
17	6.1	2	.03	3.4	1	.01	2.2	2	.01
18	5.8	1	.02	3.4	2	.02	2.1	2	.01
19	5.8	3	.05	3.4	5	.05	2.0	2	.01
20	5.5	1	.01	3.3	5	.04	2.0	2	.01
21	5.5	1	.01	3.3	4	.04	2.0	2	.01
22	5.2	3	.04	3.3	3	.03	1.9	2	.01
23	5.2	1	.01	3.1	2	.02	1.9	2	.01
24	5.2	2	.03	3.1	1	.01	1.9	2	.01
25	5.2	1	.01	3.1	3	.03	1.9	2	.01
26	5.2	1	.01	3.3	2	.02	1.9	3	.02
27	5.2	2	.03	3.1	4	.03	1.8	3	.01
28	5.1	1	.01	3.0	5	.04	1.8	4	.02
29	4.9	3	.04	3.0	9	.07	1.8	4	.02
30	4.9	2	.03	2.9	5	.04	1.7	5	.02
31	--	--	--	2.8	5	.04	--	--	--
TOTAL	185.2	--	1.27	113.1	--	.91	67.5	--	.52

11160300 ZAYANTE CREEK AT ZAYANTE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, FEBRUARY TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.7	6	.03	1.0	6	.02	1.1	9	.03
2	1.6	7	.03	1.0	7	.02	1.1	9	.03
3	1.5	7	.03	.97	7	.02	1.1	10	.03
4	1.5	7	.03	.97	12	.03	1.1	9	.03
5	1.5	8	.03	1.0	17	.05	1.1	8	.02
6	1.5	8	.03	1.0	22	.06	1.1	7	.02
7	1.5	8	.03	1.2	20	.06	1.0	5	.01
8	1.5	9	.04	1.2	18	.06	1.0	7	.02
9	1.5	9	.04	1.2	16	.05	1.1	9	.03
10	1.5	8	.03	1.2	14	.05	1.1	12	.04
11	1.4	7	.03	1.1	13	.04	1.0	10	.03
12	1.4	6	.02	1.1	12	.04	1.0	9	.02
13	1.3	5	.02	1.1	10	.03	1.2	8	.03
14	1.3	5	.02	1.1	12	.04	1.1	7	.02
15	1.3	6	.02	1.2	15	.05	1.1	8	.02
16	1.3	6	.02	1.2	18	.06	1.1	8	.02
17	1.3	6	.02	1.2	21	.07	1.0	9	.02
18	1.2	7	.02	1.2	18	.06	1.0	9	.02
19	1.3	8	.03	1.2	15	.05	1.0	10	.03
20	1.2	8	.03	1.2	11	.04	1.0	10	.03
21	1.1	9	.03	1.2	11	.04	1.0	10	.03
22	1.1	10	.03	1.2	10	.03	1.0	10	.03
23	1.1	11	.03	1.2	10	.03	1.0	9	.02
24	1.1	10	.03	1.2	10	.03	.97	8	.02
25	1.1	8	.02	1.1	11	.03	.97	8	.02
26	1.1	6	.02	1.1	12	.04	.90	9	.02
27	1.1	5	.01	1.1	13	.04	.90	10	.02
28	1.0	5	.01	1.1	12	.04	.80	10	.02
29	.97	5	.01	1.1	11	.03	.75	10	.02
30	.97	6	.02	1.1	10	.03	.71	9	.02
31	.97	6	.02	1.1	9	.03	--	--	--
TOTAL	39.91	--	.78	34.84	--	1.27	30.30	--	.72

TOTAL DISCHARGE FOR PERIOD FEB. 1 TO SEPT. 30 (CFS-DAYS) 1973.75
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR PERIOD FEB. 1 TO SEPT. 30 (TONS) 6437.86

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

						PARTICLE SIZE											
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED											
DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
JAN 24, 1970	0905	12.0	180	474	230	20	28	36	47	60	75	88	98	100	--	--	VBWC
FEB 28.....	1100	11.0	50	581	78	38	49	60	72	81	88	95	99	100	--	--	SBWC
MAR 1.....	0900	11.0	470	7070	8970	12	13	16	22	29	38	52	75	96	99	100	VPWC

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: 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.0°C on several days during August; minimum, 4.0°C Nov. 26.
EXTREMES, 1966-70.--Water temperatures: Maximum (1966-67, 1968-70), 23.0°C on several days in 1970; minimum, 1.5°C Dec. 15, 1967.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Temperature recorder malfunction Nov. 27 to Dec. 3; recorder stopped Mar. 15 to Apr. 1, Apr. 11 to May 21; probe inoperative May 22 to June 4; recorder stopped July 5-8.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV. 18...	0930	27	7.0	13.7	40	22	137	0

DATE	CHLO-RIDE (CL) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
NOV. 18...	23	.10	.01	.18	131	362	7.8	9

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	17.0	13.0	17.0	13.0	--	--	7.0	5.0	10.5	10.0	11.0	10.0
2	17.0	13.0	17.0	13.0	--	--	7.0	5.0	10.5	10.0	10.0	9.0
3	15.5	12.0	15.5	12.0	--	--	6.5	5.0	10.0	9.5	10.0	9.0
4	15.5	11.5	15.5	11.5	9.0	7.0	6.5	5.0	10.5	9.5	9.5	9.0
5	14.5	10.5	15.0	10.0	8.5	5.5	6.0	4.5	11.0	10.5	10.5	9.0
6	14.0	10.0	14.5	10.0	8.5	6.0	6.0	4.5	11.0	10.5	11.0	9.0
7	14.5	10.5	13.0	12.0	9.5	8.0	7.5	6.0	11.0	10.0	11.5	10.0
8	14.5	11.5	12.5	12.0	10.0	8.5	8.5	7.5	11.0	10.0	12.5	11.0
9	15.5	12.0	12.0	11.0	9.5	8.0	10.0	8.5	11.0	11.0	11.0	10.0
10	16.0	13.0	11.5	10.0	9.5	8.5	10.5	10.0	11.5	11.0	11.5	10.0
11	15.5	12.5	11.0	10.0	11.0	9.5	10.5	9.5	12.0	11.5	11.0	10.0
12	14.0	10.0	11.5	10.0	11.0	10.5	11.0	10.5	11.5	11.5	12.5	10.5
13	13.0	11.0	11.5	11.0	12.0	11.0	11.5	11.0	11.5	11.0	13.0	11.0
14	14.0	12.0	12.0	11.5	12.5	11.0	11.5	11.0	11.0	11.0	13.0	11.0
15	14.0	13.0	12.0	11.5	12.0	9.5	11.5	11.0	11.0	11.0	--	--
16	17.0	13.5	12.5	10.0	11.5	9.5	12.0	11.0	11.0	10.5	--	--
17	18.0	14.0	11.0	8.5	12.5	10.5	12.0	12.0	11.0	11.0	--	--
18	18.0	13.0	9.5	8.0	12.0	11.0	12.0	11.0	11.0	10.0	--	--
19	19.0	14.5	9.5	8.0	12.5	12.0	12.0	11.5	10.0	9.5	--	--
20	18.0	14.0	9.5	8.0	13.5	12.5	13.0	12.0	10.0	9.0	--	--
21	18.0	14.0	9.5	8.0	13.5	11.5	13.0	13.0	10.0	9.0	--	--
22	18.0	14.0	9.5	7.0	11.5	10.5	13.0	13.0	10.0	9.0	--	--
23	18.0	13.0	8.0	6.5	11.0	10.0	13.0	13.0	10.0	9.0	--	--
24	17.5	13.5	7.5	6.5	13.0	11.5	13.0	12.0	10.5	9.5	--	--
25	18.0	14.0	7.5	6.0	13.0	11.0	12.0	11.0	10.5	10.0	--	--
26	18.0	14.0	6.5	4.0	11.0	9.5	11.5	10.5	10.5	10.0	--	--
27	17.5	14.5	--	--	9.5	8.0	12.0	10.5	10.5	10.0	--	--
28	16.5	15.0	--	--	9.0	8.0	10.5	9.0	11.0	10.5	--	--
29	18.0	14.0	--	--	8.0	7.0	9.5	8.0	--	--	--	--
30	18.0	14.5	--	--	7.0	6.0	10.0	9.0	--	--	--	--
31	18.0	13.5	--	--	7.0	5.5	10.0	9.0	--	--	--	--
AVE	16.5	12.9	11.6	9.6	10.7	9.2	10.3	9.3	10.8	10.2	--	--

11160500 SAN LORENZO RIVER AT BIG TREES, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	21.5	15.0	22.0	16.5	20.5	14.0
2	13.0	10.0	--	--	--	--	22.5	16.0	22.0	15.5	20.0	13.5
3	12.5	9.0	--	--	--	--	22.5	17.5	22.0	16.0	19.0	14.5
4	12.0	8.5	--	--	--	--	22.5	17.0	22.0	16.0	20.0	15.0
5	12.5	9.0	--	--	17.0	14.5	--	--	22.0	14.0	19.5	13.5
6	12.5	9.5	--	--	19.0	14.0	--	--	23.0	15.5	21.0	14.0
7	13.0	9.0	--	--	18.5	14.0	--	--	23.0	15.5	21.5	15.5
8	13.0	9.5	--	--	15.0	14.0	--	--	23.0	15.0	22.0	15.0
9	13.0	9.5	--	--	17.0	13.5	20.5	16.0	23.0	16.0	21.0	15.0
10	13.5	10.5	--	--	18.5	13.0	20.5	16.0	23.0	16.0	21.0	14.0
11	--	--	--	--	19.0	13.0	21.0	16.0	22.0	16.0	22.0	14.5
12	--	--	--	--	19.0	13.0	21.0	16.0	22.5	16.5	15.5	14.0
13	--	--	--	--	14.5	14.0	21.0	15.5	23.0	16.5	19.5	13.0
14	--	--	--	--	16.0	13.0	20.5	15.5	21.5	16.5	19.0	11.5
15	--	--	--	--	18.5	13.0	21.0	16.0	21.0	16.5	19.0	11.0
16	--	--	--	--	18.5	14.0	21.0	15.5	22.0	16.0	19.5	11.5
17	--	--	--	--	19.0	14.0	21.0	15.5	22.5	15.5	20.5	12.5
18	--	--	--	--	19.5	13.0	21.0	15.5	22.5	16.5	21.0	12.5
19	--	--	--	--	20.0	13.5	21.0	16.0	22.0	16.5	20.5	13.5
20	--	--	--	--	20.5	14.5	21.5	16.5	20.0	15.0	21.0	12.5
21	--	--	--	--	20.5	15.0	21.5	16.5	21.0	15.5	20.5	13.5
22	--	--	--	--	20.5	15.5	21.0	16.0	21.5	15.5	20.0	13.0
23	--	--	--	--	21.0	15.5	20.5	15.5	21.5	15.0	19.5	12.0
24	--	--	--	--	21.0	15.5	20.0	15.5	21.5	14.5	20.5	12.0
25	--	--	--	--	19.5	15.5	20.5	15.5	21.5	14.5	20.5	12.5
26	--	--	--	--	21.0	15.5	20.5	15.5	21.5	14.5	20.5	12.5
27	--	--	--	--	21.0	16.0	21.0	15.5	20.0	14.5	19.0	12.5
28	--	--	--	--	20.5	15.5	21.5	16.0	20.5	15.0	19.5	12.5
29	--	--	--	--	20.0	14.0	21.5	14.5	21.0	15.0	18.5	12.0
30	--	--	--	--	20.0	14.0	22.0	15.5	21.5	15.5	19.5	12.0
31	--	--	--	--	--	--	22.5	16.0	21.0	15.0	--	--
AVE	--	--	--	--	19.0	14.2	21.2	15.8	21.8	15.5	20.0	13.2

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, temperature recorder at gaging station on left bank at downstream side of 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.5°C July 4; minimum, 4.5°C Jan. 7.
EXTREMES, 1965-70.--Water temperatures: Maximum, 21.5°C on several days in 1965-66, 1968; minimum (1965-66, 1967-70), 2.0°C Dec. 19, 1965.
REMARKS.--Recorder malfunction Jan. 4-6, 18, 19, June 6 to July 3.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	14.0	11.0	9.0	6.0	5.0	5.5	5.0	9.5	9.0	11.0	9.5
2	16.0	14.0	11.0	9.0	6.0	5.0	6.0	5.0	9.0	7.5	9.5	8.0
3	15.0	12.0	11.5	9.0	7.5	5.0	7.5	5.0	8.5	8.0	9.0	8.5
4	14.5	11.5	11.5	9.5	8.0	6.5	--	--	8.5	8.0	9.5	9.0
5	14.0	10.0	11.5	10.5	7.5	6.5	--	--	10.0	9.5	9.5	8.0
6	13.0	10.0	11.0	10.5	8.0	7.0	--	--	10.0	9.0	9.5	8.0
7	13.0	10.0	11.0	10.0	9.0	8.0	6.5	4.5	9.5	8.0	10.5	8.5
8	13.5	11.5	11.5	11.0	10.0	9.0	8.0	6.5	10.0	9.0	11.0	10.0
9	13.5	11.0	11.0	9.5	10.0	9.0	10.5	8.0	10.5	9.5	10.5	10.0
10	13.0	11.5	11.5	8.5	10.0	9.0	10.5	10.0	11.0	10.0	10.0	9.5
11	13.0	10.5	10.0	8.0	11.0	10.0	10.5	10.0	11.0	10.5	10.0	9.5
12	12.0	9.0	10.0	8.0	11.5	11.0	11.0	10.5	11.0	10.5	11.0	9.5
13	12.0	10.5	11.0	8.5	11.5	11.0	11.5	11.0	11.0	10.5	11.5	9.5
14	12.5	11.5	11.5	10.5	12.0	11.0	12.0	11.5	10.5	10.0	11.5	10.5
15	13.0	12.0	12.0	11.5	12.0	10.0	12.0	11.0	10.5	9.0	11.0	9.0
16	13.5	12.0	12.5	9.0	11.0	10.5	12.5	12.0	10.5	9.5	11.0	9.0
17	13.5	12.0	10.5	7.5	11.0	10.5	12.5	12.0	10.5	10.0	11.0	9.5
18	13.5	11.0	9.0	7.0	12.5	11.0	--	--	10.0	8.5	10.5	9.0
19	11.5	10.0	8.5	6.5	13.5	12.5	--	--	9.0	8.0	9.5	7.5
20	11.0	9.0	8.5	6.5	14.0	13.5	12.0	11.0	8.0	7.0	9.5	7.0
21	11.5	9.0	8.5	8.0	14.0	12.0	12.0	12.0	8.5	7.0	9.5	7.0
22	11.5	10.0	8.5	7.5	12.0	11.0	12.5	12.0	8.5	7.0	10.5	8.5
23	12.0	11.0	9.5	7.5	12.5	11.0	12.5	12.0	8.0	7.0	11.0	9.0
24	12.5	12.0	8.5	7.0	13.5	12.5	12.5	11.5	9.5	7.5	11.5	9.0
25	12.5	11.0	8.5	7.0	13.5	11.5	11.5	9.0	9.0	8.0	12.0	10.0
26	12.5	12.0	8.5	7.0	11.5	9.5	10.5	10.0	9.5	7.5	11.5	9.5
27	13.0	12.0	8.0	6.5	9.5	8.0	11.0	10.0	10.0	8.0	11.5	10.0
28	13.0	11.0	7.5	6.0	8.0	7.5	10.0	8.0	11.0	10.0	11.5	9.5
29	12.0	10.0	7.0	5.5	7.5	6.5	8.5	6.5	--	--	11.0	9.0
30	12.0	9.5	6.5	5.0	6.5	5.5	9.0	8.0	--	--	10.5	9.0
31	11.5	9.0	--	--	6.0	5.0	9.0	8.0	--	--	10.0	8.0
AVE	13.0	11.0	9.9	8.2	10.2	9.1	10.3	9.2	9.7	8.7	10.5	9.0

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	8.0	12.0	9.0	18.5	17.5	--	--	19.0	16.5	16.5	14.5
2	12.0	8.5	13.0	10.0	19.0	16.0	--	--	19.0	16.0	16.5	14.0
3	12.0	9.0	13.0	11.0	19.0	16.5	--	--	19.0	16.5	16.0	14.0
4	12.0	9.5	13.0	12.0	18.0	16.0	20.5	17.5	16.5	15.5	16.0	14.5
5	12.0	9.5	12.0	11.5	18.0	16.0	20.0	17.5	18.5	14.5	15.5	12.5
6	12.5	10.5	11.5	11.0	--	--	20.0	16.0	18.5	16.5	16.5	12.5
7	12.0	10.5	12.5	10.0	--	--	20.0	16.5	19.0	16.0	17.0	14.0
8	12.0	10.0	13.0	12.0	--	--	19.5	15.0	19.0	16.5	16.5	14.0
9	12.0	10.5	13.5	12.0	--	--	19.5	15.0	18.5	16.5	16.5	13.5
10	12.5	11.5	13.0	11.0	--	--	19.5	15.5	19.0	16.0	16.0	13.0
11	12.5	10.5	12.5	11.0	--	--	20.0	17.5	19.5	16.5	15.5	12.5
12	12.0	9.5	12.0	10.5	--	--	19.5	16.5	19.5	16.5	15.5	12.5
13	10.0	9.5	13.5	11.0	--	--	19.5	16.5	19.5	16.0	15.0	12.5
14	10.0	9.0	14.0	11.0	--	--	19.5	16.0	19.0	15.5	14.0	11.0
15	10.5	9.0	15.5	12.0	--	--	19.5	17.0	17.5	16.0	13.5	10.0
16	11.0	9.0	16.0	13.0	--	--	20.0	17.0	18.5	15.5	13.5	10.5
17	11.0	9.0	15.5	14.0	--	--	20.0	17.0	19.0	15.5	14.0	10.5
18	11.0	10.0	14.0	13.0	--	--	20.0	17.0	19.0	16.5	15.0	11.5
19	12.5	9.5	13.0	12.0	--	--	20.0	16.5	18.5	16.5	15.0	13.0
20	10.0	8.0	13.5	12.0	--	--	20.0	16.5	18.0	16.0	16.0	13.0
21	9.0	9.0	14.5	11.5	--	--	20.0	17.0	18.0	16.0	15.5	13.0
22	10.0	9.0	14.5	11.5	--	--	19.5	16.0	17.0	15.5	15.0	12.0
23	11.0	9.0	15.5	12.0	--	--	17.5	16.0	17.5	15.5	15.0	12.0
24	12.0	10.0	15.5	12.5	--	--	19.0	15.5	17.5	14.5	15.0	11.0
25	12.0	10.0	16.0	14.0	--	--	19.5	16.5	17.0	15.0	15.0	11.0
26	10.5	9.5	15.5	13.5	--	--	20.0	17.0	16.5	15.0	15.0	11.0
27	10.0	9.0	14.5	13.0	--	--	19.5	16.5	16.5	15.0	15.0	11.0
28	10.0	8.0	15.5	12.5	--	--	20.0	17.0	16.0	14.5	15.0	11.5
29	10.0	7.5	16.0	13.0	--	--	19.5	16.0	17.0	14.0	14.5	11.5
30	11.0	8.5	17.0	13.5	--	--	19.0	16.0	17.0	15.0	14.5	11.0
31	--	--	--	--	--	--	18.5	16.5	17.0	14.0	--	--
AVE	11.2	9.3	14.0	11.9	--	--	19.6	16.4	18.1	15.6	15.3	12.3

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 (revised).
PERIOD OF RECORD.--Water temperatures: October 1969 to September 1970.
Sediment records: October 1965 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 7,640 mg/l Aug. 28; minimum daily, 4 mg/l on several days.
Sediment loads: Maximum daily, 5,560 tons Jan. 14; minimum daily, 0.01 ton on several days.
EXTREMES, 1965-70.--Sediment concentrations: Maximum daily, 19,800 mg/l Jan. 21, 1967; minimum daily, 2 mg/l Dec. 3, 1968.
Sediment loads: 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 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	--	--	--	--	26.0	25.5	--	--	20.5
2	--	--	13.0	12.0	--	--	--	--	--	--	--	--
3	--	--	--	--	15.0	12.0	23.5	--	--	--	23.0	27.0
4	--	--	--	--	--	10.0	--	--	16.0	--	--	22.0
5	--	--	15.0	--	--	--	--	15.5	26.0	--	--	--
6	--	16.5	--	13.5	--	17.0	--	--	--	--	--	--
7	--	--	--	--	--	--	20.5	13.5	--	25.5	21.5	--
8	--	--	12.0	10.5	--	--	--	--	--	--	--	23.0
9	--	--	14.5	12.0	--	18.5	--	19.5	23.0	--	--	--
10	--	--	12.0	--	17.0	--	18.0	--	--	24.5	--	--
11	--	--	--	--	--	--	--	--	--	--	--	23.0
12	--	--	16.0	14.0	--	--	--	20.0	25.5	--	--	--
13	--	--	--	--	13.0	22.0	--	--	--	--	--	--
14	--	--	--	13.5	--	--	20.0	--	--	27.0	21.0	--
15	14.0	--	--	13.0	--	--	--	28.5	--	--	--	23.0
16	--	--	16.5	14.5	13.5	--	--	--	27.0	--	--	--
17	--	13.0	--	--	13.0	21.5	20.5	--	--	25.5	--	--
18	--	--	--	--	--	--	--	--	--	--	22.5	22.0
19	--	--	15.5	--	--	--	--	22.0	26.0	--	--	--
20	--	--	--	15.0	17.0	22.0	--	--	--	--	--	--
21	--	16.5	14.0	15.0	--	--	20.5	--	--	--	22.5	--
22	--	--	--	--	--	--	--	26.0	--	--	--	23.5
23	--	--	--	16.0	--	19.0	--	--	24.5	--	--	--
24	--	--	14.5	13.5	19.0	--	21.5	--	--	--	--	--
25	--	16.5	--	--	--	--	--	--	--	--	17.5	22.0
26	--	--	9.5	--	--	--	--	26.0	18.5	--	--	--
27	--	--	--	14.5	19.5	21.5	--	--	--	--	--	--
28	--	16.5	--	--	13.5	--	23.0	--	--	--	20.5	--
29	--	--	--	--	--	--	--	25.5	--	--	--	22.0
30	--	--	12.0	15.5	--	--	--	--	28.0	--	--	--
31	--	--	--	--	--	19.0	--	--	--	23.0	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.1	23	.13	3.2	50	.43	.80	7	.02
2	1.6	23	.10	2.1	25	.14	.80	7	.02
3	1.2	23	.07	2.1	25	.14	1.2	7	.02
4	1.6	23	.10	2.1	25	.14	1.2	8	.03
5	1.2	23	.07	28	571	139	1.2	8	.03
6	1.6	23	.10	6.0	180	6.5	1.2	8	.03
7	2.6	25	.18	4.8	145	4.4	1.2	8	.03
8	3.6	181	4.8	1.6	40	.17	29	460	157
9	4.0	50	.54	1.2	20	.06	6.4	100	8.0
10	8.9	295	13	1.6	10	.04	17	1200	191
11	1.6	60	.26	1.2	4	.01	6.1	178	4.4
12	2.1	30	.17	1.2	4	.01	8.5	299	7.8
13	2.1	25	.14	1.2	4	.01	1.6	52	.27
14	3.1	25	.21	1.2	4	.01	.80	20	.04
15	149	1880	1370	1.2	4	.01	.80	10	.02
16	3.8	80	.82	1.2	4	.01	.60	6	.01
17	2.6	40	.28	1.2	4	.01	.60	6	.01
18	2.1	30	.17	1.2	5	.02	7.6	216	9.5
19	2.1	30	.17	1.2	6	.02	66	1920	864
20	2.6	30	.21	1.2	8	.03	125	2320	3150
21	2.1	25	.14	1.2	10	.03	110	3090	2400
22	2.1	25	.14	.80	10	.02	3.2	90	.78
23	2.1	25	.14	.80	10	.02	4.8	121	3.5
24	2.1	25	.14	.80	10	.02	68	1090	473
25	1.6	25	.11	.80	10	.02	26	414	54
26	2.1	25	.14	.80	9	.02	2.6	26	.18
27	2.6	25	.18	.80	8	.02	1.2	20	.06
28	2.1	25	.14	.80	8	.02	1.2	18	.06
29	2.1	25	.14	.80	8	.02	.60	16	.03
30	2.1	25	.14	.80	8	.02	.60	14	.02
31	2.1	25	.14	--	--	--	.60	14	.02
TOTAL	222.6	--	1393.07	73.10	--	151.37	496.40	--	7323.88

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.60	14	.02	3.8	40	.41	26	461	136
2	.43	14	.02	3.2	35	.30	3.6	30	.29
3	.43	14	.02	3.2	32	.28	8.1	59	2.2
4	.43	13	.02	2.6	30	.21	126	1760	1480
5	.60	12	.02	2.6	30	.21	12	220	7.1
6	.60	12	.02	2.6	25	.18	7.7	110	2.3
7	.60	10	.02	2.6	25	.18	6.1	126	6.8
8	5.6	253	12	2.6	20	.14	7.1	231	5.4
9	53	706	200	5.1	62	3.3	6.6	150	2.7
10	13	321	33	4.7	50	.63	5.5	65	.97
11	32	417	72	2.2	20	.12	5.3	55	.79
12	7.3	116	4.6	29	720	212	3.9	45	.47
13	10	153	10	33	709	213	2.9	38	.30
14	192	4940	5560	3.0	70	.57	3.4	38	.35
15	80	1190	531	2.1	30	.17	2.6	40	.28
16	98	1660	996	43	740	308	2.3	40	.25
17	12	122	5.0	6.8	204	4.7	2.3	41	.25
18	5.2	40	.56	2.4	60	.39	2.5	40	.27
19	6.6	119	4.1	2.3	50	.31	2.5	40	.27
20	116	2270	1200	2.3	40	.25	2.4	39	.25
21	205	2590	2390	2.3	30	.19	2.6	30	.21
22	32	120	10	2.2	20	.12	2.1	20	.11
23	80	1500	800	2.2	10	.06	1.3	14	.05
24	49	725	104	2.2	5	.03	1.9	14	.07
25	14	100	3.8	2.3	6	.04	1.7	14	.06
26	12	50	1.6	2.2	7	.04	2.3	20	.12
27	70	971	705	26	449	151	1.5	26	.11
28	7.4	100	2.0	55	634	209	1.5	24	.10
29	5.2	70	.98	--	--	--	1.6	22	.10
30	4.4	50	.59	--	--	--	1.6	20	.09
31	3.8	45	.46	--	--	--	2.4	18	.12
TOTAL	1117.19	--	12646.83	253.5	--	1105.83	259.3	--	1648.38

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.5	20	.14	2.0	38	.21	2.7	36	.26
2	2.4	24	.16	2.5	40	.27	2.7	36	.26
3	2.7	28	.20	2.3	45	.28	2.5	37	.25
4	3.4	40	.37	1.9	45	.23	3.1	37	.31
5	3.1	50	.42	2.0	50	.27	3.0	40	.32
6	2.6	60	.42	1.2	30	.10	2.9	40	.31
7	3.2	72	.62	2.6	11	.08	3.2	40	.35
8	2.6	55	.39	2.7	18	.13	24	422	127
9	2.8	40	.30	3.4	24	.22	15	285	48
10	2.6	24	.17	3.2	90	.78	3.1	40	.33
11	3.4	28	.26	2.7	170	1.2	3.0	30	.24
12	3.1	32	.27	3.0	240	1.9	2.5	20	.14
13	2.3	36	.22	2.3	190	1.2	3.3	25	.22
14	2.3	40	.25	2.7	130	.95	2.2	35	.21
15	2.6	55	.39	3.1	79	.66	2.7	40	.29
16	2.9	70	.55	3.1	70	.59	1.9	48	.25
17	2.7	82	.60	2.9	65	.51	2.3	102	.63
18	2.9	90	.70	3.2	60	.52	1.9	155	.80
19	3.1	100	.84	3.2	50	.43	2.5	211	1.4
20	2.5	110	.74	3.2	55	.48	2.7	185	1.3
21	2.8	118	.89	5.8	100	1.6	3.0	160	1.3
22	3.1	115	.96	2.6	68	.48	2.8	140	1.1
23	3.0	110	.89	3.1	70	.59	2.8	113	.85
24	2.8	102	.77	3.3	75	.67	3.3	85	.76
25	3.3	100	.89	3.0	80	.65	2.7	55	.40
26	5.1	155	4.7	3.0	84	.68	3.0	26	.21
27	2.7	75	.55	2.7	90	.66	3.4	125	1.1
28	2.3	17	.11	3.2	100	.86	3.0	220	1.8
29	2.3	25	.16	3.3	104	.93	3.0	320	2.6
30	3.0	30	.24	3.2	80	.69	3.7	416	4.2
31	--	--	--	3.1	60	.50	--	--	--
TOTAL	86.1	--	18.17	89.5	--	19.32	117.9	--	197.19

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.6	240	2.3	3.3	50	.45	1.2	1280	4.1
2	3.5	78	.74	2.8	100	.76	1.3	750	2.6
3	2.9	70	.55	2.8	1440	11	1.2	208	.67
4	2.7	60	.44	2.9	1250	9.8	2.1	840	4.8
5	2.0	50	.27	2.5	1100	7.4	3.2	650	5.6
6	2.2	40	.24	2.4	900	5.8	2.6	460	3.2
7	1.8	32	.16	2.8	754	5.7	2.1	270	1.5
8	1.9	32	.16	3.0	735	6.0	1.6	80	.35
9	1.9	32	.16	2.3	720	4.5	2.1	78	.44
10	2.6	48	.34	1.2	700	2.3	1.6	76	.33
11	2.3	48	.30	1.2	685	2.2	2.1	76	.43
12	2.1	48	.27	1.3	670	2.4	3.2	185	1.6
13	1.7	47	.22	1.7	650	3.0	3.2	295	2.5
14	1.7	47	.22	1.3	632	2.2	3.2	405	3.5
15	1.5	52	.21	1.5	1540	6.2	1.6	512	2.2
16	1.7	58	.27	1.0	2450	6.6	.80	515	1.1
17	1.6	63	.27	.99	3360	9.0	1.2	520	1.7
18	2.5	60	.41	1.0	4270	12	.80	522	1.1
19	2.9	56	.44	.93	3460	8.7	.80	515	1.1
20	2.8	54	.41	.90	2650	6.4	.60	510	.83
21	2.9	50	.39	3.6	2070	21	1.6	500	2.2
22	2.1	48	.27	2.3	2050	13	2.1	494	2.8
23	1.9	46	.24	1.4	2250	8.5	2.1	365	2.1
24	1.9	42	.22	1.7	2450	11	1.6	230	.99
25	2.7	40	.29	1.6	2680	12	1.6	101	.44
26	2.4	38	.25	1.6	4350	19	1.6	94	.41
27	2.5	36	.24	1.6	6000	26	1.6	88	.38
28	3.3	34	.30	1.6	7640	33	.80	80	.17
29	2.7	30	.22	1.7	6050	28	.80	74	.16
30	2.3	28	.17	2.0	4450	24	.80	74	.16
31	2.7	24	.17	1.1	2850	8.5	--	--	--
TOTAL	73.3	--	11.14	58.02	--	316.41	51.10	--	49.46

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 2898.01
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 24881.05

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

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 15, 1969	1005	14.0	124	3980	1330	31	34	41	51	64	74	87	96	100	--	--	SPWC
DEC 8.....	0754	12.0	187	1640	828	14	18	24	30	34	54	79	98	100	--	--	VBWC
DEC 10.....	0745	12.0	203	9400	5150	15	16	18	23	32	50	91	99	100	--	--	VPWC
DEC 19.....	1206	15.5	236	5830	3710	14	14	20	23	35	51	92	100	--	--	--	VPWC
JAN 14, 1970	0807	13.5	414	3100	3470	22	27	35	43	52	65	89	99	100	--	--	VPWC

11169800 COYOTE CREEK NEAR GILROY, CALIF.

LOCATION.--Lat 37°04'40", long 121°29'36", in NE¼SE¼ 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 1970.
Sediment records: December 1964 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 1,330 mg/l Jan. 16; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 10,600 tons Jan. 16; minimum daily, 0 tons on many days.
EXTREMES, 1965-70.--Sediment concentrations: Maximum daily, 3,220 mg/l Jan. 19, 1969; minimum daily, no flow for many days each year.
Sediment loads: Maximum daily, 41,600 tons Jan. 19, 1969; minimum daily, 0 tons on many days each year.
REMARKS.--No flow Oct. 1 to Dec. 20, Sept. 9-30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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

11169800 COYOTE CREEK NEAR GILROY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1							0	--	0
2							0	--	0
3							0	--	0
4							0	--	0
5							0	--	0
6							0	--	0
7							0	--	0
8							0	--	0
9							0	--	0
10							0	--	0
11							0	--	0
12							0	--	0
13							0	--	0
14							0	--	0
15							0	--	0
16							0	--	0
17							0	--	0
18							0	--	0
19							0	--	0
20							0	--	0
21							29	13	2.6
22							33	9	1.0
23							12	5	.16
24							13	4	.14
25							113	22	9.2
26							48	6	.90
27							23	4	.25
28							14	4	.15
29							10	3	.08
30							7.2	3	.06
31							5.8	3	.05
TOTAL	0	--	0	0	--	0	308.0	--	14.59

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.9	3	.04	58	1	.16	1410	460	2220
2	4.3	3	.03	48	1	.13	613	74	143
3	3.9	2	.02	42	1	.11	325	5	4.4
4	3.5	2	.02	39	1	.11	628	95	283
5	3.2	2	.02	34	1	.09	559	34	57
6	2.9	2	.02	30	1	.08	328	9	8.0
7	3.0	1	.01	28	2	.15	239	3	1.9
8	3.4	1	.01	25	2	.14	190	2	1.0
9	38	11	4.3	24	2	.13	152	2	.82
10	146	27	13	26	2	.14	131	2	.71
11	210	38	31	23	1	.06	100	1	.27
12	123	17	6.7	25	1	.07	85	1	.23
13	59	5	.80	44	3	.36	74	1	.20
14	569	496	1340	49	4	.53	62	1	.17
15	461	274	431	36	2	.19	55	1	.15
16	2360	1330	10600	34	2	.26	50	1	.14
17	1160	309	1390	224	13	7.8	46	2	.25
18	332	12	11	128	5	1.7	39	4	.42
19	154	7	2.9	82	2	.44	36	5	.49
20	111	4	1.2	64	1	.17	34	3	.28
21	1650	522	2560	52	1	.14	33	1	.09
22	604	80	156	44	1	.12	30	1	.08
23	294	5	4.0	39	1	.11	29	2	.16
24	724	74	158	36	1	.10	27	2	.15
25	375	16	16	32	1	.09	26	4	.28
26	227	9	5.5	30	1	.08	25	6	.41
27	196	6	3.2	28	1	.08	23	4	.25
28	140	3	1.1	143	24	14	22	2	.12
29	104	2	.56	--	--	--	21	4	.23
30	84	2	.45	--	--	--	20	7	.38
31	69	1	.19	--	--	--	19	7	.36
TOTAL	10219.1	--	16737.07	1467	--	27.54	5431	--	2724.94

11169800 COYOTE CREEK NEAR GILROY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	18	7	.34	8.3	2	.04	1.9	1	.01
2	18	7	.34	7.6	2	.04	1.7	1	0
3	17	7	.32	7.4	2	.04	1.6	1	0
4	17	8	.37	7.2	2	.04	1.5	1	0
5	16	7	.30	7.0	2	.04	1.4	2	.01
6	15	6	.24	7.0	2	.04	1.3	2	.01
7	15	6	.24	7.2	2	.04	1.3	2	.01
8	14	5	.19	6.8	1	.02	1.2	2	.01
9	14	5	.19	6.7	1	.02	1.4	3	.01
10	13	5	.18	6.4	1	.02	1.4	3	.01
11	13	6	.21	6.3	1	.02	1.6	3	.01
12	13	6	.21	6.2	1	.02	1.6	3	.01
13	13	6	.21	6.0	1	.02	1.4	4	.02
14	16	6	.26	6.0	1	.02	1.4	4	.02
15	18	5	.24	5.7	1	.02	1.3	4	.01
16	15	5	.20	5.4	1	.01	1.1	5	.01
17	13	5	.18	5.1	1	.01	1.0	5	.01
18	12	5	.16	4.8	1	.01	1.0	5	.01
19	12	6	.19	4.3	1	.01	.99	5	.01
20	12	7	.23	4.2	1	.01	.95	6	.02
21	11	7	.21	4.2	1	.01	.95	6	.02
22	11	7	.21	3.9	1	.01	.88	6	.01
23	10	7	.19	3.6	2	.02	.85	7	.02
24	9.8	6	.16	3.2	2	.02	.79	7	.01
25	9.6	6	.16	3.1	2	.02	.78	7	.01
26	9.6	6	.16	3.0	2	.02	.78	7	.01
27	10	6	.16	2.9	2	.02	.76	8	.02
28	9.5	4	.10	2.8	2	.02	.76	8	.02
29	9.0	2	.05	2.7	1	.01	.76	8	.02
30	8.6	2	.05	2.3	1	.01	.71	8	.02
31	--	--	--	2.1	1	.01	--	--	--
TOTAL	392.1	--	6.25	159.4	--	.66	35.06	--	.36

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.70	7	.01	.03	5	0	.02	1	0
2	.68	7	.01	.03	5	0	.02	1	0
3	.74	7	.01	.03	5	0	.02	1	0
4	.72	7	.01	.06	5	0	.02	1	0
5	.69	7	.01	.07	4	0	.02	1	0
6	.65	7	.01	.14	4	0	.01	1	0
7	.59	7	.01	.13	4	0	.01	1	0
8	.39	7	.01	.12	4	0	.01	1	0
9	.08	7	0	.10	4	0	0	--	0
10	.03	7	0	.13	4	0	0	--	0
11	.03	7	0	.12	4	0	0	--	0
12	.03	7	0	.10	4	0	0	--	0
13	.03	7	0	.13	4	0	0	--	0
14	.03	7	0	.09	3	0	0	--	0
15	.03	6	0	.06	3	0	0	--	0
16	.03	6	0	.03	3	0	0	--	0
17	.03	6	0	.04	3	0	0	--	0
18	.03	6	0	.03	3	0	0	--	0
19	.03	6	0	.03	3	0	0	--	0
20	.03	6	0	.03	3	0	0	--	0
21	.03	6	0	.03	3	0	0	--	0
22	.03	6	0	.03	3	0	0	--	0
23	.03	6	0	.03	3	0	0	--	0
24	.03	6	0	.03	2	0	0	--	0
25	.03	6	0	.03	2	0	0	--	0
26	.03	6	0	.03	2	0	0	--	0
27	.03	6	0	.03	2	0	0	--	0
28	.03	5	0	.03	2	0	0	--	0
29	.03	5	0	.03	2	0	0	--	0
30	.03	5	0	.03	2	0	0	--	0
31	.03	5	0	.03	2	0	--	--	--
TOTAL	5.90	--	.08	1.83	--	0	.13	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 18019.52
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 19511.49

11169800 COYOTE CREEK NEAR GILROY, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
JAN 14, 1970	1500	11.0	1570	1090	4620	28	38	50	61	71	78	80	83	88	92	100	SBWC
JAN 16.....	0900	9.0	4060	2410	26400	16	19	30	39	50	60	68	79	92	99	100	VPWC
JAN 16.....	1424	12.0	2100	670	3800	20	30	41	53	65	72	78	85	95	99	100	SBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	128	METHOD OF ANALYSIS
NOV 1, 1969	1330		4	0	1	3	5	10	17	24	33	43	56	92	100	S

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: Water year 1958 (partial-record station), December 1958 to July 1966.
Water temperatures: October 1959 to September 1961, October 1962 to September 1970.
Sediment records: October 1962 to September 1967.
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.0°C Aug. 11; minimum, 6.5°C Jan. 5.
EXTREMES, 1963-70.--Water temperatures: Maximum, 30.5°C June 14, 1966; minimum, 4.0°C Jan. 2, Dec. 28, 1966, Dec. 14, 1967.
REMARKS.--Recorder stopped Apr. 16 to May 5.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	20.5	17.0	15.5	11.0	9.0	8.5	8.0	12.5	11.5	13.0	11.0
2	21.0	19.0	17.0	15.5	10.5	9.5	8.0	7.0	12.0	10.5	13.0	11.0
3	19.0	17.0	17.0	15.5	10.5	9.0	8.0	7.5	12.0	10.5	12.0	11.5
4	19.0	17.0	17.5	16.0	10.5	9.5	8.0	7.5	13.5	10.5	11.5	10.5
5	19.0	17.0	17.0	16.0	10.0	8.0	7.5	6.5	13.5	10.5	16.5	10.0
6	20.0	17.0	16.0	15.5	10.0	9.5	8.0	8.0	13.5	10.0	16.5	9.5
7	20.0	17.0	15.5	15.0	10.0	9.0	9.0	8.5	13.5	10.0	16.0	9.5
8	19.0	18.0	15.5	15.0	10.0	10.0	9.0	8.5	13.5	10.5	18.0	10.0
9	19.0	17.0	15.0	14.5	10.0	10.0	9.5	8.5	12.5	11.0	13.0	11.0
10	19.0	17.0	15.0	14.0	10.0	10.0	10.0	9.0	13.0	11.5	13.0	10.0
11	17.0	15.0	15.0	14.0	10.0	10.0	9.5	9.0	13.0	12.0	13.0	11.5
12	18.0	15.0	15.0	14.0	11.0	10.0	10.0	9.5	13.0	12.5	15.5	11.5
13	17.0	16.0	15.0	14.0	11.0	10.0	10.0	9.5	13.0	12.0	17.5	13.0
14	16.0	16.0	16.0	14.5	11.0	10.5	11.0	10.0	12.5	11.0	17.0	13.0
15	16.0	16.0	15.0	14.0	10.5	10.5	11.0	10.0	13.0	11.0	16.5	12.5
16	18.0	16.0	14.5	13.5	10.5	10.0	12.5	11.0	14.0	11.5	17.5	13.0
17	17.0	15.0	13.5	12.0	10.5	10.0	12.5	12.5	12.5	10.5	16.5	12.0
18	16.5	14.5	13.0	11.0	10.5	10.5	12.5	12.5	13.5	10.0	15.0	11.0
19	16.0	15.0	13.0	11.5	11.0	10.5	13.0	12.5	13.0	9.5	15.5	11.0
20	16.0	15.0	13.0	11.5	12.0	11.0	13.0	13.0	14.0	9.5	17.0	11.5
21	17.0	15.5	12.5	11.5	12.0	11.0	14.5	13.0	14.0	10.0	16.5	12.0
22	16.5	16.0	12.5	11.5	11.0	11.0	14.5	14.0	14.0	10.0	17.5	12.0
23	16.5	16.0	12.0	11.0	11.5	11.0	14.5	14.0	14.0	10.0	19.0	12.5
24	16.5	15.5	12.0	11.0	12.0	11.5	14.0	13.5	14.5	10.5	19.5	13.0
25	15.5	14.5	12.5	11.0	12.0	11.5	13.5	12.0	15.0	10.5	19.5	13.5
26	16.0	15.0	12.0	10.0	11.5	10.5	12.5	12.0	15.5	11.0	19.5	13.5
27	16.0	15.5	12.0	10.5	10.5	9.5	12.5	12.0	15.0	11.5	17.5	13.5
28	16.0	15.0	11.5	10.0	9.5	9.0	12.0	11.0	14.0	12.5	18.0	13.0
29	16.0	15.5	11.0	10.0	9.0	8.5	11.0	10.5	--	--	18.5	13.0
30	16.0	15.0	11.0	10.0	9.0	8.5	12.0	11.0	--	--	17.5	12.0
31	16.5	15.0	--	--	8.5	8.0	12.0	11.0	--	--	18.5	11.0
AVE	17.5	16.1	14.1	13.0	10.5	9.9	11.1	10.4	13.5	10.8	16.3	11.7

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	9.5	--	--	23.0	18.5	24.0	21.0	25.0	19.0	20.5	18.0
2	20.0	11.0	--	--	23.5	18.5	25.0	20.5	26.0	19.0	21.0	17.5
3	16.5	13.0	--	--	23.0	18.0	25.5	19.5	26.0	22.0	21.0	17.5
4	17.0	12.0	--	--	23.0	18.0	23.0	19.0	26.0	22.5	20.5	18.0
5	17.0	13.0	--	--	22.5	18.5	24.0	18.5	24.0	21.5	21.5	17.5
6	17.0	12.5	15.5	14.0	21.5	19.0	24.0	18.5	24.5	20.5	22.0	18.0
7	16.0	12.0	17.5	13.5	20.5	19.0	24.5	20.5	24.0	18.0	23.0	20.0
8	16.0	12.0	17.0	13.5	19.5	18.0	24.0	20.5	25.0	18.0	22.5	20.0
9	16.0	12.5	17.5	14.0	20.0	15.0	22.5	21.0	27.5	21.0	23.5	19.5
10	16.0	12.5	17.5	13.5	21.5	15.0	24.0	20.5	26.5	20.5	24.0	20.0
11	17.0	12.0	17.0	12.5	21.5	18.5	24.0	20.5	28.0	21.5	23.5	19.0
12	18.0	13.0	18.0	13.0	21.0	18.5	24.5	20.5	24.5	20.0	21.5	18.0
13	13.0	11.0	20.5	15.0	22.0	18.0	26.0	20.0	26.0	20.0	20.5	17.0
14	14.0	11.0	21.0	15.5	21.0	18.0	25.0	20.0	24.5	18.5	21.5	17.0
15	14.5	11.0	23.0	16.0	22.5	17.5	23.0	20.0	25.0	20.0	21.5	18.5
16	--	--	23.5	17.0	21.0	18.0	24.0	19.5	24.5	19.0	22.0	19.5
17	--	--	22.0	17.0	21.0	17.5	25.0	20.0	26.0	21.5	22.0	20.0
18	--	--	20.0	15.5	23.5	16.5	25.0	21.0	25.0	20.0	21.5	20.0
19	--	--	18.0	15.0	23.5	18.5	25.5	20.5	24.5	21.0	20.0	19.0
20	--	--	19.5	14.5	23.5	18.5	24.5	20.5	23.0	19.0	20.0	18.5
21	--	--	20.0	14.5	24.0	18.5	24.5	20.5	24.0	20.5	21.0	18.5
22	--	--	21.0	15.5	24.0	19.0	24.0	20.0	22.5	19.0	20.0	18.0
23	--	--	22.0	16.0	23.5	20.0	24.5	20.5	23.5	20.0	21.0	18.5
24	--	--	21.5	17.0	23.0	20.0	24.5	20.0	22.5	18.0	21.0	18.0
25	--	--	20.5	16.5	22.0	20.0	24.0	20.0	23.0	18.5	21.5	17.5
26	--	--	20.0	16.5	22.0	20.0	25.0	20.0	21.5	17.0	21.5	18.0
27	--	--	19.5	16.0	22.5	19.5	24.5	21.0	22.0	18.0	21.5	18.5
28	--	--	20.5	15.5	20.0	19.0	24.5	20.5	21.5	17.5	21.5	18.5
29	--	--	21.0	15.5	22.0	18.0	25.0	20.0	22.0	18.5	21.0	18.5
30	--	--	22.5	17.0	23.0	19.0	23.5	20.0	21.0	18.0	21.0	18.5
31	--	--	24.0	18.5	--	--	23.0	20.0	21.0	18.5	--	--
AVE	--	--	20.0	15.3	22.1	18.3	24.3	20.1	24.2	19.5	21.5	18.5

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: Water years 1952-53 (partial-record station), October 1953 to September 1967, October 1968 to September 1969.
Water temperatures: July 1956 to September 1970.
Sediment records: January 1957 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 25.0°C July 13; minimum, 6.0°C Jan. 6.
Sediment concentrations: Maximum daily, 3,570 mg/l Jan. 21; minimum daily, 2 mg/l Nov. 21.
Sediment loads: Maximum daily, 47,200 tons Jan. 21; minimum daily, 0.08 ton Nov. 21.
EXTREMES, 1956-70.--Water temperatures: Maximum (1956-62, 1964-70), 31.0°C June 1, 1960; minimum, 3.0°C Jan. 5, 1961, Jan. 14, 1963.
Sediment concentrations (1957-70): Maximum daily, 5,340 mg/l Apr. 3, 1958; minimum daily, no flow for many days in 1957, 1959-61.
Sediment loads (1957-70): 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 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	13.0	8.0	8.0	12.0	12.0	12.0	16.0	20.0	20.0	22.5	18.0
2	20.0	15.0	9.0	8.0	12.0	12.0	13.0	21.0	21.0	23.0	23.5	17.5
3	19.0	15.0	8.0	7.0	9.0	12.0	13.5	22.0	20.5	22.0	19.5	20.0
4	15.0	15.0	10.0	7.0	13.0	10.0	14.0	18.0	21.5	23.0	21.0	18.0
5	16.0	15.0	9.0	8.0	12.0	13.0	18.0	17.0	20.5	23.0	21.5	18.5
6	16.0	15.0	10.0	6.0	13.0	14.0	17.0	15.0	22.5	23.5	23.5	18.0
7	16.0	14.0	10.0	7.0	14.0	15.0	17.0	15.0	22.0	22.0	20.5	23.0
8	17.0	15.0	11.0	8.0	13.0	15.0	17.0	17.0	17.5	20.0	19.5	19.5
9	17.0	14.0	11.0	10.0	13.0	14.0	15.0	17.0	18.0	23.0	20.0	23.0
10	18.0	13.0	11.0	11.0	14.0	12.0	18.0	18.0	21.5	19.5	24.0	23.0
11	17.0	13.0	12.0	11.0	15.0	13.0	18.0	18.0	21.5	24.0	20.5	22.5
12	16.0	13.0	12.0	12.0	14.0	13.0	18.0	16.0	21.5	24.0	20.0	20.5
13	15.0	13.0	12.0	12.0	14.0	16.0	14.0	18.0	21.0	25.0	23.0	19.0
14	15.0	12.0	13.0	13.0	14.0	16.0	14.0	19.0	18.0	24.0	19.0	19.0
15	15.0	14.0	13.0	12.0	14.0	15.0	14.0	20.0	18.0	20.5	23.5	18.5
16	18.0	14.0	12.0	14.0	13.0	17.0	16.0	24.0	20.0	23.5	20.5	19.0
17	17.0	12.0	12.0	13.0	12.0	15.0	17.0	22.0	20.5	21.0	19.5	18.0
18	15.0	11.0	12.0	12.0	13.0	15.0	17.0	20.0	17.5	20.0	20.0	21.0
19	15.0	10.0	13.0	13.0	11.0	15.0	18.0	19.0	19.5	26.0	19.0	18.0
20	12.0	10.0	14.0	13.0	13.0	15.0	13.0	18.0	20.5	21.0	19.0	20.0
21	15.0	10.0	14.0	14.0	13.0	16.0	17.0	21.0	19.5	20.0	18.5	20.0
22	16.0	10.0	13.0	15.0	13.0	15.0	17.0	21.0	24.0	23.0	21.5	16.5
23	16.0	9.0	12.0	14.0	13.0	15.0	17.0	17.0	23.0	24.0	21.5	18.0
24	16.0	10.0	13.0	12.0	14.0	19.0	17.0	22.0	20.0	22.5	18.0	20.0
25	16.0	10.0	14.0	11.0	15.0	19.0	17.0	23.0	20.5	23.5	18.0	20.0
26	14.0	8.0	11.0	12.0	15.0	16.0	16.0	19.0	19.0	24.5	18.0	20.0
27	14.0	8.0	9.0	12.0	11.0	18.0	15.0	20.0	19.0	24.5	17.5	16.5
28	17.0	8.0	9.0	10.0	15.0	18.0	15.0	21.0	20.0	20.5	17.5	19.0
29	16.0	8.0	8.0	10.0	--	18.0	16.0	19.0	21.5	19.0	21.0	19.0
30	15.0	9.0	8.0	12.0	--	16.0	14.0	22.0	18.5	23.0	19.0	19.0
31	15.0	--	8.0	11.0	--	15.0	--	22.0	--	21.5	17.5	--
AVE	16.0	11.9	11.0	10.9	13.1	15.0	15.8	19.3	20.3	22.4	20.2	19.4

11179000 ALAMEDA CREEK NEAR NILES, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	38	13	1.3	35	8	.76	36	10	.97
2	41	6	.66	36	6	.58	33	5	.45
3	41	9	1.0	54	15	2.2	31	6	.50
4	20	12	.65	45	10	1.2	28	6	.45
5	21	6	.34	40	9	.97	36	6	.58
6	21	4	.23	54	20	2.9	50	13	1.8
7	17	3	.14	41	14	1.5	58	16	2.5
8	36	11	1.1	33	10	.89	60	17	2.8
9	40	7	.76	23	4	.25	65	27	4.7
10	42	10	1.1	18	3	.15	53	14	2.0
11	39	6	.63	16	3	.13	52	15	2.1
12	44	11	1.3	14	3	.11	50	16	2.2
13	50	9	1.2	14	4	.15	52	13	1.8
14	45	10	1.2	11	6	.18	49	11	1.5
15	54	15	2.2	12	4	.13	49	11	1.5
16	75	30	6.1	16	7	.30	47	9	1.1
17	52	23	3.2	26	9	.63	47	7	.89
18	35	26	2.5	19	6	.31	48	10	1.3
19	25	25	1.7	15	5	.20	55	14	2.1
20	29	21	1.6	14	3	.11	106	111	33
21	35	15	1.4	14	2	.08	121	196	88
22	46	14	1.7	14	4	.15	108	331	108
23	48	12	1.6	13	10	.35	29	120	11
24	48	13	1.7	12	6	.19	48	53	8.3
25	45	13	1.6	12	5	.16	77	87	21
26	37	14	1.4	12	5	.16	61	151	26
27	42	13	1.5	12	5	.16	25	50	3.4
28	50	11	1.5	21	7	.40	18	15	.73
29	50	12	1.6	18	5	.24	17	6	.28
30	49	11	1.5	30	9	.73	17	5	.23
31	47	10	1.3	--	--	--	38	17	1.7
TOTAL	1262	--	45.71	694	--	16.27	1564	--	332.88

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	43	14	1.6	88	53	13	237	366	366
2	45	13	1.6	73	36	7.1	328	390	345
3	48	9	1.2	57	32	4.9	333	100	90
4	55	11	1.6	56	28	4.2	796	1380	5580
5	47	7	.89	54	29	4.2	789	860	2130
6	35	7	.66	49	30	4.0	470	110	140
7	33	7	.62	48	25	3.2	332	62	56
8	32	9	.78	52	24	3.4	243	35	23
9	53	20	2.9	51	23	3.2	191	24	12
10	75	120	24	44	20	2.4	166	23	10
11	68	120	24	38	20	2.1	134	20	7.2
12	66	112	21	48	23	3.0	174	21	9.9
13	32	52	4.5	179	396	532	154	20	8.3
14	515	1400	3450	176	1180	637	85	17	3.9
15	262	1390	1090	70	320	60	80	16	3.5
16	1080	2200	8860	49	70	9.3	78	14	2.9
17	615	1080	1860	220	1020	666	71	12	2.3
18	243	266	198	92	320	79	62	9	1.5
19	127	60	21	61	75	12	60	6	.97
20	116	97	40	51	44	6.1	58	7	1.1
21	3920	3570	47200	46	29	3.6	56	7	1.1
22	878	1160	3490	45	29	3.5	58	13	2.0
23	317	245	219	42	28	3.2	50	12	1.6
24	1160	1860	7360	40	26	2.8	41	15	1.7
25	442	360	458	35	20	1.9	38	29	3.0
26	242	165	108	37	20	2.0	33	30	2.7
27	397	691	909	35	30	2.8	28	14	1.1
28	238	180	120	43	23	2.7	28	8	.60
29	146	92	36	--	--	--	37	16	1.6
30	107	59	17	--	--	--	34	14	1.3
31	94	55	14	--	--	--	24	9	.58
TOTAL	11531	--	75535.35	1879	--	2078.6	5268	--	8810.85

11179000 ALAMEDA CREEK NEAR NILES, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	24	16	1.0	56	42	6.4	48	51	6.6
2	18	18	.87	60	49	7.9	42	54	6.1
3	23	21	1.3	66	53	9.4	44	52	6.2
4	23	22	1.4	52	63	8.8	44	43	5.1
5	42	40	4.7	34	50	4.6	42	43	4.9
6	45	24	2.9	34	56	5.1	34	45	4.1
7	39	13	1.4	31	42	3.5	38	38	3.9
8	40	20	2.2	27	28	2.0	38	33	3.4
9	46	22	2.7	27	34	2.5	41	45	5.0
10	55	21	3.1	32	45	3.9	35	34	3.2
11	56	22	3.3	37	53	5.3	30	33	2.7
12	65	32	5.6	27	39	2.8	28	38	2.9
13	67	35	6.3	24	26	1.7	28	45	3.4
14	54	30	4.4	22	28	1.7	31	54	4.5
15	46	24	3.0	23	44	2.7	29	48	3.8
16	43	30	3.5	29	53	4.1	25	33	2.2
17	32	21	1.8	38	37	3.8	25	34	2.3
18	52	28	3.9	38	37	3.8	29	37	2.9
19	79	42	9.0	34	39	3.6	26	38	2.7
20	68	46	8.4	36	46	4.5	24	36	2.3
21	57	32	4.9	32	28	2.4	36	39	3.8
22	53	25	3.6	28	28	2.1	36	41	4.0
23	55	26	3.9	32	49	4.2	33	38	3.4
24	56	34	5.1	45	55	6.7	40	39	4.2
25	59	29	4.6	48	38	4.9	43	36	4.2
26	70	44	8.3	43	36	4.2	46	54	6.7
27	68	52	9.5	40	35	3.8	45	48	5.8
28	57	39	6.0	39	36	3.8	51	38	5.2
29	52	38	5.3	42	45	5.1	48	29	3.8
30	53	47	6.7	47	52	6.6	37	31	3.1
31	--	--	--	56	60	9.1	--	--	--
TOTAL	1497	--	128.67	1179	--	141.0	1096	--	122.4

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	33	32	2.9	39	36	3.8	8.4	41	.93
2	32	75	6.5	41	34	3.8	5.2	31	.44
3	29	90	7.0	41	40	4.4	15	28	1.2
4	29	108	8.5	42	40	4.5	54	36	6.0
5	31	30	2.5	39	43	4.5	54	39	5.7
6	32	22	1.9	37	44	4.4	33	34	3.0
7	33	25	2.2	35	43	4.1	13	43	1.5
8	32	26	2.2	37	54	5.4	26	45	3.1
9	30	20	1.6	37	52	5.2	62	45	7.5
10	30	24	1.9	38	59	6.1	50	35	4.7
11	30	18	1.5	37	50	5.0	45	35	4.3
12	32	13	1.1	37	48	4.8	42	33	3.7
13	35	16	1.5	37	45	4.5	42	29	3.3
14	33	12	1.1	40	46	5.0	35	27	2.6
15	39	31	3.3	39	36	3.8	8.3	20	.45
16	45	24	2.9	37	42	4.2	22	25	1.6
17	44	30	3.6	37	49	4.9	30	22	1.8
18	46	34	4.2	36	45	4.4	32	16	1.4
19	51	31	4.3	33	47	4.2	39	28	2.9
20	50	39	5.3	34	49	4.5	45	18	2.2
21	42	31	3.5	35	51	4.8	44	14	1.7
22	42	24	2.7	37	38	3.8	44	26	3.1
23	42	19	2.2	37	36	3.6	42	22	2.5
24	37	28	2.8	35	55	5.2	47	18	2.3
25	37	30	3.0	36	55	5.3	63	29	4.9
26	46	23	3.0	36	55	5.3	22	18	1.1
27	46	35	5.1	36	60	5.8	16	21	.91
28	23	26	1.7	36	56	5.4	22	15	.89
29	44	57	6.8	38	45	4.6	24	11	.71
30	42	37	4.2	39	51	5.4	34	16	1.5
31	42	38	4.3	34	56	5.1	--	--	--
TOTAL	1159	--	105.3	1152	--	145.8	1018.9	--	77.93

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 29299.9
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 87540.76

11179000 ALAMEDA CREEK NEAR NILES, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 22, 1969	1610	13.0	73	293	58	76	88	95	98	98	100	--	--	--	--	--	SBWC
JAN 16, 1970	1330	14.0	3160	4260	36300	38	43	60	72	80	87	93	97	100	--	--	VPWC
JAN 17.....	1430	13.0	648	1170	2050	73	77	87	95	97	99	99	100	--	--	--	SPWC
JAN 21.....	1615	14.0	5340	4470	64400	63	66	78	91	96	100	--	--	--	--	--	SPWC
JAN 24.....	0900	12.0	1510	3570	14600	64	68	79	90	96	99	99	100	--	--	--	VPWC
MAR 4.....	1300	10.0	375	333	337	43	56	72	87	95	98	99	100	--	--	--	SBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
NOV 4, 1969	1020	14.0	5	48	3	7	22	29	43	55	68	82	93	99	100	S

11185350 KERN RIVER NEAR QUAKING ASPEN CAMP, CALIF.

LOCATION.--Lat 36°08'04", long 118°25'49", in SW¼SW¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 19°C Aug. 11; minimum, 0.5°C on several days during December and January.
EXTREMES, 1965-70.--Water temperatures: Maximum, 21.0°C July 26, 28, 1966, July 21, 1968; minimum, freezing point on several days in 1966 and 1969.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.0	8.5	6.5	4.5	3.0	1.5	1.0	3.5	1.5	4.0	3.0
2	11.5	10.5	8.5	6.5	4.5	3.5	1.5	0.5	3.5	1.5	5.0	3.0
3	12.0	9.0	8.5	6.5	4.5	3.5	1.0	0.5	3.5	1.5	5.0	3.0
4	9.5	7.0	8.5	6.5	4.0	3.0	1.0	0.5	4.0	2.0	3.5	1.0
5	8.5	6.5	8.0	6.5	3.5	2.0	0.5	0.5	4.5	3.0	4.0	1.0
6	9.0	7.0	7.0	7.0	4.0	3.0	0.5	0.5	4.5	3.0	5.0	1.5
7	9.5	6.5	7.0	6.0	4.0	3.0	1.5	0.5	4.5	3.0	5.0	3.0
8	9.0	8.0	6.5	5.5	3.5	3.0	3.0	1.5	4.5	3.0	5.5	3.5
9	10.5	8.5	6.0	5.5	3.5	2.0	3.0	1.5	5.0	4.0	5.5	4.0
10	10.0	8.5	6.0	6.0	3.5	2.0	3.0	1.5	5.0	4.5	5.0	2.0
11	10.0	8.5	6.5	5.5	3.0	2.0	3.0	1.5	5.0	4.5	4.5	2.5
12	9.0	6.5	6.5	5.5	4.0	2.0	3.5	2.0	5.0	4.0	5.5	3.0
13	8.5	5.5	6.5	5.5	4.5	3.0	3.0	2.0	4.0	3.5	7.0	4.0
14	7.0	5.5	6.5	5.5	4.5	3.0	3.0	3.0	4.0	3.0	6.5	4.5
15	8.5	6.5	6.0	5.5	4.0	3.0	3.0	2.0	4.5	3.0	7.0	4.5
16	9.0	8.5	6.5	6.0	3.5	2.0	3.0	3.0	4.5	3.0	7.5	5.0
17	9.0	8.5	6.0	4.5	3.5	2.0	4.0	3.0	5.0	3.5	7.5	5.0
18	8.5	6.0	4.5	3.5	3.5	2.0	4.0	3.5	3.5	1.5	7.5	5.5
19	7.0	5.5	5.0	3.5	4.0	3.0	4.0	3.5	3.0	1.0	6.0	3.5
20	7.0	5.5	5.0	4.0	5.0	4.0	4.0	3.5	3.5	1.0	6.5	3.5
21	7.0	6.0	5.0	4.0	5.0	4.5	4.5	4.0	3.5	2.0	7.0	4.0
22	8.5	6.5	5.0	4.0	5.0	4.5	5.0	4.0	4.0	1.5	7.5	5.0
23	8.5	6.5	4.5	3.5	4.5	4.0	5.0	4.0	4.5	3.0	8.0	5.5
24	8.0	6.5	4.5	3.5	5.0	4.5	5.0	4.0	5.0	3.0	8.5	5.5
25	8.0	6.5	4.5	3.5	5.0	4.5	4.5	3.5	5.0	3.0	8.5	6.5
26	8.5	6.5	4.5	3.5	4.5	3.0	3.5	3.0	4.5	3.0	8.5	6.0
27	8.5	6.5	4.5	3.5	3.5	1.0	4.0	3.0	5.0	3.0	7.0	5.0
28	8.5	6.5	4.0	2.0	2.0	1.0	3.0	1.5	4.5	3.5	7.5	5.0
29	8.5	6.5	3.5	2.0	1.0	0.5	2.0	1.0	--	--	7.0	5.5
30	8.5	6.5	4.5	3.0	1.0	0.5	2.0	1.0	--	--	7.0	5.5
31	8.5	6.5	--	--	1.5	1.0	2.0	1.0	--	--	6.0	4.0
AVE	8.9	7.1	5.9	4.8	3.8	2.7	3.0	2.1	4.3	2.8	6.3	4.0

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	3.5	10.0	6.5	11.0	9.5	15.0	12.5	16.5	13.5	16.0	12.0
2	7.0	4.5	11.0	7.0	11.0	9.5	15.5	13.0	15.5	13.0	15.0	11.5
3	7.5	5.0	9.5	8.0	11.0	10.0	16.0	14.5	17.0	13.0	15.0	11.5
4	7.5	5.0	9.0	8.0	10.5	10.0	15.5	14.5	17.0	14.5	15.0	11.5
5	8.0	5.5	10.5	7.5	10.5	10.0	16.0	15.0	17.5	14.5	14.0	11.5
6	8.0	5.5	9.5	7.5	11.0	10.0	16.5	14.5	18.0	14.5	14.0	10.5
7	7.5	5.5	9.0	6.5	11.5	10.5	17.0	15.0	18.0	15.0	15.0	11.0
8	8.0	5.5	10.0	7.5	11.5	11.0	16.5	15.0	17.5	14.0	16.0	12.0
9	8.0	5.5	11.0	9.0	11.5	10.5	15.0	14.0	18.0	14.0	16.0	13.0
10	8.0	6.5	10.5	8.5	12.0	11.0	14.0	13.5	18.5	14.5	16.0	13.0
11	8.0	6.5	9.0	7.0	12.0	11.0	15.0	13.0	19.0	15.0	16.0	13.0
12	7.5	5.5	9.0	7.0	12.0	11.0	16.0	14.0	17.5	15.5	16.0	12.5
13	7.5	5.0	10.0	7.5	11.0	10.0	17.0	14.5	17.5	15.0	14.5	11.0
14	5.0	3.0	11.0	8.5	11.0	9.0	16.5	15.0	18.5	15.5	13.5	9.5
15	6.5	3.5	11.0	8.0	12.5	9.5	17.5	15.0	18.0	14.5	12.5	9.0
16	7.0	5.0	10.0	8.0	13.0	11.0	17.0	14.5	17.0	15.0	13.0	9.0
17	7.0	6.0	10.0	8.0	13.0	11.0	17.0	14.5	17.5	15.0	13.5	10.0
18	8.5	5.5	10.0	8.0	13.0	11.5	17.5	15.5	18.0	15.0	14.0	11.0
19	9.0	6.5	9.0	8.0	13.0	12.0	17.5	15.5	18.0	15.0	14.0	11.0
20	9.0	6.5	9.0	8.0	14.0	12.5	17.0	15.5	17.0	14.5	14.0	11.5
21	7.0	5.5	10.0	8.5	13.5	12.5	17.5	15.0	16.5	13.5	13.5	10.5
22	7.5	4.0	10.5	9.0	14.0	13.0	17.0	15.0	17.0	13.0	13.0	10.0
23	8.0	5.0	10.5	9.0	14.0	13.0	17.0	14.5	17.0	13.5	13.5	11.0
24	9.0	6.0	10.5	9.0	14.0	13.0	17.0	14.5	17.0	13.5	13.5	11.0
25	10.0	6.5	10.0	9.0	14.0	13.0	16.0	14.5	18.0	14.5	13.0	10.5
26	9.0	7.0	9.5	8.0	15.5	13.5	15.0	14.0	17.5	14.0	12.5	9.0
27	7.0	5.0	10.5	9.0	15.5	13.5	16.5	13.5	17.0	15.5	12.5	9.5
28	5.0	3.5	10.5	9.0	14.0	12.5	15.5	13.5	17.0	15.0	13.0	10.0
29	7.0	3.0	10.5	9.0	14.0	11.5	16.5	14.5	17.5	14.5	13.0	10.0
30	8.5	5.0	11.0	9.0	13.5	11.5	16.5	14.0	17.0	14.0	13.0	10.0
31	--	--	11.0	9.5	--	--	16.5	13.0	17.0	13.5	--	--
AVE	7.6	5.2	10.1	8.1	12.6	11.3	16.3	14.3	17.4	14.4	14.1	10.9

11187000 KERN RIVER AT KERNVILLE, CALIF.

LOCATION.--Lat 35°45'34", long 118°25'12", in NE¼NW¼ 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 1970.
Sediment records: Water years 1967-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.0°C Aug. 19; minimum, 2.0°C Jan. 6.
EXTREMES, 1962-70.--Water temperatures: Maximum (1962-63, 1964-70), 26.5°C Aug. 5, 6, 8, 1966; minimum, 1.0°C on several days in 1963, 1965, and 1966.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	15.0	11.0	10.0	5.5	5.0	4.0	3.0	6.0	5.0	6.5	6.5
2	16.0	15.0	10.5	9.5	5.5	5.0	3.5	3.0	6.0	5.0	7.5	6.0
3	15.0	13.5	10.5	10.0	5.5	5.0	3.5	2.5	6.0	5.0	7.5	6.0
4	13.5	12.5	10.5	10.0	5.5	4.5	3.5	2.5	6.5	5.5	7.0	5.0
5	13.0	11.5	10.5	9.5	5.0	4.0	3.5	2.5	7.0	6.0	6.5	4.5
6	12.5	11.5	10.0	10.0	5.0	4.0	3.5	2.0	7.0	6.0	7.0	5.5
7	13.0	12.0	10.0	9.5	5.0	4.0	3.0	2.5	7.0	6.0	7.5	6.0
8	13.0	12.0	10.0	9.0	4.5	4.0	4.0	3.0	7.0	6.5	8.0	6.5
9	13.5	12.0	9.5	9.0	4.5	4.0	4.5	4.0	7.5	7.0	8.0	6.5
10	13.5	12.5	9.0	8.5	4.5	4.0	5.0	4.0	8.0	7.5	7.5	6.5
11	14.0	12.5	9.5	9.0	4.5	3.5	4.5	4.0	8.5	8.0	7.0	5.5
12	13.0	12.0	9.5	9.0	4.5	3.5	5.0	4.5	8.5	7.0	8.0	7.0
13	12.0	11.0	9.5	9.0	5.0	4.0	5.0	4.5	7.5	7.0	9.0	7.5
14	12.0	10.5	9.5	8.5	5.0	4.0	5.0	5.0	7.0	6.5	9.5	8.5
15	12.0	11.0	9.0	9.0	5.0	4.0	5.0	4.5	7.0	6.0	9.5	8.0
16	13.0	12.0	10.0	9.0	4.5	4.0	6.0	5.0	7.0	6.0	9.5	8.0
17	13.0	11.5	9.0	8.0	5.0	4.0	5.5	5.0	7.5	6.5	9.5	8.5
18	12.0	10.5	8.5	6.5	5.0	4.0	5.5	5.0	7.0	6.0	9.0	8.0
19	11.0	10.0	6.5	6.0	5.0	4.5	6.0	5.5	6.0	5.0	8.0	7.0
20	11.0	10.5	6.5	6.0	6.5	5.0	6.5	5.5	6.0	4.5	8.0	6.5
21	11.5	10.5	6.5	6.0	6.5	6.0	7.0	6.0	6.0	5.0	8.5	7.0
22	11.5	10.5	6.5	5.5	6.5	6.5	7.5	7.0	6.0	5.0	9.0	7.5
23	12.0	11.0	6.5	5.5	6.5	6.0	7.5	7.0	6.5	5.0	9.0	8.0
24	12.0	11.0	6.0	5.5	7.0	6.0	8.0	7.0	7.0	5.5	9.5	8.5
25	12.0	11.0	5.5	5.0	7.0	6.5	7.0	6.0	7.0	6.0	10.0	9.0
26	11.5	10.5	5.5	4.5	7.0	5.5	6.5	5.5	7.5	6.0	10.0	9.0
27	11.5	10.5	6.0	5.0	5.5	4.0	6.5	6.0	7.5	6.5	9.5	8.0
28	11.0	10.5	5.5	4.5	4.0	3.0	6.0	5.0	7.0	6.5	9.0	8.0
29	11.0	10.0	5.0	4.5	3.5	2.5	5.0	4.0	--	--	9.0	8.0
30	11.0	10.0	6.0	4.5	3.5	2.5	5.0	4.0	--	--	9.0	8.0
31	11.0	10.0	--	--	3.5	2.5	5.0	4.0	--	--	8.0	7.0
AVE	12.5	11.4	8.3	7.5	5.2	4.4	5.3	4.5	6.9	6.0	8.4	7.1

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.0	11.0	9.0	14.5	13.5	17.5	16.0	20.5	19.5	20.0	18.5
2	8.5	7.0	11.5	10.0	15.0	14.0	18.0	17.0	20.5	19.0	19.5	18.0
3	9.0	8.0	11.5	10.5	15.0	14.0	18.0	17.5	20.0	18.5	19.0	17.5
4	9.5	8.0	11.0	10.0	15.0	13.5	18.5	18.0	20.5	19.5	19.0	18.0
5	9.5	8.0	11.5	10.0	14.5	13.5	19.0	18.0	21.0	19.0	18.5	17.5
6	10.0	8.5	11.5	10.5	15.0	14.0	19.0	18.0	21.0	20.0	18.5	17.0
7	10.0	8.5	11.0	9.5	16.0	15.0	19.0	18.5	21.0	20.0	19.0	17.5
8	10.0	8.5	11.5	9.5	16.0	15.0	19.0	18.0	21.5	20.5	20.0	18.0
9	10.0	9.0	12.0	10.5	16.0	14.5	18.0	17.5	21.5	20.0	20.5	19.0
10	10.5	9.0	12.0	11.0	15.5	14.5	17.5	17.0	21.5	20.0	19.5	18.0
11	10.5	9.5	11.5	10.5	16.0	14.5	18.0	16.5	21.5	21.0	19.5	18.0
12	10.0	8.5	11.5	10.0	16.5	15.5	18.5	17.0	22.5	21.5	19.0	17.5
13	9.5	8.0	12.0	10.0	16.0	15.0	19.0	18.0	22.5	21.5	18.0	17.0
14	8.0	6.5	13.0	11.0	16.0	14.5	19.0	18.5	22.5	21.5	17.0	15.5
15	8.0	6.0	13.0	11.5	16.5	15.0	19.0	18.5	22.0	21.0	17.0	15.0
16	8.5	7.0	13.0	11.5	17.5	16.0	20.0	18.5	22.5	21.5	16.0	15.0
17	8.0	7.5	13.0	11.5	17.5	16.5	20.0	19.5	22.5	21.0	16.0	15.0
18	9.0	7.0	12.5	11.5	18.0	16.5	20.5	20.0	22.5	21.5	16.5	15.0
19	9.0	8.5	12.0	11.0	17.5	16.0	21.0	20.5	23.0	22.0	16.5	15.0
20	9.5	8.0	12.5	11.0	18.0	16.5	21.0	20.5	22.0	21.0	16.5	15.0
21	9.0	7.0	12.5	11.0	18.0	17.0	21.0	20.5	21.5	20.0	16.0	15.0
22	8.5	6.5	13.0	12.0	18.0	17.0	20.5	20.0	21.5	20.0	16.0	14.0
23	9.0	7.0	13.0	12.0	18.0	17.0	20.5	19.5	21.5	20.0	16.0	14.5
24	9.5	8.0	13.5	13.0	18.0	16.5	20.5	19.5	21.5	20.0	16.0	14.5
25	10.5	9.0	13.5	12.5	18.0	17.0	20.5	19.5	22.0	21.0	15.5	14.5
26	10.5	9.0	13.5	12.0	18.5	17.0	20.5	19.5	21.0	20.0	15.0	13.5
27	9.0	7.5	13.5	12.5	18.5	17.5	20.0	19.0	21.0	20.0	15.5	13.5
28	8.0	7.0	13.5	13.0	17.5	16.5	20.0	19.5	21.0	20.5	15.5	14.0
29	8.0	6.0	14.0	13.0	17.0	16.0	21.0	19.5	21.0	20.0	15.5	14.0
30	9.5	7.5	14.0	13.5	17.0	15.5	20.5	20.0	20.5	19.5	15.0	14.0
31	--	--	14.5	14.0	--	--	20.5	19.5	20.5	19.0	--	--
AVE	9.2	7.8	12.5	11.2	16.7	15.5	19.5	18.7	21.5	20.3	17.4	15.9

11187000 KERN RIVER AT KERNVILLE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 21, 1969	1600	11.0	388	2	2.1	--	--	--	--	--	--	--	--	--	--	--	
NOV 21.....	0945	6.0	410	1	1.1	--	--	--	--	--	--	--	--	--	--	--	
DEC 17.....	1420	4.5	306	2	1.7	--	--	--	--	--	--	--	--	--	--	--	
JAN 22, 1970	1345	7.0	772	9	19	--	--	--	--	--	--	--	--	--	--	--	
FEB 18.....	1210	6.0	510	3	4.1	--	--	--	--	--	--	--	--	--	--	--	
MAR 18.....	1425	9.0	736	13	26	--	--	--	--	--	--	--	--	--	--	--	
APR 16.....	1410	7.5	899	11	27	--	--	--	--	--	--	--	--	--	--	--	
MAY 20.....	1455	12.0	2090	62	350	--	--	--	--	--	--	--	--	--	--	--	
JUN 19.....	1505	16.5	1250	9	30	--	--	--	--	--	--	--	--	--	--	--	
JUL 16.....	1230	19.0	730	7	14	--	--	--	--	--	--	--	--	--	--	--	
AUG 19.....	1630	23.0	278	4	3.0	--	--	--	--	--	--	--	--	--	--	--	

11187500 BOREL CANAL BELOW ISABELLA DAM, CALIF.

LOCATION.--Lat 35°38'32", long 118°28'09", in NE¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 24.5°C on several days during August; minimum, 6.5°C on several days during January.
EXTREMES, 1958-70.--Water temperatures: Maximum, 26.5°C July 31, Aug. 1, 1959; minimum, 0.5°C Jan. 17, 18, 1960.
REMARKS.--No flow June 9.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	20.5	15.0	15.0	11.5	11.5	9.0	9.0	8.5	8.0	9.5	9.5
2	20.5	20.0	15.0	15.0	11.5	11.0	9.0	8.5	8.5	8.5	9.5	9.5
3	20.0	20.0	15.0	15.0	11.0	11.0	8.5	8.5	8.5	8.5	9.5	9.5
4	20.0	19.5	15.0	15.0	11.0	11.0	8.5	8.0	8.5	8.5	9.5	9.5
5	19.5	19.5	15.0	15.0	11.0	10.5	8.0	7.0	8.5	8.5	9.5	9.5
6	19.5	19.5	15.0	14.5	10.5	10.5	7.0	7.0	8.5	8.5	9.5	9.0
7	19.5	19.5	14.5	14.5	10.5	10.5	7.0	7.0	8.5	8.5	9.5	9.5
8	19.5	19.0	14.5	14.5	10.5	10.5	7.0	6.5	9.0	8.5	9.5	9.5
9	19.0	19.0	14.5	14.0	10.5	10.0	6.5	6.5	9.0	9.0	10.0	9.5
10	19.0	18.0	14.0	14.0	10.0	10.0	6.5	6.5	9.0	9.0	10.0	10.0
11	18.0	18.0	14.0	14.0	10.0	9.5	6.5	6.5	9.0	9.0	10.0	9.5
12	18.0	18.0	14.0	14.0	9.5	9.5	6.5	6.5	9.0	9.0	10.0	9.5
13	18.0	18.0	14.0	14.0	9.5	9.5	6.5	6.5	9.0	9.0	10.5	10.0
14	18.0	17.0	14.0	14.0	9.5	9.5	6.5	6.5	9.0	9.0	10.0	10.0
15	17.0	17.0	14.0	14.0	9.5	9.5	6.5	6.5	9.0	9.0	10.0	10.0
16	17.0	17.0	14.0	13.0	9.5	9.5	6.5	6.5	9.0	9.0	10.0	10.0
17	17.0	16.5	13.0	13.0	9.5	9.5	6.5	6.5	9.0	9.0	10.0	10.0
18	16.5	16.0	13.0	13.0	9.5	9.5	7.0	6.5	9.0	9.0	10.0	9.5
19	16.0	16.0	13.0	13.0	9.5	9.5	7.0	7.0	9.0	9.0	11.5	10.0
20	16.0	16.0	13.0	13.0	9.5	9.5	7.0	7.0	9.0	9.0	11.0	10.5
21	16.0	16.0	13.0	13.0	9.5	9.5	7.0	7.0	9.0	9.0	11.0	10.5
22	16.0	15.5	13.0	13.0	9.5	9.5	7.0	7.0	9.0	8.5	11.0	10.5
23	15.5	15.5	13.0	12.0	9.5	9.5	7.0	7.0	9.0	8.5	11.5	11.0
24	15.5	15.5	13.0	12.0	9.5	9.5	7.0	7.0	9.5	9.0	11.5	11.5
25	15.5	15.5	12.0	12.0	10.0	9.5	7.0	7.0	9.5	9.5	12.0	11.5
26	15.5	15.0	12.0	12.0	10.0	10.0	7.0	7.0	9.5	9.5	12.0	11.5
27	15.0	15.0	12.0	12.0	10.0	10.0	7.0	7.0	9.5	9.5	12.0	11.5
28	15.0	15.0	12.0	11.5	10.0	9.5	8.0	7.0	9.5	9.5	12.0	12.0
29	15.0	15.0	11.5	11.5	9.5	9.0	8.0	7.0	--	--	12.0	12.0
30	15.0	15.0	11.5	11.5	9.0	9.0	8.0	8.0	--	--	12.0	12.0
31	15.0	15.0	--	--	9.0	9.0	8.0	8.0	--	--	12.5	12.0
AVE	17.3	17.2	13.5	13.4	10.0	9.9	7.2	7.1	9.0	8.9	10.6	10.3

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	12.5	12.5	12.0	19.5	18.5	21.0	20.5	23.5	23.0	23.5	23.0
2	12.5	12.5	13.5	12.5	18.5	18.0	20.5	20.0	24.0	23.0	23.0	23.0
3	12.5	12.5	14.5	13.0	18.0	17.5	20.5	20.5	23.5	23.5	23.5	22.5
4	13.5	12.5	14.5	13.5	18.0	17.5	20.5	20.0	24.5	23.5	23.0	22.5
5	13.5	13.0	14.0	13.0	19.0	18.0	21.0	20.5	24.0	23.5	22.5	22.0
6	13.0	13.0	13.0	12.5	18.5	18.0	21.0	21.0	24.0	23.0	22.5	22.0
7	13.0	12.0	12.5	12.5	20.0	16.5	21.0	20.5	24.0	23.0	23.0	22.0
8	12.0	12.0	12.5	12.5	17.5	16.0	22.0	21.0	23.5	23.5	22.5	22.0
9	13.0	12.0	12.5	12.5	--	--	23.0	21.5	24.0	23.0	23.0	21.5
10	12.5	12.0	12.5	12.5	17.0	15.5	22.0	21.0	23.5	23.0	23.0	22.0
11	12.0	12.0	12.5	12.5	17.0	16.0	22.0	21.5	24.5	23.0	22.5	22.0
12	13.0	12.5	13.0	12.5	17.0	17.0	22.5	20.5	24.0	23.5	22.0	22.0
13	13.0	12.5	13.0	13.0	17.5	17.0	22.5	20.5	24.5	23.5	22.0	21.5
14	13.5	12.5	14.0	13.0	18.0	17.5	23.0	21.0	24.5	23.0	21.5	21.0
15	12.5	12.0	15.0	14.0	18.0	18.0	23.5	22.0	24.5	23.0	21.0	20.5
16	12.0	12.0	18.5	15.0	18.0	18.0	22.0	20.0	24.0	23.5	21.5	20.5
17	12.0	12.0	16.0	15.0	18.5	18.0	23.0	20.0	24.0	23.5	22.0	21.0
18	12.0	12.0	15.5	15.0	19.0	18.5	23.0	22.0	23.5	23.5	21.5	21.0
19	12.0	12.0	15.0	14.5	19.5	18.5	23.0	22.0	23.5	23.5	21.0	20.5
20	12.0	12.0	14.5	14.5	19.5	19.0	23.5	22.0	23.5	23.5	20.5	20.0
21	12.0	12.0	16.0	14.5	20.0	19.5	23.0	22.0	24.5	23.5	20.0	20.0
22	12.0	12.0	17.0	15.0	21.0	19.5	22.5	22.0	24.0	23.5	21.0	19.5
23	12.0	12.0	16.5	15.5	21.5	20.5	23.0	22.0	24.0	23.5	20.5	20.0
24	12.0	11.5	18.0	15.5	21.5	20.0	23.0	23.0	24.5	23.0	20.5	19.5
25	12.0	12.0	19.0	17.5	21.5	20.0	24.0	23.0	24.0	23.5	19.5	19.5
26	12.0	12.0	18.5	15.5	21.5	20.0	24.0	24.0	24.0	23.5	20.0	19.0
27	12.0	12.0	16.0	15.5	20.5	18.5	24.0	24.0	24.0	23.5	20.5	19.5
28	12.0	12.0	16.5	16.0	19.5	18.5	24.0	24.0	24.0	23.5	20.5	20.0
29	12.0	12.0	18.0	16.0	20.0	19.0	24.0	24.0	24.0	23.5	20.5	20.0
30	12.5	12.0	18.0	16.5	20.5	19.0	24.0	23.5	23.5	23.5	20.0	19.5
31	--	--	19.0	17.5	--	--	23.5	23.0	23.5	23.0	--	--
AVE	12.4	12.2	15.2	14.2	19.2	18.1	22.6	21.7	24.0	23.3	21.6	21.0

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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 33.0°C July 18-21, Aug. 18; minimum, 4.0°C sometime during period Dec. 16 to Feb. 8.
EXTREMES, 1965-67, 1969-70.--Water temperatures: Maximum, 33.0°C July 18-21, Aug. 18, 1970; minimum (1966-67, 1969-70), 3.5°C Dec. 28, 1966.
REMARKS.--Clock stopped Oct. 18-30, Nov. 5-12, Dec. 15 to Feb. 9; range in temperature, 12.5°C to 18.0°C, 11.5°C to 16.0°C, and 4.0°C to 14.0°C, respectively. Prior to Mar. 20, 1968, gage was located 1.9 miles upstream.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	17.0	17.0	13.0	9.5	7.0	--	--	--	--	11.5	10.0
2	17.0	16.5	17.0	13.0	10.5	7.0	--	--	--	--	10.5	9.0
3	16.5	14.5	17.0	13.5	10.5	7.5	--	--	--	--	11.0	8.5
4	14.5	13.5	17.0	13.5	10.5	7.0	--	--	--	--	9.5	8.5
5	13.5	13.0	--	--	10.0	7.0	--	--	--	--	9.5	8.0
6	13.0	12.5	--	--	10.5	7.5	--	--	--	--	12.0	7.5
7	13.5	12.5	--	--	10.0	7.0	--	--	--	--	13.0	9.0
8	13.5	13.0	--	--	8.5	7.0	--	--	--	--	13.0	9.5
9	14.5	13.0	--	--	10.5	8.0	--	--	--	--	13.0	10.0
10	15.0	14.5	--	--	10.0	7.0	--	--	12.5	11.0	11.5	9.0
11	14.5	14.5	--	--	10.5	7.0	--	--	14.0	12.0	12.0	8.0
12	14.5	14.5	--	--	10.5	7.0	--	--	13.0	11.0	12.5	8.5
13	15.5	14.0	16.0	12.0	11.0	7.0	--	--	11.5	10.0	14.0	10.0
14	15.0	15.0	16.0	12.5	10.5	7.0	--	--	12.0	9.5	14.0	10.5
15	16.0	15.0	15.0	13.0	--	--	--	--	12.0	8.5	13.5	12.0
16	17.5	16.0	15.0	13.0	--	--	--	--	12.0	8.5	14.5	10.5
17	18.0	15.0	14.5	10.5	--	--	--	--	12.0	9.5	12.0	10.0
18	--	--	13.0	9.5	--	--	--	--	9.5	8.0	13.5	9.0
19	--	--	12.5	9.0	--	--	--	--	11.5	7.5	13.0	8.5
20	--	--	12.5	9.0	--	--	--	--	10.5	7.5	13.5	8.5
21	--	--	13.0	9.0	--	--	--	--	11.5	8.0	13.5	9.0
22	--	--	12.0	9.0	--	--	--	--	11.5	8.0	14.5	9.5
23	--	--	12.0	8.5	--	--	--	--	12.0	8.0	15.0	10.5
24	--	--	12.0	8.5	--	--	--	--	12.5	9.0	16.0	11.5
25	--	--	11.5	8.5	--	--	--	--	13.0	9.5	16.5	12.0
26	--	--	11.0	8.0	--	--	--	--	13.0	9.5	15.5	12.0
27	--	--	11.5	7.5	--	--	--	--	13.0	9.5	15.0	11.0
28	--	--	11.0	7.5	--	--	--	--	11.5	10.5	14.5	10.0
29	--	--	10.5	7.0	--	--	--	--	--	--	14.5	10.0
30	--	--	10.5	7.0	--	--	--	--	--	--	14.0	9.5
31	17.0	13.0	--	--	--	--	--	--	--	--	13.5	8.5
AVE	--	--	--	--	--	--	--	--	--	--	13.2	9.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	8.5	17.0	11.0	25.5	18.0	29.5	20.5	31.0	21.5	29.5	21.0
2	15.0	9.0	18.5	12.0	26.0	18.5	30.5	21.0	30.0	21.5	29.5	21.0
3	15.5	10.0	17.5	13.0	26.0	18.0	27.5	23.0	30.5	21.5	29.0	20.0
4	16.0	11.0	18.5	13.0	26.5	19.0	30.0	23.0	30.0	22.5	28.0	20.0
5	16.5	11.0	20.0	13.5	26.0	20.0	32.0	24.5	31.0	22.0	26.5	19.0
6	17.0	12.0	17.5	14.0	26.0	19.5	31.5	24.0	31.0	22.0	27.5	18.5
7	16.5	11.5	17.0	12.0	26.5	19.5	31.5	23.0	32.0	23.0	28.0	19.0
8	16.0	11.0	18.5	12.0	22.5	20.0	30.0	22.5	32.5	23.0	28.0	20.0
9	16.5	11.0	17.5	13.5	22.0	17.5	26.0	24.0	32.5	22.5	28.5	19.5
10	17.0	12.0	18.0	13.0	20.5	16.0	30.0	22.5	32.0	22.5	28.5	20.0
11	17.0	12.0	17.5	11.5	23.0	15.5	31.0	22.0	32.5	23.5	28.5	20.0
12	17.0	11.5	17.5	12.0	23.0	16.0	31.5	23.0	32.0	24.0	27.5	19.5
13	15.0	11.5	19.0	12.5	23.0	17.0	32.0	23.5	32.0	24.0	25.0	18.0
14	11.5	8.5	20.5	14.0	23.5	16.0	32.0	23.5	32.0	23.0	24.0	16.0
15	13.0	7.0	21.5	15.5	24.0	17.0	31.5	24.0	32.0	23.0	24.5	15.0
16	13.0	9.0	22.0	16.5	25.5	18.0	30.5	23.0	32.0	23.5	25.5	16.0
17	14.0	9.5	22.5	16.5	25.5	18.0	31.5	22.5	32.0	24.0	26.0	17.0
18	15.5	9.5	22.5	16.5	26.5	19.0	33.0	23.5	33.0	25.0	26.0	17.5
19	15.0	10.5	21.5	15.5	27.5	20.0	33.0	24.5	32.5	25.0	26.0	17.5
20	15.0	9.5	20.0	14.5	29.0	21.0	33.0	25.5	31.5	24.5	24.0	17.0
21	12.5	10.0	21.0	14.0	29.0	21.0	33.0	25.0	31.5	23.5	24.5	16.0
22	14.5	8.0	22.0	15.5	30.0	22.0	32.5	23.5	31.0	23.0	25.0	16.5
23	15.5	9.5	23.5	17.0	30.5	22.5	32.0	23.0	31.5	23.0	25.5	17.0
24	16.5	10.0	24.0	17.5	30.5	22.0	32.5	23.5	31.5	23.0	25.0	17.0
25	18.5	11.0	22.5	18.0	29.5	22.5	32.5	23.5	31.0	23.0	25.0	17.0
26	14.5	11.5	24.0	17.0	30.5	23.0	30.0	23.5	30.0	23.0	24.5	16.5
27	13.0	10.0	22.0	17.5	29.0	21.0	31.5	23.0	30.0	23.0	24.5	16.0
28	12.0	9.0	21.5	15.0	28.0	21.0	31.0	22.5	30.5	23.0	24.0	16.0
29	14.0	7.0	21.5	14.5	27.0	19.0	32.0	23.5	30.5	23.0	25.5	16.5
30	15.5	9.0	24.0	15.5	28.5	19.5	30.0	21.5	29.5	21.5	25.0	17.5
31	--	--	25.0	17.5	--	--	30.5	21.0	31.0	21.5	--	--
AVE	15.1	10.0	20.5	14.5	26.3	19.2	31.1	23.1	31.4	23.0	26.3	17.9

11208000 MARBLE FORK KAWEAH RIVER AT POTWISHA CAMP, CALIF.

LOCATION.--Lat 36°31'08", long 118°48'03", in SE¼ sec.23, T.16 S., R.29 E., Tulare County, temperature recorder at gaging station on left bank, 0.1 mile north of Potwisha Camp, and 0.3 mile upstream from confluence with Middle Fork Kaweah River.
DRAINAGE AREA.--51.4 sq mi.
PERIOD OF RECORD.--Water temperatures: January 1962 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.5°C Aug. 18, 19; minimum, 1.5°C Jan. 5, 6.
EXTREMES, 1962-70.--Water temperatures: Maximum, 23.5°C on several days in 1964, 1966, and 1970; minimum (1963-70), 1.0°C on several days in 1965 and 1967.
REMARKS.--Recorder stopped June 13-16.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	17.0	11.5	11.0	5.5	5.0	3.5	3.5	5.5	5.0	6.0	5.5
2	18.5	16.5	11.5	11.0	5.5	5.0	4.0	3.5	6.0	5.5	5.5	5.0
3	17.0	15.0	11.5	11.0	5.5	5.0	3.5	3.0	6.0	5.5	5.0	4.5
4	15.0	13.5	11.5	11.0	5.5	5.0	3.0	2.0	5.5	5.0	4.5	4.0
5	14.5	13.0	11.5	11.0	5.0	4.5	2.0	1.5	6.0	5.0	4.0	3.5
6	14.0	12.0	11.0	10.5	5.0	4.5	3.0	1.5	6.0	5.5	6.0	3.5
7	13.5	12.0	11.0	9.5	5.0	4.5	4.0	3.0	6.5	6.0	6.0	4.5
8	13.5	13.0	9.5	9.0	4.5	4.5	5.0	4.0	6.5	6.0	6.5	5.0
9	14.0	13.0	9.5	8.5	4.5	4.5	5.5	5.0	6.5	6.5	6.5	5.5
10	14.0	13.0	9.0	8.5	4.5	4.0	5.5	5.0	7.0	6.5	6.0	4.5
11	15.0	13.5	9.5	8.5	4.5	4.0	5.5	5.5	8.5	7.0	5.0	4.0
12	14.5	13.0	9.5	9.0	5.0	4.5	6.0	5.5	8.0	7.0	6.5	5.0
13	14.0	11.5	9.5	9.0	5.5	4.5	6.0	5.5	7.0	6.0	8.0	6.0
14	13.0	11.5	9.5	9.0	5.5	5.0	6.0	5.0	6.0	5.0	8.5	6.5
15	12.0	11.5	9.5	9.5	5.5	5.0	5.5	5.0	6.0	5.0	8.5	6.0
16	13.0	12.0	9.5	9.5	5.0	5.0	6.0	5.0	6.5	5.5	8.5	6.5
17	13.0	10.5	9.5	8.5	5.0	4.5	5.5	5.0	6.5	6.0	7.0	6.5
18	10.5	9.5	8.5	7.0	5.5	5.0	6.0	5.5	6.0	4.0	8.5	6.5
19	10.5	8.5	7.0	6.0	6.0	5.5	6.5	6.0	5.5	4.0	7.0	5.5
20	10.5	9.0	6.5	6.5	7.0	6.0	7.0	6.5	5.0	4.0	7.0	5.0
21	10.0	9.0	7.0	6.5	8.0	7.0	7.0	7.0	5.5	4.5	8.0	5.5
22	11.0	9.0	7.0	6.5	7.0	6.0	8.0	7.0	5.5	4.5	8.5	6.5
23	11.0	10.0	6.5	6.0	6.5	6.0	8.0	7.0	6.5	4.5	9.0	6.5
24	11.0	10.0	6.5	6.0	7.0	6.5	8.5	6.5	6.5	4.5	9.5	7.0
25	11.5	11.0	6.0	6.0	8.0	6.5	6.5	5.5	6.5	5.5	9.5	8.0
26	11.5	11.0	6.0	6.0	6.5	4.5	6.5	6.0	7.0	6.0	9.5	7.0
27	11.0	11.0	6.0	6.0	4.5	4.0	6.5	6.5	7.0	6.0	8.0	5.5
28	11.0	11.0	6.0	6.0	4.5	4.0	6.5	5.5	7.0	6.0	8.0	6.0
29	11.0	11.0	6.0	5.0	4.0	3.5	5.5	4.5	--	--	8.5	6.5
30	11.5	11.0	5.5	5.0	4.0	3.0	5.5	4.5	--	--	7.0	5.5
31	11.5	11.0	--	--	3.5	3.0	5.0	4.5	--	--	7.0	5.0
AVE	12.9	11.7	8.6	8.1	5.4	4.8	5.6	4.9	6.4	5.4	7.2	5.5

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	5.0	9.0	6.5	14.0	11.0	16.5	14.0	20.5	18.0	21.0	19.0
2	8.5	6.0	10.0	8.0	14.0	11.0	18.0	14.5	20.5	18.5	21.0	19.0
3	9.0	7.0	10.0	8.0	14.0	11.0	17.0	15.5	21.0	18.0	20.5	18.5
4	9.0	7.0	10.0	8.0	14.5	11.0	19.0	16.5	21.0	19.0	20.0	18.5
5	9.5	8.0	10.0	8.0	14.5	12.0	20.5	18.0	21.0	18.5	19.5	18.0
6	10.0	8.0	10.0	6.5	14.5	12.0	20.5	18.0	21.0	18.5	19.0	17.0
7	9.0	7.0	8.0	5.5	14.5	12.0	20.5	18.0	21.5	19.0	19.5	17.0
8	9.0	7.0	8.0	6.5	14.5	13.0	20.0	19.5	21.5	19.0	20.5	18.5
9	9.5	7.0	9.0	7.0	13.0	11.0	19.5	19.5	21.5	19.0	21.0	19.0
10	10.0	8.0	9.0	6.5	11.0	10.5	20.0	18.5	21.5	19.0	21.0	19.5
11	10.0	7.0	8.0	5.5	11.0	10.5	20.0	16.5	22.0	20.0	21.0	19.5
12	9.0	6.5	8.0	5.0	11.5	10.5	20.0	17.0	22.0	20.0	21.0	19.5
13	8.5	5.0	9.5	6.5	--	--	20.5	18.0	23.0	20.5	20.5	18.0
14	5.0	4.0	11.0	7.0	--	--	20.5	18.0	22.0	20.0	19.5	16.5
15	6.0	4.0	12.0	8.0	--	--	20.5	18.5	22.0	19.5	18.0	15.5
16	6.0	5.5	11.5	8.5	--	--	20.5	18.5	22.0	20.0	18.0	15.5
17	6.0	6.0	11.5	8.5	13.0	11.5	20.5	18.0	23.0	20.5	19.0	16.5
18	7.0	5.5	11.0	8.0	14.0	12.0	21.5	18.5	23.5	21.0	19.0	17.0
19	7.0	6.5	10.0	8.0	15.0	14.0	22.0	19.5	23.5	21.0	19.5	17.0
20	8.0	6.0	10.0	6.5	16.0	13.5	22.0	20.0	23.0	20.5	18.5	17.0
21	7.0	4.5	11.0	8.0	16.5	14.5	22.0	19.5	22.0	20.0	18.5	16.0
22	5.5	3.5	12.0	8.5	16.5	14.5	21.5	19.0	22.0	19.5	18.5	16.0
23	7.0	4.5	13.0	9.0	16.5	15.5	21.5	18.5	22.0	19.5	18.5	16.5
24	8.0	5.5	12.0	9.5	16.5	14.5	21.5	19.0	22.0	19.5	18.5	16.5
25	9.0	7.0	11.0	9.5	16.5	15.0	21.5	19.0	22.0	20.0	18.5	16.5
26	8.5	6.0	13.0	9.0	18.0	15.5	20.5	19.0	21.5	19.5	18.5	16.5
27	6.0	4.0	12.0	9.5	17.0	14.5	21.0	18.5	22.0	20.0	18.5	16.5
28	4.0	3.5	12.0	9.0	15.5	14.0	20.5	18.5	22.0	20.5	18.0	16.5
29	5.5	3.0	13.0	9.5	15.0	12.0	21.0	19.0	22.0	20.0	18.0	16.5
30	7.0	4.5	14.0	10.0	15.5	13.0	21.0	18.5	22.0	20.0	18.0	16.5
31	--	--	14.0	10.5	--	--	20.5	18.0	21.5	19.0	--	--
AVE	7.7	5.7	10.7	7.9	14.7	12.7	20.4	18.1	21.9	19.6	19.3	17.3

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 1970.
Sediment records: Water years 1969-70 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.											
14...	1115	5.4	5.5	11.6	7.6	10	28	1.2	1.7	.6	84
MAY											
20...	1000	121	4.5	10.2	4.5	0	14	.5	.7	.4	38
JUNE											
29...	1250	44	9.0	9.1	4.4	20	18	.6	1.0	.3	49
AUG.											
03...	1055	12	11.0	9.0	6.5	0	23	1.0	1.4	.5	66
29...	1115	6.8	12.5	--	7.6	10	27	1.2	1.7	.6	84
SEP.											
21...	1230	4.1	11.0	9.0	5.6	20	30	1.3	1.9	.7	90

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
14...	0	8.0	.6	.1	.19	.25	.05	.3	.05	.05	0
MAY											
20...	0	6.0	.3	.0	.24	.24	.00	.7	.14	.11	20
JUNE											
29...	0	5.0	.2	.2	.48	.53	.06	.2	.21	.09	0
AUG.											
03...	0	7.0	.2	.2	.12	.19	.09	.1	.05	.03	40
29...	0	6.0	.4	.1	.08	.08	.00	.0	.02	.00	120
SEP.											
21...	0	9.0	.4	.0	.12	.15	.04	.1	.02	.01	50

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)
OCT.											
14...	89	.12	1.31	75	6	5	.1	153	7.7	1.4	--
MAY											
20...	46	.06	15.0	37	6	4	.1	80	7.0	.0	2
JUNE											
29...	54	.07	6.42	48	8	4	.1	97	7.3	.5	2
AUG.											
03...	73	.10	2.37	62	8	5	.1	128	7.2	.6	18
29...	86	.12	1.58	72	3	5	.1	151	7.5	--	8
SEP.											
21...	93	.13	1.03	80	6	5	.1	166	7.1	.2	34

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE: PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 14, 1969	1100	5.5	5.4	1	.01	--	--	--	--	--	--	--	--	--	--	--	
MAY 20, 1970	1000	4.5	121	5	1.6	--	--	--	--	--	--	--	--	--	--	--	
JUN 29.....	1130	9.5	44	0	0	--	--	--	--	--	--	--	--	--	--	--	
AUG 3.....	1055	11.0	12	1	.03	--	--	--	--	--	--	--	--	--	--	--	
SEP 21.....	1230	11.0	4.1	0	0	--	--	--	--	--	--	--	--	--	--	--	

11208607 EAST FORK KAWEAH RIVER ABOVE MONARCH CREEK, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'01", long 118°35'40", in SE¼NW¼ 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 1970.
Sediment records: Water years 1968-70 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.											
14...	1240	5.4	5.5	11.5	7.6	10	28	1.3	1.7	.7	84
MAY											
20...	0845	121	3.0	10.6	4.7	0	14	.5	.8	.5	38
JUNE											
29...	1345	44	9.5	--	4.4	20	14	.6	1.0	.4	40
AUG.											
03...	1230	12	13.0	8.6	6.5	0	23	1.0	1.4	.6	68
29...	1130	7.0	13.5	9.0	7.6	0	28	1.2	1.8	.6	84
SEP.											
21...	1315	4.1	12.0	8.7	5.6	0	30	1.4	1.9	.8	89

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
14...	0	8.0	.6	.1	.11	.17	.05	.1	.00	.00	0
MAY											
20...	0	5.0	.3	.0	.44	.44	.00	.7	.16	.05	0
JUNE											
29...	0	5.0	.2	.3	.45	.48	.04	.2	.26	.12	0
AUG.											
03...	0	7.0	.2	.2	.09	.09	.00	.2	.05	.02	20
29...	0	6.0	.5	.1	.09	.25	.21	.1	.04	.00	0
SEP.											
21...	0	9.0	.4	.0	.06	.06	.00	.1	.02	.02	30

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)
OCT.											
14...	89	.12	1.30	76	7	5	.1	154	7.9	2.4	--
MAY											
20...	45	.06	14.7	37	6	4	.1	80	6.9	.8	19
JUNE											
29...	46	.06	5.46	38	5	5	.1	83	7.0	1.0	--
AUG.											
03...	73	.10	2.37	62	6	5	.1	129	7.2	--	47
29...	87	.12	1.64	75	6	5	.1	152	7.4	.9	41
SEP.											
21...	93	.13	1.03	81	8	5	.1	165	7.8	.2	28

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE: PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 14, 1969	1240	5.5	5.4	2	.03	--	--	--	--	--	--	--	--	--	--	--	
MAY 20, 1970	0845	3.0	121	6	2.0	--	--	--	--	--	--	--	--	--	--	--	
AUG 3.....	1230	13.0	12	3	.10	--	--	--	--	--	--	--	--	--	--	--	
AUG 29.....	1130	13.5	7.0	1	.02	--	--	--	--	--	--	--	--	--	--	--	
SEP 21.....	1400	12.0	4.1	0	0	--	--	--	--	--	--	--	--	--	--	--	

11208610 MONARCH CREEK NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'09", long 118°35'37", in SE¼NW¼ 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 1970.
Water temperatures: October 1968 to September 1970.
Sediment records: Water years 1968-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 15.0°C Aug. 6, 18; minimum, freezing point on several days during November to January.
EXTREMES, 1968-70.--Water temperatures: Maximum, 15.0°C Aug. 6, 18, 1970; minimum (1969-70), freezing point on several days in 1969 and 1970.
REMARKS.--No temperature record Aug. 30 to Sept. 21; probe out of water.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.											
14...	1330	1.7	3.0	11.0	7.3	20	12	.4	1.3	.3	36
DEC.											
08...	1300	.95	.5	--	7.8	30	14	.5	1.6	.3	38
JAN.											
20...	1300	2.9	3.5	--	6.3	10	15	.6	1.2	.4	43
MAR.											
11...	1100	2.1	2.0	10.4	7.7	40	18	.7	1.8	.4	54
APR.											
28...	0900	5.2	.0	11.3	7.4	10	13	.4	1.5	.3	40
MAY											
19...	1600	44	6.0	9.3	4.5	10	6.1	.1	.7	.2	18
JUNE											
29...	1100	10	6.5	--	5.0	20	7.1	.2	1.0	.2	20
AUG.											
03...	1330	5.2	12.5	8.5	6.2	0	9.5	.3	1.2	.3	28
28...	1420	2.1	12.0	--	7.9	0	12	.5	1.4	.3	38
SEP.											
21...	1415	1.1	10.5	--	6.5	0	21	.7	1.7	.3	63

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
14...	0	4.0	.8	.1	.08	.12	.03	.2	.14	.14	0
DEC.											
08...	0	5.0	.8	.1	.00	.00	.00	.2	.03	.04	0
JAN.											
20...	0	4.0	1.0	.1	.01	.04	.04	.2	.05	.04	0
MAR.											
11...	0	5.0	1.0	.1	.81	.81	.00	.0	.23	.08	0
APR.											
28...	0	3.0	.6	.0	.07	.07	.00	.4	.07	.03	0
MAY											
19...	0	3.0	.4	.0	.20	.20	.00	.5	.14	.04	30
JUNE											
29...	0	3.0	.6	.1	.44	.47	.04	.2	.31	.11	0
AUG.											
03...	0	3.0	.5	.1	.22	.22	.00	.1	.09	.09	40
28...	0	4.0	1.2	.0	.16	.20	.05	.1	.07	.06	70
SEP.											
21...	0	5.0	.8	.0	.14	.14	.00	.1	.02	.01	30

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)
OCT.											
14...	44	.06	.20	32	2	8	.1	71	7.2	.3	--
DEC.											
08...	49	.07	.13	37	6	9	.1	81	7.3	.0	--
JAN.											
20...	50	.07	.39	40	5	6	.1	86	7.2	.0	1
MAR.											
11...	62	.08	.35	48	4	7	.1	103	7.6	.2	1
APR.											
28...	47	.06	.66	34	1	9	.1	78	7.5	.5	1
MAY											
19...	24	.03	2.85	16	1	9	.1	37	6.7	.2	5
JUNE											
29...	27	.04	.73	18	2	10	.1	44	6.9	.6	--
AUG.											
03...	35	.05	.49	24	1	9	.1	60	6.7	--	4
28...	46	.06	.26	32	1	9	.1	74	6.9	.7	3
SEP.											
21...	67	.09	.20	56	4	6	.1	118	7.2	.7	68

11208610 MONARCH CREEK NEAR HAMMOND, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	5.0	5.5	1.0	1.5	1.0	3.0	0.0	5.5	2.5	5.0	1.5
2	6.0	5.0	5.5	1.0	3.5	0.0	3.0	0.0	5.0	2.0	4.5	2.0
3	6.0	5.0	6.0	1.0	3.0	0.0	3.0	0.5	4.5	3.5	4.5	1.5
4	6.0	4.0	6.0	1.0	4.0	0.0	3.0	0.5	5.0	3.5	4.5	2.5
5	5.0	3.0	5.0	2.0	4.5	0.5	4.0	0.5	5.0	3.5	5.0	1.5
6	4.0	3.0	4.0	1.0	3.5	0.5	4.0	0.5	4.5	3.0	4.5	1.5
7	4.0	3.0	3.0	1.0	1.5	1.0	4.0	3.0	5.5	2.5	4.0	2.0
8	4.0	3.0	3.0	1.0	1.5	0.5	4.0	3.0	4.5	4.0	4.0	2.5
9	5.0	4.0	2.5	1.0	1.5	0.0	4.5	2.0	4.5	4.0	4.5	2.0
10	5.0	4.0	3.5	0.5	1.5	0.0	4.5	2.0	5.0	4.0	5.0	3.5
11	4.0	3.0	3.0	1.0	1.0	0.5	4.0	3.0	5.0	3.0	4.5	2.0
12	4.0	2.0	3.0	1.0	2.0	0.0	5.0	1.5	5.0	4.0	4.5	2.5
13	4.0	2.0	3.0	1.0	1.0	0.0	7.5	3.0	5.0	4.0	4.0	2.5
14	3.0	2.0	3.0	1.0	2.0	0.5	7.5	2.0	5.0	2.5	4.5	3.0
15	3.5	2.5	2.5	1.5	2.5	0.5	8.5	2.5	4.5	2.5	4.5	2.5
16	3.5	2.5	2.5	2.0	2.0	1.5	8.0	3.5	4.5	2.5	4.5	2.5
17	4.0	3.0	2.5	0.5	2.0	1.0	8.0	2.5	5.0	3.0	4.5	3.0
18	4.0	2.5	3.0	1.0	2.5	0.0	7.5	4.0	5.0	2.5	4.5	2.5
19	4.5	2.0	3.0	1.0	2.0	0.5	4.5	4.0	5.0	3.0	5.0	3.0
20	5.5	2.5	2.5	1.0	2.0	0.0	5.0	3.0	5.0	3.5	5.0	3.0
21	4.0	2.0	3.0	1.0	2.0	1.5	4.5	4.0	5.0	3.0	4.5	2.5
22	5.0	2.0	3.0	1.0	2.0	1.0	5.0	2.5	5.5	3.0	4.5	3.0
23	5.5	1.5	3.0	1.5	2.0	0.0	5.0	3.0	5.5	3.0	4.5	3.0
24	5.5	1.5	2.5	0.5	2.0	1.0	5.5	4.0	5.0	3.0	4.5	2.5
25	5.0	2.0	3.0	0.0	2.0	1.5	5.5	2.5	5.0	3.0	4.5	3.0
26	6.5	2.0	3.0	0.5	3.5	1.0	5.0	2.5	5.0	3.0	5.0	3.0
27	5.5	2.0	3.0	0.5	4.0	1.5	5.0	3.5	5.0	3.0	5.0	3.0
28	5.5	1.0	2.0	0.5	4.0	1.0	5.0	4.0	5.0	1.5	5.0	3.0
29	5.0	1.0	3.0	0.0	3.5	0.0	5.0	4.0	--	--	5.0	3.5
30	4.5	1.0	3.5	0.0	3.0	0.0	5.0	2.5	--	--	5.0	3.5
31	5.0	1.0	--	--	3.0	0.0	5.0	2.0	--	--	5.5	3.0
AVE	4.8	2.6	3.4	0.9	2.5	0.5	5.1	2.4	5.0	3.1	4.6	2.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.0	3.0	1.0	0.0	7.0	6.0	9.0	6.5	13.0	12.0	--	--
2	5.0	3.0	1.0	0.0	7.0	6.0	8.5	6.5	13.0	12.0	--	--
3	4.5	3.0	1.5	0.5	7.0	6.0	8.5	7.5	13.5	12.0	--	--
4	4.5	3.0	2.0	0.5	7.0	6.0	9.0	8.0	14.5	13.0	--	--
5	4.5	2.5	2.0	0.5	7.0	6.0	9.0	8.0	14.5	12.0	--	--
6	4.5	3.0	3.5	2.0	7.0	6.0	10.5	9.0	15.0	12.5	--	--
7	5.0	3.0	3.5	2.0	7.0	6.0	10.0	9.0	14.0	12.5	--	--
8	4.5	3.0	3.5	2.0	7.0	6.5	10.0	9.0	13.5	11.5	--	--
9	4.5	3.0	4.0	3.0	7.5	7.0	10.0	9.5	14.0	11.5	--	--
10	4.5	3.0	4.0	3.0	7.5	7.0	10.0	9.0	14.5	11.5	--	--
11	5.0	3.0	4.5	3.0	7.5	6.5	10.0	8.5	14.5	12.5	--	--
12	5.0	3.0	5.0	4.0	7.5	6.5	11.0	9.5	13.5	12.5	--	--
13	5.0	4.0	5.0	3.0	7.5	7.0	11.5	9.5	14.5	12.5	--	--
14	5.5	3.5	5.0	3.0	7.5	6.0	11.0	10.0	14.0	12.0	--	--
15	5.5	3.0	5.5	4.0	7.5	6.0	11.5	10.0	13.5	12.0	--	--
16	5.0	3.5	5.5	4.0	8.0	6.5	11.5	10.0	14.0	12.0	--	--
17	5.0	4.0	5.5	4.0	7.5	6.0	12.0	10.0	13.0	12.0	--	--
18	5.0	3.5	6.5	5.0	7.5	6.0	12.5	11.5	15.0	12.0	--	--
19	5.0	4.0	7.0	6.0	7.5	6.0	13.0	11.5	14.5	12.5	--	--
20	5.5	3.0	7.5	6.0	7.5	6.5	13.0	11.5	14.0	12.0	--	--
21	5.0	4.5	7.5	6.0	7.0	6.0	12.5	11.5	13.5	11.5	--	--
22	5.5	3.0	8.0	6.0	7.0	6.0	12.5	11.0	13.5	11.0	12.0	10.5
23	5.5	3.0	7.5	6.0	7.5	6.0	13.0	11.0	13.0	11.0	12.0	10.5
24	5.5	3.0	7.5	6.0	7.0	6.0	13.5	11.5	12.5	11.0	12.0	10.0
25	5.0	3.5	7.5	5.5	8.0	6.5	13.0	11.5	13.5	11.5	12.0	10.0
26	5.0	4.0	7.5	6.0	8.0	7.0	12.5	12.0	12.0	11.0	11.0	9.0
27	5.0	4.0	7.0	6.0	8.0	6.5	12.5	11.5	12.0	11.5	10.5	9.0
28	5.0	0.0	7.5	6.0	8.0	6.5	13.0	11.0	12.0	11.5	10.5	9.0
29	2.0	0.0	7.5	6.0	8.0	6.5	13.0	12.0	13.0	11.0	10.5	9.0
30	1.5	0.0	7.0	6.0	9.0	6.5	14.0	12.0	--	--	11.0	9.0
31	--	--	7.0	6.0	--	--	13.0	12.0	--	--	--	--
AVE	4.8	3.0	5.3	3.9	7.5	6.3	11.4	10.0	13.6	11.8	--	--

11208610 MONARCH CREEK NEAR HAMMOND, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 14, 1969	1330	3.0	1.7	2	.01	--	--	--	--	--	--	--	--	--	--	--	
DEC 8.....	1230	0.5	1.0	0	0	--	--	--	--	--	--	--	--	--	--	--	
JAN 20, 1970	1300	3.5	2.9	2	.02	--	--	--	--	--	--	--	--	--	--	--	
MAR 11.....	1100	2.0	2.1	0	0	--	--	--	--	--	--	--	--	--	--	--	
APR 28.....	0900	0.0	5.2	3	.04	--	--	--	--	--	--	--	--	--	--	--	
MAY 19.....	1600	6.0	44	5	.59	--	--	--	--	--	--	--	--	--	--	--	
JUN 29.....	1100	6.5	10	1	.03	--	--	--	--	--	--	--	--	--	--	--	
AUG 3.....	1330	12.5	5.2	1	.01	--	--	--	--	--	--	--	--	--	--	--	
AUG 28.....	1420	12.0	2.1	0	0	--	--	--	--	--	--	--	--	--	--	--	
SEP 21.....	1415	10.5	1.1	1	0	--	--	--	--	--	--	--	--	--	--	--	

11208615 EAST FORK KAWEAH RIVER BELOW MONARCH CREEK, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'09", long 118°35'56", in NW¼NW¼ 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 1970.
Sediment records: Water years 1968-70 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DISCHARGE (CFS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT.											
14...	1530	7.2	5.0	10.9	8.1	20	27	1.2	1.8	.6	82
MAY											
20...	0745	150	2.5	10.9	5.3	0	13	.4	.9	.4	36
JUNE											
29...	1500	54	9.5	8.6	4.5	40	13	.5	1.0	.4	37
AUG.											
03...	1500	17	15.0	8.2	6.7	0	21	.9	1.4	.5	64
29...	1030	9.0	10.5	9.2	7.9	20	26	1.2	1.7	.5	81
SEP.											
21...	1600	5.2	12.0	7.6	6.2	0	30	1.3	2.1	.8	91

DATE	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)	DISSOLVED ORTHO PHOSPHATE (PO4) (MG/L)	DISSOLVED BORON (B) (UG/L)
OCT.											
14...	0	6.0	.7	.1	.00	.03	.02	.1	.00	.00	0
MAY											
20...	0	5.0	.4	.0	.18	.18	.00	.9	.14	.04	0
JUNE											
29...	0	5.0	.2	.2	.25	.27	.03	.2	.24	.12	0
AUG.											
03...	0	5.0	.4	.2	.18	.28	.13	.1	.05	.04	80
29...	0	6.0	.5	.2	.00	.15	.19	.0	.02	.00	70
SEP.											
21...	0	8.0	.5	.0	.06	.06	.00	.0	.01	.01	20

DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	DELAYED COLIFORM (COLONIES PER 100 ML)
OCT.											
14...	86	.12	1.67	72	5	5	.1	148	7.9	3.6	--
MAY											
20...	44	.06	17.8	34	4	5	.1	72	6.9	.7	3
JUNE											
29...	43	.06	6.27	34	4	6	.1	77	7.1	--	--
AUG.											
03...	68	.09	3.12	56	3	5	.1	121	7.1	--	62
29...	84	.11	2.04	70	4	5	.1	148	7.2	.8	43
SEP.											
21...	94	.13	1.32	80	5	5	.1	166	7.4	.4	88

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 14, 1969	1530	5.0	7.2	4	.08	--	--	--	--	--	--	--	--	--	--	--	
MAY 20, 1970	0745	2.5	150	6	2.4	--	--	--	--	--	--	--	--	--	--	--	
JUN 29.....	1500	9.5	54	0	0	--	--	--	--	--	--	--	--	--	--	--	
AUG 3.....	1500	15.0	17	1	.05	--	--	--	--	--	--	--	--	--	--	--	
SEP 21.....	1600	12.0	5.2	0	0	--	--	--	--	--	--	--	--	--	--	--	

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 1970.
Water temperatures: August 1968 to September 1970.
Sediment records: Water years 1968-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 16.0°C Aug. 30; minimum, 0.5°C on several days during November and December.
EXTREMES, 1968-70.--Water temperatures: Maximum, 16.0°C Aug. 22-24, 1969, Aug. 30, 1970; minimum, freezing point on many days in 1968 and 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.											
14...	1640	9.4	5.0	10.8	8.8	20	27	1.3	2.0	.6	84
DEC.											
08...	1400	8.9	1.0	--	9.2	10	30	1.6	2.4	.7	92
JAN.											
20...	1430	23	4.0	--	8.0	10	22	1.2	1.8	.8	70
MAR.											
11...	1300	12	2.0	10.3	9.3	50	25	1.3	2.2	.7	78
APR.											
28...	1030	31	1.0	10.9	7.9	10	22	1.0	1.8	.5	68
MAY											
20...	1100	144	5.0	9.8	5.0	0	12	.4	1.0	.4	32
JUNE											
30...	0830	62	6.0	--	5.0	20	13	.6	1.1	.4	38
AUG.											
03...	1600	18	13.0	8.6	7.3	0	21	1.0	1.7	.6	65
28...	1630	9.9	12.5	--	9.6	10	26	1.3	2.2	.7	83
29...	0630	--	12.0	--	--	--	--	--	--	--	--
29...	1200	--	13.0	--	--	--	--	--	--	--	--
29...	1740	--	14.5	7.8	--	--	--	--	--	--	--
30...	0635	--	12.5	8.8	--	--	--	--	--	--	--
30...	1200	--	12.5	8.2	--	--	--	--	--	--	--
30...	1600	--	14.5	7.6	--	--	--	--	--	--	--
31...	0625	--	11.5	--	--	--	--	--	--	--	--
31...	1100	--	11.5	--	--	--	--	--	--	--	--
SEP.											
21...	1700	5.6	11.0	8.6	7.5	0	36	1.6	2.4	.8	112

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
14...	0	6.0	.6	.2	.06	.07	.01	.0	.00	.00	0
DEC.											
08...	0	7.0	.8	.1	.00	.00	.00	.1	.03	.04	30
JAN.											
20...	0	7.0	.5	.2	.00	.06	.09	.5	.03	.02	0
MAR.											
11...	0	9.0	1.2	.0	.67	.67	.00	.1	.15	.06	0
APR.											
28...	0	5.0	.4	.0	.11	.12	.01	.0	.26	.19	0
MAY											
20...	0	5.0	.6	.0	.21	.21	.00	.7	.19	.10	30
JUNE											
30...	0	5.0	.4	.2	.50	.53	.04	.2	.22	.07	0
AUG.											
03...	0	6.0	.3	.2	.27	.28	.01	.1	.04	.01	70
28...	0	5.0	.6	.1	--	--	--	--	--	--	90
29...	--	--	--	--	.09	.10	.01	.2	.05	.00	--
29...	--	--	--	--	.03	.20	.22	.1	.05	.00	--
29...	--	--	--	--	.05	.19	.18	.0	.05	.00	--
30...	--	--	--	--	.03	.03	.00	.2	.14	.12	--
30...	--	--	--	--	.10	.10	.00	.1	.05	.00	--
30...	--	--	--	--	.19	.19	.00	.8	.20	.17	--
31...	--	--	--	--	.23	.23	.00	.2	1.3	1.3	--
31...	--	--	--	--	.14	.14	.00	.2	.09	.00	--
SEP.											
21...	0	8.0	.7	.1	.03	.03	.00	.1	.01	.01	50

11208620 EAST FORK KAWEAH RIVER BELOW MOSQUITO CREEK, NEAR HAMMOND, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)
OCT.											
14...	88	.12	2.23	73	4	6	.1	149	7.9	.3	--
DEC.											
08...	97	.13	2.33	82	7	6	.1	168	7.9	.6	--
JAN.											
20...	76	.10	4.72	60	3	6	.1	126	7.4	.0	5
MAR.											
11...	87	.12	2.82	68	4	7	.1	145	7.7	.6	2
APR.											
28...	72	.10	6.03	59	3	6	.1	123	7.9	.7	1
MAY											
20...	41	.06	15.9	32	6	6	.1	68	6.9	.4	2
JUNE											
30...	45	.06	7.53	35	4	6	.1	77	7.6	.4	--
AUG.											
03...	70	.10	3.40	56	3	6	.1	124	7.2	--	56
28...	87	.12	2.33	70	2	6	.1	150	7.4	.5	--
29...	--	--	--	--	--	--	--	150	--	--	--
29...	--	--	--	--	--	--	--	152	8.3	--	--
29...	--	--	--	--	--	--	--	151	8.0	--	--
30...	--	--	--	--	--	--	--	154	8.3	--	--
30...	--	--	--	--	--	--	--	152	8.3	--	--
30...	--	--	--	--	--	--	--	156	8.3	--	--
31...	--	--	--	--	--	--	--	156	--	--	--
31...	--	--	--	--	--	--	--	153	--	--	--
SEP.											
21...	112	.15	1.69	96	4	5	.1	197	7.6	.3	142

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.0	6.0	4.5	1.0	0.5	2.0	2.0	2.0	1.5	1.5	1.0
2	11.0	9.0	6.0	4.5	1.0	0.5	2.0	2.0	2.5	1.5	2.0	1.0
3	10.0	8.0	6.0	4.5	1.0	0.5	2.0	2.0	3.0	2.0	2.0	1.0
4	9.0	7.0	6.0	5.0	1.0	0.5	2.0	2.0	3.5	2.5	2.0	1.0
5	8.0	6.0	5.5	4.5	1.0	0.5	2.0	2.0	3.5	2.5	2.0	1.0
6	8.0	6.0	5.0	3.0	1.5	1.0	2.0	2.0	3.5	2.5	3.0	1.0
7	8.0	6.0	4.0	3.0	1.0	1.0	2.5	2.0	3.5	3.0	3.5	2.0
8	8.0	6.0	4.0	3.0	1.0	1.0	3.0	2.5	3.5	3.0	3.0	2.0
9	8.0	6.0	4.0	3.0	1.0	1.0	4.0	3.0	3.5	3.0	3.5	2.0
10	8.0	7.0	3.5	2.5	1.0	1.0	3.5	3.5	3.0	3.0	2.5	2.0
11	8.0	7.0	3.5	2.5	1.0	1.0	3.5	3.0	4.0	3.0	2.5	2.0
12	7.0	6.0	3.5	2.5	1.0	1.0	3.0	3.0	3.5	3.0	3.0	1.5
13	6.0	5.0	3.5	2.5	1.0	1.0	3.5	3.0	3.0	2.5	4.0	2.5
14	6.0	5.0	3.5	2.5	1.0	1.0	3.0	3.0	3.0	2.5	4.5	3.0
15	5.5	5.0	3.0	3.0	1.0	1.0	3.0	3.0	3.0	2.0	4.0	2.5
16	5.5	5.5	3.0	2.0	1.0	1.0	3.5	3.0	3.5	2.5	4.5	3.0
17	5.5	4.5	2.0	1.5	1.0	1.0	3.0	3.0	3.0	2.0	4.0	3.0
18	4.5	3.5	2.0	1.5	1.5	1.0	3.5	3.0	2.5	2.0	4.0	3.0
19	5.0	3.0	2.5	1.5	2.5	1.5	4.0	3.5	2.5	2.0	3.0	2.5
20	5.5	3.5	3.0	2.0	3.5	2.5	4.0	3.5	2.0	2.0	4.0	2.0
21	6.0	4.0	3.0	2.0	3.5	3.0	3.5	3.5	2.5	2.0	4.0	2.5
22	6.0	5.0	2.5	2.0	3.5	3.0	3.5	3.5	3.0	2.0	4.5	2.5
23	6.5	5.0	2.5	1.5	4.0	3.0	4.0	3.5	3.5	2.0	4.5	3.0
24	6.0	5.0	2.0	1.5	4.0	3.5	4.0	3.0	3.5	2.5	5.0	3.0
25	6.0	5.0	2.0	1.5	4.0	3.0	3.0	3.0	3.5	2.0	5.5	3.5
26	6.0	4.5	2.0	1.5	3.0	2.5	3.5	3.0	3.5	2.5	4.5	3.5
27	6.0	4.5	2.0	1.0	2.5	2.0	3.0	3.0	3.0	2.0	3.5	2.0
28	6.0	4.5	1.5	1.0	2.0	2.0	3.0	2.0	2.0	1.0	3.5	2.5
29	6.0	4.5	1.0	0.5	2.0	2.0	2.5	2.0	--	--	3.0	2.5
30	6.0	4.5	1.0	0.5	2.0	1.5	2.0	2.0	--	--	3.5	2.5
31	6.0	4.5	--	--	2.0	1.5	2.5	2.0	--	--	3.0	2.0
AVE	6.9	5.5	3.3	2.4	1.9	1.5	3.0	2.7	3.1	2.3	3.5	2.2

11208620 EAST FORK KAWEAH RIVER BELOW MOSQUITO CREEK, NEAR HAMMOND, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.5	2.0	5.0	3.0	8.0	6.5	10.5	7.5	14.0	9.5	15.0	10.5
2	4.0	2.0	6.0	3.5	7.5	6.0	11.0	8.0	13.0	10.0	15.0	10.5
3	4.0	2.5	6.0	4.5	7.0	6.0	10.5	9.0	14.5	10.0	15.0	10.5
4	4.5	2.5	5.5	4.5	7.0	6.5	10.5	9.0	14.5	11.0	14.5	10.5
5	5.0	3.0	6.0	4.5	7.0	6.5	10.5	9.5	14.5	11.0	13.0	10.5
6	4.5	3.0	5.0	4.5	8.5	6.5	12.0	9.5	14.5	11.0	14.0	10.0
7	4.5	3.0	5.5	4.0	8.0	7.0	11.5	9.0	15.0	11.5	14.5	11.0
8	5.0	3.5	5.5	5.0	7.5	7.0	11.0	9.5	14.0	10.0	15.0	11.5
9	5.0	3.5	6.0	5.0	7.5	6.5	10.0	9.5	14.5	10.0	15.5	11.5
10	5.0	3.5	6.0	5.0	7.0	6.5	11.0	9.5	15.0	10.5	15.5	12.0
11	5.0	3.5	5.5	5.0	7.5	6.0	11.5	9.0	15.0	11.5	15.0	12.0
12	4.5	3.5	5.5	4.5	7.5	6.5	12.0	9.5	13.5	11.5	14.5	11.5
13	4.0	2.5	6.0	4.5	6.5	6.0	12.5	9.5	15.0	11.5	13.5	10.0
14	2.5	2.0	5.5	5.0	6.5	5.5	12.0	9.5	15.0	11.5	12.5	9.0
15	3.0	2.0	5.5	4.5	7.0	5.5	13.0	9.5	15.0	11.5	12.5	9.0
16	3.0	2.0	6.0	4.5	8.0	6.0	13.0	9.5	14.5	12.0	12.5	9.5
17	2.5	2.0	6.5	4.5	8.5	6.0	13.0	9.5	13.5	12.0	13.0	10.0
18	3.0	2.0	6.5	5.0	9.0	7.0	13.5	11.0	15.0	12.0	13.0	10.0
19	3.5	2.0	6.5	5.0	9.0	7.5	14.0	11.5	15.0	12.0	13.0	10.0
20	4.0	2.0	6.0	5.0	9.0	7.5	14.5	11.5	15.0	12.5	12.5	10.0
21	3.0	2.0	6.0	5.0	9.5	8.0	15.0	12.0	14.5	11.5	11.5	9.0
22	3.5	2.0	6.0	5.0	9.5	8.0	14.5	11.0	14.5	11.5	11.5	8.0
23	4.0	2.0	7.0	5.0	9.5	8.0	14.5	11.0	14.5	11.5	11.0	8.0
24	4.5	2.5	7.5	5.5	9.5	8.0	14.5	11.0	13.5	11.0	10.5	8.5
25	4.5	3.0	6.5	5.5	9.5	8.0	13.5	11.0	14.0	12.0	11.0	8.5
26	3.5	3.0	7.0	5.5	10.0	8.5	12.0	10.5	13.0	11.5	10.5	7.5
27	3.0	2.0	7.0	5.5	10.0	8.5	12.0	10.5	13.0	12.0	10.5	7.5
28	2.0	1.0	7.0	5.5	9.5	8.0	12.5	10.0	13.0	12.0	10.0	7.5
29	3.0	1.0	7.0	6.0	9.5	6.5	13.5	11.0	15.5	12.0	10.0	7.5
30	4.0	2.0	8.0	6.0	9.5	6.0	13.0	9.5	16.0	12.5	10.0	7.5
31	--	--	8.0	6.0	--	--	13.5	9.0	15.5	11.5	--	--
AVE	3.8	2.4	6.2	4.9	8.3	6.9	12.5	9.9	14.4	11.3	12.8	9.6

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 14, 1969	1640	5.0	9.4	2	.05	--	--	--	--	--	--	--	--	--	--	--	
DEC 8.....	1400	1.0	8.9	2	.05	--	--	--	--	--	--	--	--	--	--	--	
JAN 20, 1970	1430	4.0	23	3	.19	--	--	--	--	--	--	--	--	--	--	--	
MAR 11.....	1300	2.0	12	1	.04	--	--	--	--	--	--	--	--	--	--	--	
APR 28.....	1030	1.0	31	2	.17	--	--	--	--	--	--	--	--	--	--	--	
MAY 20.....	1200	5.0	140	10	3.8	--	--	--	--	--	--	--	--	--	--	--	
JUN 30.....	0835	6.0	60	0	0	--	--	--	--	--	--	--	--	--	--	--	
AUG 3.....	1600	13.0	18	1	.05	--	--	--	--	--	--	--	--	--	--	--	
AUG 28.....	1630	12.5	9.9	1	.03	--	--	--	--	--	--	--	--	--	--	--	
SEP 21.....	1715	11.0	5.6	1	.02	--	--	--	--	--	--	--	--	--	--	--	

11208625 EAST FORK KAWEAH RIVER AT SEQUOIA NATIONAL PARK BOUNDARY, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'30", long 118°39'11", in SW¼SW¼ 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 1970.
Water temperatures: August 1968 to September 1970.
Sediment records: Water years 1968-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 16.0°C Aug. 11, 13, 18, 19; minimum, freezing point on several days during March.
EXTREMES, 1968-70.--Water temperatures: Maximum, 17.0°C Aug. 3, 1968; minimum, freezing point on many days during winter period each year.
REMARKS.--No temperature record Oct. 1 to Dec. 7, Jan. 16-18, Mar. 31, Apr. 1.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.											
15...	0830	13	5.0	11.7	10	20	22	1.2	2.3	.7	70
DEC.											
08...	1100	9.2	1.0	12.5	11	40	23	1.4	2.8	.8	74
JAN.											
19...	1200	39	3.0	--	9.7	20	14	.9	2.0	.7	43
MAR.											
09...	1410	22	2.0	11.1	11	40	19	1.0	2.4	.8	62
APR.											
21...	1100	39	1.0	--	10	10	16	.8	2.0	.5	50
MAY											
19...	1400	232	8.0	10.2	5.7	10	9.9	.4	1.0	.4	26
JUNE											
29...	1800	67	11.0	--	6.2	20	12	.5	1.2	.4	34
AUG.											
04...	0900	20	12.0	--	8.6	0	19	1.0	1.9	.7	60
29...	0830	12	12.0	--	10	10	23	1.2	2.3	.8	74
SEP.											
22...	0800	9.2	8.0	10.0	8.3	0	25	1.4	2.7	.8	82

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
15...	0	5.0	.7	.1	.13	.20	.05	.1	.63	.56	0
DEC.											
08...	0	6.0	.8	.1	.07	.07	.00	.1	.05	.05	10
JAN.											
19...	0	5.0	1.8	.2	--	--	--	.0	--	--	0
MAR.											
09...	0	6.0	1.2	.0	1.0	1.2	.18	.0	.71	.45	0
APR.											
21...	0	5.0	.4	.0	.00	.00	.00	.3	.06	.02	0
MAY											
19...	0	4.0	.3	.0	.26	.26	.00	.5	.21	.05	0
JUNE											
29...	0	4.0	.4	.2	.66	.69	.04	.2	.12	.07	0
AUG.											
04...	0	5.0	.4	.1	.13	.14	.01	.2	.05	.00	80
29...	0	5.0	.6	.1	.00	.03	.04	.0	.01	.00	40
SEP.											
22...	0	6.0	.7	.0	.10	.12	.03	.0	.02	.01	50

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)
OCT.											
15...	76	.10	2.67	60	3	7	.1	125	7.9	1.4	--
DEC.											
08...	82	.11	2.04	64	3	9	.2	138	7.6	1.2	2
JAN.											
19...	55	.07	5.79	38	3	10	.1	86	7.1	.5	7
MAR.											
09...	73	.10	4.34	52	1	9	.1	112	7.5	.0	2
APR.											
21...	60	.08	6.32	44	3	9	.1	97	7.6	.8	1
MAY											
19...	35	.05	21.9	26	5	7	.1	57	6.8	.3	3
JUNE											
29...	42	.06	7.60	32	4	5	.1	69	7.0	.8	--
AUG.											
04...	67	.09	3.62	52	3	7	.1	113	7.5	--	74
29...	79	.11	2.56	62	1	7	.1	135	7.1	.3	22
SEP.											
22...	85	.12	2.11	68	1	8	.1	147	7.9	.2	100

11208625 EAST FORK KAWEAH RIVER AT SEQUOIA NATIONAL PARK BOUNDARY, NEAR HAMMOND, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	1.5	1.0	1.5	1.0	0.5	0.0
2	--	--	--	--	--	--	1.5	1.5	1.5	0.5	0.0	0.0
3	--	--	--	--	--	--	1.5	1.5	2.0	1.0	0.5	0.0
4	--	--	--	--	--	--	2.0	1.5	2.5	1.0	0.5	0.0
5	--	--	--	--	--	--	2.5	2.0	2.5	2.0	0.5	0.0
6	--	--	--	--	--	--	3.0	2.5	3.0	2.5	1.5	0.0
7	--	--	--	--	--	--	3.0	2.5	3.5	2.5	2.5	1.5
8	--	--	--	--	1.5	1.0	3.0	2.5	4.0	2.5	2.5	1.0
9	--	--	--	--	1.0	1.0	4.0	3.0	4.0	3.5	2.5	1.0
10	--	--	--	--	1.0	1.0	4.0	4.0	4.0	3.0	1.0	0.5
11	--	--	--	--	1.5	1.0	4.0	3.5	4.0	2.5	2.0	0.5
12	--	--	--	--	1.5	1.0	4.0	3.0	3.5	2.0	1.5	1.0
13	--	--	--	--	1.0	1.0	3.0	3.0	2.5	0.5	1.5	0.5
14	--	--	--	--	1.0	1.0	3.5	3.0	1.5	0.5	2.0	0.5
15	--	--	--	--	1.0	1.0	4.5	3.5	2.0	0.5	3.0	0.5
16	--	--	--	--	1.5	1.0	--	--	2.0	0.5	3.0	1.0
17	--	--	--	--	1.0	0.5	--	--	1.5	0.5	2.0	1.5
18	--	--	--	--	1.5	1.0	--	--	1.0	0.0	4.5	1.5
19	--	--	--	--	4.0	1.5	3.5	2.5	0.5	0.5	4.0	3.0
20	--	--	--	--	5.0	4.0	3.5	2.5	1.0	0.5	5.0	1.5
21	--	--	--	--	5.0	3.5	4.0	3.0	1.0	0.5	4.0	1.5
22	--	--	--	--	4.0	3.0	4.0	3.0	2.5	0.5	4.5	2.0
23	--	--	--	--	5.0	4.0	4.0	3.0	2.0	1.0	5.0	2.0
24	--	--	--	--	5.0	4.0	4.0	3.0	2.0	1.0	5.0	2.5
25	--	--	--	--	5.0	2.5	3.0	2.0	2.0	0.5	5.0	3.0
26	--	--	--	--	2.5	2.0	3.0	2.0	2.0	1.0	5.0	2.5
27	--	--	--	--	2.0	1.5	3.0	2.0	2.0	1.0	4.0	1.5
28	--	--	--	--	1.5	1.0	2.0	0.5	2.0	0.5	4.5	2.0
29	--	--	--	--	1.0	1.0	1.0	0.5	--	--	4.5	2.0
30	--	--	--	--	1.0	1.0	1.5	0.5	--	--	4.0	1.5
31	--	--	--	--	1.5	1.0	1.5	0.5	--	--	--	--
AVE	--	--	--	--	--	--	3.0	2.3	2.3	1.2	2.9	1.2

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	6.0	2.0	10.5	6.5	12.0	8.0	13.0	9.0	13.5	10.0
2	4.5	1.5	6.5	2.5	10.0	6.5	12.5	8.0	12.5	9.5	12.5	9.5
3	5.5	2.0	6.5	3.0	10.0	6.5	12.5	9.5	14.0	9.5	12.5	9.5
4	5.0	2.5	6.0	3.0	10.0	7.0	12.5	10.0	14.5	12.0	12.0	9.5
5	5.5	2.5	7.0	3.0	10.0	7.0	12.5	10.5	15.5	12.0	11.5	9.5
6	5.5	3.0	6.5	3.0	11.0	6.5	14.0	10.0	15.5	12.0	11.5	9.0
7	5.5	2.5	7.0	3.0	11.0	7.0	13.5	10.0	15.5	12.5	12.5	10.0
8	6.0	3.0	6.5	4.0	9.5	7.5	12.0	10.0	15.0	10.5	13.0	10.5
9	6.0	3.0	7.5	4.0	8.0	7.0	11.5	10.5	15.0	11.5	13.0	10.5
10	6.5	3.5	7.0	3.5	8.0	6.0	13.0	9.5	15.5	11.5	13.0	10.5
11	6.0	2.5	6.5	3.5	10.0	6.0	13.0	9.5	16.0	13.0	12.5	10.5
12	6.0	2.5	7.0	3.0	9.5	6.0	13.5	10.0	15.0	13.0	12.0	10.0
13	3.5	2.0	8.0	4.0	7.0	5.5	14.0	10.0	16.0	13.0	10.5	8.5
14	4.0	2.0	8.0	4.5	9.0	5.0	14.0	10.5	15.5	12.5	9.5	7.0
15	3.5	1.5	8.0	4.5	10.0	6.0	14.5	11.0	15.0	12.5	9.5	7.0
16	4.0	2.0	8.0	4.5	11.5	6.5	14.0	10.0	15.5	13.0	10.0	7.5
17	3.5	2.0	8.0	4.5	12.0	6.0	14.5	10.0	15.0	13.0	10.0	8.0
18	4.5	2.5	8.0	4.5	12.0	7.0	14.0	11.5	16.0	13.0	9.5	7.5
19	3.0	1.0	8.5	4.5	12.5	8.0	14.5	11.5	16.0	13.5	10.0	7.5
20	3.5	1.0	8.0	4.5	12.5	8.0	15.0	11.5	15.5	13.5	9.5	7.5
21	1.5	1.0	9.0	4.5	12.5	8.0	15.0	11.5	15.0	12.0	9.0	7.0
22	3.5	0.5	9.0	5.0	13.0	8.5	14.5	11.0	15.0	12.0	10.0	8.0
23	4.5	0.5	9.5	5.5	13.0	8.0	14.5	10.5	15.0	12.0	10.0	8.0
24	5.5	1.5	9.0	5.5	12.5	8.5	14.5	11.0	15.0	12.0	10.0	7.5
25	6.5	2.5	8.0	5.5	12.0	9.0	13.5	10.5	15.5	13.5	10.0	8.0
26	4.0	2.0	9.5	5.5	13.0	10.0	12.0	10.5	15.0	12.5	9.5	7.5
27	2.0	0.5	9.5	5.5	12.0	8.0	13.0	10.0	15.0	13.5	9.5	7.5
28	1.0	0.5	9.5	5.5	11.0	8.0	13.0	9.5	14.5	13.0	9.0	7.5
29	3.0	0.5	10.0	6.0	11.0	6.5	14.5	11.0	15.0	12.0	9.0	7.5
30	5.0	1.0	10.0	6.0	11.5	7.0	13.0	9.0	14.5	12.0	9.0	7.5
31	--	--	10.0	6.5	--	--	13.5	9.0	14.0	11.0	--	--
AVE	4.4	1.8	8.0	4.3	10.8	7.1	13.5	10.2	15.0	12.1	10.8	8.5

11208625 EAST FORK KAWEAH RIVER AT SEQUOIA NATIONAL PARK BOUNDARY, NEAR HAMMOND, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 15, 1969	0830	5.0	13	2	.07	--	--	--	--	--	--	--	--	--	--	--	
DEC 8.....	1100	1.0	9.2	1	.02	--	--	--	--	--	--	--	--	--	--	--	
JAN 19, 1970	1200	3.0	39	7	.74	--	--	--	--	--	--	--	--	--	--	--	
MAR 9.....	1410	2.0	22	1	.06	--	--	--	--	--	--	--	--	--	--	--	
APR 21.....	1100	1.0	39	1	.11	--	--	--	--	--	--	--	--	--	--	--	
MAY 19.....	1400	8.0	232	13	8.1	--	--	--	--	--	--	--	--	--	--	--	
JUN 29.....	1700	11.0	69	0	0	--	--	--	--	--	--	--	--	--	--	--	
AUG 4.....	0900	12.0	20	1	.05	--	--	--	--	--	--	--	--	--	--	--	
AUG 29.....	0830	12.0	12	0	0	--	--	--	--	--	--	--	--	--	--	--	
SEP 22.....	0830	8.0	9.2	1	.02	--	--	--	--	--	--	--	--	--	--	--	

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 1970.
Sediment records: Water years 1968-70 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.											
15...	1030	.32	8.1	10.5	23	20	4.0	.7	3.5	1.3	26
APR.											
21...	1330	1.0	1.0	11.6	19	10	3.1	.5	3.0	.9	20
MAY											
20...	1315	1.0	7.0	9.5	20	0	3.5	.5	3.2	1.0	20
JUNE											
30...	1315	.56	10.0	9.5	22	30	3.9	.6	3.5	1.2	23
AUG.											
04...	1130	.24	11.0	9.0	24	10	4.6	.7	4.0	1.4	27
28...	1245	.14	13.0	8.8	27	20	4.8	.9	4.4	1.5	32
SEP.											
22...	1100	.09	9.0	9.2	25	0	4.3	.8	4.1	1.5	29

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
15...	0	.0	.5	.0	.17	.20	.02	.1	.09	.09	0
APR.											
21...	0	.0	.2	.0	.12	.12	.00	.1	.22	.16	0
MAY											
20...	0	1.0	.5	.0	.50	.50	.00	.0	.38	.21	0
JUNE											
30...	0	.0	.4	.2	.26	.28	.03	.0	.35	.22	0
AUG.											
04...	0	.0	.3	.0	.18	.19	.01	.0	.13	.10	150
28...	0	.0	.3	.0	.12	.15	.04	.6	.10	.07	200
SEP.											
22...	0	1.0	.4	.1	.09	.09	.00	.0	.10	.08	20

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)
OCT.											
15...	46	.06	.04	13	0	34	.4	44	7.4	1.2	--
APR.											
21...	37	.05	.10	10	0	37	.4	36	7.5	.0	1
MAY											
20...	40	.05	.11	10	0	37	.4	38	6.9	.4	7
JUNE											
30...	43	.06	.06	12	0	36	.4	42	7.3	.3	--
AUG.											
04...	48	.07	.03	14	0	35	.5	50	7.0	.8	14
28...	55	.07	.02	16	0	35	.5	54	7.1	.9	0
SEP.											
22...	51	.07	.01	14	0	36	.5	51	6.7	.2	84

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE: PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 15, 1969	1050	8.0	.32	1	0	--	--	--	--	--	--	--	--	--	--	--	
APR 21, 1970	1330	1.0	1.0	1	0	--	--	--	--	--	--	--	--	--	--	--	
MAY 20.....	1315	7.0	1.0	2	.01	--	--	--	--	--	--	--	--	--	--	--	
JUN 30.....	1315	10.0	.56	1	0	--	--	--	--	--	--	--	--	--	--	--	
AUG 4.....	1130	11.0	.24	1	0	--	--	--	--	--	--	--	--	--	--	--	
AUG 28.....	1245	13.0	.14	0	0	--	--	--	--	--	--	--	--	--	--	--	
SEP 22.....	1000	--	.09	3	0	--	--	--	--	--	--	--	--	--	--	--	

11208650 REDWOOD CREEK ABOVE MINERAL KING HIGHWAY, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'14", long 118°42'10", in NE¼NW¼ 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 1970.
Sediment records: Water years 1968-70 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.											
15...	1130	.42	8.0	10.7	22	20	5.3	.7	3.7	1.0	30
DEC.											
09...	1345	.40	2.0	11.8	21	40	5.4	.8	4.0	1.0	28
APR.											
21...	1500	1.9	1.0	11.6	17	10	3.2	.4	2.8	.8	19
MAY											
19...	1200	2.2	10.5	9.2	17	10	3.9	.5	3.1	.9	21
JUNE											
30...	1430	.88	12.5	9.3	20	20	4.7	.6	3.6	1.0	25
AUG.											
04...	1245	.41	14.0	8.6	22	10	5.3	.6	3.9	1.2	28
28...	1200	.32	16.0	--	22	10	5.8	.8	4.5	1.2	35
SEP.											
22...	1045	.15	10.0	9.8	21	0	4.8	.8	4.0	1.2	29

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
15...	0	.0	.5	.1	.18	.22	.03	.1	.03	.03	0
DEC.											
09...	0	1.0	.4	.1	.00	.00	.00	.1	.05	.05	0
APR.											
21...	0	.0	.4	.0	.13	.19	.08	.1	.08	.02	0
MAY											
19...	0	1.0	.4	.0	.18	.18	.00	.0	.49	.17	30
JUNE											
30...	0	.0	.4	.2	.21	.23	.03	.0	.28	.12	30
AUG.											
04...	0	1.0	.3	.2	.28	.28	.00	.0	.07	.05	120
28...	0	.0	.4	.0	.00	.03	.04	.0	.10	.08	120
SEP.											
22...	0	.0	.5	.0	.14	.17	.04	.0	.02	.01	100

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)
OCT.											
15...	48	.07	.05	16	0	32	.4	51	7.5	1.2	--
DEC.											
09...	48	.07	.05	17	0	33	.4	52	7.5	.0	2
APR.											
21...	34	.05	.17	10	0	36	.4	35	7.8	.0	2
MAY											
19...	37	.05	.22	12	0	34	.4	37	7.3	.3	--
JUNE											
30...	43	.06	.10	14	0	34	.4	47	7.1	1.2	--
AUG.											
04...	49	.07	.05	16	0	33	.4	53	6.9	--	47
28...	52	.07	.04	18	0	34	.5	57	6.6	.9	5
SEP.											
22...	46	.06	.02	16	0	34	.4	54	6.9	.5	160

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 15, 1969	1130	8.0	.42	4	0	--	--	--	--	--	--	--	--	--	--	--	
DEC 9.....	1345	2.0	.40	0	0	--	--	--	--	--	--	--	--	--	--	--	
APR 21, 1970	1430	1.0	1.9	1	.01	--	--	--	--	--	--	--	--	--	--	--	
MAY 19.....	1200	10.5	2.2	2	.01	--	--	--	--	--	--	--	--	--	--	--	
JUN 30.....	1430	12.5	.88	1	0	--	--	--	--	--	--	--	--	--	--	--	
AUG 4.....	1245	14.0	.41	1	0	--	--	--	--	--	--	--	--	--	--	--	
AUG 28.....	1200	16.0	.32	2	0	--	--	--	--	--	--	--	--	--	--	--	
SEP 22.....	--	10.0	.15	1	0	--	--	--	--	--	--	--	--	--	--	--	

11208680 SQUIRREL CREEK BELOW MINERAL KING HIGHWAY, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°26'36", long 118°46'00", in SE¼SE¼ 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 1970.
Sediment records: Water years 1968-70 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.											
15...	1300	.98	10.0	11.4	28	50	6.1	1.1	5.8	1.7	38
DEC.											
09...	1230	1.6	3.5	--	27	50	6.2	1.2	6.4	1.6	37
APR.											
21...	0825	3.8	3.0	12.1	23	10	4.9	1.0	4.9	1.1	30
MAY											
19...	1030	3.8	10.5	9.7	22	0	5.0	.9	4.9	1.4	29
JULY											
01...	0900	1.6	14.0	--	26	40	6.2	1.2	5.9	1.8	36
AUG.											
04...	1330	.47	21.0	8.3	27	20	6.8	1.3	6.8	1.9	41
28...	1000	.31	19.5	8.8	30	60	7.9	1.5	8.0	2.0	50
SEP.											
22...	1145	.12	14.5	9.3	32	30	6.8	1.7	8.0	1.8	49

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
15...	0	2.0	1.3	.1	.09	.10	.01	.3	.03	.03	0
DEC.											
09...	0	1.0	1.4	.1	.14	.14	.00	.1	.06	.06	0
APR.											
21...	0	1.0	1.0	.0	.02	.06	.05	.1	.09	.04	0
MAY											
19...	0	1.0	1.1	.0	.31	.31	.00	.1	.43	.15	10
JULY											
01...	0	1.0	1.2	.2	.11	.28	.22	.1	.37	.21	0
AUG.											
04...	0	1.0	1.0	.2	.32	.33	.01	.0	.11	.04	50
28...	0	.0	1.2	.2	.47	.52	.06	.0	.08	.05	70
SEP.											
22...	0	2.0	1.5	.1	.21	.23	.03	.1	.12	.09	90

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)
OCT.											
15...	65	.09	.17	20	0	37	.6	69	7.6	1.1	--
DEC.											
09...	63	.09	.27	20	0	38	.6	72	7.2	.0	21
APR.											
21...	52	.07	.53	16	0	38	.5	58	7.0	.1	40
MAY											
19...	49	.07	.50	16	0	37	.5	56	6.6	.6	84
JULY											
01...	62	.08	.27	20	0	36	.6	70	6.9	.7	--
AUG.											
04...	66	.09	.08	22	0	37	.6	79	7.0	--	270
28...	76	.10	.06	26	0	38	.7	89	7.0	.9	82
SEP.											
22...	78	.11	.03	24	0	40	.7	89	7.2	.5	1130

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE: PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 15, 1969	1305	10.0	.98	2	.01	--	--	--	--	--	--	--	--	--	--	--	
DEC 9.....	1230	3.5	1.6	1	0	--	--	--	--	--	--	--	--	--	--	--	
APR 21, 1970	0800	3.0	3.8	5	.05	--	--	--	--	--	--	--	--	--	--	--	
MAY 19.....	--	10.5	3.8	5	.05	--	--	--	--	--	--	--	--	--	--	--	
JUL 1.....	0900	14.0	1.6	3	.01	--	--	--	--	--	--	--	--	--	--	--	
AUG 4.....	1345	21.0	.47	2	0	--	--	--	--	--	--	--	--	--	--	--	
AUG 28.....	1000	19.5	.31	1	0	--	--	--	--	--	--	--	--	--	--	--	
SEP 22.....	--	14.5	.12	2	0	--	--	--	--	--	--	--	--	--	--	--	

11208715 CRUNIGEN CREEK BELOW MINERAL KING HIGHWAY, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°26'55", long 118°16'18", in SW¼NE¼ 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 1970.
Sediment records: Water years 1969-70 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.											
15...	1345	.13	12.0	10.8	37	20	25	3.2	11	1.3	112
DEC.											
09...	1100	.22	4.0	13.2	34	40	25	3.4	10	1.3	108
APR.											
22...	1300	.34	10.5	10.0	33	10	21	2.9	8.5	1.2	93
MAY											
19...	0945	.30	11.0	9.7	34	0	23	3.1	9.7	1.4	102
JULY											
01...	1000	.08	15.0	--	38	30	24	3.3	11	1.4	110

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT.											
15...	0	4.0	3.8	.1	.31	.35	.03	.1	.12	.07	0
DEC.											
09...	0	3.0	2.7	.2	.54	.54	.00	.2	.05	.05	0
APR.											
22...	0	3.0	2.0	.0	.06	.06	.00	.4	.09	.04	0
MAY											
19...	0	4.0	2.2	.1	.36	.36	.00	.3	.53	.23	0
JULY											
01...	0	2.0	3.0	.2	--	--	--	--	--	--	0

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)
OCT.											
15...	140	.19	.05	76	0	24	.6	193	8.2	4.8	--
DEC.											
09...	133	.18	.08	76	0	22	.5	191	7.8	.0	175
APR.											
22...	118	.16	.11	64	0	22	.5	164	7.6	--	225
MAY											
19...	128	.17	.07	70	0	23	.5	175	7.5	.2	--
JULY											
01...	137	.19	.03	74	0	24	.6	190	7.3	.6	--

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 15, 1969	1345	12.0	.13	5	0	--	--	--	--	--	--	--	--	--	--	--	
DEC 9.....	1100	4.0	.22	2	0	--	--	--	--	--	--	--	--	--	--	--	
APR 22, 1970	1300	10.5	.34	5	0	--	--	--	--	--	--	--	--	--	--	--	
MAY 19.....	--	11.0	.30	5	0	--	--	--	--	--	--	--	--	--	--	--	
JUL 1.....	1000	15.0	.08	2	0	--	--	--	--	--	--	--	--	--	--	--	

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.

LOCATION.--Lat 36°27'05", long 118°47'15", in NW¼ 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 1970.
Water temperatures: June 1968 to September 1970.
Sediment records: Water years 1968-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 21.0°C Aug. 18-20; minimum, 0.5°C Jan. 5-7.
EXTREMES, 1968-70.--Water temperatures: Maximum, 21.5°C Aug. 3, 4, 1968; minimum, 0.5°C in 1968 and 1970.
REMARKS.--Records of water temperatures furnished by Southern California Edison Company. 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 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT. 15...	1440	38	8.5	11.9	17	20	12	1.0	4.0	1.0	48
DEC. 09...	0945	28	3.5	--	18	40	12	1.1	4.9	1.0	47
JAN. 19...	1530	181	6.0	--	15	40	6.5	.8	3.2	.9	28
MAR. 10...	1000	101	4.0	11.9	20	60	8.4	1.8	4.4	1.0	38
APR. 22...	1000	104	3.0	12.7	14	10	9.4	.7	3.1	.7	34
MAY 18...	1400	532	9.5	10.5	6.6	0	5.8	.3	1.2	.5	18
JULY 01...	1120	118	14.0	--	8.7	40	8.7	.5	2.0	.6	28
AUG. 04...	1430	33	19.0	8.7	12	0	13	.9	3.2	1.0	46
28...	0900	21	19.5	9.2	13	10	16	1.2	4.5	1.1	59
SEP. 22...	1245	15	14.0	9.5	12	0	16	1.2	4.5	1.3	61

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT. 15...	0	3.0	1.3	.1	.02	.06	.03	.1	.07	.07	0
DEC. 09...	0	3.0	1.4	.1	.00	.00	.00	.1	.04	.06	30
JAN. 19...	0	2.0	.8	.2	.11	.13	.03	.2	.06	.05	0
MAR. 10...	0	3.0	1.6	.0	.41	.41	.00	.0	.18	.08	0
APR. 22...	0	2.0	.6	.0	.18	.18	.00	.0	.25	.06	0
MAY 18...	0	4.0	.4	.0	.18	.18	.00	.2	.25	.06	70
JULY 01...	0	3.0	.4	.2	.35	.38	.04	.0	.25	.12	0
AUG. 04...	0	4.0	.7	.2	.01	.04	.04	.0	.18	.14	80
28...	0	3.0	1.0	.0	.00	.03	.04	.0	.03	.00	40
SEP. 22...	0	5.0	1.1	.1	.25	.30	.06	.3	.04	.03	30

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DELAYED COLI-FORM (COL-ONIES PER 100 ML)
OCT. 15...	63	.09	6.46	34	0	20	.3	90	7.8	.4	--
DEC. 09...	65	.09	4.91	34	0	23	.4	93	7.5	2.4	17
JAN. 19...	43	.06	21.0	20	0	25	.3	54	6.9	.0	10
MAR. 10...	60	.08	16.4	28	0	24	.4	73	7.9	3.4	14
APR. 22...	48	.07	13.5	26	0	20	.3	67	7.5	.0	10
MAY 18...	28	.04	40.2	16	1	14	.1	38	6.6	.1	175
JULY 01...	38	.05	12.1	24	1	15	.2	59	7.1	.6	--
AUG. 04...	58	.08	4.70	36	0	0	.2	91	7.1	.2	81
28...	69	.09	3.91	45	0	17	.3	111	7.2	.5	39
SEP. 22...	71	.10	2.88	45	0	17	.3	114	7.3	.6	180

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.5	8.5	8.0	3.5	3.5	1.0	1.0	4.0	3.5	5.5	5.5
2	14.5	13.5	8.5	8.5	3.5	3.5	1.0	1.0	4.0	3.5	5.5	5.0
3	13.5	11.5	8.5	8.5	3.5	3.5	1.0	1.0	4.0	3.5	5.0	4.5
4	11.5	9.5	8.5	8.5	3.5	3.5	1.0	1.0	4.5	4.0	4.5	4.0
5	9.5	8.5	8.5	8.5	3.5	3.5	1.0	0.5	5.0	4.5	4.0	3.0
6	9.0	8.5	8.5	8.5	3.5	3.5	0.5	0.5	5.0	4.5	5.0	3.5
7	9.0	8.5	8.5	8.0	3.5	3.5	1.5	0.5	5.0	4.5	5.5	4.0
8	10.0	9.0	8.0	6.5	3.5	3.5	3.0	1.5	5.5	5.0	6.0	5.0
9	10.0	9.5	6.5	6.0	3.5	3.5	4.5	3.0	6.0	5.5	6.0	5.5
10	10.0	10.0	6.5	6.0	3.5	3.5	5.0	4.5	7.0	6.0	6.0	4.5
11	10.5	10.0	6.5	6.5	3.5	3.0	5.0	5.0	7.0	7.0	4.5	3.5
12	10.5	9.5	6.5	6.5	3.0	3.0	5.0	4.5	7.0	6.5	6.0	4.5
13	10.0	8.5	7.0	6.5	3.5	3.0	5.0	4.5	6.5	6.0	8.0	5.5
14	8.5	8.0	7.0	7.0	3.5	3.5	5.5	5.0	6.0	5.0	8.5	6.5
15	8.5	8.0	8.0	7.0	3.5	3.5	5.5	4.5	5.0	4.5	8.5	6.5
16	10.0	8.5	8.5	8.0	3.5	3.5	6.5	5.0	5.0	4.5	8.0	6.5
17	10.0	9.5	8.5	6.5	3.5	3.5	6.0	5.5	5.5	5.0	8.0	6.5
18	9.5	8.0	6.5	5.5	4.0	3.5	5.5	4.5	5.5	4.0	8.0	6.5
19	8.0	6.0	5.5	4.5	5.0	4.0	6.0	5.5	4.0	3.0	7.0	5.0
20	6.5	6.0	5.0	4.5	6.5	5.0	6.0	6.0	3.5	2.0	6.0	4.5
21	7.0	6.5	5.0	5.0	8.0	6.5	7.0	6.0	3.5	3.5	6.5	5.0
22	8.0	7.0	5.0	5.0	8.0	6.5	7.0	6.5	4.0	3.5	8.0	5.5
23	8.5	8.0	5.0	4.5	6.5	6.0	7.0	6.0	4.5	3.5	8.5	6.0
24	8.5	8.5	4.5	4.5	6.5	6.5	6.5	6.0	5.0	4.0	9.0	6.5
25	8.5	8.5	4.5	4.5	7.0	6.5	6.0	5.0	5.5	4.5	9.5	8.0
26	8.5	8.0	4.5	4.5	7.0	5.0	5.0	4.5	5.5	4.5	9.5	8.0
27	9.0	8.5	4.5	4.5	5.0	3.5	6.0	5.0	5.5	5.0	8.5	5.5
28	9.0	8.5	4.5	4.5	3.5	1.5	6.0	4.0	5.5	5.5	7.0	5.5
29	9.0	9.0	4.5	4.0	1.5	1.0	4.0	3.0	--	--	7.0	6.0
30	9.0	8.0	4.0	3.5	1.0	1.0	3.0	2.0	--	--	7.0	5.5
31	8.0	8.0	--	--	1.0	1.0	3.5	2.0	--	--	5.5	4.0
AVE	9.6	8.8	6.5	6.1	4.2	3.7	4.4	3.7	5.1	4.5	6.8	5.3

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.5	4.0	9.0	5.5	14.0	10.0	15.5	13.5	18.0	16.0	19.0	18.0
2	7.0	4.5	10.0	7.0	14.0	10.0	16.5	14.0	18.0	16.5	18.5	18.0
3	8.0	6.0	10.0	8.0	14.0	10.0	16.5	15.0	18.5	16.0	18.0	16.5
4	8.0	6.5	10.0	7.0	14.0	10.5	18.0	15.5	19.0	17.0	17.0	16.5
5	9.0	6.5	10.5	7.0	14.0	10.5	19.0	16.5	19.0	17.0	16.5	16.5
6	9.0	7.0	10.0	6.5	15.0	11.0	19.0	16.5	19.5	18.0	16.5	15.5
7	8.5	6.5	8.0	5.0	15.0	11.0	19.0	16.5	20.0	18.0	16.0	15.5
8	8.5	6.5	8.5	6.5	14.5	11.5	18.5	16.0	20.0	18.0	16.5	16.0
9	9.0	6.5	9.5	7.0	12.0	10.5	17.0	16.5	19.0	18.0	18.0	16.5
10	9.5	7.0	9.5	6.5	11.0	10.0	18.0	15.5	19.5	18.0	18.5	18.0
11	9.5	7.0	9.0	5.5	12.0	9.5	18.5	15.5	20.0	19.0	18.5	18.0
12	9.0	6.0	8.5	5.0	12.0	10.0	19.0	16.0	20.0	19.5	18.5	18.0
13	8.5	5.0	10.0	5.5	11.5	9.0	19.0	16.5	20.0	19.5	18.0	16.5
14	5.0	3.0	11.5	6.5	11.0	9.0	19.0	16.5	20.5	19.0	16.5	14.5
15	4.5	3.0	11.5	7.0	13.0	10.0	19.5	17.0	20.0	18.5	14.5	14.0
16	5.0	4.0	11.5	7.0	13.5	11.0	19.5	16.5	20.0	19.0	14.0	13.5
17	5.0	4.5	11.5	7.0	14.0	11.0	19.0	16.5	20.0	19.0	14.5	14.0
18	6.0	4.5	10.5	6.5	15.0	11.5	20.0	17.0	21.0	20.0	14.5	14.0
19	7.0	6.0	10.5	6.5	15.5	12.0	20.5	18.5	21.0	20.5	15.0	14.5
20	7.0	5.5	10.0	6.0	16.5	13.0	20.5	19.0	21.0	20.0	15.0	14.5
21	7.0	4.5	11.0	6.5	16.5	13.5	20.5	18.5	20.5	19.5	14.5	14.0
22	5.5	3.0	11.5	7.0	16.5	13.5	20.0	18.0	20.0	19.0	14.0	14.0
23	6.5	4.5	12.0	8.0	16.5	13.5	19.5	17.0	19.5	19.0	14.5	14.0
24	8.0	5.5	12.0	8.5	16.5	13.5	19.5	17.0	19.5	19.0	14.5	14.0
25	9.5	6.5	10.5	8.5	16.5	14.0	19.5	18.0	19.5	19.0	14.5	14.5
26	9.5	6.0	13.0	8.0	18.0	15.0	19.0	16.5	19.5	19.0	14.5	14.0
27	6.0	4.0	12.0	9.0	18.0	14.5	18.5	16.0	20.0	19.5	14.5	14.0
28	4.0	3.0	11.5	8.5	15.5	13.5	18.5	16.0	20.0	19.5	14.0	14.0
29	5.0	2.0	13.0	8.0	14.5	12.0	19.0	16.5	20.0	19.5	14.0	13.5
30	8.0	4.0	14.0	9.5	14.5	12.0	19.0	16.5	20.0	19.0	14.0	13.5
31	--	--	14.0	9.5	--	--	18.5	16.0	19.0	18.5	--	--
AVE	7.3	5.1	10.8	7.1	14.5	11.5	18.8	16.5	19.7	18.6	15.9	15.3

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 15, 1969	1430	8.5	38	1	.10	--	--	--	--	--	--	--	--	--	--	--	
JAN 19, 1970	1530	6.0	181	6	2.9	--	--	--	--	--	--	--	--	--	--	--	
MAR 10.....	1000	4.0	101	1	.27	--	--	--	--	--	--	--	--	--	--	--	
APR 22.....	1000	3.0	104	3	.84	--	--	--	--	--	--	--	--	--	--	--	
MAY 18.....	1000	7.0	615	19	32	--	--	--	--	--	--	--	--	--	--	--	
JUL 1.....	1120	14.0	118	1	.32	--	--	--	--	--	--	--	--	--	--	--	
AUG 4.....	1430	19.0	33	2	.18	--	--	--	--	--	--	--	--	--	--	--	
AUG 28.....	0920	19.5	21	1	.06	--	--	--	--	--	--	--	--	--	--	--	
SEP 22.....	1215	14.0	15	0	0	--	--	--	--	--	--	--	--	--	--	--	

11209900 KAWEAH RIVER AT THREE RIVERS, CALIF.

LOCATION.--Lat 36°26'38", long 118°54'09", in SW¼SW¼ sec.13, T.17 S., R.28 E., Tulare County, 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.0°C Aug. 28; minimum, 1.5°C sometime during period Jan. 1-15.
EXTREMES, 1965-66, 1968-70.--Water temperatures: Maximum, 28.5°C Aug. 18, 1966; minimum, 1.5°C sometime during period Jan. 1-15, 1970.
REMARKS.--Recorder malfunction Oct. 30 to Nov. 3, July 9. Clock stopped Dec. 20-27, Jan. 1-16, Feb. 17-20, Mar. 6 to Apr. 1, Apr. 27-30, Aug. 6-26, Aug. 30 to Sept. 30; range in temperature, 6.5°C to 11.0°C, 1.5°C to 10.0°C, 5.0°C to 10.0°C, 5.5°C to 15.5°C, 3.5°C to 11.0°C, 22.0°C to 27.0°C, and 16.0°C to 25.0°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	21.0	17.0	--	--	8.5	5.0	--	--	7.5	5.5	9.5	8.5
2	20.0	15.5	--	--	9.0	5.0	--	--	9.5	5.0	8.5	7.5
3	18.0	13.0	--	--	9.0	5.0	--	--	8.5	5.5	10.0	7.0
4	16.5	11.5	17.0	12.0	9.0	5.0	--	--	8.5	6.0	8.0	6.0
5	16.0	10.5	15.5	11.5	9.0	5.0	--	--	10.5	6.0	8.0	5.5
6	17.0	11.0	13.5	12.5	9.0	5.5	--	--	11.0	7.0	--	--
7	17.0	11.0	14.5	11.0	8.5	6.0	--	--	11.5	7.0	--	--
8	16.5	12.0	14.0	10.0	7.0	6.0	--	--	11.0	7.5	--	--
9	17.0	12.0	12.5	9.5	9.0	5.5	--	--	10.5	9.0	--	--
10	17.0	12.0	14.0	9.0	9.0	5.5	--	--	12.0	9.5	--	--
11	18.0	14.0	14.0	9.5	9.0	5.5	--	--	13.5	10.0	--	--
12	17.5	12.0	14.5	10.0	9.5	5.5	--	--	11.5	10.0	--	--
13	16.0	10.5	15.0	10.0	10.0	6.0	--	--	10.0	9.0	--	--
14	13.0	10.0	14.5	10.0	9.5	5.5	--	--	11.0	7.5	--	--
15	13.0	11.0	13.0	11.0	8.5	5.5	--	--	11.5	6.5	--	--
16	14.0	12.0	14.0	10.5	8.0	4.5	--	--	12.0	6.5	--	--
17	15.0	11.0	12.5	9.0	9.0	5.0	10.0	8.5	--	--	--	--
18	14.5	10.0	12.0	8.0	9.0	6.5	9.5	7.5	--	--	--	--
19	14.0	9.0	11.5	6.5	9.0	7.5	10.5	8.5	--	--	--	--
20	14.0	9.0	11.0	7.0	--	--	11.5	9.5	--	--	--	--
21	14.0	9.5	11.0	7.5	--	--	12.0	10.0	9.5	6.0	--	--
22	15.5	10.0	11.0	7.0	--	--	13.0	10.0	10.5	5.5	--	--
23	16.0	11.0	11.0	6.5	--	--	12.5	10.5	11.0	6.0	--	--
24	15.0	11.5	10.5	6.5	--	--	10.5	8.5	11.5	6.5	--	--
25	15.5	11.5	9.5	6.5	--	--	9.5	7.0	12.5	7.5	--	--
26	15.0	11.0	9.5	5.5	--	--	10.0	7.5	12.0	8.0	--	--
27	15.0	11.5	10.0	5.5	--	--	10.0	7.5	12.0	8.0	--	--
28	15.0	12.0	9.5	5.0	7.0	3.0	9.0	6.0	9.5	8.5	--	--
29	16.0	11.5	9.5	5.0	6.5	3.5	8.0	4.5	--	--	--	--
30	--	--	9.5	5.0	6.0	2.5	7.0	4.0	--	--	--	--
31	--	--	--	--	6.0	3.0	7.5	3.5	--	--	--	--
AVE	15.9	11.5	12.4	8.4	--	--	--	--	10.8	7.2	--	--

11209900 KAWEAH RIVER AT THREE RIVERS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	15.0	8.5	17.0	12.5	23.0	16.0	26.0	19.0	--	--
2	13.0	6.5	16.5	10.0	17.0	12.0	24.0	17.0	25.5	19.5	--	--
3	13.5	7.5	15.5	11.5	18.0	12.0	22.0	18.0	26.5	20.0	--	--
4	14.0	8.0	14.0	11.0	18.0	13.5	24.5	19.0	27.0	21.0	--	--
5	14.5	9.0	15.5	10.5	18.5	14.5	26.0	20.0	27.0	21.0	--	--
6	14.5	9.5	12.0	9.0	18.5	14.5	26.0	20.0	--	--	--	--
7	13.5	9.0	12.0	8.0	19.0	15.0	25.5	20.0	--	--	--	--
8	13.0	8.5	13.0	9.0	16.5	14.0	24.0	19.5	--	--	--	--
9	13.0	9.0	13.5	9.5	14.5	12.5	--	--	--	--	--	--
10	13.5	9.5	12.5	8.5	14.5	12.0	24.0	19.0	--	--	--	--
11	13.5	10.0	12.0	7.5	17.0	13.0	25.0	19.0	--	--	--	--
12	13.0	9.0	11.5	7.5	17.0	12.0	25.5	19.5	--	--	--	--
13	11.0	6.0	13.5	8.0	17.5	13.0	26.0	20.0	--	--	--	--
14	7.0	4.5	14.5	9.0	17.0	11.5	26.5	20.5	--	--	--	--
15	10.0	4.0	14.5	10.0	19.0	12.5	26.5	21.0	--	--	--	--
16	11.0	6.5	15.0	10.0	20.0	14.0	26.0	20.5	--	--	--	--
17	10.0	6.5	14.5	9.5	20.0	14.5	26.0	19.5	--	--	--	--
18	12.5	6.0	13.5	9.5	20.5	15.0	27.0	20.5	--	--	--	--
19	13.0	8.0	13.5	9.5	21.5	16.0	27.5	22.0	--	--	--	--
20	13.0	7.0	12.5	8.5	21.5	17.0	27.5	22.5	--	--	--	--
21	9.0	5.0	13.5	9.0	22.0	18.0	27.5	22.0	--	--	--	--
22	11.5	4.5	14.5	10.0	22.5	18.0	27.0	21.0	--	--	--	--
23	13.0	6.0	14.5	10.5	22.0	18.0	26.5	21.0	--	--	--	--
24	14.0	7.0	15.0	10.5	22.5	17.5	27.0	21.0	--	--	--	--
25	15.0	8.5	14.0	10.5	21.5	17.5	27.0	21.5	--	--	--	--
26	11.0	7.0	15.0	11.0	23.0	18.5	25.5	21.0	--	--	--	--
27	--	--	15.0	11.5	22.0	18.0	26.5	19.5	27.0	22.5	--	--
28	--	--	14.0	10.5	21.5	16.0	25.5	20.0	28.0	22.0	--	--
29	--	--	14.5	10.0	20.0	15.0	26.5	20.0	27.5	22.0	--	--
30	--	--	15.5	11.0	21.5	15.0	26.0	20.0	--	--	--	--
31	--	--	16.0	11.5	--	--	25.5	19.0	--	--	--	--
AVE	12.4	7.3	14.1	9.7	19.4	14.8	25.8	20.0	--	--	--	--

11213500 KINGS RIVER ABOVE NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°51'48", long 119°07'24", in NE¼ 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: October 1953 to September 1955.
Water temperatures: December 1965 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.0°C sometime during period Aug. 2 to Sept. 11; minimum, 2.0°C Jan. 6.
EXTREMES, 1966-70.--Water temperatures: Maximum (1967-70), 23.5°C on several days during July 1968; minimum, freezing point Dec. 14, 15, 1967.
REMARKS.--Clock stopped Aug. 2 to Sept. 11; range in temperature, 18.0°C to 23.0°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	15.5	11.5	10.0	7.0	6.0	4.5	3.0	8.5	7.0	9.5	9.0
2	17.5	15.5	12.0	10.0	7.5	6.0	5.0	3.5	8.5	7.0	9.0	8.0
3	16.5	14.0	12.0	10.0	7.5	6.0	4.5	3.5	8.0	6.5	9.5	8.0
4	14.5	12.0	12.0	10.0	7.5	6.0	4.5	3.0	9.0	7.0	9.0	7.5
5	13.0	11.0	11.5	10.0	7.0	6.0	4.0	2.5	9.0	8.0	8.0	7.0
6	13.0	11.0	11.5	10.5	7.0	6.0	4.0	2.0	10.0	8.0	10.0	7.0
7	13.5	11.0	11.0	10.0	7.0	6.0	5.5	4.0	10.0	8.0	10.5	8.0
8	13.0	12.0	10.0	9.0	8.0	6.0	8.0	5.5	9.5	8.0	11.0	9.0
9	14.0	12.0	9.5	8.0	8.5	7.0	9.0	8.0	9.5	8.5	11.0	9.5
10	14.5	12.5	10.5	9.0	8.0	6.5	8.5	8.0	11.0	9.5	10.5	9.0
11	15.0	13.5	11.0	9.0	8.0	6.0	8.5	8.0	12.0	10.5	10.0	8.0
12	14.5	12.5	11.0	9.0	7.5	6.5	8.0	7.5	11.5	10.5	11.0	8.0
13	13.5	11.0	10.5	9.5	7.5	6.0	8.0	7.5	10.5	9.5	12.5	9.5
14	12.0	10.5	11.0	9.0	7.5	6.0	8.0	7.5	10.0	8.5	12.5	10.5
15	11.5	10.5	11.0	10.0	7.5	6.0	8.0	7.0	9.5	8.0	13.0	10.5
16	13.0	11.0	12.0	11.0	7.0	6.0	9.0	7.0	10.0	7.5	13.0	10.5
17	13.5	12.0	12.0	10.0	7.0	6.0	8.5	7.5	10.5	9.0	13.0	10.5
18	12.0	10.0	10.5	8.5	8.0	6.5	8.5	7.5	9.0	7.5	12.5	11.0
19	11.0	9.0	9.0	7.5	8.5	7.5	8.5	7.5	8.5	7.0	11.5	9.0
20	11.0	9.0	9.0	7.0	10.5	8.5	9.0	8.0	8.5	6.0	11.0	8.0
21	11.5	9.0	9.0	7.5	10.5	10.0	9.5	9.0	8.5	7.5	12.0	9.0
22	12.0	10.0	9.0	8.0	11.0	9.5	9.5	9.5	9.5	7.5	12.5	9.5
23	12.0	10.0	9.0	7.5	10.0	9.0	9.5	9.5	10.0	7.5	13.0	10.0
24	12.0	10.5	8.0	8.0	11.0	9.5	10.0	9.5	10.0	8.0	13.0	10.5
25	12.5	11.0	8.0	6.5	10.0	8.5	10.0	9.5	10.5	8.0	13.5	11.0
26	12.0	10.5	8.0	7.0	9.0	8.0	8.5	7.5	10.0	8.0	13.5	11.5
27	12.0	10.5	8.0	7.0	8.0	6.5	9.5	8.0	10.5	8.5	11.5	9.0
28	12.0	10.5	8.0	6.5	6.5	4.5	8.0	7.0	10.0	9.5	11.5	9.0
29	12.0	10.5	7.5	6.0	5.0	4.0	7.0	6.0	--	--	11.5	9.5
30	11.5	10.0	7.0	5.5	4.5	3.0	7.0	6.0	--	--	11.0	9.0
31	11.5	10.0	--	--	4.5	3.0	7.0	5.5	--	--	10.0	7.5
AVE	13.1	11.2	10.0	8.5	7.9	6.5	7.6	6.6	9.7	8.1	11.3	9.1

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	7.0	13.0	10.0	15.0	12.0	17.5	15.0	21.0	17.5	--	--
2	11.5	8.0	14.0	11.5	14.5	12.0	18.5	16.0	--	--	--	--
3	12.5	9.5	13.5	12.0	14.5	12.5	18.0	17.0	--	--	--	--
4	13.0	11.5	13.5	12.0	15.0	12.5	19.0	17.5	--	--	--	--
5	13.0	10.5	13.0	11.0	15.0	12.5	20.0	18.0	--	--	--	--
6	13.0	11.0	13.0	11.0	15.0	13.0	20.0	18.0	--	--	--	--
7	12.0	10.0	11.5	9.0	15.0	13.0	20.0	18.0	--	--	--	--
8	12.0	10.0	11.5	10.5	15.0	13.5	19.5	17.5	--	--	--	--
9	12.0	10.5	13.0	11.0	14.0	13.0	18.5	17.5	--	--	--	--
10	12.5	11.0	13.0	11.0	14.0	13.5	18.5	16.5	--	--	--	--
11	12.5	11.0	12.0	9.5	15.0	13.0	19.0	17.0	--	--	--	--
12	12.0	10.0	10.5	8.5	14.5	13.5	20.0	17.5	--	--	22.0	19.0
13	11.5	8.5	12.5	10.0	13.5	11.5	20.5	18.5	--	--	20.8	18.0
14	8.5	6.5	13.5	11.0	14.0	11.5	21.0	18.5	--	--	19.0	16.0
15	9.5	7.0	14.0	10.0	15.0	12.5	21.0	19.0	--	--	18.5	16.5
16	10.5	8.0	13.5	10.0	16.0	13.5	20.5	18.5	--	--	18.5	15.5
17	10.0	9.0	13.5	10.0	16.0	14.5	20.5	18.5	--	--	19.0	16.0
18	12.0	8.5	13.5	10.0	16.5	14.5	21.5	19.0	--	--	19.5	17.0
19	13.0	10.5	13.0	10.0	17.0	15.0	22.0	19.0	--	--	19.5	17.0
20	12.5	10.0	12.5	10.0	17.0	15.0	22.0	20.0	--	--	19.0	16.0
21	11.5	8.5	13.0	10.0	17.0	15.5	22.0	20.0	--	--	19.0	16.0
22	10.0	7.0	13.0	10.5	17.0	15.5	21.5	19.0	--	--	19.0	16.0
23	11.5	8.0	13.5	10.5	17.0	16.0	21.5	18.5	--	--	19.0	16.5
24	12.5	9.0	14.0	11.0	17.5	16.0	21.5	19.0	--	--	19.0	17.0
25	13.5	10.5	13.0	11.0	17.0	16.0	22.0	19.0	--	--	19.0	16.5
26	13.0	9.5	14.0	11.0	18.5	16.5	21.0	18.5	--	--	19.0	16.0
27	9.5	7.5	14.0	11.5	18.0	16.5	21.0	18.0	--	--	18.0	16.0
28	7.5	6.0	13.5	11.0	17.0	15.0	20.5	18.0	--	--	18.0	16.0
29	10.0	5.5	14.0	11.0	16.0	14.5	21.0	18.0	--	--	18.0	15.5
30	12.0	8.0	14.5	11.5	17.0	14.0	21.0	18.0	--	--	18.0	16.0
31	--	--	14.5	12.0	--	--	20.5	17.5	--	--	--	--
AVE	11.5	8.9	13.2	10.6	15.8	13.9	20.4	18.1	--	--	--	--

11216500 NORTH FORK KINGS RIVER ABOVE DINKEY CREEK, AT BALCH CAMP, CALIF.

LOCATION.--Lat 36°54'12", long 119°07'14", in SE¼NE¼ sec.10, T.12 S., R.26 E., Fresno County, 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 24.0°C Aug. 6; minimum, 2.0°C Jan. 6.
EXTREMES, 1967-70.--Water temperatures: Maximum, 26.0°C June 22, 23, 25-27, 1968; minimum, freezing point Dec. 14-16, 21, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	13.5	13.5	10.5	8.5	6.5	5.5	3.0	9.0	7.0	8.0	7.0
2	17.0	13.5	13.5	10.5	9.0	6.0	5.5	3.0	10.0	7.0	7.0	6.5
3	15.0	12.0	13.5	11.0	8.5	6.0	5.5	3.0	10.0	7.0	6.5	5.5
4	14.0	10.5	13.5	10.5	8.0	6.0	4.5	2.5	10.5	7.5	6.0	5.0
5	14.0	10.0	12.5	10.5	8.0	6.0	4.5	2.5	9.0	7.0	5.5	5.0
6	14.0	10.5	12.0	11.5	8.5	6.5	4.5	2.0	10.0	6.5	11.0	5.5
7	14.5	10.5	12.5	11.0	8.0	6.0	5.0	3.5	10.5	7.0	11.0	6.5
8	14.0	11.0	12.0	10.0	8.0	6.0	7.5	5.0	9.5	7.0	11.5	8.0
9	15.0	11.0	12.0	9.5	8.5	7.0	8.0	7.0	9.0	8.0	11.0	8.5
10	15.0	11.5	12.0	9.0	8.5	6.5	9.5	8.0	10.5	8.5	9.5	8.0
11	16.0	12.0	12.0	9.0	8.5	6.5	9.0	8.0	13.0	9.5	9.5	6.5
12	15.0	11.5	12.0	9.5	8.5	6.0	8.0	7.0	11.0	10.0	11.0	9.0
13	14.0	10.0	12.0	10.0	8.5	6.0	8.0	7.0	10.0	8.5	13.0	8.0
14	11.5	10.5	12.0	10.0	8.5	6.0	9.0	8.0	10.5	7.5	12.5	8.5
15	12.0	11.0	12.0	10.5	8.0	5.5	8.0	7.0	10.5	7.0	13.5	8.5
16	14.0	12.0	13.0	11.0	8.0	6.0	10.0	7.0	11.5	7.0	13.5	9.0
17	15.5	13.0	11.5	9.5	8.0	5.5	10.5	7.0	11.5	8.5	13.5	9.0
18	13.0	11.5	10.0	8.0	8.5	6.0	10.0	8.0	10.0	6.5	13.0	9.0
19	13.0	9.5	10.0	8.0	8.0	7.0	10.0	8.5	10.0	6.0	12.0	8.0
20	13.0	10.0	10.0	8.0	11.0	8.0	10.0	9.0	10.0	6.0	12.5	7.0
21	13.5	10.0	11.0	9.0	10.0	9.0	10.5	9.0	9.0	7.5	12.5	7.5
22	13.5	10.5	10.5	8.5	10.0	9.0	11.5	9.5	11.0	7.0	13.5	8.0
23	14.0	11.0	10.5	8.0	10.5	10.0	11.0	9.5	11.0	5.5	14.0	8.5
24	13.0	11.0	9.5	7.5	11.0	9.5	11.0	9.5	8.0	6.0	14.5	9.0
25	14.0	11.0	9.5	7.0	10.0	8.0	10.0	10.0	9.0	6.0	15.0	10.0
26	13.5	11.0	9.5	7.0	10.0	8.0	10.5	9.0	9.0	7.0	15.0	10.5
27	13.5	11.0	9.0	7.0	9.0	6.5	11.0	9.0	9.0	7.0	14.0	9.0
28	13.5	11.0	9.0	7.0	6.5	4.5	10.0	7.5	8.5	8.0	14.0	8.5
29	14.0	11.5	8.5	6.0	6.0	3.5	9.5	6.5	--	--	12.5	8.5
30	13.5	11.0	8.5	6.0	5.5	3.0	8.5	6.0	--	--	12.5	8.5
31	13.0	10.5	--	--	5.5	3.0	8.0	6.0	--	--	12.0	7.0
AVE	14.1	11.1	11.2	9.0	8.5	6.4	8.5	6.7	10.0	7.3	11.6	7.8

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	6.5	16.0	9.0	23.0	16.0	20.0	13.5	18.5	12.5	19.0	14.0
2	13.5	7.5	17.0	10.5	22.0	16.0	20.0	13.5	18.0	12.5	19.0	13.5
3	14.0	8.0	17.0	11.5	21.0	15.5	17.0	14.5	19.0	12.5	18.0	13.0
4	15.0	9.0	16.0	11.5	19.5	13.5	19.0	14.5	19.0	14.0	18.0	13.0
5	15.5	9.5	18.0	11.0	19.0	13.5	21.5	15.5	21.5	13.5	17.0	12.5
6	16.0	10.0	15.5	12.0	19.0	13.5	21.5	16.0	24.0	16.0	17.0	12.0
7	15.0	10.0	15.0	10.0	19.0	13.5	21.0	15.0	21.0	15.0	18.0	13.0
8	15.0	10.0	17.0	11.0	15.5	13.0	20.5	15.0	20.0	14.0	19.0	13.5
9	15.0	9.0	18.5	12.0	14.0	12.0	18.0	16.0	20.0	13.5	19.0	14.0
10	15.0	10.5	19.0	12.5	14.5	11.5	21.0	15.5	20.0	14.0	19.0	14.0
11	16.0	10.5	16.0	12.0	17.0	11.0	21.0	15.0	20.0	14.5	18.5	13.5
12	15.5	10.0	17.0	10.0	17.5	12.0	20.5	15.0	20.0	15.0	17.5	13.0
13	13.0	9.5	19.0	11.5	16.0	11.0	21.5	15.5	20.0	15.0	16.0	12.0
14	10.5	8.0	20.5	13.0	17.0	11.0	21.5	15.5	19.5	14.5	15.5	10.5
15	13.0	7.0	21.5	14.0	18.0	11.5	21.5	16.0	19.5	14.0	15.5	11.0
16	14.0	9.0	22.5	15.0	18.0	12.0	21.0	15.0	20.0	14.5	16.0	11.0
17	11.0	8.5	22.5	15.0	18.5	12.5	20.5	14.5	20.0	15.0	16.0	11.5
18	14.5	7.5	22.0	15.0	19.0	12.5	21.0	15.0	21.5	15.5	16.0	11.5
19	14.0	10.0	21.5	15.0	20.0	13.5	21.0	15.0	21.0	16.0	16.0	12.0
20	14.0	8.0	20.0	14.0	20.5	14.0	21.0	15.5	20.5	15.5	15.5	11.5
21	11.0	8.0	20.5	13.5	21.0	14.5	21.0	15.0	20.0	15.0	15.5	11.0
22	13.5	6.5	21.0	14.0	20.5	14.5	20.0	14.0	20.0	14.5	16.0	11.5
23	15.0	8.5	22.0	14.5	21.0	15.5	20.0	14.0	20.0	14.5	16.0	11.5
24	15.0	8.5	22.0	15.0	21.0	15.0	19.5	13.5	19.0	14.5	15.5	12.0
25	16.0	9.5	22.0	15.5	21.0	15.0	20.0	14.0	19.5	14.5	15.0	11.0
26	12.5	9.0	22.5	15.5	18.0	14.0	18.0	15.0	19.0	13.5	15.0	11.0
27	11.0	8.0	22.5	16.0	19.0	13.5	20.0	15.0	19.0	14.5	15.0	10.5
28	9.0	7.0	23.0	15.0	20.5	15.0	19.5	13.5	19.0	14.5	15.0	11.0
29	13.0	6.0	21.0	15.0	20.0	14.0	19.5	14.0	20.0	15.0	14.5	11.0
30	15.0	8.0	21.5	15.0	19.5	13.0	19.0	13.0	20.0	14.5	15.0	11.0
31	--	--	22.5	15.5	--	--	18.5	12.5	19.5	14.0	--	--
AVE	13.8	8.6	19.7	13.2	19.0	13.4	20.2	14.7	19.9	14.4	16.6	12.0

11218500 KINGS RIVER BELOW NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°53'04", long 119°09'07", in NW¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.0°C Aug. 29; minimum, 0.5°C Jan. 6.
EXTREMES, 1966-67, 1968-70.--Water temperatures: Maximum, 23.0°C Aug. 29, 1970; minimum, freezing point on several days in 1966 and 1967.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Temperature subject to fluctuation because of powerplant operation upstream. No record Oct. 12-15. Thermograph malfunction Nov. 29 to Dec. 9; range in temperature, 6.0°C to 7.5°C.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	MEAN DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
NOV. 10...	1135	1050	9.5	10.2	7.5	48	0	6.6	0	32	102	7.5

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	12.0	10.0	12.0	9.5	--	--	5.5	3.0	6.0	4.0	7.0	7.0
2	13.0	10.0	12.5	10.0	--	--	5.0	3.0	7.0	4.5	7.5	6.0
3	13.0	11.0	12.0	10.0	--	--	5.5	3.0	7.0	4.0	8.0	6.0
4	12.5	10.5	12.0	9.5	--	--	5.0	3.0	7.5	4.5	6.5	5.0
5	13.0	10.5	11.0	9.0	--	--	4.5	1.0	6.5	5.0	5.5	5.0
6	13.0	11.0	10.0	9.5	--	--	4.5	0.5	7.0	5.5	7.5	5.0
7	13.0	11.0	10.5	9.0	--	--	4.0	2.5	8.0	5.0	8.5	6.0
8	13.0	11.0	10.5	9.0	--	--	6.0	4.0	8.5	6.0	9.0	7.5
9	13.0	11.0	10.0	8.0	--	--	6.5	5.5	7.5	6.0	9.0	7.0
10	13.0	11.0	10.0	7.5	8.0	6.5	7.5	5.5	8.5	6.5	7.0	5.5
11	13.5	12.0	11.0	9.0	8.5	7.0	6.0	5.5	8.5	7.0	6.0	5.0
12	--	--	11.0	9.0	8.5	7.0	7.0	5.5	8.5	7.0	7.0	5.0
13	--	--	11.5	9.0	9.0	7.0	6.0	5.0	7.0	6.0	8.0	6.0
14	--	--	11.5	9.0	10.0	7.0	6.0	5.5	8.0	6.0	9.0	7.0
15	--	--	10.0	9.0	10.0	7.0	6.0	5.5	8.0	5.5	8.5	7.5
16	12.0	10.5	11.0	9.5	9.5	7.0	7.5	5.5	7.5	5.5	9.0	7.5
17	11.5	10.0	10.5	8.5	9.0	7.0	7.5	6.5	6.5	5.0	8.5	7.5
18	10.0	9.5	10.0	8.0	9.0	7.5	7.0	6.0	6.0	4.0	9.0	7.5
19	10.5	8.5	10.5	8.0	8.0	8.0	7.5	6.5	6.0	3.5	8.0	5.5
20	11.0	9.0	10.0	7.5	--	--	8.0	6.5	5.5	3.0	7.5	5.0
21	11.0	9.0	10.0	7.5	9.0	9.0	8.5	7.0	6.0	4.0	7.5	5.5
22	12.0	9.0	10.0	7.5	9.0	8.0	8.5	7.0	6.5	4.0	8.0	6.5
23	11.5	9.5	10.0	7.0	8.0	7.0	8.0	7.0	8.0	5.0	9.0	6.5
24	11.0	9.5	9.0	6.5	8.5	6.5	8.5	7.0	7.0	6.0	10.5	7.5
25	11.5	9.5	8.5	6.0	8.5	6.5	8.5	7.5	9.0	6.5	10.5	8.5
26	11.5	9.5	8.5	6.5	8.0	6.5	8.0	7.0	9.0	7.0	11.0	8.5
27	11.5	9.5	8.5	6.0	7.0	5.5	8.5	6.5	9.0	7.0	9.5	6.5
28	11.0	9.5	8.5	6.0	5.5	3.5	7.0	4.0	8.5	7.0	9.0	6.0
29	12.0	9.5	--	--	5.5	3.5	6.0	3.0	--	--	10.0	7.5
30	11.5	9.5	--	--	5.5	3.0	5.0	2.5	--	--	8.5	6.0
31	11.5	9.0	--	--	5.5	3.0	5.5	2.5	--	--	7.0	5.0
AVE	12.0	10.0	10.4	8.2	--	--	6.6	4.8	7.4	5.4	8.3	6.4

11218500 KINGS RIVER BELOW NORTH FORK, NEAR TRIMMER, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	4.5	11.0	8.5	13.0	11.5	15.5	14.0	16.5	12.5	15.0	11.0
2	8.0	4.5	12.0	10.0	13.0	11.5	17.5	14.0	17.5	12.5	14.0	10.5
3	9.0	6.0	12.5	10.5	13.0	11.0	17.0	15.0	16.0	13.0	13.5	10.5
4	11.0	7.0	11.5	10.0	13.0	12.0	18.0	15.5	15.5	12.5	14.0	11.0
5	10.5	8.0	11.5	9.5	13.0	11.5	20.0	17.0	15.5	12.5	19.0	11.0
6	10.5	8.5	10.5	9.0	13.0	12.0	19.5	18.0	15.0	12.5	19.0	12.0
7	9.5	8.0	9.5	8.5	13.0	12.0	19.0	17.0	17.0	13.0	18.0	11.5
8	9.5	7.0	10.5	8.5	13.0	12.0	18.5	16.0	20.0	13.0	17.0	11.5
9	9.5	7.0	11.0	9.0	12.5	11.5	17.5	15.0	20.0	15.0	18.0	11.5
10	10.0	8.0	10.5	9.5	12.5	12.0	17.0	15.5	19.5	13.5	18.0	11.5
11	11.0	8.5	9.5	7.0	12.0	11.5	19.0	15.0	16.5	13.5	16.0	11.5
12	10.0	8.5	8.5	7.0	12.0	11.5	19.5	15.5	17.0	13.5	21.5	12.0
13	9.0	6.0	10.5	8.0	11.5	10.5	19.0	17.0	17.0	13.5	20.0	12.0
14	6.0	4.5	11.5	10.0	11.0	10.0	19.0	15.5	15.5	13.5	13.5	10.0
15	6.5	4.0	11.0	10.0	11.5	10.5	18.5	17.0	16.5	13.5	16.5	10.0
16	7.5	5.5	11.5	10.5	12.5	11.0	20.0	14.5	18.5	13.5	14.0	9.5
17	7.0	5.5	11.5	10.0	12.5	12.0	19.0	15.5	18.0	14.5	13.5	10.0
18	9.0	6.0	11.0	10.0	13.5	12.0	19.0	16.0	16.5	14.0	13.5	10.5
19	10.5	7.0	10.0	9.5	13.5	12.5	20.0	16.0	17.0	13.5	18.5	10.0
20	9.0	8.0	10.0	9.0	16.0	12.5	19.0	14.5	16.5	13.0	19.0	11.0
21	8.0	5.5	10.0	9.0	16.5	14.5	17.5	14.5	15.0	13.0	13.0	10.5
22	7.0	5.0	11.0	10.0	16.5	15.5	17.5	14.0	20.5	13.0	13.5	10.5
23	8.5	5.5	11.5	10.5	16.0	15.0	16.5	13.5	18.5	14.5	15.0	10.5
24	8.5	6.5	11.5	10.5	16.0	15.0	18.0	13.5	15.0	13.0	14.0	10.5
25	11.5	8.0	11.5	10.5	16.0	15.0	18.0	15.0	14.5	12.0	13.5	11.5
26	9.5	8.0	12.0	10.5	17.0	15.5	18.0	15.0	14.5	12.0	18.5	12.0
27	8.0	5.5	12.0	11.0	17.5	16.0	17.0	14.0	14.0	12.0	19.0	13.0
28	5.5	4.0	11.5	10.0	16.5	15.5	16.0	13.0	19.5	12.0	14.5	11.0
29	6.5	3.5	12.0	10.0	16.0	14.0	16.0	13.0	23.0	14.5	14.5	10.5
30	8.5	5.5	12.5	11.0	15.0	14.0	15.5	12.5	21.0	13.0	15.0	11.5
31	--	--	13.0	11.5	--	--	15.5	12.5	16.0	12.0	--	--
AVE	8.7	6.3	11.1	9.6	13.9	12.7	18.0	15.0	17.2	13.1	16.1	11.0

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 September 1963, water years 1964-66 (partial-record station). Water temperatures: October 1969 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Minimum, 8.0°C on many days during December and January.
REMARKS.--Recorder installed Oct. 16. No record Feb. 5-24, May 13-26, June 25 to Aug. 12.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	11.5	10.0	12.0	10.0	9.5	8.0	9.5	9.0	10.5	9.5
2	--	--	11.5	10.5	11.5	10.0	10.0	8.0	11.0	9.0	10.0	9.5
3	--	--	11.5	10.5	11.0	10.0	9.5	8.0	11.0	8.5	9.5	9.5
4	--	--	12.0	10.5	11.0	10.0	9.0	8.0	11.0	9.0	10.0	9.5
5	--	--	12.0	10.5	11.0	10.0	10.0	8.0	--	--	10.0	9.5
6	--	--	11.5	10.5	11.0	10.0	11.0	8.5	--	--	10.0	9.0
7	--	--	11.0	10.5	11.0	10.0	10.5	9.5	--	--	10.5	9.0
8	--	--	12.0	10.5	11.0	10.0	12.5	8.5	--	--	9.5	9.0
9	--	--	11.5	10.5	11.0	10.0	9.5	8.5	--	--	9.5	9.0
10	--	--	11.5	10.0	11.0	10.0	11.0	8.5	--	--	11.0	9.0
11	--	--	12.0	10.5	11.0	10.0	9.0	8.5	--	--	10.5	9.5
12	--	--	12.5	10.0	11.0	10.0	9.0	8.5	--	--	12.5	9.5
13	--	--	12.5	10.5	12.0	9.5	9.0	8.5	--	--	12.5	9.0
14	--	--	13.0	11.0	12.0	9.5	9.0	8.5	--	--	12.0	9.5
15	--	--	12.5	11.0	12.0	9.5	9.0	8.5	--	--	12.5	9.5
16	--	--	12.5	11.0	11.0	9.5	9.5	8.5	--	--	11.0	9.5
17	12.5	11.5	13.0	11.0	11.0	9.0	10.0	9.0	--	--	11.0	9.0
18	12.5	11.0	13.0	11.0	12.0	10.0	9.5	8.5	--	--	11.0	9.0
19	12.0	11.0	12.0	10.0	11.0	10.0	9.0	9.0	--	--	11.0	9.0
20	12.0	11.0	12.0	10.0	13.5	10.5	10.0	8.5	--	--	12.0	9.0
21	12.0	11.0	12.5	10.0	11.5	10.5	10.0	9.0	--	--	12.0	9.0
22	11.0	10.0	12.0	10.5	10.5	9.5	10.0	9.0	--	--	10.5	9.5
23	11.0	10.0	12.0	10.5	10.0	9.0	10.0	9.0	--	--	12.5	9.5
24	11.5	10.5	12.0	10.5	11.0	9.5	10.0	8.0	--	--	11.0	9.5
25	11.5	10.5	12.0	10.0	10.0	9.5	9.0	8.0	11.0	9.0	--	--
26	11.5	10.5	12.5	10.0	9.5	8.5	10.5	8.0	10.5	9.0	12.5	9.5
27	11.5	10.5	12.0	10.0	9.5	9.0	11.0	9.0	10.5	9.0	11.5	9.5
28	11.5	10.5	12.0	10.0	10.0	9.0	11.0	9.0	10.5	9.0	11.5	9.5
29	12.0	10.5	12.0	10.0	11.0	8.5	10.5	9.0	--	--	12.0	9.5
30	12.0	10.0	12.0	10.0	10.0	8.0	11.0	8.5	--	--	11.0	9.0
31	11.0	10.0	--	--	9.5	8.0	11.0	9.0	--	--	11.5	9.0
AVE	--	--	12.1	10.4	11.0	9.6	10.0	8.5	--	--	11.1	9.3

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	8.5	11.0	8.5	18.5	16.5	--	--	--	--	15.0	14.5
2	11.0	9.0	11.0	8.5	17.5	15.5	--	--	--	--	15.0	14.5
3	11.0	9.0	11.0	8.5	17.5	15.5	--	--	--	--	15.0	14.5
4	11.5	9.5	11.0	8.5	18.0	15.5	--	--	--	--	15.0	14.5
5	11.5	9.5	11.0	8.0	18.0	15.5	--	--	--	--	15.0	14.5
6	11.5	9.5	11.0	8.5	17.5	16.0	--	--	--	--	15.0	14.5
7	11.5	9.0	11.0	8.5	16.5	14.5	--	--	--	--	15.5	14.5
8	11.5	9.0	11.5	8.0	15.5	13.5	--	--	--	--	15.5	15.0
9	11.5	9.0	11.5	9.5	15.5	13.5	--	--	--	--	16.0	15.5
10	12.0	9.5	18.0	9.5	15.0	13.0	--	--	--	--	16.5	15.5
11	12.0	9.5	19.0	17.5	14.0	12.5	--	--	--	--	16.0	15.5
12	12.0	9.5	20.5	18.5	15.0	13.5	--	--	--	--	16.0	15.5
13	11.0	9.0	--	--	14.0	12.0	--	--	13.5	13.0	16.0	15.5
14	10.5	9.0	--	--	14.0	12.5	--	--	13.0	13.0	15.5	15.0
15	11.0	9.0	--	--	14.0	12.0	--	--	13.0	13.0	15.5	15.0
16	11.5	9.0	--	--	14.0	12.5	--	--	13.5	13.0	16.0	15.0
17	12.0	9.0	--	--	14.0	12.5	--	--	13.5	13.0	16.5	15.0
18	12.0	9.0	--	--	14.5	12.5	--	--	13.5	13.0	16.5	15.5
19	12.0	9.0	--	--	14.5	13.0	--	--	14.0	13.0	16.5	15.5
20	11.5	8.5	--	--	14.5	12.5	--	--	13.5	13.0	16.5	16.0
21	10.0	9.0	--	--	15.0	14.0	--	--	14.0	13.5	16.5	16.0
22	11.5	9.0	--	--	17.5	14.5	--	--	13.5	13.0	17.0	16.0
23	11.5	8.5	--	--	17.0	16.5	--	--	13.5	13.0	17.0	16.0
24	12.0	9.0	--	--	18.0	16.5	--	--	14.0	13.5	17.0	16.5
25	12.0	9.0	--	--	--	--	--	--	14.0	13.5	17.0	16.0
26	9.5	9.0	--	--	--	--	--	--	14.0	13.0	17.0	16.0
27	10.0	9.0	19.0	17.0	--	--	--	--	14.0	13.5	18.0	16.5
28	10.0	8.0	17.5	15.0	--	--	--	--	14.0	13.5	18.5	16.5
29	11.0	8.0	18.0	15.5	--	--	--	--	14.5	13.5	19.0	17.0
30	11.0	8.0	18.5	16.5	--	--	--	--	15.0	14.5	19.5	17.0
31	--	--	18.5	16.5	--	--	--	--	15.0	14.5	--	--
AVE	11.3	8.9	--	--	15.8	14.0	--	--	--	--	16.4	15.5

11237000 BIG CREEK BELOW HUNTINGTON LAKE, CALIF.

LOCATION.--Lat 37°13'19", long 119°12'43", in SW¼NW¼ sec.23, T.8 S., R.25 E., Fresno County, Sierra National Forest, temperature recorder at gaging station on right bank 1,200 ft upstream from Grouse Creek, and 1 mile downstream from Huntington Lake.
DRAINAGE AREA.--81.1 sq mi.
PERIOD OF RECORD.--Water temperatures: July 1961 to September 1970 (discontinued).
EXTREMES, 1969-70.--Water temperatures: Maximum, 15.0°C on several days during August and September; minimum, 0.5°C on several days during December and January.
EXTREMES, 1961-70.--Water temperatures: Maximum, 18.5°C Aug. 11-14, 1969; minimum (1961-63, 1965-70), freezing point on several days during winter period.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	10.0	9.5	8.5	5.5	5.0	1.5	1.0	2.0	1.5	1.5	1.5
2	11.5	10.0	9.5	8.5	5.0	4.5	1.5	1.0	2.0	1.5	3.0	1.5
3	10.5	9.0	9.5	8.5	5.0	4.5	1.0	0.5	2.0	1.5	3.0	2.0
4	10.5	9.0	9.5	8.5	5.0	4.0	1.0	0.5	3.0	1.0	3.0	1.5
5	10.5	9.0	9.0	8.0	5.0	4.0	1.0	0.5	3.0	1.5	3.0	1.5
6	10.5	9.0	8.5	6.0	5.0	4.5	1.5	0.5	3.0	1.5	3.0	2.0
7	11.0	9.5	8.0	6.5	4.5	3.5	1.5	1.5	3.0	1.5	3.5	2.0
8	11.0	10.0	8.0	7.0	4.0	3.5	2.0	1.5	3.0	1.5	3.5	3.0
9	11.0	10.0	7.0	6.5	3.5	3.0	2.0	1.0	3.0	2.0	3.5	2.0
10	11.0	9.5	8.0	6.5	3.5	3.0	1.5	0.5	3.5	3.0	3.0	2.0
11	10.5	9.5	7.0	6.5	4.0	3.5	1.5	1.5	4.0	3.0	3.5	2.0
12	10.0	9.0	8.0	6.5	3.5	3.5	2.0	1.5	3.5	2.0	3.5	2.0
13	10.0	8.5	7.0	6.5	3.5	3.5	2.0	2.0	2.0	1.5	4.0	3.0
14	9.5	8.5	8.0	6.5	3.5	3.0	2.0	0.5	2.0	1.5	4.0	3.0
15	10.0	9.5	8.0	6.5	3.5	3.0	1.5	0.5	3.0	1.5	4.5	2.0
16	10.5	9.5	7.0	6.5	3.5	2.0	1.5	0.5	3.0	1.5	4.5	3.0
17	10.0	8.5	6.5	5.5	3.5	2.0	1.5	1.0	2.0	1.0	4.5	3.0
18	8.5	8.0	6.5	5.5	3.5	2.0	2.0	1.5	1.5	1.0	4.0	2.0
19	9.5	8.0	6.5	6.0	3.5	3.0	2.0	1.5	1.5	1.0	4.0	2.0
20	10.0	8.5	7.0	6.0	4.0	3.0	3.0	2.0	1.5	1.0	4.5	2.0
21	10.0	8.5	8.0	6.0	4.0	2.0	3.0	2.0	3.0	1.5	4.5	3.0
22	10.0	9.0	6.5	6.0	3.0	2.0	3.0	2.0	3.0	1.5	5.0	3.0
23	10.0	9.0	6.5	5.5	3.5	3.0	3.0	2.0	3.0	1.5	5.5	3.5
24	10.0	8.5	6.0	5.5	3.5	3.5	3.0	1.5	3.0	1.5	5.5	3.5
25	10.0	8.5	6.5	5.5	3.5	2.0	2.0	1.5	3.5	2.0	6.0	3.5
26	10.0	8.5	6.0	5.5	2.0	1.5	3.0	1.5	3.5	2.0	5.5	3.5
27	10.0	8.5	6.0	5.5	1.5	1.0	3.0	1.0	4.0	2.0	5.5	3.0
28	10.0	8.5	6.0	5.0	1.0	0.5	1.5	1.0	3.5	1.5	6.0	3.5
29	9.5	8.0	5.5	5.0	1.0	0.5	1.5	1.0	--	--	5.5	3.5
30	9.5	8.5	5.5	5.0	1.0	1.0	1.5	1.0	--	--	4.5	3.5
31	9.5	8.5	--	--	1.0	1.0	2.0	1.0	--	--	4.5	2.0
AVE	10.2	8.9	7.3	6.4	3.5	2.8	1.9	1.2	2.8	1.6	4.2	2.5

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.0	2.0	8.0	3.5	12.0	8.0	12.0	9.0	13.5	10.5	14.5	12.0
2	6.0	3.5	8.5	4.0	12.0	8.0	12.0	9.5	13.5	10.5	14.5	12.0
3	6.0	3.5	8.5	4.5	11.5	8.0	11.0	10.0	14.0	11.0	14.0	11.5
4	6.0	3.5	8.0	4.5	12.0	8.0	12.0	10.0	14.0	11.5	14.0	11.5
5	6.5	4.0	9.0	4.5	12.0	8.0	13.0	10.5	14.0	11.0	13.5	11.0
6	6.5	4.0	7.0	5.0	12.0	8.0	13.0	10.0	14.5	11.0	14.0	11.0
7	6.5	4.0	8.0	4.5	11.5	8.0	13.0	10.0	14.5	11.5	14.5	12.0
8	6.5	4.0	6.5	4.5	9.5	8.5	13.0	10.0	14.0	11.0	14.5	12.0
9	6.5	4.0	8.5	4.5	9.5	8.5	11.5	10.5	14.0	11.0	15.0	12.0
10	8.0	4.5	9.0	5.0	9.0	7.0	13.0	10.5	14.5	11.5	15.0	13.0
11	7.0	4.5	6.5	4.5	10.5	7.0	13.0	10.0	14.5	12.0	14.5	12.0
12	7.0	4.0	8.5	4.5	9.5	7.0	13.0	10.0	14.5	12.0	14.5	12.0
13	6.0	1.0	9.5	5.5	8.0	6.5	13.5	10.5	14.5	12.0	13.5	11.5
14	3.5	1.0	10.0	5.5	9.5	6.5	13.5	10.5	14.5	11.5	13.0	10.5
15	5.5	3.0	10.5	5.5	11.0	7.0	13.5	11.0	14.5	11.5	13.0	11.0
16	5.5	3.5	10.5	6.0	11.0	8.0	13.5	10.5	14.5	12.0	13.5	11.0
17	4.5	3.5	10.5	6.0	11.0	8.0	13.5	10.5	14.5	12.0	14.0	11.5
18	6.5	3.5	10.5	6.0	11.5	8.0	14.0	11.0	15.0	12.0	14.0	11.5
19	5.5	4.0	10.5	6.0	12.0	8.5	14.0	11.0	14.5	12.0	14.0	11.5
20	6.5	3.5	10.0	5.5	12.0	9.0	13.5	12.0	14.5	12.0	13.5	11.5
21	4.5	2.0	10.5	5.5	12.0	9.0	14.0	12.0	14.5	11.5	13.5	11.0
22	5.0	2.0	10.5	6.0	12.0	9.0	13.5	11.0	14.5	11.5	13.5	11.0
23	6.5	3.0	11.0	6.5	12.0	9.5	13.5	11.0	14.5	12.0	14.0	11.5
24	7.0	3.5	11.0	6.5	12.0	9.5	13.5	11.0	14.5	11.5	14.0	11.5
25	8.0	4.0	10.0	6.5	11.0	9.5	13.5	11.0	14.5	13.0	13.5	11.0
26	5.0	2.0	11.0	6.5	12.0	10.0	13.5	11.0	14.5	12.0	13.5	11.0
27	4.0	1.5	10.5	7.0	12.0	9.5	13.5	11.0	15.0	13.5	13.5	11.5
28	4.0	2.0	10.5	6.5	10.5	9.0	13.5	11.0	15.0	13.5	13.5	11.5
29	5.0	3.0	11.0	6.5	11.0	8.5	14.0	11.5	15.0	13.0	13.5	11.5
30	6.5	3.5	11.0	7.0	11.5	8.5	13.5	11.0	14.5	13.0	14.0	11.5
31	--	--	11.5	8.0	--	--	13.5	10.5	14.5	12.0	--	--
AVE	5.9	3.2	9.6	5.5	11.1	8.3	13.2	10.6	14.4	11.8	13.9	11.5

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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 31.0°C Aug. 18.
EXTREMES, 1960-70.--Water temperatures: Maximum (1960-63, 1964-68, 1969-70), 33.0°C Aug. 5, 1966; minimum (1960-69), 2.0°C on several days in 1961, 1965-68.
REMARKS.--Probe inoperative Oct. 17 to Mar. 1; recorder stopped Mar. 30 to Apr. 6, Sept. 13-30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	16.5	--	--	--	--	--	--	--	--	--	--
2	19.5	16.5	--	--	--	--	--	--	--	--	8.5	8.0
3	16.5	14.5	--	--	--	--	--	--	--	--	8.5	8.0
4	16.0	13.0	--	--	--	--	--	--	--	--	8.5	6.5
5	15.0	11.5	--	--	--	--	--	--	--	--	6.5	6.0
6	15.0	11.5	--	--	--	--	--	--	--	--	8.5	5.5
7	14.5	11.5	--	--	--	--	--	--	--	--	9.0	6.5
8	14.5	12.0	--	--	--	--	--	--	--	--	9.5	8.5
9	15.0	13.0	--	--	--	--	--	--	--	--	9.5	8.5
10	15.0	12.0	--	--	--	--	--	--	--	--	9.0	8.0
11	14.5	12.0	--	--	--	--	--	--	--	--	8.5	6.5
12	14.0	11.5	--	--	--	--	--	--	--	--	9.5	7.0
13	13.5	10.5	--	--	--	--	--	--	--	--	11.0	9.0
14	12.0	11.0	--	--	--	--	--	--	--	--	11.5	9.5
15	13.0	11.5	--	--	--	--	--	--	--	--	11.5	9.5
16	13.0	13.0	--	--	--	--	--	--	--	--	11.0	9.5
17	--	--	--	--	--	--	--	--	--	--	11.0	9.5
18	--	--	--	--	--	--	--	--	--	--	10.0	7.0
19	--	--	--	--	--	--	--	--	--	--	9.5	6.5
20	--	--	--	--	--	--	--	--	--	--	9.0	6.5
21	--	--	--	--	--	--	--	--	--	--	10.0	7.0
22	--	--	--	--	--	--	--	--	--	--	11.0	8.5
23	--	--	--	--	--	--	--	--	--	--	11.0	9.0
24	--	--	--	--	--	--	--	--	--	--	12.0	9.5
25	--	--	--	--	--	--	--	--	--	--	13.0	10.5
26	--	--	--	--	--	--	--	--	--	--	13.5	11.0
27	--	--	--	--	--	--	--	--	--	--	11.0	9.0
28	--	--	--	--	--	--	--	--	--	--	11.0	8.5
29	--	--	--	--	--	--	--	--	--	--	11.0	9.0
30	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	10.1	8.1

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	13.5	9.0	22.0	18.5	22.0	19.0	27.0	21.0	28.0	20.5
2	--	--	15.0	10.5	23.0	19.0	23.5	19.5	26.5	21.0	27.0	20.0
3	--	--	15.5	11.5	23.0	19.0	22.0	21.0	28.0	21.0	26.5	19.5
4	--	--	15.5	12.0	23.0	19.5	23.5	21.0	28.0	21.5	26.0	19.5
5	--	--	16.0	12.0	23.5	19.5	26.0	23.0	28.0	21.5	24.5	18.5
6	--	--	14.5	12.0	23.0	20.0	26.0	23.0	28.5	21.5	25.0	18.0
7	12.0	9.5	12.0	10.0	23.0	19.5	25.5	22.0	29.0	21.5	25.5	19.0
8	12.0	9.5	14.0	10.0	23.0	19.0	25.5	22.0	29.0	21.5	26.0	20.0
9	13.0	10.0	15.5	11.0	19.0	17.0	24.0	23.0	29.0	21.5	27.0	20.5
10	14.5	10.5	15.0	11.5	18.5	15.5	25.5	22.0	29.0	21.5	28.5	21.0
11	14.5	11.0	13.0	10.5	19.5	15.5	26.0	22.0	29.5	23.0	28.0	20.5
12	13.5	10.5	13.5	9.5	19.0	15.5	25.0	23.0	29.5	23.5	26.5	20.0
13	12.0	8.5	15.5	11.0	18.5	15.0	26.0	23.0	30.0	23.5	--	--
14	8.5	6.5	18.0	13.0	18.5	15.0	26.5	23.0	29.0	22.0	--	--
15	9.5	5.5	19.0	14.0	19.5	15.5	28.0	24.0	29.5	23.0	--	--
16	10.0	8.0	20.0	15.0	20.0	16.0	26.5	23.0	29.5	23.5	--	--
17	9.5	8.0	20.0	15.5	20.5	17.0	26.5	21.5	30.0	23.5	--	--
18	11.0	8.0	19.5	15.5	21.5	18.0	27.0	23.0	31.0	24.5	--	--
19	12.0	9.5	19.0	15.0	23.0	19.0	28.5	23.5	30.5	24.5	--	--
20	11.0	9.0	18.0	14.0	23.5	20.0	29.0	24.0	30.0	23.5	--	--
21	10.0	8.0	18.5	13.5	24.5	21.0	29.0	24.5	29.5	23.0	--	--
22	9.0	5.5	19.5	15.0	24.5	21.0	28.5	23.5	29.5	22.0	--	--
23	10.0	6.0	20.0	15.5	24.5	21.5	28.0	23.0	29.5	21.5	--	--
24	11.0	8.0	20.5	16.5	24.5	21.0	28.0	23.0	29.0	21.0	--	--
25	13.0	9.0	20.5	16.5	24.0	21.0	28.0	23.0	29.0	22.0	--	--
26	11.5	9.5	20.5	16.5	23.5	21.0	28.5	23.5	28.5	21.0	--	--
27	9.5	8.0	20.0	16.5	23.5	20.5	29.0	23.5	28.5	23.0	--	--
28	8.0	6.0	19.5	15.5	23.0	20.0	28.0	23.0	29.0	23.0	--	--
29	9.0	5.0	20.0	15.5	21.5	18.0	28.0	23.0	28.5	22.0	--	--
30	11.0	7.0	20.5	16.5	21.0	18.0	28.0	22.0	28.0	21.5	--	--
31	--	--	21.5	18.0	--	--	27.0	21.0	28.0	20.5	--	--
AVE	11.0	8.2	17.5	13.5	22.0	18.5	26.5	22.5	29.0	22.2	--	--

11247000 SAN JOAQUIN RIVER BELOW KERCKHOFF POWERHOUSE, NEAR PRATHER, CALIF.

LOCATION.--Lat 37°04'45", long 119°33'36", in NW¼ 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 to September 1970.
EXTREMES, January to September 1970.--Water temperatures: Maximum, 18.5°C Sept. 1.
EXTREMES, 1960-68, January to September 1970.--Water temperatures: Maximum (1960-66, 1967-68, January to September 1970), 29.0°C Sept. 1, 2, 1968; minimum (1960-68), 2.0°C Jan. 29, 1968.
REMARKS.--No record May 2-12.

TEMPERATURE (°C) OF WATER, JANUARY TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	--	--	6.0	6.0	8.0	6.0
2	--	--	--	--	--	--	--	--	6.0	5.5	7.5	6.5
3	--	--	--	--	--	--	--	--	5.5	5.5	7.0	6.0
4	--	--	--	--	--	--	--	--	5.5	5.5	6.0	5.5
5	--	--	--	--	--	--	--	--	5.5	5.5	6.0	5.5
6	--	--	--	--	--	--	6.5	6.0	5.5	5.5	6.0	6.0
7	--	--	--	--	--	--	6.0	6.0	5.5	5.5	6.5	6.0
8	--	--	--	--	--	--	6.0	6.0	5.5	5.5	7.0	6.5
9	--	--	--	--	--	--	6.0	6.0	5.5	5.5	7.0	7.0
10	--	--	--	--	--	--	6.0	6.0	5.5	5.5	7.0	7.0
11	--	--	--	--	--	--	6.0	6.0	5.5	5.5	7.0	7.0
12	--	--	--	--	--	--	6.0	6.0	5.5	5.5	7.0	7.0
13	--	--	--	--	--	--	6.0	6.0	5.5	5.0	7.0	7.0
14	--	--	--	--	--	--	7.5	6.0	5.0	5.0	7.0	7.0
15	--	--	--	--	--	--	7.0	6.5	5.0	5.0	8.0	7.0
16	--	--	--	--	--	--	8.0	7.0	5.5	5.0	8.0	7.5
17	--	--	--	--	--	--	7.5	7.0	5.5	5.5	8.0	7.5
18	--	--	--	--	--	--	7.0	7.0	5.5	5.0	8.0	7.5
19	--	--	--	--	--	--	7.5	6.5	5.5	5.5	8.0	7.5
20	--	--	--	--	--	--	7.5	7.0	5.5	5.5	8.0	8.0
21	--	--	--	--	--	--	7.5	7.5	6.0	5.5	8.0	8.0
22	--	--	--	--	--	--	7.5	7.0	6.0	5.5	8.0	8.0
23	--	--	--	--	--	--	7.0	6.5	6.0	5.5	8.0	8.0
24	--	--	--	--	--	--	6.5	6.5	6.0	5.5	8.0	8.0
25	--	--	--	--	--	--	6.5	6.5	6.0	5.5	8.0	8.0
26	--	--	--	--	--	--	6.5	6.5	6.0	5.5	8.5	8.0
27	--	--	--	--	--	--	6.5	6.5	6.0	6.0	9.0	8.5
28	--	--	--	--	--	--	6.5	6.5	6.0	6.0	9.0	8.5
29	--	--	--	--	--	--	6.5	6.0	--	--	9.0	8.5
30	--	--	--	--	--	--	6.0	6.0	--	--	9.0	9.0
31	--	--	--	--	--	--	6.0	6.0	--	--	9.0	9.0
AVE	--	--	--	--	--	--	6.7	6.4	5.6	5.5	7.7	7.3

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	9.0	--	--	12.5	12.0	14.0	14.0	15.5	15.0	18.5	17.5
2	9.0	8.5	--	--	13.0	12.5	14.0	14.0	15.5	15.0	17.5	17.0
3	8.5	8.5	--	--	13.0	12.5	14.0	14.0	15.5	15.0	17.0	17.0
4	9.0	8.0	--	--	13.0	13.0	14.0	14.0	15.5	15.0	17.0	17.0
5	9.0	8.5	--	--	13.0	13.0	14.0	14.0	15.5	15.0	17.5	17.0
6	9.5	9.0	--	--	13.0	13.0	14.0	14.0	15.5	15.0	18.0	17.5
7	9.0	8.5	--	--	13.0	13.0	14.0	14.0	16.0	15.0	17.5	17.0
8	8.5	8.5	--	--	13.0	12.5	14.5	14.0	16.0	15.5	17.5	17.5
9	8.5	8.5	--	--	12.5	12.0	14.5	14.5	16.0	15.5	17.5	17.5
10	8.5	8.5	--	--	12.0	12.0	14.5	14.5	16.5	15.5	18.0	17.0
11	8.5	8.5	--	--	12.0	12.0	14.5	14.5	16.5	16.0	18.0	18.0
12	8.5	8.5	--	--	12.0	12.0	14.5	14.0	16.0	16.0	18.0	18.0
13	9.0	8.5	10.5	10.0	12.5	12.0	14.5	14.0	16.0	16.0	18.0	17.5
14	9.0	9.0	10.5	10.0	12.5	12.5	14.5	14.5	16.0	16.0	17.5	17.0
15	9.0	9.0	10.5	10.5	12.5	12.5	14.5	14.5	16.0	16.0	17.5	17.5
16	9.0	9.0	10.5	10.5	12.5	12.5	15.0	14.5	16.0	16.0	17.5	17.5
17	9.0	8.5	11.0	10.5	12.5	12.5	15.0	14.5	16.0	16.0	17.5	17.5
18	9.0	8.5	11.0	11.0	12.5	12.5	14.5	14.5	16.0	16.0	17.5	17.5
19	9.0	8.5	11.0	11.0	12.5	12.5	15.0	14.5	16.5	16.0	18.0	17.5
20	9.0	8.0	11.0	11.0	12.5	12.5	15.0	14.5	16.5	16.0	18.0	17.5
21	9.0	8.5	11.5	11.0	12.5	12.5	15.0	14.5	16.5	16.0	17.5	17.0
22	9.0	8.5	11.5	11.0	13.0	12.5	15.0	14.5	16.5	16.5	17.5	17.0
23	9.0	8.0	11.5	11.0	13.0	13.0	15.0	14.5	16.5	16.5	18.0	17.0
24	9.0	8.5	12.0	11.5	13.0	13.0	15.0	14.5	16.5	16.5	18.0	17.5
25	10.0	8.5	12.0	12.0	13.0	13.0	15.0	14.5	16.5	16.5	17.5	17.0
26	10.0	8.5	12.0	12.0	13.0	13.0	15.0	14.5	16.5	16.5	17.5	17.0
27	9.0	8.5	12.0	12.0	14.0	13.0	16.0	15.0	16.5	16.5	18.0	17.5
28	9.0	8.5	12.0	12.0	14.0	14.0	16.0	15.0	16.5	16.5	18.0	17.5
29	8.5	8.5	12.0	12.0	14.0	14.0	15.5	15.0	17.0	16.5	17.5	17.0
30	9.5	8.0	12.0	12.0	14.0	14.0	15.5	15.0	17.5	17.0	17.0	17.0
31	--	--	12.0	12.0	--	--	15.5	15.0	17.5	17.0	--	--
AVE	9.0	8.5	--	--	12.8	12.7	14.7	14.4	16.2	15.9	17.7	17.3

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 1970.
Water temperatures: October 1965 to September 1970.
Sediment records: November 1969 to September 1970 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 18.0°C sometime during period July 14 to Aug. 14, and on Aug. 18; minimum, freezing point on several days during January, March, and April.
EXTREMES, 1965-70.--Water temperatures: Maximum (1966-70), 18.0°C sometime during period July 14 to Aug. 14, Aug. 18, 1970; minimum, freezing point on many days during winter period each year.
REMARKS.--Thermograph malfunction Oct. 1, 10-13, Oct. 30 to Nov. 1, Apr. 20-25, Apr. 27 to May 5, May 9-26. Clock stopped July 14 to Aug. 14; range in temperature, 13.0°C to 18.0°C.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
NOV.											
05...	1200	55	5.5	11.0	5.5	40	2.0	.0	1.8	.3	7
DEC.											
17...	1500	27	2.0	12.0	11	--	3.1	.3	2.7	.5	11
FEB.											
10...	1155	153	4.0	11.0	8.0	40	2.5	.2	2.0	.3	8
APR.											
15...	1400	367	1.5	12.0	7.3	30	1.4	.0	1.2	.3	6
MAY											
26...	1400	1520	10.0	12.0	3.6	40	.5	.0	.7	.3	3
JUNE											
30...	1200	478	10.0	10.0	3.7	0	.5	.0	.8	.2	3
AUG.											
26...	1000	29	13.0	8.6	3.9	30	1.8	.0	1.5	.3	5

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)
NOV.										
05...	0	1.0	3.0	.1	.14	.16	.03	.0	.02	.00
DEC.										
17...	0	1.0	3.6	.1	--	--	.00	.1	.03	.04
FEB.										
10...	0	1.0	2.2	.1	.19	.19	.00	.0	.14	.11
APR.										
15...	0	1.0	1.3	.2	.03	.08	.06	.1	.04	.04
MAY										
26...	0	.0	.8	.0	.06	.12	.08	.1	.00	.00
JUNE										
30...	0	.0	.3	.1	.32	.34	.03	.1	.19	.09
AUG.										
26...	0	1.0	2.4	.0	.21	.21	.00	.0	.04	.01

DATE	DIS-SOLVED BORON (B) (UG/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)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
NOV.										
05...	0	17	.02	5	0	42	.4	6.9	.0	12
DEC.										
17...	10	27	.04	8	0	38	.4	6.8	.0	2
FEB.										
10...	0	20	.03	7	0	37	.3	6.7	.7	1
APR.										
15...	70	16	.02	4	0	40	.3	6.7	1.6	0
MAY										
26...	40	7	.01	1	0	48	.3	6.1	.0	0
JUNE										
30...	0	7	.01	1	0	54	.3	6.5	.5	5
AUG.										
26...	0	13	.02	4	0	40	.3	6.1	1.0	27

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	1.0	0.5	1.0	1.0	2.0	1.5	2.0	1.0
2	11.0	9.0	6.0	5.0	1.5	1.0	1.0	0.5	2.5	1.0	2.0	0.5
3	9.0	6.5	6.5	5.0	1.5	1.0	1.0	0.5	3.5	2.0	1.5	0.5
4	7.0	5.5	6.0	5.0	1.5	1.0	1.0	0.5	4.5	3.0	1.0	0.5
5	6.5	5.0	5.5	4.0	1.5	1.0	1.0	0.5	4.0	2.5	2.0	0.5
6	6.0	5.0	5.0	3.0	3.0	1.5	1.0	0.5	4.0	2.5	3.5	0.5
7	7.0	5.5	3.5	2.5	2.5	2.0	1.5	1.0	4.0	2.0	4.5	1.5
8	7.5	6.5	3.5	2.5	2.5	2.0	1.5	1.5	4.5	2.5	4.0	2.5
9	7.5	6.5	3.5	2.0	2.5	1.5	1.5	1.5	4.5	3.0	3.5	1.0
10	--	--	4.0	2.5	2.5	1.5	2.5	1.5	5.5	4.0	3.0	1.0
11	--	--	4.0	2.5	2.5	2.0	3.0	2.0	6.0	4.5	3.5	1.5
12	--	--	4.5	2.5	2.5	2.0	2.5	2.0	5.0	2.5	5.5	2.5
13	--	--	4.5	2.5	2.5	2.0	3.0	1.5	2.5	1.5	6.0	4.0
14	5.0	4.5	4.5	2.5	2.5	2.0	3.0	1.5	2.5	1.0	6.0	3.5
15	7.0	5.0	4.5	3.0	2.0	2.0	2.0	1.0	3.5	1.5	5.5	2.0
16	7.5	6.5	5.0	3.5	2.0	2.0	2.5	1.0	3.5	2.0	6.0	2.5
17	6.5	4.0	3.5	1.0	2.5	1.5	2.5	2.0	2.5	0.5	5.5	2.5
18	4.5	2.5	1.5	0.5	4.0	2.5	3.0	2.0	1.0	0.5	2.5	1.0
19	5.0	3.0	3.0	1.5	4.5	3.0	4.0	3.0	1.5	0.5	3.0	0.0
20	5.5	3.5	4.0	2.5	5.0	3.5	5.0	4.0	1.5	1.0	4.5	1.0
21	6.0	3.5	4.0	2.5	5.0	4.5	5.5	2.5	2.5	1.0	5.5	2.0
22	6.5	4.0	3.5	2.0	5.0	4.0	3.5	1.5	3.5	1.5	6.5	2.5
23	7.0	5.5	3.0	1.5	5.0	4.0	4.5	3.0	3.5	1.5	6.5	3.0
24	6.5	5.0	2.5	1.5	5.5	4.0	4.0	2.5	4.0	2.0	7.0	3.0
25	6.5	4.0	2.5	2.0	5.0	2.5	2.5	1.5	4.5	1.5	7.5	3.0
26	6.0	4.0	2.5	2.0	2.5	1.0	3.5	2.5	5.0	2.5	6.5	3.0
27	5.5	4.0	2.0	1.5	1.0	0.5	4.0	2.0	4.5	2.5	5.5	1.5
28	5.5	4.0	2.0	1.0	1.0	0.5	2.0	0.5	3.5	1.5	6.0	2.0
29	5.0	3.5	1.5	1.0	1.0	0.5	1.5	0.0	--	--	5.5	2.0
30	--	--	1.0	0.5	1.0	0.5	1.0	0.0	--	--	3.5	1.5
31	--	--	--	--	1.0	0.5	2.0	0.0	--	--	3.0	1.0
AVE	--	--	3.7	2.4	2.7	1.9	2.5	1.5	3.6	1.9	4.5	1.8

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.0	0.0	--	--	12.0	8.5	14.5	10.5	--	--	13.5	11.5
2	6.0	2.0	--	--	12.0	9.0	15.5	11.5	--	--	13.5	11.5
3	6.0	2.0	--	--	12.0	8.5	15.0	12.0	--	--	13.0	11.5
4	6.5	3.0	--	--	11.5	8.5	16.0	13.0	--	--	13.0	11.5
5	7.0	3.0	--	--	11.5	9.0	16.5	14.5	--	--	12.0	10.5
6	6.5	3.5	6.5	4.0	12.5	9.0	16.0	13.5	--	--	12.5	10.5
7	6.5	2.5	7.5	3.0	12.5	9.0	16.0	13.0	--	--	14.0	11.5
8	7.0	2.5	7.0	4.5	10.0	9.0	16.0	13.5	--	--	14.5	12.5
9	8.0	3.5	--	--	11.0	9.0	15.5	14.5	--	--	14.5	12.5
10	7.5	3.5	--	--	11.5	8.5	16.0	14.0	--	--	14.5	12.5
11	6.5	2.5	--	--	11.5	8.0	16.0	12.5	--	--	14.5	12.5
12	6.5	3.0	--	--	9.0	7.5	16.5	13.5	--	--	14.0	12.0
13	4.5	1.0	--	--	9.0	7.0	16.5	14.0	--	--	13.0	10.0
14	3.0	0.5	--	--	9.0	7.0	--	--	--	--	11.0	9.0
15	3.0	0.0	--	--	10.5	7.0	--	--	16.0	14.0	11.5	9.0
16	4.0	2.0	--	--	12.0	8.5	--	--	16.5	14.0	11.5	9.5
17	4.5	1.0	--	--	13.0	8.5	--	--	17.5	15.5	12.0	10.0
18	6.0	1.5	--	--	14.5	10.0	--	--	18.0	16.0	12.5	10.5
19	5.5	3.5	--	--	14.5	11.0	--	--	17.0	15.5	12.0	10.5
20	--	--	--	--	14.5	11.0	--	--	16.0	14.0	11.5	9.5
21	--	--	--	--	14.5	12.0	--	--	16.0	13.5	11.5	9.5
22	--	--	--	--	14.5	11.5	--	--	15.5	14.0	12.0	10.0
23	--	--	--	--	14.5	11.5	--	--	15.5	13.5	12.0	10.0
24	--	--	--	--	15.0	11.5	--	--	15.0	12.0	12.5	10.0
25	--	--	--	--	14.0	11.5	--	--	16.0	14.0	12.0	10.0
26	5.5	1.0	--	--	15.0	12.5	--	--	15.5	13.0	12.0	9.5
27	--	--	10.5	7.5	14.0	11.5	--	--	15.5	15.0	12.0	9.5
28	--	--	10.5	6.5	13.0	9.5	--	--	16.0	15.0	11.5	9.5
29	--	--	11.5	7.5	12.5	8.5	--	--	16.0	14.5	11.5	9.5
30	--	--	12.0	7.5	13.5	9.5	--	--	15.0	13.0	12.0	9.5
31	--	--	12.0	8.5	--	--	--	--	14.5	12.5	--	--
AVE	--	--	--	--	12.5	9.4	--	--	--	--	12.6	10.5

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
NOV 5, 1969	1200	5.5	55	4	.60	--	--	--	--	--	--	--	--	--	--	--	
DEC 17.....	1540	2.0	26	1	.07	--	--	--	--	--	--	--	--	--	--	--	
FEB 10, 1970	1130	4.0	154	4	1.7	--	--	--	--	--	--	--	--	--	--	--	
APR 15.....	1400	1.5	367	3	3.1	--	--	--	--	--	--	--	--	--	--	--	
MAY 26.....	1320	10.0	1540	7	29	--	--	--	--	--	17	28	39	75	100	--	S
JUN 30.....	1200	10.0	478	3	3.9	--	--	--	--	--	--	--	--	--	--	--	
AUG 26.....	1000	13.0	29	1	.08	--	--	--	--	--	--	--	--	--	--	--	

11283100 LILY CREEK NEAR PINECREST, CALIF.

LOCATION.--Lat 38°08'41", long 119°53'59", in T.3 N., R.14 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 22.0°C July 19-21, Aug. 2; minimum, freezing point on many days during winter period.
EXTREMES, 1964-70.--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. 15. No flow Aug. 24 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	11.0	4.5	4.0	--	--	--	--	--	--	--	--
2	13.0	10.5	4.5	4.5	--	--	--	--	--	--	--	--
3	11.0	9.5	4.5	4.5	--	--	--	--	--	--	--	--
4	9.5	7.0	4.5	4.5	--	--	--	--	--	--	--	--
5	9.0	6.5	4.5	3.0	--	--	--	--	--	--	--	--
6	8.0	6.5	3.0	1.0	--	--	--	--	--	--	--	--
7	8.0	6.5	1.0	1.0	--	--	--	--	--	--	--	--
8	8.0	6.5	1.0	0.5	--	--	--	--	--	--	--	--
9	8.5	6.5	1.0	0.5	--	--	--	--	--	--	--	--
10	8.0	6.5	1.5	1.0	--	--	--	--	--	--	--	--
11	7.0	5.5	2.0	1.0	--	--	--	--	--	--	--	--
12	6.5	5.0	2.0	1.5	--	--	--	--	--	--	--	--
13	6.0	4.5	2.0	1.5	--	--	--	--	--	--	--	--
14	5.5	4.5	2.0	1.5	--	--	--	--	--	--	--	--
15	4.5	4.0	2.0	2.0	--	--	--	--	--	--	--	--
16	5.5	4.0	2.0	1.5	--	--	--	--	--	--	2.0	1.0
17	4.5	4.0	1.5	0.5	--	--	--	--	--	--	2.5	1.5
18	4.0	3.0	1.0	0.0	--	--	--	--	--	--	2.0	1.0
19	4.0	2.0	1.0	0.0	--	--	--	--	--	--	1.5	1.0
20	4.5	3.0	1.0	0.5	--	--	--	--	--	--	2.5	1.5
21	4.5	3.5	1.0	0.5	--	--	--	--	--	--	3.0	1.5
22	5.0	4.0	1.0	0.0	--	--	--	--	--	--	3.0	1.5
23	5.0	4.5	1.0	0.0	--	--	--	--	--	--	3.0	2.0
24	5.0	4.5	0.5	0.0	--	--	--	--	--	--	3.5	2.0
25	5.0	4.0	0.5	0.0	--	--	--	--	--	--	3.5	2.0
26	5.0	4.0	0.5	0.0	--	--	--	--	--	--	3.5	2.0
27	5.0	4.0	0.5	0.0	--	--	--	--	--	--	3.5	1.5
28	4.5	4.0	0.0	0.0	--	--	--	--	--	--	4.0	2.0
29	4.5	3.5	0.0	0.0	--	--	--	--	--	--	3.5	2.0
30	4.5	3.5	0.0	0.0	--	--	--	--	--	--	3.0	1.5
31	4.5	4.0	--	--	--	--	--	--	--	--	3.0	1.5
AVE	6.5	5.2	1.7	1.2	--	--	--	--	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.0	1.5	4.5	1.0	9.5	7.5	14.5	10.5	21.5	18.0	--	--
2	4.0	1.5	4.5	1.5	10.0	7.5	15.5	12.0	22.0	18.0	--	--
3	4.0	2.0	4.0	2.0	11.0	7.5	15.5	13.5	21.5	18.0	--	--
4	4.5	2.0	4.0	2.0	11.5	7.5	17.0	14.0	21.5	18.5	--	--
5	4.5	2.0	4.0	2.0	11.0	8.0	18.5	16.0	21.0	18.0	--	--
6	4.5	2.0	3.5	2.0	11.5	8.0	18.5	16.0	21.0	18.0	--	--
7	3.5	2.0	4.5	2.0	11.5	8.5	18.5	15.0	21.0	18.0	--	--
8	3.5	1.5	3.0	2.5	8.5	6.0	18.5	15.5	20.5	17.5	--	--
9	3.5	1.5	5.0	2.5	8.0	7.5	18.5	16.5	21.0	17.5	--	--
10	3.0	1.5	4.5	2.5	9.5	6.5	17.0	15.0	21.0	17.5	--	--
11	3.5	1.0	4.5	2.5	10.5	6.5	17.0	15.5	21.5	18.0	--	--
12	3.5	1.0	4.5	2.5	8.0	7.0	17.5	16.5	21.5	18.0	--	--
13	2.5	1.0	5.5	2.5	7.0	5.5	18.5	17.0	21.5	18.5	--	--
14	1.0	1.0	5.5	2.5	7.5	6.5	20.0	18.5	20.5	18.0	--	--
15	1.0	1.0	5.5	2.5	9.0	5.5	21.0	19.5	20.5	17.5	--	--
16	1.5	0.5	5.5	2.5	10.5	6.5	21.0	19.0	20.0	17.0	--	--
17	2.0	0.5	6.0	3.0	12.0	7.5	20.5	18.0	19.5	17.0	--	--
18	2.5	0.5	6.0	3.0	13.0	9.0	21.0	18.5	19.0	17.0	--	--
19	2.5	1.0	6.5	3.5	13.0	9.5	22.0	19.0	19.5	16.0	--	--
20	2.5	1.0	5.0	3.5	13.5	10.5	22.0	19.5	18.5	15.5	--	--
21	2.0	1.0	7.0	3.5	14.5	10.5	22.0	19.5	18.5	15.5	--	--
22	1.0	0.5	7.5	4.0	15.0	11.0	21.5	18.5	18.5	15.5	--	--
23	1.5	0.5	8.0	4.0	15.5	11.5	21.5	18.5	18.0	14.5	--	--
24	3.5	0.5	8.0	4.5	15.5	11.5	21.5	18.5	--	--	--	--
25	4.0	1.0	8.0	4.5	13.5	12.0	21.5	18.5	--	--	--	--
26	3.0	1.0	7.5	5.0	13.5	11.5	21.5	18.5	--	--	--	--
27	1.0	1.0	8.0	5.5	12.0	10.0	21.0	18.5	--	--	--	--
28	1.0	1.0	9.0	5.0	11.5	11.0	21.0	18.0	--	--	--	--
29	1.5	1.0	9.5	5.5	12.5	8.5	21.0	18.5	--	--	--	--
30	4.0	1.0	10.5	6.0	13.0	9.0	21.5	18.0	--	--	--	--
31	--	--	10.5	6.5	--	--	20.5	18.0	--	--	--	--
AVE	2.8	1.1	6.1	3.3	11.4	8.6	19.6	17.0	--	--	--	--

11290000 TUOLUMNE RIVER AT MODESTO, CALIF.

LOCATION.--Lat 37°37'38", long 120°59'11", in SE¼SW¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.0°C July 10, 21, 23, 24, 27; minimum, 8.0°C Jan. 4, 6-8.
EXTREMES, 1965-70.--Water temperatures: Maximum (1965-67, 1968-70), 29.0°C on several days in 1966, 1967 and 1969; minimum, 8.0°C on many days during winter period of most years.
REMARKS.--Clock stopped Oct. 7-14, Oct. 21 to Nov. 24, Feb. 16 to Mar. 4, Mar. 19 to Apr. 8, Apr. 30 to May 6, June 9 to July 2, Sept. 27-30; range in temperature, 16.5°C to 18.5°C, 12.5°C to 17.0°C, 8.5°C to 10.0°C, 11.0°C to 19.0°C, 17.0°C to 23.0°C, 16.5°C to 22.5°C, and 17.5°C to 23.5°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	19.5	--	--	11.0	11.0	9.0	9.0	9.0	9.0	--	--
2	20.0	19.5	--	--	11.0	10.5	9.0	8.5	9.0	8.5	--	--
3	19.5	17.5	--	--	11.0	10.5	9.0	8.5	9.0	9.0	--	--
4	18.0	17.0	--	--	11.0	10.5	9.0	8.0	9.5	9.0	--	--
5	18.5	17.5	--	--	11.0	10.5	9.0	8.5	9.5	9.0	9.5	9.0
6	18.5	17.5	--	--	11.0	10.5	8.5	8.0	9.5	9.0	10.0	9.0
7	--	--	--	--	11.0	11.0	8.5	8.0	9.5	9.0	10.5	10.0
8	--	--	--	--	11.0	10.5	8.5	8.0	9.5	9.0	11.0	10.0
9	--	--	--	--	11.5	11.0	9.5	8.5	9.5	9.0	11.0	10.0
10	--	--	--	--	11.5	11.0	10.0	9.0	9.5	9.0	10.5	9.5
11	--	--	--	--	11.5	11.0	10.5	10.0	10.0	9.0	10.5	9.5
12	--	--	--	--	11.5	11.0	11.0	10.5	10.0	9.5	10.5	9.5
13	--	--	--	--	12.0	11.0	11.0	10.5	10.0	9.5	11.0	10.0
14	--	--	--	--	12.0	11.5	10.5	10.0	9.5	9.0	12.0	10.5
15	16.0	15.0	--	--	12.0	11.5	10.0	9.0	9.5	9.0	11.5	11.0
16	15.5	15.0	--	--	11.5	11.0	9.0	8.5	--	--	11.5	10.5
17	16.5	15.0	--	--	11.0	11.0	10.0	9.0	--	--	12.0	10.5
18	16.0	15.0	--	--	11.0	11.0	9.5	9.0	--	--	12.5	11.0
19	15.5	14.5	--	--	11.5	11.0	9.5	9.0	--	--	--	--
20	16.0	14.5	--	--	12.5	11.5	9.5	9.0	--	--	--	--
21	--	--	--	--	13.0	12.5	10.0	9.5	--	--	--	--
22	--	--	--	--	13.0	12.5	10.0	9.5	--	--	--	--
23	--	--	--	--	13.0	12.5	10.0	9.5	--	--	--	--
24	--	--	--	--	12.5	12.0	10.0	9.5	--	--	--	--
25	--	--	12.5	11.5	12.0	12.0	10.0	9.0	--	--	--	--
26	--	--	12.0	11.5	12.0	11.0	10.0	9.0	--	--	--	--
27	--	--	12.0	11.5	12.0	10.5	10.0	9.0	--	--	--	--
28	--	--	11.5	11.5	10.5	9.0	10.0	9.0	--	--	--	--
29	--	--	11.5	11.0	10.0	9.0	9.5	8.5	--	--	--	--
30	--	--	11.5	11.0	9.5	8.5	9.5	9.0	--	--	--	--
31	--	--	--	--	9.0	8.5	9.0	9.0	--	--	--	--
AVE	--	--	--	--	11.4	10.9	9.6	9.0	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	26.5	23.0	--	--	26.5	23.0	25.5	22.0
2	--	--	--	--	27.5	23.5	--	--	26.5	24.0	25.5	22.0
3	--	--	--	--	26.0	24.0	24.0	21.5	27.0	24.5	25.5	21.5
4	--	--	--	--	24.0	22.0	25.0	22.0	27.0	24.0	25.0	22.5
5	--	--	--	--	23.5	21.0	26.0	23.0	26.0	23.5	23.5	20.0
6	--	--	--	--	23.0	20.5	26.0	23.0	26.5	23.5	24.5	21.0
7	--	--	21.0	19.0	23.5	21.0	27.0	23.5	26.5	23.5	26.0	22.0
8	--	--	19.5	18.0	22.0	20.0	27.0	23.5	26.5	23.5	26.5	23.0
9	19.5	17.0	20.0	17.5	--	--	27.5	24.0	25.5	23.5	26.5	22.5
10	20.0	17.5	19.5	17.5	--	--	28.0	25.0	26.0	23.0	26.0	22.5
11	19.0	16.5	18.5	17.0	--	--	27.5	25.0	26.5	23.0	26.0	23.0
12	19.0	16.0	17.5	16.0	--	--	27.5	24.5	26.0	23.5	25.5	22.0
13	17.0	15.5	18.0	16.0	--	--	27.5	24.5	27.0	23.5	24.0	21.0
14	17.0	15.5	19.0	16.5	--	--	27.0	24.0	27.5	24.0	23.0	20.0
15	17.5	15.5	20.0	17.5	--	--	27.0	24.0	27.0	24.0	22.5	19.0
16	18.5	16.0	21.0	18.5	--	--	27.5	23.0	26.5	24.0	23.0	19.5
17	18.5	16.0	21.0	19.0	--	--	27.5	24.0	27.5	23.5	23.5	20.0
18	19.0	16.5	21.0	19.0	--	--	27.5	24.5	27.5	24.5	24.0	21.0
19	19.0	17.0	20.5	18.5	--	--	27.5	25.0	26.5	24.0	23.0	21.5
20	17.5	15.5	20.0	18.0	--	--	27.5	25.0	26.0	23.0	22.5	20.0
21	18.5	15.5	20.5	17.5	--	--	28.0	25.0	26.0	22.5	22.5	20.0
22	19.0	16.0	22.0	19.0	--	--	27.5	24.5	26.0	23.0	22.5	19.5
23	19.5	17.0	23.0	20.0	--	--	28.0	24.5	26.0	22.5	23.0	20.5
24	20.0	17.0	23.0	20.5	--	--	28.0	24.5	25.5	22.5	22.5	20.0
25	19.5	17.5	24.5	21.0	--	--	27.0	24.5	25.5	22.0	22.5	19.0
26	18.0	16.0	24.0	21.5	--	--	27.5	24.5	24.5	21.5	22.5	20.0
27	17.5	15.5	23.5	21.5	--	--	28.0	24.5	25.0	21.5	--	--
28	18.5	15.5	23.5	21.0	--	--	27.0	25.0	24.5	22.0	--	--
29	19.0	16.0	24.5	21.5	--	--	26.5	24.0	25.0	22.0	--	--
30	--	--	25.0	21.5	--	--	26.5	23.5	25.0	21.5	--	--
31	--	--	25.5	22.0	--	--	26.5	23.0	25.5	22.0	--	--
AVE	--	--	21.4	19.0	--	--	27.1	24.0	26.1	23.1	24.1	21.0

11292700 MIDDLE FORK STANISLAUS RIVER AT HELLS HALF ACRE BRIDGE, NEAR PINECREST, CALIF.

LOCATION.--Lat 38°14'49", long 120°01'51", in SW¼NE¼ sec.31, T.5 N., R.18 E., Tuolumne County, 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 22.0°C July 15; minimum, freezing point sometime during period Dec. 26 to Jan. 6.
EXTREMES, 1965-70.--Water temperatures: Maximum (1966-70), 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 Oct. 1, 2, Dec. 26 to Jan. 6, Apr. 10-12; range in temperature, 12.0°C to 18.0°C, 0.0°C to 3.0°C, and 5.5°C to 10.5°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	10.0	8.0	4.5	2.5	--	--	5.0	3.5	5.5	3.0
2	--	--	10.5	8.5	4.5	3.0	--	--	5.5	3.0	4.5	2.5
3	13.0	10.5	10.5	8.5	4.5	3.0	--	--	6.0	3.5	5.0	2.5
4	12.0	9.5	10.5	9.0	4.0	2.5	--	--	6.5	4.5	4.0	2.0
5	11.5	8.5	9.5	8.5	3.5	2.5	--	--	6.0	4.5	5.0	2.0
6	11.5	8.5	8.5	6.0	4.5	2.5	--	--	6.5	4.5	6.0	2.5
7	11.5	9.0	7.5	6.0	4.5	3.0	1.5	1.0	6.5	4.5	6.5	3.5
8	11.5	9.5	7.5	6.0	4.0	3.0	2.5	1.5	6.5	4.5	6.5	5.0
9	12.5	10.0	7.5	5.5	3.5	3.0	3.5	2.5	6.5	5.0	5.5	4.0
10	12.5	10.0	7.5	5.5	3.5	2.5	4.0	3.0	6.5	5.5	5.5	3.0
11	11.0	8.5	7.5	5.5	5.0	3.5	4.0	3.0	7.5	6.5	5.0	3.5
12	10.5	8.0	8.0	6.0	5.0	4.0	4.0	3.5	6.5	4.5	7.5	4.5
13	10.0	7.5	8.0	6.0	5.5	4.0	4.0	3.5	4.5	3.0	8.5	5.5
14	8.5	8.0	8.0	6.0	5.0	4.0	4.0	2.0	4.5	3.0	8.5	6.0
15	9.5	8.5	7.5	6.0	4.5	3.5	3.5	2.5	5.5	3.0	7.5	4.5
16	10.5	9.5	8.0	6.0	5.0	3.5	3.5	2.5	4.5	3.0	7.5	4.5
17	10.0	7.5	6.5	4.5	4.5	3.0	4.0	3.0	4.0	1.5	8.0	5.5
18	8.5	6.5	5.5	3.5	5.5	3.5	5.5	4.0	4.0	2.0	5.5	2.5
19	9.0	6.5	5.5	3.5	5.5	5.0	5.0	4.0	4.0	1.5	5.5	2.0
20	9.5	7.0	6.0	4.0	6.0	5.5	5.5	4.0	4.5	2.0	6.5	2.5
21	10.5	8.0	6.5	5.0	6.5	3.5	5.5	4.0	5.0	2.5	7.0	3.5
22	10.5	8.5	6.0	4.5	4.5	3.5	6.0	4.5	6.0	3.0	8.0	4.5
23	11.0	9.0	6.0	4.0	5.0	4.5	6.0	5.0	5.5	3.0	8.5	5.0
24	11.0	9.0	6.0	4.0	5.0	4.5	6.0	4.0	6.0	4.0	9.0	5.5
25	10.5	8.5	6.5	4.5	5.5	3.5	4.5	3.0	6.5	4.0	8.5	5.5
26	10.5	8.5	6.0	4.5	--	--	5.5	3.5	6.5	4.0	8.0	5.0
27	10.0	8.5	5.5	4.0	--	--	5.0	3.5	6.5	4.5	7.0	4.0
28	10.0	8.0	5.5	3.5	--	--	4.0	2.5	6.0	5.5	8.0	4.0
29	9.5	7.5	5.0	3.5	--	--	4.0	2.5	--	--	7.5	4.5
30	9.5	7.5	5.0	3.0	--	--	4.5	3.0	--	--	6.0	3.5
31	10.0	8.0	--	--	--	--	4.5	2.5	--	--	6.5	3.5
AVE	10.6	8.4	7.3	5.4	4.8	3.5	4.4	3.1	5.7	3.7	6.7	3.9

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	2.5	6.5	2.0	14.0	10.0	15.5	11.5	18.5	14.5	17.5	14.0
2	8.0	3.5	8.5	4.0	14.0	11.5	18.0	13.0	19.0	14.5	17.0	13.5
3	8.0	4.5	10.0	5.0	14.0	9.5	16.5	14.0	19.0	15.0	17.0	13.0
4	8.5	4.5	10.5	6.0	14.5	10.5	18.0	15.0	19.5	15.0	16.0	13.0
5	9.0	5.5	10.5	6.5	14.0	10.0	19.0	15.0	19.0	14.5	15.5	12.0
6	8.0	5.0	10.5	7.0	14.0	9.5	18.5	14.0	19.0	14.5	16.0	12.0
7	7.5	6.0	10.5	7.0	14.0	9.5	18.5	14.5	19.5	15.0	17.0	13.0
8	11.0	7.0	9.0	7.0	12.0	9.5	19.5	15.5	19.0	15.0	17.5	13.5
9	9.0	7.0	9.0	5.5	10.5	9.5	19.0	16.5	19.5	15.0	17.5	14.0
10	--	--	8.5	5.0	11.5	9.5	20.0	16.0	19.5	15.0	17.5	14.0
11	--	--	8.0	5.0	12.5	9.0	20.0	15.5	19.5	15.5	17.5	14.0
12	--	--	9.0	5.5	11.0	9.5	20.5	16.0	19.5	15.5	17.0	14.0
13	8.0	5.0	8.5	6.5	10.5	8.5	20.5	16.5	19.5	15.5	15.5	12.5
14	8.0	5.0	12.0	8.0	10.5	9.5	21.5	16.5	19.0	15.0	14.0	11.0
15	6.5	0.5	12.5	7.5	13.0	9.0	22.0	17.5	19.0	15.0	14.0	10.5
16	3.0	0.5	13.0	9.0	15.0	10.5	21.0	17.0	19.0	15.0	14.5	10.5
17	4.5	1.0	13.0	9.0	15.5	11.5	20.5	16.0	19.5	15.5	15.0	11.5
18	5.0	3.0	12.0	8.5	15.5	11.0	20.5	16.0	20.0	16.0	15.0	11.5
19	6.0	3.0	11.5	8.0	16.0	11.5	21.5	17.0	20.0	16.0	13.0	11.0
20	7.5	3.5	11.0	7.0	16.5	12.5	21.5	17.5	19.5	15.5	13.5	10.0
21	7.5	5.5	12.0	8.0	17.5	12.5	21.5	17.5	19.0	15.0	13.5	10.5
22	6.0	3.5	13.0	9.5	17.5	12.5	21.0	16.5	19.0	15.0	14.0	10.5
23	4.5	3.0	13.0	9.5	18.0	12.5	20.5	16.0	18.5	14.5	15.0	11.5
24	4.5	2.5	13.0	11.0	17.5	13.0	20.5	16.5	18.0	14.0	15.0	11.5
25	7.0	2.5	13.5	10.5	16.0	13.0	20.5	16.5	18.0	14.5	14.5	11.5
26	8.0	4.0	13.5	10.0	15.5	14.5	20.5	16.5	18.0	14.5	15.0	11.5
27	9.5	5.5	13.0	9.5	15.5	11.5	20.0	16.0	18.0	15.0	15.0	12.0
28	7.0	3.0	13.0	9.5	14.5	11.0	20.0	15.5	19.0	15.0	15.0	12.0
29	3.5	1.5	13.5	10.0	14.5	10.0	20.0	15.5	19.0	15.5	15.0	12.5
30	4.0	1.0	14.5	10.5	14.5	11.0	19.5	15.0	18.5	15.0	15.0	12.5
31	--	--	14.0	10.5	--	--	19.0	14.5	18.0	14.5	--	--
AVE	6.9	3.7	11.3	7.7	14.3	10.8	19.8	15.7	19.0	15.0	15.5	12.1

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 to September 1970.
EXTREMES, February to September 1970.--Water temperatures: Maximum, 17.5°C July 6, 20, Aug. 18.
REMARKS.--Recorder malfunction June 14, 15, 21-26, July 1, 2.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	--	--	--	--	8.0	6.0
2	--	--	--	--	--	--	--	--	--	--	9.0	6.5
3	--	--	--	--	--	--	--	--	--	--	9.0	7.0
4	--	--	--	--	--	--	--	--	--	--	9.0	7.5
5	--	--	--	--	--	--	--	--	--	--	9.0	8.0
6	--	--	--	--	--	--	--	--	--	--	9.0	8.0
7	--	--	--	--	--	--	--	--	--	--	9.0	7.5
8	--	--	--	--	--	--	--	--	--	--	9.0	8.0
9	--	--	--	--	--	--	--	--	--	--	9.0	8.0
10	--	--	--	--	--	--	--	--	--	--	9.0	8.5
11	--	--	--	--	--	--	--	--	--	--	9.0	7.5
12	--	--	--	--	--	--	--	--	--	--	8.5	7.5
13	--	--	--	--	--	--	--	--	--	--	9.0	7.5
14	--	--	--	--	--	--	--	--	--	--	9.0	8.0
15	--	--	--	--	--	--	--	--	--	--	9.0	7.0
16	--	--	--	--	--	--	--	--	--	--	8.5	7.0
17	--	--	--	--	--	--	--	--	--	--	8.5	7.5
18	--	--	--	--	--	--	--	--	--	--	7.5	6.0
19	--	--	--	--	--	--	--	--	--	--	7.0	6.0
20	--	--	--	--	--	--	--	--	--	--	7.5	6.0
21	--	--	--	--	--	--	--	--	6.5	5.5	8.0	6.5
22	--	--	--	--	--	--	--	--	6.5	5.5	8.5	7.5
23	--	--	--	--	--	--	--	--	6.5	5.0	9.0	7.5
24	--	--	--	--	--	--	--	--	7.0	6.0	9.0	8.0
25	--	--	--	--	--	--	--	--	7.0	6.0	9.0	8.5
26	--	--	--	--	--	--	--	--	7.0	6.0	9.0	8.0
27	--	--	--	--	--	--	--	--	8.0	6.5	8.5	7.0
28	--	--	--	--	--	--	--	--	7.5	6.5	9.0	7.0
29	--	--	--	--	--	--	--	--	--	--	9.0	7.0
30	--	--	--	--	--	--	--	--	--	--	8.5	6.5
31	--	--	--	--	--	--	--	--	--	--	7.5	7.0
AVE	--	--	--	--	--	--	--	--	--	--	8.6	7.3

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.0	11.5	8.5	15.5	14.5	--	--	14.0	12.5	14.5	13.0
2	6.5	6.0	11.5	9.5	16.0	14.5	--	--	14.5	12.5	15.0	12.5
3	7.0	6.0	11.5	9.5	16.0	14.5	17.0	14.0	13.5	12.5	15.5	13.5
4	6.5	6.0	11.0	9.0	17.0	14.0	16.0	14.0	14.5	13.0	14.0	13.5
5	6.5	5.0	10.5	9.0	17.0	14.5	17.0	14.5	15.0	12.5	14.0	11.5
6	7.0	5.5	11.0	9.0	16.0	14.5	17.5	14.5	15.0	12.5	14.0	12.5
7	7.5	6.5	10.0	9.0	16.0	14.0	16.5	14.0	14.5	12.5	14.5	13.0
8	8.0	7.0	10.0	9.0	15.5	13.5	16.5	14.0	14.0	12.5	15.5	13.0
9	7.5	6.5	11.0	9.0	14.0	13.5	16.5	14.0	14.5	12.5	14.5	13.5
10	7.0	6.0	11.0	9.5	14.5	13.5	15.5	13.5	14.5	12.5	15.0	13.0
11	6.5	6.0	10.0	9.5	15.0	12.0	16.0	14.0	15.5	12.5	16.0	13.0
12	8.0	6.5	10.0	9.0	14.5	12.5	16.5	14.0	15.5	13.0	16.5	13.0
13	8.5	4.5	11.5	10.0	13.0	12.0	17.0	14.0	14.5	13.0	15.5	13.0
14	5.5	4.5	12.0	10.0	--	--	15.0	14.0	15.5	13.5	14.0	12.5
15	7.5	5.5	12.5	10.0	--	--	16.0	14.0	15.0	13.5	14.5	12.5
16	7.0	7.0	13.0	10.0	14.5	13.0	15.0	13.5	15.5	13.0	14.0	12.5
17	8.0	6.0	13.0	10.0	15.0	13.0	15.0	13.0	16.5	13.5	17.0	12.5
18	8.5	7.0	13.0	10.0	15.5	13.0	16.0	13.0	17.5	13.5	14.0	12.5
19	8.5	8.0	12.5	10.5	16.0	13.5	17.0	13.0	16.0	13.5	14.0	13.0
20	8.0	6.5	12.0	10.0	16.5	14.5	17.5	13.0	15.5	13.5	13.0	12.5
21	7.5	6.5	12.5	10.5	--	--	16.0	13.0	15.5	13.5	13.5	12.5
22	7.0	6.5	13.5	11.0	--	--	16.0	13.0	15.5	13.0	13.5	12.5
23	8.5	6.5	13.5	11.0	--	--	16.5	13.0	14.5	13.5	14.0	13.0
24	10.0	8.0	14.0	11.5	--	--	16.5	13.0	14.5	13.0	14.0	13.0
25	10.0	8.5	13.5	11.5	--	--	16.0	13.5	15.0	13.5	14.0	13.0
26	10.0	7.5	14.5	12.0	--	--	16.0	13.0	15.0	13.5	14.0	12.5
27	7.5	6.0	14.5	12.0	16.5	14.5	15.0	13.0	15.5	13.5	14.0	13.0
28	6.5	6.0	14.0	11.5	16.0	15.0	15.5	13.0	15.5	13.5	14.0	13.0
29	8.5	6.0	14.5	13.0	15.0	13.0	15.5	13.0	15.5	13.5	14.0	13.0
30	10.5	8.0	15.0	13.5	16.0	13.5	14.5	13.0	14.5	13.5	14.0	13.0
31	--	--	15.5	13.5	--	--	14.0	13.0	14.5	13.5	--	--
AVE	7.8	6.4	12.4	10.4	--	--	16.0	13.5	15.0	13.1	14.5	12.8

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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 26.5°C July 26; minimum, 8.0°C Feb. 4, 14, 15, 17, 18.
EXTREMES, 1966-70.--Water temperatures: Maximum, 26.5°C June 25, 1968; minimum (1966-68, 1969-70), 6.0°C sometime during period Jan. 13-31, 1968.
REMARKS.--No record Dec. 31 to Jan. 2.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	19.0	17.0	16.5	12.0	11.5	--	--	8.5	8.5	9.0	8.5
2	19.0	19.0	17.0	16.5	12.0	11.5	--	--	8.5	8.5	9.0	8.5
3	19.0	18.0	17.0	16.5	12.0	11.5	9.5	9.0	8.5	8.5	9.0	9.0
4	19.0	18.5	17.0	16.5	12.0	11.5	9.5	9.0	8.5	8.0	9.0	9.0
5	19.0	18.5	16.5	16.5	11.5	11.5	9.5	9.0	8.5	8.5	9.0	9.0
6	18.5	18.0	16.5	16.5	11.5	11.5	9.0	8.5	9.0	8.5	9.0	8.5
7	18.5	17.5	16.5	16.0	11.5	11.5	9.0	9.0	9.0	8.5	9.0	8.5
8	18.0	17.5	16.0	15.5	11.5	11.5	9.0	9.0	9.0	8.5	9.5	9.0
9	18.0	17.5	16.0	15.5	11.5	11.5	9.0	8.5	8.5	8.5	9.5	9.0
10	17.5	17.0	15.5	14.5	11.5	11.5	9.0	8.5	8.5	8.5	10.0	9.5
11	17.5	16.5	15.0	14.0	11.5	11.5	9.0	9.0	9.0	8.5	10.0	9.5
12	17.0	16.5	14.5	14.0	11.5	11.0	9.0	8.5	8.5	8.5	10.0	9.5
13	17.0	16.5	14.5	14.0	11.5	11.0	8.5	8.5	8.5	8.5	10.0	9.0
14	17.0	16.5	14.0	13.5	11.0	11.0	8.5	8.5	8.5	8.0	10.0	9.0
15	17.0	17.0	14.5	14.0	11.0	11.0	8.5	8.5	8.5	8.0	10.0	9.5
16	17.0	16.5	14.5	14.0	11.0	10.5	9.5	8.5	8.5	8.5	9.5	9.0
17	17.0	17.0	14.0	13.5	11.0	10.0	10.0	9.5	8.5	8.0	10.0	9.5
18	17.0	17.0	13.5	12.5	11.0	11.0	10.0	9.5	9.0	8.0	10.0	9.0
19	17.0	17.0	13.0	12.5	11.0	11.0	9.5	8.5	9.0	8.5	10.0	9.0
20	17.0	17.0	13.0	12.5	11.0	11.0	9.0	9.0	9.0	8.5	10.0	9.0
21	17.5	17.0	13.0	12.5	11.5	11.0	9.0	9.0	9.0	8.5	10.0	9.5
22	17.5	17.0	13.0	12.5	11.5	11.5	9.0	8.5	9.0	9.0	10.0	9.5
23	17.5	17.0	13.0	12.5	11.5	11.5	9.0	9.0	9.0	8.5	10.5	9.5
24	17.5	17.0	13.0	12.5	11.5	11.5	9.0	9.0	9.0	8.5	10.5	9.5
25	17.5	17.0	13.0	12.5	11.5	11.0	9.0	8.5	9.0	8.5	11.0	10.5
26	17.5	17.0	13.0	12.5	11.0	11.0	9.0	8.5	9.0	8.5	11.5	11.0
27	17.5	17.0	13.0	12.5	11.0	10.5	9.0	8.5	9.0	8.5	11.5	10.5
28	17.0	17.0	12.5	12.0	11.0	10.5	9.0	8.5	9.0	8.5	11.0	10.0
29	17.0	17.0	12.5	12.0	10.5	10.0	8.5	8.5	--	--	11.0	10.0
30	17.0	17.0	12.5	11.5	10.5	10.0	8.5	8.5	--	--	11.0	10.0
31	17.0	16.5	--	--	--	--	8.5	8.5	--	--	11.0	10.5
AVE	17.6	17.2	14.5	13.9	11.3	11.1	9.1	8.7	8.8	8.4	10.0	9.4

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	15.5	13.5	15.5	14.0	21.5	17.5	24.5	24.0	23.5	21.5
2	12.5	11.0	17.5	14.5	15.5	15.5	24.0	20.5	25.0	24.0	23.0	22.0
3	13.0	11.5	18.0	16.0	16.0	15.5	24.0	23.0	25.5	23.5	23.5	22.0
4	14.5	12.5	18.0	16.0	16.5	16.0	25.0	23.0	24.5	23.5	22.0	22.0
5	15.0	13.0	18.0	16.0	16.5	16.0	24.5	24.0	23.5	23.5	22.5	21.5
6	15.0	13.5	17.0	11.0	16.5	16.0	24.5	24.0	24.5	23.5	24.0	21.5
7	14.0	13.0	11.0	10.0	16.0	15.5	25.0	24.0	24.5	24.0	25.0	22.5
8	14.0	13.0	10.5	10.0	16.0	15.5	25.0	24.0	24.5	23.5	25.0	22.5
9	15.0	13.5	10.5	10.0	16.5	15.5	24.0	24.0	25.5	24.0	25.0	22.5
10	15.5	14.5	10.5	10.0	17.0	16.5	25.0	23.0	25.0	23.5	24.5	22.5
11	15.5	14.5	10.5	10.0	17.0	17.0	25.0	24.0	25.0	23.5	25.0	22.5
12	15.5	14.5	11.0	10.5	17.0	16.5	25.0	24.0	24.0	23.5	25.0	24.0
13	15.5	14.0	12.0	11.0	17.0	16.0	25.0	24.0	24.0	24.0	24.0	23.5
14	14.0	13.0	12.0	11.0	18.0	16.0	25.0	24.5	25.0	23.5	23.5	23.5
15	14.5	13.0	12.5	11.5	20.0	18.0	25.0	24.0	24.5	23.5	23.5	23.0
16	14.5	13.5	13.5	12.5	21.0	19.0	24.5	24.5	24.5	23.5	25.5	23.5
17	14.0	13.5	13.5	13.0	21.5	19.5	25.0	24.5	24.5	23.5	23.5	21.5
18	15.5	13.5	13.5	13.0	22.0	20.0	25.5	25.0	24.5	24.5	23.5	20.5
19	16.0	15.0	13.5	13.5	24.5	21.5	26.0	25.0	24.5	24.0	21.5	20.5
20	15.5	14.5	13.5	13.5	25.0	23.5	25.5	25.0	24.0	23.5	21.0	20.0
21	14.5	14.5	14.0	13.5	24.5	16.5	26.0	25.5	23.5	23.0	21.5	20.0
22	15.5	14.0	14.5	13.5	16.5	16.0	25.5	25.5	24.0	23.5	23.0	19.5
23	15.5	14.5	14.5	13.0	16.5	16.0	26.0	25.5	23.5	22.5	23.5	20.5
24	15.5	14.5	14.5	14.0	17.0	16.5	26.0	25.5	23.5	23.0	21.5	20.0
25	16.0	15.0	14.5	14.0	17.0	17.0	25.5	24.5	23.0	23.0	22.5	20.0
26	15.5	14.5	14.5	14.0	17.0	16.5	26.5	25.0	23.0	23.0	23.5	20.0
27	14.5	13.5	14.5	14.0	18.0	17.0	26.0	25.0	23.0	22.5	24.0	19.5
28	13.5	12.5	14.5	14.0	18.0	17.0	25.5	25.0	23.0	22.5	23.5	18.5
29	14.0	13.0	15.0	14.5	17.5	17.0	25.5	25.0	23.0	23.0	22.5	19.5
30	15.5	13.5	15.0	14.5	18.0	17.5	25.0	24.5	23.0	23.0	21.5	19.5
31	--	--	15.0	14.5	--	--	24.5	24.0	23.5	22.5	--	--
AVE	14.7	13.5	14.0	12.9	18.2	17.0	25.0	24.1	24.1	23.4	23.4	21.3

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.--13,540 sq mi.
PERIOD OF RECORD.--Chemical analyses: March 1951 to September 1970.
Water temperatures: March 1951 to September 1970.
Sediment records: November 1956 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 30.0°C July 7; minimum, 7.5°C Jan. 5.
Sediment concentrations: Maximum daily, 283 mg/l Jan. 19; minimum daily, 29 mg/l Jan. 9.
Sediment loads: Maximum daily, 13,300 tons Jan. 19; minimum daily, 238 tons Sept. 16.
EXTREMES, 1951-70.--water temperatures: Maximum, 30.0°C July 7, 1970; minimum, 3°C Jan. 24, 1962.
Sediment concentrations (1956-70): Maximum daily, 1,590 mg/l Dec. 25, 1964; minimum daily, 9 mg/l Jan. 4, 1960, Nov. 18, 1961.
Sediment loads (1956-70): 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 1969 TO SEPTEMBER 1970

DATE	TIME	MEAN DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)
OCT.											
08...	--	4490	--	--	13	30	16	7.6	200	33	2.0
NOV.											
07...	0810	5030	13.5	8.9	10	40	13	6.1	150	26	1.7
DEC.											
05...	0900	4390	10.0	10.2	11	10	17	7.9	200	36	1.8
JAN.											
14...	1220	4080	12.0	10.9	13	20	23	12	310	58	2.1
FEB.											
04...	0900	9680	10.5	8.8	13	30	17	8.2	200	38	1.9
MAR.											
18...	1300	5600	14.5	9.6	16	60	25	12	150	53	2.0
APR.											
15...	1140	1690	15.5	10.5	20	60	44	22	360	94	3.8
MAY											
13...	1130	2490	18.5	10.2	15	10	25	13	110	55	2.4
JUNE											
17...	1015	1980	20.5	11.1	19	20	26	13	290	51	2.6
JULY											
15...	0945	1150	24.0	9.5	15	10	46	23	530	97	3.2
AUG.											
18...	1120	1060	25.0	10.2	20	40	45	22	500	98	3.9
SEP.											
16...	1000	1260	20.5	8.5	24	0	43	20	470	94	4.2

DATE	DIS-SOLVED LITHIUM (LI) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
08...	10	74	0	23	40	.1	2.1	.49	50	173
NOV.										
07...	10	59	0	21	34	.1	1.5	.35	50	143
DEC.										
05...	20	67	0	37	40	.1	2.6	.50	150	187
JAN.										
14...	10	91	0	64	62	.2	3.3	.56	290	283
FEB.										
04...	10	68	0	45	40	.1	2.3	.09	210	199
MAR.										
18...	10	91	0	62	65	.1	2.7	.20	190	283
APR.										
15...	10	156	0	96	130	.3	6.8	1.5	340	495
MAY										
13...	10	100	0	58	71	.1	3.7	.52	220	293
JUNE										
17...	10	100	0	51	67	.1	5.0	1.0	320	287
JULY										
15...	10	170	0	68	146	.1	6.8	1.4	110	490
AUG.										
18...	20	170	0	70	138	.2	5.6	1.4	260	487
SEP.										
16...	10	170	0	64	128	.3	7.2	.99	150	469

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	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)	TUR-BID-ITY (JTU)
OCT.										
08...	.24	72	11	61	49	1.7	312	7.4	15	--
NOV.										
07...	.19	58	10	48	49	1.5	253	7.3	25	--
DEC.										
05...	.25	75	20	55	50	1.8	336	7.3	16	--
JAN.										
14...	.38	126	51	75	54	2.4	495	7.4	15	--
FEB.										
04...	.27	76	20	56	51	1.9	346	7.3	35	--
MAR.										
18...	.38	112	37	75	50	2.2	498	7.5	30	--
APR.										
15...	.67	200	72	128	50	2.9	846	7.6	30	--
MAY										
13...	.40	116	34	82	50	2.2	513	8.1	40	--
JUNE										
17...	.39	118	36	82	48	2.0	484	7.1	--	45
JULY										
15...	.67	210	71	139	50	2.9	876	7.7	--	46
AUG.										
18...	.66	203	64	139	51	3.0	859	7.5	--	50
SEP.										
16...	.64	190	51	139	51	3.0	818	7.7	--	16

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	15.0	10.0	8.5	10.0	9.5	13.5	18.0	20.5	21.0	25.5	23.0
2	20.0	14.0	9.0	9.5	10.0	10.0	13.0	18.0	20.5	21.0	25.5	23.0
3	17.0	15.0	9.0	9.0	12.5	10.5	14.0	20.5	20.0	26.0	26.0	25.0
4	15.0	16.0	10.0	8.5	10.0	11.0	13.5	21.5	23.5	25.0	24.5	23.0
5	15.0	15.0	10.0	7.5	10.0	9.0	14.0	19.0	20.0	28.0	25.0	21.0
6	16.0	14.0	9.0	9.0	9.5	10.0	14.0	19.0	19.5	20.0	25.0	20.0
7	15.0	16.0	9.0	10.0	10.0	9.0	14.5	15.9	19.0	30.0	24.0	21.0
8	15.0	13.0	10.0	8.5	10.0	10.5	15.0	13.0	18.5	27.0	24.0	22.0
9	16.0	15.0	9.0	9.5	11.0	13.0	16.0	13.5	17.5	25.0	25.5	24.0
10	17.0	14.0	10.0	9.5	10.5	12.0	16.0	13.0	18.5	22.5	25.5	25.0
11	17.0	14.0	9.0	10.0	10.5	12.5	15.5	13.5	20.0	25.0	25.0	24.0
12	17.0	13.0	10.0	9.0	11.5	11.5	15.5	13.5	20.0	25.5	25.0	24.0
13	15.0	13.0	10.0	10.5	11.5	12.0	14.0	17.0	19.0	25.5	25.5	23.5
14	15.0	13.0	11.0	9.0	10.5	13.0	13.5	17.0	19.5	25.0	25.5	21.5
15	16.0	13.0	12.0	10.5	11.0	13.0	13.5	17.5	18.0	25.0	25.0	20.0
16	17.0	13.0	10.5	10.5	11.0	13.0	14.5	20.0	21.0	24.0	25.0	21.5
17	15.0	13.0	10.0	11.5	11.5	12.0	15.5	20.0	20.5	24.0	24.0	21.0
18	15.0	13.0	10.0	12.5	11.0	10.5	15.0	20.0	20.0	23.5	25.0	20.0
19	14.0	12.0	11.5	12.5	10.0	12.5	15.5	18.0	20.5	24.0	25.5	18.5
20	15.0	11.0	13.0	12.5	9.0	14.0	15.5	17.5	24.0	25.5	24.0	21.5
21	16.0	11.0	13.0	12.5	11.0	10.5	14.0	17.0	26.0	25.5	24.0	21.5
22	14.0	11.0	12.0	12.0	10.0	11.5	14.0	17.5	27.0	23.5	24.0	18.0
23	15.0	11.0	11.5	12.0	10.0	12.5	14.0	19.0	27.0	23.5	24.0	19.0
24	14.0	10.0	12.5	12.0	13.0	10.5	14.5	20.0	23.0	23.5	24.0	20.0
25	14.0	10.0	12.0	10.0	13.0	14.0	16.0	20.5	26.0	24.0	24.0	20.0
26	15.0	10.0	12.5	10.0	13.0	14.5	15.5	18.0	19.0	25.0	23.0	20.0
27	15.0	10.0	12.0	11.5	12.0	12.5	16.0	17.0	18.0	25.5	24.0	19.0
28	16.0	9.0	10.5	10.0	11.0	13.0	14.5	18.0	21.0	25.5	22.0	20.5
29	15.0	9.0	9.0	9.0	--	13.5	14.0	17.0	19.0	23.5	24.5	21.5
30	14.0	9.0	10.5	9.5	--	12.0	16.5	18.0	18.0	25.0	23.5	20.5
31	15.0	--	9.0	9.0	--	12.5	--	20.0	--	24.5	25.0	--
AVE	15.6	12.5	10.5	10.2	10.9	11.8	14.7	17.7	20.8	24.6	24.6	21.4

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4670	85	1070	4920	41	545	4360	38	447
2	4420	79	943	4890	42	555	4430	40	478
3	4360	75	883	4880	40	527	4650	37	465
4	4460	70	843	4730	40	511	4560	31	382
5	4560	60	739	4670	46	580	4390	30	356
6	4620	64	798	4830	56	730	4200	31	352
7	4590	56	694	5030	59	801	4080	33	364
8	4490	58	703	5040	51	694	4020	35	380
9	4110	54	599	4970	51	684	4010	37	401
10	3770	56	570	4880	55	725	4010	42	455
11	3620	48	469	4860	55	722	3930	46	488
12	3470	53	497	4890	50	660	3910	36	380
13	3400	47	431	4850	47	615	3930	41	435
14	3340	50	451	4910	46	610	3770	41	417
15	3730	61	614	5150	48	667	3640	42	413
16	4230	57	651	5100	53	730	3590	43	417
17	4360	48	565	4850	45	589	3590	44	426
18	4270	51	588	4400	49	582	3560	40	384
19	4420	52	621	4300	44	511	3560	46	442
20	4440	50	599	4280	39	451	3580	49	474
21	4420	46	549	4250	43	493	3480	48	451
22	4640	48	601	4210	47	534	3430	51	472
23	4760	53	681	4230	43	491	3310	38	340
24	4890	56	739	4060	41	449	3380	39	356
25	5060	52	710	3820	37	382	3550	53	508
26	5220	42	592	4110	40	444	4100	89	985
27	5320	39	560	4410	39	464	4510	87	1060
28	5310	62	889	4500	58	705	4660	70	881
29	5290	45	643	4430	42	502	4690	61	772
30	5100	48	661	4380	40	473	4710	56	712
31	4980	44	592	--	--	--	4770	63	811
TOTAL	138320	--	20545	138830	--	17426	124360	--	15704

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4840	56	732	13300	89	3200	7130	67	1290
2	4910	60	795	11400	89	2740	7360	90	1790
3	4660	56	705	10300	91	2530	9040	134	3270
4	4100	46	509	9680	81	2120	9800	104	2750
5	3950	35	373	9870	84	2240	10200	100	2750
6	3950	36	384	9870	75	2000	11300	126	3840
7	4210	31	352	9570	75	1940	11700	100	3160
8	3990	37	399	9300	79	1980	11700	94	2970
9	4030	29	316	9150	69	1700	11900	89	2860
10	4100	46	509	9180	77	1910	11800	78	2490
11	4040	50	545	9360	72	1820	11200	79	2390
12	3880	53	555	9360	86	2170	10400	72	2020
13	3880	42	440	9230	71	1770	9120	88	2170
14	4080	94	1040	9260	89	2230	8200	74	1640
15	4630	103	1290	8840	75	1790	7550	67	1370
16	6720	180	3270	8580	61	1410	7000	69	1300
17	8220	165	3660	8390	58	1310	6510	68	1200
18	12200	268	8830	8340	59	1330	5600	75	1130
19	17400	283	13300	8530	59	1360	5310	73	1050
20	18200	171	8400	8890	66	1580	5050	72	982
21	18400	138	6860	9020	65	1580	5070	80	1100
22	18700	135	6820	9000	60	1460	4860	82	1080
23	24000	173	11200	8750	51	1200	4770	70	902
24	24000	113	7320	8370	56	1270	4650	77	967
25	21200	93	5320	8100	59	1290	4450	81	973
26	20200	79	4310	8010	55	1190	4050	76	831
27	19700	59	3140	7970	50	1080	3700	66	659
28	19400	56	2930	7730	69	1440	3450	94	876
29	18900	62	3160	--	--	--	3300	105	936
30	17900	62	3000	--	--	--	3270	116	1020
31	16200	74	3240	--	--	--	3130	93	786
TOTAL	344590	--	103704	257350	--	49640	222570	--	52552

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2800	68	514	1660	110	493	2500	82	554
2	2250	61	371	1590	120	515	2780	109	818
3	1960	62	328	1620	116	507	3150	130	1110
4	1860	70	352	1630	111	489	3780	148	1510
5	1720	63	293	1490	133	535	3880	129	1350
6	1650	67	298	1530	147	607	3700	132	1320
7	1670	81	365	1680	127	576	3070	109	904
8	1680	78	354	1630	108	475	2420	100	653
9	1590	80	343	1810	115	562	2080	92	517
10	1550	88	368	2110	152	866	2390	124	800
11	1500	77	312	2350	126	799	3510	182	1720
12	1540	83	345	2420	119	778	3770	160	1630
13	1680	94	426	2490	120	807	3200	127	1100
14	1760	86	409	2510	117	793	3470	174	1630
15	1690	90	411	2470	119	794	3580	133	1290
16	1680	94	426	2520	123	837	2630	115	817
17	1650	98	437	3110	143	1200	1980	118	631
18	1630	90	396	3540	143	1370	1620	110	481
19	1600	98	423	3600	141	1370	1380	117	436
20	1590	96	412	3640	122	1200	1220	118	389
21	1450	88	345	3490	103	971	1230	105	349
22	1380	92	343	3060	105	868	1500	138	559
23	1330	100	359	2320	134	839	2140	157	907
24	1370	100	370	2010	112	608	2990	195	1570
25	1470	105	417	2500	130	878	2700	151	1100
26	1590	104	446	2690	142	1030	2810	135	1020
27	1690	100	456	2570	114	791	2990	107	864
28	1650	101	450	2460	102	677	2440	103	679
29	1590	92	395	2430	92	604	3040	137	1120
30	1610	98	426	2610	114	803	3160	111	947
31	--	--	--	2650	89	637	--	--	--
TOTAL	50180	--	11590	74190	--	24279	81110	--	28775

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2920	95	749	968	134	350	1220	111	366
2	2320	104	651	1030	125	348	1090	91	268
3	2130	111	638	1110	117	351	1070	95	274
4	1950	108	569	1050	109	309	1090	117	344
5	1780	120	577	950	99	254	1210	91	297
6	1650	124	552	1030	121	337	1320	87	310
7	1600	116	501	1010	136	371	1380	96	358
8	1430	142	548	980	138	365	1220	84	277
9	1270	135	463	1040	136	382	1080	83	242
10	1250	121	408	1070	119	344	1030	87	242
11	1240	111	372	962	123	319	1080	88	257
12	1270	114	391	908	130	319	1260	86	293
13	1380	124	462	920	130	323	1340	70	253
14	1330	126	452	950	136	349	1380	74	276
15	1150	125	388	926	127	318	1370	74	274
16	1120	141	426	986	124	330	1260	70	238
17	1090	129	380	1080	118	344	1260	87	296
18	1110	135	405	1060	117	335	1300	85	298
19	1120	139	420	962	119	309	1420	86	330
20	1130	156	476	968	115	301	1510	94	383
21	1020	151	416	956	110	284	1590	85	365
22	902	153	373	1010	111	303	1510	73	298
23	920	155	385	1040	108	303	1440	82	319
24	950	143	367	1210	118	386	1410	81	308
25	974	133	350	1230	116	385	1360	78	286
26	1080	121	353	1140	112	345	1410	63	240
27	1150	133	413	1140	114	351	1520	93	382
28	1130	126	384	1130	108	330	1550	87	364
29	1000	150	405	1170	106	335	1480	92	368
30	944	167	426	1140	113	348	1420	79	303
31	926	154	385	1250	98	331	--	--	--
TOTAL	41236	--	14085	32376	--	10359	39580	--	9109

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1544692
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 357768

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 13, 1969	1500	17.0	3420	44	406	--	--	--	--	--	93	100	--	--	--	--	S
NOV 19.....	1225	12.0	4290	42	486	--	--	--	--	--	86	96	100	--	--	--	S
DEC 16.....	1500	12.0	3590	39	378	--	--	--	--	--	87	97	100	--	--	--	S
JAN 5, 1970	1340	8.5	3930	35	371	--	--	--	--	--	80	94	99	100	--	--	S
JAN 20.....	1425	12.0	18100	162	7920	39	51	58	65	69	77	84	96	100	--	--	VBWC
JAN 23.....	0900	12.0	23900	200	12900	--	--	--	--	--	75	85	94	100	--	--	S
FEB 3.....	1315	10.5	10300	94	2610	30	42	52	61	71	77	84	96	100	--	--	SBWC
MAR 3.....	1240	11.5	9190	136	3370	25	33	42	52	63	76	85	99	100	--	--	VBWC
APR 6.....	1045	18.0	1660	66	296	--	--	--	--	--	96	98	100	--	--	--	S
MAY 4.....	1355	23.0	1640	108	478	47	60	71	83	92	96	98	99	100	--	--	SBWC
JUN 1.....	1240	23.0	2490	82	551	23	36	50	66	77	87	89	93	100	--	--	SBWC
JUL 1.....	1210	22.0	3020	97	791	25	34	47	62	76	90	91	93	100	--	--	SBWC
AUG 6.....	1155	23.5	1080	129	376	45	61	73	83	92	98	98	100	--	--	--	SBWC
SEP 2.....	1425	24.5	1110	82	246	--	--	--	--	--	--	--	--	--	--	--	

11311150 STOCKTON SHIP CANAL AT LIGHT 40, NEAR STOCKTON, CALIF.

LOCATION.--Lat 37°58'40", long 121°23'00", T.2 N., R.5 E., San Joaquin County, on left bank at Light 40, approximately 7 miles northwest of Stockton.
PERIOD OF RECORD.--Chemical analyses: February 1968 to September 1970.
REMARKS.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT.						
22...	1020	17.0	7.5	310	7.2	1.9
NOV.						
14...	1350	17.0	8.9	330	7.2	1.9
DEC.						
18...	0955	11.0	8.2	440	7.2	1.6
JAN.						
13...	0955	10.0	10.1	390	7.3	1.4
FEB.						
17...	1205	12.0	10.2	330	7.1	1.5
MAR.						
12...	1115	13.0	10.3	230	7.2	1.4
APR.						
21...	1430	16.0	12.7	682	8.4	4.0
MAY						
12...	1400	20.0	14.9	750	8.5	5.3
JUNE						
10...	1345	23.0	9.8	420	8.2	3.0
JULY						
08...	1315	27.0	9.5	400	7.5	3.7
AUG.						
11...	1345	26.0	5.7	370	7.1	1.2
SEP.						
17...	1305	23.0	3.7	618	7.3	2.8

DATE	SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	ORGANIC NITROGEN (N) (MG/L)
OCT.											
22...	16	--	17	7.0	29	3.0	77	0	21	39	.45
JAN.											
13...	13	--	22	10	50	2.0	75	0	52	50	1.1
FEB.											
17...	--	200	--	--	--	--	--	--	--	--	--
APR.											
21...	14	--	39	18	74	2.5	128	3	60	107	1.1
JULY											
08...	3.0	100	22	11	41	3.3	94	0	30	56	.73

DATE	AMMONIA NITROGEN (N) (MG/L)	NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL FILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	ALKALINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.										
22...	.12	1.0	200	185	71	8	63	46	1.5	--
JAN.										
13...	--	.9	--	249	96	34	62	52	2.2	--
FEB.										
17...	--	--	--	--	--	--	--	--	--	--
APR.										
21...	--	1.0	400	404	170	60	110	48	2.5	--
JULY										
08...	--	.2	200	228	110	33	77	46	1.8	5.5

11319500 MOKELUMNE RIVER NEAR MOKELUMNE HILL, CALIF.

LOCATION.--Lat 38°18'46", long 120°43'09", in SW¼SW¼ sec.1, T.5 N., R.11 E., Calaveras County, 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.0°C July 26; minimum, 2.5°C Jan. 4-6.
EXTREMES, 1961-70.--Water temperatures: Maximum, 24.5°C Aug. 5, 1967; minimum (1961-65, 1966-70), 1.0°C Jan. 31, Feb. 1, 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	14.0	13.0	12.0	10.0	9.0	4.0	3.0	5.5	5.5	7.5	7.0
2	15.0	14.0	13.0	12.0	10.0	9.0	4.0	3.0	5.5	5.0	7.0	6.0
3	14.5	13.5	13.0	12.0	10.0	8.5	4.0	3.0	5.5	5.0	7.0	6.0
4	14.0	13.0	13.0	12.5	10.0	8.5	4.0	2.5	6.0	5.5	7.0	6.5
5	14.0	12.5	13.0	13.0	10.0	8.5	4.0	2.5	6.5	6.0	7.0	6.5
6	13.5	12.0	13.0	12.5	10.0	8.5	3.5	2.5	6.5	6.0	7.0	6.5
7	13.5	12.5	12.5	12.0	10.0	8.5	4.0	4.0	7.0	6.0	7.5	6.5
8	13.5	12.5	12.0	12.0	10.0	9.0	5.0	4.0	6.5	6.0	8.5	7.5
9	14.0	13.0	12.0	11.5	10.0	9.0	6.0	5.0	6.5	6.5	8.0	7.0
10	14.0	13.0	12.5	11.5	10.0	9.0	7.0	6.0	7.0	6.5	7.5	7.0
11	14.0	12.5	12.5	11.0	9.5	9.0	6.0	6.0	8.0	6.5	7.5	6.5
12	13.5	12.5	12.0	11.5	9.5	9.0	6.0	6.0	9.0	8.0	7.5	7.0
13	13.0	12.0	12.0	11.0	9.5	9.0	6.5	6.0	8.0	7.5	8.0	7.5
14	13.0	12.5	11.5	11.0	9.0	8.5	8.0	6.5	7.5	6.5	8.5	8.0
15	13.0	12.5	11.5	11.0	9.0	8.0	7.0	7.0	7.0	6.5	9.0	8.0
16	13.0	12.5	12.0	11.0	9.0	8.5	8.5	7.0	6.5	6.0	9.0	7.5
17	13.0	12.0	12.0	11.0	8.5	7.5	8.0	8.0	7.0	6.0	9.0	8.5
18	12.5	11.5	11.5	10.0	9.0	8.5	8.0	8.0	6.5	5.5	9.5	8.0
19	12.5	11.0	11.0	10.0	9.5	8.5	8.0	8.0	6.0	5.0	9.0	7.5
20	12.5	11.0	11.5	10.0	10.0	9.0	8.5	8.0	6.0	5.5	8.5	7.0
21	13.0	11.5	10.5	10.0	10.0	9.0	9.5	8.5	6.0	5.5	8.5	7.5
22	13.5	12.0	10.5	9.0	9.0	8.0	9.0	9.0	6.5	6.0	9.0	8.0
23	13.5	12.5	10.5	9.5	8.5	7.5	9.0	9.0	7.0	6.0	9.5	8.5
24	13.5	12.5	11.0	9.0	9.0	7.5	9.0	8.5	7.0	6.5	10.0	9.0
25	13.5	12.5	11.0	9.5	9.5	8.5	8.5	7.5	7.0	6.5	10.0	9.5
26	13.5	12.5	10.5	9.0	8.5	7.5	7.5	6.5	7.0	6.5	10.5	9.5
27	13.5	12.0	10.5	10.0	7.5	6.0	8.0	7.0	7.0	7.0	10.0	9.0
28	13.5	12.5	10.5	9.0	6.0	5.5	7.5	6.0	7.0	7.0	9.5	9.0
29	12.5	11.5	10.0	9.0	5.5	3.5	6.0	5.0	--	--	9.5	8.5
30	12.5	11.5	10.0	9.0	4.5	3.5	5.5	5.0	--	--	9.5	8.5
31	13.0	12.0	--	--	4.0	3.5	5.5	4.5	--	--	9.0	8.0
AVE	13.4	12.4	11.6	10.7	8.9	7.8	6.6	5.9	6.7	6.1	8.5	7.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	11.0	9.5	16.0	15.0	15.5	14.0	15.5	13.5	13.0	12.0
2	9.0	8.0	12.0	11.0	16.5	15.0	16.0	14.5	15.5	13.5	13.5	12.0
3	9.5	8.0	12.5	11.5	17.0	15.5	16.0	15.0	14.5	13.5	13.5	12.0
4	10.0	9.0	13.0	11.5	16.0	15.5	16.0	15.0	17.0	13.5	13.5	12.0
5	10.0	9.0	14.0	12.5	16.5	15.5	16.5	15.0	17.0	13.0	14.0	12.0
6	10.5	9.0	13.5	13.0	16.5	15.5	16.0	15.0	15.5	13.0	13.5	12.0
7	10.5	9.5	13.0	12.5	16.5	15.5	16.0	15.0	15.0	13.5	14.5	13.0
8	10.5	9.5	13.0	12.0	15.5	14.0	19.0	14.0	18.0	14.5	14.0	13.0
9	10.5	9.5	12.0	11.5	14.0	14.0	18.5	15.5	15.5	13.5	14.0	13.0
10	10.0	9.5	13.0	12.0	15.0	14.0	17.0	15.0	15.0	14.0	15.0	12.5
11	10.5	9.5	12.5	11.5	15.0	14.0	17.0	14.5	15.0	13.5	14.5	13.0
12	10.0	9.5	12.0	11.5	14.5	13.5	19.5	15.0	15.0	14.0	18.5	12.5
13	9.5	8.0	12.5	11.5	14.0	13.0	18.0	15.0	15.0	13.5	14.0	13.0
14	8.0	7.0	13.5	12.0	14.5	13.0	16.0	15.0	15.0	13.5	13.5	10.5
15	8.0	6.5	14.0	13.0	14.0	13.0	18.0	15.0	15.0	13.5	13.0	10.0
16	9.0	7.0	14.5	13.5	14.5	13.0	15.5	14.5	14.5	13.0	13.0	10.5
17	9.5	8.5	15.0	14.0	15.0	14.0	15.5	14.5	14.5	13.0	14.0	12.0
18	10.0	8.5	14.5	14.0	16.0	14.0	17.5	14.5	15.5	13.0	15.0	12.0
19	10.5	9.5	14.5	13.0	17.0	15.0	16.5	14.5	14.5	12.5	14.0	13.0
20	10.5	9.5	14.0	12.5	17.0	15.5	16.5	14.5	15.5	12.0	14.0	12.5
21	9.5	9.0	14.0	12.5	18.0	16.0	17.5	14.5	15.5	12.5	13.5	12.5
22	10.0	9.0	14.5	13.0	18.0	16.5	16.0	14.5	14.5	12.5	13.5	12.0
23	9.5	8.5	15.0	13.5	18.0	16.5	17.5	14.5	14.5	12.5	14.0	13.0
24	10.0	8.5	15.0	14.0	17.5	16.5	19.5	14.5	14.0	12.5	14.5	13.0
25	10.5	9.5	15.5	14.5	18.0	16.0	16.0	14.5	13.5	12.5	15.0	13.0
26	10.5	9.5	15.0	14.5	16.0	14.5	20.0	14.5	13.5	12.5	15.0	13.0
27	9.5	8.5	15.0	14.0	17.5	14.0	16.5	14.5	14.0	12.5	15.0	13.5
28	11.0	8.0	14.5	14.0	17.5	16.0	15.5	14.0	14.0	12.5	14.5	12.0
29	9.0	8.0	15.0	14.0	16.0	15.0	15.5	14.0	13.5	12.5	14.0	13.0
30	10.0	8.5	15.0	14.0	15.0	14.0	15.5	14.0	13.5	12.0	15.0	13.0
31	--	--	15.5	14.0	--	--	16.0	13.5	13.0	12.0	--	--
AVE	9.8	8.6	13.8	12.8	16.1	14.8	16.8	14.6	14.9	13.0	14.2	12.3

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: Water years 1965-66 (partial-record station).
Water temperatures: October 1961 to September 1968, October 1969 to September 1970.
Sediment records: Water years 1963-70 (partial-record station).
EXTREMES, 1961-63, 1964-68.--Water temperatures: Maximum (1961-63, 1964-65, 1966-68), 18.0°C Oct. 14-16, 1961; minimum (1961-63, 1965-68), 7.0°C Jan. 22-26, 1962.
REMARKS.--Recorder malfunction Oct. 1 to May 13. Where no maximum or minimum is shown, temperatures are once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT DAILY	OCT MIN	NOV MAX	NOV DAILY	NOV MIN	DEC MAX	DEC DAILY	DEC MIN	JAN MAX	JAN DAILY	JAN MIN	FEB MAX	FEB DAILY	FEB MIN	MAR MAX	MAR DAILY	MAR MIN
1	--	19.0	--	--	16.0	--	--	14.5	--	--	11.5	--	--	11.0	--	--	10.5	--
2	--	18.5	--	--	16.0	--	--	14.5	--	--	11.5	--	--	11.0	--	--	--	--
3	--	18.0	--	--	16.0	--	--	14.5	--	--	11.5	--	--	11.0	--	--	10.5	--
4	--	18.0	--	--	16.0	--	--	14.5	--	--	11.0	--	--	11.0	--	--	--	--
5	--	18.0	--	--	16.0	--	--	14.5	--	--	11.0	--	--	11.0	--	--	--	--
6	--	18.0	--	--	16.0	--	--	14.0	--	--	11.0	--	--	11.0	--	--	--	--
7	--	18.0	--	--	15.5	--	--	14.0	--	--	11.0	--	--	11.0	--	--	--	--
8	--	17.0	--	--	15.5	--	--	14.0	--	--	11.0	--	--	11.0	--	--	--	--
9	--	17.0	--	--	15.5	--	--	14.0	--	--	11.0	--	--	11.0	--	--	--	--
10	--	17.0	--	--	15.5	--	--	14.0	--	--	11.0	--	--	11.0	--	--	--	--
11	--	17.0	--	--	15.5	--	--	14.0	--	--	11.0	--	--	11.0	--	--	--	--
12	--	17.0	--	--	15.5	--	--	13.5	--	--	11.0	--	--	11.0	--	--	--	--
13	--	17.0	--	--	15.5	--	--	13.5	--	--	11.0	--	--	11.0	--	--	--	--
14	--	17.0	--	--	15.5	--	--	13.5	--	--	11.0	--	--	11.0	--	--	--	--
15	--	17.0	--	--	15.5	--	--	13.5	--	--	11.0	--	--	11.0	--	--	--	--
16	--	17.0	--	--	15.5	--	--	13.5	--	--	11.0	--	--	11.0	--	--	--	--
17	--	17.0	--	--	15.5	--	--	13.5	--	--	11.0	--	--	11.0	--	--	--	--
18	--	17.0	--	--	15.5	--	--	13.0	--	--	11.0	--	--	11.0	--	--	--	--
19	--	17.0	--	--	15.0	--	--	13.0	--	--	11.0	--	--	10.5	--	--	--	--
20	--	17.0	--	--	15.0	--	--	13.0	--	--	11.0	--	--	10.5	--	--	--	--
21	--	17.0	--	--	15.0	--	--	13.0	--	--	11.0	--	--	10.5	--	--	--	--
22	--	16.5	--	--	15.0	--	--	13.0	--	--	11.0	--	--	10.5	--	--	--	--
23	--	16.5	--	--	15.0	--	--	13.0	--	--	11.0	--	--	10.5	--	--	--	--
24	--	16.5	--	--	15.0	--	--	12.0	--	--	11.0	--	--	10.5	--	--	--	--
25	--	16.5	--	--	15.0	--	--	12.0	--	--	11.0	--	--	10.5	--	--	--	--
26	--	16.5	--	--	15.0	--	--	12.0	--	--	11.0	--	--	10.5	--	--	--	--
27	--	16.5	--	--	15.0	--	--	12.0	--	--	11.0	--	--	10.5	--	--	--	--
28	--	16.0	--	--	14.5	--	--	12.0	--	--	11.0	--	--	10.5	--	--	--	--
29	--	16.0	--	--	14.5	--	--	11.5	--	--	11.0	--	--	--	--	--	--	--
30	--	16.0	--	--	14.5	--	--	11.5	--	--	11.0	--	--	--	--	--	--	--
31	--	16.0	--	--	--	--	--	11.5	--	--	11.0	--	--	--	--	--	--	--
AVE	--	17.0	--	--	15.3	--	--	13.2	--	--	11.0	--	--	10.8	--	--	--	--

11323500 MOKELUMNE RIVER BELOW CAMANCHE DAM, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	APR MAX	APR MIN	APR DAILY	MAY MAX	MAY MIN	MAY DAILY	JUN MAX	JUN MIN	JUN DAILY	JUL MAX	JUL MIN	JUL DAILY	AUG MAX	AUG MIN	AUG DAILY	SEP MAX	SEP MIN	SEP DAILY
1	--	--	--	--	--	--	22.0	--	19.5	18.0	--	17.0	18.5	--	18.0	18.5	--	18.5
2	--	--	--	--	--	--	19.5	--	18.0	18.0	--	17.0	18.0	--	17.0	19.0	--	18.5
3	--	--	--	--	--	--	20.0	--	18.5	18.5	--	17.0	18.0	--	17.0	19.0	--	18.0
4	--	--	--	--	17.0	--	20.0	--	18.0	18.5	--	17.0	18.5	--	18.0	19.0	--	18.5
5	--	--	--	--	--	--	20.0	--	18.0	18.0	--	17.0	18.5	--	18.0	19.0	--	18.5
6	--	--	--	--	--	--	19.0	--	17.0	18.0	--	17.0	18.5	--	18.0	18.5	--	17.0
7	--	--	--	--	14.0	--	19.5	--	17.0	18.0	--	16.5	18.5	--	18.0	19.0	--	18.0
8	--	--	--	--	--	--	20.0	--	13.5	18.0	--	13.5	18.5	--	18.0	19.0	--	18.5
9	--	--	--	--	--	--	18.5	--	16.5	16.5	--	13.5	19.0	--	18.5	19.0	--	18.5
10	--	--	--	--	--	--	20.0	--	14.0	17.0	--	16.5	19.0	--	18.5	19.0	--	18.5
11	--	--	--	--	--	--	18.0	--	14.5	17.0	--	16.5	19.0	--	18.0	19.5	--	19.0
12	--	--	--	--	--	--	17.0	--	15.5	18.0	--	16.5	18.5	--	18.0	19.5	--	19.0
13	--	--	--	--	--	--	18.0	--	16.0	18.0	--	17.0	18.5	--	18.0	19.0	--	18.0
14	--	--	--	18.0	--	15.5	18.0	--	15.5	18.0	--	17.0	19.0	--	18.0	19.0	--	18.0
15	--	--	--	19.0	--	16.0	18.0	--	15.5	18.0	--	17.0	19.0	--	18.5	19.0	--	18.0
16	--	--	--	19.0	--	17.0	18.0	--	14.0	18.0	--	16.5	19.0	--	18.5	18.5	--	18.0
17	--	--	--	19.5	--	16.5	18.0	--	15.5	18.0	--	17.0	19.5	--	19.0	18.5	--	18.0
18	--	--	--	19.0	--	16.5	18.0	--	16.0	18.0	--	17.0	19.5	--	19.0	19.0	--	18.0
19	--	--	--	19.0	--	16.5	18.5	--	17.0	18.0	--	17.0	19.5	--	19.0	18.5	--	18.5
20	--	--	--	18.5	--	16.0	18.5	--	17.0	18.5	--	18.0	19.5	--	19.0	18.5	--	18.0
21	--	--	--	19.0	--	16.5	18.5	--	17.0	18.5	--	17.0	19.5	--	19.0	18.5	--	18.0
22	--	--	--	19.0	--	17.0	18.5	--	16.5	18.0	--	17.0	19.5	--	19.0	18.5	--	17.0
23	--	--	--	19.0	--	16.5	19.0	--	16.5	18.5	--	17.0	19.5	--	19.0	18.0	--	17.0
24	--	--	--	19.5	--	18.0	19.0	--	17.0	18.0	--	17.0	19.5	--	19.0	18.0	--	17.0
25	--	--	--	19.0	--	17.0	18.5	--	17.0	18.0	--	17.0	19.5	--	19.0	18.0	--	17.0
26	--	--	--	18.5	--	16.5	18.5	--	16.5	18.5	--	18.0	19.0	--	18.5	18.5	--	18.0
27	--	--	--	19.5	--	16.5	18.5	--	16.0	18.5	--	18.0	19.0	--	18.5	18.5	--	18.0
28	--	--	--	19.0	--	17.0	18.5	--	15.0	18.5	--	17.0	19.0	--	18.5	18.5	--	18.0
29	--	--	--	19.0	--	17.0	15.5	--	14.0	18.5	--	17.0	19.0	--	18.5	18.5	--	18.0
30	--	--	--	19.0	--	17.0	17.0	--	17.0	18.5	--	18.0	19.0	--	18.5	18.0	--	14.0
31	--	--	--	19.5	--	18.5	--	--	--	18.5	--	18.0	19.0	--	18.0	--	--	--
AVE	--	--	--	--	--	--	18.7	--	16.3	18.1	--	16.9	19.0	--	18.4	18.7	--	17.9

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE: PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 31, 1969	1420	16.0	825	5	11	--	--	--	--	--	--	--	--	--	--	--	
DEC 2.....	1050	14.5	414	2	2.2	--	--	--	--	--	--	--	--	--	--	--	
JAN 6, 1970	1040	11.0	313	2	1.7	--	--	--	--	--	--	--	--	--	--	--	
FEB 5.....	1140	11.0	3820	12	124	--	--	--	--	--	--	--	--	--	--	--	
MAR 3.....	1345	10.5	1260	3	10	--	--	--	--	--	--	--	--	--	--	--	
MAY 4.....	1405	17.0	456	1	1.2	--	--	--	--	--	--	--	--	--	--	--	
JUN 2.....	1315	19.5	505	3	4.1	--	--	--	--	--	--	--	--	--	--	--	
JUL 6.....	1410	17.5	724	3	5.9	--	--	--	--	--	--	--	--	--	--	--	
AUG 6.....	1650	18.0	815	1	2.2	--	--	--	--	--	--	--	--	--	--	--	

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.

LOCATION.--Lat 38°09'31", long 121°18'09", in NW¼NE¼ 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, 1968-70 (partial-record station).
Water temperatures: March 1951 to September 1958, November 1960 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.0°C June 5, 6, 22; minimum, 9.0°C on several days during January.
EXTREMES, 1951-58, 1960-70.--Water temperatures: Maximum (1951-54, 1956-58, 1960-70), 28.5°C July 9, 1951; minimum (1951-55, 1956-58, 1961-70), 1.5°C Jan. 29, 30, 1954.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
JAN.							
27...	0930	4660	10.0	10.9	3.5	1.7	17
FEB.							
24...	1100	1530	10.5	11.2	3.9	2.1	20

DATE	CAR-BONATE (CO3) (MG/L)	CHLO-RIDE (CL) (MG/L)	HARD-NESS (CA,MG) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
JAN.							
27...	0	.8	13	14	39	6.8	25
FEB.							
24...	0	1.0	15	16	41	7.0	20

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	17.0	15.0	15.0	12.5	12.5	10.0	9.5	10.5	10.5	10.0	10.0
2	17.0	16.5	15.0	15.0	12.5	12.0	9.5	9.0	10.5	10.5	10.0	10.0
3	16.5	16.0	15.0	15.0	12.0	12.0	9.0	9.0	10.5	10.5	10.0	10.0
4	16.0	15.5	15.0	14.5	12.0	12.0	9.0	9.0	10.5	10.5	10.0	10.0
5	15.5	15.5	14.5	14.5	12.0	12.0	9.0	9.0	10.5	10.5	10.0	10.0
6	15.5	15.5	14.5	14.0	12.0	11.5	9.0	9.0	10.5	10.5	10.0	10.0
7	15.5	15.0	14.0	14.0	11.5	11.0	9.0	9.0	10.5	10.5	10.0	10.0
8	15.0	15.0	14.0	14.0	11.0	11.0	9.0	9.0	10.5	10.0	10.0	10.0
9	15.0	14.5	14.0	14.0	11.0	11.0	9.0	9.0	10.0	10.0	10.5	10.0
10	14.5	14.5	14.0	14.0	11.0	11.0	10.0	9.0	10.0	10.0	10.5	10.5
11	14.5	14.5	14.0	14.0	11.0	11.0	10.0	10.0	10.0	10.0	10.5	10.5
12	14.5	14.5	14.0	14.0	11.0	11.0	10.0	10.0	10.0	10.0	11.0	10.5
13	14.5	14.5	14.0	14.0	11.0	11.0	10.0	10.0	10.0	10.0	11.0	11.0
14	14.5	14.5	14.0	14.0	11.0	11.0	10.0	10.0	10.0	10.0	11.0	11.0
15	14.5	14.5	14.0	14.0	11.0	11.0	10.0	10.0	10.0	10.0	11.0	11.0
16	14.5	14.5	14.0	14.0	11.0	11.0	10.0	10.0	10.0	10.0	11.0	11.0
17	14.5	14.5	14.5	14.0	11.0	11.0	10.0	10.0	10.0	10.0	11.5	11.0
18	14.5	14.5	14.5	14.0	11.0	11.0	10.5	10.0	10.0	9.5	12.0	11.5
19	14.5	14.5	14.0	13.5	11.0	11.0	10.5	10.5	9.5	9.5	12.0	12.0
20	14.5	14.5	13.5	13.5	12.0	11.0	10.5	10.5	9.5	9.5	12.0	12.0
21	14.5	14.5	13.5	13.5	12.0	12.0	10.5	10.5	9.5	9.5	12.5	12.0
22	14.5	14.5	13.5	13.5	12.0	12.0	10.5	10.5	10.0	9.5	12.5	12.5
23	14.5	14.5	13.5	13.5	12.0	12.0	10.5	10.5	10.0	10.0	13.0	12.5
24	14.5	14.5	13.5	13.5	12.0	11.5	10.5	10.5	10.0	10.0	13.0	13.0
25	14.5	14.5	13.5	13.5	12.0	11.5	10.5	10.5	10.0	10.0	13.0	13.0
26	14.5	14.5	13.5	13.5	11.5	11.5	10.5	10.5	10.0	10.0	13.0	13.0
27	14.5	14.5	13.5	13.0	11.5	10.5	10.5	10.5	10.0	10.0	13.0	12.5
28	14.5	14.5	13.5	13.0	10.5	10.0	10.5	10.5	10.0	10.0	12.5	12.0
29	15.0	14.5	13.0	12.5	10.0	10.0	10.5	10.5	--	--	12.0	12.0
30	15.0	15.0	12.5	12.5	10.0	10.0	10.5	10.5	--	--	12.0	12.0
31	15.0	15.0	--	--	10.0	10.0	10.5	10.5	--	--	12.0	12.0
AVE	15.0	14.9	14.0	13.8	11.4	11.2	10.0	9.9	10.1	10.0	11.4	11.2

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	12.0	16.5	15.0	21.5	20.0	19.5	19.0	19.0	18.5	20.0	19.5
2	12.5	12.0	17.0	16.0	22.0	21.0	20.5	19.5	19.0	18.5	20.0	19.5
3	12.5	12.5	17.5	17.0	22.5	21.5	21.0	20.5	19.0	18.5	20.0	19.5
4	12.5	12.5	18.5	17.5	22.5	21.5	21.0	20.5	19.0	18.5	19.5	19.5
5	13.0	12.5	18.0	17.5	23.0	21.0	21.0	20.0	19.0	18.5	19.5	19.0
6	13.0	13.0	18.0	17.5	23.0	21.0	21.0	20.5	19.5	18.5	19.0	19.0
7	13.5	13.0	17.5	16.5	22.5	21.0	20.5	19.5	19.5	19.0	19.5	19.0
8	13.5	13.5	17.0	16.5	22.0	20.0	20.0	19.0	19.5	19.0	20.0	19.5
9	13.5	13.5	16.5	16.0	20.0	19.5	19.5	19.0	19.5	19.0	20.5	20.0
10	14.0	13.5	16.5	15.5	19.5	18.5	19.0	17.0	20.0	19.0	20.5	20.5
11	14.0	13.5	16.0	16.0	20.0	18.5	18.0	17.0	20.0	19.5	20.5	20.5
12	13.5	13.5	16.0	16.0	19.5	19.0	18.5	18.0	20.0	19.5	20.5	20.0
13	13.5	13.5	16.5	16.0	20.0	18.5	19.0	18.0	20.0	19.5	20.0	19.5
14	13.5	13.5	16.5	16.0	20.0	19.0	19.0	18.0	20.0	19.5	19.5	19.0
15	13.5	13.0	18.0	16.5	20.5	19.0	19.0	18.0	20.0	19.5	19.0	19.0
16	13.5	13.0	19.0	18.0	21.5	19.5	18.5	18.0	20.0	19.5	19.0	19.0
17	14.0	13.5	20.0	19.0	21.5	19.5	18.5	18.0	20.0	19.5	19.0	19.0
18	14.5	14.0	20.0	19.5	20.5	19.5	19.0	18.0	20.5	19.5	19.0	19.0
19	15.0	14.5	20.0	19.5	21.5	19.5	19.5	18.5	20.5	20.0	19.0	19.0
20	15.0	14.5	20.0	18.0	22.5	20.5	20.0	19.0	20.5	19.5	19.0	18.5
21	15.0	14.5	19.0	18.0	22.5	21.0	20.0	19.0	20.0	19.5	18.5	18.0
22	15.0	14.5	19.0	18.5	23.0	21.5	20.0	19.0	20.0	19.5	18.5	18.5
23	15.0	14.0	20.0	19.0	22.5	21.5	20.0	19.0	19.5	19.0	18.5	18.5
24	15.0	14.5	20.0	19.5	22.5	21.0	19.5	19.0	19.5	19.0	18.5	18.5
25	15.0	14.5	20.5	20.0	21.0	20.0	19.5	19.0	19.5	19.0	18.5	18.5
26	15.0	14.5	20.5	19.5	20.0	19.5	19.5	19.0	19.0	19.0	18.5	18.0
27	15.0	14.5	20.0	19.0	20.0	19.0	19.5	19.0	19.0	18.5	18.5	18.5
28	14.5	14.0	20.0	18.5	20.0	19.0	20.0	19.0	19.0	19.0	18.5	18.5
29	14.5	14.5	19.5	18.5	19.5	19.0	19.5	19.0	19.5	19.0	18.5	18.5
30	15.0	14.5	20.0	19.5	19.0	18.5	19.5	19.0	19.5	19.0	18.5	18.5
31	--	--	20.5	19.0	--	--	19.0	18.5	19.5	19.0	--	--
AVE	14.0	13.6	18.5	17.7	21.2	19.9	19.6	18.8	19.6	19.1	19.3	19.0

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.

LOCATION.--Lat 38°30'01", long 121°02'39", in NW¼SE¼ sec.36, T.8 N., R.8 E., Sacramento County, 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 1964-70 (partial-record station).
Water temperatures: October 1962 to September 1970.
Sediment records: Water years 1958-62 (partial-record station), October 1962 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 26.5°C on several days during July and August; minimum, 4.0°C Jan. 6.
Sediment concentrations: Maximum daily, 983 mg/l Jan. 16; minimum daily, 0 mg/l on several days during June to August.
Sediment loads: Maximum daily, 31,500 tons Jan. 16; minimum daily, 0 tons on several days during June to August.
EXTREMES, 1962-70.--Water temperatures: Maximum (1965-70), 30.0°C Aug. 26, 27, 1967; minimum (1963-70), 1.5°C on several days in 1965 and 1968.
Sediment concentrations: Maximum daily, 3,070 mg/l Feb. 1, 1963; minimum daily, 0 mg/l on several days in 1970.
Sediment loads: Maximum daily, 245,000 tons Feb. 1, 1963; minimum daily, 0 tons on several days in 1970.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)
NOV.											
10...	0915	84	11.0	11.4	7.4	--	3.2	--	36	0	--
JAN.											
22...	1200	10200	12.0	--	3.4	--	2.1	--	26	0	--
APR.											
29...	1045	388	11.0	11.7	6.4	3.2	3.2	.9	38	0	3.3
JUNE											
11...	1500	194	22.0	11.1	5.7	--	2.8	--	33	0	--
SEP.											
04...	0730	40	21.0	8.3	6.6	--	2.8	--	36	0	--

DATE	CHLO-RIDE (CL) (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 (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.												
10...	4.9		--	--	--	29	0	30	27	.3	77	7.3
JAN.												
22...	1.5		--	--	--	15	0	21	35	.3	46	6.9
APR.												
29...	.8	.0	0	36	37.7	29	0	31	19	.3	72	7.7
JUNE												
11...	.8		--	--	--	24	0	27	30	.3	63	7.6
SEP.												
04...	1.6		--	--	--	34	4	30	27	.3	66	7.8

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	14.5	14.5	8.0	8.0	5.5	5.5	8.0	8.0	9.5	9.0
2	--	--	14.5	14.5	8.0	8.0	5.5	4.5	8.0	8.0	9.5	9.0
3	20.5	18.0	14.5	14.0	8.0	8.0	5.0	4.5	8.0	8.0	9.5	9.0
4	20.0	17.0	15.0	14.5	8.0	8.0	4.5	4.5	8.0	8.0	9.5	9.5
5	19.0	17.0	15.0	15.0	8.0	8.0	4.5	4.5	8.5	8.0	9.5	9.0
6	18.5	16.5	15.0	14.0	8.0	8.0	4.5	4.0	9.0	8.5	10.0	9.5
7	18.0	16.5	14.0	12.5	8.0	8.0	5.0	4.5	9.0	9.0	10.5	10.0
8	18.0	17.0	12.5	12.0	8.0	8.0	6.0	5.0	9.0	9.0	11.0	10.5
9	17.5	17.0	12.0	12.0	9.0	8.0	7.5	6.0	9.0	9.0	10.5	10.0
10	18.0	16.0	12.0	11.0	9.0	9.0	8.5	7.5	9.5	9.0	10.0	9.5
11	17.5	16.0	12.0	11.5	9.0	9.0	8.5	8.5	10.0	9.5	9.5	9.5
12	17.5	15.0	12.0	11.5	9.5	9.0	8.5	8.5	10.5	10.0	10.0	9.5
13	17.0	15.0	12.0	12.0	10.0	9.5	9.0	8.5	10.5	10.5	10.5	10.0
14	16.0	15.5	12.0	12.0	10.0	10.0	10.0	9.0	10.5	10.0	11.0	10.5
15	16.0	15.5	12.5	12.0	10.0	10.0	10.0	9.5	10.0	9.5	11.0	11.0
16	17.0	16.0	12.5	12.5	10.0	10.0	10.0	9.5	9.5	9.5	11.0	11.0
17	17.0	16.0	12.5	11.0	10.0	9.0	10.0	10.0	9.5	9.5	11.0	10.5
18	16.5	15.0	11.0	10.0	9.0	9.0	10.0	10.0	9.5	9.0	10.5	10.5
19	15.0	14.5	10.5	10.0	9.5	9.0	10.0	10.0	9.0	8.5	10.5	9.5
20	15.0	14.0	10.0	9.5	11.0	9.5	10.0	10.0	8.5	8.0	9.5	9.5
21	15.0	14.5	10.0	9.5	11.5	11.0	11.0	10.0	8.0	8.0	10.0	9.5
22	15.5	15.0	10.0	9.5	11.5	11.0	11.0	10.5	8.5	8.0	10.5	10.0
23	16.0	15.5	10.0	9.0	11.0	10.5	10.5	10.5	8.5	8.5	11.0	10.5
24	15.5	15.5	9.0	9.0	10.5	10.5	10.5	10.5	8.5	8.5	11.5	11.0
25	15.5	15.0	9.0	9.0	10.5	10.5	10.5	9.5	9.0	8.5	11.5	11.5
26	15.0	15.0	9.0	9.0	10.5	10.0	9.5	9.5	9.0	9.0	11.5	11.5
27	15.0	15.0	9.0	9.0	10.0	9.0	9.5	9.5	9.0	9.0	11.5	11.0
28	15.0	14.5	9.0	8.5	9.0	7.5	9.5	9.0	9.0	9.0	11.0	11.0
29	14.5	14.0	8.5	8.5	7.5	6.5	9.0	8.0	--	--	11.0	11.0
30	15.0	14.0	8.5	8.0	6.5	6.0	8.0	8.0	--	--	11.0	11.0
31	15.0	14.5	--	--	6.0	5.5	8.0	8.0	--	--	11.5	10.5
AVE	16.6	15.5	11.6	11.2	9.2	8.8	8.4	8.0	9.0	8.8	10.5	10.2

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.5	15.0	14.0	22.5	22.0	24.0	22.5	25.5	23.5	25.0	23.0
2	12.0	11.0	16.0	15.0	24.0	22.5	25.0	23.5	26.0	24.0	25.0	23.0
3	12.0	11.5	17.0	16.0	24.5	23.5	25.5	24.0	26.0	24.5	24.0	23.0
4	12.5	12.0	18.0	17.0	24.5	24.0	26.0	25.0	26.0	24.5	25.0	23.0
5	13.0	12.0	18.0	17.0	24.5	24.0	26.0	25.0	26.0	24.0	24.0	22.5
6	13.0	13.0	17.5	17.0	24.0	23.0	26.0	24.5	26.0	24.5	23.5	22.0
7	13.0	13.0	17.0	15.5	23.5	23.0	26.0	25.0	26.5	25.0	24.0	23.0
8	13.0	13.0	16.0	15.5	23.5	21.5	26.0	24.5	26.0	24.5	24.5	23.5
9	13.0	12.5	15.5	15.0	21.5	20.0	25.0	24.0	26.0	24.5	24.5	24.0
10	13.0	13.0	15.5	15.0	20.5	19.0	24.5	23.5	26.0	24.5	24.5	23.5
11	13.0	12.5	16.5	15.5	21.5	20.5	24.5	23.5	26.0	25.0	24.5	23.5
12	13.0	12.5	16.5	16.0	21.5	20.0	25.0	24.0	26.0	25.0	24.5	23.0
13	13.0	12.0	17.0	16.0	21.5	20.0	25.0	24.0	26.0	25.0	23.5	22.5
14	12.0	11.0	18.0	17.0	21.5	20.0	26.0	25.0	26.0	25.0	22.5	21.5
15	11.0	10.0	19.0	18.0	22.0	21.5	26.5	25.0	26.0	25.0	22.0	21.0
16	11.5	10.5	19.5	19.0	23.0	22.0	26.0	24.5	26.0	24.0	21.5	20.5
17	12.0	11.0	20.0	19.5	23.0	22.0	26.0	25.0	25.5	24.0	22.0	21.0
18	13.0	12.0	20.0	19.5	23.5	22.5	26.0	25.0	25.5	25.0	22.5	21.0
19	14.0	13.0	20.0	19.5	24.5	23.0	26.5	25.0	25.5	24.5	22.0	21.5
20	14.0	14.0	19.5	18.5	25.0	24.0	26.5	25.5	25.0	24.0	22.0	20.5
21	14.0	13.0	18.5	18.5	25.5	24.5	26.5	25.5	25.0	24.0	22.0	20.0
22	13.0	13.0	19.0	18.5	26.0	25.0	26.0	25.5	25.0	24.0	22.0	20.0
23	13.0	12.5	19.5	19.0	26.0	25.0	26.5	25.5	24.5	23.5	22.5	20.5
24	14.0	13.0	20.0	19.5	26.0	24.5	26.5	25.5	24.5	23.0	22.5	21.0
25	14.0	14.0	20.0	20.0	25.5	25.0	26.0	25.0	24.5	23.0	22.0	20.0
26	14.0	14.0	21.0	20.0	25.0	24.0	26.0	25.0	25.0	23.0	22.0	20.0
27	14.0	12.5	21.0	21.0	24.0	23.0	26.0	25.0	24.5	23.0	22.0	20.0
28	13.0	12.0	21.0	21.0	23.5	23.0	26.0	24.5	25.0	23.0	22.0	20.0
29	13.0	12.0	21.0	21.0	23.5	22.0	25.5	24.5	25.0	23.0	22.0	20.5
30	14.0	13.0	21.0	21.0	23.0	22.0	25.0	24.0	25.5	23.5	22.0	20.0
31	--	--	22.0	21.0	--	--	25.5	24.0	25.0	23.5	--	--
AVE	12.9	12.3	18.6	17.9	23.6	22.5	25.7	24.6	25.5	24.1	23.1	21.6

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	22	3	.18	44	3	.36	50	1	.14
2	21	3	.17	43	2	.23	51	1	.14
3	21	3	.17	42	3	.34	51	1	.14
4	21	3	.17	41	2	.22	50	1	.14
5	21	2	.11	50	2	.27	50	1	.14
6	22	4	.24	255	10	9.2	49	1	.13
7	23	3	.19	256	15	11	49	1	.13
8	24	2	.13	139	12	4.5	53	1	.14
9	27	2	.15	100	7	1.9	54	1	.15
10	30	3	.24	82	4	.89	71	1	.19
11	31	3	.25	75	3	.61	77	1	.21
12	31	3	.25	68	2	.37	95	2	.51
13	33	3	.27	64	2	.35	102	3	.83
14	31	3	.25	62	2	.33	97	3	.79
15	34	8	.73	62	2	.33	86	2	.46
16	106	13	4.4	64	1	.17	75	2	.41
17	243	9	5.9	68	2	.37	71	1	.19
18	161	8	3.5	77	1	.21	68	1	.18
19	107	8	2.3	68	1	.18	82	1	.22
20	77	9	1.9	61	2	.33	411	59	132
21	66	7	1.2	59	1	.16	1440	192	932
22	57	3	.46	57	2	.31	1500	150	724
23	51	2	.28	56	2	.30	575	27	43
24	53	2	.29	54	1	.15	2610	128	1170
25	51	2	.28	53	1	.14	1860	57	311
26	49	2	.26	51	1	.14	1390	42	175
27	50	3	.41	51	1	.14	779	10	21
28	51	2	.28	51	1	.14	578	5	7.8
29	47	2	.25	50	1	.14	472	2	2.5
30	47	3	.38	50	1	.14	395	2	2.1
31	46	3	.37	--	--	--	340	1	.92
TOTAL	1654	--	25.96	2253	--	33.92	13631	--	3526.56

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	302	1	.82	1610	10	43	3610	249	4360
2	274	1	.74	1390	8	30	2980	120	1150
3	240	1	.65	1250	8	27	1740	25	117
4	222	2	1.2	1130	6	18	1690	20	91
5	208	2	1.1	1040	5	14	1750	15	71
6	190	2	1.0	1030	5	14	1370	7	26
7	190	2	1.0	950	6	15	1250	5	17
8	198	1	.53	887	4	9.6	2100	34	193
9	229	4	2.5	842	3	6.8	1560	13	55
10	902	40	118	797	3	6.5	1670	8	36
11	764	24	52	779	4	8.4	1440	6	23
12	641	5	8.7	797	4	8.6	1320	6	21
13	824	10	22	1170	15	47	1200	5	16
14	5220	497	9710	1740	48	244	1160	4	13
15	3620	244	2700	1200	7	23	1150	4	12
16	8810	983	31500	1030	30	83	1120	3	9.1
17	9420	500	12700	3220	161	1620	1090	4	12
18	5290	180	2570	1880	19	96	1030	4	11
19	3640	80	786	1450	7	27	960	3	7.8
20	3710	70	701	1280	5	17	905	2	4.9
21	11300	803	30300	1160	4	13	860	2	4.6
22	11100	583	19400	1070	5	14	824	2	4.4
23	5570	170	2560	980	5	13	806	2	4.4
24	6500	292	5280	941	5	13	770	2	4.2
25	4700	115	1460	878	4	9.5	752	3	6.1
26	3560	55	529	833	4	9.0	725	3	5.9
27	4280	130	1500	806	4	8.7	680	1	1.8
28	3540	60	573	779	5	11	648	1	1.7
29	2720	28	206	--	--	--	648	2	3.5
30	2280	16	98	--	--	--	608	2	3.3
31	1880	12	61	--	--	--	576	2	3.1
TOTAL	102324	--	122844.24	32919	--	2449.1	38992	--	6288.8

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	544	1	1.5	393	3	3.2	222	3	1.8
2	518	1	1.4	404	4	4.4	211	3	1.7
3	506	1	1.4	415	4	4.5	211	4	2.3
4	488	2	2.6	432	5	5.8	190	4	2.1
5	482	1	1.3	442	4	4.8	172	3	1.4
6	470	2	2.5	448	5	6.0	163	2	.88
7	464	2	2.5	454	4	4.9	155	1	.42
8	454	3	3.7	432	5	5.8	148	1	.40
9	448	3	3.6	426	5	5.8	224	2	1.2
10	442	2	2.4	426	5	5.8	278	3	2.3
11	448	1	1.2	420	2	2.3	200	2	1.1
12	432	3	3.5	404	2	2.2	169	0	0
13	454	6	7.4	382	1	1.0	158	0	0
14	632	5	8.5	371	2	2.0	158	0	0
15	524	5	7.1	376	2	2.0	155	1	.42
16	470	2	2.5	393	2	2.1	152	1	.41
17	448	2	2.4	426	2	2.3	131	1	.35
18	437	1	1.2	442	2	2.4	120	2	.65
19	448	5	6.0	437	2	2.4	120	4	1.3
20	470	4	5.1	415	2	2.2	111	5	1.5
21	432	4	4.7	376	1	1.0	102	5	1.4
22	415	2	2.2	355	2	1.9	96	5	1.3
23	393	3	3.2	340	2	1.8	89	3	.72
24	376	4	4.1	330	2	1.8	84	2	.45
25	376	4	4.1	310	2	1.7	83	1	.22
26	388	3	3.1	301	2	1.6	81	0	0
27	442	5	6.0	306	2	1.7	86	0	0
28	426	4	4.6	288	1	.78	94	0	0
29	388	4	4.2	265	1	.72	88	0	0
30	388	3	3.1	245	2	1.3	88	0	0
31	--	--	--	233	3	1.9	--	--	--
TOTAL	13603	--	107.1	11687	--	88.10	4339	--	24.32

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	80	0	0	48	2	.26	41	4	.44
2	80	1	.22	46	2	.25	40	8	.86
3	80	1	.22	48	2	.26	41	6	.66
4	77	1	.21	46	2	.25	40	2	.22
5	71	1	.19	45	2	.24	41	1	.11
6	70	2	.38	46	2	.25	46	1	.12
7	65	2	.35	44	2	.24	49	2	.26
8	59	2	.32	43	2	.23	50	2	.27
9	58	2	.31	43	2	.23	53	2	.29
10	58	2	.31	57	2	.31	50	1	.14
11	57	2	.31	57	2	.31	48	1	.13
12	56	2	.30	57	1	.15	50	2	.27
13	54	3	.44	57	1	.15	49	4	.53
14	52	2	.28	56	2	.30	50	5	.68
15	50	1	.14	68	2	.37	50	4	.54
16	53	1	.14	71	2	.38	49	2	.26
17	74	1	.20	71	2	.38	50	1	.14
18	72	1	.19	72	2	.39	49	2	.26
19	71	1	.19	71	1	.19	49	2	.26
20	71	1	.19	70	1	.19	39	1	.11
21	68	1	.18	58	0	0	30	1	.08
22	67	2	.36	56	0	0	28	2	.15
23	68	2	.37	52	0	0	26	3	.21
24	60	2	.32	53	1	.14	27	3	.22
25	59	2	.32	53	1	.14	23	2	.12
26	58	2	.31	50	1	.14	20	1	.05
27	58	2	.31	38	1	.10	20	2	.11
28	56	1	.15	34	0	0	23	3	.19
29	54	1	.15	34	0	0	24	3	.19
30	52	1	.14	33	0	0	24	2	.13
31	48	2	.26	36	1	.10	--	--	--
TOTAL	1956	--	7.76	1613	--	5.95	1179	--	8.00

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	226150
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	135409.81

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 21, 1969	0830	11.0	842	200	455	--	--	--	--	--	99	100	--	--	--	--	S
DEC 22.....	0820	11.0	1620	169	739	--	--	--	--	--	98	99	100	--	--	--	S
JAN 14, 1970	1240	10.0	5680	532	8160	--	--	--	--	--	26	33	71	98	100	--	V
JAN 14.....	1740	10.0	8980	987	23900	11	14	18	23	28	35	46	66	99	100	--	VBWC
JAN 16.....	1215	10.0	11100	952	28500	--	--	--	--	--	28	41	63	98	100	--	V
JAN 16.....	1645	10.0	14600	1740	68600	8	9	13	16	20	29	40	59	96	100	--	VBWC
JAN 19.....	1130	10.0	3220	76	661	--	--	--	--	--	42	53	85	95	100	--	S
JAN 21.....	1730	11.0	16600	1200	53800	--	--	--	--	--	22	31	50	95	100	--	V
MAR 1.....	1730	9.5	7370	803	16000	--	--	--	--	--	28	43	76	98	100	--	V

11341400 SACRAMENTO RIVER NEAR MT SHASTA, CALIF.

LOCATION.--Lat 41°15'56", long 122°18'32", in SE¼SE¼ sec.33, T.40 N., R.4 W., Siskiyou County, temperature recorder 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 (revised).
PERIOD OF RECORD.--Chemical analyses: May to September 1970.
Water temperatures: October 1965 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 15.0°C Aug. 24-27, and sometime during period Aug. 28 to Sept. 9; minimum, 4.0°C on several days during January to March.
EXTREMES, 1965-70.--Water temperatures: Maximum (1966-70), 17.0°C on many days in 1968 and 1969; minimum (1965-66, 1967-70), 1.5°C on several days in 1968 and 1969.
REMARKS.--Clock stopped July 14-21, 23-30, Aug. 28 to Sept. 9, 14-30; range in temperature, 9.5°C to 12.0°C, 9.5°C to 12.0°C, 12.5°C to 15.0°C, and 11.5°C to 13.5°C, respectively.

CHEMICAL ANALYSES, MAY TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	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)
MAY										
20...	1340	478	13.5	9.7	102	78	--	--	--	1
JUNE										
10...	1255	267	9.0	11.0	106	--	--	--	--	4
19...	1650	129	11.0	--	--	--	--	--	1	17
JULY										
30...	1135	63	12.5	10.0	104	--	--	--	--	31
AUG.										
26...	1430	40	15.0	9.5	103	131	8.3	1	13	96

DATE	TIME	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
MAY				
20...	1340	.05	.00	.23
JUNE				
10...	1255	.22	.00	.01
JULY				
30...	1135	.28	.05	.05
AUG.				
26...	1430	.17	.07	.10

11341400 SACRAMENTO RIVER NEAR MT SHASTA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	13.5	10.0	9.5	6.0	5.5	4.5	4.5	4.5	4.0	5.0	4.5
2	13.5	13.0	9.5	9.0	6.0	5.5	4.5	4.5	4.5	4.0	4.5	4.0
3	13.0	12.5	9.5	9.0	6.5	6.0	4.5	4.5	4.5	4.0	5.0	4.5
4	13.0	12.0	9.5	9.0	6.0	6.0	4.5	4.5	4.5	4.5	5.0	4.5
5	12.5	11.5	9.5	9.0	6.5	6.0	4.5	4.5	5.0	4.5	5.0	4.5
6	12.5	11.5	9.5	9.0	6.5	6.0	4.5	4.5	5.5	5.0	5.5	5.0
7	12.0	11.5	9.0	9.0	6.5	6.0	5.0	4.5	5.5	5.0	5.5	5.0
8	12.5	12.0	9.5	8.5	6.0	6.0	5.0	4.5	5.5	5.0	5.5	5.0
9	12.0	11.5	9.0	8.5	6.0	5.5	5.0	4.5	5.5	5.0	5.5	5.0
10	12.0	11.5	9.0	8.5	6.0	5.5	5.5	5.0	5.0	5.0	5.5	5.0
11	12.0	12.0	9.0	8.5	5.5	5.5	5.0	5.0	5.0	4.5	5.5	5.5
12	12.0	11.5	9.0	8.5	5.5	5.0	5.0	5.0	4.5	4.0	5.5	5.5
13	11.5	11.5	9.0	8.0	5.5	5.5	5.0	4.5	4.5	4.0	5.5	5.0
14	11.5	11.5	8.5	8.0	5.5	5.5	4.5	4.0	4.0	4.0	6.0	5.5
15	11.5	11.5	8.0	8.0	5.5	5.0	4.5	4.5	4.0	4.0	5.5	5.5
16	11.5	11.5	8.0	7.5	5.5	5.0	4.5	4.5	4.0	4.0	6.0	5.5
17	11.5	11.5	7.5	7.5	5.5	5.5	4.5	4.5	4.5	4.0	5.5	5.5
18	11.5	11.5	7.5	7.5	5.5	5.5	4.5	4.5	4.5	4.0	5.5	5.0
19	11.5	11.5	8.0	7.5	5.5	5.5	4.5	4.5	4.5	4.0	5.5	5.0
20	11.5	11.0	8.0	7.5	6.0	5.5	5.0	4.5	4.5	4.0	5.5	5.5
21	11.5	10.5	8.0	7.5	6.0	5.5	5.0	5.0	5.0	4.5	5.5	5.5
22	10.5	10.0	8.0	7.5	6.0	5.5	5.0	5.0	5.0	4.5	6.5	5.5
23	10.5	10.0	7.5	7.0	5.5	5.5	5.0	5.0	5.0	4.5	6.5	6.0
24	10.5	10.0	7.5	7.0	5.5	5.5	5.0	5.0	5.0	4.5	6.5	5.5
25	10.5	10.0	7.5	7.0	5.5	5.5	5.0	5.0	5.0	4.5	6.5	5.5
26	10.5	9.5	7.0	7.0	5.5	5.0	5.0	4.5	5.5	5.0	6.0	5.5
27	10.5	10.0	7.0	6.5	5.5	5.0	4.5	4.5	5.5	5.0	5.5	5.5
28	10.0	9.5	7.0	6.5	5.0	5.0	4.5	4.0	5.5	4.5	6.0	5.5
29	10.0	9.5	7.0	6.0	5.0	4.5	4.0	4.0	--	--	6.0	6.0
30	10.0	9.5	6.5	6.0	4.5	4.5	4.0	4.0	--	--	6.5	5.5
31	10.0	9.5	--	--	4.5	4.5	4.5	4.0	--	--	6.5	5.5
AVG	11.5	11.0	8.3	7.8	5.6	5.4	4.7	4.5	4.8	4.4	5.6	5.2

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	5.5	10.0	9.0	10.5	10.0	11.5	9.5	12.5	10.5	--	--
2	6.5	5.5	10.5	10.0	11.5	10.5	11.5	9.5	12.5	10.0	--	--
3	7.0	5.5	10.5	10.0	12.5	11.5	11.0	9.5	12.5	10.0	--	--
4	6.0	6.0	11.0	9.5	12.5	11.0	11.0	9.5	12.5	10.0	--	--
5	6.5	6.0	11.0	10.0	11.0	10.5	11.0	9.5	13.0	10.5	--	--
6	6.5	6.5	11.0	10.5	11.0	10.5	11.0	9.5	13.0	10.5	--	--
7	7.5	6.5	11.0	10.0	10.5	10.0	11.0	9.5	13.0	10.5	--	--
8	7.5	6.5	10.5	9.5	10.0	9.5	11.0	9.5	13.0	10.5	--	--
9	7.5	6.5	10.5	10.0	9.5	9.0	11.0	9.5	13.5	11.0	--	--
10	7.5	7.0	10.5	10.0	9.0	8.5	11.5	9.0	13.5	11.0	14.0	12.5
11	7.0	6.5	10.5	10.0	9.0	8.5	12.0	9.5	13.5	11.0	14.0	12.5
12	7.5	6.5	10.5	10.0	9.0	8.5	12.0	9.5	13.5	11.5	13.5	12.5
13	7.5	6.5	10.5	10.0	9.5	9.0	12.0	9.5	14.0	12.0	13.0	12.0
14	8.0	7.0	11.5	10.5	9.5	9.0	--	--	14.0	12.0	--	--
15	7.5	7.0	12.0	11.0	9.5	9.0	--	--	14.0	11.5	--	--
16	7.5	7.0	12.0	11.0	9.5	9.0	--	--	14.5	12.0	--	--
17	8.0	7.5	12.5	11.5	10.5	9.5	--	--	14.5	12.0	--	--
18	8.0	8.0	12.5	11.5	10.5	9.5	--	--	14.5	12.0	--	--
19	9.0	8.0	13.5	12.5	11.0	10.0	--	--	14.5	12.0	--	--
20	9.0	8.0	13.5	13.0	11.0	10.0	--	--	14.5	12.5	--	--
21	9.0	8.5	14.0	13.0	11.0	10.0	--	--	14.5	12.5	--	--
22	9.0	8.5	14.0	13.0	11.0	10.0	12.0	10.0	14.5	12.5	--	--
23	9.0	8.5	13.0	12.0	11.0	10.0	--	--	14.5	12.5	--	--
24	9.0	8.5	12.0	11.5	10.5	10.0	--	--	15.0	13.0	--	--
25	9.5	9.0	11.5	11.0	10.5	10.0	--	--	15.0	13.0	--	--
26	9.0	9.0	12.0	11.5	11.0	10.0	--	--	15.0	13.0	--	--
27	9.5	9.0	12.0	11.5	10.5	10.0	--	--	15.0	12.5	--	--
28	9.5	8.5	12.0	11.5	10.0	9.0	--	--	--	--	--	--
29	9.0	8.5	11.5	10.0	10.5	9.0	--	--	--	--	--	--
30	9.5	9.0	10.5	10.0	11.0	9.0	--	--	--	--	--	--
31	--	--	10.5	10.0	--	--	12.5	10.5	--	--	--	--
AVG	8.0	7.3	11.5	10.7	10.4	9.6	--	--	13.8	11.5	--	--

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 Lamoine.
DRAINAGE AREA.--425 sq mi.
PERIOD OF RECORD.--Chemical analyses: October 1950 to September 1953 (partial-record station), December 1953 to September 1970.
Water temperatures: June to September 1951, October 1953 to September 1957, October 1962 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 24.5°C July 5; minimum, 2.0°C Jan. 4-6.
EXTREMES, 1951, 1953-57, 1962-70.--Water temperatures: Maximum (1951, 1953-57, 1963-70), 28.0°C July 6, 1968; minimum, freezing point on several days in 1964, 1967, and 1968.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)
OCT.											
14...	1015	278	11.1	11.3	--	--	9.6	--	76	0	--
NOV.											
17...	0920	232	5.6	12.8	--	--	9.0	--	74	0	--
DEC.											
08...	1125	252	5.6	13.3	--	--	10	--	75	0	--
JAN.											
12...	0935	3010	7.2	12.5	--	--	2.8	--	41	0	--
FEB.											
09...	1050	1370	8.9	12.5	--	--	3.4	--	42	0	--
MAR.											
09...	1000	2010	7.2	13.2	--	--	3.1	--	45	0	--
APR.											
14...	1120	870	8.5	12.9	--	--	3.8	--	50	0	--
MAY											
12...	1135	894	8.3	12.9	4.4	7.3	4.7	.6	56	0	.5
JUNE											
16...	0910	428	15.5	10.6	--	--	5.2	--	64	0	--
JULY											
13...	0820	227	18.9	9.7	--	--	10	--	72	0	--
AUG.											
31...	0840	185	17.2	10.0	--	--	11	--	77	0	--

DATE	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 DAY)	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)
OCT.											
14...	6.2	--	200	--	--	60	0	62	.5	142	8.0
NOV.											
17...	8.8	--	190	--	--	53	0	61	.5	146	7.7
DEC.											
08...	8.5	--	200	--	--	52	0	62	.6	150	7.8
JAN.											
12...	1.4	--	50	--	--	32	0	34	.2	76	6.4
FEB.											
09...	1.4	--	90	--	--	33	0	34	.3	80	7.5
MAR.											
09...	1.8	--	120	35	190	35	0	37	.2	80	7.7
APR.											
14...	2.1	--	60	--	--	40	0	41	.3	92	7.8
MAY											
12...	1.2	.1	70	79	191	41	0	46	.3	97	7.8
JUNE											
16...	4.4	--	130	--	--	49	0	52	.3	117	7.9
JULY											
13...	6.0	--	160	--	--	52	0	59	.6	136	8.2
AUG.											
31...	8.4	--	270	--	--	54	0	63	.7	153	8.0

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL 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)
MAY												
22...	1030	984	--	--	--	.00	.00	.31	--	--	--	7
JUNE												
19...	1920	396	20.0	--	--	--	--	--	--	--	2	10
AUG.												
28...	1625	182	19.0	9.7	108	.18	.02	.060	147	8.8	2	8

11342000 SACRAMENTO RIVER AT DELTA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	12.5	15.0	10.5	6.0	2.5	6.0	4.0	8.0	6.0	7.5	4.5
2	16.5	12.0	14.5	10.0	6.0	3.0	5.5	4.0	9.0	6.0	7.5	4.5
3	14.0	10.5	14.0	10.0	6.0	3.0	4.5	2.5	8.5	6.5	7.5	6.5
4	13.5	9.0	12.0	10.0	6.5	3.5	4.0	2.0	9.0	6.5	7.5	6.0
5	14.0	8.5	11.5	10.5	6.5	3.5	4.0	2.0	8.5	7.5	10.0	5.0
6	13.5	8.0	10.5	9.5	7.0	4.5	4.0	2.0	10.5	8.0	9.0	7.0
7	12.0	8.5	9.5	9.0	7.0	4.5	5.5	4.0	11.0	7.5	9.0	8.5
8	12.0	10.0	11.0	9.0	6.0	5.5	5.5	5.0	10.5	8.0	11.0	7.5
9	12.0	9.5	11.0	8.0	6.5	6.0	7.5	5.0	10.5	8.5	9.0	6.5
10	14.5	10.5	12.0	8.0	6.5	6.0	8.5	7.5	11.0	9.0	9.0	6.0
11	13.0	9.0	12.0	8.5	7.5	6.0	8.0	8.0	9.0	8.5	8.5	7.5
12	13.0	8.5	12.5	8.5	8.0	7.5	8.5	8.0	8.5	6.5	9.0	7.5
13	12.0	8.5	12.5	9.0	9.0	8.0	9.0	8.5	6.5	5.0	10.5	8.0
14	11.5	9.0	11.5	8.0	9.0	8.5	8.5	8.0	7.5	5.0	13.0	9.5
15	10.5	9.0	10.0	8.0	8.5	7.0	8.0	7.5	7.0	6.0	11.5	7.5
16	9.5	9.0	10.0	7.0	8.0	7.0	8.5	8.0	7.0	5.5	13.0	8.5
17	11.5	8.5	7.5	4.5	8.0	7.0	9.0	8.0	7.5	5.0	11.0	7.5
18	11.5	8.5	6.5	4.5	8.5	8.0	9.0	8.5	9.0	5.0	10.5	6.0
19	11.5	7.0	8.0	4.5	8.5	8.0	9.0	8.5	9.0	5.5	11.0	5.5
20	13.5	8.0	8.0	4.5	10.0	8.5	9.5	9.0	9.5	5.5	11.5	6.5
21	15.5	11.0	8.0	4.0	9.5	7.0	10.0	9.5	9.5	5.5	12.0	7.0
22	15.0	11.0	9.0	5.5	7.0	6.0	10.0	9.5	9.5	6.0	13.0	7.5
23	13.0	10.5	8.5	5.5	7.0	6.0	10.0	9.0	9.0	6.0	13.0	8.5
24	13.0	12.0	8.0	5.0	9.0	7.0	9.0	8.0	9.5	6.5	14.5	9.5
25	14.0	11.0	9.0	5.5	9.5	7.5	8.5	8.0	10.5	6.5	13.5	9.5
26	11.0	9.0	9.5	6.5	8.0	6.5	8.5	8.0	11.5	7.5	12.5	9.0
27	11.0	9.5	8.5	5.5	6.5	5.5	9.0	8.0	10.5	7.5	12.5	7.0
28	12.5	8.5	8.0	5.0	6.5	5.0	9.0	7.0	8.5	6.0	13.0	8.5
29	13.0	8.0	7.5	4.0	7.0	5.0	8.0	7.5	--	--	12.0	7.5
30	13.5	9.0	6.0	3.0	7.0	4.5	9.0	7.5	--	--	11.0	7.0
31	14.5	10.0	--	--	6.0	4.5	8.0	7.0	--	--	11.5	6.5
AVG	12.9	9.4	10.0	7.0	7.4	5.8	7.7	6.7	9.1	6.5	10.8	7.2

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	7.0	16.5	11.5	18.0	14.0	21.5	14.5	20.0	13.5	19.0	13.0
2	12.5	9.0	17.5	12.5	20.0	15.5	23.0	17.0	21.0	14.5	19.5	13.5
3	12.5	7.5	17.5	13.5	20.5	16.5	23.0	17.5	21.5	15.0	19.0	13.5
4	13.0	8.0	17.5	13.0	21.0	17.0	24.0	17.5	21.0	15.5	17.5	14.0
5	14.0	8.5	15.0	11.5	20.0	17.0	24.5	19.5	20.5	15.0	16.5	10.5
6	12.0	8.5	14.0	11.5	20.0	17.0	23.5	18.5	20.5	15.0	19.0	11.5
7	11.0	7.0	15.0	10.5	18.5	16.0	23.0	17.5	20.0	15.0	20.5	14.5
8	13.0	8.5	14.0	11.0	16.5	10.0	22.0	16.5	20.0	14.0	21.0	15.5
9	13.0	9.5	13.0	10.0	10.5	9.5	21.0	15.5	21.0	14.5	20.0	14.5
10	14.0	11.0	11.5	8.5	15.5	9.5	20.5	15.0	21.0	14.5	20.0	14.0
11	12.0	8.0	10.0	8.0	15.5	12.0	21.5	15.0	21.5	15.0	20.5	14.5
12	12.0	7.0	9.5	6.5	15.0	12.0	22.0	15.5	21.0	15.0	19.0	15.0
13	10.5	7.0	14.0	8.5	14.5	12.5	22.0	16.5	21.5	15.0	15.5	12.0
14	10.5	6.5	16.0	10.5	14.5	12.5	23.0	16.5	22.0	15.5	14.5	8.5
15	11.0	8.5	18.0	13.0	16.5	12.0	23.0	17.5	22.0	16.0	15.0	8.5
16	9.5	8.0	18.5	13.0	19.0	14.0	22.0	17.0	21.0	15.0	16.0	10.0
17	12.0	7.0	18.5	13.5	19.5	15.5	23.0	16.0	21.0	15.0	17.0	11.0
18	11.5	8.5	17.0	12.0	20.5	15.0	23.0	16.5	21.0	15.0	16.5	12.5
19	12.5	9.0	16.5	12.0	22.5	16.5	23.0	16.5	21.5	15.5	16.0	13.0
20	10.5	7.5	17.0	12.0	23.0	18.0	23.0	17.0	21.0	15.0	15.0	11.5
21	11.0	7.5	17.5	11.5	22.0	18.5	22.5	17.5	21.5	15.0	15.5	10.5
22	11.5	7.5	18.5	13.0	23.5	18.5	22.5	17.0	21.5	15.5	17.5	10.5
23	11.0	8.5	18.0	13.5	23.0	18.5	22.0	16.0	21.0	15.0	17.5	12.0
24	10.5	8.0	18.0	12.5	22.0	18.5	22.0	16.5	20.5	14.5	16.0	11.5
25	11.5	8.5	18.5	13.0	21.5	17.5	22.5	17.0	20.5	14.5	15.5	10.5
26	10.0	8.0	18.0	14.5	22.5	17.5	22.0	16.5	20.0	14.0	16.5	10.0
27	8.0	6.0	17.0	13.5	20.0	14.5	21.5	16.5	19.5	13.5	16.5	10.0
28	10.5	6.5	16.5	12.0	15.0	13.5	21.5	17.0	19.5	13.0	15.0	11.0
29	12.0	7.5	17.0	12.0	16.5	11.5	21.0	16.5	20.0	14.0	15.5	11.0
30	15.0	9.5	16.5	13.5	18.5	13.0	20.0	14.5	20.0	15.5	16.0	10.5
31	--	--	17.5	13.0	--	--	19.0	13.5	19.0	13.5	--	--
AVG	11.6	7.9	16.1	11.7	18.8	14.7	22.1	16.5	20.7	14.7	17.2	11.9

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 1970. Water temperatures: March 1965 to September 1970.
Sediment records: Water years 1957-61, 1967-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 29.0°C Aug. 12, but could have been higher during period of no record.
EXTREMES, 1965-70.--Water temperatures: Maximum, 29.0°C Aug. 12, 1970; minimum (1965-66, 1967-69), freezing point on many days during most years.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Temperature recorder malfunction Nov. 29 to Feb. 11. Clock stopped Oct. 18-22, range in temperature, 5.0°C to 11.0°C.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
15...	1210	123	7.0	10.2	--	--	28	--	160	0	--	6.4
NOV.												
18...	1245	86	3.5	12.9	--	--	31	--	156	0	--	9.0
DEC.												
09...	1120	83	.0	12.9	--	--	26	--	144	0	--	7.6
JAN.												
13...	1035	478	.5	12.2	--	--	17	--	87	0	--	3.8
FEB.												
10...	1110	504	6.5	11.2	--	--	20	--	107	0	--	6.4
MAR.												
10...	1245	1540	6.0	11.2	--	--	20	--	84	0	--	6.8
APR.												
15...	1045	235	6.5	11.3	--	--	22	--	119	1	--	5.0
MAY												
13...	1255	779	9.5	10.5	14	9.1	17	4.0	112	0	14	2.0
JUNE												
17...	1130	445	19.0	8.1	--	--	18	--	123	0	--	3.5
JULY												
14...	1215	41	23.5	11.6	--	--	19	--	120	0	--	2.1
AUG.												
04...	0845	7.8	20.0	5.9	--	--	18	--	131	0	--	3.4
SEP.												
01...	1030	71	18.5	9.5	--	--	24	--	143	0	--	5.8

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 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 (MG/L)
OCT.												
15...	--	200	--	--	94	0	131	39	1.3	290	8.2	40
NOV.												
18...	--	170	--	--	86	0	128	44	1.5	292	7.7	50
DEC.												
09...	--	100	--	--	79	0	118	42	1.3	274	7.9	27
JAN.												
13...	--	130	--	--	52	0	71	42	1.0	166	7.1	130
FEB.												
10...	--	120	--	--	68	0	88	39	1.1	209	7.5	55
MAR.												
10...	--	100	--	--	60	0	69	42	1.1	195	7.6	130
APR.												
15...	--	130	--	--	77	0	99	38	1.1	244	8.4	45
MAY												
13...	1.4	80	150	321	73	0	92	32	.9	221	7.8	50
JUNE												
17...	--	170	--	--	73	0	101	35	.9	221	7.9	30
JULY												
14...	--	120	--	--	67	0	98	38	1.0	218	7.8	20
AUG.												
04...	--	100	--	--	77	0	107	34	.9	225	7.9	10
SEP.												
01...	--	240	--	--	88	0	117	37	1.1	262	7.9	30

11348500 PIT RIVER NEAR CANBY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT DAILY	OCT MIN	NOV MAX	NOV DAILY	NOV MIN	DEC MAX	DEC DAILY	DEC MIN	JAN MAX	JAN DAILY	JAN MIN	FEB MAX	FEB DAILY	FEB MIN	MAR MAX	MAR DAILY	MAR MIN
1	16.0	--	13.0	10.0	--	6.0	--	--	--	--	--	--	--	--	--	4.5	--	1.5
2	15.5	--	12.5	10.0	--	6.0	--	--	--	--	--	--	--	--	--	4.0	--	1.5
3	12.5	--	10.0	10.0	--	6.5	--	--	--	--	--	--	--	--	--	3.5	--	2.0
4	12.5	--	8.0	10.0	--	7.0	--	--	--	--	--	--	--	--	--	3.0	--	2.0
5	12.5	--	8.0	9.5	--	7.5	--	--	--	--	--	--	--	--	--	5.0	--	1.0
6	12.0	--	8.5	8.5	--	6.5	--	--	--	--	0.5	--	--	--	--	7.5	--	3.5
7	11.0	--	9.0	7.0	--	5.5	--	--	--	--	--	--	--	--	--	7.0	--	4.5
8	11.5	--	9.5	7.5	--	5.0	--	--	--	--	--	--	--	--	--	6.5	--	3.0
9	11.0	--	9.0	8.0	--	3.5	--	0.0	--	--	--	--	--	--	--	6.0	--	3.0
10	11.0	--	9.0	7.5	--	3.5	--	--	--	--	--	--	--	6.5	--	6.0	--	2.0
11	10.5	--	7.5	8.0	--	3.5	--	--	--	--	--	--	--	--	--	5.5	--	3.0
12	10.0	--	7.0	8.0	--	4.0	--	--	--	--	--	--	6.5	--	5.0	5.5	--	3.0
13	9.0	--	7.0	8.0	--	4.0	--	--	--	--	0.5	--	5.0	--	3.0	8.0	--	4.0
14	9.5	--	7.5	7.5	--	3.5	--	--	--	--	--	--	5.0	--	2.5	9.0	--	6.5
15	8.5	--	7.0	7.0	--	3.5	--	--	--	--	--	--	5.5	--	3.0	9.5	--	6.0
16	8.0	--	7.0	6.5	--	4.0	--	--	--	--	--	--	5.0	--	1.5	9.5	--	6.5
17	7.5	--	6.0	4.0	--	2.0	--	--	--	--	--	--	2.5	--	0.5	8.5	--	5.0
18	--	--	--	3.5	--	1.0	--	--	--	--	--	--	4.0	--	1.0	6.5	--	3.5
19	--	--	--	3.5	--	1.0	--	--	--	--	--	--	4.0	--	1.0	7.5	--	3.0
20	--	--	--	4.0	--	1.0	--	--	--	--	--	--	5.0	--	1.0	8.5	--	4.5
21	--	--	--	4.0	--	1.0	--	--	--	--	5.5	--	6.0	--	2.0	10.5	--	6.0
22	--	7.5	--	4.0	--	1.0	--	--	--	--	--	--	7.5	--	3.5	12.0	--	7.0
23	11.0	--	8.5	4.0	--	1.0	--	--	--	--	--	--	7.5	--	3.5	12.5	--	8.0
24	10.5	--	9.5	4.0	--	1.0	--	--	--	--	--	--	6.5	--	4.0	13.5	--	9.5
25	11.0	--	8.0	4.0	--	1.0	--	--	--	--	--	--	8.0	--	3.5	13.0	--	9.0
26	10.5	--	7.0	3.5	--	1.0	--	--	--	--	--	--	9.0	--	4.5	11.0	--	8.5
27	9.0	--	8.0	3.5	--	0.5	--	--	--	--	--	--	9.0	--	5.0	11.5	--	5.5
28	9.0	--	6.5	4.5	--	1.5	--	--	--	--	--	--	7.0	--	3.5	12.0	--	7.5
29	9.0	--	6.0	--	--	--	--	--	--	--	--	--	--	--	--	10.5	--	7.0
30	9.0	--	6.0	--	--	--	--	--	--	--	1.0	--	--	--	--	--	--	5.0
31	9.0	--	6.0	--	--	--	--	--	--	--	--	--	--	--	--	7.0	--	3.0
AVE	10.6	--	8.1	6.4	--	3.3	--	--	--	--	--	--	--	--	--	8.1	--	4.7

DAY	APR MAX	APR DAILY	APR MIN	MAY MAX	MAY DAILY	MAY MIN	JUN MAX	JUN DAILY	JUN MIN	JUL MAX	JUL DAILY	JUL MIN	AUG MAX	AUG DAILY	AUG MIN	SEP MAX	SEP DAILY	SEP MIN
1	10.5	--	3.0	16.0	--	10.0	25.0	--	19.0	24.0	--	18.0	25.5	--	16.0	21.0	--	16.5
2	11.5	--	6.5	19.0	--	13.0	26.0	--	21.5	28.0	--	20.5	--	--	--	21.5	--	16.5
3	13.0	--	6.0	20.5	--	15.0	26.0	--	22.5	28.0	--	23.0	--	--	--	20.5	--	16.0
4	14.0	--	7.0	21.0	--	17.5	28.0	--	22.0	29.5	--	24.0	--	20.0	--	18.5	--	13.5
5	15.5	--	9.0	20.5	--	16.5	28.5	--	23.5	30.0	--	24.0	26.0	--	16.0	16.5	--	12.5
6	15.0	--	9.5	18.5	--	16.0	27.5	--	23.0	30.0	--	23.5	--	--	--	18.5	--	15.0
7	13.0	--	8.5	17.0	--	13.0	25.5	--	21.5	31.0	--	24.0	--	--	--	20.0	--	16.0
8	15.0	--	8.0	16.0	--	12.0	23.5	--	16.5	30.0	--	22.5	--	--	--	20.5	--	17.5
9	14.5	--	10.0	12.0	--	11.0	16.5	--	14.5	28.5	--	22.0	--	--	--	20.0	--	15.5
10	12.5	--	9.5	11.5	--	8.5	18.0	--	13.5	27.0	--	21.0	27.0	--	15.5	20.5	--	16.0
11	13.0	--	7.5	10.0	--	7.5	18.5	--	15.0	27.0	--	19.5	25.5	--	19.0	20.5	--	16.5
12	12.0	--	7.0	10.0	--	6.0	17.0	--	14.5	24.5	--	18.0	29.0	--	16.0	19.0	--	15.0
13	9.0	--	4.0	13.0	--	7.5	15.5	--	13.5	25.0	--	19.0	27.5	--	17.0	15.0	--	12.5
14	7.0	--	2.5	16.0	--	10.0	15.5	--	14.0	26.5	--	19.5	26.5	--	18.5	14.5	--	10.0
15	8.0	--	3.5	19.5	--	13.0	20.0	--	14.5	30.5	--	21.5	26.5	--	19.0	15.0	--	11.0
16	9.0	--	5.5	21.5	--	16.5	22.0	--	18.0	26.0	--	20.5	24.5	--	18.0	16.0	--	12.0
17	12.0	--	6.0	22.0	--	18.5	24.0	--	19.0	26.5	--	19.0	24.5	--	17.0	17.5	--	13.0
18	11.5	--	7.5	21.5	--	18.0	26.0	--	20.0	27.0	--	20.5	25.0	--	18.0	17.0	--	14.0
19	9.5	--	6.5	20.5	--	17.5	28.0	--	22.5	26.5	--	20.0	24.0	--	16.5	16.0	--	13.5
20	10.5	--	4.5	19.5	--	15.5	29.0	--	24.5	25.0	--	18.5	24.0	--	16.5	15.5	--	12.0
21	11.5	--	7.0	20.5	--	15.0	29.0	--	25.5	25.0	--	18.0	24.0	--	18.5	15.5	--	12.0
22	11.0	--	6.5	21.0	--	16.5	29.5	--	24.0	25.5	--	19.5	23.5	--	19.0	16.0	--	11.5
23	10.5	--	8.5	21.5	--	17.0	29.5	--	25.0	26.0	--	18.5	23.5	--	19.0	17.0	--	13.5
24	10.5	--	7.5	23.5	--	17.5	28.5	--	23.5	26.0	--	20.0	22.5	--	17.5	17.0	--	12.0
25	11.0	--	7.5	24.5	--	19.0	28.5	--	24.0	25.5	--	20.5	22.5	--	16.5	14.5	--	10.0
26	8.0	--	5.5	24.0	--	21.0	27.5	--	23.0	25.5	--	20.5	22.0	--	16.0	14.5	--	9.5
27	8.0	--	4.0	23.5	--	20.5	24.0	--	20.0	24.5	--	20.0	21.5	--	15.5	15.5	--	10.5
28	7.0	--	3.0	23.0	--	18.0	20.5	--	16.0	23.0	--	18.0	23.0	--	15.5	16.0	--	12.0
29	9.0	--	4.0	23.5	--	16.5	19.5	--	13.5	22.0	--	18.0	22.5	--	17.5	16.5	--	12.0
30	13.5	--	8.0	22.0	--	17.5	21.5	--	15.0	21.5	--	16.5	23.5	--	16.5	21.5	--	7.0
31	--	--	--	23.0	--	17.5	--	--	--	21.0	--	16.0	25.0	--	15.0	--	--	--
AVE	11.2	--	6.4	19.2	--	14.8	23.9	--	19.4	26.3	--	20.1	--	--	--	17.6	--	13.1

11348500 PIT RIVER NEAR CANBY, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 22, 1969	1330	7.5	133	26	9.3	--	--	--	--	--	--	--	--	--	--	--	
NOV 25.....	1410	2.5	94	42	11	--	--	--	--	--	--	--	--	--	--	--	
JAN 6, 1970	1245	0.5	61	30	4.9	--	--	--	--	--	69	73	77	82	84	100	S
JAN 21.....	1445	5.5	1600	108	467	--	--	--	--	--	91	93	95	99	100	--	S
JAN 30.....	1220	1.0	1900	77	395	--	--	--	--	--	94	95	97	99	100	--	S
MAR 24.....	1415	11.0	380	65	67	--	--	--	--	--	96	97	98	99	100	--	S
MAY 7.....	1250	14.0	360	68	66	--	--	--	--	--	99	99	99	100	--	--	S
JUN 9.....	1215	14.5	216	24	14	--	--	--	--	--	--	--	--	--	--	--	
JUL 23.....	1510	20.5	201	56	30	--	--	--	--	--	--	--	--	--	--	--	
SEP 18.....	1005	14.0	84	61	14	--	--	--	--	--	--	--	--	--	--	--	

11368000 MCCLOUD RIVER ABOVE SHASTA LAKE, CALIF.

LOCATION.--Lat 40°57'30", long 122°13'07", in NW¼ sec.28, T.36 N., R.3 W., Shasta County, at gaging station just upstream from Shasta Lake, 0.2 mile downstream from Big Bollibokka Creek, and 11.3 miles east of Lamoine.
DRAINAGE AREA.--604 sq mi.
PERIOD OF RECORD.--Chemical analyses: Water years 1951, 1953-58 (partial-record station), October 1958 to September 1970.
Water temperatures: June to September 1951, October 1953 to September 1959.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
14...	0910	315	9.4	11.2	--	--	5.2	--	62	0	--	1.7
NOV.												
17...	0815	303	6.1	12.2	--	--	4.5	--	60	0	--	2.1
DEC.												
08...	1015	319	5.6	13.2	--	--	4.8	--	60	0	--	1.7
JAN.												
12...	0825	2310	7.8	12.4	--	--	2.6	--	44	0	--	.0
FEB.												
09...	0940	1080	9.4	12.4	--	--	3.1	--	60	0	--	.8
MAR.												
09...	0905	1370	7.8	13.1	--	--	3.1	--	53	0	--	.5
APR.												
14...	1015	477	9.0	12.5	--	--	3.8	--	62	0	--	.0
MAY												
12...	0945	390	8.0	12.8	10	5.2	4.9	.9	64	0	2.6	.0
JUNE												
16...	0800	354	14.5	10.3	--	--	4.2	--	60	0	--	1.5
JULY												
13...	0715	307	17.2	9.8	--	--	5.7	--	63	0	--	.0
AUG.												
03...	0715	290	16.0	9.3	12	4.1	4.9	1.4	61	0	1.8	1.8
SEP.												
02...	0930	290	15.0	9.6	--	--	5.1	--	62	0	--	2.1

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 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 (MG/L)
OCT.												
14...	--	0	--	--	46	0	51	20	.3	107	8.0	3
NOV.												
17...	--	70	--	--	43	0	49	19	.3	108	7.6	1
DEC.												
08...	--	0	--	--	42	0	49	20	.3	105	7.6	2
JAN.												
12...	--	0	--	--	36	0	36	14	.2	82	7.3	7
FEB.												
09...	--	0	--	--	47	0	49	13	.2	106	7.4	10
MAR.												
09...	--	90	--	--	42	0	43	14	.2	95	7.6	5
APR.												
14...	--	0	--	--	53	2	51	14	.2	113	7.9	2
MAY												
12...	.0	10	72	75.8	46	0	52	18	.3	111	7.9	0
JUNE												
16...	--	40	--	--	47	0	49	16	.3	108	7.9	2
JULY												
13...	--	0	--	--	44	0	52	22	.4	109	8.1	3
AUG.												
03...	.0	0	79	61.9	47	0	50	18	.3	107	8.2	5
SEP.												
02...	--	60	--	--	44	0	51	20	.3	108	8.0	2

11370500 SACRAMENTO RIVER AT KESWICK, CALIF.
(Formerly published as Sacramento River at Keswick Dam, near Keswick, Calif.)

LOCATION.--Lat 40°36'04", long 122°26'36", in SW¼NW¼ 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 1970.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
07...	0645	7860	10.6	9.6	--	--	4.2	--	54	0	2.0	1.5
NOV.												
04...	0740	7860	12.2	9.0	--	--	5.0	--	59	0	2.3	1.8
DEC.												
02...	0930	7650	11.1	9.9	--	--	6.9	--	68	0	4.3	1.8
JAN.												
06...	0925	15200	9.4	11.2	--	--	6.1	--	61	0	2.0	2.9
FEB.												
03...	0920	58600	8.9	11.7	--	--	4.6	--	45	0	3.4	1.1
MAR.												
03...	0340	8180	8.0	10.6	--	--	3.8	--	41	0	5.9	.8
APR.												
07...	0835	7050	8.8	11.7	--	--	3.5	--	45	0	4.6	.5
MAY												
07...	1225	9710	10.0	12.1	6.8	5.1	4.7	.9	49	0	4.3	.4
JUNE												
03...	0835	9030	9.4	12.3	--	--	4.6	--	54	0	4.0	2.7
JULY												
14...	0805	11700	11.7	10.7	--	--	4.2	--	52	0	3.1	1.3
SEP.												
08...	0930	7880	11.0	9.8	8.2	4.7	4.7	.9	52	0	2.6	2.3

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 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 (MG/L)
OCT.												
07...	--	50	--	--	40	0	44	19	.3	102	7.8	2
NOV.												
04...	--	70	--	--	42	0	48	21	.3	106	7.2	7
DEC.												
02...	--	50	--	--	46	0	56	25	.4	123	7.9	3
JAN.												
06...	--	40	--	--	42	0	50	24	.4	112	7.4	22
FEB.												
03...	--	40	--	--	34	0	37	23	.3	89	7.0	110
MAR.												
03...	--	100	--	--	33	0	34	20	.3	83	7.1	50
APR.												
07...	--	0	--	--	39	2	37	16	.2	113	7.6	40
MAY												
07...	.1	20	76	1990	38	0	40	21	.3	94	7.5	10
JUNE												
03...	--	40	--	--	40	0	44	20	.3	99	7.6	12
JULY												
14...	--	20	--	--	39	0	43	19	.3	97	7.6	4
SEP.												
08...	.2	30	66	1400	40	40	43	20	.3	100	7.0	8

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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 18.0°C on several days during June and July; minimum, 4.5°C Jan. 6.
EXTREMES, 1965-70.--Water temperatures: Maximum, 21.0°C July 1, 1967; minimum, 2.0°C sometime during period Jan. 3 to Feb. 1, 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	12.5	11.0	10.0	9.5	8.0	7.0	6.5	9.5	9.5	9.0	8.0
2	14.5	12.5	11.0	10.0	9.5	8.0	7.0	6.0	10.0	9.5	9.0	7.5
3	13.0	11.0	11.0	10.0	10.0	8.0	6.5	5.5	10.0	10.0	9.0	8.0
4	12.5	11.0	11.5	10.0	10.0	8.5	6.0	5.0	10.0	9.5	8.5	8.0
5	12.0	10.0	12.0	11.0	10.0	8.5	6.0	5.0	10.0	10.0	10.0	7.5
6	12.0	10.0	11.5	11.0	10.0	9.0	6.5	4.5	10.0	10.0	9.5	8.5
7	12.0	10.0	11.0	10.0	10.5	9.0	7.5	6.5	10.5	9.5	10.0	9.0
8	13.0	12.0	11.0	10.5	10.0	9.5	7.5	7.0	11.0	9.5	10.5	8.5
9	12.5	11.0	11.0	9.5	10.5	10.0	9.0	7.5	11.0	10.0	9.5	8.5
10	13.0	12.0	11.0	9.5	10.0	9.5	9.5	9.0	11.0	10.0	10.0	8.5
11	12.5	10.5	11.0	10.0	10.0	9.5	9.5	9.0	10.5	10.0	9.0	8.5
12	12.0	10.5	11.5	9.5	10.5	9.5	10.0	9.5	10.0	9.0	9.0	8.5
13	12.0	10.0	11.0	10.0	10.5	10.0	10.5	10.0	9.5	9.0	9.0	8.5
14	12.5	11.5	11.0	9.5	11.0	10.0	11.0	10.5	9.5	9.0	9.5	9.0
15	12.5	11.5	11.0	9.5	10.5	9.5	10.5	10.0	9.5	9.5	10.0	9.0
16	12.0	11.5	11.0	9.5	10.5	9.5	11.0	10.5	9.5	9.0	11.0	9.0
17	12.0	10.5	10.0	9.0	10.0	10.0	11.5	11.0	9.5	9.0	10.5	8.5
18	12.0	10.0	10.5	8.5	10.5	9.5	11.5	11.0	9.5	8.5	9.0	8.5
19	10.5	9.0	10.0	9.0	11.0	10.5	11.5	11.0	9.5	8.5	9.5	8.5
20	11.5	10.0	10.0	8.5	12.5	11.0	12.0	11.5	9.0	8.5	9.5	8.5
21	12.0	10.0	10.0	8.5	12.5	10.0	12.5	12.0	9.0	8.0	9.5	8.5
22	12.0	10.5	11.0	9.5	10.5	10.0	12.5	12.5	9.5	8.0	9.5	8.5
23	12.0	10.5	10.5	9.0	11.0	10.5	12.5	12.0	9.5	7.0	9.0	8.5
24	12.0	11.0	10.5	9.0	11.0	10.0	12.0	10.0	9.5	8.0	9.0	8.5
25	11.5	10.5	10.5	9.0	11.0	9.0	10.0	10.0	9.0	8.0	9.0	8.5
26	11.0	10.0	10.5	9.5	9.5	8.0	10.0	10.0	9.0	8.0	9.5	8.5
27	11.0	10.0	10.0	8.5	8.5	7.5	10.0	9.5	9.5	8.5	9.0	8.5
28	11.0	9.5	10.0	8.5	8.5	7.5	10.0	9.0	9.0	8.5	9.0	8.5
29	11.0	9.5	10.0	8.0	8.5	7.5	9.5	9.0	--	--	9.0	8.5
30	11.0	10.0	9.5	8.0	8.5	7.0	9.5	9.0	--	--	9.5	8.5
31	11.5	10.0	--	--	8.5	7.0	10.0	9.5	--	--	9.5	8.5
AVE	12.1	10.6	10.7	9.4	10.2	9.1	9.7	9.0	9.8	9.0	9.4	8.5

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	8.5	13.5	11.5	16.0	15.0	17.0	15.0	16.5	15.5	15.0	14.0
2	11.5	9.0	14.0	12.0	16.5	15.5	17.5	16.0	17.0	15.5	15.0	14.0
3	11.5	8.5	14.5	12.0	17.0	15.5	16.5	15.5	17.0	16.0	15.0	14.0
4	12.0	8.5	14.5	13.0	17.0	15.5	17.5	15.5	17.0	16.0	14.5	14.0
5	12.5	9.5	14.5	13.0	17.0	16.0	18.0	17.0	17.0	16.0	14.5	13.5
6	12.0	10.0	13.5	12.0	17.5	16.0	17.5	16.5	17.0	16.0	15.5	14.0
7	11.0	8.5	13.5	12.0	16.0	15.0	17.0	16.0	17.5	16.0	16.5	15.0
8	12.0	9.0	14.0	12.0	15.0	13.0	16.5	15.5	17.0	16.0	16.0	15.0
9	12.5	10.0	13.0	11.0	13.5	12.5	17.0	15.5	17.0	16.0	15.5	14.5
10	12.5	10.5	12.5	10.5	15.5	13.0	17.0	15.5	17.0	16.0	15.0	14.5
11	11.5	9.0	12.0	10.5	16.0	14.5	16.5	15.5	17.0	16.0	15.0	14.5
12	11.5	8.5	11.0	9.5	16.0	14.0	16.5	15.5	16.5	15.5	15.0	13.5
13	11.5	9.5	13.5	10.5	15.5	14.5	17.0	15.5	17.0	15.5	14.0	12.5
14	11.0	9.0	14.0	11.5	15.5	14.0	16.5	16.0	17.0	16.0	13.0	12.0
15	11.0	9.0	14.5	12.0	16.5	14.5	17.5	16.0	17.0	16.0	13.0	12.0
16	11.0	9.0	15.0	12.5	17.0	15.5	17.0	15.5	16.0	15.0	13.5	12.5
17	11.5	8.5	15.0	13.0	17.0	16.0	17.0	15.5	16.0	15.0	14.0	13.0
18	11.5	10.0	15.0	13.0	17.0	15.5	17.0	16.0	16.0	15.0	14.5	13.5
19	12.5	10.0	15.0	13.5	17.5	16.0	17.0	16.0	16.0	15.0	14.5	13.5
20	11.5	9.5	15.0	13.0	17.5	16.5	17.5	16.5	15.5	14.5	14.0	13.0
21	11.5	9.0	15.0	13.0	18.0	17.0	18.0	16.5	15.5	14.5	14.0	13.0
22	12.0	9.5	15.5	13.5	18.0	16.5	17.5	16.5	16.0	14.5	14.0	13.0
23	11.5	10.0	15.5	13.5	18.0	17.0	17.5	16.5	15.5	14.5	14.5	13.5
24	12.0	10.0	15.5	13.5	17.0	16.5	17.5	16.5	15.0	14.5	13.5	12.0
25	12.0	10.5	16.0	13.5	16.5	15.5	17.5	16.5	15.5	14.0	13.0	12.0
26	12.5	10.0	17.0	15.0	17.5	16.0	17.5	16.5	15.0	14.0	13.0	12.0
27	11.0	9.0	16.5	14.5	17.0	14.0	17.5	16.5	14.5	14.0	13.0	12.5
28	11.5	8.5	16.0	14.5	15.0	14.0	18.0	16.5	15.0	14.0	13.0	12.5
29	12.0	10.0	16.0	14.5	15.5	13.0	17.5	16.0	15.0	14.0	13.0	12.5
30	13.5	11.0	16.0	14.5	16.0	14.5	17.0	15.5	16.0	14.5	13.0	12.5
31	--	--	16.0	14.0	--	--	16.5	15.5	15.0	14.0	--	--
AVE	11.8	9.4	14.6	12.6	16.5	15.1	17.2	16.0	16.2	15.1	14.2	13.3

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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 30.5°C July 5; minimum, 1.5°C Jan. 5.
EXTREMES, 1965-70.--Water temperatures: Maximum, 31.0°C Aug. 6, 7, 1966; minimum (1965-66, 1967-70), freezing point sometime during period Dec. 6, 1968 to Jan. 14, 1969.
REMARKS.--No record Mar. 4-6. Clock stopped July 16 to Aug. 11; range in temperature, 19.5°C to 29.0°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	14.0	12.0	8.5	6.5	3.5	5.5	4.5	8.0	6.5	8.0	4.5
2	17.0	14.0	12.5	9.0	7.5	4.0	5.0	3.0	8.0	6.0	7.0	6.0
3	16.0	12.5	12.5	9.5	7.0	4.5	4.5	2.5	8.5	7.0	7.5	6.5
4	15.0	10.5	12.5	10.0	7.0	4.0	3.5	2.0	8.5	6.5	--	--
5	15.5	10.0	12.5	11.0	6.5	3.5	3.0	1.5	9.0	8.0	--	--
6	15.0	10.0	11.0	10.0	7.0	5.0	4.0	2.0	9.5	7.5	--	--
7	14.5	10.5	10.5	10.0	7.0	4.5	5.5	4.0	9.5	7.0	8.5	8.0
8	15.5	12.5	11.0	9.5	7.5	6.5	6.5	5.5	9.5	7.5	8.0	6.5
9	15.5	12.0	10.0	7.5	9.0	7.5	8.0	6.5	9.5	7.5	8.0	7.0
10	16.0	13.5	10.5	7.0	8.5	7.5	8.5	8.0	10.0	8.5	7.5	5.5
11	14.0	10.5	11.5	8.5	9.5	8.0	8.5	8.0	10.0	9.0	7.5	7.0
12	14.0	10.0	11.5	8.5	10.5	9.5	9.5	8.5	9.5	9.0	8.0	6.5
13	13.0	10.0	11.0	8.5	10.5	10.0	10.0	9.0	9.0	8.0	8.5	7.0
14	12.5	11.5	11.0	8.0	10.5	10.0	9.5	9.0	8.5	7.0	9.5	8.0
15	12.0	11.5	11.0	8.5	10.0	9.5	9.0	8.5	8.5	8.0	9.5	7.5
16	12.5	11.5	11.5	9.5	9.5	9.0	9.5	9.0	9.0	8.0	9.5	7.5
17	12.0	10.0	9.5	6.0	10.0	9.0	9.0	9.0	8.5	7.0	9.5	8.0
18	12.0	9.5	8.0	6.0	11.0	9.5	9.5	9.0	8.5	7.0	9.0	7.0
19	11.5	8.0	8.5	5.5	11.5	10.5	10.0	9.0	8.5	6.5	8.5	6.5
20	13.0	8.5	8.0	5.0	12.5	11.0	11.0	9.5	8.0	5.5	8.5	6.5
21	14.0	10.0	8.0	5.5	13.0	10.0	11.5	11.0	8.0	6.0	8.5	6.5
22	14.0	10.5	8.0	5.0	10.0	9.0	11.0	10.5	8.0	6.0	9.5	7.5
23	13.5	11.0	8.5	5.5	10.0	10.0	11.0	10.5	8.5	6.0	10.0	7.5
24	14.0	12.0	8.0	5.0	11.0	10.0	10.5	9.0	8.0	6.0	10.5	8.5
25	13.0	10.5	8.5	5.0	11.0	9.5	9.0	8.5	8.0	6.0	10.5	9.0
26	12.5	10.0	8.5	5.0	9.5	7.0	9.5	9.0	8.5	6.0	11.0	9.0
27	12.5	11.0	8.0	5.0	8.0	6.0	9.5	8.0	8.5	6.5	10.0	8.0
28	12.0	9.5	7.5	4.5	6.5	5.0	8.5	6.0	8.0	7.5	10.0	8.0
29	11.5	8.0	7.0	3.5	6.0	4.5	7.5	5.5	--	--	10.0	8.5
30	12.0	8.0	7.0	4.0	6.0	4.5	8.0	6.5	--	--	10.0	8.5
31	12.0	8.5	--	--	5.5	4.0	8.0	7.0	--	--	9.5	8.0
AVE	13.8	10.6	9.8	7.1	8.9	7.3	8.2	7.1	8.7	7.0	9.0	7.3

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	7.5	18.0	12.0	25.0	17.0	26.5	18.0	--	--	23.0	17.0
2	10.5	8.5	18.5	13.0	26.5	18.0	28.5	20.0	--	--	23.0	17.5
3	10.5	8.0	19.5	14.0	27.5	19.0	27.0	21.0	--	--	22.0	16.5
4	10.5	8.0	20.0	14.5	27.5	18.5	29.5	21.0	--	--	20.0	17.0
5	11.5	9.0	18.5	15.0	27.0	19.0	30.5	22.5	--	--	19.5	14.0
6	14.5	9.0	16.5	14.0	26.5	19.0	29.5	22.0	--	--	22.0	15.5
7	13.0	10.0	18.0	13.0	24.5	18.5	29.0	21.0	--	--	23.0	17.0
8	14.0	10.0	15.5	14.0	20.0	16.0	28.5	20.5	--	--	23.5	17.5
9	14.0	10.5	16.0	12.5	17.0	15.0	27.5	20.0	--	--	23.5	17.0
10	15.0	12.0	17.0	11.5	20.0	14.5	27.5	19.0	--	--	24.0	17.0
11	14.0	10.0	14.0	11.0	22.0	15.0	28.0	19.0	--	--	23.5	17.0
12	13.5	9.0	13.0	9.5	20.5	14.5	28.5	19.5	27.5	19.5	22.0	16.5
13	12.0	10.0	17.5	11.0	20.0	14.5	28.0	20.0	27.5	19.5	18.0	14.0
14	13.0	9.0	19.0	12.0	21.0	16.0	29.5	20.0	27.5	20.0	18.5	12.0
15	13.0	9.5	21.5	13.0	23.5	16.0	29.5	22.0	27.0	20.5	18.5	12.0
16	10.5	8.5	22.0	15.0	25.0	17.0	--	--	26.5	20.0	20.5	13.0
17	13.0	8.5	22.0	16.0	25.0	18.0	--	--	25.5	19.5	20.5	14.0
18	13.0	9.5	22.0	15.5	25.5	17.5	--	--	26.0	20.0	20.0	14.5
19	15.0	10.5	21.0	16.0	28.0	19.5	--	--	25.5	19.0	20.0	16.0
20	13.0	9.0	21.0	15.0	29.0	20.5	--	--	25.5	18.5	19.5	14.5
21	13.5	9.5	21.5	14.5	29.5	21.5	--	--	25.5	18.5	18.5	14.5
22	14.5	9.5	22.0	15.0	30.0	21.5	--	--	25.5	19.0	20.0	13.5
23	15.5	11.0	21.5	15.5	29.0	22.5	--	--	25.0	18.0	19.5	14.0
24	13.0	10.5	22.0	15.0	27.5	22.0	--	--	25.0	17.5	17.0	13.5
25	14.0	10.0	23.5	16.0	26.5	21.0	--	--	24.0	17.0	18.5	12.5
26	14.0	10.5	24.0	17.5	27.5	21.5	--	--	24.0	16.5	19.0	12.8
27	12.5	8.0	22.5	17.5	23.5	20.5	--	--	23.5	16.0	19.5	13.0
28	12.0	8.0	22.5	16.0	20.5	18.5	--	--	23.5	16.5	19.0	13.5
29	14.5	8.0	22.0	16.0	22.5	15.0	--	--	24.5	18.0	18.5	13.5
30	17.0	11.0	22.0	16.0	24.0	16.5	--	--	23.5	18.5	19.0	13.5
31	--	--	23.5	16.0	--	--	--	--	23.0	17.0	--	--
AVE	13.1	9.4	19.9	14.3	24.7	18.1	--	--	--	--	20.4	14.8

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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 32.0°C July 5; minimum, 2.0°C Jan. 5, 6.
EXTREMES, 1965-70.--Water temperatures: Maximum (1966-67, 1968-70), 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 Oct. 5-24, Oct. 28 to Nov. 22, Nov. 29 to Dec. 22; range in temperature, 15.0°C to 21.0°C, 7.0°C to 15.0°C, and 5.0°C to 12.0°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	21.0	--	--	--	--	6.5	5.0	8.5	6.0	10.0	6.5
2	23.0	21.0	--	--	--	--	6.0	4.0	8.5	5.0	10.0	6.5
3	22.0	19.0	--	--	--	--	5.5	3.0	9.5	7.5	10.5	8.0
4	21.0	18.0	--	--	--	--	5.0	2.5	9.5	7.0	9.5	8.5
5	--	--	--	--	--	--	4.5	2.0	10.0	8.5	11.0	6.5
6	--	--	--	--	--	--	3.5	2.0	10.5	8.0	11.0	9.0
7	--	--	--	--	--	--	5.0	3.5	10.5	7.0	11.5	10.0
8	--	--	--	--	--	--	6.5	6.0	10.5	7.5	12.0	9.0
9	--	--	--	--	--	--	8.0	6.5	11.0	8.0	11.5	9.0
10	--	--	--	--	--	--	9.0	8.0	11.0	8.5	11.5	7.5
11	--	--	--	--	--	--	9.0	9.0	11.0	9.5	11.5	10.0
12	--	--	--	--	--	--	10.0	9.0	11.0	10.0	11.5	9.0
13	--	--	--	--	--	--	10.5	10.0	10.0	8.5	12.5	9.0
14	--	--	--	--	--	--	10.5	10.0	9.5	6.0	14.5	11.0
15	--	--	--	--	--	--	10.0	9.5	9.5	8.5	13.0	9.5
16	--	--	--	--	--	--	10.0	9.5	9.5	9.0	14.0	9.0
17	--	--	--	--	--	--	10.5	10.0	9.5	7.5	12.5	10.0
18	--	--	--	--	--	--	10.0	9.5	9.5	6.5	12.0	9.0
19	--	--	--	--	--	--	10.5	10.0	9.5	6.5	12.5	8.0
20	--	--	--	--	--	--	11.5	10.5	9.5	5.5	13.0	8.0
21	--	--	--	--	--	--	12.0	11.0	10.0	6.5	14.0	9.0
22	--	--	--	--	--	--	12.0	11.5	10.5	6.5	14.5	10.0
23	--	--	9.0	7.0	11.0	10.5	12.0	11.0	10.0	6.5	15.5	11.0
24	--	--	9.0	7.0	11.5	9.0	11.0	9.0	10.5	8.0	16.0	12.0
25	16.5	14.5	9.0	6.5	11.5	10.0	9.5	9.0	11.0	7.0	15.5	12.0
26	16.0	13.5	9.0	7.0	11.0	7.0	10.0	9.0	11.0	7.5	15.0	12.5
27	15.0	14.0	9.0	6.5	9.0	6.5	10.0	8.5	11.5	8.0	15.0	11.0
28	--	--	9.0	6.5	7.5	5.5	8.5	6.0	11.5	9.5	15.5	12.0
29	--	--	--	--	7.0	5.5	7.5	5.0	--	--	14.5	12.0
30	--	--	--	--	7.0	5.0	9.0	6.0	--	--	14.5	11.5
31	--	--	--	--	7.0	4.5	8.0	6.5	--	--	14.5	11.0
AVE	--	--	--	--	--	--	8.8	7.5	10.1	7.5	12.9	9.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	11.0	21.0	16.0	26.0	21.0	28.0	24.0	29.5	25.0	27.0	23.5
2	16.0	13.0	22.0	17.5	27.0	22.5	29.5	26.0	30.0	25.5	27.5	23.5
3	16.0	12.5	23.0	18.5	27.5	24.5	29.0	27.0	30.0	25.5	27.0	23.0
4	16.5	12.5	23.0	19.5	27.0	24.0	31.0	27.0	30.0	26.0	26.0	23.5
5	17.5	13.5	22.0	19.5	26.5	24.0	32.0	28.5	29.5	26.0	24.5	21.0
6	18.0	14.5	20.5	19.0	26.0	24.0	31.5	28.5	30.0	26.0	26.0	21.0
7	16.5	14.0	20.0	16.5	25.5	23.5	31.0	27.5	30.0	26.0	28.0	23.0
8	17.5	13.5	20.0	17.0	24.0	19.0	31.0	27.0	29.5	25.5	28.5	24.0
9	17.5	14.5	17.5	15.5	19.5	18.0	30.0	27.0	30.0	25.0	28.0	24.0
10	18.5	15.5	18.5	14.0	21.5	17.0	30.5	25.5	30.5	25.5	28.0	23.5
11	17.5	15.0	17.5	15.0	22.0	19.0	29.5	26.0	30.5	26.0	28.0	24.0
12	17.5	14.0	15.0	13.0	21.5	18.0	30.0	26.0	30.5	26.0	27.0	24.0
13	16.5	14.5	19.0	13.5	22.0	19.0	29.5	26.5	30.5	26.0	24.0	21.5
14	16.5	13.0	20.5	16.0	23.5	20.0	31.0	26.0	31.0	26.0	23.5	19.0
15	17.0	14.0	23.0	17.0	24.5	20.5	31.0	28.0	31.0	26.5	23.5	18.5
16	15.5	13.0	24.0	18.5	25.0	22.0	31.0	27.5	30.5	26.0	24.0	19.5
17	16.0	11.0	24.0	20.0	26.5	23.0	31.5	26.5	30.0	25.5	25.0	20.0
18	15.5	13.5	23.0	20.0	26.5	23.0	31.0	26.5	30.5	26.0	25.0	21.0
19	17.0	13.0	22.5	20.0	28.5	25.0	31.5	27.0	29.5	25.5	25.0	22.5
20	15.5	13.5	23.0	18.5	29.5	26.5	30.5	27.0	29.5	24.5	24.5	21.0
21	16.5	13.0	23.5	19.0	30.0	27.5	31.0	27.5	29.0	24.5	23.5	21.0
22	17.5	13.5	23.5	19.5	30.5	27.5	31.0	27.0	28.5	25.0	24.0	20.0
23	18.0	15.0	23.0	19.5	30.0	28.0	31.0	26.5	28.0	24.0	24.0	20.5
24	17.0	14.5	24.0	19.5	29.5	27.5	31.0	27.5	28.0	23.5	23.0	19.5
25	16.0	13.5	24.5	20.5	28.5	27.0	31.0	27.5	28.0	24.0	21.0	16.5
26	16.5	13.5	25.0	21.5	29.0	26.5	31.0	27.0	27.5	23.5	22.5	17.0
27	15.5	12.5	24.0	21.5	27.5	25.0	30.5	27.0	27.5	23.0	23.0	18.0
28	15.5	12.0	24.0	20.0	25.5	23.5	30.0	26.5	27.5	23.0	23.0	18.5
29	17.0	12.5	24.5	20.5	24.5	21.5	29.5	26.0	28.0	24.0	22.5	19.0
30	19.0	14.5	22.5	21.0	25.5	22.5	29.0	25.5	28.5	25.0	22.5	18.5
31	--	--	24.0	19.5	--	--	29.0	25.0	27.5	23.5	--	--
AVE	16.7	13.4	22.0	18.3	26.0	23.0	30.5	26.7	29.4	25.1	25.0	21.0

11374400 MIDDLE FORK COTTONWOOD CREEK NEAR ONO, CALIF.

LOCATION.--Lat 40°22'03", long 122°34'19", in SW¼NW¼sec.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. Prior to June 24, 1970, at site 4.2 miles downstream.
DRAINAGE AREA.--244 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1963 to September 1965, July 1968 to September 1970.
Sediment records: Water years 1963-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 35.0°C July 19; minimum, 1.5°C sometime during period Dec. 19 to Jan. 7.
EXTREMES, 1968-70.--Water temperatures: Maximum, 35.0°C July 19, 1970; minimum, freezing point Dec. 25, 26, 1968.
REMARKS.--Clock stopped Nov. 1-3, Dec. 19 to Jan. 7; range in temperature, 13.5°C to 17.0°C, and 2.0°C to 13.0°C, respectively. No record June 24 to July 13.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	19.0	--	--	8.5	6.0	--	--	12.0	11.0	10.0	7.5
2	22.0	18.0	--	--	8.5	7.0	--	--	13.0	10.5	9.5	6.0
3	21.0	17.0	--	--	8.5	6.5	--	--	12.5	11.5	9.5	7.5
4	20.5	16.0	17.0	15.5	8.5	6.5	--	--	12.5	11.0	8.5	6.5
5	20.5	15.5	16.5	15.5	9.5	8.5	--	--	12.5	12.0	11.0	5.0
6	20.0	15.0	15.5	14.5	9.5	7.5	--	--	13.0	11.5	11.0	8.0
7	18.5	16.0	14.5	13.5	10.0	9.5	--	--	13.0	10.5	10.5	9.0
8	19.0	17.0	15.0	13.5	11.0	9.5	6.0	5.0	12.0	10.0	11.0	7.5
9	19.0	16.0	14.5	11.5	11.0	10.5	8.0	6.0	12.0	9.0	10.5	8.5
10	20.0	17.0	14.5	11.5	11.5	11.0	8.5	8.0	11.5	10.0	11.5	7.5
11	18.5	15.0	15.0	12.0	11.5	11.0	9.0	8.5	11.5	10.5	10.5	9.5
12	18.0	14.5	15.0	12.0	11.5	11.0	9.0	9.0	11.5	10.5	11.5	9.5
13	17.5	13.0	15.0	12.5	12.0	11.5	10.0	9.0	11.0	9.0	12.5	9.5
14	18.0	16.0	14.5	12.0	11.5	10.5	10.0	10.0	9.5	6.5	14.0	11.0
15	17.0	14.5	14.5	12.5	11.0	10.5	10.0	10.0	9.5	8.5	13.0	9.0
16	15.0	13.5	14.0	11.5	11.0	10.5	10.0	9.5	9.5	9.0	14.5	10.0
17	16.0	12.5	11.5	9.5	12.5	11.0	10.0	9.5	9.0	7.5	12.5	8.5
18	15.5	12.0	11.0	9.5	12.5	12.0	10.0	10.0	9.5	6.5	11.5	7.5
19	16.0	11.5	11.0	9.0	--	--	10.5	10.0	9.5	6.0	12.0	7.0
20	17.0	13.0	10.5	8.0	--	--	10.5	10.5	9.5	5.5	13.0	7.5
21	18.0	14.5	10.5	8.5	--	--	10.5	10.5	10.0	6.5	15.5	11.0
22	18.0	15.0	11.0	8.5	--	--	10.5	10.5	10.5	6.5	16.0	11.0
23	17.5	16.0	10.5	8.5	--	--	11.5	10.5	10.0	6.5	16.5	12.5
24	18.0	17.0	11.0	8.5	--	--	11.5	10.0	11.0	8.0	17.0	11.5
25	17.5	15.0	10.5	8.5	--	--	10.5	9.5	11.5	7.5	16.0	11.0
26	16.5	14.5	11.0	8.5	--	--	10.5	10.0	12.0	8.0	15.0	11.0
27	16.0	15.0	10.5	8.0	--	--	10.5	9.0	12.0	8.0	15.5	10.0
28	16.5	13.0	10.0	7.5	--	--	9.5	8.0	12.0	9.5	15.5	10.5
29	16.5	13.0	9.5	7.0	--	--	10.5	9.5	--	--	15.5	10.5
30	17.0	13.5	9.0	6.5	--	--	11.0	10.0	--	--	14.0	10.0
31	17.0	14.0	--	--	--	--	11.5	11.0	--	--	14.5	9.5
AVE	18.1	14.9	12.7	10.5	--	--	--	--	11.2	8.8	12.9	9.0

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	9.5	21.0	15.0	27.5	21.5	--	--	31.5	21.5	28.5	19.0
2	16.0	11.0	17.0	16.0	29.0	23.0	--	--	33.0	21.5	28.5	19.0
3	15.5	10.0	23.0	17.0	29.0	23.5	--	--	33.0	22.5	27.5	18.5
4	16.5	10.5	23.0	18.0	29.0	23.0	--	--	32.0	22.5	24.0	17.0
5	17.5	11.5	21.0	18.0	29.0	23.5	--	--	32.0	22.0	25.0	16.0
6	17.0	12.5	20.5	17.0	29.0	24.0	--	--	32.0	22.0	27.5	18.0
7	15.0	10.5	21.5	16.0	27.5	23.5	--	--	33.0	22.5	29.0	20.0
8	16.5	11.5	19.0	17.0	25.5	21.0	--	--	31.5	20.5	29.0	21.0
9	17.0	12.5	18.0	15.0	22.0	19.0	--	--	33.0	22.0	28.5	20.0
10	18.0	14.0	19.0	13.5	25.0	18.5	--	--	33.0	22.5	29.0	20.0
11	16.0	11.5	18.0	15.0	25.0	20.0	--	--	33.0	23.0	29.0	20.0
12	16.0	11.5	16.5	13.0	24.5	20.0	--	--	32.5	23.0	26.5	19.5
13	15.0	12.5	20.0	14.0	24.0	20.5	--	--	33.0	22.5	22.5	16.0
14	15.5	11.5	22.5	16.5	24.5	21.0	34.5	29.0	33.0	22.5	22.5	13.5
15	15.0	11.5	24.5	18.0	26.5	20.5	34.0	24.5	32.5	22.5	23.5	14.0
16	15.0	11.5	25.5	19.5	27.0	22.0	33.0	23.5	32.0	22.0	24.5	15.5
17	16.5	11.0	26.0	20.5	28.0	23.0	34.0	22.5	31.5	21.5	25.0	16.5
18	16.5	12.5	25.5	20.5	29.0	23.0	34.5	23.5	31.5	22.0	25.0	18.0
19	17.0	12.0	24.5	20.5	30.0	24.0	35.0	23.5	32.0	21.0	23.5	17.0
20	14.5	11.0	24.5	19.0	31.0	25.5	34.5	24.5	30.5	21.0	23.0	15.5
21	15.0	9.5	25.5	19.5	31.0	26.5	34.0	23.5	31.0	20.5	22.5	15.0
22	16.0	10.0	26.0	20.5	32.0	26.5	33.0	22.0	30.5	21.5	23.5	14.5
23	16.5	11.0	24.5	19.5	31.0	27.0	34.0	23.0	30.0	20.0	24.5	16.5
24	16.5	13.0	26.0	20.0	--	--	34.0	24.0	29.5	20.0	21.5	15.0
25	16.0	12.5	27.0	21.0	--	--	33.5	24.0	29.5	20.0	21.5	13.0
26	16.0	12.0	27.0	22.0	--	--	33.0	24.0	29.0	19.5	23.0	13.5
27	14.0	10.5	26.0	22.5	--	--	33.0	24.0	29.0	19.0	23.5	14.5
28	16.0	9.5	26.0	20.5	--	--	33.0	23.5	29.0	19.5	22.0	15.0
29	17.0	11.0	26.0	20.0	--	--	32.0	22.0	29.0	20.0	22.5	15.0
30	19.5	13.0	25.0	20.0	--	--	32.0	21.5	28.5	20.5	23.0	14.5
31	--	--	26.0	20.0	--	--	31.5	21.5	28.0	19.5	--	--
AVE	16.1	11.4	23.1	18.2	--	--	--	--	31.2	21.3	25.0	16.7

11374400 MIDDLE FORK COTTONWOOD CREEK NEAR ONO, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 14, 1969	1425	16.0	14	1	.04	--	--	--	--	--	--	--	--	--	--	--	
NOV 3.....	1330	15.5	22	4	.24	--	--	--	--	--	--	--	--	--	--	--	
DEC 16.....	1530	10.5	208	7	3.9	--	--	--	--	--	--	--	--	--	--	--	
DEC 19.....	1230	10.0	1160	707	2210	32	50	65	77	84	90	93	98	100	--	--	VPWC
DEC 22.....	1115	12.0	1040	167	469	--	--	--	--	--	--	--	--	--	--	--	
DEC 30.....	1200	4.0	277	9	6.7	--	--	--	--	--	--	--	--	--	--	--	
JAN 7, 1970	1300	3.5	133	1	.36	--	--	--	--	--	--	--	--	--	--	--	
JAN 17.....	1400	9.5	3490	1040	9800	17	25	35	45	54	62	72	83	92	99	100	VPWC
JAN 22.....	1600	10.5	3940	1140	12100	--	--	--	--	--	--	--	--	--	--	--	
JAN 27.....	1600	9.5	5640	1980	30200	13	19	29	37	45	52	68	90	99	100	--	VPWC
JAN 29.....	1130	9.5	1650	769	3430	20	27	35	44	53	60	67	83	97	100	--	VPWC
FEB 16.....	1050	9.5	404	15	16	--	--	--	--	--	--	--	--	--	--	--	
MAR 10.....	1020	8.0	910	166	408	--	--	--	--	--	52	55	64	93	100	--	V
MAR 27.....	1020	10.5	293	14	11	--	--	--	--	--	--	--	--	--	--	--	
APR 9.....	1430	13.0	191	8	4.1	--	--	--	--	--	--	--	--	--	--	--	
APR 24.....	1020	13.0	140	2	.76	--	--	--	--	--	--	--	--	--	--	--	
MAY 13.....	1110	14.0	109	2	.59	--	--	--	--	--	--	--	--	--	--	--	
MAY 26.....	1100	22.0	83	12	2.7	--	--	--	--	--	--	--	--	--	--	--	
JUN 10.....	1350	21.0	72	18	3.5	--	--	--	--	--	--	--	--	--	--	--	
JUN 30.....	1010	20.0	40	46	5.0	--	--	--	--	--	--	--	--	--	--	--	
AUG 26.....	1515	27.0	8.7	10	.23	--	--	--	--	--	--	--	--	--	--	--	

11376000 COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'10", long 122°14'12", in NE¼ sec.7, T.29 N., R.3 W., Shasta 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 1970.
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 and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
01...	0800	106	17.0	8.2	--	--	6.1	--	104	0	--	4.6
NOV.												
13...	1020	81	14.0	10.9	--	--	12	--	142	0	--	22
DEC.												
01...	1135	83	8.5	13.2	--	--	12	--	136	0	--	18
JAN.												
07...	1005	448	4.0	13.3	--	--	9.6	--	129	0	--	12
FEB.												
05...	1500	2530	10.5	11.8	--	--	7.6	--	124	0	--	4.3
MAR.												
05...	1135	3380	6.0	12.8	--	--	8.7	--	96	0	--	4.1
APR.												
03...	1015	755	13.0	12.5	--	--	9.2	--	141	1	--	5.3
MAY												
07...	0915	395	17.0	10.6	26	12	10	1.0	133	0	18	6.1
JUNE												
05...	0745	173	22.5	8.8	--	--	8.8	--	135	0	--	9.0
JULY												
03...	0830	125	23.5	7.9	--	--	8.7	--	123	0	--	7.0
AUG.												
07...	1300	50	26.0	10.0	--	--	7.8	--	120	0	--	3.9
SEPT.												
02...	1410	54	25.0	7.8	--	--	7.1	--	106	0	--	4.1

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 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 (MG/L)
OCT.												
01...	--	90	--	--	82	0	85	14	.3	192	8.1	1
NOV.												
13...	--	70	--	--	132	16	116	--	--	303	7.6	3
DEC.												
01...	--	60	--	--	126	14	112	17	.5	296	7.8	1
JAN.												
07...	--	20	--	--	117	11	106	15	.4	268	7.7	4
FEB.												
05...	--	40	--	--	106	4	102	14	.3	229	7.6	85
MAR.												
05...	--	90	--	--	86	7	79	18	.4	203	7.7	160
APR.												
03...	--	0	--	--	131	14	117	13	.3	289	8.4	8
MAY												
07...	.2	20	132	148	115	6	109	16	.4	260	8.1	2
JUNE												
05...	--	90	--	--	114	3	111	14	.4	257	8.0	2
JULY												
03...	--	0	--	--	101	0	101	16	.4	238	8.0	1
AUG.												
07...	--	120	--	--	97	0	98	15	.3	210	8.1	2
SEP.												
02...	--	140	--	--	83	0	87	16	.3	187	8.0	9

11376550 BATTLE CREEK BELOW COLEMAN FISH HATCHERY, NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'54", long 122°08'43", in SW¼NE¼ 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 (revised).
PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1966.
Water temperatures: December 1965 to September 1970.
Sediment records: Water years 1962-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.5°C June 21-23, July 5; minimum, 4.5°C Jan. 5, 6.
EXTREMES, 1965-70.--Water temperatures: Maximum, 22.0°C July 21, 1969; minimum, 2.0°C Dec. 23, 24, 1968.
REMARKS.--Recorder malfunction Nov. 21, 22, Nov. 24 to Dec. 4. Temperature record furnished by U.S. Fish and Wildlife Service.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	13.0	12.0	10.5	--	--	6.5	6.0	8.0	6.5	9.5	8.0
2	14.0	13.0	12.0	10.5	--	--	6.5	5.5	8.5	6.5	8.5	6.0
3	13.0	11.0	11.5	10.5	--	--	6.0	5.0	9.0	8.0	9.0	7.0
4	12.0	10.0	12.0	10.5	--	--	5.5	5.0	9.0	8.0	8.5	8.0
5	12.0	11.0	12.0	11.0	8.0	7.0	5.5	4.5	9.5	8.5	9.5	6.5
6	12.0	10.0	11.0	10.0	8.5	7.0	6.0	4.5	9.5	8.5	9.5	8.0
7	11.5	10.0	10.0	9.5	8.5	7.0	11.5	6.0	10.0	8.5	9.5	9.0
8	12.0	11.0	10.0	9.5	8.5	8.0	13.0	11.5	10.5	8.5	10.5	9.0
9	12.0	11.0	10.0	9.0	8.5	8.0	12.0	7.0	10.5	9.0	10.0	8.5
10	13.0	11.0	10.0	9.0	8.5	8.0	9.0	7.0	10.5	9.5	9.5	7.0
11	12.0	10.0	10.5	9.5	9.0	8.5	8.0	7.0	10.5	9.5	9.5	8.0
12	11.5	10.0	11.0	10.0	9.0	8.5	12.0	8.0	10.5	9.5	10.0	8.5
13	11.0	10.0	11.0	10.0	9.0	8.5	13.0	12.0	9.5	8.5	11.0	9.0
14	10.5	10.0	10.5	9.5	9.0	8.5	13.0	11.0	9.0	7.0	12.0	10.0
15	10.5	10.0	10.5	9.5	9.5	9.0	13.0	12.0	9.5	8.5	11.5	9.5
16	11.0	10.5	11.0	9.5	9.5	8.5	13.0	12.0	9.5	8.5	12.0	9.5
17	11.0	10.0	9.5	8.0	9.5	8.5	12.0	11.5	8.5	7.0	11.5	9.5
18	10.5	9.5	8.5	6.5	9.5	9.0	12.0	11.5	8.5	6.0	10.0	8.0
19	10.5	9.0	8.5	8.0	10.0	9.5	12.0	9.5	8.5	6.0	10.0	8.0
20	11.5	9.5	9.0	8.0	11.0	9.5	9.5	9.0	9.0	6.5	10.5	8.5
21	12.5	10.5	--	--	11.0	9.0	11.0	9.5	9.0	7.0	11.0	9.0
22	12.5	11.0	--	--	9.0	7.0	10.5	10.0	9.5	8.0	12.0	9.5
23	12.0	11.0	9.0	8.0	8.5	8.0	10.5	10.0	9.5	8.0	13.5	10.0
24	12.5	11.5	--	--	9.0	8.5	10.5	8.5	9.5	8.5	13.5	11.5
25	12.0	10.5	--	--	9.5	8.5	8.5	7.0	10.0	8.5	13.0	10.5
26	11.0	10.0	--	--	8.5	6.5	8.5	8.0	10.0	8.5	13.0	10.5
27	11.0	10.5	--	--	6.5	6.0	8.5	7.0	11.0	9.0	11.5	9.5
28	11.0	10.0	--	--	6.0	5.5	7.0	6.0	11.0	9.5	12.0	10.0
29	11.0	9.5	--	--	6.5	5.5	6.5	5.5	--	--	11.5	10.0
30	11.5	10.0	--	--	6.5	5.5	8.0	6.5	--	--	11.0	9.5
31	11.5	10.5	--	--	6.5	5.5	7.0	6.0	--	--	10.5	9.0
AVE	11.7	10.5	--	--	8.6	7.7	9.5	8.0	9.6	8.1	10.8	8.9

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.0	15.0	11.5	19.0	15.0	18.5	14.5	18.5	15.0	16.0	13.5
2	11.5	10.0	15.5	12.0	20.0	16.0	19.5	16.0	19.5	15.0	16.0	14.0
3	11.5	9.5	16.0	13.0	20.0	17.0	19.5	16.5	19.5	15.5	15.5	13.5
4	12.0	10.0	16.5	13.5	19.5	16.5	20.0	16.5	19.5	15.5	15.5	13.5
5	13.0	10.5	16.0	13.5	20.0	16.5	20.5	17.0	19.0	15.5	14.5	11.5
6	13.0	11.0	14.5	12.0	19.5	16.5	20.0	17.0	19.0	15.5	16.0	13.0
7	12.0	10.0	14.5	11.0	18.0	16.0	20.0	16.5	19.0	15.5	16.5	14.5
8	12.0	10.0	14.5	12.0	17.0	13.0	19.0	16.5	18.0	15.0	17.0	14.5
9	12.0	10.5	13.5	11.0	13.5	11.5	18.5	16.0	18.5	15.0	16.5	14.5
10	13.0	11.0	13.5	10.5	16.5	12.0	18.5	15.0	19.0	15.5	16.5	14.0
11	12.0	10.0	12.0	10.0	16.5	13.0	18.5	15.5	19.5	15.5	16.5	14.0
12	11.5	9.5	10.5	9.0	16.0	13.5	19.0	15.5	18.5	15.5	16.0	14.0
13	11.5	9.5	14.0	9.0	15.5	13.5	20.0	16.0	18.5	15.5	15.0	12.0
14	11.0	8.5	15.5	11.5	16.0	13.5	20.0	16.5	18.5	15.5	13.5	10.5
15	11.0	8.5	17.5	13.5	16.5	13.5	20.0	17.0	18.5	15.5	13.5	10.5
16	10.0	8.5	18.5	14.5	16.5	14.5	19.5	16.5	18.0	15.5	14.5	11.5
17	11.5	8.0	18.5	15.0	17.0	15.0	19.5	16.0	17.0	14.5	14.5	12.0
18	11.0	9.0	17.0	14.5	18.0	15.0	19.5	16.0	18.0	15.0	15.0	13.0
19	12.0	10.0	16.5	14.5	19.0	16.5	19.5	16.5	17.0	15.0	14.5	13.5
20	10.5	8.5	16.5	13.5	19.5	17.0	19.5	16.5	16.5	14.5	14.0	11.5
21	10.5	7.0	17.0	13.5	20.0	18.0	19.5	16.0	16.5	14.5	14.0	11.5
22	12.0	8.5	18.0	14.5	20.5	18.0	20.0	16.5	16.5	14.5	14.5	11.5
23	12.0	10.0	18.0	14.5	20.5	16.5	19.5	16.0	16.5	14.0	15.5	13.0
24	11.5	9.5	18.5	14.5	19.5	17.0	19.5	16.5	16.0	14.0	14.0	11.5
25	11.5	10.0	19.0	15.0	19.0	16.5	19.0	16.5	16.0	14.0	14.0	10.5
26	10.5	9.5	18.5	15.5	19.0	16.5	19.0	16.0	16.0	14.0	14.5	11.0
27	10.0	7.0	18.0	15.0	18.5	15.5	20.5	16.0	16.0	13.5	14.5	11.0
28	10.5	7.0	17.0	14.5	15.5	14.0	19.5	16.0	16.0	13.5	14.5	11.0
29	11.5	6.5	17.5	14.5	16.0	12.0	19.0	15.5	16.5	14.5	14.0	11.5
30	14.0	10.0	17.0	14.5	16.5	13.5	18.5	14.5	16.5	14.5	14.5	11.0
31	--	--	18.5	14.5	--	--	18.5	14.5	16.0	14.0	--	--
AVE	11.6	9.2	16.2	13.1	17.9	15.1	19.4	16.0	17.7	14.8	15.0	12.4

11376550 BATTLE CREEK BELOW COLEMAN FISH HATCHERY, NEAR COTTONWOOD, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 6, 1969	1350	11.0	306	6	5.0	--	--	--	--	--	--	--	--	--	--	--	
NOV 3.....	1600	11.5	316	4	3.4	--	--	--	--	--	--	--	--	--	--	--	
DEC 15.....	1100	9.5	618	10	17	--	--	--	--	--	--	--	--	--	--	--	
DEC 20.....	1230	11.0	2820	112	853	--	--	--	--	--	33	42	62	91	100	--	V
JAN 7, 1970	1045	7.0	466	7	8.8	--	--	--	--	--	--	--	--	--	--	--	
JAN 14.....	1415	11.0	4380	349	4130	--	--	--	--	--	62	73	84	96	100	--	V
JAN 19.....	1050	10.0	1690	79	360	--	--	--	--	--	41	54	66	84	98	100	S
JAN 30.....	1250	7.0	1590	109	468	--	--	--	--	--	42	58	83	97	100	--	V
FEB 18.....	1315	8.0	905	30	73	--	--	--	--	--	--	--	--	--	--	--	
MAR 9.....	1030	8.5	1060	65	186	--	--	--	--	--	--	--	--	--	--	--	
MAR 20.....	--	10.0	710	10	19	--	--	--	--	--	--	--	--	--	--	--	
APR 9.....	1125	12.0	710	7	13	--	--	--	--	--	--	--	--	--	--	--	
MAY 8.....	1330	13.0	604	13	21	--	--	--	--	--	--	--	--	--	--	--	
JUN 11.....	1430	14.5	541	24	35	--	--	--	--	--	--	--	--	--	--	--	
JUL 6.....	1430	19.0	473	7	8.9	--	--	--	--	--	--	--	--	--	--	--	
AUG 27.....	1340	15.5	281	4	3.0	--	--	--	--	--	--	--	--	--	--	--	

11377100 SACRAMENTO RIVER ABOVE BEND BRIDGE, NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°17'19", long 120°11'08", in SW¼SE¼ sec.10, 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 (revised), excluding Goose Lake basin.
PERIOD OF RECORD.--Water temperatures: March to September 1970.
EXTREMES, March to September 1970.--Water temperatures: Maximum, 15.5°C on several days during July and August; minimum recorded, 8.0°C Mar. 1, 4, 5.

TEMPERATURE (°C) OF WATER, MARCH TO SEPTEMBER 1970

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	8.5	8.0
3	---	---	---	---	---	---	---	---	---	---	9.0	8.5
4	---	---	---	---	---	---	---	---	---	---	9.0	8.0
5	---	---	---	---	---	---	---	---	---	---	8.5	8.0
6	---	---	---	---	---	---	---	---	---	---	9.0	8.5
7	---	---	---	---	---	---	---	---	---	---	9.0	9.0
8	---	---	---	---	---	---	---	---	---	---	9.5	9.0
9	---	---	---	---	---	---	---	---	---	---	9.5	9.0
10	---	---	---	---	---	---	---	---	---	---	9.0	8.5
11	---	---	---	---	---	---	---	---	---	---	9.5	9.0
12	---	---	---	---	---	---	---	---	---	---	9.5	9.0
13	---	---	---	---	---	---	---	---	---	---	10.0	9.0
14	---	---	---	---	---	---	---	---	---	---	10.5	10.0
15	---	---	---	---	---	---	---	---	---	---	11.0	10.0
16	---	---	---	---	---	---	---	---	---	---	11.0	10.0
17	---	---	---	---	---	---	---	---	---	---	11.0	10.0
18	---	---	---	---	---	---	---	---	---	---	10.0	9.0
19	---	---	---	---	---	---	---	---	---	---	10.0	9.0
20	---	---	---	---	---	---	---	---	---	---	10.0	9.0
21	---	---	---	---	---	---	---	---	---	---	10.5	9.5
22	---	---	---	---	---	---	---	---	---	---	11.0	9.5
23	---	---	---	---	---	---	---	---	---	---	11.0	10.0
24	---	---	---	---	---	---	---	---	---	---	12.0	10.0
25	---	---	---	---	---	---	---	---	---	---	12.0	10.0
26	---	---	---	---	---	---	---	---	---	---	11.5	10.0
27	---	---	---	---	---	---	---	---	---	---	11.0	9.5
28	---	---	---	---	---	---	---	---	---	---	11.5	10.0
29	---	---	---	---	---	---	---	---	---	---	11.5	10.0
30	---	---	---	---	---	---	---	---	---	---	11.0	9.5
31	---	---	---	---	---	---	---	---	---	---	11.0	9.5
MONTH	---	---	---	---	---	---	---	---	---	---	12.0	8.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.0	12.0	10.5	15.0	12.5	14.5	11.5	15.0	12.0	14.5	12.0
2	11.0	10.0	12.0	11.0	15.0	12.0	15.5	12.5	15.5	12.5	14.5	12.0
3	11.0	10.0	12.5	11.0	15.0	12.5	15.0	12.5	15.5	13.0	14.5	12.0
4	11.5	10.0	13.0	11.0	15.0	12.0	15.0	12.5	15.0	13.0	14.0	12.5
5	12.0	10.5	13.0	11.5	15.0	12.5	15.5	13.0	15.0	12.5	14.0	11.5
6	12.0	11.0	12.0	11.0	14.5	12.0	15.0	13.0	15.0	12.5	15.0	12.5
7	11.5	10.0	12.0	11.0	14.5	11.5	15.0	12.5	15.0	12.5	15.0	13.0
8	12.0	10.5	12.0	11.0	13.5	11.0	15.0	12.0	15.0	12.5	15.0	13.0
9	12.0	11.0	11.5	10.5	11.0	10.0	14.5	12.0	15.0	12.5	15.0	13.0
10	12.5	11.5	11.5	10.5	13.5	10.5	15.0	12.0	15.0	12.5	14.5	13.0
11	12.0	10.5	11.5	10.5	13.5	11.0	14.5	12.0	15.0	12.5	15.0	13.0
12	11.5	10.5	10.5	9.5	13.0	11.0	14.5	12.0	15.0	12.5	14.5	13.0
13	11.5	10.0	12.0	10.0	12.5	11.0	15.0	12.0	15.5	13.0	14.5	12.0
14	11.0	9.5	13.5	11.5	13.5	11.0	15.0	12.0	15.0	13.5	13.0	11.5
15	11.0	10.0	14.5	12.0	14.0	11.5	15.0	12.0	15.5	13.5	13.0	11.5
16	11.0	9.5	14.5	12.5	14.5	11.5	14.5	12.0	15.0	12.5	13.5	12.0
17	11.0	9.5	15.0	13.0	14.5	12.0	15.0	11.5	15.0	12.5	14.0	12.0
18	11.0	10.0	14.5	13.0	14.5	12.0	14.5	12.0	15.0	13.0	14.0	12.5
19	11.5	10.5	14.5	12.5	15.0	12.0	15.0	12.0	14.5	12.5	14.0	12.5
20	11.5	10.0	14.5	12.0	15.0	12.5	15.0	12.0	15.0	12.5	14.0	12.0
21	11.0	10.0	14.5	12.5	15.0	12.0	15.0	12.0	14.5	12.5	14.0	12.0
22	11.5	10.0	14.5	12.5	15.0	12.0	15.0	12.0	15.0	12.5	14.0	12.0
23	11.5	10.0	14.5	13.0	15.0	12.5	15.0	12.0	14.5	12.0	14.0	12.5
24	11.5	10.0	15.0	13.0	14.5	12.0	15.0	12.0	14.5	12.0	14.0	12.0
25	11.0	10.0	15.0	13.0	14.5	12.0	15.0	12.0	14.5	12.0	13.0	11.5
26	11.0	10.0	15.0	13.5	15.0	12.0	15.0	12.0	14.5	12.0	13.5	11.5
27	11.0	9.5	15.0	12.5	14.5	12.0	15.0	12.0	14.5	12.0	13.5	11.5
28	10.5	9.5	14.5	12.5	13.0	11.5	15.0	12.0	14.5	12.0	13.5	12.0
29	11.0	9.5	14.5	12.5	13.5	11.0	15.0	12.5	15.0	12.5	13.0	11.5
30	11.5	10.0	14.5	12.5	14.0	11.5	15.0	12.0	14.5	12.5	13.0	12.0
31	---	---	15.0	12.5	---	---	15.0	12.0	14.5	12.0	---	---
MONTH	12.5	9.5	15.0	9.5	15.0	10.0	15.5	11.5	15.5	12.0	15.0	11.5

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 (revised), excluding Goose Lake basin (at gaging station).

PERIOD OF RECORD.--Chemical analyses: May 1955 to September 1968, water years 1969-70 (partial-record station).
Water temperatures: May 1955 to September 1970 (discontinued).
Sediment records: October 1957 to September 1970 (discontinued).

EXTREMES, 1969-70.--Water temperatures: Minimum, 8.0°C Jan. 5, 6.
Sediment concentrations: Maximum daily, 3,470 mg/l Jan. 24; minimum daily, 3 mg/l Nov. 19.
Sediment loads: Maximum daily, 1,200,000 tons Jan. 24; minimum daily, 60 tons Nov. 12.

EXTREMES, 1955-70.--Water temperatures: Maximum (1955-66), 19.0°C June 1, 1960; minimum (1955-70), 3.0°C Jan. 22, 1962, Dec. 24, 1968.
Sediment concentrations (1957-70): Maximum daily, 3,470 mg/l Jan. 24, 1970; minimum daily, 1 mg/l on many days in 1964 and 1967.
Sediment loads (1957-70): Maximum daily, 1,200,000 tons Jan. 24, 1970; minimum daily, 12 tons Dec. 8-10, 15, 1964.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Records of daily discharge data given for station 11377100 Sacramento River above Bend Bridge, near Red Bluff. No appreciable inflow between sampling point and gaging station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
NOV.												
13...	0920	8420	12.2	10.2	--	--	6.7	--	64	0	--	3.8
JAN.												
07...	0830	15600	8.9	12.0	--	--	6.7	--	64	0	--	2.7
MAR.												
05...	0815	18400	8.1	12.2	--	--	5.0	--	50	0	--	2.7
MAY												
07...	0735	9740	11.7	11.4	9.5	5.0	6.0	.9	59	0	5.9	1.3
JULY												
02...	1300	10200	13.3	12.0	--	--	6.0	--	58	0	--	1.8
SEP.												
02...	1440	8780	12.0	12.7	9.4	5.0	5.6	--	58	0	3.0	2.6

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 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 (MG/L)
NOV.												
13...	.3	10	--	--	47	0	52	24	.4	123	7.7	5
JAN.												
07...	.5	70	--	--	46	0	52	24	.4	121	7.4	15
MAR.												
05...	.7	70	--	--	43	2	41	20	.3	105	7.5	170
MAY												
07...	.1	0	55	1450	44	0	48	22	.4	113	7.7	8
JULY												
02...	.4	10	--	--	42	0	48	24	.4	111	7.7	10
SEP.												
02...	.1	0	70	1660	44	0	48	22	.4	109	7.0	15

11377200 SACRAMENTO RIVER AT BEND, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	14.0	9.0	9.5	9.0	9.5	12.0	14.0	16.0	15.0	14.0	---
2	---	14.0	9.0	10.5	10.5	9.5	12.0	14.5	---	---	---	14.5
3	14.0	12.0	9.0	9.0	10.0	9.5	12.0	14.5	16.0	16.0	16.0	---
4	---	11.5	9.0	9.0	10.5	9.0	12.5	14.5	---	---	---	14.0
5	---	11.5	9.0	8.0	---	10.0	13.0	14.0	16.0	---	16.0	---
6	12.0	11.5	9.5	8.0	10.0	10.0	12.5	13.0	---	16.0	---	---
7	---	11.5	11.0	8.5	10.0	9.5	11.5	13.0	---	---	16.0	15.0
8	13.0	12.5	10.0	8.5	9.5	9.5	13.5	---	12.0	16.0	---	---
9	---	13.0	10.0	8.5	10.5	9.5	13.0	13.0	---	---	---	16.0
10	12.5	11.0	10.0	9.0	10.5	10.0	13.0	12.5	14.0	13.5	16.0	---
11	---	11.5	10.0	9.0	9.5	9.5	12.0	12.0	---	---	---	15.0
12	---	11.0	10.0	9.0	10.0	10.5	13.0	11.5	14.0	---	16.0	---
13	13.5	12.0	10.5	9.0	9.0	11.0	11.5	13.0	---	16.0	---	---
14	---	11.0	10.5	10.0	9.5	11.5	11.0	14.5	---	---	16.0	14.0
15	12.0	12.0	10.0	9.5	9.5	12.0	12.0	15.0	15.0	16.0	---	---
16	---	11.5	10.0	11.0	9.0	12.5	10.5	15.0	---	---	---	13.0
17	12.0	10.0	10.0	10.5	9.0	11.5	12.0	15.0	15.5	15.5	16.0	13.0
18	---	10.0	10.0	10.5	9.0	10.0	11.5	15.0	---	---	---	---
19	---	11.0	11.0	10.0	9.5	12.0	12.0	14.5	16.0	---	15.5	---
20	13.5	10.0	12.0	10.5	10.0	11.5	11.5	15.0	---	16.0	---	---
21	---	9.5	12.5	10.5	9.5	12.0	11.5	15.0	---	---	15.5	13.0
22	14.0	12.0	9.5	11.0	10.0	12.5	12.5	15.0	16.0	16.0	---	---
23	---	10.5	10.5	11.0	9.5	13.0	12.0	15.5	---	---	---	13.0
24	13.5	9.5	10.0	11.0	10.0	13.5	12.0	15.5	15.5	16.0	15.0	---
25	---	9.5	12.0	9.5	10.5	11.5	11.5	16.0	---	---	---	14.0
26	---	9.5	9.5	9.5	10.5	12.0	11.0	15.0	16.0	---	15.0	---
27	12.0	9.5	9.5	10.0	10.5	12.0	11.0	14.5	---	16.0	---	---
28	---	9.0	9.5	9.0	10.0	12.0	12.0	16.0	---	---	15.0	14.0
29	13.0	9.0	9.5	9.0	---	12.0	12.0	15.5	14.5	16.0	---	---
30	---	9.0	9.0	10.0	---	11.5	13.0	15.5	---	---	---	13.0
31	12.0	---	8.5	9.0	---	11.5	---	14.0	---	15.5	15.0	---
MONTH	---	11.0	10.0	9.5	10.0	11.0	12.0	14.5	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9120	6	148	8390	4	91	8350	5	113
2	8440	4	91	8400	5	113	8350	5	113
3	8280	4	89	8390	5	113	8330	4	90
4	8170	4	88	8370	6	136	8330	4	90
5	8210	5	111	8850	6	143	8310	4	90
6	8150	5	110	9300	8	201	8330	4	90
7	8150	5	110	9110	8	197	8330	4	90
8	7850	6	127	8760	6	142	8350	5	113
9	8210	6	133	8660	4	94	8100	5	109
10	8210	5	111	7680	4	83	7430	4	80
11	8210	5	111	6260	11	178	7350	4	79
12	8220	4	89	5560	4	60	17600	78	5360
13	8210	4	89	8040	9	186	27500	194	15600
14	8240	4	89	8510	5	115	16800	45	2040
15	8550	5	115	8490	5	115	15800	30	1280
16	9050	8	195	8480	5	114	14200	21	805
17	9020	8	195	8460	5	114	13900	12	450
18	8690	6	141	8460	4	91	14400	15	583
19	8660	5	117	8420	3	68	43000	388	67200
20	8570	4	93	8440	4	91	48600	381	50400
21	8490	4	92	8440	4	91	46700	551	78400
22	8480	4	92	8460	4	91	36300	258	25900
23	8460	4	91	8440	4	91	44900	132	17500
24	8440	4	91	8420	4	91	46600	102	13000
25	8480	4	92	8400	4	91	47400	64	8190
26	8480	4	92	8400	4	91	43900	32	3790
27	8440	4	91	8390	4	91	41600	30	3370
28	8480	4	92	8390	5	113	40200	29	3150
29	8460	5	114	8390	5	113	39000	29	3050
30	8440	5	114	8370	5	113	28900	24	1870
31	8400	5	113	--	--	--	23300	22	1380
TOTAL	261260	--	3426	249130	--	3421	740160	--	304375

11377200 SACRAMENTO RIVER AT BEND, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	22800	23	1420	86400	158	36900	23200	217	14900
2	20400	22	1210	79800	149	32100	13200	75	2670
3	16700	22	992	71600	138	26700	12200	52	1710
4	16200	22	962	69400	119	22300	15700	96	5310
5	15900	23	987	63000	103	17500	18200	181	9500
6	15800	23	981	60300	113	18400	13500	82	2990
7	15600	19	800	59600	106	17100	13200	73	2600
8	15700	20	848	58600	93	14700	18300	211	10400
9	30800	261	27600	52600	93	13200	14900	93	3740
10	40400	273	34500	46800	92	11600	16100	104	4520
11	24500	57	3770	42600	85	9780	14000	52	1970
12	26000	55	3860	38800	85	8900	13500	48	1750
13	28200	95	7230	38200	151	16300	13300	46	1650
14	54000	392	64500	33100	107	9820	13200	45	1600
15	53600	300	43400	26100	76	5360	12700	47	1610
16	83100	732	169000	24300	90	6100	12000	35	1130
17	68000	346	63500	29900	208	17400	11800	35	1120
18	59000	146	23300	24500	90	5950	12300	40	1330
19	50700	108	14800	22600	62	3780	11900	33	1060
20	74800	205	41400	20600	59	3280	11300	27	824
21	93900	354	90900	19800	50	2670	10600	30	859
22	104000	376	112000	18500	48	2400	10500	26	737
23	111000	807	270000	17400	48	2260	10300	21	584
24	123000	3470	1200000	17200	44	2040	10200	20	551
25	112000	1120	342000	17100	41	1890	10200	20	551
26	103000	296	82000	17000	37	1700	10100	21	573
27	127000	1190	415000	16800	36	1630	9990	19	512
28	107000	374	109000	15800	36	1540	9930	20	536
29	97100	216	56600	--	--	--	9830	18	478
30	92400	191	47700	--	--	--	9750	16	421
31	90400	171	41700	--	--	--	9570	15	388
TOTAL	1893000	--	3271960	1088400	--	313300	395470	--	78574

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9050	17	415	11900	19	610	9320	11	277
2	8480	17	389	11900	16	514	9410	9	229
3	8210	16	355	11900	14	450	9660	10	261
4	8130	18	395	10800	15	437	9770	11	290
5	8100	18	394	10100	12	327	9840	11	292
6	8060	18	392	10200	8	220	10200	12	330
7	8030	16	347	10200	11	303	10300	12	334
8	7950	14	301	10300	12	334	10300	11	306
9	7900	14	299	10300	10	278	10500	11	312
10	7880	11	234	10300	9	250	10700	11	318
11	8330	12	270	10300	10	278	10500	12	340
12	8840	15	358	10300	11	306	10400	11	309
13	9070	13	318	9610	11	285	10300	10	278
14	9270	22	551	8820	8	191	10400	10	281
15	9180	15	372	8570	9	208	10400	9	253
16	9110	11	271	8530	8	184	10300	8	222
17	9090	11	270	8550	8	185	10200	8	220
18	9030	12	293	8570	8	185	10200	8	220
19	9050	14	342	8580	9	208	10200	9	248
20	9230	15	374	8570	11	255	10600	9	258
21	9560	15	387	8530	11	253	10600	9	258
22	9990	16	432	8510	10	230	10500	8	227
23	10500	18	510	8460	11	251	10500	7	198
24	11300	24	732	8690	14	328	10500	9	255
25	11800	27	860	8870	12	287	10500	11	312
26	11800	22	701	8910	8	192	10600	9	258
27	11800	21	669	8940	11	266	10600	9	258
28	11800	22	701	8980	10	242	10600	9	258
29	11700	20	632	8940	10	241	10700	9	260
30	11700	19	600	8930	10	241	10600	9	258
31	--	--	--	9050	11	269	--	--	--
TOTAL	283940	--	13164	295110	--	8808	309200	--	8120

11377200 SACRAMENTO RIVER AT BEND, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	10400	9	253	9840	6	159	9360	7	177
2	10300	8	222	9830	6	159	8980	5	121
3	10300	7	195	9770	6	158	8820	6	143
4	10300	7	195	9790	5	132	8800	6	143
5	10300	7	195	9810	4	106	8580	6	139
6	10200	6	165	9840	5	133	8530	6	138
7	10200	6	165	9830	5	133	8460	6	137
8	10300	6	167	9830	5	133	8440	6	137
9	10300	6	167	9830	6	159	8440	5	114
10	10600	8	229	9830	6	159	8420	5	114
11	11000	8	238	9650	6	156	8170	6	132
12	11200	8	242	9740	6	158	8060	6	131
13	11300	8	244	9290	6	150	7970	6	129
14	11200	8	242	9390	6	152	7920	6	128
15	11200	8	242	9250	6	150	7990	6	129
16	11300	8	244	9340	6	151	7990	6	129
17	11200	8	242	9360	6	152	7970	6	129
18	11200	8	242	9470	6	153	7990	6	129
19	11200	8	242	9540	6	155	7990	5	108
20	11300	7	214	9380	6	152	7940	5	107
21	11300	7	214	9200	6	149	7920	5	107
22	11300	8	244	9360	6	152	7880	5	106
23	11300	9	275	9410	6	152	7900	6	128
24	11400	8	246	9360	6	152	7900	5	107
25	11100	8	240	9290	6	150	7940	5	107
26	10800	8	233	9300	6	151	7950	5	107
27	10800	7	204	9340	6	151	7860	6	127
28	10900	7	206	9340	6	151	7680	9	187
29	10400	5	140	9410	6	152	7760	6	126
30	10300	5	139	9390	6	152	7720	5	104
31	9990	6	162	9380	6	152	--	--	--
TOTAL	334890	--	6648	295390	--	4624	245330	--	3820

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 6391280
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 4020240

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMP-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 19, 1969	1510	11.0	50500	575	78400	24	34	43	53	57	79	92	99	100	--	--	VBWC
DEC 20.....	1430	12.0	48600	356	46700	--	--	--	--	--	80	91	98	100	--	--	V
DEC 21.....	1640	12.0	65200	1110	195000	35	46	59	72	81	93	98	99	100	--	--	VBWC
JAN 10, 1970	0730	8.5	43000	322	37400	--	--	--	--	--	88	91	93	99	100	--	S
JAN 16.....	1530	11.0	95900	898	233000	27	40	51	63	71	86	95	99	100	--	--	VBWC
JAN 17.....	1015	10.5	69200	322	60200	--	--	--	--	--	85	89	93	100	--	--	S
JAN 21.....	0700	10.0	90600	311	76100	--	--	--	--	--	74	82	86	100	--	--	S
JAN 24.....	1315	11.0	111000	2770	830000	--	--	--	--	--	94	99	100	--	--	--	VPWC
JAN 26.....	0945	10.0	103000	253	70400	22	33	45	58	70	76	89	97	99	100	--	SBWC
JAN 27.....	0710	10.0	138000	1830	682000	--	--	--	--	--	81	94	99	100	--	--	SPWC
JAN 27.....	1750	10.0	125000	715	241000	21	32	43	55	66	78	92	98	99	100	--	SBWC
FEB 2.....	1115	10.5	80200	139	30100	--	--	--	--	--	75	87	96	99	100	--	S
FEB 17.....	1430	8.5	27700	190	14200	31	41	50	57	65	72	84	93	98	99	100	SBWC

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 1970.
Water temperatures: October 1961 to September 1970.
Sediment records: October 1962 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 34.5°C July 4; minimum, freezing point Jan. 4-6.
Sediment concentrations: Maximum daily, 14,300 mg/l Jan. 24; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 462,000 tons Jan. 23; minimum daily, 0.01 ton on many days.
EXTREMES, 1961-70.--Water temperatures: Maximum, 34.5°C Aug. 18, 23, 1967, July 4, 1970; minimum, freezing point on several days during most years.
Sediment concentrations (1962-70): Maximum daily, 60,200 mg/l Dec. 22, 1964; minimum daily, no flow Oct. 4, 1964.
Sediment loads (1962-70): Maximum daily, 5,070,000 tons Dec. 22, 1964; minimum daily, 0 tons Oct. 4, 1964.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Temperature recorder malfunction July 20-27, Aug. 2-4; probe buried Nov. 4 to Dec. 11. Where no maximum or minimum is shown, temperature is once-daily reading.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
01...	0930	7.1	--	9.3	--	--	12	--	136	0	--	21
NOV.												
12...	1040	25	12.8	--	--	--	11	--	141	0	--	13
DEC.												
01...	1250	16	8.9	12.9	--	--	11	--	160	0	--	16
JAN.												
05...	1230	163	2.8	14.7	--	--	4.3	--	87	0	--	2.8
FEB.												
05...	1045	534	8.9	12.4	--	--	4.0	--	104	0	--	2.3
MAR.												
06...	1120	410	8.9	12.9	--	--	4.9	--	114	0	--	2.6
APR.												
03...	1130	208	11.5	11.7	--	--	4.8	--	117	0	--	4.5
MAY												
06...	1020	176	12.0	11.3	26	7.5	5.3	.8	100	0	19	2.0
JUNE												
05...	0930	82	21.7	9.1	--	--	4.8	--	114	0	--	5.2
JULY												
02...	1015	25	26.1	10.6	--	--	8.7	--	139	2	--	7.9
AUG.												
07...	1015	7.4	24.0	10.8	--	--	12	--	121	0	--	17
SEP.												
03...	1115	5.7	25.0	11.4	--	--	14	--	97	0	--	25

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 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 (MG/L)
OCT.												
01...	.2	160	--	--	170	58	112	13	.4	397	8.2	1
NOV.												
12...	.1	80	--	--	148	32	116	14	.4	331	8.3	2
DEC.												
01...	.1	140	--	--	170	39	131	12	.4	372	8.1	3
JAN.												
05...	.1	70	--	--	85	14	71	10	.2	184	7.8	7
FEB.												
05...	.1	40	--	--	95	10	85	8	.2	195	7.8	350
MAR.												
06...	.2	90	--	--	100	6	94	10	.2	215	8.0	120
APR.												
03...	.1	0	--	--	110	14	96	9	.2	228	8.3	15
MAY												
06...	.1	20	111	52.7	96	14	82	10	.2	210	8.0	35
JUNE												
05...	.0	120	--	--	115	21	94	8	.2	241	8.2	1
JULY												
02...	.1	70	--	--	155	38	117	11	.3	334	8.4	1
AUG.												
07...	.4	150	--	--	165	66	99	14	.4	376	7.9	2
SEP.												
03...	.1	180	--	--	169	89	80	15	.5	388	8.3	2

11382000 THOMES CREEK AT PASKENTA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
	DAILY		DAILY		DAILY		DAILY		DAILY		DAILY	
1	25.5	20.0	17.0	14.5	---	4.5	7.5	3.0	8.5	4.5	10.5	6.0
2	21.5	17.5	17.0	14.5	---	9.0	6.5	1.0	10.0	4.5	9.5	3.5
3	17.5	15.0	16.0	14.5	---	9.5	6.0	0.5	8.5	6.0	8.5	4.0
4	18.0	13.5	---	16.0	---	8.0	5.5	0.0	10.5	6.5	7.0	5.5
5	19.5	13.5	---	13.5	---	8.0	5.0	0.0	10.0	7.0	7.5	4.0
6	19.5	13.5	---	11.0	---	8.5	4.0	0.0	11.0	7.0	10.5	6.0
7	17.5	14.0	---	11.0	---	9.5	5.0	3.0	11.5	6.0	9.5	8.0
8	18.0	15.0	---	10.5	---	8.0	6.0	4.5	12.0	6.5	11.0	6.5
9	18.0	14.0	---	9.0	---	8.5	8.0	6.0	11.5	7.5	8.5	6.0
10	18.5	14.0	---	8.0	---	9.0	7.5	6.0	11.0	8.5	10.0	4.0
11	15.5	11.5	---	14.5	---	---	8.0	7.0	10.0	8.5	8.0	6.5
12	16.0	12.0	---	15.0	9.5	7.0	8.0	6.5	11.0	6.5	12.0	7.5
13	15.0	12.0	---	15.0	9.0	8.0	8.0	7.0	7.5	4.5	13.0	7.5
14	13.0	12.5	---	14.5	8.5	8.0	9.0	8.0	9.5	3.5	15.5	9.0
15	13.0	13.0	---	12.5	8.5	6.5	8.5	7.5	8.5	5.5	12.5	6.0
16	13.0	12.0	---	9.5	8.0	6.5	10.0	8.0	7.5	5.5	15.0	7.5
17	14.0	10.0	---	6.0	8.5	7.5	10.0	8.0	8.5	4.5	12.0	6.0
18	14.0	10.5	---	10.0	10.0	8.5	10.0	8.5	9.5	4.0	12.0	4.5
19	15.0	10.5	---	10.5	9.0	9.0	10.0	9.0	10.0	4.0	12.5	4.0
20	17.0	12.0	---	10.5	11.0	9.0	9.5	8.5	10.5	3.5	12.5	3.5
21	19.0	15.0	---	10.5	11.0	7.5	10.5	9.0	11.0	4.0	14.0	5.5
22	18.0	15.0	---	11.0	8.0	7.0	10.5	10.0	11.0	4.0	15.5	6.0
23	17.5	14.5	---	5.5	8.5	7.5	10.5	10.0	10.5	4.0	16.5	7.0
24	16.5	15.5	---	10.5	10.0	8.0	10.0	8.0	12.5	5.5	17.0	7.5
25	16.0	13.5	---	11.0	9.5	7.0	9.0	8.0	13.5	6.0	16.0	7.5
26	15.5	13.5	---	11.0	8.5	5.0	9.0	8.5	14.0	7.0	14.5	7.0
27	15.5	14.0	---	7.0	6.5	4.0	9.0	5.5	13.5	7.0	14.5	5.5
28	15.0	13.0	---	6.0	6.5	3.0	7.0	4.0	11.0	8.5	15.5	5.5
29	16.0	12.0	---	5.0	7.0	2.5	6.0	3.5	---	---	15.5	5.5
30	16.5	14.0	---	4.0	8.0	3.0	8.5	4.5	---	---	13.5	4.5
31	17.0	14.5	---	---	7.0	2.0	7.5	4.5	---	---	13.5	4.0
MONTH	25.5	10.0	---	---	---	---	10.5	0	14.0	3.5	17.0	3.5

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
	DAILY		DAILY		DAILY		DAILY		DAILY		DAILY	
1	14.5	3.5	21.5	8.0	26.0	12.0	32.0	16.5	31.5	16.5	29.5	16.0
2	15.0	5.0	22.5	9.0	27.5	13.5	33.5	18.0	---	---	29.5	16.0
3	15.0	4.5	23.0	10.5	27.0	13.5	32.0	18.5	---	---	28.5	15.5
4	16.0	4.5	22.5	11.0	27.0	13.0	34.5	19.5	---	31.0	25.0	16.0
5	16.5	5.5	18.0	10.0	27.0	14.0	34.0	21.0	31.0	17.0	24.0	12.5
6	15.5	6.0	16.5	10.0	29.0	16.5	34.0	20.0	31.0	17.0	28.5	15.0
7	13.5	4.0	14.0	9.0	26.5	16.5	33.0	18.0	31.5	17.0	30.0	17.5
8	16.0	5.0	16.0	11.0	18.5	13.0	32.5	17.5	31.5	17.0	29.5	17.5
9	15.0	6.0	16.5	9.5	17.0	12.5	31.5	18.0	32.5	17.5	30.0	17.5
10	17.5	7.0	10.5	6.5	24.5	12.0	31.5	16.5	32.5	17.5	30.0	17.5
11	14.5	4.5	13.0	6.0	25.5	12.5	32.5	17.0	33.0	18.0	30.0	17.5
12	15.5	4.0	13.5	4.5	22.5	10.5	32.5	17.5	33.0	18.0	28.0	17.0
13	8.0	4.5	19.0	6.5	22.5	12.0	32.0	18.0	33.0	18.0	22.5	13.0
14	11.5	5.0	21.0	8.5	21.0	13.0	34.0	17.5	33.5	18.5	23.5	11.0
15	10.5	3.0	23.5	10.5	26.5	11.5	32.5	19.5	32.0	18.0	24.5	11.5
16	12.0	3.5	24.0	11.5	27.0	14.0	32.0	16.5	31.5	18.0	26.0	13.0
17	14.5	3.5	23.0	12.5	28.0	15.0	33.5	17.5	31.5	17.0	26.5	14.5
18	13.5	4.5	22.5	12.5	29.5	15.0	33.5	18.5	31.0	17.0	26.0	15.5
19	15.5	5.5	21.5	11.5	32.0	17.0	34.0	19.0	31.0	16.5	24.5	16.0
20	10.5	4.0	22.5	11.0	33.0	18.5	---	23.0	31.0	16.5	24.5	13.5
21	15.5	4.0	23.0	11.0	33.5	20.5	---	---	31.5	17.0	23.5	13.5
22	16.0	3.5	24.5	12.0	34.0	21.0	---	32.0	30.5	17.5	24.5	13.5
23	12.5	5.0	23.0	11.5	31.5	21.5	---	---	30.5	16.5	26.0	14.0
24	15.5	4.0	25.0	11.5	31.5	21.0	---	32.5	31.0	16.0	21.5	13.0
25	15.0	5.5	25.5	13.5	30.5	19.0	---	---	30.5	16.5	22.0	10.0
26	13.0	5.0	24.5	13.5	31.0	20.0	33.0	19.5	30.5	16.0	24.5	11.5
27	11.5	2.0	23.0	13.0	24.5	17.0	---	---	30.0	15.5	26.0	12.5
28	14.0	1.0	24.5	12.0	20.5	15.0	32.5	18.5	30.0	22.0	25.0	13.5
29	16.0	3.5	24.0	11.5	27.5	13.0	31.0	20.0	29.5	20.0	24.5	14.0
30	19.0	6.5	22.5	12.0	29.5	14.5	30.5	16.5	29.0	17.0	25.0	14.0
31	---	---	25.0	12.0	---	---	30.5	16.5	29.0	16.0	---	---
MONTH	---	1.0	25.5	4.5	34.0	10.5	---	---	33.5	15.5	30.0	10.0

11382000 THOMES CREEK AT PASKENTA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	7.1	2	.04	4.2	2	.02	16	1	.04
2	7.1	2	.04	4.2	2	.02	16	1	.04
3	6.5	2	.04	52	21	12	15	1	.04
4	6.5	2	.04	35	8	.76	16	1	.04
5	6.5	2	.04	150	34	26	16	1	.04
6	7.1	2	.04	91	11	4.1	16	1	.04
7	7.1	2	.04	33	1	.09	16	1	.04
8	2.6	2	.01	28	1	.08	19	1	.05
9	3.0	3	.02	33	1	.09	22	1	.06
10	5.9	3	.05	25	1	.07	22	1	.06
11	5.9	3	.05	23	1	.06	37	4	.40
12	6.5	3	.05	25	1	.07	2690	3080	27900
13	7.7	4	.08	28	1	.08	1790	1250	7270
14	11	4	.12	27	1	.07	1150	381	1230
15	21	6	.34	25	1	.07	930	117	294
16	123	226	114	25	1	.07	640	42	73
17	76	112	24	24	1	.06	564	25	38
18	12	58	1.9	23	1	.06	650	30	53
19	8.2	32	.71	22	1	.06	2250	1860	14900
20	7.0	15	.28	20	1	.05	2090	1550	9460
21	6.1	10	.16	20	1	.05	4130	4990	67200
22	6.1	13	.21	20	1	.05	1340	1570	6250
23	5.6	15	.23	19	1	.05	1940	2060	11400
24	5.6	14	.21	19	1	.05	1640	929	4310
25	5.2	10	.14	19	1	.05	1190	600	1930
26	5.2	8	.11	18	1	.05	1070	350	973
27	5.2	4	.06	16	1	.04	900	172	418
28	4.7	4	.05	16	1	.04	660	132	235
29	4.2	2	.02	16	1	.04	548	100	148
30	4.2	2	.02	16	1	.04	470	64	81
31	4.2	2	.02	--	--	--	399	56	60
TOTAL	394.0	--	143.12	876.4	--	44.34	27252	--	154223.85

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	335	39	35	822	1800	3990	617	770	1280
2	285	27	21	718	1320	2560	447	440	531
3	246	25	17	637	1150	1980	404	260	284
4	201	17	9.2	600	860	1390	661	887	1950
5	152	14	5.7	540	810	1180	416	380	427
6	134	13	4.7	493	660	879	422	280	319
7	130	10	3.5	447	540	652	822	899	2730
8	174	33	21	416	490	550	1070	1510	4360
9	951	831	2500	404	430	469	830	790	1770
10	980	355	982	398	420	451	752	510	1040
11	645	103	182	386	335	349	698	370	697
12	737	258	605	461	902	1120	626	290	490
13	1800	1390	7010	635	1060	1820	590	245	390
14	5380	5240	83100	475	620	795	680	410	753
15	2330	2450	17700	468	440	556	635	285	489
16	8830	12000	297000	768	1510	4790	582	210	330
17	5680	7040	112000	840	1720	3900	526	250	355
18	2760	4010	32300	542	680	995	454	210	257
19	2710	4060	31500	503	520	706	410	125	138
20	2560	3040	21300	489	425	561	360	105	102
21	7180	6900	133000	475	375	481	345	102	95
22	5960	5960	102000	447	425	513	330	100	89
23	11500	12700	462000	428	330	381	317	94	80
24	7610	14300	332000	416	240	270	313	93	79
25	3780	7980	84400	410	275	304	313	103	87
26	3840	7670	90000	422	240	273	305	108	89
27	6200	10500	204000	434	240	281	284	82	63
28	2870	5550	43000	468	280	354	261	74	52
29	1730	3650	17000	--	--	--	254	68	47
30	1240	2600	8700	--	--	--	244	65	43
31	974	2050	5390	--	--	--	229	60	37
TOTAL	89904	--	2087786.1	14542	--	32550	15197	--	19453

11382000 THOMES CREEK AT PASKENTA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	215	50	29	141	13	4.9	91	2	.49
2	208	45	25	148	17	6.8	90	2	.49
3	203	42	23	160	51	22	87	3	.70
4	201	42	23	173	71	33	80	3	.65
5	198	38	20	178	38	18	74	2	.40
6	198	40	21	173	28	13	71	2	.38
7	198	42	22	168	22	10	66	1	.18
8	195	32	17	165	18	8.0	71	2	.38
9	188	35	18	186	33	17	80	4	.86
10	190	30	15	174	22	10	66	2	.36
11	196	29	15	165	10	4.5	58	3	.47
12	186	28	14	157	9	3.8	52	4	.56
13	184	28	14	154	10	4.2	51	4	.55
14	182	32	16	148	8	3.2	63	6	1.0
15	174	38	18	148	8	3.2	62	5	.84
16	173	40	19	171	16	7.4	54	4	.58
17	166	30	13	188	26	13	51	7	.96
18	162	26	11	186	27	14	46	5	.62
19	156	27	11	178	17	8.2	42	3	.34
20	146	28	11	158	9	3.8	40	2	.22
21	142	24	9.2	140	8	3.0	38	3	.31
22	137	19	7.0	135	10	3.6	35	3	.28
23	132	18	6.4	135	10	3.6	33	3	.27
24	132	21	7.5	132	7	2.5	33	3	.27
25	133	17	6.1	130	7	2.5	31	3	.25
26	13[illegible]	22	8.2	133	6	2.2	29	2	.16
27	142	21	8.1	135	10	3.6	30	2	.16
28	142	15	5.8	120	8	2.6	33	4	.36
29	141	11	4.2	111	6	1.8	34	6	.55
30	140	14	5.3	103	5	1.4	30	3	.24
31	--	--	--	96	3	.78	--	--	--
TOTAL	5098	--	422.8	4689	--	235.58	1621	--	13.88

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	26	3	.21	7.0	2	.04	6.2	2	.03
2	24	9	.58	6.6	2	.04	5.7	2	.03
3	22	14	.83	6.6	2	.04	5.7	2	.03
4	21	14	.79	6.6	2	.04	6.2	2	.03
5	19	10	.51	6.6	3	.05	6.2	2	.03
6	18	7	.34	6.2	2	.03	6.6	2	.04
7	16	6	.26	6.2	1	.02	7.0	2	.04
8	14	5	.19	5.7	1	.02	5.7	2	.03
9	14	7	.26	5.3	2	.03	5.0	2	.03
10	14	6	.23	5.3	1	.01	4.7	1	.01
11	13	4	.14	5.3	2	.03	4.4	1	.01
12	13	4	.14	5.0	2	.03	4.4	1	.01
13	12	5	.16	4.7	2	.03	4.7	1	.01
14	12	5	.16	4.4	1	.01	4.4	1	.01
15	12	4	.13	4.4	2	.02	4.7	1	.01
16	12	3	.10	4.4	1	.01	4.7	1	.01
17	11	3	.09	4.7	1	.01	4.4	1	.01
18	10	3	.08	4.7	1	.01	4.7	1	.01
19	10	8	.22	4.4	2	.02	4.7	1	.01
20	9.6	12	.31	4.7	1	.01	4.4	1	.01
21	9.2	8	.20	4.4	2	.02	4.1	1	.01
22	8.3	4	.09	4.4	2	.02	3.8	1	.01
23	7.9	3	.06	4.7	2	.03	3.4	1	.01
24	7.9	3	.06	4.7	1	.01	3.1	1	.01
25	7.4	3	.06	4.7	2	.03	2.5	1	.01
26	7.4	5	.10	4.7	2	.03	2.5	1	.01
27	7.4	8	.16	4.7	2	.03	2.8	1	.01
28	7.9	4	.09	5.0	2	.03	2.8	1	.01
29	7.9	3	.06	5.3	2	.03	3.1	1	.01
30	7.4	3	.06	5.3	2	.03	2.2	1	.01
31	7.4	2	.04	6.2	2	.03	--	--	--
TOTAL	388.7	--	6.71	162.9	--	.79	134.8	--	.50

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 160259.8
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 2294880.67

11382000 THOMES CREEK AT PASKENTA, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 16, 1969	1240	13.0	152	388	159	--	--	--	--	--	36	61	98	100	--	--	V
NOV 5.....	1625	13.5	372	103	103	--	--	--	--	--	52	65	93	100	--	--	V
DEC 12.....	1045	7.0	3300	4230	37700	20	24	35	47	56	66	76	90	99	100	--	VPWC
DEC 14.....	1435	8.0	1380	994	3700	25	38	47	57	66	78	80	87	94	98	100	SBWC
DEC 19.....	1640	9.0	3640	3410	33500	14	22	31	41	51	63	75	88	95	99	100	VPWC
DEC 21.....	0830	11.0	5570	9930	149000	17	23	31	41	54	63	78	90	96	99	100	VPWC
DEC 23.....	1530	8.0	2230	2160	13000	14	21	32	42	52	60	71	86	98	100	--	VPWC
JAN 16, 1970	1215	9.0	9900	12700	339000	21	28	33	48	59	71	87	97	100	--	--	VPWC
JAN 19.....	1415	9.0	3440	6700	62200	14	20	25	36	46	57	71	84	95	99	100	VPWC
JAN 21.....	1215	9.5	6890	5790	108000	15	22	29	42	54	65	79	92	99	100	--	VPWC
JAN 23.....	1215	10.0	13100	10700	378000	13	19	26	35	47	59	76	89	96	98	100	VPWC
JAN 23.....	1620	10.0	14600	20200	796000	24	30	36	51	64	75	91	98	100	--	--	VPWC
JAN 23.....	2025	10.0	17100	19300	891000	24	26	34	47	60	73	88	98	100	--	--	VPWC
JAN 26.....	1320	8.5	2500	5640	38100	21	27	32	46	58	68	78	88	97	100	--	VPWC

11384600 LITTLE STONY CREEK ABOVE EAST PARK RESERVOIR, NEAR LODOGA, CALIF.

LOCATION.--Lat 39°17'48", long 122°32'22", in SE¼NW¼ sec.28, T.17 N., R.6 W., Colusa County, temperature recorder at gaging station on left bank, 1.1 miles upstream from county bridge on Lodoga-Stonyfork road, 1.4 miles downstream from Frenzel Creek, and 2.8 miles southwest of Lodoga.
DRAINAGE AREA.--45.6 sq mi.
PERIOD OF RECORD.--Water temperatures: May 1967 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 29.0°C July 25-27; minimum, 1.0°C Jan. 6.
EXTREMES, 1967-70.--Water temperatures: Maximum, 30.0°C July 20-24, 1969; minimum, freezing point Dec. 21-23, 1968.
REMARKS.--No record Oct. 1, Nov. 16, 27, 28, Dec. 2, 3, June 6-20, Sept. 2-4. Clock stopped Mar. 16 to Apr. 1, Sept. 13-30; range in temperature, 6.5°C to 9.0°C, and 15.0°C to 20.0°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	15.0	10.0	6.0	2.5	6.0	4.0	8.0	7.5	9.0	8.5
2	19.5	13.5	15.0	10.0	--	--	5.0	3.0	8.5	7.0	8.5	7.5
3	18.0	12.5	15.0	10.0	--	--	4.0	2.0	9.5	8.0	8.0	7.5
4	18.0	12.0	15.5	10.5	8.0	4.5	3.5	2.0	9.5	8.0	8.0	7.5
5	17.5	10.0	13.5	11.5	7.0	3.0	3.0	1.5	10.0	8.5	8.0	7.5
6	17.0	10.0	12.5	9.5	7.5	4.5	4.0	1.0	10.0	8.5	8.5	8.0
7	16.0	10.5	11.0	9.0	8.0	5.0	5.0	3.5	10.0	8.0	8.5	8.0
8	17.5	13.0	13.0	9.0	8.5	6.0	5.5	5.0	10.0	8.0	8.5	8.0
9	17.0	11.0	11.5	8.0	9.0	6.0	8.0	5.5	10.0	9.0	8.0	7.0
10	17.5	12.0	11.0	7.5	10.0	7.0	8.5	7.5	10.0	9.0	8.0	7.0
11	16.0	10.0	12.5	8.0	10.0	9.0	8.5	7.5	10.0	9.0	8.0	7.5
12	16.0	10.0	12.5	8.5	11.5	10.0	9.0	8.0	10.0	8.5	8.5	8.0
13	14.0	8.5	12.0	8.5	13.5	10.5	9.5	8.5	9.0	7.5	9.0	8.0
14	13.0	11.0	12.0	8.0	12.0	10.0	9.5	8.5	9.0	8.0	8.5	7.5
15	12.5	11.5	12.0	8.0	11.0	9.0	9.0	8.5	9.0	8.0	8.0	7.0
16	15.0	10.5	--	--	10.5	8.5	10.5	9.0	8.5	6.5	--	--
17	14.0	10.0	8.5	4.0	11.0	9.5	10.0	9.0	8.0	6.0	--	--
18	14.0	9.0	8.5	4.0	11.5	10.5	10.0	9.0	7.5	6.5	--	--
19	14.0	8.5	8.0	4.0	11.5	10.5	10.5	9.0	7.5	6.5	--	--
20	15.5	9.0	7.5	3.5	12.5	10.5	10.5	8.5	7.5	6.0	--	--
21	17.0	11.5	8.0	4.0	12.5	8.5	11.0	10.5	7.5	6.5	--	--
22	17.0	11.5	9.0	5.0	9.5	8.5	11.5	11.0	8.0	7.0	--	--
23	16.5	12.0	8.0	5.0	10.5	9.5	11.0	9.5	8.0	7.0	--	--
24	16.5	11.5	8.5	5.0	11.0	10.0	10.0	9.0	8.5	7.5	--	--
25	15.5	10.5	9.0	5.0	10.5	8.0	10.0	9.0	8.5	7.5	--	--
26	15.0	11.0	9.0	5.0	8.5	7.0	10.0	9.5	8.5	8.0	--	--
27	15.0	11.0	--	--	7.0	5.5	10.0	7.0	8.5	8.0	--	--
28	15.0	10.0	--	--	6.5	5.0	8.0	6.0	9.0	8.5	--	--
29	14.5	9.0	7.0	3.0	6.5	5.0	7.5	6.0	--	--	--	--
30	15.0	10.0	6.5	3.0	7.0	5.0	8.5	7.0	--	--	--	--
31	15.0	10.5	--	--	6.0	4.0	8.0	6.5	--	--	--	--
AVE	15.8	10.7	10.8	6.9	9.5	7.3	8.2	6.8	8.9	7.6	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	14.0	13.0	24.0	23.0	26.0	24.0	27.0	25.0	22.5	20.5
2	10.0	9.0	15.0	13.5	24.5	23.0	26.0	24.5	27.0	24.5	--	--
3	10.0	9.0	16.0	14.5	25.5	24.0	27.5	25.5	27.5	24.5	--	--
4	10.0	9.0	16.5	15.5	26.0	24.0	27.5	26.5	27.0	25.0	--	--
5	10.5	9.0	16.0	15.5	26.5	24.5	28.0	26.0	27.0	25.0	20.0	18.0
6	10.5	9.5	--	--	--	--	27.5	26.5	27.5	24.0	21.0	18.0
7	10.5	9.5	19.0	18.0	--	--	28.0	26.5	27.0	25.0	21.5	19.0
8	10.5	9.5	19.0	18.0	--	--	27.5	25.0	26.5	25.5	21.5	19.5
9	10.5	10.0	19.0	18.5	--	--	27.5	25.0	27.0	24.0	21.5	19.5
10	11.0	10.0	19.0	18.0	--	--	27.0	24.0	26.5	24.0	21.5	19.5
11	11.0	10.5	19.0	18.0	--	--	27.5	25.0	26.5	24.0	21.5	19.0
12	12.0	11.0	18.5	17.5	--	--	28.0	25.0	26.5	24.0	21.0	19.0
13	11.5	11.0	18.5	17.0	--	--	28.0	25.5	26.5	24.0	--	--
14	11.0	10.0	19.0	18.0	--	--	28.0	25.5	26.5	24.0	--	--
15	10.5	10.0	19.5	19.0	--	--	28.5	26.5	26.5	24.0	--	--
16	10.0	9.5	20.5	19.5	--	--	28.0	26.0	26.0	24.0	--	--
17	10.0	9.5	21.5	20.5	--	--	28.5	26.0	26.0	24.0	--	--
18	10.5	10.0	22.0	21.0	--	--	28.5	26.0	25.5	23.0	--	--
19	11.0	10.0	22.0	21.0	--	--	28.0	26.0	25.0	22.5	--	--
20	12.0	11.0	22.0	21.0	--	--	28.0	26.5	25.0	22.5	--	--
21	11.5	11.0	22.0	21.0	26.0	25.0	28.5	26.0	25.0	22.5	--	--
22	11.5	11.0	22.0	21.0	27.0	26.0	28.5	26.0	25.0	22.5	--	--
23	12.0	11.0	22.0	21.5	28.0	26.5	28.5	26.0	24.5	22.5	--	--
24	12.0	11.0	23.0	21.5	28.5	27.0	28.5	26.0	24.0	21.5	--	--
25	12.0	11.0	23.0	22.0	28.5	27.0	29.0	26.0	24.0	21.5	--	--
26	12.5	11.5	23.5	22.5	28.0	26.5	29.0	26.5	23.5	21.5	--	--
27	12.5	12.0	24.0	23.0	28.0	26.5	29.0	26.5	23.5	21.5	--	--
28	12.5	11.5	23.5	22.5	28.0	26.0	28.5	26.0	23.5	21.0	--	--
29	12.5	11.5	24.0	22.5	27.0	26.0	28.0	26.0	23.5	21.0	--	--
30	13.0	12.0	23.5	22.5	26.0	25.0	27.5	25.0	23.0	21.0	--	--
31	--	--	23.5	22.5	--	--	27.5	25.0	22.5	20.5	--	--
AVE	11.2	10.4	20.3	19.3	--	--	27.9	25.7	25.5	23.2	--	--

11388000 STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.

LOCATION.--Lat 39°49'07", long 122°19'26", in SW¼ 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.--741 sq mi.
PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1969, water year 1970 (partial-record station).
Water temperatures: June 1969 to September 1970.
Sediment records: Water years 1958-62 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.5°C Aug. 1, 28.
EXTREMES, June 1969 to September 1970.--Water temperatures: Maximum, 28.5°C Aug. 1, 28, 1970.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Temperature recorder malfunction Oct. 1, Oct. 4 to Nov. 2, Nov. 11-13, Nov. 28 to Dec. 2, Dec. 21, Dec. 28 to Mar. 16, Apr. 15 to May 4.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
NOV. 05...	1210	84	--	12.9	--	--	15	--	208	0	--	14
JAN. 07...	1215	53	7.2	14.0	--	--	15	--	133	0	--	18
MAR. 04...	1155	47	8.9	11.8	--	--	11	--	137	0	--	9.4
MAY 06...	1145	291	--	11.4	34	15	14	1.2	160	0	24	12
JULY 02...	0800	208	20.6	9.1	--	--	15	--	177	0	--	12
SEP. 03...	1400	141	25.0	9.3	--	--	16	--	203	0	--	14

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 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 (MG/L)
NOV. 05...	.1	250	--	--	177	6	171	16	.5	382	8.3	27
JAN. 07...	1.2	200	--	--	127	18	109	20	.6	303	7.8	115
MAR. 04...	1.2	120	--	--	122	10	112	16	.4	281	8.0	120
MAY 06...	.1	10	179	141	142	11	131	17	.5	330	8.3	25
JULY 02...	.1	130	--	--	158	13	145	17	.5	377	8.3	30
SEP. 03...	.1	270	--	--	174	7	167	17	.5	385	8.0	55

11388000 STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	--	--	--	--	--	--
2	22.0	19.0	--	--	--	--	--	--	--	--	--	--
3	21.5	19.0	18.0	16.0	12.5	12.0	--	--	--	--	--	--
4	--	--	18.0	15.0	12.5	12.5	--	--	--	--	--	--
5	--	--	18.0	16.0	12.5	12.0	--	--	--	--	--	--
6	--	--	18.0	15.0	12.0	12.0	--	--	--	--	--	--
7	--	--	16.0	15.0	13.0	12.0	--	--	--	--	--	--
8	--	--	17.0	14.0	12.5	12.0	--	--	--	--	--	--
9	--	--	17.0	13.0	14.0	12.0	--	--	--	--	--	--
10	--	--	17.5	14.0	13.0	13.0	--	--	--	--	--	--
11	--	--	--	--	13.5	12.0	--	--	--	--	--	--
12	--	--	--	--	13.0	12.0	--	--	--	--	--	--
13	--	--	--	--	13.0	12.5	--	--	--	--	--	--
14	--	--	17.0	14.0	14.0	13.0	--	--	--	--	--	--
15	--	--	16.0	14.0	13.5	12.5	--	--	--	--	--	--
16	--	--	17.0	13.0	14.0	12.5	--	--	--	--	--	--
17	--	--	16.0	12.5	14.0	13.5	--	--	--	--	14.0	12.5
18	--	--	15.0	13.0	15.0	14.0	--	--	--	--	14.5	12.5
19	--	--	15.0	12.0	14.0	14.0	--	--	--	--	15.0	12.0
20	--	--	14.0	12.5	15.5	13.0	--	--	--	--	17.0	12.0
21	--	--	13.0	12.0	--	--	--	--	--	--	16.0	12.0
22	--	--	13.0	12.0	14.0	13.0	--	--	--	--	17.0	12.0
23	--	--	14.0	12.0	13.5	13.0	--	--	--	--	16.5	12.0
24	--	--	13.0	12.0	14.0	13.5	--	--	--	--	15.5	12.0
25	--	--	13.0	12.5	14.0	13.0	--	--	--	--	15.0	12.0
26	--	--	13.0	12.0	14.0	12.0	--	--	--	--	14.5	12.0
27	--	--	14.0	12.5	14.0	12.0	--	--	--	--	15.0	12.0
28	--	--	--	--	--	--	--	--	--	--	15.0	12.0
29	--	--	--	--	--	--	--	--	--	--	15.0	12.0
30	--	--	--	--	--	--	--	--	--	--	14.5	12.0
31	--	--	--	--	--	--	--	--	--	--	15.0	12.0
AVE	--	--	--	--	--	--	--	--	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	12.0	--	--	18.0	16.0	22.5	20.5	28.5	26.0	27.0	23.0
2	15.0	11.5	--	--	20.0	17.0	22.5	20.0	28.0	25.5	27.0	22.5
3	15.5	12.0	--	--	19.0	16.5	22.0	20.5	28.0	25.0	25.0	22.5
4	16.0	12.0	--	--	19.0	16.5	22.5	21.0	27.5	25.5	24.5	22.0
5	16.5	12.0	15.0	13.0	19.5	16.5	23.0	21.0	28.0	25.5	24.0	22.0
6	17.0	12.0	15.0	13.0	19.5	16.5	23.5	21.5	27.0	24.0	24.0	21.0
7	15.5	12.0	14.5	13.0	19.0	16.5	24.5	22.0	27.0	24.0	23.5	21.0
8	16.5	12.0	14.5	13.0	20.5	16.5	25.0	22.5	27.0	23.5	24.0	21.0
9	16.0	12.0	15.0	13.0	21.5	19.0	24.0	22.0	26.0	23.5	24.0	21.5
10	17.0	12.5	15.0	13.0	22.0	20.5	24.5	22.5	26.5	24.0	24.0	21.5
11	16.0	12.0	15.5	13.5	21.0	18.5	24.5	22.5	26.0	24.5	24.0	21.5
12	16.5	12.0	15.5	13.5	20.0	18.5	24.5	22.5	26.0	23.5	23.5	21.5
13	15.0	13.0	16.0	14.0	20.5	18.5	24.0	22.5	27.0	23.5	24.0	21.0
14	17.0	13.0	16.0	14.0	21.5	19.5	24.5	22.5	27.0	23.5	23.0	21.0
15	--	--	16.0	14.0	22.0	20.0	24.0	22.5	27.0	23.5	22.0	20.0
16	--	--	16.0	14.0	22.0	20.0	25.0	23.0	27.0	23.0	22.5	19.5
17	--	--	16.0	14.0	24.5	20.0	25.0	23.5	26.5	23.0	22.0	19.5
18	--	--	16.0	14.0	24.0	22.0	25.5	24.0	27.0	23.0	22.0	19.5
19	--	--	16.0	14.0	25.0	22.5	25.5	24.0	27.0	23.0	21.5	19.5
20	--	--	16.0	14.5	24.5	23.0	26.0	24.5	27.5	23.5	21.5	19.5
21	--	--	16.5	14.5	24.5	23.0	26.5	24.5	27.5	23.5	21.5	19.0
22	--	--	17.0	15.0	24.5	23.5	26.5	24.0	26.5	23.5	21.5	19.0
23	--	--	17.0	15.0	25.0	23.5	26.5	24.5	27.0	23.5	21.5	18.5
24	--	--	17.0	15.0	24.0	22.5	26.0	25.0	27.5	23.5	20.5	18.0
25	--	--	17.0	15.0	23.0	22.0	26.5	25.0	27.0	23.5	20.0	17.5
26	--	--	17.0	15.0	23.0	21.0	27.0	25.0	27.0	23.5	19.0	17.0
27	--	--	17.0	15.0	22.5	21.0	27.0	25.5	27.0	23.0	20.0	17.0
28	--	--	17.0	15.0	21.5	20.5	27.5	25.5	28.5	23.5	20.0	17.0
29	--	--	17.0	15.0	22.5	20.5	27.0	25.5	27.0	23.0	19.5	17.0
30	--	--	17.0	15.5	22.5	20.5	27.5	25.5	26.5	23.0	19.5	17.0
31	--	--	17.0	15.5	--	--	27.5	26.0	27.5	23.0	--	--
AVE	--	--	16.1	14.2	21.9	19.7	25.1	23.3	27.1	23.8	22.5	19.9

11389000 SACRAMENTO RIVER AT BUTTE CITY, CALIF.

LOCATION.--Lat 39°27'28", long 121°59'35", in SE¼NE¼ 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 (revised).
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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.0°C on several days during June and August; minimum, 7.5°C Jan. 5-7.
EXTREMES, 1955-58, 1959-67, 1969-70.--Water temperatures: Maximum, 24.0°C June 2, 3, 5, 7, 1960; minimum (1955-57, 1959-62, 1963-67, 1969-70), freezing point Jan. 2-5, 1960.
REMARKS.--Clock stopped Oct. 15-22; range in temperature, 12.0°C to 14.0°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	9.5	9.0	8.5	9.0	9.0	10.5	10.0
2	16.0	14.5	13.5	12.5	10.0	9.5	8.5	8.5	9.5	9.0	10.0	9.5
3	15.0	13.5	13.5	12.5	10.0	9.5	8.5	8.0	10.0	9.5	10.0	9.5
4	14.0	13.0	14.0	13.0	10.0	9.5	8.5	8.0	10.0	9.5	10.0	9.5
5	14.5	12.5	14.0	13.0	10.0	9.5	8.0	7.5	10.0	10.0	9.5	8.5
6	14.0	12.5	14.0	13.0	10.0	10.0	7.5	7.5	10.0	10.0	10.0	9.0
7	14.0	13.0	14.0	13.0	10.0	10.0	8.0	7.5	10.0	9.5	11.5	10.0
8	13.5	13.0	13.0	12.0	10.5	10.0	8.5	8.0	10.0	9.5	11.0	11.0
9	14.0	13.0	13.0	11.5	10.5	10.0	9.0	8.5	10.0	9.5	11.0	10.5
10	14.5	13.5	13.0	12.0	10.5	10.0	8.5	8.0	10.0	10.0	10.5	10.5
11	14.0	12.5	13.5	12.5	10.5	10.0	8.5	8.5	10.0	10.0	10.5	10.0
12	14.0	12.5	14.0	13.0	10.0	10.0	9.0	8.5	10.0	10.0	11.0	10.0
13	13.5	12.5	14.0	13.0	10.5	10.0	9.5	9.0	10.0	9.5	11.5	11.0
14	12.5	12.0	14.0	13.5	10.5	10.0	10.0	9.5	9.5	9.0	12.5	11.5
15	--	--	14.0	13.0	10.5	10.5	10.0	9.5	9.5	9.0	12.5	12.0
16	--	--	14.0	12.5	10.5	10.5	10.0	9.0	9.5	9.5	13.0	12.0
17	--	--	13.5	12.0	11.0	10.5	10.0	9.5	9.5	9.0	12.5	11.5
18	--	--	12.5	11.5	11.0	10.5	10.0	10.0	9.0	9.0	12.5	11.5
19	--	--	12.0	11.0	11.0	11.0	10.0	10.0	9.0	9.0	12.0	11.0
20	--	--	12.0	11.0	11.5	11.0	10.0	10.0	9.5	8.5	12.0	11.0
21	--	--	12.0	11.0	12.5	11.5	11.0	10.0	9.5	9.0	12.5	11.5
22	--	--	12.0	11.0	12.5	11.0	11.5	11.0	10.0	9.0	13.0	12.0
23	13.5	13.0	12.0	11.0	11.0	10.0	12.0	11.5	10.0	9.5	13.5	12.5
24	13.5	13.0	12.0	11.0	10.5	10.0	11.5	11.0	10.0	9.5	14.0	13.0
25	13.5	12.5	12.0	11.0	11.0	10.0	11.0	10.0	10.0	10.0	14.0	13.0
26	13.0	12.0	11.5	11.0	11.0	10.5	10.0	10.0	10.0	10.0	14.0	13.0
27	13.0	12.0	11.5	11.0	10.5	9.5	10.5	10.0	10.5	10.0	14.0	12.5
28	13.0	12.0	11.0	10.5	9.5	9.0	10.5	9.5	10.5	10.0	13.5	12.5
29	13.0	12.0	11.0	10.0	9.0	9.0	9.5	8.5	--	--	13.5	12.5
30	13.0	12.0	10.5	10.0	9.5	9.0	9.0	9.0	--	--	13.0	12.0
31	13.0	12.0	--	--	9.5	9.0	9.0	9.0	--	--	13.0	12.0
AVE	--	--	12.8	11.8	10.5	10.0	9.6	9.1	9.8	9.5	12.0	11.2

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	12.0	15.0	13.0	19.0	18.0	18.0	16.0	19.0	17.5	18.0	17.0
2	13.5	12.5	16.0	14.0	19.5	18.0	18.5	17.0	19.0	17.5	18.0	17.0
3	13.5	12.5	16.5	15.0	20.0	19.0	18.5	17.5	19.5	18.0	18.0	17.0
4	14.0	13.0	16.5	15.0	20.0	18.5	19.5	18.0	19.5	18.5	18.0	17.0
5	14.5	13.5	16.5	15.5	19.5	18.5	19.5	18.5	19.5	18.5	17.0	16.0
6	15.0	14.0	16.0	15.0	19.5	18.0	19.5	18.5	20.0	18.5	17.5	16.0
7	15.0	13.5	16.0	15.0	19.0	18.0	19.5	18.5	20.0	19.0	18.5	17.0
8	14.5	13.5	16.0	15.0	18.5	16.0	19.5	18.5	20.0	18.5	19.0	18.0
9	14.5	14.0	15.5	14.5	16.0	15.0	19.0	18.5	19.5	18.5	19.0	18.0
10	15.5	14.5	15.5	14.5	16.0	14.5	19.0	18.0	19.5	18.5	19.0	18.0
11	15.0	14.0	15.0	14.0	16.5	15.0	19.0	17.5	19.5	18.5	18.5	17.5
12	15.0	13.5	14.5	13.5	16.0	15.0	19.0	17.5	19.5	18.5	18.5	17.5
13	14.5	13.0	14.5	13.0	16.5	15.5	19.0	17.5	19.5	18.5	17.5	16.5
14	13.5	13.0	15.0	13.0	17.0	16.0	19.0	17.5	19.5	18.5	17.0	16.0
15	13.5	13.0	17.0	15.0	17.5	16.0	19.0	18.0	19.5	18.5	16.0	15.0
16	14.0	13.0	18.0	17.0	18.0	16.5	19.0	17.5	19.5	18.5	16.0	15.0
17	14.0	13.0	19.0	18.0	18.0	17.0	19.0	17.5	19.5	18.5	17.0	15.5
18	14.0	13.0	19.0	18.0	18.5	17.0	19.0	17.5	19.5	18.5	17.0	16.5
19	14.5	13.0	19.0	17.5	19.0	18.0	19.0	17.5	19.5	18.0	17.0	16.5
20	14.0	13.0	18.0	17.0	19.5	18.0	18.5	17.5	19.0	18.0	17.0	16.0
21	14.0	13.0	18.0	17.0	20.0	18.5	19.0	17.0	19.0	17.5	17.0	16.0
22	14.5	13.0	18.5	17.5	20.0	18.5	19.5	17.5	19.0	17.5	16.5	15.5
23	14.5	14.0	18.0	17.0	20.0	18.5	19.5	18.0	19.0	17.5	17.0	16.0
24	15.0	14.0	18.5	17.0	20.0	18.5	19.5	18.0	18.5	17.5	16.5	15.5
25	15.0	14.0	19.5	18.0	20.0	19.0	19.5	18.0	18.5	17.5	15.5	15.0
26	14.0	13.0	19.5	18.0	19.0	17.5	19.5	17.5	18.5	17.5	16.0	15.0
27	14.0	12.5	19.0	18.0	18.0	17.0	19.0	18.0	18.5	17.5	16.0	15.0
28	14.0	12.0	19.0	18.0	18.0	17.0	19.0	18.0	18.0	17.0	16.0	15.5
29	14.0	12.0	19.0	18.0	17.0	15.5	19.0	17.5	18.0	17.0	16.0	15.5
30	15.0	13.0	18.0	17.5	17.0	15.5	19.0	17.5	18.5	17.0	16.0	15.0
31	--	--	18.5	17.0	--	--	19.0	17.5	18.5	17.0	--	--
AVE	14.3	13.2	17.2	16.0	18.4	17.1	19.1	17.7	19.2	18.0	17.2	16.2

11390000 BUTTE CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°43'34", long 121°42'28", in NW¼NW¼ 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: October 1953 to September 1968, water years 1969-70 (partial-record station). Water temperatures: November 1961 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 22.5°C July 5; minimum, 3.0°C Jan. 5, 6.
EXTREMES, 1961-70.--Water temperatures: Maximum (1961-64, 1965-70), 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 and reviewed by Geological Survey. Temperature recorder malfunction Oct. 1-28, May 10-25; range in temperature, 10.0°C to 18.0°C, and 11.0°C to 16.0°C, respectively. No record Nov. 27, 28, Dec. 15-18, 21, 22.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)
NOV.								
05...	1550	403	12.2	11.6	--	--	3.9	--
JAN.								
07...	1700	306	--	14.7	--	--	2.8	--
MAR.								
04...	1555	1200	--	13.3	--	--	2.3	--
MAY								
07...	1100	321	13.3	11.8	8.6	3.8	2.8	.9
JULY								
14...	1200	152	--	9.6	--	--	3.8	--
SEP.								
04...	1000	135	15.0	10.9	--	--	3.8	--

DATE	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
NOV.								
05...	62	0	2.8	60	49	112	7.0	36
JAN.								
07...	47	0	.5	30	35	81	7.3	2
MAR.								
04...	38	0	.0	100	31	69	7.5	10
MAY								
07...	48	0	.0	0	37	81	7.6	4
JULY								
14...	62	0	.2	0	45	104	7.9	1
SEP.								
04...	64	0	.4	140	53	109	7.9	1

11390000 BUTTE CREEK NEAR CHICO, CALIF.--Continued

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	--	--	11.0	9.0	5.5	4.0	5.0	4.0	8.0	7.0	9.0	8.5
2	--	--	11.0	9.5	5.5	4.0	5.0	4.0	8.0	6.5	8.5	8.0
3	--	--	11.0	9.5	5.5	4.5	5.0	3.5	8.5	7.5	8.0	7.5
4	--	--	12.0	10.0	5.0	4.0	4.5	3.5	8.5	8.0	8.0	7.5
5	--	--	12.5	11.5	5.0	3.5	4.0	3.0	9.0	8.5	8.5	7.0
6	--	--	11.5	10.5	5.0	4.5	3.5	3.0	9.0	8.5	9.5	8.0
7	--	--	10.5	10.0	5.5	4.5	4.5	3.5	9.0	8.5	10.0	9.5
8	--	--	10.5	10.0	5.5	5.0	6.0	4.5	9.0	8.5	10.0	9.5
9	--	--	10.0	9.0	6.0	5.0	7.5	6.0	9.5	9.0	9.5	9.0
10	--	--	9.5	8.5	5.5	5.5	7.5	7.0	10.0	9.0	9.0	8.5
11	--	--	10.0	8.0	6.0	5.5	8.0	7.5	10.0	9.5	9.0	8.5
12	--	--	9.5	8.0	8.5	6.0	8.0	8.0	10.0	9.5	10.0	8.5
13	--	--	9.5	8.5	8.5	8.5	9.0	8.0	9.5	8.5	10.5	9.5
14	--	--	9.5	8.0	8.5	7.5	9.0	8.5	8.5	7.5	11.5	10.5
15	--	--	9.0	8.5	--	--	9.0	8.5	8.5	8.0	10.5	9.5
16	--	--	9.5	8.5	--	--	9.0	8.5	9.0	8.5	10.5	9.5
17	--	--	8.5	7.0	--	--	9.0	8.5	8.5	8.0	10.5	9.0
18	--	--	7.5	6.5	--	--	9.0	8.5	8.0	7.0	9.0	7.5
19	--	--	7.0	6.0	9.0	7.5	10.0	9.0	7.5	6.5	9.0	7.0
20	--	--	7.5	6.5	9.5	8.5	10.0	9.5	7.5	6.0	9.0	7.5
21	--	--	7.5	6.5	--	--	11.0	10.0	7.5	6.5	10.0	8.0
22	--	--	7.5	6.5	--	--	11.0	10.5	8.0	7.0	10.5	8.5
23	--	--	7.5	6.5	8.5	8.5	10.5	10.5	8.0	7.0	11.0	9.5
24	--	--	7.0	6.0	9.0	8.5	10.5	9.5	8.5	7.5	11.5	10.0
25	--	--	7.0	6.0	9.0	8.5	9.5	8.5	8.5	7.5	11.5	10.0
26	--	--	7.0	6.0	8.5	6.5	9.5	9.0	8.5	8.0	11.0	9.5
27	--	--	--	--	7.0	6.0	9.5	8.5	9.0	8.0	10.5	8.5
28	--	--	--	--	6.0	4.5	8.5	7.0	9.0	8.5	10.5	8.5
29	10.0	9.0	6.0	4.5	5.0	4.0	8.0	6.5	--	--	10.5	9.0
30	10.5	8.5	6.0	4.5	5.5	4.5	8.0	7.5	--	--	10.0	8.5
31	10.5	9.0	--	--	5.5	4.5	8.0	7.0	--	--	10.0	8.0
AVE	--	--	9.0	7.8	6.7	5.7	8.0	7.1	8.7	7.9	9.9	8.6

DAY	APR MAX	APR MIN	MAY MAX	MAY MIN	JUN MAX	JUN MIN	JUL MAX	JUL MIN	AUG MAX	AUG MIN	SEP MAX	SEP MIN
1	10.0	7.5	14.0	11.0	17.0	14.0	19.5	16.0	20.5	17.0	18.5	15.5
2	10.0	8.0	15.0	12.0	18.5	15.5	20.5	16.5	20.5	17.0	18.0	15.0
3	10.0	8.0	15.5	12.5	19.5	16.5	21.0	17.5	21.0	17.5	17.5	14.5
4	10.5	8.0	16.0	13.0	19.5	16.5	21.5	18.0	21.0	18.0	17.0	15.0
5	11.0	8.5	15.0	13.5	19.5	16.5	22.5	19.0	21.0	17.5	16.0	13.5
6	11.5	9.5	15.0	13.5	19.5	16.5	22.0	18.5	21.0	17.5	16.5	13.5
7	11.5	9.5	15.0	12.5	18.5	16.5	21.5	18.5	21.0	17.0	17.5	14.5
8	11.0	9.0	13.5	13.0	17.0	14.5	21.5	18.0	21.0	17.0	18.5	15.5
9	11.0	9.5	13.5	12.5	15.0	14.0	20.0	18.0	21.0	17.5	18.5	15.5
10	12.0	10.0	--	--	16.0	13.0	20.5	17.0	21.5	17.5	18.0	15.0
11	11.5	9.5	--	--	16.5	13.0	21.0	17.5	21.5	18.0	17.5	15.0
12	10.5	8.5	--	--	15.5	13.5	21.0	17.5	21.0	17.5	17.0	14.0
13	9.0	8.0	--	--	16.0	13.5	21.0	17.5	21.0	17.5	16.0	13.5
14	8.0	7.0	--	--	16.5	13.5	21.5	17.5	21.0	17.5	14.5	12.0
15	9.0	6.5	--	--	17.0	14.0	22.0	18.5	21.5	18.0	14.0	11.0
16	7.5	7.0	--	--	17.5	14.5	21.5	18.5	21.0	17.5	14.5	11.0
17	9.0	6.5	--	--	18.0	15.0	21.5	18.0	20.5	17.5	15.0	12.0
18	9.0	7.5	--	--	19.0	16.0	21.5	18.0	21.0	18.0	15.0	12.5
19	11.0	8.5	--	--	20.0	17.0	21.5	17.5	21.0	18.0	15.5	13.5
20	10.0	8.0	--	--	21.0	18.0	20.5	18.0	20.5	17.5	15.5	13.0
21	9.5	7.5	--	--	22.0	19.0	21.0	17.5	20.5	17.0	15.0	12.5
22	10.5	7.5	--	--	22.0	19.0	21.0	17.5	20.0	16.5	14.5	11.5
23	10.5	8.5	--	--	22.0	19.0	21.5	18.0	19.5	16.0	15.0	12.0
24	11.0	8.5	--	--	22.0	19.5	21.5	18.5	19.5	16.0	14.5	12.0
25	11.5	9.5	--	--	20.5	19.0	21.5	18.0	19.5	16.0	14.0	11.5
26	10.5	9.0	17.0	14.0	20.5	18.5	21.5	18.0	19.0	16.0	14.0	11.5
27	9.0	7.5	17.0	14.5	20.5	18.0	21.0	18.0	19.0	15.5	14.0	11.5
28	8.5	6.5	16.5	14.0	18.5	17.0	20.5	17.0	19.0	15.5	14.0	11.5
29	11.0	7.5	16.5	13.5	18.0	15.5	20.5	17.0	19.0	15.5	14.0	12.0
30	12.5	9.0	16.0	13.5	18.0	15.0	20.0	16.5	19.0	16.0	14.0	11.5
31	--	--	16.5	13.0	--	--	20.0	16.5	19.0	15.5	--	--
AVE	10.3	8.2	--	--	18.7	16.0	21.1	17.7	20.4	17.0	15.8	13.1

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 (revised).
PERIOD OF RECORD.--Water temperatures: October 1966 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 22.0°C June 23; minimum, 9.0°C Jan. 4-7, Mar. 6.
EXTREMES, 1966-70.--Water temperatures: Maximum, 22.0°C June 23, 1970; minimum, 4.0°C Dec. 26, 1968.
REMARKS.--Clock stopped Jan. 24 to Mar. 4; range in temperature, 11.0°C to 13.5°C. Recorder malfunction Sept. 15, 24-27.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	16.0	14.0	13.5	10.0	9.5	10.5	10.0	--	--	--	--
2	17.0	16.0	14.0	14.0	10.0	10.0	10.5	10.0	--	--	--	--
3	16.0	14.5	14.5	14.0	11.0	10.0	10.0	9.5	--	--	--	--
4	15.0	14.0	14.5	14.0	11.0	10.5	9.5	9.0	--	--	--	--
5	14.5	14.0	15.0	14.5	11.0	10.5	9.5	9.0	--	--	11.0	10.0
6	14.5	14.0	15.0	14.5	11.0	10.5	9.0	9.0	--	--	10.0	9.0
7	14.5	14.0	14.5	14.0	11.0	11.0	10.0	9.0	--	--	11.0	9.5
8	14.5	14.0	14.0	13.0	11.5	11.0	10.0	10.0	--	--	12.0	11.0
9	14.5	14.0	13.0	12.5	11.5	11.5	10.0	10.0	--	--	12.0	12.0
10	14.5	14.0	12.5	12.5	12.0	11.5	10.0	10.0	--	--	12.0	11.0
11	14.5	13.5	13.0	12.5	11.5	11.5	10.5	10.0	--	--	11.5	11.0
12	14.0	13.0	13.0	13.0	11.5	11.5	11.0	10.5	--	--	11.0	10.5
13	14.0	13.5	13.0	13.0	12.0	11.5	11.0	10.5	--	--	11.5	10.5
14	13.5	13.0	13.5	13.0	12.0	11.5	11.5	11.0	--	--	12.0	11.5
15	13.0	13.0	13.0	12.5	12.0	11.5	11.5	11.0	--	--	13.0	12.0
16	13.5	13.0	12.5	12.0	12.0	12.0	11.5	11.0	--	--	13.0	12.5
17	13.5	13.0	12.0	11.0	12.0	12.0	11.5	11.0	--	--	13.5	12.5
18	13.5	13.0	11.0	10.0	12.5	12.0	11.5	11.5	--	--	13.0	12.5
19	13.0	12.5	10.0	10.0	13.0	12.5	12.0	11.5	--	--	12.5	12.0
20	13.0	13.0	10.0	9.5	13.5	13.0	12.0	12.0	--	--	12.0	12.0
21	14.0	13.5	10.0	9.5	14.0	13.5	12.5	12.0	--	--	12.5	12.0
22	15.0	14.0	10.0	9.5	13.5	12.0	13.0	12.5	--	--	12.5	12.0
23	15.0	15.0	10.0	10.0	12.0	12.0	13.5	13.0	--	--	13.0	12.5
24	15.0	15.0	10.0	10.0	12.0	12.0	--	--	--	--	13.5	13.0
25	15.0	15.0	10.5	10.0	12.5	12.0	--	--	--	--	14.0	13.5
26	15.0	14.5	10.5	10.0	12.5	11.5	--	--	--	--	14.0	14.0
27	14.5	14.5	10.0	10.0	11.5	11.0	--	--	--	--	14.0	13.5
28	14.5	14.0	10.5	10.0	11.0	10.5	--	--	--	--	13.5	13.0
29	14.0	13.5	10.0	10.0	11.0	10.5	--	--	--	--	13.5	13.5
30	14.0	13.5	10.0	9.5	11.0	11.0	--	--	--	--	13.5	13.0
31	14.0	13.5	--	--	11.0	10.5	--	--	--	--	13.0	12.5
AVE	14.4	13.9	12.1	11.7	11.7	11.3	--	--	--	--	12.5	11.9

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	12.5	15.0	14.0	20.0	19.0	18.5	17.5	20.0	19.5	19.0	18.5
2	13.0	13.0	16.0	15.0	20.5	20.0	19.5	18.5	20.0	19.5	18.5	18.5
3	13.0	13.0	17.0	16.0	21.0	20.5	20.0	19.5	20.0	20.0	19.0	18.5
4	13.5	13.0	17.5	17.0	21.0	21.0	20.5	20.0	20.5	20.0	19.0	18.5
5	14.5	13.5	17.5	17.0	21.0	21.0	21.0	20.5	20.5	20.0	19.0	18.0
6	15.0	14.5	17.0	16.0	21.0	20.0	21.5	21.0	20.5	20.0	18.0	17.5
7	15.0	14.5	16.5	16.0	20.5	20.0	21.0	21.0	20.5	20.0	18.5	17.5
8	14.5	14.0	17.0	16.5	20.0	18.5	21.0	21.0	20.5	20.0	19.0	18.5
9	14.5	14.0	16.5	16.5	18.5	17.0	21.0	20.5	20.5	20.0	19.5	19.0
10	15.0	14.5	16.5	16.0	17.0	17.0	20.5	20.5	20.5	20.0	19.5	19.0
11	15.0	15.0	16.0	15.5	17.0	17.0	20.5	20.0	20.5	20.0	20.0	19.5
12	15.0	14.0	15.5	15.0	17.0	17.0	20.0	20.0	20.5	20.0	20.0	19.5
13	14.0	13.5	15.0	15.0	17.5	17.0	20.0	20.0	20.5	20.0	19.5	18.5
14	13.5	12.5	15.5	15.0	18.0	17.5	20.0	20.0	20.0	20.0	18.5	18.0
15	13.0	12.5	16.5	15.5	18.5	18.0	20.5	20.0	20.5	20.0	--	--
16	13.5	13.0	18.0	16.5	19.0	18.5	20.5	20.0	20.5	20.0	17.0	16.5
17	13.5	13.5	19.0	18.0	19.0	19.0	20.0	20.0	20.5	20.0	17.0	16.5
18	14.0	13.5	19.0	19.0	19.5	19.0	20.5	20.0	20.0	19.5	17.0	17.0
19	14.0	13.5	19.0	18.5	20.5	19.5	20.5	20.0	19.5	19.5	17.5	17.0
20	14.0	13.5	19.0	18.5	21.0	20.5	20.5	20.0	20.0	19.0	17.5	17.0
21	13.5	13.5	19.0	19.0	21.5	21.0	20.5	20.0	20.0	19.5	17.5	17.5
22	14.0	13.5	19.5	19.0	21.5	21.5	20.0	19.5	20.0	19.0	17.5	16.5
23	14.0	14.0	19.5	19.0	22.0	21.0	20.5	20.0	20.0	19.0	17.0	16.5
24	15.0	14.0	19.0	19.0	21.0	21.0	21.0	20.5	19.5	19.0	--	--
25	15.0	15.0	20.0	19.0	21.0	21.0	20.5	20.0	19.0	18.5	--	--
26	15.0	14.0	20.0	19.0	21.0	20.5	20.5	20.0	18.5	18.5	--	--
27	14.0	13.0	20.0	19.5	20.5	20.0	20.0	20.0	18.5	18.5	--	--
28	13.5	13.0	20.0	19.5	20.0	19.0	20.5	20.0	18.5	18.5	16.0	16.0
29	13.5	13.0	20.0	19.5	19.0	18.0	20.0	20.0	18.5	18.5	16.5	16.0
30	14.0	13.5	20.0	19.5	18.0	17.5	20.0	19.5	18.5	18.5	16.0	16.0
31	--	--	20.0	19.0	--	--	19.5	19.5	19.0	18.5	--	--
AVE	14.1	13.6	17.9	17.3	19.8	19.3	20.3	20.0	19.9	19.5	18.1	17.7

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 1970.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)
OCT.											
07...	1000	8360	15.0	10.9	--	--	6.0	--	69	0	--
NOV.											
04...	1050	8970	15.0	11.4	--	--	6.6	--	69	0	--
DEC.											
02...	1045	9340	10.6	12.8	--	--	6.2	--	76	0	--
JAN.											
06...	1040	20100	7.8	12.8	--	--	7.6	--	66	0	--
FEB.											
03...	1025	27100	10.0	12.4	--	--	6.3	--	57	0	--
MAR.											
03...	0955	25000	10.6	12.3	--	--	5.9	--	56	0	--
APR.											
07...	1125	10200	14.4	10.2	--	--	7.8	--	84	0	--
MAY											
05...	0930	9170	17.2	10.2	12	7.3	8.9	1.2	71	0	9.2
JUNE											
03...	0945	6230	22.8	9.0	--	--	10	--	78	0	--
JULY											
15...	0845	7900	21.7	9.3	--	--	7.8	--	64	0	--
AUG.											
19...	1445	6550	22.0	7.5	--	--	9.8	--	77	0	--
SEP.											
10...	1135	8370	23.0	9.2	--	--	11	--	82	0	--

DATE	CHLO-RIDE (CL) (MG/L)	NITRATE (NO3) (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	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
OCT.											
07...	2.8	--	140	51	0	57	20	.4	133	7.9	10
NOV.											
04...	4.6	--	90	50	0	57	22	.4	130	7.3	15
DEC.											
02...	4.8	--	100	54	0	62	20	.4	143	7.6	6
JAN.											
06...	4.0	--	70	54	0	54	23	.5	143	7.3	34
FEB.											
03...	3.0	--	60	48	1	47	22	.4	120	7.3	200
MAR.											
03...	2.4	--	120	34	0	46	27	.4	116	7.5	140
APR.											
07...	3.0	--	0	72	3	69	19	.4	166	7.5	55
MAY											
05...	5.0	.7	0	60	2	58	24	.5	152	7.9	60
JUNE											
03...	7.0	--	100	64	0	64	25	.5	174	7.9	25
JULY											
15...	1.9	--	60	49	0	52	26	.5	129	7.8	20
AUG.											
19...	5.1	--	120	59	0	63	27	.6	160	7.9	10
SEP.											
10...	5.8	--	150	63	0	67	28	.6	174	8.3	10

11390700 COLUSA TROUGH NEAR COLUSA, CALIF.

LOCATION.--Lat 39°11'43", long 122°03'34", in SE¼NE¼ 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 1963 (partial-record station, October 1953 to September 1970.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
07...	1445	219	16.7	11.2	38	28	79	2.5	245	0
NOV.										
04...	1505	281	17.2	10.2	31	25	66	3.6	235	0
DEC.										
02...	1505	91	9.4	15.8	44	36	109	3.1	308	0
JAN.										
06...	1350	274	6.1	13.8	45	40	125	2.7	317	0
FEB.										
03...	1445	1290	12.2	10.9	38	27	80	2.8	249	0
MAR.										
03...	1350	359	13.3	11.5	57	41	138	2.5	333	0
APR.										
07...	1610	458	16.7	10.3	26	18	43	2.1	156	5
MAY										
05...	1425	1210	20.6	9.2	23	15	46	2.3	156	0
JUNE										
03...	1445	258	29.4	6.6	27	24	70	1.0	208	0
JULY										
14...	1445	528	28.3	7.8	28	22	53	.8	209	0
AUG.										
19...	1200	781	22.0	8.0	28	20	47	1.0	218	0
SEP.										
10...	0905	1180	21.0	7.4	25	17	39	1.5	194	0

DATE	SULFATE (SO4) (MG/L)	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)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
OCT.									
07...	107	46	1.9	190	393	209	709	7.8	25
NOV.									
04...	78	29	2.2	300	346	179	618	7.4	55
DEC.									
02...	149	58	1.4	320	556	258	758	8.1	15
JAN.									
06...	169	66	3.1	350	604	279	1020	7.8	45
FEB.									
03...	102	44	6.3	210	432	207	715	7.8	170
MAR.									
03...	194	88	2.5	390	706	310	1130	8.2	50
APR.									
07...	57	22	3.3	90	249	136	444	8.5	90
MAY									
05...	68	18	2.4	100	248	118	432	8.2	500
JUNE									
03...	103	36	2.0	400	379	168	625	7.8	55
JULY									
14...	63	21	2.6	220	302	160	513	8.1	100
AUG.									
19...	43	18	.1	170	264	154	465	7.6	80
SEP.									
10...	37	17	.0	170	236	134	426	7.5	270

11392100 MIDDLE FORK FEATHER RIVER NEAR PORTOLA, CALIF.

LOCATION.--Lat 39°43'13", long 120°26'26", in SW¼NW¼ 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 (revised).
PERIOD OF RECORD.--Chemical analyses: May to September 1970.
Sediment records: Water year 1970 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)
MAY											
26...	0915	96	16.5	7.0	85	86	0	3.0	1.9	.63	.01
JUNE											
24...	0800	58	21.0	5.7	77	86	0	.0	2.2	.73	.03
JULY											
21...	1520	16	22.5	7.6	106	82	0	4.0	1.7	.81	.02
AUG.											
19...	1800	11	21.0	8.0	108	70	0	3.0	.5	.55	.00
SEP.											
17...	0830	5.5	12.0	7.9	89	78	0	4.0	.9	.44	.00

DATE	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE (N) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL 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 CACO3 (MG/L)
MAY											
26...	.01	.2	.05	.21	.02	.070	.010	106	.14	27.5	71
JUNE											
24...	.04	.4	.09	.27	.11	.090	.040	106	.14	16.6	71
JULY											
21...	.03	.2	.05	.27	.04	.090	.010	84	.11	3.63	67
AUG.											
19...	.00	.1	.02	.12	.01	.040	.000	74	.10	2.20	57
SEP.											
17...	.00	.1	.02	.09	.01	.030	.000	81	.11	1.20	64

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)
MAY										
26...	149	7.3	--	4	1.9	89	3200	--	--	.00
JUNE										
24...	156	7.0	55	4	.9	29	68	--	7.0	.02
JULY										
21...	147	6.9	20	9	.7	20	--	260	6.5	.03
AUG.										
19...	120	7.6	5	5	.0	40	--	64	3.5	.03
SEP.										
17...	137	7.5	18	4	.9	6	--	90	2.5	.02

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)
ANALYSIS OF ADDITIONAL SAMPLES												
MAY												
26...	.00	.00	.00	.00	.00	.00	.00	.00	.07	.00	.00	.00

11392100 MIDDLE FORK FEATHER RIVER NEAR PORTOLA, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
MAY 25, 1970	1200	17.0	96	32	8.3	--	--	--	--	--	--	--	--	--	--	--	
JUN 24.....	1200	22.5	59	47	7.5	--	--	--	--	--	--	--	--	--	--	--	
JUL 21.....	1630	22.5	16	32	1.4	--	--	--	--	--	--	--	--	--	--	--	
AUG 19.....	1400	21.5	11	16	.48	--	--	--	--	--	--	--	--	--	--	--	
SEP 16.....	1610	14.5	11	5	.15	--	--	--	--	--	--	--	--	--	--	--	

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.
PERIOD OF RECORD.--Chemical analyses: May to September 1970.
Sediment records: Water year 1970 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DISCHARGE (CFS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)
MAY											
26...	1230	96	20.0	7.8	104	86	0	4.0	2.2	.56	.01
JUNE											
24...	0900	59	21.0	5.8	78	88	0	1.0	2.6	.64	.02
JULY											
21...	1730	17	24.5	7.4	106	87	0	5.0	2.6	.71	.02
AUG.											
19...	1900	11	22.5	7.2	99	80	0	4.0	1.0	.52	.00
SEP.											
16...	1415	12	15.5	8.4	100	83	0	5.0	1.8	.33	.00

DATE	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE (N) (MG/L)	PHOSPHATE (PO4) (MG/L)	DISSOLVED ORTHO PHOSPHATE (PO4) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	ALKALINITY AS CACO3 (MG/L)
MAY											
26...	.01	.2	.05	.20	.02	.070	.010	107	.15	27.7	71
JUNE											
24...	.03	.3	.07	.21	.05	.070	.020	105	.14	16.7	72
JULY											
21...	.03	.2	.05	.20	.04	.070	.010	105	.14	4.82	71
AUG.											
19...	.00	.2	.05	.20	.01	.070	.000	86	.12	2.55	66
SEP.											
16...	.00	.1	.02	.12	.02	.040	.010	88	.12	2.85	68

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	DELAYED COLIFORM (COLONIES PER 100 ML)	IMMEDIATE COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
MAY										
26...	150	7.6	--	3	1.8	15	4300	--	--	.00
JUNE										
24...	158	7.1	40	3	.6	20	392	--	6.0	.02
JULY										
21...	163	7.8	30	6	.3	21	--	120	7.0	.03
AUG.										
19...	143	7.6	5	5	1.0	14	--	80	3.5	.02
SEP.										
16...	151	7.5	15	4	.6	10	--	60	3.0	.03

11392200 MIDDLE FORK FEATHER RIVER AT DELLEKER, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)
ANALYSIS OF ADDITIONAL SAMPLES												
MAY 26...	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
MAY 26, 1970	1230	20.0	96	19	4.9	--	--	--	--	--	--	--	--	--	--	--	
JUN 24.....	0900	21.0	59	25	4.0	--	--	--	--	--	--	--	--	--	--	--	
JUL 21.....	1830	24.0	17	19	.87	--	--	--	--	--	--	--	--	--	--	--	
AUG 19.....	1710	22.5	11	16	.48	--	--	--	--	--	--	--	--	--	--	--	
SEP 16.....	1440	15.0	12	7	.23	--	--	--	--	--	--	--	--	--	--	--	

11392500 MIDDLE FORK FEATHER RIVER NEAR CLIO, CALIF.

LOCATION.--Lat 39°45'14", long 120°35'42", in SE¼ 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 Blairsden.
DRAINAGE AREA.--686 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1963 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 25.5°C July 14, 15; minimum, 2.0°C on several days during December.
EXTREMES, 1963-70.--Water temperatures: Maximum, 26.0°C Aug. 3, 1966; minimum (1963-66, 1968-70), freezing point on many days in 1963 and 1969.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	12.0	11.5	8.5	8.5	3.0	3.0	3.0	3.0	4.0	3.5	5.5	5.5
2	12.0	11.5	8.5	8.5	3.0	3.0	3.0	3.0	3.5	3.5	5.5	4.5
3	12.0	10.5	8.5	8.5	3.0	2.5	3.5	3.0	3.5	3.5	4.5	4.0
4	10.5	8.0	8.5	8.0	2.5	2.5	3.5	3.5	4.5	3.5	4.0	4.0
5	9.0	8.5	8.0	8.0	2.5	2.5	3.5	3.5	4.5	4.5	4.0	3.5
6	9.0	9.0	8.0	7.5	2.5	2.0	3.5	3.5	4.5	4.5	4.0	3.5
7	9.5	9.0	7.5	7.5	2.0	2.0	3.5	3.5	4.5	4.5	5.0	4.0
8	9.5	9.5	7.5	7.5	2.0	2.0	4.0	3.5	5.0	4.5	5.0	5.0
9	9.5	9.5	7.5	7.5	2.0	2.0	4.0	4.0	5.5	5.0	5.0	5.0
10	9.5	9.5	7.5	7.0	2.0	2.0	4.0	4.0	5.5	5.5	5.0	4.5
11	9.5	9.0	7.0	6.5	2.0	2.0	4.0	4.0	5.5	5.5	4.5	4.5
12	9.5	8.0	6.5	6.5	2.5	2.0	4.0	4.0	5.5	5.5	5.0	4.5
13	8.0	8.0	6.5	6.5	2.5	2.5	4.0	4.0	5.5	5.5	6.0	5.0
14	8.0	8.0	6.5	6.5	2.5	2.5	4.0	4.0	5.5	5.5	6.5	6.0
15	8.0	8.0	6.5	6.5	2.5	2.5	4.0	4.0	5.5	5.5	6.5	4.5
16	8.0	8.0	6.5	6.5	2.5	2.5	4.0	4.0	5.5	5.0	6.5	6.5
17	8.0	8.0	6.5	6.5	2.5	2.5	4.0	4.0	5.0	4.5	6.5	6.5
18	8.0	8.0	6.5	5.5	2.5	2.5	4.5	4.0	4.5	3.5	6.5	5.5
19	8.0	8.0	5.5	5.0	3.0	2.5	4.5	4.5	3.5	3.5	5.5	4.5
20	8.0	8.0	5.0	5.0	3.0	3.0	5.0	4.5	3.5	3.0	4.5	4.5
21	8.0	8.0	5.0	5.0	4.0	3.0	5.5	5.0	3.5	3.0	5.0	4.5
22	8.0	8.0	5.0	5.0	4.0	4.0	5.5	5.5	4.0	3.5	6.0	5.0
23	8.5	8.0	5.0	4.0	4.0	4.0	5.5	5.5	4.5	4.0	6.5	5.0
24	8.5	8.5	4.0	3.5	4.0	4.0	5.5	5.5	5.0	4.5	7.5	6.5
25	8.5	8.5	3.5	3.5	4.0	4.0	5.5	5.5	5.0	5.0	7.5	7.0
26	8.5	8.5	3.5	3.5	4.0	4.0	5.5	5.5	5.5	5.0	7.5	7.0
27	8.5	8.5	3.5	3.5	4.0	4.0	5.5	5.5	6.0	5.0	7.0	6.5
28	8.5	8.5	3.5	3.5	4.5	4.0	5.5	5.5	6.0	5.5	6.5	6.0
29	8.5	8.5	3.5	3.0	4.0	3.5	5.5	4.0	--	--	6.5	6.5
30	8.5	8.5	3.0	3.0	3.5	3.0	4.0	4.0	--	--	6.5	6.0
31	8.5	8.5	--	--	3.0	3.0	4.0	4.0	--	--	6.0	6.0
AVE	9.0	8.7	6.1	5.9	3.0	2.9	4.4	4.2	4.8	4.5	5.7	5.2

11392500 MIDDLE FORK FEATHER RIVER NEAR CLIO, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR MIN	MAY MAX	MAY MIN	JUN MAX	JUN MIN	JUL MAX	JUL MIN	AUG MAX	AUG MIN	SEP MAX	SEP MIN
1	6.0	5.5	8.5	7.0	20.0	14.5	21.5	18.5	18.5	15.0	18.5	16.0
2	6.0	5.5	10.0	8.5	20.5	15.5	23.0	19.5	18.5	15.5	17.5	16.0
3	6.5	6.0	12.0	10.0	21.0	15.5	23.5	20.5	19.5	17.0	17.0	15.5
4	6.5	6.5	13.0	12.0	21.5	16.0	24.5	22.0	19.5	17.5	17.0	16.0
5	7.0	6.5	13.0	13.0	20.0	16.5	24.5	22.5	18.0	16.0	16.5	15.5
6	8.0	7.0	13.0	12.5	20.5	16.5	24.5	21.5	18.0	15.5	16.5	16.0
7	8.0	8.0	12.5	12.0	20.5	15.5	24.0	21.0	17.5	14.5	17.5	16.0
8	8.0	8.0	12.5	11.0	20.0	16.0	24.5	22.5	17.5	14.5	17.5	17.0
9	8.0	8.0	11.0	10.5	17.0	14.5	24.5	22.5	17.0	14.5	19.5	13.0
10	8.0	8.0	10.5	10.5	18.0	14.5	24.0	22.5	17.5	15.0	17.5	13.5
11	8.5	8.0	10.5	8.5	18.0	14.0	24.0	21.5	18.5	15.5	17.0	12.5
12	8.5	8.5	9.0	8.5	16.0	14.5	24.0	21.5	18.0	15.0	16.5	12.5
13	8.5	8.5	10.0	9.0	16.5	15.5	24.5	21.5	17.5	14.5	15.0	11.0
14	8.5	7.5	11.5	10.0	16.5	16.0	25.5	21.0	17.5	13.5	14.0	10.0
15	7.5	7.0	13.0	11.5	18.0	15.5	25.5	22.0	18.0	15.5	13.5	10.0
16	7.0	7.0	14.5	12.5	19.5	16.5	24.5	21.0	18.5	16.5	14.0	10.0
17	7.0	6.5	15.5	13.5	20.0	16.0	24.0	19.0	20.5	18.0	14.5	11.0
18	7.0	6.5	17.0	14.0	21.5	18.0	23.5	19.5	21.0	19.0	14.5	11.0
19	7.0	7.0	15.5	12.5	22.0	19.0	23.5	20.0	21.0	19.0	14.5	12.0
20	7.5	7.0	15.0	11.0	22.5	19.5	24.5	21.5	20.0	18.0	12.5	9.0
21	7.5	7.5	17.0	12.0	23.0	21.0	24.5	21.0	20.0	18.0	12.5	9.5
22	7.5	7.5	16.5	11.5	23.5	21.0	22.5	19.5	20.0	18.0	13.0	9.5
23	7.5	7.5	18.0	13.0	23.5	21.5	23.0	20.0	19.5	18.0	13.0	10.0
24	7.5	7.0	18.0	13.0	23.5	21.5	23.0	19.5	19.0	17.0	13.0	10.0
25	7.5	7.0	19.5	13.0	23.5	21.5	22.0	18.5	19.0	16.5	12.5	9.0
26	8.5	7.5	19.5	14.5	22.5	21.5	21.5	18.0	19.0	17.0	12.5	9.0
27	8.5	8.0	18.5	14.0	21.5	20.0	20.5	17.5	19.0	17.0	13.0	9.0
28	8.0	7.0	18.5	12.5	20.5	19.0	20.0	17.0	19.0	17.5	13.0	9.5
29	7.0	6.0	18.5	13.5	19.5	17.0	19.0	17.0	20.0	18.5	13.0	10.0
30	7.0	6.0	19.0	14.5	20.5	17.5	19.0	17.0	19.5	18.0	13.5	10.0
31	--	--	19.5	14.0	--	--	19.0	16.0	19.0	17.0	--	--
AVE	7.5	7.1	14.5	11.7	20.4	17.4	23.1	20.1	18.9	16.5	15.0	12.0

11393300 MIDDLE FORK FEATHER RIVER BELOW LONG VALLEY CREEK, AT SLOAT, CALIF.

LOCATION.--Lat 39°51'58", long 120°44'00", in SE¼SW¼ sec.10, T.23 N., R.11 E., Plumas County, Plumas National Forest, 0.1 mile downstream from Long Valley Creek, at Sloat.
PERIOD OF RECORD.--Chemical analyses: May to September 1970.
Sediment records: Water year 1970 (partial-record station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)
MAY											
26...	1500	637	15.0	8.6	99	41	0	2.0	.6	.19	.01
JUNE											
24...	1600	250	24.5	7.4	104	61	0	3.0	.9	.23	.02
JULY											
22...	0900	80	17.5	8.4	102	78	0	3.0	.7	.30	.02
AUG.											
19...	1600	55	24.0	8.3	115	60	10	4.0	.6	.27	.00
SEP.											
16...	1000	57	10.0	10.1	105	83	0	5.0	.8	.18	.00

DATE	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE (N) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL 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 CACO3 (MG/L)
MAY											
26...	.01	.1	.02	.10	.02	.030	.010	45	.06	77.4	34
JUNE											
24...	.03	.1	.02	.09	.04	.030	.010	69	.09	46.6	50
JULY											
22...	.03	.1	.02	.09	.05	.030	.020	85	.12	18.4	64
AUG.											
19...	.00	.1	.02	.11	.01	.040	.000	88	.12	13.1	66
SEP.											
16...	.00	.1	.02	.08	.05	.030	.020	88	.12	13.5	68

11393300 MIDDLE FORK FEATHER RIVER BELOW LONG VALLEY CREEK, AT SLOAT, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	DELAYED COLIFORM (COLONIES PER 100 ML)	IMMEDIATE COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
MAY 26...	68	7.6	--	1	1.0	4	500	--	--	.00
JUNE 24...	109	7.3	10	1	.8	15	20	--	1.5	.01
JULY 22...	135	7.3	5	2	.0	9	--	82	2.0	.02
AUG. 19...	139	9.0	5	1	.7	2	--	11	2.5	.02
SEP. 16...	144	7.8	5	1	.4	4	--	16	1.5	.01

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DIELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLORDANE (UG/L)
ANALYSIS OF ADDITIONAL SAMPLES												
MAY 26...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
MAY 25, 1970	1630	15.5	637	10	17	--	--	--	--	--	--	--	--	--	--	--	
JUN 24.....	1515	24.5	258	4	2.8	--	--	--	--	--	--	--	--	--	--	--	
JUL 22.....	1130	18.5	80	1	.22	--	--	--	--	--	--	--	--	--	--	--	
AUG 19.....	1600	24.0	55	4	.59	--	--	--	--	--	--	--	--	--	--	--	
SEP 16.....	1100	10.5	57	1	.15	--	--	--	--	--	--	--	--	--	--	--	

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 to September 1970.
Water temperatures: October 1962 to September 1970.
Sediment records: Water year 1970 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 22.5°C July 5, 15; minimum, 1.0°C Jan. 3, 5.
EXTREMES, 1962-70.--Water temperatures: Maximum (1964-70), 24.0°C Aug. 3, 1966; minimum (1962-64, 1965--70), 0.5°C on several days in 1966-68, and 1970.
REMARKS.--No record Sept. 1-5, 16, 17, 28-30.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)
MAY											
27...	0900	1560	14.5	9.8	101	40	0	2.0	.6	.27	.01
JUNE											
24...	1400	560	22.0	8.6	103	62	0	4.0	1.2	.39	.02
JULY											
22...	1600	278	23.0	8.4	102	76	0	7.0	1.4	.42	.02
AUG.											
19...	1600	176	22.0	8.6	104	84	0	7.0	1.3	.22	.00
SEP.											
15...	1045	159	14.5	10.1	104	86	0	7.0	1.7	.30	.00

DATE	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	NITRATE (N) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL 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 CACO3 (MG/L)
MAY											
27...	.01	.1	.02	.06	.01	.020	.000	46	.06	194	33
JUNE											
24...	.03	.1	.02	.08	.00	.030	.000	72	.10	109	51
JULY											
22...	.03	.1	.02	.06	.02	.020	.010	86	.12	64.6	62
AUG.											
19...	.00	.0	.00	.05	.01	.020	.000	94	.13	44.7	69
SEP.											
15...	.00	.0	.00	.03	.01	.010	.000	92	.13	39.5	71

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)
MAY										
27...	73	7.6	--	1	.1	0	616	--	--	.00
JUNE										
24...	116	7.6	5	0	.7	0	83	--	1.0	.01
JULY										
22...	141	7.5	5	1	.0	2	--	17	1.0	.01
AUG.										
19...	154	8.3	2	0	.0	4	--	19	1.5	.02
SEP.										
15...	158	7.9	1	0	.3	0	--	130	.0	.00

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
ANALYSIS OF ADDITIONAL SAMPLES											
MAY											
27...	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00

11394500 MIDDLE FORK FEATHER RIVER NEAR MERRIMAC, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	14.5	9.0	8.5	3.5	3.0	2.5	2.0	5.0	5.0	7.5	6.0
2	15.0	14.0	9.0	8.5	3.5	3.0	2.5	2.0	5.0	5.0	6.0	6.0
3	14.0	12.0	9.0	8.5	3.0	3.0	2.0	1.0	6.0	5.0	6.0	6.0
4	12.0	11.0	9.5	9.0	3.0	2.5	2.5	2.0	6.5	6.0	6.0	5.5
5	11.0	10.5	9.5	9.0	2.5	1.5	2.0	1.0	7.5	6.5	6.0	5.0
6	10.5	10.0	9.5	8.5	2.5	2.0	2.0	1.5	7.5	7.5	6.5	6.0
7	10.5	10.0	8.5	8.5	2.5	2.0	3.0	2.0	7.5	7.5	7.0	6.5
8	11.0	10.0	8.5	8.0	2.5	2.5	4.0	3.0	7.5	7.5	7.0	7.0
9	11.5	10.5	8.0	8.0	3.0	2.5	5.0	4.0	7.5	7.5	7.0	6.5
10	12.0	11.0	8.0	7.5	3.0	3.0	5.0	5.0	7.5	7.5	6.5	6.0
11	11.0	10.0	7.5	7.5	4.0	3.0	5.5	5.0	8.0	7.5	6.5	6.5
12	10.0	9.5	7.5	7.5	4.5	4.0	6.0	5.5	8.5	7.5	7.5	6.5
13	9.5	9.0	7.5	7.5	5.0	4.5	5.5	5.5	7.5	5.5	8.0	7.5
14	9.0	9.0	7.5	7.0	5.0	5.0	6.0	5.5	5.5	5.5	9.0	8.5
15	9.5	9.0	8.0	7.5	5.0	5.0	6.0	5.5	6.0	5.5	9.0	8.0
16	10.0	9.5	8.0	7.0	5.0	4.5	6.0	6.0	6.5	6.5	8.0	8.0
17	10.0	9.5	7.0	6.0	4.5	4.0	6.5	6.0	6.5	5.5	8.0	7.5
18	9.5	9.0	6.0	5.5	4.5	4.0	7.0	6.5	5.5	5.5	7.5	6.5
19	9.0	8.5	5.5	5.0	5.0	4.5	7.0	7.0	5.5	4.5	6.5	6.0
20	9.0	8.5	5.5	5.0	6.0	5.0	7.0	7.0	5.0	4.5	6.5	6.0
21	9.5	9.0	5.5	5.0	6.5	6.0	7.5	7.0	5.5	5.0	7.5	6.5
22	10.0	9.5	5.0	5.0	6.0	6.0	7.5	7.0	6.0	5.5	8.5	7.5
23	10.0	10.0	5.0	5.0	6.0	5.0	7.5	7.0	6.5	6.0	9.0	8.5
24	11.0	10.0	5.0	4.5	6.0	5.0	7.5	6.5	7.0	6.5	9.0	9.0
25	10.5	10.0	5.0	4.5	6.0	5.5	6.5	6.0	7.0	6.5	9.0	9.0
26	10.0	10.0	5.0	4.5	5.5	4.5	6.5	6.0	7.0	7.0	9.0	8.0
27	10.0	9.5	5.0	4.5	4.5	3.0	6.5	6.0	7.5	7.0	8.0	7.5
28	10.0	9.0	4.5	4.0	3.0	2.0	6.0	5.0	7.5	7.5	8.0	7.5
29	9.0	9.0	4.0	3.5	2.0	2.0	5.0	4.5	--	--	8.0	7.5
30	9.0	8.5	3.5	3.0	2.0	2.0	5.0	4.5	--	--	7.5	7.0
31	9.0	8.5	--	--	2.0	2.0	5.0	5.0	--	--	7.0	6.5
AVE	10.5	9.9	6.9	6.4	4.1	3.6	5.3	4.8	6.6	6.2	7.5	7.0

11394500 MIDDLE FORK FEATHER RIVER NEAR MERRIMAC, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.0	11.5	10.0	15.5	14.5	18.5	17.5	20.0	18.5	--	--
2	8.0	7.0	12.0	11.0	16.5	15.5	19.5	18.5	20.5	18.5	--	--
3	8.0	8.0	13.0	12.0	17.0	16.0	20.5	19.5	20.5	18.5	--	--
4	9.0	8.0	13.5	13.0	17.5	16.5	21.5	20.5	22.0	19.5	--	--
5	9.5	8.5	13.0	12.5	18.0	17.0	22.5	21.0	21.5	19.5	--	--
6	10.0	9.5	13.0	12.0	17.5	17.0	21.5	21.0	21.5	19.5	18.0	16.0
7	10.0	10.0	12.0	11.5	17.5	16.5	21.0	20.5	21.0	19.5	19.0	17.0
8	10.0	10.0	11.5	11.0	17.0	15.5	21.0	20.5	21.0	19.5	19.5	18.0
9	10.0	10.0	11.0	10.5	15.5	14.0	20.5	20.0	21.5	19.5	19.5	18.0
10	10.5	10.0	10.5	10.0	14.5	13.5	21.0	20.0	21.5	19.5	19.5	18.0
11	10.5	10.0	10.0	9.0	15.0	14.0	21.0	20.0	22.0	19.0	19.0	18.0
12	10.5	9.5	9.0	8.5	15.0	14.5	21.0	20.0	21.5	20.0	19.0	17.5
13	9.5	7.5	10.0	9.0	14.5	13.5	21.0	20.0	21.5	19.5	18.0	16.5
14	7.5	7.0	12.0	10.0	14.0	13.5	21.5	20.0	21.0	19.5	16.5	15.0
15	7.5	7.0	12.5	11.5	14.5	13.5	22.5	21.0	21.5	19.5	16.0	14.5
16	7.0	7.0	14.0	13.0	16.0	14.5	22.0	21.0	21.0	19.5	--	--
17	7.5	6.5	14.0	13.0	16.5	15.5	21.5	20.5	21.0	19.5	--	--
18	8.5	7.5	13.5	13.0	17.5	16.5	22.0	20.5	21.5	20.0	15.5	14.0
19	9.0	8.5	13.0	12.5	19.0	17.5	22.0	20.5	22.0	19.5	15.0	14.5
20	8.5	8.5	12.5	12.5	20.0	19.0	21.5	20.5	21.0	19.5	15.0	14.0
21	8.5	7.5	12.5	12.0	21.0	20.0	22.0	20.5	20.5	19.0	15.0	13.5
22	8.0	7.5	14.0	13.0	21.0	20.0	23.0	20.5	20.5	19.0	14.5	13.5
23	8.5	7.5	14.0	13.0	21.5	20.5	22.0	20.5	20.0	19.0	14.5	13.0
24	8.5	8.0	14.0	13.5	22.5	20.0	22.0	20.5	20.0	18.5	14.5	13.0
25	9.5	8.5	14.5	13.5	21.0	20.5	22.0	20.5	19.5	18.0	13.5	12.0
26	9.5	8.5	15.0	14.5	20.5	19.5	22.0	21.0	19.5	18.0	13.5	12.0
27	8.5	6.5	15.5	14.5	20.0	19.0	21.5	20.0	19.5	18.0	13.5	12.0
28	6.5	5.5	14.5	14.0	19.0	17.5	21.0	19.5	19.0	18.0	--	--
29	8.0	6.5	14.5	13.5	17.5	16.5	21.0	19.5	20.0	18.5	--	--
30	10.0	8.0	15.5	14.5	17.5	16.5	20.5	19.0	19.5	19.0	--	--
31	--	--	14.5	14.0	--	--	20.0	19.0	19.5	18.5	--	--
AVE	8.8	8.0	12.9	12.1	17.6	16.6	21.3	20.1	20.7	19.1	--	--

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
MAY 27, 1970	0845	15.0	1560	5	21	--	--	--	--	--	--	--	--	--	--	--	
JUN 24.....	0900	20.5	560	2	3.0	--	--	--	--	--	--	--	--	--	--	--	
JUL 22.....	1600	23.0	278	1	.75	--	--	--	--	--	--	--	--	--	--	--	
AUG 19.....	1600	22.0	176	1	.48	--	--	--	--	--	--	--	--	--	--	--	
SEP 15.....	1030	14.5	159	8	3.4	--	--	--	--	--	--	--	--	--	--	--	

11401180 LITTLE GRIZZLY CREEK NEAR GENESEE, CALIF.

LOCATION.--Lat 40°00'50", long 120°45'11", in NE¼SW¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.0°C July 15; minimum, 1.0°C on several days during winter period.
EXTREMES, 1964-70.--Water temperatures: Maximum, 20.0°C July 15, 1970; minimum, freezing point on many days during winter period of most years.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.5	5.0	3.5	2.0	1.5	1.5	1.0	3.5	3.0	4.0	2.0
2	10.5	8.5	5.0	3.5	2.0	1.5	1.5	1.0	3.5	2.5	3.5	2.5
3	8.5	7.0	5.0	4.0	2.0	1.5	1.5	1.0	4.5	3.0	3.5	3.0
4	7.0	5.5	7.0	5.0	2.0	2.0	1.5	1.5	4.5	3.5	3.5	2.5
5	6.5	4.5	7.0	3.0	2.0	2.0	1.5	1.5	5.0	4.0	3.5	2.5
6	6.0	4.0	5.0	4.0	2.5	2.0	2.0	1.5	5.5	4.0	4.0	2.5
7	7.0	5.0	5.5	4.5	3.0	2.0	2.0	2.0	5.5	4.5	4.5	3.5
8	7.5	6.0	5.0	4.0	3.0	2.5	2.0	2.0	5.5	4.0	4.5	3.5
9	7.5	6.0	4.0	3.0	3.0	3.0	2.5	1.5	5.5	4.0	4.5	3.0
10	8.0	6.5	4.0	3.0	3.5	3.0	4.5	3.0	5.5	4.5	5.0	4.0
11	6.5	4.5	4.0	3.0	4.0	3.0	5.0	4.5	5.5	5.0	5.0	4.0
12	5.5	3.5	4.0	3.5	5.0	4.0	4.5	4.0	5.0	3.0	5.5	4.5
13	5.5	4.5	4.0	3.0	4.5	3.5	5.0	4.0	4.0	3.5	5.5	4.0
14	6.5	5.5	3.5	3.0	4.0	3.0	4.5	3.5	4.0	3.5	5.0	4.5
15	6.5	5.0	4.5	2.5	3.5	3.0	5.0	4.5	4.0	3.5	5.0	3.0
16	7.0	6.0	4.5	2.0	3.0	2.5	5.0	4.0	4.0	3.0	5.0	3.0
17	6.0	5.0	2.0	1.0	3.0	2.0	5.0	4.5	4.0	3.0	4.5	2.5
18	6.0	5.0	2.0	1.0	4.5	3.0	5.5	5.0	4.0	3.0	3.0	2.0
19	5.0	3.5	2.5	1.5	5.0	4.0	6.0	5.0	4.0	3.0	3.5	1.5
20	5.5	3.5	2.0	1.5	5.5	4.0	6.0	5.0	4.0	3.0	4.0	1.5
21	6.0	4.0	2.5	2.0	6.0	4.0	6.0	5.0	4.5	3.5	4.5	2.0
22	6.0	4.5	3.0	2.5	5.0	4.0	6.0	5.0	4.5	3.5	5.0	2.5
23	6.5	5.0	3.0	2.5	4.5	2.0	6.0	5.0	4.5	3.5	5.5	3.0
24	6.5	5.5	3.0	2.5	4.5	2.0	7.0	4.5	5.0	4.0	6.0	3.0
25	6.0	4.0	3.0	2.5	5.0	3.5	6.5	5.0	4.5	3.5	6.0	4.0
26	5.5	4.0	3.0	2.5	4.0	3.0	6.0	6.0	5.0	4.0	5.0	1.0
27	6.0	4.5	2.5	2.0	3.0	2.0	6.0	5.0	5.0	3.5	3.0	1.0
28	6.0	4.0	2.0	1.5	2.0	1.5	5.5	4.0	5.0	4.0	3.5	1.0
29	4.5	3.0	2.0	1.5	1.5	1.0	5.0	3.5	--	--	4.5	1.5
30	4.5	3.0	2.0	1.5	1.0	1.0	4.0	3.5	--	--	4.0	2.5
31	4.5	3.0	--	--	1.5	1.0	4.0	3.0	--	--	4.0	2.5
AVE	6.5	4.9	3.7	2.7	3.4	2.5	4.3	3.5	4.6	3.6	4.4	2.7

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.5	2.0	9.5	4.5	13.0	8.5	17.0	14.0	16.5	12.5	13.0	10.5
2	5.5	3.0	9.5	5.0	13.5	9.5	18.0	14.5	17.0	13.0	13.0	10.0
3	5.5	2.0	10.0	6.5	13.5	10.0	18.5	15.0	17.5	14.0	12.5	10.0
4	5.5	2.5	9.5	6.5	14.0	10.5	19.0	16.0	17.0	14.0	12.5	10.5
5	7.0	3.0	9.0	6.5	14.0	11.0	19.0	16.0	17.0	13.5	12.0	9.0
6	6.5	3.0	8.5	6.5	14.5	11.0	18.0	15.0	16.5	13.0	13.0	10.0
7	6.5	4.0	9.0	6.5	13.5	10.5	18.0	14.5	16.0	12.5	14.0	11.0
8	6.5	4.0	8.0	6.5	11.5	10.0	18.5	15.5	16.5	12.5	13.5	11.0
9	7.5	4.0	8.5	6.5	11.5	9.5	18.0	15.5	17.0	13.0	13.0	10.5
10	7.5	5.0	7.0	5.0	12.0	9.0	18.5	16.0	17.5	14.0	12.5	10.0
11	7.0	4.5	7.5	5.0	12.5	9.0	18.0	15.5	17.5	14.0	12.5	9.5
12	6.5	3.0	7.5	4.5	11.0	10.0	18.5	15.5	17.0	13.0	12.0	10.0
13	5.0	3.0	9.0	5.5	12.0	10.0	18.5	15.5	16.5	13.0	11.0	9.0
14	5.0	3.0	10.5	6.5	12.5	10.5	19.0	15.5	16.5	13.5	10.0	7.0
15	5.0	2.5	11.0	6.5	13.5	10.5	20.0	16.0	17.0	13.5	9.5	7.0
16	5.0	3.0	11.5	7.5	13.5	11.0	18.5	15.5	16.5	13.0	10.0	7.0
17	6.0	2.5	10.5	7.5	14.5	11.0	18.5	14.0	17.5	14.0	10.5	8.0
18	6.0	3.0	10.0	7.0	16.0	12.0	18.5	14.5	17.0	14.5	11.5	8.5
19	6.0	4.0	10.0	7.5	16.5	13.0	19.0	14.5	16.5	14.0	11.0	9.5
20	5.0	3.5	9.5	6.0	16.5	13.5	19.5	16.0	16.0	13.0	9.5	8.0
21	5.5	3.0	10.5	6.5	17.0	14.5	18.5	15.5	16.0	12.5	9.0	7.0
22	6.0	4.0	10.5	7.0	17.0	15.0	18.5	15.0	16.0	13.0	9.0	6.5
23	6.5	4.0	10.5	7.5	18.0	15.5	19.0	15.0	15.5	12.5	9.5	7.0
24	7.5	4.0	11.0	7.0	18.0	15.5	19.0	15.0	15.0	12.0	9.5	7.0
25	6.5	4.0	11.5	7.5	17.5	15.0	18.5	15.0	14.5	11.0	8.0	6.0
26	6.0	4.0	12.0	8.5	16.5	15.0	18.0	14.5	14.5	11.5	8.0	5.5
27	6.0	3.5	11.0	8.5	16.0	14.5	17.5	14.0	14.5	11.5	8.5	6.0
28	6.5	4.0	11.5	7.5	14.5	12.5	17.5	14.0	15.0	11.5	9.0	6.5
29	7.0	3.5	11.5	7.5	15.0	12.0	17.5	14.0	15.5	13.0	9.0	7.0
30	8.5	4.5	11.5	8.0	15.5	12.0	17.0	13.0	15.0	12.5	9.0	7.0
31	--	--	12.0	8.0	--	--	16.5	13.0	14.0	11.5	--	--
AVE	6.2	3.4	10.0	6.7	14.5	11.7	18.3	14.9	16.2	12.9	10.8	8.4

11401500 INDIAN CREEK NEAR CRESCENT MILLS, CALIF.

LOCATION.--Lat 40°04'42", long 120°55'36", in SW¼SW¼ 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 1970.
Sediment records: Water years 1957-66 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.5°C June 21, 24; minimum, freezing point on several days during December and January.
EXTREMES, 1962-65, 1966-70.--Water temperatures: Maximum, 28.0°C July 26-28, 1963; minimum (1962-64, 1966-70), freezing point on many days during most years.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	13.0	11.0	9.0	6.0	4.0	2.0	0.0	4.0	2.0	6.5	3.0
2	14.5	13.0	11.0	9.5	6.0	4.5	2.0	0.0	4.0	1.5	5.5	2.5
3	13.0	11.5	11.0	9.0	6.0	4.5	1.5	0.0	4.5	2.0	5.5	3.5
4	13.0	11.0	10.5	9.5	6.0	4.5	2.0	0.0	6.0	3.5	5.0	3.5
5	13.0	10.5	10.5	8.5	6.0	4.0	2.0	0.0	6.0	4.5	7.5	3.5
6	13.0	10.5	9.0	8.0	6.0	4.5	1.5	0.5	6.5	4.5	8.5	4.0
7	12.5	11.0	9.0	8.5	6.5	5.5	2.5	1.5	6.5	4.5	9.0	6.0
8	12.5	11.5	10.5	8.5	6.5	5.5	3.5	2.0	6.5	4.5	8.5	5.0
9	12.5	11.5	9.5	8.0	7.0	6.5	3.0	2.0	6.5	5.0	7.0	5.0
10	13.0	12.0	9.5	7.5	7.0	6.5	2.5	1.5	6.5	5.0	8.0	5.0
11	12.0	11.0	9.5	7.5	6.5	5.0	3.5	2.0	6.5	5.0	7.0	5.0
12	12.0	10.0	9.5	7.5	6.0	5.0	4.0	3.0	6.5	5.0	9.5	5.5
13	12.0	11.0	9.5	8.0	7.0	5.5	4.0	3.0	5.0	3.5	10.0	7.0
14	11.5	11.0	9.5	7.5	7.0	6.5	3.5	1.5	6.0	3.5	10.5	7.5
15	11.5	10.0	9.0	8.0	7.0	6.5	3.0	2.0	6.5	4.5	9.5	6.0
16	11.0	10.0	9.0	8.0	7.0	7.0	3.5	2.5	5.5	3.0	10.0	6.0
17	11.5	10.0	8.0	5.5	7.0	7.0	4.0	3.0	4.5	2.0	9.0	6.0
18	11.0	10.0	6.5	4.5	7.5	7.0	5.0	4.0	5.5	2.5	8.0	4.0
19	11.0	9.0	6.0	5.0	7.5	6.5	5.0	4.0	5.5	2.5	8.0	3.5
20	11.5	9.0	6.5	4.5	7.0	6.0	5.0	3.5	5.5	2.0	8.5	4.0
21	12.0	10.0	6.5	4.5	7.5	5.0	5.5	5.0	5.5	2.0	9.5	5.0
22	12.0	10.0	6.5	4.5	5.5	4.5	6.0	5.5	6.5	3.0	10.0	6.0
23	12.0	11.0	6.0	4.5	4.5	2.0	6.0	5.0	6.0	3.0	11.0	6.5
24	12.0	11.0	6.5	4.5	3.5	2.0	5.0	4.0	6.0	3.5	11.5	7.0
25	12.0	11.0	7.5	6.0	4.5	3.0	4.5	3.5	6.5	4.0	11.0	7.5
26	12.0	10.5	7.5	6.0	4.0	2.5	5.0	4.5	6.5	4.5	9.5	7.0
27	11.5	10.5	7.5	6.0	3.0	1.5	4.5	3.5	7.0	4.5	10.0	6.5
28	11.5	10.5	7.5	6.0	2.0	0.5	3.5	2.0	6.5	5.0	10.0	6.5
29	11.5	9.5	6.0	4.0	2.0	0.0	2.5	1.5	--	--	9.5	6.5
30	11.0	9.5	6.0	4.5	2.0	0.0	4.0	2.0	--	--	8.5	6.0
31	11.0	9.0	--	--	2.0	0.0	3.0	1.5	--	--	9.0	5.5
AVE	12.1	10.6	8.4	6.8	5.6	4.3	3.6	2.4	5.9	3.6	8.7	5.3

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	5.0	14.5	10.0	18.0	14.0	20.5	15.5	21.0	14.5	18.5	13.0
2	10.5	6.5	15.0	11.0	18.5	15.5	21.5	16.5	21.5	14.5	18.5	13.0
3	11.0	6.5	15.5	12.0	19.0	15.5	21.5	17.5	21.5	16.0	17.5	13.0
4	11.0	6.5	15.0	12.5	19.5	16.0	22.5	18.0	21.0	15.5	15.5	13.0
5	12.0	7.5	14.5	12.0	19.5	17.0	22.5	19.0	21.5	14.5	17.0	11.5
6	11.5	8.5	13.5	11.0	19.5	15.5	22.0	18.0	20.5	14.5	18.5	12.5
7	12.0	8.5	14.0	10.5	19.0	16.0	22.0	18.0	20.0	14.5	19.0	14.5
8	12.5	8.5	13.0	10.5	17.0	13.5	22.0	18.0	21.0	14.0	19.5	14.5
9	12.0	9.0	12.5	10.0	15.0	12.5	21.0	18.0	21.5	15.0	19.0	14.0
10	12.0	9.5	11.5	9.5	17.5	13.0	21.5	17.5	21.5	15.5	18.5	13.5
11	12.0	8.5	11.0	8.0	17.5	13.5	21.5	17.0	21.0	15.5	18.0	13.0
12	11.0	7.5	10.5	8.0	16.0	13.0	21.0	17.0	21.0	14.5	17.0	13.0
13	10.0	7.0	13.0	9.0	15.5	12.5	22.5	16.0	20.5	14.5	16.0	12.5
14	9.0	6.5	14.0	10.5	15.5	13.5	23.0	17.0	21.0	15.0	15.5	10.5
15	10.0	6.5	15.5	11.0	18.0	13.5	22.5	18.5	20.0	15.0	16.0	10.5
16	9.0	7.0	15.5	12.5	17.5	15.0	21.5	17.5	20.0	14.5	16.5	10.5
17	10.5	6.5	15.0	12.0	19.0	14.5	22.0	16.0	21.0	14.5	16.5	11.5
18	10.0	7.0	14.5	12.0	20.5	15.5	22.0	16.5	21.0	15.5	16.0	11.5
19	11.0	8.5	14.0	11.5	22.0	16.5	22.0	16.5	20.5	15.5	14.5	12.5
20	10.0	7.5	13.5	11.0	22.5	17.0	22.0	17.5	19.5	14.0	15.5	10.5
21	9.5	7.0	15.0	11.5	23.5	18.5	21.5	17.0	19.5	14.0	15.5	10.5
22	10.5	7.5	15.0	12.5	23.0	18.0	22.5	16.5	19.5	14.5	16.5	10.5
23	10.0	8.0	16.0	13.0	23.0	18.5	22.5	16.5	19.0	13.5	16.5	11.0
24	11.0	7.0	16.0	12.5	23.5	18.5	22.0	16.5	19.0	13.5	15.5	11.0
25	12.0	8.5	17.0	13.5	22.0	18.5	22.0	16.5	18.5	13.0	15.0	10.0
26	10.5	7.0	17.0	14.5	21.0	18.0	21.5	16.0	18.5	13.5	15.5	9.5
27	8.0	5.5	16.5	14.0	19.0	16.0	20.5	15.5	19.5	13.5	16.0	9.5
28	8.5	5.5	16.0	13.0	17.5	15.5	20.0	15.0	19.5	13.5	16.0	10.5
29	11.0	5.5	16.0	13.0	18.5	14.0	20.0	15.0	20.5	15.0	16.0	10.5
30	13.5	9.0	17.0	13.5	19.5	15.0	20.5	14.5	19.0	15.0	16.0	10.5
31	--	--	17.0	13.5	--	--	20.5	14.5	18.5	13.5	--	--
AVE	10.7	7.3	14.6	11.6	19.2	15.4	21.6	16.7	20.2	14.5	16.7	11.7

11404500 NORTH FORK FEATHER RIVER AT PULGA, CALIF.

LOCATION.--Lat 39°47'39", long 121°27'03", in NE¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.0°C July 18.
EXTREMES, 1963-70.--Water temperatures: Maximum (1963-64, 1965-66, 1967-70), 23.0°C July 18, 1970; minimum (1963-65, 1966-69), 1.0°C Jan. 12, 13, 1963.
REMARKS.--Recorder stopped Jan. 1 to Feb. 1; range in temperature, 5.0°C to 6.0°C. No record Feb. 5-7.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	16.0	13.0	11.0	8.0	7.0	--	--	--	--	8.0	6.0
2	18.0	16.0	13.0	11.0	8.0	6.5	--	--	5.5	5.0	6.0	5.0
3	17.0	14.5	13.0	11.5	7.5	6.5	--	--	5.5	5.0	6.0	5.0
4	17.0	14.5	13.0	11.5	7.5	6.5	--	--	--	--	6.0	5.5
5	17.5	14.0	13.0	12.0	7.5	6.5	--	--	--	--	5.5	5.0
6	17.0	14.0	12.5	12.0	7.5	7.0	--	--	--	--	6.5	5.0
7	16.0	14.0	12.0	11.5	8.0	7.0	--	--	7.0	6.5	7.5	6.5
8	15.5	14.5	12.0	11.0	7.5	7.0	--	--	7.5	6.5	7.5	6.5
9	16.0	14.0	11.5	10.0	8.0	7.5	--	--	8.0	7.0	7.0	6.5
10	16.0	15.0	11.5	10.0	8.0	7.5	--	--	8.5	7.5	7.0	6.0
11	15.0	13.0	12.0	10.5	8.5	7.5	--	--	8.5	8.0	7.0	6.0
12	15.0	12.5	12.0	10.5	8.5	7.5	--	--	8.5	7.0	7.0	6.0
13	14.0	13.5	11.5	10.5	8.5	7.0	--	--	7.0	6.0	7.5	6.5
14	13.5	13.5	11.5	10.0	8.5	8.0	--	--	6.0	5.0	8.0	7.5
15	13.5	13.0	11.0	10.0	8.5	8.0	--	--	6.5	5.5	8.0	7.5
16	14.0	13.0	11.5	10.5	8.5	7.5	--	--	7.0	6.0	8.0	7.0
17	14.0	12.5	11.0	9.0	8.5	7.5	--	--	6.5	5.0	8.0	7.0
18	13.5	12.0	10.0	8.5	8.5	7.5	--	--	5.5	4.5	7.5	6.0
19	14.0	11.5	9.5	9.0	9.0	7.5	--	--	6.0	5.0	7.5	6.0
20	13.5	11.5	10.0	8.5	8.5	7.5	--	--	6.0	4.5	6.5	6.0
21	14.0	12.0	10.0	8.5	9.0	8.5	--	--	6.5	5.0	8.5	6.5
22	14.0	12.0	9.5	8.5	8.5	8.0	--	--	7.0	5.0	10.0	7.0
23	14.0	12.0	9.5	8.5	8.5	7.5	--	--	6.5	5.5	10.5	7.5
24	14.0	13.0	9.0	8.0	7.5	7.5	--	--	6.0	5.5	11.0	8.0
25	13.5	12.0	9.0	8.0	8.0	7.5	--	--	7.5	5.5	10.5	8.0
26	13.5	12.0	9.0	8.0	7.5	7.0	--	--	8.0	5.5	9.5	8.0
27	13.0	12.0	9.0	8.0	7.0	6.0	--	--	8.5	6.5	10.0	7.5
28	13.0	11.5	8.5	7.5	6.5	5.5	--	--	8.0	7.0	10.5	7.5
29	12.5	11.0	8.0	7.0	6.0	5.0	--	--	--	--	9.0	7.5
30	12.5	11.0	8.0	7.0	6.5	5.5	--	--	--	--	9.5	7.0
31	12.5	11.0	--	--	6.0	5.0	--	--	--	--	9.5	7.0
AVE	14.7	13.0	10.8	9.6	7.9	7.0	--	--	7.0	5.8	8.1	6.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	6.5	12.5	8.5	18.0	14.0	19.0	14.0	20.0	16.0	19.5	16.0
2	10.0	7.0	13.5	9.5	18.5	14.5	19.5	15.0	20.0	16.5	19.5	16.0
3	10.0	7.0	14.5	10.0	19.0	15.0	19.5	16.0	20.5	17.0	19.5	16.0
4	10.5	7.0	14.5	11.0	19.5	15.5	20.0	16.0	20.5	17.0	18.5	17.0
5	11.0	8.0	14.5	11.5	18.5	15.5	20.5	16.5	20.5	17.0	19.0	16.0
6	11.0	8.0	13.0	11.5	20.0	16.0	21.0	17.0	20.0	16.0	20.0	17.0
7	11.0	8.0	14.0	10.5	19.0	15.5	21.0	17.0	20.0	16.5	20.0	17.0
8	11.0	8.0	13.0	11.5	18.0	15.5	21.5	17.5	20.0	16.5	20.5	17.5
9	11.0	8.5	12.5	11.0	15.5	14.5	21.0	18.0	20.0	16.5	20.5	17.5
10	11.5	9.0	13.0	10.5	17.5	14.0	21.0	17.5	20.5	16.5	20.5	17.5
11	11.5	8.0	12.0	9.5	17.0	13.5	21.5	18.0	20.5	17.0	20.0	17.0
12	11.0	7.5	10.5	9.0	16.5	13.0	21.5	18.0	20.5	16.5	20.0	17.5
13	8.5	7.5	12.5	9.0	15.0	13.0	22.0	18.5	20.0	16.5	19.0	17.0
14	8.5	7.0	13.5	9.5	15.5	14.0	22.0	18.5	20.0	17.0	18.5	15.5
15	9.5	6.5	14.5	10.0	16.5	12.5	22.0	19.0	20.5	17.0	18.0	15.0
16	8.0	7.0	15.5	11.5	17.0	12.5	22.0	18.5	20.0	16.5	18.0	15.0
17	9.5	6.5	16.0	12.0	17.0	13.0	22.5	18.5	20.5	17.0	18.5	15.5
18	9.5	7.0	15.5	12.0	17.0	13.5	23.0	19.0	20.5	17.5	18.5	15.5
19	10.5	8.0	15.5	12.5	17.0	14.5	22.5	19.0	20.5	17.0	17.5	16.5
20	10.0	7.0	15.5	11.5	19.5	15.0	22.0	19.0	20.0	16.5	18.0	15.5
21	9.0	7.5	16.0	11.5	20.0	16.5	22.5	18.5	20.0	17.0	17.5	15.0
22	11.0	7.5	15.5	12.5	20.0	16.0	22.5	18.5	20.0	17.0	17.5	15.0
23	10.5	7.5	16.5	12.5	21.0	17.0	22.5	19.0	20.0	16.5	17.5	15.0
24	11.0	7.5	17.0	12.5	21.0	17.0	22.5	19.0	20.0	16.5	17.0	14.5
25	10.5	8.5	17.5	13.0	21.0	17.0	21.5	17.5	20.0	16.5	16.0	13.0
26	9.0	8.0	17.5	13.5	19.5	17.5	21.0	17.5	20.0	16.5	16.0	13.0
27	8.0	7.0	17.5	14.0	19.5	17.0	21.0	17.5	20.0	16.5	16.5	14.0
28	10.5	6.5	17.0	13.5	19.5	17.5	21.0	17.0	20.0	16.0	16.5	14.0
29	10.5	6.5	17.5	13.5	18.5	15.0	21.0	17.0	20.0	17.0	--	--
30	12.0	8.0	17.0	13.5	18.5	15.0	20.5	16.5	20.0	17.0	--	--
31	--	--	17.0	13.0	--	--	20.0	16.0	20.0	16.5	--	--
AVE	10.2	7.4	14.9	11.5	18.3	15.0	21.3	17.6	20.2	16.7	18.5	15.8

11405300 WEST BRANCH FEATHER RIVER NEAR PARADISE, CALIF.

LOCATION.--Lat 39°47'12", long 121°33'42", in SE¼SE¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 25.5°C on several days during June and July; minimum, 2.5°C sometime during period Dec. 22 to Jan. 6, Jan. 7, 8.
EXTREMES, 1962-70.--Water temperatures: Maximum (1962-63, 1964-70), 30.5°C Aug. 18, 1967; minimum, 1.0°C on several days in 1965.
REMARKS.--No record Oct. 15-17. Clock stopped Dec. 22 to Jan. 6, June 25-30; range in temperature, 2.5°C to 6.0°C, and 19.5°C to 24.0°C, respectively.
REVISIONS.--Revised figures for water temperatures for water year 1966 superseding those previously published are given herewith:

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	15.5	13.0	11.5	6.0	5.5	4.0	4.0	4.0	3.5	5.5	5.5
2	17.0	14.5	13.0	11.5	6.0	6.0	4.0	4.0	4.0	3.5	5.5	4.5
3	17.0	14.5	13.0	12.0	6.5	6.0	4.0	4.0	4.5	4.0	4.5	3.5
4	16.5	14.5	13.0	12.0	6.5	6.0	5.5	4.0	5.0	4.5	4.5	3.5
5	17.0	14.5	13.0	12.0	6.5	6.0	6.5	5.5	6.0	5.0	5.5	4.0
6	17.0	14.5	12.0	11.5	6.5	6.0	6.5	6.0	6.0	6.0	7.0	5.5
7	18.0	15.0	12.0	11.5	6.0	5.5	6.0	5.5	6.0	5.0	8.0	7.0
8	18.0	15.0	12.0	11.5	6.0	5.5	5.5	5.5	5.0	4.0	8.0	8.0
9	17.0	15.0	11.5	10.5	5.5	5.5	5.5	5.5	4.5	4.0	8.0	8.0
10	18.0	15.5	10.5	9.5	5.5	5.0	5.5	5.5	5.0	4.5	8.0	6.5
11	17.0	15.0	10.0	10.0	5.5	5.5	5.5	5.0	5.0	4.5	7.0	6.0
12	17.0	15.0	10.0	9.5	5.5	5.5	5.0	5.0	5.0	4.5	6.5	6.5
13	17.0	15.0	9.5	9.5	5.5	5.0	5.5	5.0	5.5	4.5	7.0	6.5
14	16.5	15.0	9.5	9.5	5.0	4.0	5.5	5.5	5.0	5.0	7.0	6.5
15	15.5	14.0	9.5	9.0	4.0	3.0	5.5	5.5	5.5	5.0	7.0	6.5
16	15.0	13.0	9.0	9.0	3.0	1.5	5.5	5.0	6.0	5.5	6.5	6.0
17	14.0	13.0	9.0	9.0	1.5	1.0	5.0	4.0	5.5	5.5	6.0	5.0
18	14.0	13.5	9.0	8.5	1.0	1.0	4.5	4.0	6.0	5.5	6.0	5.5
19	15.0	14.0	8.5	8.5	1.0	1.0	4.5	4.0	6.0	6.0	6.5	6.0
20	15.5	14.0	8.5	8.5	1.0	1.0	4.0	3.5	6.5	6.0	7.0	6.0
21	15.5	14.0	9.0	8.0	1.0	1.0	3.5	3.0	6.0	6.0	7.0	6.5
22	15.0	13.5	8.0	7.0	1.5	1.0	3.5	3.0	6.0	6.0	7.0	6.5
23	15.0	13.5	8.0	7.0	1.5	1.5	3.5	3.5	7.0	6.0	8.5	7.0
24	15.0	13.5	8.0	8.0	2.0	1.5	3.5	3.5	7.0	6.0	8.5	8.0
25	15.0	13.5	8.0	6.5	3.5	2.0	3.5	3.5	6.0	5.5	8.5	8.0
26	14.5	13.5	6.5	6.5	3.5	3.5	3.5	3.5	5.5	5.0	9.0	8.5
27	14.5	13.5	6.5	6.0	4.0	3.5	3.5	3.5	5.5	5.0	9.0	8.5
28	14.5	13.5	6.0	5.5	4.5	4.0	3.5	3.5	5.5	5.0	9.5	8.0
29	14.5	13.5	5.5	5.5	4.0	4.0	3.5	3.5	--	--	9.5	8.0
30	14.5	12.0	6.0	5.5	4.0	4.0	3.5	3.5	--	--	9.5	8.0
31	13.5	11.5	--	--	4.0	4.0	3.5	3.0	--	--	10.5	8.5
AVE	15.9	14.0	9.6	9.0	4.1	3.7	4.6	4.3	5.5	5.0	7.3	6.5

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.5	9.5	8.5	14.5	12.0	24.5	20.5	27.0	21.0	23.0	18.5
2	9.5	8.0	9.5	8.5	14.0	12.0	25.5	20.0	28.0	22.0	23.5	19.0
3	9.0	8.0	10.0	9.0	14.5	11.5	25.5	19.0	28.0	22.0	24.0	19.5
4	9.0	8.0	11.0	10.0	15.5	12.0	26.5	20.0	28.0	22.0	24.5	20.0
5	9.0	6.5	11.0	10.0	15.0	13.5	27.0	20.0	28.0	22.0	25.0	21.0
6	9.0	7.0	10.5	9.0	14.5	14.5	25.5	20.0	28.0	23.0	24.5	21.0
7	9.0	7.0	11.5	9.5	14.5	13.5	24.5	19.0	28.0	23.0	23.5	20.5
8	9.0	7.0	11.5	10.5	16.0	14.0	24.0	20.0	28.0	23.0	22.0	19.5
9	8.5	8.0	11.5	10.5	19.0	16.0	24.0	20.0	26.5	23.0	23.0	19.5
10	8.0	6.0	10.5	10.5	19.5	17.0	24.5	18.5	28.5	23.0	21.5	19.5
11	7.0	7.0	11.5	10.5	20.0	17.0	24.5	19.0	26.5	23.0	21.5	19.5
12	8.5	7.0	11.5	10.5	20.5	17.0	24.0	19.0	28.0	23.0	21.0	18.5
13	9.5	7.0	13.0	11.0	22.0	18.5	24.0	18.5	27.0	23.0	20.0	18.0
14	10.0	8.0	13.0	11.5	24.0	19.5	24.0	18.5	27.0	23.0	20.5	17.0
15	10.5	8.5	13.0	11.0	25.0	20.5	24.0	18.5	28.0	23.0	21.0	18.0
16	10.5	9.0	13.0	11.5	26.0	21.5	24.0	18.5	27.0	23.0	21.5	18.0
17	10.5	9.0	13.0	11.5	26.0	21.5	24.5	19.0	29.0	24.0	21.0	18.5
18	10.0	8.5	14.0	13.0	26.0	21.5	26.0	19.5	28.0	24.5	21.0	20.0
19	8.5	6.5	14.5	13.0	26.5	21.5	27.0	20.5	26.0	23.0	21.0	19.5
20	8.5	7.0	15.0	14.0	24.0	22.0	27.0	20.5	25.5	21.0	22.0	19.5
21	8.5	7.0	15.0	14.0	22.0	20.5	27.0	21.0	25.5	21.0	23.0	20.0
22	9.0	8.0	15.0	13.5	24.0	19.0	28.0	21.5	24.5	21.5	21.5	19.5
23	10.0	8.0	15.0	13.0	24.0	19.5	27.0	21.5	24.0	21.0	22.0	19.5
24	10.0	8.5	15.5	13.5	25.0	19.5	25.5	20.5	23.0	19.5	21.5	19.5
25	10.0	8.5	16.5	14.5	25.5	19.0	26.0	20.5	22.0	19.5	21.5	19.0
26	10.0	8.5	16.5	14.5	26.0	20.0	26.0	20.5	23.5	19.5	23.0	19.5
27	9.0	8.0	15.5	14.5	27.0	20.0	25.5	20.0	24.0	19.5	21.5	19.0
28	9.5	8.0	15.5	14.5	27.0	21.0	26.5	20.0	23.5	20.0	22.0	19.5
29	9.0	7.0	15.5	14.5	26.5	21.0	25.5	20.0	22.0	19.5	23.0	19.5
30	9.5	8.0	15.0	13.5	26.5	20.5	24.5	21.0	20.0	19.0	23.0	20.5
31	--	--	13.5	12.0	--	--	25.5	20.0	22.0	18.0	--	--
AVE	9.3	7.7	13.1	11.8	21.7	17.9	25.4	19.8	25.9	21.7	22.2	19.3

11405300 WEST BRANCH FEATHER RIVER NEAR PARADISE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	17.0	12.0	10.5	6.0	6.0	--	--	5.0	4.5	7.0	6.5
2	19.5	16.5	11.5	11.0	6.0	5.5	--	--	4.5	4.5	6.5	6.5
3	17.0	14.5	12.0	11.0	5.5	5.5	--	--	5.0	4.5	6.5	6.5
4	16.5	13.5	11.5	11.0	5.5	5.5	--	--	5.0	5.0	6.5	6.5
5	16.0	13.5	11.0	10.0	5.5	5.0	--	--	5.5	5.0	6.5	6.0
6	15.5	13.0	10.0	9.0	5.5	5.0	--	--	5.5	5.5	6.5	6.0
7	14.5	13.5	9.0	9.0	5.5	5.5	2.5	2.5	5.5	5.5	7.0	6.5
8	14.0	13.5	9.0	9.0	5.5	5.5	3.5	2.5	6.0	5.5	7.0	6.5
9	15.5	13.5	9.0	8.0	6.0	5.5	4.0	3.5	6.5	6.0	6.5	6.0
10	16.0	14.0	8.5	8.0	6.0	6.0	4.5	4.0	7.0	6.5	6.0	6.0
11	14.5	12.0	9.0	8.5	6.0	6.0	5.0	4.5	7.0	7.0	6.0	6.0
12	14.5	12.0	9.0	9.0	6.5	6.0	5.5	5.0	7.0	7.0	6.5	6.0
13	13.5	12.0	9.5	9.0	6.5	6.0	6.0	5.5	7.0	6.5	7.0	6.5
14	12.0	12.0	9.5	9.5	6.0	5.0	6.0	6.0	6.5	5.5	7.5	7.0
15	--	--	9.5	9.5	5.0	5.0	6.0	6.0	6.0	5.5	7.0	6.5
16	--	--	10.0	9.5	5.0	5.0	6.0	6.0	6.0	6.0	7.0	7.0
17	--	--	10.0	8.5	5.0	5.0	6.0	6.0	6.0	6.0	7.0	7.0
18	9.0	8.5	8.5	8.0	5.5	5.0	6.0	6.0	6.0	5.5	7.0	6.0
19	10.0	8.5	8.0	7.5	6.0	5.5	6.0	6.0	5.5	5.0	6.0	5.5
20	10.5	8.5	8.0	7.5	6.0	6.0	6.5	6.0	6.0	5.5	6.0	5.5
21	11.0	9.5	7.5	7.5	6.5	5.5	6.5	6.0	5.5	5.5	5.5	5.0
22	11.5	10.5	7.5	7.0	--	--	6.5	6.0	6.0	5.5	6.0	5.5
23	11.5	10.5	7.5	7.0	--	--	6.5	6.5	6.0	6.0	6.5	6.0
24	11.5	11.0	7.0	7.0	--	--	6.5	6.0	6.0	6.0	7.0	6.5
25	11.5	10.5	7.0	7.0	--	--	6.0	6.0	6.5	6.0	7.0	7.0
26	11.5	10.5	7.0	7.0	--	--	6.0	6.0	6.5	6.5	7.0	7.0
27	11.5	11.0	7.0	7.0	--	--	6.0	6.0	7.0	6.5	7.5	6.5
28	12.0	10.5	7.0	6.5	--	--	6.0	5.0	7.0	7.0	7.5	7.0
29	11.5	10.0	6.5	6.0	--	--	5.0	5.0	--	--	7.5	7.0
30	11.0	10.0	6.0	6.0	--	--	5.0	5.0	--	--	7.5	7.0
31	11.5	10.5	--	--	--	--	5.0	5.0	--	--	7.0	6.5
AVE	13.4	11.8	8.8	8.4	--	--	5.5	5.3	6.0	5.8	6.7	6.4

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.0	12.0	10.5	17.5	16.5	21.5	19.5	23.5	22.5	22.0	21.0
2	7.5	6.5	12.5	11.5	19.5	17.5	23.0	21.0	23.5	22.5	22.0	21.0
3	7.5	6.0	13.0	12.5	20.0	19.0	24.0	22.0	24.0	23.0	21.5	20.5
4	8.0	7.0	13.5	13.0	20.0	19.0	24.0	22.5	24.0	23.0	21.5	20.5
5	8.5	8.0	13.5	13.0	20.0	19.0	25.0	23.0	24.0	22.5	20.5	19.5
6	9.0	8.5	13.0	12.5	20.0	19.0	25.0	23.0	24.0	22.5	20.5	19.5
7	9.0	8.5	12.5	11.5	20.0	19.0	24.5	23.5	24.0	22.5	20.5	19.5
8	8.5	8.5	12.0	11.5	19.5	17.5	24.5	23.5	24.0	22.5	21.0	20.0
9	8.5	8.5	11.5	11.5	17.5	16.0	24.5	22.5	24.0	23.0	21.0	20.0
10	9.5	8.5	11.5	11.0	16.0	15.5	23.0	22.0	24.0	23.0	21.0	20.0
11	9.5	8.5	11.5	10.0	16.5	15.0	23.5	21.5	24.5	23.5	20.5	20.0
12	9.0	8.0	10.0	9.5	17.0	16.0	24.0	22.0	24.5	23.5	20.0	19.5
13	9.0	8.0	10.5	9.5	17.0	16.0	23.0	21.5	24.5	23.5	20.0	19.0
14	8.0	7.5	12.0	10.5	16.5	16.5	23.5	22.0	24.5	23.5	19.0	18.0
15	7.5	7.0	13.5	12.0	17.0	16.0	24.0	22.0	24.5	23.5	18.0	17.0
16	7.0	7.0	14.5	13.5	18.0	16.5	24.0	22.0	24.5	23.5	18.0	17.0
17	7.5	7.0	15.0	14.5	19.0	17.5	24.0	22.0	24.0	23.5	18.0	17.0
18	8.0	7.5	14.5	14.5	20.0	19.0	24.0	22.0	24.0	23.5	18.0	17.5
19	9.0	8.0	14.5	14.0	21.5	20.0	24.5	22.5	24.0	23.0	18.0	17.5
20	9.0	8.0	14.0	12.5	23.0	21.0	24.5	23.0	24.0	22.5	18.0	17.0
21	8.5	8.0	14.0	13.0	24.0	22.5	24.5	23.0	23.5	22.5	17.0	16.0
22	8.5	8.0	14.5	14.0	25.0	23.5	24.5	22.5	23.0	22.5	16.0	15.5
23	9.0	8.5	15.5	14.5	25.5	24.0	25.0	23.0	23.0	22.0	16.0	15.5
24	9.0	8.5	15.5	14.5	25.5	24.0	25.0	23.0	22.5	21.5	16.0	15.5
25	9.5	9.0	16.0	15.0	25.5	24.0	25.0	23.0	22.5	21.5	16.0	15.0
26	9.5	9.5	16.5	15.5	--	--	25.0	23.0	22.5	21.5	16.0	15.0
27	9.5	8.0	16.5	16.0	--	--	25.0	23.0	22.0	21.5	16.0	15.0
28	8.0	6.5	16.0	15.0	--	--	24.0	22.5	22.0	21.5	16.0	15.0
29	9.0	7.5	16.0	15.0	--	--	24.0	22.0	22.5	21.5	16.0	15.5
30	11.0	9.0	16.0	15.0	--	--	23.5	22.0	22.5	22.0	16.0	15.5
31	--	--	16.5	15.5	--	--	23.5	22.0	22.0	21.0	--	--
AVE	8.6	7.8	13.8	13.0	20.0	18.8	24.1	22.3	23.5	22.6	18.7	17.8

11406920 THERMALITO AFTERBAY RELEASE TO FEATHER RIVER NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°27'23", long 121°38'10", in NW¼SE¼ 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 southeast of Oroville.
PERIOD OF RECORD.--Water temperatures: May 1968 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.0°C July 13; minimum, 8.0°C Jan. 5.
EXTREMES, 1968-70.--Water temperatures: Maximum, 28.0°C July 13, 1970; minimum, 6.0°C on several days in 1968 and 1969.
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 and reviewed by Geological Survey.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	16.5	13.5	13.5	11.0	10.5	9.5	9.5	9.0	8.5	10.5	10.0
2	16.5	15.5	14.0	13.5	11.0	10.5	9.5	9.0	9.0	8.5	10.0	9.0
3	15.5	14.5	14.0	13.5	10.5	10.5	9.5	9.0	9.0	8.5	9.0	9.0
4	14.5	14.0	14.0	14.0	10.5	10.5	9.0	8.5	9.0	9.0	9.5	9.0
5	15.0	14.5	14.5	14.0	10.5	10.0	9.0	8.0	9.0	9.0	9.5	8.5
6	14.5	14.5	14.0	14.0	10.5	10.5	8.5	8.5	9.5	9.0	9.5	9.0
7	14.5	14.0	14.0	13.5	10.5	10.0	8.5	8.5	9.5	9.0	9.5	9.0
8	14.5	14.0	13.5	13.5	10.5	10.0	8.5	8.5	9.5	9.0	10.0	9.0
9	14.5	14.0	13.5	13.0	10.5	10.0	8.5	8.5	9.5	9.0	9.5	9.0
10	15.0	14.5	13.5	13.0	10.5	10.5	9.5	8.5	9.5	9.5	9.5	9.0
11	14.5	14.0	13.5	13.0	10.5	10.5	9.5	9.0	9.5	9.5	9.5	9.0
12	14.5	13.5	13.5	13.0	10.5	10.5	9.5	9.5	10.0	9.5	10.5	9.5
13	14.0	13.5	13.5	13.0	10.5	10.5	9.5	9.5	10.0	9.5	10.5	9.5
14	14.0	13.5	13.5	13.0	11.0	10.5	9.5	9.5	9.5	9.0	11.0	10.5
15	13.5	13.5	13.5	13.5	11.0	11.0	9.5	9.0	9.0	9.0	11.0	10.5
16	13.5	13.5	13.5	13.0	11.0	11.0	10.0	9.0	9.0	9.0	10.5	10.0
17	13.5	13.5	13.0	12.0	11.0	11.0	10.0	9.5	9.0	9.0	10.5	10.0
18	13.5	13.5	12.0	11.0	11.0	11.0	9.5	9.5	9.0	8.5	10.0	9.5
19	14.0	13.0	11.5	11.0	11.0	11.0	9.5	9.5	9.0	8.5	10.5	9.5
20	14.0	13.5	11.5	11.0	11.5	11.0	9.5	9.5	9.0	8.5	11.0	10.0
21	14.5	13.5	11.0	11.0	12.0	11.5	10.0	9.5	9.0	9.0	13.5	11.0
22	14.5	14.0	11.0	11.0	12.0	12.0	10.0	9.5	9.5	9.0	14.5	12.0
23	14.0	14.0	11.0	11.0	12.0	11.5	10.5	9.5	9.5	9.0	14.0	12.0
24	14.5	14.0	11.5	11.0	11.5	11.0	10.5	9.5	9.5	9.0	16.0	13.5
25	15.0	14.0	11.5	11.0	11.0	10.5	9.5	9.0	9.5	9.0	16.0	15.0
26	15.0	14.5	11.5	11.0	10.5	10.5	9.5	9.5	10.0	9.5	15.0	14.5
27	14.5	14.5	11.5	11.5	10.5	10.0	9.5	9.5	10.0	9.5	14.5	13.5
28	14.5	14.0	11.5	11.0	10.0	9.5	9.5	8.5	10.0	10.0	16.5	13.5
29	14.0	13.5	11.5	11.0	9.5	9.0	9.0	8.5	--	--	14.0	13.5
30	13.5	13.0	11.0	11.0	9.5	9.5	9.0	9.0	--	--	14.0	13.0
31	13.5	13.0	--	--	9.5	9.5	9.0	9.0	--	--	13.5	13.0
AVE	14.5	14.0	12.7	12.3	10.7	10.5	9.4	9.1	9.4	9.0	11.7	10.7

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.0	16.5	15.0	25.0	22.0	22.0	21.5	23.0	21.5	20.5	20.0
2	14.5	13.5	16.5	15.0	26.0	22.0	21.5	21.0	23.5	21.5	20.0	19.5
3	14.5	13.5	17.0	15.5	25.0	23.0	21.5	20.5	23.0	21.0	19.5	17.0
4	15.5	14.0	19.0	16.0	24.0	22.0	21.0	20.5	22.0	21.0	19.0	16.5
5	16.5	14.5	18.0	15.5	22.0	21.0	21.0	20.5	22.0	21.5	18.0	16.5
6	16.0	15.0	18.0	17.0	21.5	21.0	24.0	20.5	22.0	21.5	19.0	16.5
7	15.0	14.0	18.5	16.5	22.0	20.5	24.0	23.0	21.5	20.5	18.0	17.0
8	16.0	14.0	16.5	16.0	23.0	19.5	23.5	23.0	23.0	20.5	18.5	16.5
9	14.5	14.0	17.0	16.5	19.5	19.0	23.5	22.0	24.0	21.5	18.5	17.0
10	14.5	14.0	19.0	16.5	21.0	19.0	23.5	22.0	25.5	22.0	18.5	16.5
11	15.0	14.0	18.0	16.5	22.0	19.5	23.0	22.0	24.0	23.0	18.0	16.5
12	15.0	13.5	17.0	16.5	21.5	19.5	23.0	22.0	23.5	21.5	17.0	16.0
13	14.0	12.0	18.0	16.5	20.0	19.0	28.0	22.0	23.0	21.5	18.0	16.0
14	13.0	12.0	18.5	17.0	23.5	19.5	25.5	23.5	22.0	21.0	18.0	16.5
15	14.0	12.0	19.0	18.0	24.5	20.5	23.5	22.0	22.0	21.0	17.0	16.0
16	13.0	12.0	19.0	17.0	23.0	21.0	23.5	21.5	23.5	21.5	16.5	16.5
17	14.0	12.0	18.5	18.0	24.5	21.5	23.5	23.0	23.0	22.0	16.5	16.0
18	14.5	13.0	19.5	18.5	24.0	21.0	23.5	23.0	22.0	21.0	17.0	16.0
19	15.0	13.5	20.0	19.0	25.0	22.0	23.5	23.0	21.0	20.0	17.0	16.5
20	14.5	13.5	21.0	19.5	24.0	22.0	23.5	23.0	20.0	19.5	18.0	16.5
21	14.5	13.0	22.0	19.5	26.5	21.5	24.0	21.5	19.5	19.0	17.0	16.5
22	15.5	13.5	21.5	20.5	27.0	24.0	24.0	23.5	19.0	19.0	17.0	16.5
23	14.5	13.5	22.0	20.5	25.0	23.5	24.0	23.0	20.5	19.0	16.5	15.5
24	15.0	14.0	23.0	21.0	24.0	23.5	23.0	22.0	21.0	19.5	15.5	15.0
25	15.5	14.0	22.0	21.5	24.0	22.0	23.0	21.5	20.0	19.5	15.0	14.0
26	15.5	15.0	22.0	21.5	23.0	21.5	23.5	21.5	20.0	19.5	15.5	14.5
27	15.0	14.5	21.5	21.5	21.5	21.0	23.5	21.5	20.0	19.5	15.5	14.0
28	15.0	14.0	21.5	21.0	21.5	21.0	24.5	23.5	20.0	19.0	16.0	14.5
29	15.0	14.0	21.5	20.5	23.0	21.0	24.0	24.0	19.5	19.0	15.5	14.5
30	16.0	14.5	24.0	21.0	23.0	21.5	24.0	23.5	20.0	19.0	15.5	15.0
31	--	--	23.5	22.0	--	--	23.5	22.0	20.0	20.0	--	--
AVE	14.8	13.6	19.6	18.3	23.3	21.2	23.5	22.2	21.7	20.5	17.4	16.2

11407000 FEATHER RIVER AT OROVILLE, CALIF.

LOCATION.--Lat 39°31'13", long 121°32'48", in SW¼NE¼ sec.8, T.19 N., R.4 E., Butte County, on right bank, 300 ft upstream from fish barrier dam on Feather River, and 0.6 mile northeast of Oroville business district.
DRAINAGE AREA.--3,624 sq mi.
PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1970.
Water temperatures: October 1953 to September 1954, November 1956 to September 1970.
Sediment records: November 1956 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 17.0°C on several days during August; minimum, 7.0°C Feb. 13.
Sediment concentrations: Maximum daily, 80 mg/l Jan. 14; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 7,660 tons Jan. 16; minimum daily, 1.1 tons on many days.
EXTREMES, 1953-54, 1956-70.--Water temperatures: Maximum (1956-67, 1968-70), 27.0°C Sept. 10, 12, 1959; minimum (1956-67, 1969-70), 1.5°C Dec. 27, 1959, Jan. 23-25, 1962.
Sediment concentrations (1956-70): Maximum daily, 4,100 mg/l Feb. 1, 1963; minimum daily, 1 mg/l on many days in 1961-62, 1964, 1968-70.
Sediment loads (1956-70): Maximum daily, 1,500,000 tons Feb. 1, 1963; minimum daily, 1.0 ton June 9, 10, 1968.
REMARKS.--Thermograph recorder is at fish hatchery near fish barrier dam and represents the water temperatures at the gaging station. Chemical and sediment sampling point varies 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 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	SILICA (SIO2) (MG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.												
30...	1015	452	12.0	12	--	40	8.2	3.3	3.1	.8	44	0
NOV.												
26...	0928	434	9.5	12	2	20	8.2	3.2	3.5	1.0	45	0
DEC.												
31...	1022	685	9.5	11	--	50	8.7	3.5	3.7	.9	50	0
JAN.												
29...	1040	35100	9.0	11	--	80	6.6	2.9	3.0	.8	35	0
FEB.												
06...	0915	418	8.5	11	--	60	6.1	2.7	2.6	.8	34	0
MAR.												
27...	0730	410	--	10	--	40	6.3	2.8	2.8	.8	34	0
APR.												
29...	1500	420	11.0	12	--	21	6.8	2.8	2.7	.8	36	0
MAY												
22...	1230	413	--	--	--	--	7.2	2.8	2.9	.8	38	0
JUNE												
24...	0735	415	16.0	13	--	0	9.6	2.9	3.0	.8	47	0
AUG.												
03...	1500	404	18.0	--	--	--	7.9	3.1	3.4	.8	43	0
31...	1430	413	--	--	--	--	8.1	3.4	3.4	1.0	43	0
SEP.												
28...	--	404	--	--	--	--	8.3	3.2	3.5	.9	44	0

DATE	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.											
30...	3.0	.8	.0	.14	.18	.05	.0	.07	.00	0	51
NOV.											
26...	2.0	.5	.0	.09	.16	.09	.0	.03	.00	20	54
DEC.											
31...	3.0	1.0	.2	1.1	1.2	.10	.4	.14	.06	30	58
JAN.											
29...	3.0	.8	.1	.50	.54	.05	.4	.18	.12	0	48
FEB.											
06...	5.0	.9	.0	.00	.00	.00	.2	.28	.06	60	48
MAR.											
27...	3.0	.8	.2	.76	.78	.03	.1	.15	.08	10	45
APR.											
29...	5.0	1.1	.0	.12	.12	.00	.1	.09	.03	0	46
MAY											
22...	2.0	.9	--	.36	.36	.00	.2	.27	.13	0	50
JUNE											
24...	3.0	.7	.1	.22	.24	.03	.0	.06	.02	10	60
AUG.											
03...	2.0	.8	--	.08	.09	.01	.0	.07	.02	0	58
31...	1.0	.8	--	.55	.61	.08	.2	.15	.11	0	56
SEP.											
28...	3.0	.8	--	--	--	--	--	--	--	70	57

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	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)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED VANA-DIUM (V) (UG/L)
OCT.											
30...	54	.07	34	0	16	.2	81	7.6	4	--	--
NOV.											
26...	53	.07	34	0	18	.3	82	7.2	--	1	.4
DEC.											
31...	57	.08	36	0	18	.3	87	7.5	1	--	--
JAN.											
29...	46	.07	28	0	18	.2	68	7.1	22	--	--
FEB.											
06...	46	.07	26	0	17	.2	65	7.3	10	--	--
MAR.											
27...	44	.06	27	0	18	.2	67	7.0	5	--	--
APR.											
29...	50	.06	28	0	17	.2	70	7.3	4	--	8.0
MAY											
22...	--	.07	30	0	17	.2	70	6.9	--	--	--
JUNE											
24...	56	.08	36	0	15	.2	--	7.2	4	--	--
AUG.											
03...	--	.08	32	0	18	.3	83	7.3	--	--	--
31...	--	.08	34	0	17	.3	83	7.0	--	--	--
SEP.											
28...	--	.08	34	0	18	.3	81	7.1	--	--	--

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)
ANALYSES OF ADDITIONAL SAMPLES												
OCT.												
30...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
NOV.												
11...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
DEC.												
31...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
JAN.												
29...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
FEB.												
26...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
MAR.												
27...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
APR.												
29...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAY												
27...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
JUNE												
24...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AUG.												
03...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	11.0	11.5	11.5	--	--	9.5	9.5	8.5	8.5	8.5	8.0
2	12.0	11.0	12.0	11.5	--	--	9.5	9.5	8.5	8.5	8.5	8.0
3	12.0	11.5	12.0	11.5	--	--	9.5	9.5	8.5	8.5	8.5	8.5
4	13.0	12.0	11.5	11.5	--	--	9.5	9.0	8.5	8.5	8.5	8.5
5	13.0	12.0	12.0	11.5	--	--	9.0	9.0	8.5	8.5	8.5	8.5
6	13.0	11.5	12.0	11.5	--	--	9.0	9.0	8.5	8.5	8.5	8.5
7	12.0	11.5	11.5	11.5	--	--	9.0	9.0	8.5	8.5	8.5	8.5
8	12.0	11.5	11.5	11.0	--	--	9.0	9.0	8.5	8.5	8.5	8.5
9	13.0	12.0	11.5	11.0	11.0	11.0	9.0	9.0	8.5	8.5	8.5	8.5
10	12.0	11.5	11.5	11.0	11.0	10.0	9.0	8.5	8.5	8.5	8.5	8.5
11	12.0	11.5	11.5	11.0	10.5	9.5	8.5	8.5	8.5	8.5	8.5	8.5
12	12.0	11.0	11.5	11.0	10.5	10.5	8.5	8.5	8.5	8.0	8.5	8.5
13	12.0	10.5	11.5	11.0	10.5	10.5	9.0	8.5	8.0	7.0	8.5	8.5
14	11.0	10.5	11.5	11.0	11.0	10.5	9.0	8.5	8.5	8.0	8.5	8.5
15	11.5	11.0	11.0	11.0	11.0	10.5	9.0	8.5	8.5	8.5	9.0	8.5
16	11.0	11.0	11.5	11.0	10.5	10.5	10.5	8.5	8.5	8.5	9.5	9.0
17	11.5	11.0	--	--	10.5	10.5	8.5	8.0	8.5	8.0	9.5	9.5
18	11.5	11.5	--	--	10.5	10.5	9.0	8.5	8.5	8.0	9.5	9.5
19	11.5	11.0	--	--	10.5	10.5	9.0	9.0	8.5	8.5	10.0	9.5
20	11.5	11.0	--	--	10.5	9.5	9.0	8.5	8.5	8.5	9.5	9.0
21	11.5	11.0	--	--	10.0	10.0	9.0	8.5	8.5	8.5	9.5	9.5
22	11.5	11.0	--	--	10.5	10.0	8.5	8.0	8.5	8.5	10.0	9.5
23	11.0	9.5	--	--	10.5	10.0	9.0	8.5	8.5	8.5	10.5	9.0
24	11.0	10.0	--	--	10.0	10.0	8.5	8.5	8.5	8.5	10.0	9.5
25	11.0	11.0	--	--	10.5	10.0	9.0	8.5	8.5	8.5	10.0	9.5
26	11.5	11.0	--	--	10.0	10.0	9.0	9.0	8.5	8.5	10.5	9.5
27	11.5	10.5	--	--	10.5	10.0	9.0	8.5	8.5	8.5	11.0	10.0
28	11.5	11.0	--	--	10.5	10.0	9.0	8.5	8.5	8.5	11.0	10.5
29	11.5	11.5	--	--	10.0	10.0	9.0	9.0	--	--	11.5	10.5
30	11.5	11.5	--	--	10.0	10.0	9.0	9.0	--	--	11.5	10.5
31	12.0	11.5	--	--	10.0	9.5	9.0	8.5	--	--	11.0	10.5
AVE	11.8	11.1	--	--	--	--	9.0	8.7	8.5	8.4	9.4	9.1

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	11.5	11.0	14.5	13.5	16.5	16.0	16.5	16.0	13.0	11.5
2	11.0	10.5	11.5	11.5	14.5	14.0	16.5	16.0	16.0	15.5	13.0	11.5
3	10.5	10.0	12.0	11.5	14.5	14.0	16.5	15.5	16.5	14.5	13.0	12.0
4	11.0	10.5	12.0	11.5	14.5	14.0	16.0	15.5	16.5	15.5	13.0	12.0
5	11.5	10.5	12.0	11.5	14.5	14.0	15.5	15.0	16.5	16.0	13.5	12.0
6	11.5	10.5	11.5	11.0	14.5	14.5	15.5	15.0	17.0	16.0	13.0	12.0
7	11.0	10.0	11.5	11.0	14.5	14.0	15.5	15.0	17.0	16.0	13.0	12.0
8	10.5	10.0	11.5	11.5	14.5	14.0	16.0	15.5	17.0	16.5	13.5	12.0
9	10.5	10.0	12.0	11.5	14.5	13.5	15.5	15.0	17.0	16.5	13.5	13.0
10	11.0	10.5	13.0	11.5	14.0	14.0	15.5	15.0	17.0	15.5	13.5	13.0
11	11.5	10.5	12.0	11.5	15.0	14.5	16.0	15.5	17.0	16.5	14.0	13.5
12	10.5	10.5	12.0	10.5	15.5	14.5	15.5	15.5	17.0	16.5	14.0	13.5
13	11.0	10.0	11.5	11.0	15.5	15.0	16.0	15.0	17.0	15.5	13.5	13.0
14	10.5	10.0	13.0	11.5	15.5	15.0	16.0	15.5	16.0	14.5	14.0	13.5
15	10.5	10.0	13.5	12.0	15.0	14.5	16.0	15.5	16.0	15.5	14.5	13.5
16	10.5	10.5	13.5	13.0	15.0	14.5	16.0	15.0	15.5	15.0	13.5	13.0
17	11.0	10.5	13.5	13.0	15.0	14.5	16.5	15.5	16.0	14.5	13.5	11.5
18	11.0	10.5	13.5	13.0	15.0	14.5	16.5	16.0	16.0	15.5	11.5	11.0
19	11.5	10.5	13.0	13.0	15.5	15.0	16.5	16.0	16.0	15.0	11.0	11.0
20	11.0	10.5	13.0	12.0	15.5	15.0	16.0	15.0	16.0	15.5	11.5	11.0
21	11.0	10.5	13.5	12.0	15.5	15.0	16.0	15.5	16.5	15.5	13.0	11.0
22	10.5	10.5	13.5	13.0	16.0	15.0	16.5	15.5	16.5	16.0	13.0	11.0
23	11.0	10.5	14.0	13.5	16.0	15.0	16.5	15.0	16.0	16.0	12.0	11.0
24	11.0	10.5	14.0	13.5	16.0	15.5	15.5	15.0	16.5	15.5	12.0	11.5
25	10.5	10.5	13.5	13.0	16.0	15.5	15.5	15.5	16.5	15.5	12.0	11.5
26	10.5	10.5	14.0	13.0	16.0	15.5	15.5	15.0	16.5	16.0	13.0	11.5
27	11.0	10.5	13.5	13.5	16.0	16.0	16.0	15.0	16.5	16.0	13.0	13.0
28	11.0	10.0	14.0	13.5	16.0	15.5	16.0	15.0	16.5	16.0	13.5	11.0
29	11.0	11.0	14.0	13.5	16.0	15.0	16.0	15.0	16.0	15.5	11.5	10.5
30	11.0	11.0	14.5	13.5	16.0	15.5	16.0	15.5	15.5	15.0	11.5	10.5
31	--	--	14.5	13.5	--	--	16.0	16.0	15.5	13.0	--	--
AVE	10.9	10.4	12.9	12.2	15.2	14.7	16.0	15.4	16.4	15.5	12.9	11.9

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	427	2	2.3	442	2	2.4	431	1	1.2
2	418	2	2.3	423	1	1.1	459	1	1.2
3	398	2	2.1	423	1	1.1	459	1	1.2
4	398	2	2.1	423	1	1.1	442	1	1.2
5	398	2	2.1	442	2	2.4	438	2	2.4
6	398	2	2.1	442	2	2.4	438	2	2.4
7	408	2	2.2	442	1	1.2	438	1	1.2
8	408	2	2.2	442	1	1.2	438	1	1.2
9	408	2	2.2	442	1	1.2	438	1	1.2
10	398	2	2.1	442	2	2.4	437	1	1.2
11	398	2	2.1	442	2	2.4	427	1	1.2
12	408	2	2.2	442	1	1.2	427	1	1.2
13	408	2	2.2	448	1	1.2	427	1	1.2
14	398	2	2.1	448	1	1.2	437	1	1.2
15	398	2	2.1	447	1	1.2	438	1	1.2
16	398	2	2.1	447	1	1.2	438	1	1.2
17	389	2	2.1	447	1	1.2	437	1	1.2
18	370	2	2.0	447	1	1.2	437	1	1.2
19	380	2	2.1	448	1	1.2	437	2	2.4
20	380	2	2.1	437	1	1.2	436	2	2.4
21	404	2	2.2	447	1	1.2	447	2	2.4
22	423	3	3.4	437	1	1.2	427	2	2.3
23	423	2	2.3	436	1	1.2	439	2	2.4
24	432	1	1.2	436	1	1.2	1870	6	47
25	442	1	1.2	436	2	2.4	3790	4	41
26	442	1	1.2	434	2	2.3	3180	2	17
27	442	1	1.2	432	1	1.2	2520	2	14
28	452	1	1.2	431	1	1.2	2520	2	14
29	442	1	1.2	417	1	1.1	1990	3	16
30	452	4	4.9	408	1	1.1	1220	5	16
31	452	2	2.4	--	--	--	690	3	6.2
TOTAL	12792	--	65.2	13130	--	43.8	27852	--	207.1

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	423	5	5.7	1370	21	78	468	28	35
2	432	7	8.2	438	19	22	428	16	18
3	431	7	8.1	428	13	15	422	9	10
4	430	7	8.1	409	14	15	434	9	11
5	430	6	7.0	399	16	17	430	9	10
6	437	6	7.1	399	13	14	431	7	8.1
7	437	5	5.9	399	12	13	431	8	9.3
8	438	4	4.7	390	12	13	434	8	9.4
9	449	5	6.1	400	12	13	431	8	9.3
10	438	6	7.1	400	11	12	435	7	8.2
11	438	6	7.1	399	10	11	433	8	9.4
12	448	4	4.8	400	12	13	435	8	9.4
13	4490	9	209	418	15	17	433	8	9.4
14	31400	80	7030	399	10	11	429	8	9.3
15	42500	37	4310	399	8	8.6	432	7	8.2
16	49300	57	7660	428	11	13	420	8	9.1
17	48900	52	6940	428	10	12	423	5	5.7
18	48900	39	5150	438	11	13	422	5	5.7
19	45400	25	3060	428	9	10	428	5	5.8
20	32800	14	1240	419	9	10	428	6	6.9
21	18800	9	457	418	9	10	426	4	4.6
22	32200	16	1390	428	9	10	425	8	9.2
23	46700	30	3870	419	7	7.9	426	5	5.8
24	53100	40	5730	428	7	8.1	422	6	6.8
25	53300	38	5470	419	6	6.8	415	5	5.6
26	51100	36	4960	418	5	5.6	411	5	5.5
27	48300	51	6720	418	11	12	410	6	6.6
28	39200	25	2650	427	12	14	411	4	4.4
29	35100	24	2270	--	--	--	411	4	4.4
30	26300	28	1990	--	--	--	413	5	5.6
31	7430	32	642	--	--	--	413	2	2.2
TOTAL	720451	--	71827.9	12563	--	405.0	13210	--	267.9

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	417	3	3.4	412	3	3.3	412	1	1.1
2	421	5	5.7	404	4	4.4	413	1	1.1
3	425	4	4.6	399	7	7.5	415	1	1.1
4	422	2	2.3	405	5	5.5	419	1	1.1
5	422	4	4.6	415	5	5.6	417	1	1.1
6	425	7	8.0	420	4	4.5	415	1	1.1
7	426	8	9.2	419	4	4.5	415	2	2.2
8	428	6	6.9	416	7	7.9	415	2	2.2
9	405	5	5.5	417	9	10	416	2	2.2
10	419	3	3.4	414	5	5.6	414	2	2.2
11	429	2	2.3	410	4	4.4	412	2	2.2
12	428	1	1.2	414	3	3.4	411	3	3.3
13	422	2	2.3	413	3	3.3	415	3	3.4
14	412	7	7.8	408	5	5.5	414	3	3.4
15	398	2	2.1	409	3	3.3	415	3	3.4
16	396	1	1.1	405	3	3.3	419	2	2.3
17	398	2	2.1	405	3	3.3	420	2	2.3
18	399	1	1.1	406	3	3.3	420	2	2.3
19	399	2	2.2	410	3	3.3	420	1	1.1
20	408	2	2.2	411	2	2.2	416	1	1.1
21	422	1	1.1	412	4	4.4	415	2	2.2
22	428	2	2.3	413	3	3.3	417	2	2.3
23	427	4	4.6	408	3	3.3	416	2	2.2
24	429	4	4.6	406	4	4.4	415	2	2.2
25	423	6	6.9	409	1	1.1	411	2	2.2
26	424	4	4.6	411	1	1.1	410	2	2.2
27	425	4	4.6	416	1	1.1	408	2	2.2
28	422	4	4.6	415	3	3.4	407	2	2.2
29	421	4	4.5	413	1	1.1	414	2	2.2
30	416	5	5.6	405	1	1.1	418	2	2.3
31	--	--	--	409	1	1.1	--	--	--
TOTAL	12536	--	121.4	12729	--	119.5	12444	--	62.4

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	419	3	3.4	423	3	3.4	406	2	2.2
2	417	4	4.5	421	2	2.3	398	2	2.1
3	417	4	4.5	404	3	3.3	397	3	3.2
4	422	5	5.7	391	1	1.1	390	3	3.2
5	422	5	5.7	400	1	1.1	387	4	4.2
6	425	4	4.6	400	1	1.1	395	5	5.3
7	420	3	3.4	400	1	1.1	400	3	3.2
8	416	3	3.4	406	2	2.2	398	2	2.1
9	536	3	4.3	414	2	2.2	395	2	2.1
10	411	3	3.3	412	2	2.2	398	3	3.2
11	419	4	4.5	390	2	2.1	402	3	3.3
12	418	4	4.5	385	2	2.1	404	4	4.4
13	420	4	4.5	388	2	2.1	405	4	4.4
14	408	3	3.3	400	1	1.1	407	3	3.3
15	405	3	3.3	397	1	1.1	406	3	3.3
16	420	3	3.4	400	1	1.1	404	3	3.3
17	434	3	3.5	404	1	1.1	405	4	4.4
18	444	3	3.6	404	1	1.1	405	4	4.4
19	440	4	4.8	406	2	2.2	406	4	4.4
20	437	6	7.1	404	2	2.2	403	4	4.4
21	422	5	5.7	402	2	2.2	402	3	3.3
22	422	4	4.6	396	1	1.1	407	3	3.3
23	427	3	3.5	400	1	1.1	405	3	3.3
24	423	3	3.4	404	2	2.2	400	3	3.2
25	425	3	3.4	404	2	2.2	400	4	4.3
26	421	2	2.3	406	2	2.2	399	4	4.3
27	424	2	2.3	409	2	2.2	400	3	3.2
28	426	2	2.3	411	2	2.2	404	2	2.2
29	422	2	2.3	407	2	2.2	408	2	2.2
30	430	3	3.5	406	2	2.2	408	3	3.3
31	427	4	4.6	413	2	2.2	--	--	--
TOTAL	13219	--	123.2	12507	--	58.2	12044	--	103.0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 875477
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 73404.6

11407000 FEATHER RIVER AT OROVILLE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
JAN 14, 1970	1020	9.0	31400	109	9240	--	--	--	--	--	92	99	100	--	--	--	S
JAN 15.....	1200	9.0	40000	26	2810	--	--	--	--	--	70	92	96	100	--	--	S
JAN 29.....	1130	9.0	35100	21	1990	--	--	--	--	--	92	95	97	100	--	--	S

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.

LOCATION.--Lat 39°22'00", long 121°38'46", in SW¼ 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 1970.
Sediment records: October 1964 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 125 mg/l Jan. 14; minimum daily, 1 mg/l Dec. 4, Sept. 1.
Sediment loads: Maximum daily, 17,400 tons Jan. 26; minimum daily, 9.2 tons Dec. 4.
EXTREMES, 1964-70.--Water temperatures (1964-69): Minimum, 4.0°C on several days during 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 loads: Maximum daily, 527,000 tons Dec. 23, 1964; minimum daily, 1.4 tons Oct. 27, 1966.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	---	---	10.0	10.0	10.0	---	---	20.5	21.0	---	20.0
2	---	15.0	10.0	10.0	10.0	10.0	11.5	11.5	---	---	23.0	---
3	17.0	---	---	9.5	10.0	10.0	---	---	20.5	21.0	---	20.0
4	---	11.0	10.0	9.5	10.0	10.0	11.5	11.5	---	---	23.0	---
5	14.5	---	---	9.5	10.0	10.0	---	---	20.5	21.0	21.5	19.0
6	---	11.5	10.0	9.5	10.0	10.0	11.5	11.0	---	---	23.0	---
7	14.5	---	---	9.5	10.0	10.0	---	---	21.5	21.0	---	19.0
8	---	13.0	9.5	10.0	10.0	10.0	11.5	10.5	---	---	23.0	---
9	14.0	---	---	10.0	10.0	10.0	---	---	20.5	21.0	---	19.0
10	---	13.0	8.5	10.0	10.0	10.0	11.5	10.5	---	---	23.0	---
11	13.5	---	---	10.0	10.0	10.0	---	---	20.5	21.0	---	19.0
12	---	13.0	11.0	10.0	10.0	10.0	11.5	10.5	---	---	23.0	---
13	13.0	---	---	10.0	10.0	10.0	---	---	20.5	22.0	---	19.0
14	---	13.0	11.0	10.0	10.0	9.5	11.5	12.5	---	---	23.0	---
15	13.0	---	---	10.0	10.0	9.5	---	---	20.5	22.5	---	18.0
16	14.5	13.0	10.5	10.0	10.0	9.5	11.0	14.5	---	---	23.0	---
17	13.0	---	---	10.0	10.0	9.5	---	---	20.5	23.0	---	18.0
18	12.0	12.0	10.5	10.0	10.0	9.5	10.5	18.5	---	---	23.0	---
19	11.5	---	10.0	10.0	10.0	10.0	---	---	20.5	23.0	---	18.0
20	11.5	12.0	10.0	10.0	10.0	10.0	10.5	20.0	---	---	23.0	---
21	16.0	---	10.0	10.5	10.0	10.0	---	---	20.5	23.0	---	18.0
22	---	11.0	10.0	10.5	10.0	11.0	10.5	20.0	24.0	---	23.0	---
23	---	---	10.0	10.0	10.0	11.0	---	---	20.5	23.0	---	18.0
24	13.5	11.0	10.0	10.0	10.0	11.0	10.5	20.0	---	---	23.0	---
25	---	---	10.0	10.0	10.0	11.0	---	---	20.5	23.0	---	18.0
26	14.0	10.0	10.0	10.0	10.0	11.0	10.5	20.0	---	---	22.0	---
27	---	---	10.0	10.0	10.0	11.0	---	---	20.0	23.0	---	18.0
28	15.0	10.0	10.0	10.0	10.0	11.0	10.5	20.0	---	---	22.0	---
29	14.5	---	---	10.0	---	11.0	---	---	20.5	23.0	---	18.0
30	---	10.0	9.0	10.0	---	11.0	11.0	20.0	---	---	21.0	---
31	15.0	---	10.0	10.0	---	11.0	---	---	---	23.0	---	---
MONTH	---	---	---	10.0	10.0	10.0	---	---	---	---	---	---

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3060	6	50	2980	8	64	3270	4	35
2	3030	8	65	2920	6	47	3430	3	28
3	3040	11	90	2990	6	48	3420	2	18
4	3010	8	65	3050	6	49	3410	1	9.2
5	3010	5	41	3090	6	50	3410	2	18
6	3030	5	41	3070	6	50	3400	2	18
7	3040	5	41	3030	6	49	3640	2	20
8	3040	4	33	3000	7	57	3840	3	31
9	3040	4	33	2960	8	64	3910	4	42
10	3030	4	33	3010	10	81	4060	4	44
11	2980	4	32	3010	9	73	4720	6	76
12	3160	4	34	3000	8	65	5220	8	113
13	3030	5	41	3000	7	57	5700	18	277
14	2920	5	39	3000	6	49	5960	18	290
15	3000	5	41	2990	5	40	6000	12	194
16	2970	8	64	3350	5	45	6030	6	98
17	2950	9	72	3430	5	46	6030	7	114
18	2900	9	70	3470	5	47	6050	10	163
19	2860	8	62	3460	6	56	6170	4	67
20	2910	5	39	3450	8	75	6220	5	84
21	2980	4	32	3460	6	56	6290	6	102
22	2980	4	32	3460	4	37	6040	9	147
23	3010	4	33	3450	4	37	5510	9	134
24	3020	3	24	3470	4	37	11700	124	4920
25	2990	3	24	3400	6	55	22400	115	6960
26	2980	3	24	3240	7	61	22300	62	3730
27	3000	4	32	3230	6	52	22200	42	2520
28	3010	5	41	3250	4	35	22100	13	776
29	3010	9	73	3220	4	35	22100	8	477
30	3020	10	82	3200	4	35	21400	30	1730
31	2980	10	80	--	--	--	18300	20	988
TOTAL	92990	--	1463	95640	--	1552	274230	--	24223.2

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	14800	18	719	20500	30	1660	10600	14	401
2	14000	6	227	16100	25	1090	13500	19	693
3	12800	9	311	12000	18	583	13500	18	656
4	11600	12	376	9470	18	460	13600	11	404
5	8580	8	185	9020	14	341	13600	8	294
6	4230	6	69	8890	14	336	13600	10	367
7	4190	8	91	8800	12	285	13600	9	330
8	4160	12	135	8770	11	260	13700	14	518
9	4170	10	113	8740	12	283	14000	12	454
10	5900	9	143	8690	11	258	14400	16	622
11	9950	11	296	8810	12	285	14400	18	700
12	11500	11	342	9120	12	295	14400	20	778
13	16500	48	2410	9610	20	519	12800	12	415
14	43600	125	14300	11100	25	749	12100	15	490
15	57900	80	12500	12400	20	670	12300	16	531
16	65600	92	16300	12600	21	714	10200	15	413
17	69500	77	14400	13300	17	610	9080	14	343
18	68300	72	13300	13200	16	570	9220	14	349
19	66300	60	10700	13200	14	499	9300	16	402
20	57400	31	4800	13200	17	606	5670	12	184
21	40000	30	3240	13300	18	646	2970	12	96
22	47100	54	6870	13300	14	503	2650	8	57
23	59900	68	11000	13400	14	507	2420	8	52
24	67900	74	13600	13200	14	499	2160	10	58
25	70600	88	16800	12500	12	405	2010	10	54
26	71800	90	17400	9300	13	326	2020	10	55
27	70800	72	13800	9260	12	300	2230	8	48
28	62900	40	6790	9310	12	302	2410	14	91
29	54600	32	4720	--	--	--	2590	12	84
30	47500	28	3590	--	--	--	2770	12	90
31	29600	26	2080	--	--	--	2980	10	80
TOTAL	1173680	--	191607	321090	--	14561	270780	--	10109

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2990	12	97	1860	4	20	1530	8	33
2	2980	14	113	1870	4	20	1540	12	50
3	2920	13	102	1870	5	25	1700	15	69
4	2860	12	93	1870	6	30	1970	13	69
5	2870	14	108	1890	7	36	2110	11	63
6	2810	17	129	1920	8	41	1940	10	52
7	2740	14	104	1850	8	40	1820	9	44
8	2700	12	87	1620	8	35	1850	12	60
9	2680	12	87	1650	7	31	1830	14	69
10	2670	13	94	1630	7	31	1790	13	63
11	2660	12	86	1630	8	35	1750	12	57
12	2670	11	79	1700	9	41	1720	15	70
13	2640	9	64	1670	11	50	1730	19	89
14	2530	7	48	1630	13	57	1740	16	75
15	2490	8	54	1660	13	58	1750	12	57
16	2470	9	60	1640	13	58	1760	11	52
17	2400	8	52	1590	12	52	1750	10	47
18	2210	6	36	1680	10	45	1760	10	48
19	2050	5	28	1680	10	45	1750	10	47
20	2060	4	22	1620	10	44	1740	10	47
21	2090	7	40	1600	11	48	1740	10	47
22	2080	9	51	1620	12	52	1740	11	52
23	2070	8	45	1570	11	47	1760	11	52
24	1980	8	43	1580	9	38	1760	11	52
25	1880	8	41	1630	11	48	1760	11	52
26	1860	8	40	1640	13	58	1760	11	52
27	1840	8	40	1580	12	51	1760	11	52
28	1840	7	35	1550	10	42	1760	10	48
29	1840	6	30	1520	10	41	1760	9	43
30	1850	4	20	1510	10	41	1760	10	48
31	--	--	--	1520	9	37	--	--	--
TOTAL	71730	--	1928	51850	--	1297	53090	--	1659

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1730	10	47	2500	6	41	4330	1	12
2	1690	8	37	2670	5	36	4290	2	23
3	1670	7	32	2960	4	32	4330	2	23
4	1660	8	36	3460	4	37	4340	2	23
5	1660	8	36	3560	4	38	4340	2	23
6	1640	8	35	3690	4	40	4330	3	35
7	1630	7	31	3700	4	40	4330	4	47
8	1620	8	35	3680	4	40	4300	4	46
9	1610	9	39	3690	4	40	4310	4	47
10	1640	7	31	3750	4	41	4310	4	47
11	1640	5	22	3950	4	43	4330	3	35
12	1620	6	26	3970	3	32	4340	3	35
13	1620	8	35	3930	3	32	4360	3	35
14	1650	9	40	4010	3	32	4340	3	35
15	1620	10	44	4140	4	45	4320	3	35
16	1650	9	40	4030	5	54	4340	4	47
17	1650	8	36	4050	4	44	4410	4	48
18	1670	7	32	4030	3	33	4530	4	49
19	1620	6	26	4040	4	44	4520	4	49
20	1650	7	31	4030	5	54	4520	5	61
21	1650	8	36	4010	6	65	4520	6	73
22	1660	7	31	3990	8	86	4520	6	73
23	1630	6	26	4000	8	86	4560	6	74
24	1660	8	36	4020	8	87	4480	6	73
25	1630	9	40	4110	6	67	4480	5	60
26	1620	10	44	4290	3	35	4560	5	62
27	1700	10	46	4350	4	47	4410	5	60
28	1890	8	41	4340	4	47	4080	6	66
29	2090	7	40	4390	4	47	3560	6	58
30	2200	8	48	4380	4	47	3110	6	50
31	2290	8	49	4370	3	35	--	--	--
TOTAL	52960	--	1128	120090	--	1447	129500	--	1404

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 2707630
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 252378.2

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
DEC 30, 1969	1040	9.0	21100	41	2340	--	--	--	--	--	13	20	36	76	97	100	S
JAN 19, 1970	1030	9.0	67100	132	23900	--	--	--	--	--	21	35	58	93	100	--	V

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 1970.
Sediment records: October 1964 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 562 mg/l Feb. 2; minimum daily, 7 mg/l Dec. 5.
Sediment loads: Maximum daily, 34,900 tons Feb. 2; minimum daily, 72 tons Dec. 5.
EXTREMES, 1964-70.--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 mg/l Jan. 9, 10, 1969.
Sediment loads: Maximum daily, 334,000 tons Dec. 24, 1964; minimum daily, 12 tons Oct. 27, 1966.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	11.0	---	---	---	15.0	16.0	25.0	---	---	---
2	17.0	---	8.0	7.0	8.0	10.0	13.0	---	---	23.5	---	20.0
3	---	---	11.0	7.0	8.0	9.0	13.0	---	24.0	---	---	---
4	15.0	15.0	11.0	---	9.0	10.0	14.0	19.0	---	26.0	22.0	---
5	---	---	10.0	7.0	9.0	8.0	---	---	22.5	---	21.0	18.0
6	---	14.0	10.0	7.0	9.0	9.0	15.0	16.0	---	---	23.5	---
7	16.0	---	---	8.0	10.0	10.0	14.0	---	---	23.5	---	---
8	---	13.0	10.0	8.0	---	---	15.0	17.0	18.0	---	22.0	21.0
9	15.0	---	11.0	9.0	12.0	10.0	14.5	---	---	24.5	---	---
10	---	13.5	10.0	10.0	10.0	10.0	17.0	---	18.0	---	23.5	---
11	13.0	12.0	10.0	10.0	10.0	10.0	16.0	---	---	23.5	---	21.0
12	---	14.0	11.0	10.0	10.5	10.0	---	16.0	19.0	---	24.0	---
13	14.0	14.0	12.0	10.0	10.0	10.0	13.0	---	---	---	---	---
14	---	12.0	---	10.0	9.0	12.0	12.0	17.0	---	25.0	---	17.0
15	12.0	12.0	11.0	10.0	---	---	12.0	19.5	23.0	---	---	---
16	15.0	---	12.0	10.0	9.5	11.0	13.0	---	---	22.0	---	---
17	15.0	12.0	11.0	10.0	9.0	11.0	16.0	---	22.0	---	23.5	19.0
18	12.0	12.0	11.0	9.0	7.0	10.0	15.0	21.0	---	---	---	---
19	---	9.0	11.0	10.0	8.0	10.0	---	---	23.0	---	22.0	---
20	15.0	12.5	---	10.5	8.0	10.0	15.0	20.0	---	24.5	---	18.0
21	16.0	10.0	12.5	10.5	9.0	16.0	16.0	---	26.0	---	---	---
22	16.0	---	11.0	11.0	---	---	13.5	20.0	24.0	24.0	20.0	19.0
23	15.0	---	10.0	10.5	---	15.0	14.0	---	---	---	---	17.0
24	15.0	12.0	10.0	10.0	12.5	16.0	15.0	---	---	---	---	18.0
25	14.0	12.0	11.0	8.5	9.0	16.0	---	24.0	---	23.0	21.0	---
26	---	12.0	9.0	10.0	10.0	16.0	---	---	---	---	---	---
27	15.0	---	9.0	9.5	10.0	15.0	13.0	22.0	---	23.5	21.0	18.0
28	14.0	11.0	9.0	7.5	10.0	---	13.0	---	21.0	---	20.5	---
29	15.0	10.0	7.5	8.0	---	---	---	22.0	---	21.5	---	18.0
30	---	---	7.0	10.0	---	---	---	---	---	---	---	---
31	13.0	---	8.0	8.0	---	---	---	---	---	21.5	22.0	---
MONTH	---	---	10.0	9.0	9.5	---	---	---	---	---	---	---

11407700 FEATHER RIVER AT YUBA CITY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3370	34	309	3310	15	134	3550	8	77
2	3260	32	282	3240	15	131	3700	9	90
3	3250	33	290	3250	15	132	3690	10	100
4	3260	34	299	3300	14	125	3730	10	101
5	3200	31	268	3340	15	135	3830	7	72
6	3160	27	230	3380	18	164	3850	8	83
7	3180	25	215	3370	16	146	3860	12	125
8	3170	30	257	3360	14	127	4130	16	178
9	3170	37	317	3300	15	134	4240	12	137
10	3160	37	316	3290	15	133	4320	17	198
11	3130	39	330	3340	9	81	4650	53	665
12	3130	46	389	3340	13	117	5230	53	748
13	3280	56	496	3350	16	145	5750	55	854
14	3020	51	416	3370	13	118	6270	56	948
15	3020	47	383	3370	15	136	6360	59	1010
16	3200	34	294	3490	18	170	6340	52	890
17	3180	41	352	3720	22	221	6240	67	1130
18	3190	46	396	3740	21	212	6160	55	915
19	3140	42	356	3750	20	203	6240	71	1200
20	3200	39	337	3750	23	233	6650	85	1530
21	3240	36	315	3750	22	223	7430	148	2970
22	3260	34	299	3760	19	193	8480	129	2950
23	3280	31	275	3760	16	162	6630	46	823
24	3280	32	283	3750	15	152	5100	214	2950
25	3260	27	238	3750	18	182	22300	374	22500
26	3260	19	167	3610	10	97	24700	182	12100
27	3260	18	158	3560	10	96	23500	217	13800
28	3290	26	231	3550	11	105	22400	239	14500
29	3300	22	196	3570	12	116	21900	244	14400
30	3280	18	159	3550	10	96	21700	234	13700
31	3310	15	134	--	--	--	21200	223	12800
TOTAL	99690	--	8987	104970	--	4419	284130	--	124544

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	16900	211	9630	30000	322	26100	8430	310	7060
2	15700	231	9790	23000	562	34900	18000	406	19700
3	13800	231	8610	16900	354	16200	16200	204	8920
4	13100	189	6680	14200	336	12900	14400	136	5290
5	10700	137	3960	11300	252	7690	15700	246	10400
6	5540	76	1140	9940	156	4190	15500	420	17600
7	4570	38	469	11200	255	7710	14500	280	11000
8	4430	32	383	10400	204	5730	14600	348	13700
9	4510	33	402	10000	230	6210	16100	216	9390
10	5610	68	1030	10000	172	4640	15200	206	8450
11	9260	222	5550	9590	150	3880	16500	276	12300
12	11300	342	10400	9510	166	4260	15800	216	9210
13	12400	392	13100	9580	116	3000	15200	190	7800
14	17700	525	25100	13800	456	17000	13500	214	7800
15	52700	225	32000	16400	396	17500	13000	253	8880
16	63400	128	21900	14400	298	11600	12500	260	8780
17	74500	90	18100	13800	270	10100	9490	258	6610
18	72300	84	16400	16000	264	11400	9550	210	5410
19	66700	96	17300	15300	300	12400	8760	142	3360
20	62400	78	13100	15000	396	16000	6960	81	1520
21	35600	60	5770	14300	348	13400	4070	102	1120
22	35800	39	3770	14500	336	13200	3730	85	856
23	60700	50	8190	14400	304	11800	3300	57	508
24	53100	62	8890	13800	292	10900	3160	89	759
25	69400	87	16300	14700	192	7620	2930	60	475
26	68600	106	19600	11000	182	5410	3100	57	477
27	64000	110	19000	9450	186	4750	3140	96	814
28	65900	114	20300	9320	154	3880	2990	92	743
29	51600	108	15000	--	--	--	3070	87	721
30	48000	87	11300	--	--	--	3040	82	673
31	39400	192	20400	--	--	--	3300	77	686
TOTAL	1129620	--	363564	381790	--	304370	305720	--	191012

11407700 FEATHER RIVER AT YUBA CITY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3680	72	715	1920	41	213	1980	36	192
2	3380	69	630	2040	40	220	1940	42	220
3	3310	69	617	1890	39	199	1560	48	202
4	3210	59	511	1980	38	203	1850	49	245
5	3120	53	446	2010	39	212	2210	50	298
6	3090	48	400	2050	40	221	2140	50	289
7	2960	54	432	2430	44	289	2010	49	266
8	2920	50	394	2610	48	338	2010	48	260
9	2870	43	333	2020	47	256	2160	49	286
10	2900	46	360	1800	44	214	1760	50	238
11	2900	59	462	1780	41	197	1990	48	258
12	2840	53	406	1910	38	196	1970	46	245
13	2840	46	353	1990	36	193	1880	40	203
14	2750	45	334	1870	34	172	1870	36	182
15	2660	69	496	1950	32	168	1880	33	168
16	2590	122	853	1940	31	162	1810	36	176
17	2580	123	857	1860	30	151	1770	40	191
18	2470	92	614	2330	29	182	1780	41	197
19	2270	91	558	1940	27	141	1820	43	211
20	2200	90	535	2190	26	154	1800	40	194
21	2200	73	434	2000	25	135	1790	41	198
22	2190	92	544	2020	24	131	1810	40	195
23	2200	86	511	2000	25	135	1790	39	188
24	2220	70	420	1930	27	141	1770	39	186
25	2120	62	355	1940	28	147	1780	39	187
26	2050	53	293	1990	32	172	1920	39	202
27	2090	48	271	2130	36	207	1940	40	210
28	1410	71	270	1870	40	202	1890	40	204
29	1950	67	353	1890	45	230	1940	41	215
30	1860	52	261	1360	42	154	1950	42	221
31	--	--	--	1610	39	170	--	--	--
TOTAL	77830	--	14018	61250	--	5905	56770	--	6527

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1990	43	231	2720	65	477	4150	65	728
2	1940	44	230	2850	82	631	4320	53	618
3	1880	37	188	3100	110	921	4350	59	693
4	1890	34	174	3400	143	1310	4370	65	767
5	1890	36	184	3700	115	1150	4360	70	824
6	1850	39	195	3870	100	1040	4370	63	743
7	1820	42	206	3940	90	957	4350	58	681
8	1810	48	235	3940	86	915	4060	53	581
9	1840	53	263	3940	85	904	4170	49	552
10	1900	50	257	4010	84	909	4270	45	519
11	1830	48	237	4100	83	919	4240	42	481
12	1840	44	219	4280	82	948	4300	44	511
13	1870	41	207	4320	76	886	4250	46	528
14	1860	38	191	4320	70	816	4270	47	542
15	1890	38	194	4470	64	772	4190	44	498
16	1900	39	200	4490	60	727	4140	42	469
17	1920	39	202	4490	56	679	4140	41	458
18	1940	38	199	4480	56	677	4120	50	556
19	1920	37	192	4480	56	677	4150	58	650
20	1800	36	175	4510	61	743	4080	70	771
21	1930	33	172	4240	66	756	4580	92	1140
22	2020	32	175	4410	71	845	4320	110	1280
23	2030	32	175	4390	64	759	4200	92	1040
24	2020	32	175	4330	58	678	4210	103	1170
25	2040	32	176	4240	51	584	4160	106	1190
26	2060	30	167	4420	60	716	4170	110	1240
27	2110	28	160	4470	68	821	4230	111	1270
28	2160	33	192	4540	69	846	4060	72	789
29	2360	37	236	4520	70	854	3760	58	589
30	2510	44	298	4510	76	925	2930	50	396
31	2580	50	348	4890	80	1060	--	--	--
TOTAL	61400	--	6453	128370	--	25902	125270	--	22274

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 2816810
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1077975

11407700 FEATHER RIVER AT YUBA CITY, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	MEAN DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
DEC 25, 1969	0820	11.0	22300	750	45200	--	--	--	--	--	16	31	51	92	100	--	V
DEC 30.....	1355	9.0	21700	238	13900	--	--	--	--	--	18	32	64	98	100	--	V
JAN 16, 1970	1330	11.0	63400	102	17500	13	18	32	45	57	65	79	95	100	--	--	VBWC
MAR 25.....	1250	16.0	2930	60	475	16	30	46	72	88	92	96	98	100	--	--	SBWC
APR 16.....	1310	14.0	2590	111	776	--	--	--	--	--	97	98	100	--	--	--	S

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 1970.
Sediment records: Water years 1967-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 27.0°C June 21-23, July 5, 15; minimum, 1.0°C Jan. 4-6.
EXTREMES, 1965-70.--Water temperatures: Maximum, 27.0°C June 21-23, July 5, 15, 1970; minimum, freezing point on several days during most years.
REMARKS.--Recorder malfunction Oct. 16-26, July 8, 9, Aug. 7, 8. Clock stopped Jan. 16 to Feb. 2; range in temperature, 7.0°C to 8.0°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	17.0	9.5	8.0	3.5	3.0	3.5	2.5	--	--	9.0	7.0
2	17.0	16.0	9.5	8.5	3.5	3.0	3.0	2.0	--	--	7.0	6.0
3	16.0	15.0	10.0	8.5	4.0	3.0	2.0	1.5	7.5	6.5	8.0	7.0
4	16.0	15.0	10.5	9.0	3.5	3.0	2.0	1.0	8.5	7.5	8.0	7.5
5	16.0	14.0	11.0	10.0	3.5	2.5	2.0	1.0	9.0	8.0	8.5	6.5
6	15.0	14.0	10.0	9.5	4.0	3.0	2.0	1.0	9.0	8.0	9.0	7.5
7	15.0	14.0	10.0	9.5	4.0	3.5	3.0	2.0	9.0	8.0	9.5	8.5
8	16.0	14.0	9.5	9.0	4.5	4.0	5.0	3.5	9.0	8.0	10.0	8.5
9	16.0	15.0	9.0	8.0	5.5	4.5	7.5	5.0	9.5	8.5	8.5	7.5
10	15.0	14.0	8.0	7.5	6.0	5.0	7.5	7.0	10.0	9.0	8.5	8.0
11	15.0	13.0	8.0	7.0	6.5	6.0	7.5	7.0	10.5	9.5	8.5	7.5
12	14.0	13.0	8.0	7.0	7.5	6.5	8.0	7.5	10.0	9.5	10.0	8.5
13	13.0	13.0	8.0	7.5	8.0	7.0	8.0	8.0	9.5	8.0	11.5	9.5
14	13.0	13.0	8.0	7.0	7.0	6.0	8.0	7.5	8.0	7.0	12.0	11.0
15	14.0	7.0	8.5	7.0	6.5	5.5	8.0	7.5	8.0	7.0	11.0	9.5
16	--	--	9.5	8.0	6.0	5.5	--	--	8.0	8.0	11.0	9.0
17	--	--	8.0	6.5	5.5	5.0	--	--	8.0	7.0	10.5	9.0
18	--	--	6.5	5.5	6.5	5.0	--	--	7.0	6.0	9.0	8.0
19	--	--	6.0	5.0	8.5	6.5	--	--	7.0	5.5	9.0	7.0
20	--	--	6.0	5.0	10.0	8.5	--	--	7.0	5.5	9.5	7.0
21	--	--	6.0	5.0	11.0	9.0	--	--	7.5	6.0	10.5	8.0
22	--	--	5.5	5.0	9.0	8.0	--	--	8.5	7.0	11.0	8.5
23	--	--	6.0	5.0	9.0	8.0	--	--	8.5	7.0	12.0	9.5
24	--	--	5.5	4.5	9.0	9.0	--	--	9.0	7.5	13.0	10.5
25	--	--	5.5	5.0	9.5	8.5	--	--	9.0	8.0	13.0	11.0
26	--	--	5.5	4.5	8.5	7.0	--	--	9.5	8.0	12.0	10.5
27	11.0	9.5	5.5	4.5	7.0	5.0	--	--	10.0	8.0	12.0	9.5
28	10.5	9.5	5.0	4.0	5.0	3.5	--	--	9.5	9.0	12.0	9.5
29	10.0	8.5	4.0	3.0	3.5	3.0	--	--	--	--	12.0	9.5
30	9.5	8.0	4.0	3.0	3.5	3.0	--	--	--	--	11.0	9.0
31	9.5	8.0	--	--	3.0	2.5	--	--	--	--	11.0	8.5
AVE	--	--	7.5	6.5	6.2	5.2	--	--	8.7	7.6	10.2	8.5

11417500 SOUTH YUBA RIVER AT JONES BAR, NEAR GRASS VALLEY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--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	15.0	11.0	23.0	19.5	23.5	19.5	24.0	20.0	22.0	19.0
2	12.0	8.5	16.5	12.5	24.0	20.0	25.0	21.0	24.0	20.0	21.0	18.0
3	12.0	9.0	17.5	14.0	24.5	21.5	25.5	22.0	24.5	21.0	20.5	17.5
4	12.5	9.5	18.0	15.0	24.5	21.0	26.5	22.5	24.5	21.5	20.0	18.0
5	13.0	10.0	17.5	15.0	24.5	21.5	27.0	23.5	24.0	20.5	19.0	16.5
6	13.5	10.5	15.5	15.0	24.5	21.5	26.0	22.5	24.5	20.5	20.0	16.5
7	13.5	11.0	16.5	13.0	23.0	21.0	26.0	22.0	--	--	21.5	18.5
8	13.0	11.0	15.0	13.5	22.0	18.0	--	--	--	--	22.0	19.0
9	13.0	10.5	14.5	13.0	18.0	17.0	--	--	24.5	20.5	22.0	19.0
10	13.5	11.5	14.5	13.0	19.5	16.5	25.0	21.5	25.0	20.0	21.5	19.0
11	14.0	11.0	13.0	11.5	20.0	16.5	25.5	22.0	25.0	21.5	21.0	18.0
12	13.5	11.0	13.0	11.0	19.0	17.0	26.0	22.5	25.0	21.5	20.0	18.0
13	11.5	9.5	15.5	12.0	19.0	16.5	26.0	22.5	25.0	21.0	19.0	17.0
14	9.5	7.5	17.5	13.0	18.0	17.0	26.5	23.0	24.5	21.0	18.0	15.5
15	10.5	7.0	18.5	14.0	20.0	16.0	27.0	24.0	24.5	21.0	17.0	14.5
16	10.0	8.5	20.0	16.0	21.0	17.5	26.0	23.0	24.5	21.0	17.5	14.5
17	11.0	7.0	20.0	17.0	21.5	18.5	26.0	22.0	24.5	21.0	18.0	15.0
18	11.5	9.0	19.5	17.5	22.5	19.0	26.0	22.0	25.0	21.5	18.0	15.0
19	13.0	10.5	18.5	16.5	24.5	20.5	26.5	22.5	24.0	21.5	17.0	16.0
20	12.0	9.5	18.5	15.5	26.0	22.5	26.0	23.5	23.5	20.0	17.0	14.0
21	10.0	8.5	19.0	15.5	27.0	23.5	26.0	22.5	23.5	20.0	17.0	14.0
22	11.5	8.0	19.5	16.5	27.0	23.5	26.0	22.5	23.0	20.0	17.0	14.0
23	12.0	9.0	20.5	17.0	27.0	24.0	26.0	22.5	22.5	19.5	17.0	14.5
24	12.0	9.0	21.0	17.5	26.5	23.5	26.0	23.0	22.5	19.0	17.0	14.5
25	13.0	10.0	21.5	18.0	25.0	24.0	26.0	22.5	22.0	19.0	16.5	14.0
26	12.0	10.0	22.0	18.5	24.5	23.0	26.0	22.5	22.0	18.5	16.5	14.0
27	10.0	8.0	21.0	19.0	23.0	21.0	25.5	22.0	22.0	18.5	16.5	14.0
28	10.5	7.0	20.5	17.5	21.0	19.5	25.0	21.5	22.0	19.0	16.0	14.0
29	11.5	7.5	20.5	17.5	21.0	18.0	24.5	21.5	23.0	19.5	16.5	14.5
30	14.0	9.5	21.0	18.0	22.0	18.5	24.5	21.0	22.5	20.0	16.5	14.0
31	--	--	22.0	18.5	--	--	24.0	20.5	22.0	19.0	--	--
AVE	12.0	9.2	18.2	15.2	22.8	19.9	25.7	22.2	23.7	20.2	18.6	16.0

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
OCT 30, 1969	1330	9.5	66	5	.89	--	--	--	--	--	--	--	--	--	--	--
JAN 7, 1970	1045	2.0	166	2	.90	--	--	--	--	--	--	--	--	--	--	--
JAN 19.....	1600	8.0	2210	90	537	--	--	--	--	--	--	--	--	--	--	--
MAR 2.....	1510	6.5	815	34	75	--	--	--	--	--	--	--	--	--	--	--
APR 1.....	1500	9.5	254	3	2.1	--	--	--	--	--	--	--	--	--	--	--
MAY 1.....	1045	11.0	246	4	2.7	--	--	--	--	--	--	--	--	--	--	--
JUN 2.....	1000	20.5	119	6	1.9	--	--	--	--	--	--	--	--	--	--	--
JUL 2.....	1030	21.0	84	2	.45	--	--	--	--	--	--	--	--	--	--	--
AUG 17.....	1130	22.0	45	1	.12	--	--	--	--	--	--	--	--	--	--	--
SEP 24.....	1835	16.0	48	0	0	--	--	--	--	--	--	--	--	--	--	--

11421500 YUBA RIVER AT MARYSVILLE, CALIF.

LOCATION.--Lat 39°08'31", long 121°34'30", T.15 N., R.4 E., Yuba County, temperature recorder at Simpson Lane Bridge in Marysville, 4.2 miles downstream from gaging station near Marysville, and approximately 2 miles upstream from mouth.
DRAINAGE AREA.--1,339 sq mi (at gaging station).
PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1963, water years 1964-66 (partial-record station).
Water temperatures: October 1963 to September 1970 (discontinued).
EXTREMES, 1969-70.--Water temperatures: Maximum, 25.0°C July 20; minimum, 6.0°C Jan. 5, 6.
EXTREMES, 1963-70.--Water temperatures: Maximum (1963-67, 1968-70), 29.5°C on several days in 1964 and 1966; minimum (1963-68, 1969-70), 4.5°C Feb. 17, 1966.
REMARKS.--Recorder malfunction Mar. 10 to Apr. 2, Apr. 13, 14, June 2, 3, 8-10, June 16 to July 4.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	21.5	18.0	16.5	11.0	10.0	9.0	6.5	9.5	8.0	10.0	9.0
2	21.5	20.5	18.5	16.5	11.0	10.0	9.0	6.5	9.5	8.0	10.0	8.0
3	20.5	18.0	18.5	16.5	10.5	10.0	8.5	6.5	9.5	8.0	10.0	8.0
4	19.0	16.5	18.0	16.5	10.5	10.0	8.5	6.5	10.0	8.5	9.0	8.0
5	19.5	17.0	17.0	16.0	10.0	9.0	8.0	6.0	10.0	8.5	10.0	8.0
6	19.5	18.0	16.0	15.0	10.5	10.0	8.0	6.0	9.5	8.5	10.5	8.5
7	19.0	18.0	15.0	14.0	10.0	9.5	8.0	6.5	10.5	8.5	10.0	9.0
8	19.0	17.0	14.5	13.5	10.0	9.5	8.0	8.0	10.5	8.5	11.0	9.0
9	19.5	18.0	14.5	14.0	11.0	10.0	9.0	8.0	10.0	9.0	9.5	8.5
10	19.5	18.0	14.5	14.0	10.5	10.0	9.0	8.0	10.5	9.0	--	--
11	18.0	16.0	14.5	14.0	10.5	10.0	9.0	8.0	10.5	9.0	--	--
12	18.0	15.5	14.5	14.0	11.0	10.0	9.0	8.5	10.5	9.0	--	--
13	18.0	16.5	14.5	14.0	11.5	11.0	9.0	8.0	9.5	9.0	--	--
14	17.0	16.5	14.5	14.0	11.5	11.0	9.0	8.0	10.5	9.0	--	--
15	16.5	16.0	14.5	14.0	11.5	11.0	9.0	8.0	10.0	9.0	--	--
16	18.0	16.0	14.5	14.0	11.0	10.0	10.0	8.5	9.5	9.0	--	--
17	18.0	16.5	14.0	12.0	11.0	10.0	9.5	8.5	9.5	8.5	--	--
18	17.0	16.5	12.0	11.0	11.0	10.5	10.0	9.5	10.0	8.5	--	--
19	16.5	15.5	12.0	11.5	11.5	11.0	10.0	9.5	10.0	8.0	--	--
20	18.0	16.5	13.0	11.5	12.0	11.0	10.0	9.5	10.5	8.0	--	--
21	18.5	17.0	12.0	11.5	12.0	11.0	10.5	10.0	10.5	8.0	--	--
22	19.0	18.0	12.0	11.5	12.0	10.5	10.5	9.5	11.0	8.5	--	--
23	18.5	17.0	12.0	11.5	10.5	10.0	9.5	9.0	10.5	8.5	--	--
24	18.5	17.0	12.0	11.5	10.0	9.5	9.0	8.5	10.5	8.5	--	--
25	18.0	16.5	12.0	11.5	10.5	9.0	9.0	8.5	11.0	8.5	--	--
26	18.0	16.5	12.0	11.0	10.0	9.0	9.5	9.0	11.0	8.5	--	--
27	18.0	16.5	12.0	11.0	9.0	8.5	9.5	9.0	11.0	8.5	--	--
28	18.0	16.5	11.5	11.0	9.0	8.0	9.0	8.0	10.0	9.0	--	--
29	17.0	15.5	11.0	10.5	9.0	8.0	9.0	8.0	--	--	--	--
30	18.0	16.0	11.0	10.5	9.0	7.0	9.0	8.0	--	--	--	--
31	18.0	16.5	--	--	9.0	7.0	9.0	8.0	--	--	--	--
AVE	18.5	17.0	14.0	13.1	10.6	9.7	9.1	8.1	10.2	8.6	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	15.0	11.0	18.0	11.0	--	--	21.0	15.5	21.5	16.5
2	--	--	15.0	10.5	--	--	--	--	21.5	15.5	21.5	16.5
3	14.0	9.5	15.0	10.5	--	--	--	--	21.5	16.0	21.0	16.5
4	14.5	10.0	15.0	10.5	19.5	14.0	--	--	21.0	16.0	20.5	16.5
5	14.5	10.5	14.0	10.0	17.0	11.0	24.0	20.5	21.5	16.0	20.0	15.5
6	14.5	10.5	12.0	6.5	18.5	13.0	23.5	19.5	21.5	16.5	21.0	16.0
7	14.0	10.0	14.0	9.5	17.0	13.5	23.5	20.0	21.5	16.5	21.0	17.0
8	14.0	10.5	13.5	11.0	--	12.0	23.5	20.0	22.0	16.5	21.0	17.0
9	14.5	11.0	15.5	12.0	--	--	23.0	19.5	22.0	16.5	20.5	16.5
10	14.5	11.5	15.5	11.0	16.5	--	22.0	18.5	22.0	17.0	20.0	16.5
11	14.0	11.0	13.0	9.0	17.0	11.5	23.0	19.0	22.0	17.0	20.5	16.5
12	14.5	10.5	11.5	9.0	16.5	12.0	24.0	19.5	22.0	17.0	20.5	16.5
13	--	--	13.5	9.5	17.0	13.0	24.0	20.5	22.0	17.0	20.0	16.0
14	--	--	14.5	9.5	17.0	13.0	24.5	21.0	22.0	17.0	20.0	16.0
15	14.5	10.0	14.5	9.5	18.5	13.0	24.0	21.0	22.0	17.0	19.5	16.0
16	14.0	11.5	14.5	10.0	--	13.5	23.0	19.0	22.0	17.0	20.0	15.5
17	14.5	11.0	14.5	10.0	--	--	24.0	20.5	22.0	17.0	20.0	15.5
18	14.0	12.0	14.5	10.0	--	--	24.5	21.0	22.0	17.0	20.0	15.5
19	15.0	12.0	14.5	10.5	--	--	24.5	21.0	22.0	16.5	17.0	15.5
20	14.5	11.0	15.5	10.0	--	--	25.0	19.5	21.5	16.5	19.0	15.0
21	14.0	11.5	16.0	10.5	--	14.5	21.0	15.5	21.5	16.5	19.0	15.0
22	15.5	12.0	15.0	10.5	--	--	21.0	15.5	21.5	17.0	20.0	16.0
23	15.0	13.0	16.0	11.0	--	--	21.0	15.5	21.5	16.5	20.5	18.0
24	16.0	13.0	16.5	11.0	--	--	21.0	--	21.5	16.5	19.5	18.0
25	16.0	13.5	16.5	11.0	--	--	21.0	15.5	21.5	16.5	19.5	16.0
26	15.5	10.0	16.5	11.0	--	--	21.0	15.5	21.5	16.5	19.5	17.0
27	14.0	11.0	--	--	--	--	20.5	15.5	21.5	16.5	19.5	15.5
28	14.0	10.0	--	--	--	--	20.5	15.5	21.5	17.0	19.5	16.0
29	14.5	10.5	--	--	--	--	20.5	15.0	21.5	17.0	19.5	15.5
30	14.5	11.0	16.0	11.0	--	--	20.5	15.0	21.0	16.5	19.5	17.0
31	--	--	16.5	11.0	--	--	20.5	15.0	22.0	17.0	--	--
AVE	14.6	11.1	14.8	10.2	--	--	22.5	18.2	21.7	16.6	20.0	16.2

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 northeast of Knights Landing, and at mile 5.6.
DRAINAGE AREA.--5,920 sq mi (revised), at gaging station.
PERIOD OF RECORD.--Chemical analyses: March 1951 to June 1966.
Water temperatures: March 1951 to September 1958, November 1959 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.5°C July 4, 5; minimum, 7.5°C Jan. 5-7.
EXTREMES, 1951-58, 1959-70.--Water temperatures: Maximum, 34.5°C July 21, 1961; minimum (1951-58, 1959-66, 1967-70), freezing point Jan. 3-6, 1961.
REMARKS.--Prior to 1964 water year thermograph located at gaging station 3.8 miles upstream at highway bridge at Nicolaus, and 2.9 miles downstream from Bear River. Recorder malfunction Oct. 1-26, Oct. 28 to Nov. 7. Clock stopped Aug. 22 to Sept. 15; range in temperature, 18.0°C to 23.0°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	10.5	9.0	9.0	8.5	10.0	9.0	11.5	11.0
2	--	--	--	--	10.0	9.0	9.0	8.5	10.0	9.0	11.0	10.5
3	--	--	--	--	10.5	9.0	9.0	8.0	10.0	9.5	11.0	10.0
4	--	--	--	--	10.0	9.0	9.0	8.0	11.0	10.0	10.5	9.5
5	--	--	--	--	10.0	9.0	8.5	7.5	11.0	10.0	10.5	9.5
6	--	--	--	--	10.0	9.0	8.0	7.5	11.0	10.5	11.0	10.0
7	--	--	14.0	--	10.0	9.0	8.5	7.5	11.0	10.5	11.0	10.5
8	--	--	15.0	13.5	10.0	9.5	9.0	8.5	11.0	10.5	12.0	11.0
9	--	--	15.0	13.0	10.5	9.5	9.5	9.0	11.0	10.5	11.5	11.0
10	--	--	15.0	13.0	10.5	10.0	10.5	9.5	11.5	11.0	11.0	10.5
11	--	--	14.5	13.0	10.5	10.0	10.5	10.0	12.0	11.0	10.5	10.5
12	--	--	15.0	13.0	10.5	10.0	10.5	10.0	12.0	11.5	11.0	10.5
13	--	--	15.0	13.5	11.5	10.5	10.5	10.5	12.0	11.0	11.5	11.0
14	--	--	15.0	13.5	11.0	10.5	10.5	10.5	11.5	11.0	12.5	11.5
15	--	--	14.5	14.0	11.5	10.5	10.5	10.0	11.0	10.5	12.5	11.5
16	--	--	14.5	14.0	11.0	10.5	11.0	10.0	11.0	10.0	12.5	11.5
17	--	--	14.0	12.0	11.5	11.0	11.0	10.5	10.0	10.0	12.5	11.5
18	--	--	12.5	11.0	11.5	11.0	11.0	10.5	10.5	10.0	12.0	10.5
19	--	--	12.0	10.5	12.0	11.0	10.5	10.5	10.5	9.5	12.0	11.0
20	--	--	12.0	10.5	12.5	11.5	11.5	10.5	10.5	10.0	12.5	11.0
21	--	--	11.5	10.0	13.0	12.5	12.0	11.5	11.0	10.0	13.0	11.5
22	--	--	11.5	10.0	12.5	12.0	12.5	12.0	11.0	10.0	13.5	12.0
23	--	--	11.5	10.0	12.0	11.5	12.5	12.0	11.0	10.5	14.5	12.5
24	--	--	11.5	10.0	12.0	11.5	12.0	11.0	11.0	10.5	15.0	13.0
25	--	--	11.5	10.0	12.0	11.5	11.0	10.0	11.0	10.5	15.0	13.5
26	--	--	11.5	10.0	11.5	10.5	10.5	10.5	11.5	10.5	15.0	13.0
27	14.0	14.0	11.5	10.0	10.5	9.5	11.0	10.0	12.0	11.0	15.0	12.5
28	--	--	11.5	9.5	9.5	9.0	10.5	9.0	11.5	11.0	16.0	13.5
29	--	--	11.0	9.5	9.0	8.5	9.5	9.0	--	--	16.0	13.5
30	--	--	10.5	9.5	9.0	8.5	10.0	9.0	--	--	15.5	13.0
31	--	--	--	--	9.0	8.5	9.5	9.0	--	--	14.5	12.5
AVE	--	--	13.0	--	10.8	10.1	10.3	9.6	11.0	10.3	12.7	11.4

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	12.5	18.0	14.5	22.0	18.0	26.0	22.5	25.0	21.0	--	--
2	15.5	13.0	18.5	15.0	24.0	19.0	27.0	24.0	25.5	21.5	--	--
3	15.5	13.0	19.5	15.5	27.0	23.0	27.5	25.5	25.5	22.0	--	--
4	16.5	13.5	19.0	16.0	27.5	24.5	28.5	26.0	24.5	21.5	--	--
5	17.0	14.5	18.0	15.0	26.5	22.0	28.5	26.0	23.5	21.0	--	--
6	17.0	15.0	15.5	13.5	23.5	18.5	27.0	24.0	25.0	21.5	--	--
7	16.5	14.5	16.5	13.0	23.0	20.5	27.0	24.0	24.5	22.0	--	--
8	16.5	14.5	16.5	14.0	22.0	18.0	26.5	24.0	25.0	22.0	--	--
9	17.0	15.0	18.0	15.5	18.0	17.5	26.0	23.5	25.0	22.0	--	--
10	17.0	15.5	19.0	16.0	21.0	17.5	26.0	23.0	25.5	22.5	--	--
11	16.5	14.5	18.0	14.0	21.5	18.5	26.0	23.0	25.5	22.5	--	--
12	16.0	14.5	15.5	13.0	21.0	17.5	26.5	23.5	25.5	23.0	--	--
13	15.0	13.5	16.5	13.5	21.5	18.5	27.5	24.5	25.5	22.5	--	--
14	13.5	12.5	17.5	14.0	22.0	19.0	27.5	25.5	25.0	22.0	--	--
15	15.0	12.5	18.5	15.0	23.0	20.0	27.0	24.0	24.5	22.0	--	--
16	15.0	13.0	19.0	15.5	23.0	20.0	26.0	22.5	24.5	21.5	20.0	18.0
17	16.0	13.5	19.5	16.5	23.0	20.5	27.0	24.0	24.0	21.5	20.5	18.0
18	16.0	14.0	18.5	15.5	24.0	20.5	27.5	24.5	24.0	21.5	20.5	18.5
19	16.5	14.5	18.5	15.5	25.0	22.0	28.0	25.0	24.0	21.0	19.5	18.0
20	16.0	14.0	19.0	15.5	26.0	23.0	28.0	26.0	23.5	20.5	19.0	17.0
21	16.0	14.0	20.5	16.5	26.0	23.0	26.5	24.0	23.0	20.0	19.5	17.5
22	16.5	14.0	21.5	17.5	27.0	24.0	26.0	22.5	--	--	20.0	17.0
23	16.5	14.5	21.5	18.5	26.0	23.0	26.0	22.5	--	--	20.5	18.0
24	17.5	15.0	21.5	18.5	25.5	23.0	25.5	22.5	--	--	19.5	18.0
25	17.5	15.5	22.0	18.5	25.5	23.5	25.5	22.5	--	--	18.5	16.5
26	17.0	15.0	21.5	18.5	24.0	22.0	25.5	22.5	--	--	18.5	16.0
27	16.0	14.0	21.0	18.0	23.0	20.0	25.5	22.5	--	--	19.0	16.5
28	16.0	14.0	22.5	19.0	22.5	21.0	24.5	21.5	--	--	19.0	16.5
29	16.5	13.0	23.5	20.5	23.0	20.5	24.5	21.0	--	--	18.5	17.0
30	17.5	13.5	23.5	21.5	24.0	21.5	24.5	20.5	--	--	19.0	16.5
31	--	--	23.0	18.0	--	--	24.5	20.5	--	--	--	--
AVE	16.2	14.0	19.4	16.2	23.7	20.6	26.4	23.5	--	--	--	--

11425500 SACRAMENTO RIVER AT VERONA, CALIF.

LOCATION.--Lat 38°46'51", long 121°36'12", in SE¼ sec.23, T.11 N., R.3 E., Sutter County, at gaging station on left bank, 0.8 mile southeast of Verona, 1 mile downstream from Feather River, 6.2 miles east of Knights Landing, and at mile 19.6 upstream from Sacramento.
DRAINAGE AREA.--21,275 sq mi.
PERIOD OF RECORD.--Chemical analyses: Water year 1952 (partial-record station), August 1969 to September 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DATE	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)
AUG.						
19...	16600	21.5	.00	.2	.23	.15

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	ORGANIC NITRO-GEN (N) (MG/L)	AMMONIA (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED VANA-DIUM (V) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)
DEC.												
04...	1400	12800	9.0	11	7	.14	.03	.5	.13	.00	1.8	--
30...	1030	60800	9.0	--	--	.13	.04	.3	.20	.13	--	--
MAR.												
03...	1430	51400	10.5	--	--	.41	.09	.3	.80	.63	--	--
JULY												
01...	1025	9940	20.5	--	43	.72	.04	.4	.51	.18	3.7	4
AUG.												
11...	1135	12300	23.0	--	--	.26	.00	.2	.24	.12	--	--

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	CHLOR-DANE (UG/L)
ANALYSES OF ADDITIONAL SAMPLES												
OCT.												
27...	.00	.00	.00	.00	.00	.00	.00	.00	.04	.01	.02	--
DEC.												
04...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
30...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	--
MAR.												
03...	.00	.00	.00	.00	.00	.00	.00	.00	.07	.00	.00	--
APR.												
08...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	--
MAY												
21...	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.01	.00
JULY												
01...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
AUG.												
11...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
SEPT.												
24...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

11427000 NORTH FORK AMERICAN RIVER AT NORTH FORK DAM, CALIF.

LOCATION.--Lat 38°56'10", long 121°01'22", in SW¼NW¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 27.0°C July 21, 22; minimum, 6.5°C Jan. 9, 10.
EXTREMES, 1959-70.--Water temperatures: Maximum, 27.0°C on several days during most years; minimum, 4.5°C Jan. 21, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	21.0	14.0	14.0	10.5	10.0	8.0	7.5	8.5	8.5	9.5	9.5
2	21.0	21.0	14.0	14.0	10.5	10.5	7.5	7.5	8.5	8.5	9.5	9.5
3	21.0	21.0	14.0	13.5	10.5	10.0	7.5	7.5	8.5	8.5	9.5	9.5
4	21.0	20.5	13.5	13.5	10.0	10.0	7.5	7.5	8.5	8.5	9.5	9.5
5	20.5	20.0	13.5	13.0	10.0	10.0	7.5	7.5	8.5	8.5	9.5	9.0
6	20.0	19.5	13.0	13.0	10.0	10.0	7.5	7.0	8.5	8.5	9.0	9.0
7	19.5	19.5	13.0	13.0	10.0	10.0	7.0	7.0	8.5	8.5	9.5	9.0
8	19.5	19.0	13.0	12.5	10.0	10.0	7.0	7.0	8.5	8.5	10.0	9.5
9	19.0	19.0	12.5	12.5	10.0	9.5	7.0	6.5	8.5	8.5	10.0	10.0
10	19.0	19.0	12.5	12.5	9.5	9.5	7.0	6.5	8.5	8.0	10.0	10.0
11	19.0	18.5	12.5	12.0	9.5	9.5	7.5	7.0	9.0	8.5	10.0	10.0
12	18.5	18.5	12.0	12.0	9.5	9.5	8.0	7.5	9.0	9.0	10.0	10.0
13	18.5	18.5	12.0	12.0	9.5	9.5	8.5	8.0	9.0	9.0	10.5	10.0
14	18.5	18.0	12.0	12.0	9.5	9.5	9.0	8.5	9.0	9.0	10.5	10.0
15	18.0	17.0	12.0	12.0	9.5	9.5	9.5	9.0	9.0	9.0	11.0	10.0
16	17.0	17.0	12.0	11.0	9.5	9.5	9.5	9.5	9.0	9.0	11.5	11.0
17	17.0	17.0	11.0	11.0	10.0	9.5	9.5	9.5	9.0	9.0	11.5	11.5
18	17.0	16.5	11.0	11.0	9.5	9.5	9.5	9.5	9.0	8.5	11.5	11.5
19	16.5	16.0	11.0	10.5	9.5	9.5	10.0	9.5	8.5	8.5	11.5	11.5
20	16.0	15.5	10.5	10.5	9.5	9.5	10.0	10.0	8.5	8.5	11.5	11.5
21	15.5	15.5	10.5	10.0	9.5	9.5	10.0	10.0	8.5	8.5	11.5	11.0
22	15.5	15.5	10.0	10.0	9.5	9.5	10.5	10.0	8.5	8.5	11.0	11.0
23	15.5	15.5	10.0	10.0	9.5	9.5	10.5	10.5	8.5	8.5	11.5	11.0
24	15.5	15.5	10.0	10.0	9.5	9.0	11.0	10.5	8.5	8.5	12.0	11.5
25	15.5	15.0	10.0	10.0	9.0	9.0	10.5	10.0	8.5	8.5	12.0	12.0
26	15.0	15.0	10.0	10.0	9.0	9.0	10.0	9.5	8.5	8.5	12.5	12.0
27	15.0	14.0	10.0	10.0	9.0	9.0	9.5	9.0	9.0	8.5	12.5	12.5
28	14.0	14.0	10.0	10.0	9.0	9.0	9.0	9.0	9.5	9.0	12.5	12.5
29	14.0	14.0	10.0	10.0	9.0	8.5	9.0	8.5	--	--	12.5	12.5
30	14.0	14.0	10.0	10.0	9.0	8.5	8.5	8.5	--	--	12.5	12.5
31	14.0	14.0	--	--	8.5	8.0	8.5	8.5	--	--	12.5	12.5
AVE	17.5	17.2	11.6	11.5	9.6	9.5	8.8	8.5	8.7	8.6	10.9	10.7

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	12.5	12.5	11.5	20.0	19.0	23.5	23.5	25.5	25.5	24.0	24.0
2	12.5	12.0	13.5	12.5	20.5	20.0	23.5	23.5	25.5	25.5	24.0	23.5
3	12.0	12.0	14.5	13.5	21.5	20.5	24.0	23.5	25.5	25.5	23.5	23.5
4	12.5	12.0	15.0	14.5	21.5	21.5	25.0	24.0	25.5	25.5	23.5	23.0
5	12.5	12.5	15.0	15.0	21.5	21.5	25.0	24.5	25.5	25.5	23.0	23.0
6	12.5	12.5	15.0	15.0	22.0	21.5	25.0	25.0	25.5	25.5	23.0	23.0
7	13.0	12.5	15.0	14.0	22.0	22.0	25.0	25.0	25.5	25.5	23.0	23.0
8	13.0	13.0	15.0	15.0	22.0	22.0	25.5	25.0	25.5	25.5	23.0	23.0
9	13.0	13.0	15.0	14.0	22.0	21.0	25.5	25.5	25.5	25.5	23.0	23.0
10	13.0	13.0	14.0	14.0	21.0	19.5	25.5	25.5	25.5	25.5	23.0	23.0
11	13.0	12.5	14.5	14.0	19.5	19.5	25.5	25.5	25.5	25.0	23.5	23.0
12	12.5	12.5	14.5	14.5	20.0	19.5	25.5	25.0	25.0	25.0	23.5	23.5
13	12.5	12.5	14.5	14.5	20.0	19.5	25.0	25.0	25.0	25.0	23.5	23.0
14	12.5	12.5	15.5	14.5	19.5	19.5	25.5	25.0	25.0	25.0	23.0	23.0
15	12.5	12.0	16.5	15.0	20.0	19.5	26.0	25.5	25.0	25.0	23.0	22.5
16	12.0	12.0	17.0	16.5	20.5	20.0	26.5	26.0	25.0	25.0	22.5	22.0
17	12.0	11.5	17.5	17.0	21.0	20.5	26.0	26.0	25.0	25.0	22.0	22.0
18	11.5	11.5	17.5	17.5	21.5	21.0	26.5	26.0	25.0	25.0	22.0	22.0
19	11.5	11.5	17.5	17.5	22.5	21.5	26.5	26.5	25.0	25.0	22.0	21.0
20	12.0	11.5	18.0	17.0	23.5	22.5	26.5	26.5	25.0	25.0	21.5	21.5
21	12.0	12.0	17.5	17.0	24.5	23.5	27.0	26.5	25.0	25.0	21.5	21.5
22	12.0	12.0	17.5	17.0	24.5	24.5	27.0	26.0	25.0	25.0	21.5	21.0
23	12.0	12.0	18.5	17.5	25.0	24.5	26.0	26.0	25.0	25.0	21.0	21.0
24	12.0	12.0	18.5	18.5	25.5	25.0	26.0	26.0	25.0	25.0	21.0	21.0
25	12.0	12.0	18.5	18.5	25.5	25.5	26.0	26.0	25.0	24.5	21.0	20.5
26	12.5	12.0	19.0	18.5	25.5	25.5	26.5	26.0	24.5	24.5	20.5	20.5
27	12.5	12.0	19.0	18.5	25.5	25.0	26.5	26.5	24.5	24.0	20.5	20.5
28	12.0	12.0	19.0	18.5	25.0	24.5	26.5	26.0	24.0	24.0	20.5	20.5
29	12.0	11.5	19.0	18.5	24.5	23.5	26.0	26.0	24.0	24.0	20.5	20.5
30	12.0	11.5	19.0	19.0	23.5	23.5	26.0	25.5	24.0	24.0	20.5	20.5
31	--	--	19.0	19.0	--	--	25.5	25.5	24.0	24.0	--	--
AVE	12.3	12.1	16.5	16.0	22.4	21.9	25.7	25.4	25.0	25.0	22.3	22.1

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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.0°C on several days during June and July; minimum, 1.5°C Jan. 2-6.
EXTREMES, 1966-70.--Water temperatures: Maximum, 23.5°C July 22, 1966; minimum, 1.0°C Dec. 17, 18, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	12.0	9.5	8.5	3.0	2.5	2.5	2.0	8.0	7.5	9.5	8.0
2	14.0	12.0	9.5	8.5	3.0	2.5	2.0	1.5	7.5	7.0	8.5	7.5
3	12.0	11.0	9.0	8.0	3.0	2.5	2.0	1.5	8.5	7.5	9.0	8.0
4	12.0	10.0	9.0	8.0	3.0	2.5	1.5	1.5	8.5	8.0	8.5	8.0
5	12.0	10.0	9.5	9.0	3.0	2.5	1.5	1.5	9.0	8.0	9.0	7.5
6	11.0	10.0	9.5	9.0	3.5	3.0	2.5	1.5	8.5	8.0	9.0	8.0
7	12.0	10.0	9.5	9.0	3.5	3.0	3.0	2.5	8.5	8.0	9.5	8.0
8	12.0	10.0	9.5	8.5	4.0	3.5	4.0	3.0	9.5	8.0	10.0	9.5
9	12.0	11.0	8.5	7.5	4.5	4.0	5.5	4.0	10.0	9.0	9.5	9.0
10	12.0	11.0	8.0	7.0	4.5	4.0	6.0	5.5	10.0	9.5	9.5	8.5
11	12.0	10.0	7.5	7.0	5.0	4.5	6.0	5.5	10.5	10.0	9.5	8.5
12	11.0	10.0	7.5	7.0	5.0	5.0	6.0	5.5	10.0	9.5	10.5	9.0
13	11.0	9.0	7.5	6.5	5.0	4.5	6.0	6.0	9.5	9.0	11.0	9.5
14	11.0	10.0	7.5	6.5	4.5	4.0	6.5	6.0	9.5	9.0	11.0	10.0
15	11.0	11.0	7.5	6.5	4.0	4.0	7.0	6.5	9.5	8.5	10.5	9.0
16	11.0	11.0	7.5	7.0	4.0	3.5	7.5	7.0	9.0	9.0	11.0	9.0
17	12.0	10.0	7.0	6.0	3.5	3.0	8.5	7.5	9.0	9.0	10.5	9.0
18	10.0	9.0	6.0	5.0	4.5	3.5	8.5	8.0	9.5	8.5	9.5	7.5
19	10.0	8.0	5.5	5.0	7.5	4.5	9.0	8.5	9.5	8.5	9.5	7.5
20	10.0	9.0	5.5	5.0	8.0	7.5	9.0	9.0	9.5	8.5	10.0	7.5
21	11.0	9.0	5.5	5.0	8.0	6.5	10.0	9.0	9.5	8.5	10.0	8.0
22	11.0	9.5	5.5	5.0	7.0	6.5	10.5	10.0	9.5	8.5	10.5	8.0
23	11.0	9.5	5.0	4.0	8.0	7.0	10.5	10.5	9.5	8.5	11.0	8.5
24	11.5	11.0	4.5	4.0	8.0	8.0	10.5	9.0	9.5	8.5	11.5	9.0
25	11.5	9.5	4.5	4.0	8.0	6.5	9.0	8.5	9.5	8.0	12.0	9.0
26	11.0	9.5	4.5	4.0	6.5	5.5	9.5	9.0	9.5	8.0	11.0	9.0
27	10.5	9.0	4.0	3.5	5.5	4.0	9.0	8.0	9.5	8.0	11.0	9.0
28	10.0	9.0	3.5	3.0	4.0	4.0	8.0	7.5	9.5	9.0	11.0	9.0
29	9.5	8.0	3.0	2.5	4.0	3.0	7.5	7.0	--	--	10.5	8.5
30	9.5	8.0	3.0	2.5	3.0	2.5	8.5	7.5	--	--	10.0	8.0
31	9.5	8.5	--	--	3.0	2.5	8.5	7.0	--	--	10.0	7.5
AVE	11.2	9.8	6.8	6.1	4.9	4.2	6.6	6.0	9.3	8.5	10.1	8.5

DAY	APR.		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	7.0	13.0	9.5	16.5	13.5	18.0	15.0	18.0	15.0	17.0	15.0
2	10.5	7.5	13.5	10.5	17.0	14.5	18.5	16.0	18.0	15.0	16.5	14.5
3	11.0	7.5	14.0	11.0	17.5	15.0	18.0	17.0	19.0	15.5	16.5	14.0
4	11.0	8.0	14.0	12.0	17.0	14.0	20.0	17.0	19.0	15.5	16.0	14.5
5	11.5	8.0	14.5	11.5	17.0	14.5	20.0	17.5	19.0	15.5	15.5	14.0
6	12.0	8.5	13.0	11.5	17.0	14.5	20.0	17.0	19.0	15.5	16.0	14.0
7	11.5	9.5	13.0	10.0	16.5	14.0	20.0	17.0	18.5	15.5	16.5	15.0
8	11.5	9.0	12.0	10.5	15.0	13.5	20.0	17.0	19.0	16.0	17.0	15.0
9	11.5	9.0	13.0	12.0	13.5	13.0	18.5	17.0	19.0	16.0	17.0	15.0
10	11.0	10.0	12.5	11.0	15.0	13.0	19.5	17.0	19.0	16.0	16.5	15.0
11	12.0	9.0	11.5	9.5	15.5	12.5	20.0	17.0	19.0	16.0	16.5	14.5
12	11.5	8.5	11.5	10.0	14.0	12.5	19.0	16.0	19.0	16.5	16.0	14.0
13	10.5	8.5	13.5	10.5	14.0	12.0	19.0	16.0	19.0	16.0	15.0	14.5
14	9.0	8.0	14.0	10.5	14.5	12.5	19.0	17.0	18.5	16.0	14.5	13.0
15	9.5	7.0	14.5	11.0	15.0	12.5	19.5	17.5	18.5	16.0	14.0	12.0
16	10.0	8.5	15.5	12.5	17.0	13.0	19.0	16.5	18.5	16.0	14.0	12.0
17	11.0	8.0	15.5	12.5	17.5	15.0	19.0	16.0	18.5	16.0	14.5	12.5
18	11.0	8.5	14.5	12.5	18.0	15.0	19.0	16.0	19.0	17.0	14.5	12.5
19	12.0	10.0	14.5	12.0	19.0	16.0	19.5	16.5	18.5	16.5	14.0	13.0
20	11.0	8.0	14.5	11.5	19.5	17.0	20.0	17.0	18.0	16.0	13.5	12.0
21	10.5	8.0	14.5	11.5	20.0	17.5	19.5	17.0	18.0	16.0	13.5	12.0
22	10.5	8.0	14.5	12.0	20.0	17.5	19.0	16.5	18.0	16.0	14.0	12.0
23	11.0	8.0	15.5	12.5	20.0	18.0	19.5	16.5	18.0	15.5	14.0	12.0
24	12.0	8.5	15.5	13.0	20.0	17.5	19.5	17.0	17.5	15.5	14.0	12.0
25	12.0	9.0	16.0	13.0	19.0	17.5	19.5	15.5	17.5	15.0	14.0	12.0
26	11.5	10.0	16.0	13.5	19.0	18.0	19.5	16.5	17.5	15.0	13.5	11.5
27	10.0	8.0	15.5	13.5	18.0	16.5	19.0	16.5	17.5	15.5	13.5	11.5
28	10.5	7.5	15.0	12.5	18.0	16.5	19.0	16.0	17.5	15.5	13.5	11.5
29	11.0	7.5	15.5	12.5	17.5	15.0	19.0	16.0	17.5	16.0	13.5	11.5
30	12.0	8.5	15.5	12.5	17.0	15.0	18.5	15.5	17.0	15.5	14.0	11.5
31	--	--	16.0	13.0	--	--	18.0	15.0	17.0	15.0	--	--
AVE	11.0	8.4	14.2	11.7	17.1	14.9	19.2	16.5	18.3	15.7	14.9	13.1

11439500 SOUTH FORK AMERICAN RIVER NEAR KYBURZ, CALIF.

LOCATION.--Lat 38°45'49", long 120°19'39", in SW¼SW¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Minimum, 3.5°C on several days during January.
EXTREMES, 1967-70.--Water temperatures: Maximum (1967-69), 24.0°C June 26, 27, July 4, 8, 1968; minimum, 2.0°C on several days in 1969.
REMARKS.--Recorder inoperative Jan. 26 to Sept. 15.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	13.5	8.5	8.0	4.5	4.0	4.0	3.5	--	--	--	--
2	15.0	13.5	9.0	8.0	4.5	4.0	3.5	3.5	--	--	--	--
3	14.0	12.0	9.0	8.5	4.5	4.5	3.5	3.5	--	--	--	--
4	12.0	10.0	9.5	8.5	4.5	4.0	3.5	3.5	--	--	--	--
5	11.0	9.0	9.5	9.0	4.5	4.0	3.5	3.5	--	--	--	--
6	11.0	9.0	9.0	6.5	5.5	4.5	3.5	3.5	--	--	--	--
7	11.0	8.5	8.0	6.5	5.5	5.0	3.5	3.5	--	--	--	--
8	10.5	10.0	7.5	7.0	5.5	5.0	4.0	3.5	--	--	--	--
9	11.5	10.0	7.0	6.0	5.5	5.0	4.5	4.0	--	--	--	--
10	12.0	10.5	7.0	6.0	5.5	5.0	4.5	4.0	--	--	--	--
11	11.0	9.0	7.0	6.0	5.5	5.0	5.0	4.5	--	--	--	--
12	10.0	8.0	7.0	6.5	6.0	5.5	5.0	5.0	--	--	--	--
13	9.0	7.5	7.0	6.5	6.0	5.5	5.0	5.0	--	--	--	--
14	8.0	7.5	7.0	6.5	5.5	5.0	5.0	4.0	--	--	--	--
15	9.0	8.0	7.5	7.0	5.0	4.0	5.0	4.5	--	--	--	--
16	9.5	9.0	7.5	7.0	4.5	4.5	5.0	5.0	--	--	--	--
17	9.5	8.5	7.0	6.0	4.5	4.0	5.0	5.0	--	--	--	--
18	8.5	8.0	6.0	4.5	6.0	4.0	5.5	5.0	--	--	--	--
19	8.0	7.5	5.5	5.0	6.5	6.0	6.0	5.5	--	--	--	--
20	8.5	7.0	6.0	5.0	6.5	6.0	6.0	5.5	--	--	--	--
21	9.5	8.0	6.0	5.5	7.0	6.0	6.0	5.5	--	--	--	--
22	10.0	9.0	6.0	5.5	6.0	5.5	6.0	6.0	--	--	--	--
23	10.0	9.0	6.0	5.0	6.0	5.5	6.0	6.0	--	--	--	--
24	10.0	9.0	5.0	5.0	6.0	5.5	6.0	5.5	--	--	--	--
25	10.0	9.0	5.5	5.0	6.0	5.5	5.5	5.5	--	--	--	--
26	9.5	8.5	5.5	5.0	5.5	5.0	--	--	--	--	--	--
27	9.5	8.5	5.5	5.0	5.0	4.5	--	--	--	--	--	--
28	9.5	8.5	5.0	4.5	4.5	4.0	--	--	--	--	--	--
29	9.0	8.0	5.5	4.5	4.0	4.0	--	--	--	--	--	--
30	8.0	8.0	5.0	4.5	4.0	4.0	--	--	--	--	--	--
31	8.5	8.0	--	--	4.0	4.0	--	--	--	--	--	--
AVE	10.3	9.0	6.9	6.1	5.3	4.8	4.8	4.5	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	13.0	10.5
16	--	--	--	--	--	--	--	--	--	--	13.0	10.0
17	--	--	--	--	--	--	--	--	--	--	13.5	11.0
18	--	--	--	--	--	--	--	--	--	--	14.0	11.5
19	--	--	--	--	--	--	--	--	--	--	13.0	12.0
20	--	--	--	--	--	--	--	--	--	--	12.0	10.0
21	--	--	--	--	--	--	--	--	--	--	12.0	10.0
22	--	--	--	--	--	--	--	--	--	--	12.5	10.5
23	--	--	--	--	--	--	--	--	--	--	12.5	10.5
24	--	--	--	--	--	--	--	--	--	--	12.5	10.5
25	--	--	--	--	--	--	--	--	--	--	12.0	10.5
26	--	--	--	--	--	--	--	--	--	--	12.0	10.0
27	--	--	--	--	--	--	--	--	--	--	12.0	10.0
28	--	--	--	--	--	--	--	--	--	--	12.0	10.0
29	--	--	--	--	--	--	--	--	--	--	12.0	10.0
30	--	--	--	--	--	--	--	--	--	--	12.0	10.0
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

11445500 SOUTH FORK AMERICAN RIVER NEAR LOTUS, CALIF.

LOCATION.--Lat 38°49'07", long 120°56'45", in SW¼ 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: October 1958 to September 1963.
Water temperatures: December 1959 to September 1968, February to September 1970.
Sediment records: Water years 1957-62 (partial-record station).
EXTREMES, February to September 1970.--Water temperatures: Maximum, 20.0°C on several days during July and September.
EXTREMES, 1959-68, February to September 1970.--Water temperatures: Maximum, 29.5°C July 20, 1960; minimum (1959-68), 1.0°C on several days in 1960 and 1962.

TEMPERATURE (°C) OF WATER, FEBRUARY TO SEPTEMBER 1970

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	7.5	6.0
2	---	---	---	---	---	---	---	---	---	---	8.5	5.5
3	---	---	---	---	---	---	---	---	---	---	7.0	5.5
4	---	---	---	---	---	---	---	---	---	---	6.0	6.0
5	---	---	---	---	---	---	---	---	---	---	7.5	5.0
6	---	---	---	---	---	---	---	---	---	---	7.5	5.0
7	---	---	---	---	---	---	---	---	---	---	6.5	5.0
8	---	---	---	---	---	---	---	---	---	---	9.0	6.0
9	---	---	---	---	---	---	---	---	---	---	9.0	7.0
10	---	---	---	---	---	---	---	---	---	---	7.5	6.0
11	---	---	---	---	---	---	---	---	---	---	7.0	6.0
12	---	---	---	---	---	---	---	---	---	---	8.5	6.0
13	---	---	---	---	---	---	---	---	---	---	9.0	6.5
14	---	---	---	---	---	---	---	---	---	---	8.5	6.5
15	---	---	---	---	---	---	---	---	---	---	10.0	6.5
16	---	---	---	---	---	---	---	---	---	---	9.5	6.5
17	---	---	---	---	---	---	---	---	---	---	9.0	7.0
18	---	---	---	---	---	---	---	---	---	---	9.0	6.0
19	---	---	---	---	---	---	---	---	---	---	9.0	6.5
20	---	---	---	---	---	---	---	---	---	---	9.0	6.5
21	---	---	---	---	---	---	---	---	---	---	9.0	6.5
22	---	---	---	---	---	---	---	---	---	---	10.0	6.0
23	---	---	---	---	---	---	---	---	---	---	10.0	7.0
24	---	---	---	---	---	---	---	---	---	---	9.5	6.5
25	---	---	---	---	---	---	---	---	---	---	10.0	7.0
26	---	---	---	---	---	---	---	---	7.0	5.5	10.0	7.5
27	---	---	---	---	---	---	---	---	7.0	5.0	10.0	7.5
28	---	---	---	---	---	---	---	---	6.5	6.0	10.5	8.0
29	---	---	---	---	---	---	---	---	---	---	11.5	7.5
30	---	---	---	---	---	---	---	---	---	---	10.5	7.0
31	---	---	---	---	---	---	---	---	---	---	10.5	7.0
MONTH	---	---	---	---	---	---	---	---	---	---	11.5	5.0

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

11446500 AMERICAN RIVER AT FAIR OAKS, CALIF.

LOCATION.--Lat 38°38'08", long 121°13'36", in SE¼NE¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Minimum, 8.5°C on several days during February.
EXTREMES, 1951-58, 1959-70.--Water temperatures: Maximum (1951-58, 1959-64, 1965-69), 27.0°C July 27, Aug. 3, 1954; minimum, freezing point on several days in 1957 and 1958.
REMARKS.--Recorder malfunction Dec. 5-12; recorder removed June 29 and reinstalled Aug. 29. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	17.0	15.0	15.0	12.5	12.0	10.0	10.0	9.5	9.0	9.0	9.0
2	17.5	16.5	15.0	15.0	12.0	12.0	10.0	9.5	9.5	9.0	9.5	9.0
3	17.5	16.5	15.0	15.0	12.0	12.0	10.0	9.5	9.0	9.0	9.5	9.0
4	17.5	16.5	15.0	15.0	12.0	12.0	9.5	9.0	9.0	9.0	9.0	9.0
5	17.5	17.0	15.0	15.0	--	--	9.5	9.0	9.0	8.5	9.5	9.0
6	17.5	17.0	15.0	14.5	--	--	9.0	9.0	9.0	8.5	9.5	9.0
7	17.0	17.0	15.0	15.0	--	--	9.0	9.0	9.0	8.5	9.5	9.0
8	17.0	17.0	15.0	14.5	--	--	9.0	9.0	9.0	8.5	9.5	9.0
9	17.0	16.5	15.0	15.0	--	--	9.0	9.0	9.0	8.5	9.5	9.0
10	17.0	17.0	15.0	15.0	--	--	9.0	9.0	9.0	8.5	9.5	9.0
11	17.0	16.0	15.0	15.0	--	--	9.0	9.0	9.0	8.5	9.5	9.0
12	16.5	16.0	15.0	15.0	--	--	9.0	9.0	9.0	9.0	9.5	9.0
13	16.5	16.5	15.0	15.0	12.0	12.0	9.0	9.0	9.0	8.5	9.5	9.0
14	16.5	16.0	15.0	15.0	12.0	12.0	9.5	9.0	9.0	8.5	9.5	9.0
15	16.0	16.0	15.0	14.5	12.0	12.0	9.5	9.0	9.0	8.5	9.5	9.0
16	16.0	16.0	14.5	14.5	12.0	12.0	9.5	9.0	9.0	8.5	10.0	9.0
17	16.0	14.5	14.5	14.0	12.0	12.0	10.0	9.5	9.0	8.5	10.0	9.5
18	14.5	14.0	14.0	14.0	12.0	12.0	10.0	10.0	9.0	8.5	10.0	9.0
19	14.0	14.0	14.0	14.0	12.0	11.5	10.0	9.5	9.5	9.0	10.5	10.0
20	14.5	14.0	14.0	13.5	11.5	11.5	10.0	10.0	9.5	9.0	10.5	10.0
21	14.5	14.5	13.5	13.5	12.0	11.5	10.0	10.0	9.5	9.0	10.0	10.0
22	14.5	14.5	13.5	13.0	12.0	12.0	10.5	10.0	9.5	9.0	10.5	10.0
23	14.5	14.5	13.0	13.0	12.0	12.0	10.5	10.0	9.5	9.0	11.0	10.0
24	14.5	14.5	13.0	13.0	12.0	11.5	10.5	10.5	9.5	9.0	11.0	10.5
25	14.5	14.5	13.0	13.0	11.5	11.5	10.5	10.5	9.5	9.0	11.5	11.0
26	14.5	14.5	13.0	13.0	11.5	11.0	10.5	10.5	9.0	9.0	12.0	11.5
27	15.0	14.5	13.0	12.5	11.0	11.0	10.5	10.0	9.0	8.5	12.0	11.5
28	15.0	14.5	12.5	12.5	11.0	11.0	10.0	10.0	9.0	9.0	12.0	11.0
29	15.0	14.5	12.5	12.5	11.0	11.0	10.0	9.5	--	--	11.5	11.0
30	15.0	15.0	12.5	12.5	11.0	10.5	10.0	9.5	--	--	11.5	11.0
31	15.0	15.0	--	--	10.5	10.0	9.5	9.0	--	--	11.0	10.5
AVE	15.9	15.5	14.2	14.1	--	--	9.7	9.5	9.2	8.8	10.2	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	13.5	14.0	13.5	--	14.0 --	--	--	18.5	17.5
2	12.0	11.5	14.5	13.5	14.5	13.5	--	15.0 --	--	--	18.0	18.0
3	12.0	11.0	14.5	13.5	16.0	14.0	--	16.0 --	--	--	18.0	17.5
4	11.5	11.0	14.0	13.0	16.0	14.5	--	--	--	--	18.0	18.0
5	11.5	11.0	14.0	13.0	15.5	14.0	--	--	--	--	18.0	17.5
6	11.5	11.0	14.0	13.5	16.0	15.0	--	16.5 --	--	--	18.5	18.0
7	12.0	11.0	14.0	13.0	15.5	15.0	--	17.0 --	--	23.0 --	18.5	18.0
8	12.0	11.5	14.0	13.0	16.0	15.0	--	17.0 --	--	--	18.5	18.0
9	12.0	12.0	14.0	13.0	16.0	15.0	--	16.5 --	--	--	18.5	18.0
10	12.5	12.0	14.0	13.5	15.0	14.0	--	--	--	19.5 --	18.5	18.0
11	12.5	12.0	14.0	13.5	15.0	13.5	--	--	--	19.0 --	18.5	18.0
12	12.0	11.5	14.5	13.5	16.0	14.0	--	--	--	--	18.5	18.0
13	12.0	11.5	14.5	13.0	15.5	14.0	--	--	--	--	18.0	17.5
14	12.0	11.0	14.5	13.0	15.0	14.0	--	--	--	--	18.0	17.5
15	12.0	11.0	15.0	14.0	15.0	13.5	--	--	--	--	18.0	17.5
16	12.0	11.0	14.5	13.5	14.0	13.5	--	17.0 --	--	--	18.0	17.5
17	13.0	12.0	14.0	13.0	14.5	13.5	--	--	--	19.0 --	18.0	18.0
18	13.0	12.0	14.0	13.0	15.0	14.5	--	--	--	--	18.5	18.0
19	13.0	12.0	14.5	13.0	15.0	14.0	--	--	--	--	18.0	17.5
20	13.0	12.0	15.0	13.5	14.5	14.0	--	--	--	--	18.0	17.5
21	13.0	12.0	14.5	13.5	16.0	14.0	--	--	--	--	18.0	18.0
22	13.0	12.0	14.5	13.5	15.5	14.5	--	--	--	--	18.0	18.0
23	13.5	12.0	15.5	14.0	15.0	14.0	--	--	--	--	18.5	18.0
24	14.0	12.5	15.0	13.5	15.0	14.5	--	--	--	--	18.5	18.0
25	13.5	13.0	14.0	13.0	14.5	14.0	--	--	--	--	18.0	18.0
26	13.5	13.0	14.0	13.0	14.0	14.0	--	--	--	--	18.5	18.0
27	13.0	12.0	14.5	14.0	14.5	14.0	--	--	--	--	18.5	18.0
28	13.0	12.0	15.0	14.0	15.0	14.5	--	--	--	18.0 --	18.5	18.0
29	13.0	12.0	15.0	13.5	--	--	--	--	18.5	18.0	18.5	18.0
30	13.5	13.0	15.0	14.0	-- 14.0	--	--	--	18.0	17.5	18.5	18.0
31	--	--	14.5	14.0	--	--	--	--	18.0	17.5	--	--
AVE	12.5	11.8	14.4	13.4	15.1	14.1	--	--	--	--	18.3	17.8

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 (revised).
PERIOD OF RECORD.--Chemical analyses: October 1952 to May 1960.
Water temperatures: May 1955 to September 1970.
Sediment records: October 1956 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.0°C June 2, July 20; minimum, 7.0°C Jan. 3, 7, 8, 10.
Sediment concentrations: Maximum daily, 340 mg/l Dec. 20; minimum daily, 11 mg/l Nov. 28.
Sediment loads: Maximum daily, 54,600 tons Dec. 24; minimum daily, 469 tons Nov. 28.
EXTREMES, 1955-70.--Water temperatures: Maximum (1955-62, 1963-66, 1967-70), 28.0°C on several days in 1969 and 1970; minimum (1955-70), 4.0°C Jan. 30, 31, Feb. 1, 1957.
Sediment concentrations (1956-70): Maximum daily, 1,960 mg/l Dec. 24, 1964; minimum daily 11 mg/l Nov. 30, 1959 (estimated), and Nov. 28, 1970.
Sediment loads (1956-70): 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, 11447650 Sacramento River at Freeport, Calif., are considered as being part of this IHD station.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	---	11.0	8.5	---	13.0	14.0	17.0	24.0	22.0	---	22.0
2	20.0	---	---	8.0	10.0	11.0	14.5	18.0	28.0	23.5	25.0	22.0
3	20.0	15.5	11.0	7.0	10.0	11.0	14.0	20.0	24.0	25.0	23.0	23.0
4	20.0	15.5	10.0	---	10.0	10.0	17.0	20.0	25.0	24.0	21.0	20.0
5	20.0	14.5	10.0	8.5	11.0	---	16.0	18.0	22.5	---	22.0	22.0
6	21.0	---	---	---	11.0	11.0	16.5	16.0	---	23.0	23.0	22.0
7	16.0	13.0	---	7.0	11.0	12.0	16.0	17.0	21.0	26.0	23.0	---
8	17.0	14.0	10.0	7.0	11.0	---	17.0	17.0	19.0	23.0	---	24.0
9	15.5	14.0	10.0	8.5	12.0	---	18.0	---	--	22.0	24.0	---
10	15.5	15.0	10.0	7.0	12.0	12.0	16.5	18.0	19.0	23.0	24.0	23.0
11	15.5	14.5	10.5	---	13.0	12.0	16.0	17.0	---	21.0	24.0	23.0
12	---	14.0	11.0	9.0	12.0	12.0	---	17.5	20.0	23.0	---	20.0
13	15.5	16.5	11.5	9.0	11.0	13.0	14.0	16.5	20.0	24.0	23.0	19.0
14	15.5	15.5	---	8.5	11.5	13.0	13.5	17.5	20.0	23.0	23.0	19.0
15	15.5	---	12.0	9.0	---	---	14.0	19.0	22.0	23.0	22.0	19.0
16	15.0	14.5	11.0	---	11.0	14.0	14.0	---	19.0	23.0	24.0	20.0
17	15.0	13.5	11.0	11.0	10.0	13.0	15.0	---	18.0	23.0	23.0	---
18	15.0	---	11.0	10.0	10.0	13.0	---	---	22.0	23.0	23.0	21.0
19	---	13.0	11.5	10.0	10.0	14.0	13.0	17.0	24.0	26.0	---	---
20	14.5	12.0	11.5	11.0	11.0	13.0	14.0	18.0	23.0	28.0	22.0	19.0
21	15.0	12.0	12.0	12.0	12.0	13.0	15.0	19.0	24.0	23.0	21.0	21.0
22	---	11.5	---	13.0	12.0	14.0	15.5	22.0	26.0	23.0	---	19.0
23	---	---	11.5	13.0	12.0	15.0	16.0	23.0	26.0	---	20.0	---
24	15.5	11.5	11.5	12.0	12.0	16.0	16.0	22.0	23.0	23.0	22.0	23.0
25	15.0	11.5	11.5	12.0	13.0	16.0	16.0	22.0	24.0	---	19.0	21.0
26	15.5	11.5	11.5	11.0	14.0	16.0	15.0	20.5	22.0	22.0	21.0	20.0
27	15.5	11.0	11.5	10.0	13.0	15.0	13.5	19.0	---	22.0	22.0	19.0
28	15.5	11.0	9.0	---	---	---	15.0	19.0	20.0	23.0	21.0	20.0
29	---	11.5	9.0	12.0	---	15.0	15.0	23.0	22.0	22.0	---	20.0
30	15.5	11.0	9.5	---	---	14.0	17.0	---	22.0	21.0	22.0	19.0
31	15.5	---	9.0	---	---	13.0	---	24.0	---	21.0	---	---
MONTH	16.5	13.0	10.5	---	11.5	13.0	15.5	19.0	22.5	23.0	---	21.0

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	16900	29	1320	17200	28	1300	15800	13	555
2	16600	33	1480	17200	27	1250	15800	12	512
3	16100	41	1780	17200	24	1110	15900	12	515
4	15600	35	1470	17100	18	831	15900	13	558
5	15500	32	1340	17400	17	799	15900	13	558
6	15300	33	1360	17600	18	855	15700	14	593
7	15000	31	1260	18400	18	894	15600	15	632
8	14800	32	1280	19100	22	1130	15700	14	593
9	14800	33	1320	19200	21	1090	16300	14	616
10	14700	27	1070	18900	18	919	16800	21	953
11	15300	19	785	18500	21	1050	16800	23	1040
12	15800	18	768	18200	23	1130	17200	28	1300
13	16100	25	1090	17300	23	1070	17900	28	1350
14	16400	40	1770	16200	22	962	25700	247	18000
15	16400	52	2300	16100	17	739	32500	307	26900
16	17100	33	1520	17200	15	697	32700	207	18300
17	17800	31	1490	17500	21	992	30500	135	11100
18	18500	35	1750	17200	24	1110	28100	101	7660
19	18700	37	1870	16800	17	771	26800	102	7380
20	18300	35	1730	16200	19	831	28300	340	26000
21	17900	28	1350	15800	15	640	34800	325	30500
22	17600	28	1330	15700	19	805	40800	210	23100
23	17500	30	1420	15800	19	811	47300	245	31300
24	17400	28	1320	15800	17	725	60200	336	54600
25	17400	24	1130	15800	14	597	70300	248	47100
26	17300	23	1070	15800	13	555	72100	154	30000
27	17300	23	1070	15700	12	509	73000	135	26600
28	17400	20	940	15800	11	469	72300	126	24600
29	17400	18	846	15700	12	509	71000	110	21100
30	17300	20	934	15800	13	555	67900	112	20500
31	17300	26	1210	--	--	--	67200	109	19800
TOTAL	517500	--	41373	508200	--	25705	1092800	--	454315

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	66000	107	19100	76600	110	22800	49500	136	18200
2	62400	120	20200	76800	165	34200	52800	129	18400
3	58900	121	19200	75800	169	34600	57900	145	22700
4	56200	110	16700	74000	166	33200	59400	139	22300
5	52500	99	14000	72700	151	29600	58800	114	18100
6	46600	88	11100	71900	151	29300	57700	106	16500
7	40300	82	8920	71300	135	26000	57500	200	31100
8	36800	88	8740	70100	129	24400	57100	183	28200
9	35400	121	11600	69200	120	22400	58400	171	27000
10	36800	165	16400	67800	116	21200	59600	143	23000
11	43600	211	24800	66700	112	20200	61000	106	17500
12	50100	324	43800	66100	121	21600	61000	95	15600
13	57800	248	38700	65900	124	22100	59900	71	11500
14	66500	204	36600	66000	117	20800	57600	68	10600
15	71600	264	51000	66600	111	20000	54500	79	11600
16	78700	186	39500	66200	121	21600	51900	86	12100
17	90200	145	35300	65700	136	24100	48500	88	11500
18	93500	178	44900	65900	132	23500	44100	127	15100
19	93100	150	37700	65400	150	26500	40400	123	13400
20	87900	124	29400	64400	134	23300	38000	122	12500
21	84900	127	29100	63100	143	24400	34000	93	8540
22	89500	169	40800	62100	148	24800	30500	111	9140
23	93300	169	42600	60700	138	22600	28700	98	7590
24	93800	181	45800	58900	118	18800	27500	84	6240
25	93000	156	39200	58300	120	18900	26600	86	6180
26	89100	128	30800	57100	116	17900	25900	78	5450
27	87100	130	30600	53700	121	17500	24400	114	7510
28	84500	134	30600	50700	134	18300	22400	114	6890
29	80700	134	29200	--	--	--	21600	90	5250
30	79400	131	28100	--	--	--	21400	70	4040
31	77900	126	26500	--	--	--	21800	58	3410
TOTAL	2178100	--	900960	1849700	--	664600	1370400	--	427140

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	21700	70	4100	15600	64	2700	11800	37	1180
2	20800	73	4100	15300	57	2350	11200	26	786
3	20000	58	3130	15200	56	2300	10100	26	709
4	19000	60	3080	15100	52	2120	10400	30	842
5	18000	50	2430	15500	48	2010	11200	26	786
6	17400	50	2350	15500	60	2510	11100	26	779
7	17000	42	1930	15200	53	2180	10700	26	751
8	16400	48	2130	14900	54	2170	10900	27	795
9	15900	40	1720	14200	59	2260	11200	30	907
10	15500	47	1970	14200	68	2610	11500	18	559
11	15400	36	1500	15200	86	3530	12600	30	1020
12	14700	45	1790	17100	76	3510	12900	37	1290
13	14200	37	1420	17500	81	3830	12700	19	652
14	14800	33	1320	17500	72	3400	12700	36	1230
15	13800	38	1420	17400	66	3100	12300	27	897
16	13500	31	1130	16600	60	2690	12100	29	947
17	13400	32	1160	15600	55	2320	12100	39	1270
18	12800	37	1280	15000	50	2030	12300	45	1490
19	12100	39	1270	13700	48	1780	11800	51	1620
20	11600	33	1030	13500	50	1820	11700	56	1770
21	11100	30	899	13200	49	1750	11900	49	1570
22	11100	31	929	13000	45	1580	11900	54	1740
23	10800	30	875	12800	45	1560	12200	61	2010
24	10600	29	830	12800	43	1490	12000	35	1130
25	11100	30	899	12400	45	1510	11600	32	1000
26	11500	18	559	12400	33	1100	11600	25	783
27	12000	28	907	12100	43	1400	11800	28	892
28	12500	47	1590	10700	46	1330	12000	32	1040
29	14400	55	2140	10600	36	1030	12400	34	1140
30	15500	68	2850	10800	33	962	12900	38	1320
31	--	--	--	11600	36	1130	--	--	--
TOTAL	438600	--	52738	442200	--	66062	353600	--	32905

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13200	40	1430	13500	21	765	16700	32	1440
2	13600	40	1470	13600	24	881	17200	34	1580
3	13300	34	1220	13600	15	551	17500	36	1700
4	13100	31	1100	14000	20	756	17700	35	1670
5	13000	29	1020	14100	22	838	17900	37	1790
6	13200	29	1030	14100	23	876	18000	35	1700
7	12600	40	1360	14400	20	778	18000	31	1510
8	12200	30	988	14600	25	986	18000	30	1460
9	12000	20	648	14600	29	1140	18600	30	1510
10	11900	23	739	14800	26	1040	19600	33	1750
11	12300	23	764	14800	32	1280	20200	44	2400
12	12400	34	1140	15000	34	1380	20500	56	3100
13	12900	36	1250	14800	31	1240	21500	62	3600
14	13100	34	1200	15000	25	1010	20500	57	3150
15	13500	28	1020	15100	25	1020	20600	47	2610
16	13400	34	1230	15000	27	1090	20000	49	2650
17	12900	24	836	15000	25	1010	20000	50	2700
18	12900	19	662	14900	27	1090	19800	47	2510
19	13100	25	884	14900	24	966	19700	39	2070
20	13000	27	948	14900	23	925	19800	36	1920
21	13300	24	862	15000	24	972	19900	39	2100
22	13600	28	1030	15200	26	1070	18900	38	1940
23	13600	32	1180	15300	29	1200	17700	29	1390
24	13700	32	1180	14500	42	1640	17300	28	1310
25	13700	24	888	14400	38	1480	16900	33	1510
26	13700	17	629	14800	40	1600	16400	32	1420
27	13900	17	638	16100	46	2000	16600	33	1480
28	13900	24	901	16800	33	1500	16700	32	1440
29	13800	26	969	16900	31	1410	16800	23	1040
30	13800	22	820	17300	33	1540	16400	35	1550
31	13800	18	671	17300	34	1590	--	--	--
TOTAL	408400	--	30707	464300	--	35624	555400	--	58000

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 10179200
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 2790129

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
DEC 15, 1969	1210	12.0	31400	307	26000	16	26	41	57	72	83	93	96	98	100	--	SBWC
DEC 20.....	1230	12.0	27500	343	25500	33	44	60	74	82	88	94	99	100	--	--	SBWC
DEC 23.....	1730	11.5	48300	259	33800	--	--	--	--	--	79	91	97	99	100	--	S
DEC 24.....	1330	11.5	60000	352	57000	--	--	--	--	--	69	80	88	98	100	--	S
DEC 26.....	1545	11.5	72000	134	26000	--	--	--	--	--	64	79	92	97	100	--	S
JAN 21, 1970	1200	10.0	84600	132	30200	19	26	34	42	49	58	72	97	100	--	--	VBWC
JAN 23.....	1210	13.0	92900	136	34100	--	--	--	--	--	87	90	96	100	--	--	S
MAR 12.....	1300	10.5	61700	102	17000	24	33	42	51	60	70	84	98	100	--	--	VBWC
APR 10.....	1025	16.5	D 15500	59	2470	--	--	--	--	--	84	90	93	100	--	--	S
MAY 21.....	1300	20.0	D 13200	49	1750	--	--	--	--	--	96	98	100	--	--	--	S

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
JAN 21, 1970	1355	10.0	1	84600	50	70	96	100	--	--	--	--	--	--	--	S
JAN 21.....	1400	10.0	1	84600	--	1	28	100	--	--	--	--	--	--	--	S
JAN 21.....	1405	10.0	1	84600	--	--	6	90	99	100	--	--	--	--	--	S
JAN 21.....	1411	10.0	1	84600	--	--	3	89	99	99	100	--	--	--	--	S
JAN 21.....	1415	10.0	1	84600	--	2	63	100	--	--	--	--	--	--	--	S

D Daily mean discharge.

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 September 1970.
Water temperatures: June 1960 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.5°C June 22; minimum, 8.0°C on several days during January.
EXTREMES, 1960-70.--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 11447500 Sacramento River at Sacramento. Data collected at this site are considered as being part of the International Hydrological Decade Station, 11447500 Sacramento River at Sacramento, Calif.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.												
02...	1330	16600	18.5	8.7	16	40	9.5	5.3	6.5	.9	10	80
NOV.												
05...	1300	17400	14.5	9.8	16	70	9.4	4.6	6.0	1.1	10	70
DEC.												
03...	1255	15900	--	--	18	10	9.8	4.9	7.7	1.3	20	70
JAN.												
07...	1200	40600	8.0	12.2	18	60	9.8	4.7	6.4	1.3	20	70
FEB.												
04...	1245	74000	11.0	10.8	15	40	10	4.2	4.7	1.1	10	60
MAR.												
04...	1130	59400	10.0	11.1	14	70	9.1	4.4	5.7	1.0	10	60
APR.												
08...	1300	16400	13.0	9.3	18	70	13	7.0	9.2	1.2	10	100
MAY												
06...	1230	15100	17.0	8.8	17	40	11	6.4	10	1.2	10	30
JUNE												
03...	1235	9780	23.0	7.8	20	20	13	7.4	13	1.3	10	100
JULY												
07...	1815	12500	21.0	8.2	17	0	11	6.4	10	1.5	10	40
AUG.												
05...	1025	13500	--	--	18	10	10	6.0	9.0	.9	10	100
SEPT.												
02...	1110	17200	20.5	8.3	16	10	12	6.8	11	1.0	10	100

DATE	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
OCT.												
02...	60	0	5.0	4.4	.1	.8	0	.56	79	46	123	7.6
NOV.												
05...	55	0	5.0	3.4	.1	1.0	0	.30	74	42	112	7.5
DEC.												
03...	64	0	5.0	2.2	.1	1.3	20	.32	82	44	126	7.4
JAN.												
07...	60	0	7.0	1.9	.1	.8	30	.31	80	44	119	7.4
FEB.												
04...	47	0	7.0	2.6	.1	.9	0	.00	69	42	98	7.2
MAR.												
04...	49	0	6.0	4.4	.1	.8	10	.57	70	40	106	7.7
APR.												
08...	74	0	11	6.8	.3	1.8	30	.91	104	62	160	7.4
MAY												
06...	64	0	13	7.0	.1	1.5	60	.48	99	54	157	7.4
JUNE												
03...	73	0	13	10	.2	2.0	70	.81	116	63	181	7.2
JULY												
07...	67	0	9.0	6.2	.1	1.8	20	.30	96	54	160	7.3
AUG.												
05...	66	0	7.0	6.4	.0	1.0	0	.61	91	50	142	7.5
SEPT.												
02...	74	0	8.0	7.1	.3	.6	0	.41	98	58	160	7.3

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	NON-CAR-BONATE HARD-NESS (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	TUR-BID-ITY (MG/L)	TUR-BID-ITY (JTU)
OCT.							
02...	.11	0	49	23	.4	5.0	--
NOV.							
05...	.10	0	45	23	.4	5.0	--
DEC.							
03...	.11	0	52	27	.5	9.0	--
JAN.							
07...	.11	0	49	23	.4	72	--
FEB.							
04...	.09	3	39	19	.3	80	--
MAR.							
04...	.10	0	40	23	.4	50	--
APR.							
08...	.14	1	61	24	.5	25	--
MAY							
06...	.13	1	52	--	--	30	--
JUNE							
03...	.16	3	60	30	.7	--	16
JULY							
07...	.13	0	55	--	--	--	14
AUG.							
05...	.12	0	54	28	.6	--	6.0
SEP.							
02...	.13	0	61	29	.6	--	13

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	18.5	14.5	14.5	11.0	11.0	8.5	8.5	11.0	10.5	10.0	10.0
2	18.5	18.5	14.5	14.5	11.0	11.0	8.5	8.5	11.0	11.0	10.0	10.0
3	18.5	17.5	14.5	14.5	11.0	11.0	8.5	8.5	11.0	11.0	10.0	10.0
4	17.5	17.0	14.5	14.5	11.0	10.5	8.5	8.5	11.5	11.0	10.0	10.0
5	17.0	16.0	14.5	14.5	10.5	10.5	8.5	8.0	11.5	11.5	10.0	10.0
6	16.0	16.0	14.5	14.5	10.5	10.5	8.0	8.0	11.5	11.5	10.0	10.0
7	16.0	15.5	14.5	14.0	10.5	10.5	8.0	8.0	12.0	11.5	10.0	9.5
8	15.5	15.5	14.0	14.0	10.5	10.5	8.0	8.0	12.0	12.0	10.0	9.5
9	15.5	15.5	14.0	13.5	10.5	10.5	8.0	8.0	12.0	12.0	10.0	10.0
10	15.5	15.0	13.5	13.5	10.5	10.5	8.0	8.0	12.0	12.0	10.0	10.0
11	15.0	15.0	13.5	13.0	10.5	10.5	8.5	8.0	12.0	12.0	10.0	10.0
12	15.0	15.0	13.0	13.0	10.5	10.5	8.5	8.5	12.0	12.0	10.0	10.0
13	15.0	14.5	13.0	13.0	10.5	10.5	8.5	8.5	12.0	12.0	10.0	10.0
14	14.5	14.5	13.0	13.0	10.5	10.5	8.5	8.5	12.0	11.5	10.0	10.0
15	14.5	14.5	13.0	12.5	10.5	10.5	8.5	8.5	11.5	11.5	10.5	10.0
16	14.5	14.5	12.5	12.5	10.5	10.5	8.5	8.5	11.5	11.5	11.0	10.5
17	14.5	14.5	12.5	12.5	10.5	10.0	8.5	8.5	11.5	11.5	11.0	11.0
18	14.5	14.5	12.5	12.5	10.5	10.0	9.0	8.5	11.5	11.5	11.5	11.0
19	14.5	14.0	12.5	12.0	10.0	10.0	9.0	9.0	11.5	11.5	11.5	11.5
20	14.5	14.0	12.0	12.0	10.0	10.0	9.0	9.0	11.5	11.0	11.5	11.5
21	14.5	14.0	12.0	12.0	10.0	10.0	9.5	9.0	11.5	11.0	11.5	11.5
22	14.5	14.5	12.0	11.5	10.5	10.0	10.0	9.5	11.0	11.0	11.5	11.5
23	14.5	14.5	11.5	11.5	10.5	10.5	10.0	10.0	11.0	11.0	11.5	11.5
24	14.5	14.5	11.5	11.5	10.5	10.5	10.0	10.0	11.0	10.5	12.0	11.5
25	14.5	14.5	11.5	11.5	10.5	10.5	10.0	10.0	10.5	10.5	12.0	12.0
26	14.5	14.5	11.5	11.5	10.5	10.5	10.0	10.0	10.5	10.5	12.0	12.0
27	14.5	14.5	11.5	11.0	10.5	10.5	10.0	10.0	10.5	10.5	12.5	12.0
28	14.5	14.5	11.0	11.0	10.5	10.5	10.0	10.0	10.5	10.0	12.5	12.5
29	14.5	14.5	11.0	11.0	10.5	9.0	10.5	10.0	--	--	13.0	12.5
30	14.5	14.5	11.0	11.0	9.0	8.5	10.5	10.5	--	--	13.0	13.0
31	14.5	14.5	--	--	8.5	8.5	10.5	10.5	--	--	13.0	13.0
AVE	15.3	15.1	12.8	12.7	10.4	10.3	9.0	8.9	11.4	11.3	11.0	10.9

11447650 SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	13.0	15.0	15.0	22.5	22.0	20.5	20.5	23.0	22.5	20.5	20.0
2	13.0	13.0	15.0	15.0	22.5	22.5	20.5	20.5	23.0	22.5	20.5	20.0
3	13.0	13.0	16.0	15.0	23.0	22.5	20.5	20.0	23.0	23.0	20.0	20.0
4	13.0	13.0	16.5	16.0	23.0	22.5	21.0	20.5	23.0	23.0	20.0	19.5
5	13.0	13.0	17.0	16.5	22.5	22.5	21.0	21.0	23.0	23.0	19.5	19.5
6	13.0	13.0	17.5	17.0	22.5	22.5	21.0	21.0	23.0	23.0	19.5	19.5
7	13.0	13.0	17.0	17.0	22.5	22.5	21.0	21.0	23.0	23.0	19.5	19.0
8	13.0	13.0	17.0	17.0	22.5	22.0	21.5	21.0	23.0	23.0	19.5	19.0
9	13.5	13.0	17.0	17.0	22.0	22.0	21.5	21.5	23.0	23.0	19.5	19.0
10	14.0	13.5	17.0	17.0	22.0	21.5	21.5	21.5	23.0	23.0	19.5	19.0
11	14.0	14.0	17.0	16.5	21.5	21.5	21.5	21.5	23.0	23.0	19.5	19.0
12	14.0	14.0	16.5	16.5	21.5	21.5	21.5	21.5	23.0	23.0	19.0	18.5
13	14.0	14.0	16.5	16.5	21.5	21.5	22.0	21.5	23.0	23.0	18.5	18.5
14	14.0	14.0	17.0	16.5	21.5	21.5	22.0	22.0	23.0	22.5	18.5	18.5
15	14.0	14.0	17.0	17.0	21.5	21.5	22.0	22.0	22.5	22.0	18.5	18.5
16	14.0	14.0	17.0	17.0	22.0	21.5	22.0	22.0	22.5	22.0	18.5	18.5
17	14.5	14.0	17.5	17.0	22.0	22.0	22.0	22.0	22.5	22.0	18.5	18.5
18	14.5	14.5	17.5	17.5	22.0	22.0	22.0	22.0	22.0	22.0	18.5	18.0
19	14.5	14.5	18.0	17.5	22.0	22.0	22.0	22.0	22.0	22.0	18.0	18.0
20	15.0	14.5	18.0	18.0	22.5	22.0	22.0	22.0	22.0	21.5	18.0	18.0
21	15.0	15.0	18.5	18.0	23.0	22.5	22.0	22.0	21.5	21.0	18.0	18.0
22	15.0	15.0	19.0	18.5	23.5	22.5	22.0	22.0	21.5	21.0	18.5	18.0
23	15.0	15.0	19.5	19.0	22.5	22.5	22.0	22.0	21.5	21.0	18.5	18.5
24	15.0	15.0	20.0	19.5	22.5	22.0	22.5	22.0	21.0	21.0	18.5	18.5
25	15.0	15.0	20.5	20.0	22.0	22.0	22.5	22.5	21.0	21.0	18.5	18.5
26	15.0	15.0	20.5	20.5	22.0	21.5	22.5	22.5	21.0	21.0	18.5	18.0
27	15.0	15.0	20.5	20.5	21.5	21.5	23.0	22.5	21.0	21.0	18.0	18.0
28	15.0	15.0	21.0	20.5	21.5	21.0	23.0	22.5	21.0	20.5	18.0	18.0
29	15.0	15.0	21.5	21.0	21.0	20.5	23.0	22.5	20.5	20.5	18.0	18.0
30	15.0	15.0	21.5	21.5	20.5	20.5	23.0	22.5	20.5	20.5	18.0	18.0
31	--	--	22.0	21.5	--	--	23.0	22.5	20.5	20.0	--	--
AVE	14.1	14.1	18.1	17.8	22.1	21.9	21.9	21.7	22.1	22.0	18.9	18.7

11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°56'54", long 122°54'03", in NE¼ 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.
DRAINAGE AREA.--14.2 sq mi.
PERIOD OF RECORD.--Chemical analyses: Water years 1968-70 (partial-record station).
Water temperatures: November 1966 to September 1970.
Sediment records: December 1965 to September 1970.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 179 mg/l Jan. 25; minimum daily, no flow for many days.
Sediment loads: Maximum daily, 337 tons Jan. 24; minimum daily, 0 tons on many days.
EXTREMES, 1965-70.--Sediment concentrations: Maximum daily, 182 mg/l Jan. 5, 1966; minimum daily, no flow for many days in 1966-70.
Sediment loads: Maximum daily, 337 tons Jan. 24, 1970; minimum daily, 0 tons on many days in 1966-70.
REMARKS.--No flow Oct. 13, 17, 18, Oct. 20 to Nov. 6, June 6, 7, June 17 to Sept. 30. Sediment table omitted for period July 1 to Sept. 30. Bed material sample taken Oct. 15 at gaging station, 500 ft downstream from sampling point; bed at sampling point is concrete outlet from dam with no material over concrete.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
DEC.								
19...	0900	634	11.0	26	19	8.8	1.0	180
JAN.								
21...	1100	588	11.0	10	6.4	3.8	.9	62
22...	1700	538	10.0	8.0	5.4	3.5	.7	49

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	HARD-NESS (CA,MG) (MG/L)	PERCENT SODIUM	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)
DEC.								
19...	0	8.0	4.3	177	143	12	301	7.8
JAN.								
21...	0	--	2.4	79	52	14	111	8.1
22...	0	4.0	1.6	66	42	15	96	7.3

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	11.0	--	--	--	--	--	--	--	--	--
4	--	--	--	--	9.0	--	--	--	--	--	--	--
5	--	14.0	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	5.5	--	--	15.5	--	--	--	--	--
8	--	--	--	10.0	--	--	--	--	--	--	--	--
9	--	14.0	--	--	--	--	--	--	--	--	--	--
10	--	--	10.0	9.0	--	11.5	--	--	--	--	--	--
11	--	--	10.0	8.0	--	--	--	--	--	--	--	--
12	--	--	11.0	9.0	10.0	--	--	--	--	--	--	--
13	--	--	11.0	--	--	--	--	--	--	--	--	--
14	15.0	15.0	11.0	--	--	--	--	--	--	--	--	--
15	12.0	--	11.0	10.0	--	--	--	--	--	--	--	--
16	15.0	--	--	11.0	--	--	--	--	--	--	--	--
17	15.0	--	12.0	11.0	9.0	--	--	--	--	--	--	--
18	15.0	--	--	--	--	--	--	--	--	--	--	--
19	--	--	11.0	--	--	--	--	--	--	--	--	--
20	--	--	12.0	--	--	--	--	--	--	--	--	--
21	--	--	11.0	11.0	--	--	--	--	--	--	--	--
22	15.0	--	--	--	--	--	--	--	--	--	--	--
23	--	13.0	--	--	--	--	--	25.5	--	--	--	--
24	--	--	11.0	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	10.0	--	--	--	--	--	--	--	--
28	--	--	--	--	11.0	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--
31	15.0	--	--	10.0	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.09	31	.01	0	--	0	.59	9	.01
2	.09	31	.01	0	--	0	.59	8	.01
3	.09	31	.01	0	--	0	.59	8	.01
4	.09	31	.01	0	--	0	.59	8	.01
5	.09	31	.01	0	--	0	.77	8	.02
6	.07	30	.01	0	--	0	.86	8	.02
7	.05	25	0	.01	30	0	.95	8	.02
8	.02	20	0	.01	28	0	2.4	9	.06
9	.01	20	0	.07	26	0	3.1	9	.08
10	.01	20	0	.44	22	.03	4.3	11	.13
11	.01	20	0	.68	18	.03	23	9	.53
12	.01	20	0	.77	16	.03	219	28	19
13	0	--	0	.86	13	.03	96	48	13
14	.01	59	0	.77	10	.02	31	38	3.2
15	.03	39	0	.77	10	.02	18	31	1.5
16	.01	94	0	.77	10	.02	9.0	25	.61
17	0	--	0	.59	11	.02	8.4	22	.50
18	0	--	0	.59	11	.02	12	20	.66
19	.01	60	0	.59	11	.02	471	35	48
20	0	--	0	.59	11	.02	271	95	71
21	0	--	0	.68	11	.02	579	93	149
22	0	--	0	.68	11	.02	178	79	46
23	0	--	0	.68	11	.02	165	36	16
24	0	--	0	.68	11	.02	309	62	45
25	0	--	0	.68	11	.02	94	49	12
26	0	--	0	.68	11	.02	57	33	5.1
27	0	--	0	.68	11	.02	40	26	2.8
28	0	--	0	.68	11	.02	29	24	1.9
29	0	--	0	.68	11	.02	21	22	1.2
30	0	--	0	.59	10	.02	14	20	.76
31	0	--	0	--	--	--	11	19	.56
TOTAL	.69	--	.06	14.22	--	.46	2670.14	--	438.69

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9.8	18	.48	38	42	4.3	46	13	1.5
2	8.4	17	.39	32	38	3.3	30	18	1.5
3	7.8	17	.36	26	33	2.3	24	15	.97
4	7.8	17	.36	24	25	1.6	95	13	3.2
5	7.2	16	.31	21	22	1.2	65	26	4.5
6	6.8	16	.29	19	19	.97	42	20	2.3
7	6.4	16	.28	18	17	.83	38	18	1.8
8	34	11	.93	15	16	.65	64	20	3.5
9	429	21	28	13	14	.49	44	19	2.3
10	404	87	99	11	13	.39	36	11	1.1
11	94	60	16	11	13	.39	31	11	.92
12	78	36	7.5	45	18	2.5	25	10	.68
13	149	30	12	312	55	55	22	10	.59
14	594	74	119	139	40	16	21	10	.57
15	392	98	115	70	26	4.9	19	10	.51
16	578	93	145	144	21	8.6	16	9	.39
17	282	80	72	210	54	29	16	9	.39
18	124	56	19	98	36	9.5	15	9	.36
19	87	50	12	69	30	5.6	15	9	.36
20	110	47	14	54	27	3.9	14	9	.34
21	582	91	143	43	24	2.8	13	8	.28
22	469	86	113	36	22	2.1	13	8	.28
23	501	50	63	31	19	1.6	13	8	.28
24	728	172	337	26	16	1.1	13	8	.28
25	672	179	327	23	14	.87	13	8	.28
26	562	129	198	21	12	.68	12	7	.23
27	307	135	109	20	10	.54	11	6	.18
28	118	127	41	23	9	.55	11	6	.18
29	75	88	18	--	--	--	11	6	.18
30	58	64	10	--	--	--	11	6	.18
31	48	48	6.2	--	--	--	9.0	5	.12
TOTAL	7529.2	--	2027.10	1592	--	161.66	808.0	--	30.25

11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9.8	5	.13	3.1	4	.03	.59	7	.01
2	9.0	5	.12	2.6	4	.03	.50	10	.01
3	8.4	5	.11	2.3	5	.03	.28	10	.01
4	8.4	5	.11	2.1	5	.03	.15	20	.01
5	7.8	5	.11	2.0	5	.03	.05	20	0
6	7.2	4	.08	1.8	5	.02	0	--	0
7	6.8	4	.07	1.8	5	.02	0	--	0
8	6.4	4	.07	1.8	5	.02	.06	20	0
9	6.4	4	.07	2.0	5	.03	.50	10	.01
10	6.4	4	.07	2.0	5	.03	.59	5	.01
11	6.0	4	.06	2.1	5	.03	.44	5	.01
12	6.0	4	.06	2.3	5	.03	.28	7	.01
13	6.4	4	.07	2.1	5	.03	.23	7	0
14	6.8	4	.07	2.1	5	.03	.28	10	.01
15	6.4	4	.07	1.8	5	.02	.23	10	.01
16	6.0	4	.06	1.8	5	.02	.14	10	0
17	5.7	4	.06	1.7	5	.02	0	--	0
18	4.8	4	.05	1.5	5	.02	0	--	0
19	4.8	4	.05	1.5	5	.02	0	--	0
20	4.6	4	.05	1.7	5	.02	0	--	0
21	4.3	4	.05	1.8	5	.02	0	--	0
22	4.3	4	.05	1.7	5	.02	0	--	0
23	4.3	4	.05	1.5	5	.02	0	--	0
24	4.1	4	.04	1.5	5	.02	0	--	0
25	4.1	4	.04	1.2	5	.02	0	--	0
26	3.8	4	.04	.95	5	.01	0	--	0
27	3.8	4	.04	.95	5	.01	0	--	0
28	3.6	4	.04	.86	5	.01	0	--	0
29	3.1	4	.03	.86	5	.01	0	--	0
30	3.1	4	.03	.86	5	.01	0	--	0
31	--	--	--	.77	5	.01	--	--	--
TOTAL	172.6	--	1.95	53.05	--	.67	4.32	--	.10

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 12844.22
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 2660.94

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 12, 1969	1630	11.0	237	41	26	--	--	--	--	--	97	100	--	--	--	--	S
DEC 19.....	0900	11.0	634	26	45	73	80	89	90	91	91	94	95	97	100	--	SBWC
DEC 19.....	0900	11.0	634	26	45	30	55	84	90	91	91	94	95	97	100	--	SBN
JAN 15, 1970	1700	10.0	221	84	50	64	85	92	96	98	99	99	100	--	--	--	SBWC
JAN 15.....	1700	10.0	221	84	50	38	59	81	95	99	99	99	100	--	--	--	SBN
JAN 21.....	1100	11.0	588	66	105	61	78	88	95	96	97	98	98	99	100	--	SBWC
JAN 21.....	1100	11.0	588	66	105	43	58	80	95	97	97	98	98	99	100	--	SBN
JAN 27.....	1230	10.0	273	129	95	--	--	--	--	--	96	97	98	99	100	--	S

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
OCT 15, 1969	1045	12.0	5	0.09	6	12	26	33	39	42	44	50	60	79	100	S

11451760 CACHE CREEK ABOVE RUMSEY, CALIF.

LOCATION.--Lat 38°54'47", long 122°16'14", in SE¼ sec.2, T.12 N., R.4 W., Yolo County, at gaging station 0.4 mile downstream from highway bridge, and 2.5 miles northwest of Rumsey.
DRAINAGE AREA.--955 sq mi.
PERIOD OF RECORD.--Water temperatures: January 1960 to September 1970 (discontinued).
Sediment records: January 1960 to September 1963, June 1965 to September 1970 (discontinued).
EXTREMES, 1968-69.--Sediment concentrations: Maximum daily, 5,830 mg/l Jan. 13; minimum daily, 3 mg/l on several days during November and December.
Sediment loads: Maximum daily, 238,000 tons Jan. 21; minimum daily, 0.13 ton Nov. 6.
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 5,130 mg/l Jan. 14; minimum daily, 1 mg/l on several days during November and December.
Sediment loads: Maximum daily, 236,000 tons Jan. 24; minimum daily, 0.03 ton Nov. 26-28.
EXTREMES, 1960-70.--Water temperatures: (1964-66): Minimum, 1.0°C Dec. 17, 1965.
Sediment concentrations (1960-63, 1965-70): Maximum daily, 9,160 mg/l Jan. 29, 1967; minimum daily, 1 mg/l on several days in 1960-62, 1965, and 1969.
Sediment loads (1960-63, 1965-70): Maximum daily, 363,000 tons Jan. 31, 1963; minimum daily, 0.01 ton on many days in 1960 and 1961.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	---	---	---	8.0	8.0	17.0	20.0	28.0	23.0	---	---
2	---	16.0	---	---	8.0	8.0	12.0	19.0	28.0	---	---	---
3	17.0	---	---	8.0	8.0	8.0	13.0	19.0	27.0	---	---	---
4	---	15.0	13.0	---	---	8.0	13.0	21.0	---	---	---	---
5	16.0	---	---	---	---	9.0	12.0	21.0	22.0	---	---	---
6	---	12.0	13.0	11.0	8.0	9.0	13.0	22.0	---	27.0	---	---
7	17.0	15.0	---	---	7.0	8.0	15.0	24.0	---	---	---	---
8	---	---	---	10.0	---	8.0	15.0	25.0	---	---	---	---
9	16.0	13.0	13.0	---	---	8.0	14.0	25.0	---	27.0	---	---
10	---	---	---	5.0	---	8.0	16.0	25.0	22.0	---	---	23.0
11	17.0	12.0	8.0	6.0	9.0	9.0	17.0	25.0	---	---	---	---
12	---	---	8.0	9.0	8.0	10.0	---	25.0	---	28.0	---	---
13	---	---	---	9.0	8.0	10.0	---	23.0	---	---	---	---
14	17.0	9.0	---	7.0	8.0	10.0	17.0	22.0	25.0	28.0	---	---
15	---	---	---	8.0	8.0	12.0	18.0	25.0	---	---	---	---
16	18.0	10.0	8.0	9.0	9.0	12.0	18.0	25.0	25.0	29.0	---	---
17	---	---	---	8.0	9.0	12.0	17.0	24.0	---	---	---	---
18	17.0	---	---	6.0	8.0	12.0	17.0	23.0	---	---	---	---
19	---	10.0	---	8.0	9.0	12.0	18.0	25.0	26.0	---	25.0	---
20	---	---	---	10.0	7.0	9.0	18.0	26.0	---	---	---	---
21	---	10.0	---	10.0	---	8.0	23.0	25.0	---	---	---	---
22	17.0	---	---	7.0	---	13.0	---	25.0	26.0	---	---	---
23	---	---	3.0	6.0	7.0	14.0	15.0	25.0	---	---	---	---
24	---	9.0	---	6.0	8.0	14.0	13.0	25.0	23.0	---	---	---
25	17.0	---	---	8.0	8.0	15.0	16.0	24.0	---	---	---	---
26	---	---	6.0	8.0	8.0	14.0	19.0	22.0	---	---	---	---
27	---	10.0	7.0	7.0	8.0	16.0	18.0	25.0	---	---	---	---
28	16.0	---	6.0	7.0	7.0	15.0	22.0	25.0	---	---	---	---
29	---	9.0	---	7.0	---	16.0	---	---	---	---	---	---
30	---	---	7.0	6.0	---	16.0	---	---	26.0	---	---	---
31	---	---	7.0	8.0	---	16.0	---	26.0	---	---	---	---
MONTH	---	---	---	8.0	---	11.0	16.0	23.5	---	---	---	---

11451760 CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	5.0	10.0	9.5	---	20.0	---	---	---	24.0
2	---	---	6.5	---	9.5	10.5	17.5	16.0	26.0	24.0	27.0	---
3	---	---	5.0	4.5	10.5	10.0	---	---	---	28.0	---	23.5
4	---	---	---	---	10.0	8.5	17.0	17.0	25.0	---	27.5	---
5	---	15.0	---	---	11.0	8.0	---	---	---	29.0	---	23.0
6	---	---	---	3.5	11.5	11.0	17.5	18.0	23.0	---	26.0	---
7	---	---	---	---	11.0	12.0	---	---	---	29.0	---	23.0
8	---	---	---	---	11.5	12.5	17.0	19.0	23.5	---	26.5	---
9	---	---	---	7.0	11.0	10.5	---	---	---	28.5	---	22.0
10	---	12.0	---	9.0	10.5	13.0	16.0	---	23.0	---	27.0	---
11	---	---	---	---	11.0	12.0	---	---	---	28.0	---	22.0
12	---	12.0	12.0	10.0	10.0	13.0	16.5	---	22.0	---	27.5	---
13	---	---	---	---	9.0	14.0	---	---	---	29.0	---	22.0
14	---	12.0	14.0	10.5	10.5	15.0	15.0	---	24.0	---	27.0	---
15	---	---	---	9.5	10.5	---	---	---	---	29.0	---	21.0
16	---	---	10.0	10.0	10.0	14.0	15.0	23.0	25.0	---	26.0	---
17	---	11.0	---	11.0	8.5	---	---	---	---	28.0	---	21.0
18	---	---	11.5	10.5	9.5	12.5	16.0	22.5	26.5	---	25.0	---
19	---	---	---	10.5	9.5	---	---	---	---	---	---	21.0
20	---	---	13.0	10.5	10.0	14.0	15.5	23.0	27.0	---	26.0	---
21	---	10.0	13.0	12.0	11.0	---	---	---	---	---	---	21.0
22	---	---	9.5	12.5	11.0	16.0	17.0	23.5	27.5	---	26.0	---
23	---	---	9.0	12.0	10.5	---	---	---	---	---	---	20.0
24	---	9.0	9.5	10.0	11.0	16.0	18.0	25.5	28.5	---	25.5	---
25	---	---	---	8.5	12.0	---	---	---	---	---	---	19.0
26	---	8.5	8.0	10.0	12.0	15.0	14.5	25.0	28.0	---	26.0	---
27	---	---	7.5	10.0	12.5	---	---	---	---	---	---	18.5
28	---	7.0	5.5	9.5	---	17.0	15.0	26.0	28.5	---	25.0	---
29	---	---	8.0	9.0	---	---	---	---	---	24.5	---	18.0
30	---	---	7.5	8.5	---	13.0	15.5	27.0	---	---	25.0	---
31	---	---	---	10.0	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	10.5	---	---	---	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	126	11	3.7	13	8	.28	25	5	.34
2	121	8	2.6	15	8	.32	25	5	.34
3	118	5	1.6	21	7	.40	25	4	.27
4	117	7	2.2	22	6	.36	24	3	.19
5	106	7	2.0	18	5	.24	24	4	.26
6	103	6	1.7	16	3	.13	24	4	.26
7	99	6	1.6	15	4	.16	23	4	.25
8	83	5	1.1	14	5	.19	25	6	.41
9	76	5	1.0	13	7	.25	29	19	1.5
10	74	4	.80	13	6	.21	276	533	1250
11	74	4	.80	14	6	.23	677	1790	3860
12	78	4	.84	15	6	.24	249	249	193
13	75	5	1.0	16	8	.35	152	25	10
14	67	6	1.1	19	9	.46	500	459	737
15	56	6	.91	29	6	.47	2140	2270	19500
16	51	5	.69	35	3	.28	1110	836	3370
17	49	5	.66	35	3	.28	434	80	94
18	49	5	.66	38	3	.31	272	25	18
19	48	4	.52	39	3	.32	203	18	9.9
20	48	4	.52	39	3	.32	164	15	6.6
21	49	7	.93	37	4	.40	137	10	3.7
22	51	8	1.1	32	4	.35	120	5	1.6
23	45	8	.97	28	4	.30	130	10	3.5
24	39	9	.95	26	4	.28	1410	1260	5830
25	39	9	.95	27	6	.44	2960	2290	20700
26	39	9	.95	25	9	.61	1470	613	2880
27	38	10	1.0	24	12	.78	742	150	301
28	37	10	1.0	23	8	.50	731	120	237
29	34	9	.83	23	7	.43	630	75	128
30	19	8	.41	23	6	.37	500	38	51
31	15	8	.32	--	--	--	416	28	31
TOTAL	2023	--	35.41	707	--	10.26	15647	--	59219.12

11451760 CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	359	25	24	3710	840	8410	7060	580	11100
2	327	18	16	3920	1000	10600	6260	348	5880
3	311	15	13	3580	785	7590	5980	358	5780
4	312	13	11	3530	698	6650	5400	332	4840
5	348	10	9.4	4900	1130	17100	5080	350	4800
6	341	8	7.4	7440	1760	37600	4940	352	4690
7	313	8	6.8	4840	645	8430	4650	400	5020
8	283	8	6.1	4330	540	6310	4380	350	4140
9	255	6	4.1	7370	2260	47900	4260	265	3050
10	236	5	3.2	6270	1380	23500	4470	245	2960
11	240	90	58	8830	2520	65400	4050	222	2430
12	2360	1760	11700	8090	1530	35400	3890	211	2220
13	9180	5830	156000	6090	700	11500	3690	228	2270
14	3290	1350	13900	6560	944	20300	3570	297	2860
15	1560	435	1830	10500	2710	78000	3470	160	1500
16	1080	202	589	7320	1050	20800	3390	88	805
17	830	102	229	6050	695	11400	3080	62	516
18	1110	254	1340	5740	460	7130	1010	55	150
19	4850	1740	22900	5390	440	6400	933	60	151
20	8150	3150	69300	4990	425	5730	892	64	154
21	15600	5510	238000	4640	400	5010	923	60	150
22	8380	1990	48100	4400	395	4690	827	25	56
23	6010	1350	21900	4840	408	5330	778	23	48
24	5300	1100	15700	5880	1000	16500	746	29	58
25	5670	1590	24300	5720	640	9880	724	22	43
26	9650	2910	82400	4970	348	4670	698	19	36
27	5780	1050	16400	5020	400	5420	682	19	35
28	5250	782	11100	9020	2030	49400	677	20	37
29	4500	625	7590	--	--	--	830	22	49
30	4360	580	6830	--	--	--	562	19	29
31	4030	665	7240	--	--	--	530	17	24
TOTAL	110265	--	757507.0	163940	--	537050	88432	--	65881

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	507	11	15	463	30	38	484	35	46
2	500	20	27	456	45	55	505	36	49
3	554	28	42	454	41	50	535	37	53
4	467	17	21	479	32	41	554	36	54
5	558	28	42	468	36	45	587	35	55
6	951	47	121	486	40	52	597	35	56
7	909	45	110	488	50	66	590	35	56
8	866	45	105	512	54	75	571	35	54
9	1030	121	377	531	46	66	536	35	51
10	1350	106	387	539	42	61	531	35	50
11	1330	82	294	542	40	59	466	36	45
12	1310	72	255	573	40	62	418	36	41
13	1050	41	116	643	45	78	414	36	40
14	364	15	15	616	50	83	414	49	55
15	340	16	15	590	42	67	454	49	60
16	318	16	14	548	41	61	480	46	60
17	304	12	9.8	513	40	55	515	45	63
18	298	14	11	507	40	55	520	45	63
19	289	18	14	500	39	53	556	43	65
20	278	12	9.0	489	38	50	555	40	60
21	270	12	8.7	495	37	49	555	35	52
22	261	18	13	507	35	48	554	29	43
23	319	22	19	529	35	50	537	30	43
24	374	25	25	551	34	51	500	33	45
25	308	27	22	546	31	46	508	33	45
26	280	28	21	534	31	45	489	33	44
27	262	28	20	485	32	42	476	33	42
28	248	25	17	480	32	41	502	32	43
29	382	26	27	448	33	40	470	31	39
30	452	27	33	441	33	39	473	31	40
31	--	--	--	448	33	40	--	--	--
TOTAL	16729	--	2205.5	15861	--	1663	15346	--	1512

11451760 CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	497	32	43	412	40	44	311	21	18
2	498	35	47	407	39	43	327	22	19
3	535	41	59	378	39	40	348	22	21
4	542	46	67	357	38	37	346	22	21
5	525	47	67	374	38	38	345	21	20
6	491	47	62	395	28	30	342	21	19
7	497	47	63	472	22	28	307	21	17
8	568	47	72	485	21	27	280	21	16
9	608	46	76	465	22	28	249	21	14
10	594	45	72	450	23	28	250	21	14
11	573	45	70	430	23	27	273	21	15
12	557	42	63	403	23	25	273	21	15
13	542	39	57	416	22	25	270	21	15
14	522	38	54	412	22	24	269	21	15
15	549	40	59	376	22	22	256	21	15
16	581	41	64	357	21	20	262	20	14
17	567	37	57	329	21	19	258	18	13
18	583	37	58	337	20	18	242	16	10
19	608	36	59	390	20	21	234	13	8.2
20	538	36	52	457	20	25	230	11	6.8
21	512	34	47	459	20	25	226	9	5.5
22	519	31	43	461	20	25	199	8	4.3
23	521	30	42	468	20	25	173	8	3.7
24	534	30	43	446	20	24	170	8	3.7
25	505	30	41	428	20	23	168	7	3.2
26	514	30	42	428	20	23	156	7	2.9
27	496	30	40	447	21	25	140	6	2.3
28	465	31	39	442	21	25	138	6	2.2
29	458	32	40	402	21	23	134	5	1.8
30	451	35	43	365	21	21	139	5	1.9
31	436	38	45	336	21	19	--	--	--
TOTAL	16386	--	1686	12784	--	827	7315	--	337.5

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 465435
TOTAL LOAD FOR YEAR (TONS) 1427933.79

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	136	9	3.3	4.5	4	.05	14	1	.04
2	134	9	3.3	4.5	4	.05	14	1	.04
3	132	10	3.6	4.3	4	.05	14	2	.08
4	116	11	3.4	4.4	5	.06	15	2	.08
5	113	11	3.4	5.8	6	.09	16	2	.09
6	112	11	3.3	7.3	6	.12	16	2	.09
7	99	20	5.3	7.5	6	.12	16	2	.09
8	95	25	6.4	6.5	6	.11	18	2	.10
9	95	31	8.0	5.3	8	.11	21	3	.17
10	79	30	6.4	4.9	8	.11	27	3	.22
11	70	29	5.5	4.6	8	.10	40	4	.43
12	69	28	5.2	4.4	4	.05	230	152	168
13	68	31	5.7	5.0	5	.07	769	360	783
14	62	35	5.9	5.8	7	.11	255	151	110
15	69	37	6.9	6.2	6	.10	156	43	18
16	57	17	2.6	6.9	3	.06	116	11	3.4
17	42	14	1.6	6.9	2	.04	91	6	1.5
18	38	11	1.1	7.7	2	.04	85	8	1.8
19	34	8	.73	8.1	2	.04	1710	1830	16500
20	32	4	.35	8.3	2	.04	2090	2530	15200
21	29	5	.39	8.8	2	.05	2660	2220	17000
22	24	6	.39	9.3	2	.05	1240	564	2370
23	24	5	.32	10	2	.05	2460	374	7280
24	23	5	.31	11	2	.06	5510	1730	32400
25	22	5	.30	11	2	.06	1390	550	2060
26	12	4	.13	12	1	.03	895	150	362
27	7.2	4	.08	12	1	.03	636	32	55
28	6.2	4	.07	12	1	.03	490	26	34
29	5.3	4	.06	13	1	.04	400	10	11
30	4.9	4	.05	13	1	.04	337	6	5.5
31	4.6	4	.05	--	--	--	288	6	4.7
TOTAL	1814.2	--	84.13	231.0	--	1.96	22019	--	94369.33

11451760 CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	254	8	5.5	5730	700	10800	2670	1180	9110
2	224	8	4.8	5330	615	8850	2120	260	1490
3	202	8	4.4	5130	615	8520	2000	140	756
4	187	6	3.0	4930	642	8550	2760	1530	11400
5	170	3	1.4	4700	662	8400	3580	550	5320
6	156	2	.84	4460	680	8190	3000	255	2070
7	147	2	.79	4270	580	6690	2820	350	2660
8	229	476	570	4100	515	5700	1420	128	491
9	6600	4760	110000	3990	520	5600	1410	64	244
10	3770	1800	23400	3870	438	4580	1420	48	184
11	1360	330	1210	3770	419	4270	1350	50	182
12	1100	210	624	3860	610	6360	1310	46	163
13	2340	988	6530	7430	4300	95500	1280	43	149
14	11300	5130	183000	5320	1790	25700	1240	48	161
15	6500	1780	32300	4520	675	8240	1210	35	114
16	14000	4680	183000	4900	863	12200	1190	30	96
17	8370	2300	52000	5590	1060	16000	1160	31	97
18	6040	1650	26900	4670	695	8760	1130	32	98
19	5150	998	13900	4370	855	10100	1110	34	102
20	5130	820	11400	4190	660	7470	1100	36	107
21	12600	3020	102000	3980	455	4890	1080	37	108
22	9430	1900	48400	3730	385	3880	1090	38	112
23	15400	2450	156000	3580	535	5170	1090	36	106
24	23600	3420	236000	3460	405	3780	921	6	15
25	11400	1810	55700	3360	318	2880	416	5	5.6
26	8850	1310	31300	3270	302	2670	391	5	5.3
27	11000	1600	47500	2660	290	2080	374	5	5.0
28	8170	1440	31800	1860	340	1710	362	5	4.9
29	7170	1390	26900	--	--	--	356	3	2.9
30	6620	1200	21400	--	--	--	352	3	2.9
31	6120	958	15800	--	--	--	337	3	2.7
TOTAL	193589	--	1417654.73	121030	--	297540	42049	--	35364.3

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	325	4	3.5	413	35	39	489	40	53
2	321	3	2.6	459	32	40	456	40	49
3	310	3	2.5	489	27	36	470	43	55
4	304	3	2.5	485	24	31	510	48	66
5	299	6	4.8	474	29	37	570	45	69
6	293	8	6.3	465	34	43	565	38	58
7	289	10	7.8	419	33	37	547	31	46
8	349	14	13	423	32	37	524	24	34
9	357	12	12	397	32	34	503	23	31
10	387	11	11	354	32	31	439	22	26
11	389	12	13	351	32	30	399	26	28
12	388	16	17	423	35	40	374	25	25
13	430	19	22	476	36	46	348	27	25
14	440	18	21	470	36	46	350	30	28
15	386	24	25	456	35	43	381	31	32
16	357	34	33	490	34	45	436	32	38
17	339	33	30	513	34	47	452	34	41
18	341	32	29	509	34	47	451	36	44
19	343	32	30	491	34	45	472	36	46
20	371	32	32	522	34	48	466	36	45
21	392	30	32	496	34	46	452	35	43
22	444	28	34	478	34	44	451	34	41
23	442	28	33	476	39	50	483	36	47
24	440	29	34	486	44	58	495	38	51
25	472	24	31	481	43	56	497	37	50
26	483	16	21	456	41	50	506	36	49
27	477	18	23	455	44	54	500	38	51
28	418	20	23	452	45	55	459	40	50
29	407	17	19	430	42	49	449	38	46
30	400	14	15	465	39	49	427	39	45
31	--	--	--	448	39	47	--	--	--
TOTAL	11393	--	583.0	14202	--	1360	13921	--	1312

11451760 CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	450	45	55	489	30	40	347	30	28
2	479	52	67	450	28	34	344	36	33
3	512	56	77	437	28	33	331	44	39
4	529	55	79	429	28	32	350	45	43
5	537	54	78	392	27	29	332	46	41
6	509	44	60	422	26	30	288	44	34
7	540	32	47	464	26	33	248	43	29
8	551	30	45	481	26	34	271	44	32
9	546	28	41	474	25	32	295	46	37
10	541	27	39	458	24	30	316	45	38
11	520	26	37	469	23	29	314	43	36
12	510	29	40	452	22	27	280	43	33
13	493	33	44	459	25	31	254	44	30
14	502	35	47	418	27	30	252	44	30
15	497	36	48	403	26	28	291	44	35
16	495	36	48	399	26	28	278	44	33
17	493	37	49	399	27	29	274	44	33
18	492	37	49	395	29	31	225	43	26
19	488	37	49	372	24	24	224	44	27
20	473	37	47	415	18	20	177	44	21
21	474	37	47	453	16	20	171	44	20
22	471	37	47	417	16	18	167	45	20
23	478	37	48	366	16	16	167	46	21
24	523	40	56	324	16	14	181	47	23
25	515	39	54	321	16	14	180	46	22
26	481	37	48	320	16	14	166	46	21
27	487	37	49	341	16	15	165	47	21
28	487	37	49	338	16	15	165	48	21
29	488	36	47	337	16	15	163	48	21
30	503	35	48	346	15	14	163	48	21
31	502	34	46	347	22	21	--	--	--
TOTAL	15566	--	1585	12587	--	780	7379	--	869

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 455780.2
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1851503.45

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMP-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 11, 1968	1615	8.0	479	1270	1640	27	36	47	58	69	79	87	94	98	100	--	SBWC
JAN 13, 1969	0800	9.0	10800	6040	176000	21	23	28	37	45	55	69	81	93	100	--	VPWC
JAN 14.....	0900	7.0	3450	1440	13400	33	35	46	59	68	77	87	95	100	--	--	VPWC
JAN 16.....	1500	9.0	1040	176	494	41	55	69	80	87	92	95	99	100	--	--	SBWC
JAN 19.....	1200	8.0	4380	1380	16300	28	30	40	50	56	65	76	88	99	100	--	VPWC
JAN 20.....	0900	10.0	7440	3310	66500	15	19	23	31	37	45	62	80	95	100	--	VPWC
JAN 21.....	0900	10.0	18600	6430	323000	30	33	37	50	60	70	84	93	98	100	--	VPWC
JAN 22.....	1330	7.5	7370	1540	30600	22	29	39	49	61	70	80	90	96	99	100	SPWC
JAN 26.....	1000	8.0	9300	2890	72600	21	26	33	43	53	62	75	89	98	100	--	VPWC
FEB 6.....	1600	7.0	5970	1220	19700	17	19	27	33	39	46	54	66	84	98	100	SPWC
FEB 7.....	1700	7.0	4280	564	6520	12	20	27	32	35	47	56	69	92	100	--	SBWC
FEB 11.....	1100	9.0	9700	3060	80100	14	16	22	28	35	42	54	70	88	98	100	SPWC
FEB 12.....	1630	8.0	7400	1020	20400	23	25	37	45	54	64	73	82	90	96	100	SPWC
FEB 13.....	1000	8.0	6000	718	11600	11	18	24	29	31	42	55	75	91	99	100	SBWC
FEB 14.....	1700	8.0	5950	556	8930	17	26	33	40	43	58	69	84	94	98	100	SBWC
FEB 15.....	1000	8.0	12600	2880	98000	20	21	29	34	42	51	64	82	96	100	--	VPWC
MAR 18.....	1435	13.0	1000	57	154	23	43	58	70	74	84	92	97	98	100	--	SBWC

11451760 CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
Dec 12, 1969	1600	12.0	118	150	48	--	--	--	--	--	89	91	94	100	--	--	S
DEC 21.....	1000	13.0	3080	2660	22100	42	55	67	84	93	97	98	99	99	100	--	SPWC
JAN 9, 1970	1100	7.0	4090	4530	50000	36	37	47	60	69	76	85	91	98	100	--	VPWC
JAN 12.....	0955	10.0	1080	144	420	--	--	--	--	--	90	92	94	97	100	--	S
JAN 15.....	1020	10.0	5760	1520	23600	24	29	43	54	65	74	84	93	99	100	--	VPWC
JAN 16.....	0900	10.0	20100	6260	340000	30	31	40	54	65	75	88	97	99	100	--	VPWC
JAN 21.....	0900	12.0	14900	3350	135000	21	25	38	49	60	74	87	97	100	--	--	VPWC
JAN 21.....	1630	13.0	12200	2500	82400	22	28	40	52	61	72	81	92	98	100	--	VPWC
JAN 23.....	1600	12.0	14400	1370	53300	22	32	41	53	70	89	98	100	--	--	--	VBWC
JAN 24.....	1000	10.0	21300	2880	166000	31	41	51	67	80	89	97	100	--	--	--	VPWC
JAN 24.....	1500	10.5	18100	2570	126000	30	38	51	66	79	88	97	100	--	--	--	VPWC
FEB 2.....	1310	9.5	5280	454	6470	25	33	42	50	59	66	74	87	99	100	--	VBWC
FEB 13.....	0830	9.0	7840	4800	102000	9	13	15	20	25	31	48	76	97	100	--	VPWC
MAR 4.....	1630	9.0	6000	3440	55000	11	15	18	23	29	35	50	72	95	100	--	VPWC
MAR 5.....	1015	9.0	3620	308	3010	26	34	42	50	54	59	64	76	90	98	100	SBWC

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: October 1952 to September 1968, water year 1969 (partial-record station), October 1969 to September 1970.
Sediment records: Water years 1959-62 (partial-record station).
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DISCHARGE (CFS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT.							
03...	0800	124	15.0	10.0	29	24	194
NOV.							
12...	1030	14	14.0	10.4	36	60	245
DEC.							
12...	0900	32	13.5	10.5	52	84	307
JAN.							
13...	1330	2770	10.5	11.2	17	23	136
30...	0900	7050	9.0	11.5	12	13	126
MAR.							
10...	1100	1520	11.0	11.1	27	24	209
APR.							
09...	1320	324	19.0	11.0	41	43	311
MAY							
19...	0845	504	20.0	8.7	26	22	187
JUNE							
04...	1215	504	27.0	10.6	24	18	172
JULY							
03...	1200	425	28.0	9.0	22	17	154
SEP.							
14...	1430	247	21.0	10.6	24	17	157

11452000 CACHE CREEK NEAR CAPAY, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	CARBONATE (CO3) (MG/L)	CHLORIDE (CL) (MG/L)	DISSOLVED BORON (B) (UG/L)	HARDNESS (CA,MG) (MG/L)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.							
03...	0	24	1200	156	159	392	8.2
NOV.							
12...	0	90	--	222	201	679	8.1
DEC.							
12...	0	150	--	298	252	947	8.0
JAN.							
13...	0	26	700	113	112	352	7.8
30...	0	9.7	600	90	103	293	8.0
MAR.							
10...	0	19	900	190	171	423	8.3
APR.							
09...	0	43	1300	279	255	680	8.4
MAY							
19...	0	22	1200	155	153	379	8.2
JUNE							
04...	0	17	1000	137	141	343	8.3
JULY							
03...	0	13	900	125	126	296	8.3
SEP.							
14...	0	16	400	133	129	331	8.2

11453500 PUTAH CREEK NEAR GUENOC, CALIF.

LOCATION.--Lat 38°46'44", long 122°30'59", in Guenoc Grant, Lake County, temperature recorder 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 1970.
Sediment records: Water years 1962-64 (partial-record station), December 1964 to March 1965, water years 1965-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 29.0°C on many days during July and August; minimum, 7.0°C Jan. 4-6.
EXTREMES, 1960-70.--Water temperatures: Maximum, 30.0°C July 20, 1960; minimum (1960-65, 1966-70), 4.5°C Dec. 14, 1967.
REMARKS.--Recorder malfunction July 20 to Aug. 6.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	19.5	17.0	14.5	12.0	10.5	10.0	8.5	10.5	9.0	13.5	11.5
2	22.0	19.0	17.0	14.5	12.0	10.5	10.0	8.5	10.5	8.5	12.0	10.0
3	20.5	18.0	18.0	14.5	11.5	10.5	9.5	8.0	10.5	8.5	12.0	10.0
4	21.0	17.0	18.0	15.0	11.5	10.0	9.5	7.0	11.0	9.0	12.0	10.0
5	20.5	16.5	17.0	15.5	11.5	10.0	9.0	7.0	10.5	9.5	13.5	9.5
6	20.5	16.5	16.0	15.0	11.5	10.5	8.5	7.0	11.5	9.5	14.0	10.5
7	19.0	16.5	15.0	14.5	11.5	10.0	9.0	8.0	11.5	9.5	14.5	11.5
8	19.5	18.0	16.0	14.5	12.0	11.0	9.0	8.0	11.5	10.0	14.5	11.5
9	20.0	16.5	15.5	14.0	11.5	11.0	9.5	8.0	11.5	10.5	13.5	11.0
10	19.5	16.5	15.5	13.5	12.0	11.5	10.5	10.0	11.5	10.5	13.5	10.0
11	16.5	10.5	16.0	13.5	12.0	11.0	11.0	10.5	12.0	11.0	13.0	11.5
12	16.0	11.0	16.0	14.0	12.0	11.5	11.5	11.0	11.5	11.0	15.0	11.5
13	14.5	12.0	16.0	14.0	13.5	12.0	11.5	11.0	11.5	10.0	15.0	12.0
14	14.5	14.0	16.0	14.0	13.5	12.0	12.0	11.5	12.0	10.0	16.0	13.5
15	14.5	14.5	16.5	15.0	13.0	12.0	12.0	11.0	12.0	10.5	15.5	12.0
16	16.5	14.0	15.0	14.0	15.0	11.5	12.0	11.0	11.5	10.0	16.5	13.0
17	16.5	14.0	14.0	13.0	13.0	12.0	13.0	11.5	11.0	9.5	15.0	12.0
18	16.0	13.5	14.0	12.0	13.5	12.0	12.0	11.5	11.5	9.0	14.5	10.5
19	16.5	13.5	13.5	11.5	12.0	11.5	12.0	11.5	11.5	9.0	15.5	10.5
20	16.5	13.5	13.5	11.5	13.5	12.0	12.0	11.5	13.0	9.5	15.5	11.5
21	18.0	14.5	13.5	11.5	13.5	11.5	13.0	12.0	13.0	10.0	16.0	12.0
22	18.0	14.5	13.5	11.5	11.5	10.5	13.5	13.0	13.0	10.0	17.0	13.0
23	16.5	15.5	13.5	11.5	11.5	11.5	13.0	12.0	13.0	10.0	18.0	13.5
24	18.0	15.5	13.5	11.5	12.0	11.5	12.0	11.0	13.5	11.0	18.5	14.0
25	18.0	14.5	13.5	11.5	12.0	11.0	12.0	10.5	14.0	11.0	18.5	14.0
26	17.0	15.0	13.5	11.0	11.0	10.0	11.5	11.0	14.5	11.5	18.0	14.0
27	16.5	15.0	13.0	11.0	10.0	9.0	11.5	10.0	14.5	11.5	17.0	13.0
28	17.0	14.5	13.0	11.0	10.0	8.5	10.5	9.0	14.0	13.0	18.5	13.5
29	17.0	14.0	12.0	10.5	10.5	9.0	10.5	8.5	--	--	19.0	14.0
30	17.0	14.5	12.0	10.5	10.5	9.0	11.0	9.5	--	--	17.0	13.5
31	17.0	14.5	--	--	10.0	8.5	10.0	8.5	--	--	17.0	12.0
AVE	17.9	15.0	14.9	13.0	12.0	10.7	11.0	9.9	12.1	10.1	15.5	11.9

11453500 PUTAH CREEK NEAR GUENOC, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR MIN	MAY MAX	MAY MIN	JUN MAX	JUN MIN	JUL MAX	JUL MIN	AUG MAX	AUG MIN	SEP MAX	SEP MIN
1	18.5	12.0	22.0	15.0	26.5	20.0	28.0	21.0	--	--	25.5	20.0
2	19.0	13.5	23.5	16.0	26.5	20.5	29.0	22.0	--	--	25.0	20.0
3	19.0	13.5	23.5	16.5	27.0	20.5	28.0	23.0	--	--	25.5	20.5
4	19.5	13.5	23.5	16.5	27.0	20.5	28.5	22.0	--	--	23.5	20.5
5	20.0	14.0	20.5	15.5	26.0	20.5	28.5	22.0	--	--	23.5	19.5
6	19.0	14.0	19.5	15.5	25.5	19.5	28.5	22.0	--	--	26.0	19.5
7	19.0	13.5	21.0	14.5	24.0	19.5	28.5	22.0	28.5	23.0	26.5	21.0
8	19.0	14.0	18.5	15.5	22.0	18.5	28.5	21.5	29.0	21.5	26.5	21.5
9	19.5	14.0	21.5	15.0	21.0	18.0	26.5	21.0	29.0	21.5	27.0	22.0
10	20.0	15.0	20.0	14.5	23.0	17.0	28.0	20.5	29.0	22.0	26.5	21.0
11	19.0	13.5	19.0	14.5	24.5	18.5	28.0	21.0	29.0	21.5	26.0	20.5
12	19.0	13.5	17.0	14.0	23.0	18.5	28.5	21.5	29.0	22.0	24.5	20.5
13	14.5	13.0	21.5	15.0	21.5	18.5	29.0	21.5	28.0	23.0	23.5	18.5
14	15.5	12.0	22.0	15.5	21.0	18.5	29.0	22.0	28.5	23.5	23.5	17.0
15	15.5	12.0	24.5	22.0	24.5	18.0	28.0	23.0	28.5	24.0	22.0	16.5
16	16.0	11.5	25.0	18.0	25.0	19.5	28.0	21.5	28.5	21.5	23.5	17.0
17	18.5	11.5	24.0	18.0	25.5	19.5	29.0	21.5	27.0	21.0	24.0	17.0
18	17.0	13.0	24.0	18.0	25.5	19.5	29.0	22.0	26.5	21.5	23.5	18.0
19	19.0	13.0	23.0	18.0	26.5	20.5	29.0	22.0	27.0	21.5	21.0	18.5
20	18.0	13.0	24.0	16.5	28.0	21.5	--	--	27.0	21.0	21.5	17.0
21	17.0	13.0	24.5	17.0	28.0	22.0	--	--	27.0	21.0	21.0	16.5
22	18.0	12.0	24.5	18.0	28.5	23.0	--	--	27.0	21.0	22.0	17.0
23	19.0	13.0	24.5	18.5	27.0	22.0	--	--	26.5	20.5	23.0	16.5
24	20.0	13.0	25.0	18.5	26.5	22.0	--	--	27.0	20.5	21.0	16.5
25	20.0	14.0	25.5	19.0	26.5	21.5	--	--	26.5	20.0	21.5	16.0
26	16.5	14.0	25.0	19.0	28.0	22.0	--	--	26.5	20.5	22.0	16.0
27	15.5	12.0	24.5	18.5	26.0	21.0	--	--	26.5	21.0	22.0	16.0
28	18.0	11.5	25.0	18.5	25.0	21.0	--	--	26.0	21.0	21.5	16.0
29	19.5	13.0	25.0	19.0	25.5	19.5	--	--	26.0	21.0	21.0	16.0
30	21.0	14.0	25.0	19.0	26.0	20.5	--	--	25.5	21.0	20.5	16.5
31	--	--	26.0	19.5	--	--	--	--	25.5	20.0	--	--
AVE	18.3	13.1	23.0	17.0	25.3	20.0	--	--	27.4	21.4	23.5	18.3

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE: PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 7, 1969	1205	18.0	1.3	3	.01	--	--	--	--	--	--	--	--	--	--	--	
NOV 3.....	1245	17.0	4.8	2	.03	--	--	--	--	--	--	--	--	--	--	--	
DEC 1.....	1115	10.5	11	3	.09	--	--	--	--	--	--	--	--	--	--	--	
DEC 18.....	1155	13.0	100	2	.54	--	--	--	--	--	--	--	--	--	--	--	
DEC 22.....	1430	11.5	1020	103	284	--	--	--	--	--	--	--	--	--	--	--	
JAN 5, 1970	1210	7.0	141	7	2.7	--	--	--	--	--	--	--	--	--	--	--	
JAN 15.....	1300	12.0	1760	134	637	--	--	--	--	--	--	--	--	--	--	--	
JAN 23.....	1130	13.0	3490	193	1820	21	29	38	48	58	65	78	92	98	100		VBWC
FEB 2.....	1445	9.5	501	13	18	--	--	--	--	--	--	--	--	--	--	--	
MAR 9.....	1100	12.0	368	10	9.9	--	--	--	--	--	--	--	--	--	--	--	
APR 8.....	1300	17.0	93	15	3.8	--	--	--	--	--	--	--	--	--	--	--	
MAY 13.....	1100	16.0	34	8	.73	--	--	--	--	--	--	--	--	--	--	--	
JUN 12.....	0945	18.0	12	8	.26	--	--	--	--	--	--	--	--	--	--	--	
JUL 1.....	1235	25.0	6.2	11	.18	--	--	--	--	--	--	--	--	--	--	--	
SEP 1.....	1130	20.0	.97	19	.05	--	--	--	--	--	--	--	--	--	--	--	

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (°C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE: PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
OCT 7, 1969	1205	18.0	6	1.3	1	4	15	17	18	19	22	30	47	71	100	S

11454000 PUTAH CREEK NEAR WINTERS, CALIF.

LOCATION.--Lat 38°30'55", long 122°04'51", in NE¼NE¼ 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 1951 (partial-record station), October 1952 to September 1966. Water temperatures: November 1965 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 14.0°C Mar. 26, May 25, 27; minimum, 10.0°C on several days during October to December.
EXTREMES, 1965-70.--Water temperatures: Maximum, 22.0°C May 21, 1967; minimum (1966-68, 1969-70), 6.5°C on several days in 1967 and 1968.
REMARKS.--Clock stopped Nov. 8 to Dec. 3; range in temperature, 10.0°C to 11.5°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	12.0	11.5	--	--	10.5	10.5	11.5	11.5	11.5	11.5
2	11.0	10.5	11.5	11.5	--	--	10.5	10.5	11.5	11.5	11.5	11.5
3	11.0	10.5	11.5	11.5	--	--	10.5	10.5	11.5	11.5	11.5	11.5
4	11.0	10.0	12.5	11.5	10.5	10.0	10.5	10.5	11.5	11.5	11.5	11.0
5	11.0	10.0	12.5	12.5	10.0	10.0	10.5	10.5	11.5	11.5	11.5	11.0
6	10.5	10.5	12.5	12.0	10.0	10.0	11.0	10.5	11.5	11.5	12.0	11.5
7	10.5	10.5	12.0	11.5	10.5	10.0	10.5	10.5	11.5	11.5	12.0	11.5
8	11.0	10.5	--	--	10.5	10.0	10.5	10.5	11.5	11.5	12.5	12.0
9	11.0	11.0	--	--	11.0	10.5	11.0	10.5	12.0	11.5	12.5	12.5
10	11.0	10.5	--	--	11.0	10.5	10.5	10.5	12.0	12.0	12.5	12.0
11	11.0	10.0	--	--	11.0	10.5	11.5	10.5	12.0	12.0	12.0	12.0
12	11.5	10.5	--	--	11.0	10.5	11.5	11.5	12.0	12.0	12.0	12.0
13	10.5	10.5	--	--	10.5	10.5	11.5	11.5	12.0	12.0	12.0	11.5
14	10.5	10.5	--	--	10.5	10.5	11.5	11.5	12.0	11.5	11.5	11.5
15	11.0	10.5	--	--	10.5	10.5	11.5	11.5	11.5	11.5	11.5	11.5
16	12.0	11.0	--	--	10.5	10.5	11.5	11.5	11.5	11.5	11.5	11.5
17	13.0	12.0	--	--	10.5	10.5	11.5	11.5	12.0	11.5	11.5	11.5
18	13.0	12.0	--	--	10.5	10.5	11.5	11.5	12.0	11.5	11.5	11.5
19	12.5	12.0	--	--	11.0	10.5	11.5	11.5	12.0	11.5	11.5	11.5
20	12.5	11.5	--	--	11.0	11.0	11.5	11.5	11.5	11.5	11.5	11.5
21	12.0	11.5	--	--	12.0	11.0	11.5	11.5	11.5	11.5	11.5	11.5
22	11.5	11.5	--	--	12.0	11.5	11.5	11.5	11.5	11.5	12.0	11.5
23	11.5	11.5	--	--	11.5	11.5	11.5	11.5	11.5	11.5	12.5	12.0
24	11.5	11.5	--	--	12.0	11.5	11.5	11.5	11.5	11.5	13.0	12.0
25	11.5	11.5	--	--	12.0	12.0	11.5	11.5	11.5	11.5	13.5	12.5
26	11.5	11.5	--	--	12.0	11.0	11.5	11.5	11.5	11.5	14.0	12.5
27	11.5	11.5	--	--	11.0	10.5	11.5	11.5	11.5	11.5	13.5	11.5
28	12.0	11.5	--	--	10.5	10.5	11.5	11.5	11.5	11.5	13.5	11.5
29	12.0	12.0	--	--	10.5	10.5	11.5	11.5	--	--	13.5	12.0
30	12.0	12.0	--	--	10.5	10.5	11.5	11.5	--	--	13.5	12.0
31	12.0	12.0	--	--	10.5	10.5	11.5	11.5	--	--	13.0	12.0
AVE	11.5	11.1	--	--	10.9	10.6	11.2	11.1	11.7	11.6	12.2	11.7

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	12.0	13.0	12.5	13.0	12.5	12.5	12.5	12.5	12.5	13.0	13.0
2	13.5	12.0	12.5	12.5	13.0	12.5	12.5	12.5	13.0	12.5	13.0	12.5
3	12.5	12.0	12.5	12.5	13.0	13.0	12.5	12.5	12.5	12.5	13.0	13.0
4	12.5	12.0	12.5	12.5	13.0	13.0	12.5	12.5	13.0	12.5	13.0	12.5
5	12.5	12.0	12.5	12.5	13.0	13.0	12.5	12.5	13.0	13.0	13.0	13.0
6	12.5	12.0	13.0	12.5	13.0	12.5	13.5	12.5	13.0	13.0	13.0	13.0
7	12.5	12.0	13.0	13.0	13.0	13.0	13.0	12.5	13.0	13.0	13.0	13.0
8	12.0	12.0	13.0	13.0	13.0	12.5	12.5	12.5	13.0	12.5	13.0	13.0
9	12.0	12.0	13.0	12.5	13.0	13.0	12.5	12.5	13.0	12.5	13.0	13.0
10	12.0	11.5	13.0	12.5	13.0	13.0	12.5	12.5	12.5	12.5	13.0	12.5
11	12.0	12.0	13.0	13.0	13.0	13.0	12.5	12.5	12.5	12.5	12.5	12.5
12	12.0	12.0	13.0	13.0	13.0	13.0	12.5	12.5	12.5	12.5	13.5	12.5
13	12.0	12.0	13.0	12.5	13.0	12.5	12.5	12.5	12.5	12.5	13.0	13.0
14	12.0	12.0	12.5	12.5	13.0	13.0	12.5	12.5	12.5	12.5	13.0	13.0
15	12.0	12.0	12.5	12.5	13.0	13.0	12.5	12.5	12.5	12.5	13.0	13.0
16	12.0	12.0	12.5	12.0	13.0	13.0	12.5	12.5	12.5	12.0	13.0	12.5
17	12.0	12.0	12.5	12.0	13.0	13.0	12.5	12.5	12.5	12.0	13.0	13.0
18	12.0	12.0	12.5	12.5	13.0	13.0	12.5	12.5	13.0	12.5	13.5	13.0
19	12.5	12.0	12.5	12.5	13.0	13.0	12.5	12.5	13.0	12.5	13.0	13.0
20	12.5	12.5	12.5	12.5	13.0	13.0	12.5	12.5	13.0	12.5	13.0	13.0
21	12.5	12.5	12.5	12.5	13.0	13.0	12.5	12.5	13.0	12.5	13.0	13.0
22	12.5	12.5	12.5	12.5	13.0	13.0	12.5	12.5	13.0	12.5	13.0	13.0
23	12.5	12.5	12.5	12.5	13.5	13.0	12.5	12.5	13.0	13.0	13.0	13.0
24	12.5	12.5	13.0	12.5	13.0	13.0	12.5	12.5	13.0	13.0	13.0	12.5
25	13.0	12.5	14.0	12.5	13.0	13.0	12.5	12.5	13.0	13.0	12.5	12.5
26	13.0	12.5	13.5	13.0	13.0	13.0	13.5	12.5	13.0	13.0	12.5	12.5
27	12.5	12.5	14.0	13.0	13.0	13.0	12.5	12.5	13.0	13.0	12.5	12.5
28	12.5	12.5	13.5	13.0	13.0	13.0	12.5	12.5	13.0	13.0	12.5	12.5
29	13.0	12.5	13.0	13.0	13.0	12.5	12.5	12.5	13.0	12.5	12.5	12.5
30	13.0	13.0	13.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
31	--	--	13.0	12.5	--	--	12.5	12.5	13.0	12.5	--	--
AVE	12.4	12.2	12.9	12.6	13.0	12.9	12.6	12.5	12.8	12.6	12.9	12.8

11455400 SACRAMENTO RIVER AT RIO VISTA, CALIF.

LOCATION.--Lat 38°09'44", long 121°41'24", T.4 N., R.3 E., Sacramento County, at Highway 12 drawbridge, 1.1 miles upstream from tidal gaging station just south of Rio Vista, and approximately 2.1 miles downstream from Steamboat Slough.
PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1970.
REMARKS.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR CCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.										
17...	1055	15.0	9.3	--	--	--	--	--	--	--
21...	1855	15.0	9.3	18	200	--	--	--	--	--
NOV.										
25...	1530	13.0	9.7	18	--	--	--	--	--	--
FEB.										
12...	1145	11.0	11.0	18	400	--	--	--	--	--
MAR.										
20...	1535	14.0	10.9	17	--	13	7.8	8.1	1.1	77
APR.										
16...	1420	13.0	9.3	18	--	--	--	--	--	--
MAY										
18...	1700	18.0	9.0	17	--	--	--	--	--	--
19...	1815	18.0	9.0	--	--	--	--	--	--	--
JUNE										
15...	1505	21.0	9.0	18	--	13	8.0	17	1.7	82
16...	1645	19.0	9.2	--	--	--	--	--	--	--
JULY										
14...	1555	23.0	8.6	--	--	--	--	--	--	--
15...	1630	21.0	8.8	17	--	--	--	--	--	--
AUG.										
12...	1520	24.0	8.8	15	--	--	--	--	--	--
13...	1500	23.0	8.3	--	--	--	--	--	--	--
SEP.										
09...	1400	23.0	8.5	17	--	--	--	12	1.3	78
10...	1530	21.0	8.1	--	--	12	6.7	--	--	--

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (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.										
17...	--	--	--	--	--	--	--	--	--	--
21...	--	--	4.0	.26	.09	.03	.1	.090	.090	--
NOV.										
25...	--	--	7.0	--	--	.04	.2	.10	.080	--
FEB.										
12...	--	--	2.0	.29	.22	--	.2	.17	.030	--
MAR.										
20...	0	14	5.0	.12	--	.03	.2	.11	.050	200
APR.										
16...	--	--	9.0	.79	.79	.12	.3	.13	.10	--
MAY										
18...	--	--	10	.32	.22	.09	.2	.12	.11	--
19...	--	--	--	--	--	--	--	--	--	--
JUNE										
15...	0	16	14	.40	.27	--	.3	.19	.11	--
16...	--	--	--	--	--	--	--	--	--	--
JULY										
14...	--	--	--	--	--	--	--	--	--	--
15...	--	--	10	.47	.34	--	.2	.23	.13	--
AUG.										
12...	--	--	8.0	.29	.22	--	.1	.14	.090	--
13...	--	--	--	--	--	--	--	--	--	--
SEP.										
09...	0	8.0	7.0	--	--	--	.00	.14	.080	--
10...	--	--	--	--	--	--	--	--	--	--

11455400 SACRAMENTO RIVER AT RIO VISTA, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TOTAL FILT-RABLE RESIDUE (MG/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	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.										
17...	--	--	--	--	--	--	150	7.3	1.1	--
21...	117	--	--	--	--	--	140	6.9	1.3	--
NOV.										
25...	101	--	--	--	--	--	150	7.3	.8	--
FEB.										
12...	81	--	--	--	--	--	120	7.2	.4	--
MAR.										
20...	110	65	2	63	21	.4	160	7.6	1.1	--
APR.										
16...	113	--	--	--	--	--	190	7.3	1.4	--
MAY										
18...	129	--	--	--	--	--	200	6.7	1.1	--
19...	--	--	--	--	--	--	200	7.6	.8	--
JUNE										
15...	142	66	0	67	35	.9	210	7.3	2.1	--
16...	--	--	--	--	--	--	230	7.7	1.9	--
JULY										
14...	--	--	--	--	--	--	160	7.8	1.2	--
15...	106	--	--	--	--	--	160	7.7	1.7	--
AUG.										
12...	95	--	--	--	--	--	152	7.5	1.5	1.5
13...	--	--	--	--	--	--	150	7.6	2.1	--
SEP.										
09...	104	--	--	64	--	--	162	7.3	1.4	1.3
10...	--	58	--	--	--	--	165	--	1.2	--

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 1970.
Sediment records: December 1956 to June 1962.
EXTREMES, 1969-70.--Water temperatures: Minimum, 5.0°C Jan. 5, 6.
EXTREMES, 1961-63, 1964-70.--Water temperatures: Maximum (1961-63, 1964-65, 1966-69), 33.5°C July 18, 1968; minimum (1961-63, 1965-70), 3.5°C Dec. 14, 15, 1967.
REMARKS.--Probe inoperative July 1 to Aug. 7.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	16.0	15.5	14.5	8.0	6.0	7.0	6.0	11.0	9.0	13.5	11.0
2	17.5	16.0	15.5	14.5	7.0	6.5	7.0	6.0	11.0	8.5	12.0	10.0
3	16.0	16.0	15.0	14.0	8.0	6.5	6.5	5.5	11.0	9.0	11.0	10.0
4	16.0	16.0	15.5	14.0	8.0	6.5	6.0	5.5	11.5	9.5	11.0	9.5
5	16.0	15.0	15.5	15.0	7.0	6.5	5.5	5.0	12.0	10.5	12.0	9.0
6	15.0	14.0	15.0	14.0	8.0	6.5	5.5	5.0	13.0	10.0	13.5	10.0
7	14.5	13.5	14.5	13.0	8.0	6.5	6.5	6.0	13.0	10.5	13.5	11.0
8	14.5	14.0	14.0	13.5	8.0	6.5	7.0	6.5	13.0	10.5	14.5	11.5
9	14.5	14.0	14.0	12.0	8.5	8.0	8.0	7.0	12.0	11.0	12.0	10.5
10	15.0	14.5	13.0	11.5	8.5	8.0	8.5	8.0	12.0	11.0	13.0	9.5
11	15.0	14.5	13.0	11.5	9.5	8.5	9.0	8.5	13.0	11.5	11.5	10.5
12	14.5	14.5	13.0	11.5	10.5	9.5	9.5	9.0	12.0	11.5	14.5	10.5
13	14.5	14.5	13.0	11.5	10.5	10.5	9.5	9.5	11.5	10.5	15.0	11.5
14	14.5	14.5	13.5	12.0	10.5	10.5	10.0	9.5	11.5	10.0	16.0	13.0
15	14.5	14.5	14.0	13.5	10.5	10.0	9.5	9.0	12.0	10.5	16.0	11.5
16	14.5	14.5	14.0	13.0	10.0	9.5	10.0	9.0	11.5	10.5	17.0	12.0
17	14.5	14.0	13.0	10.5	10.5	10.0	10.5	10.0	11.0	10.0	15.0	11.5
18	14.5	13.0	10.5	9.0	10.5	10.5	10.5	10.0	11.5	9.5	13.5	10.5
19	13.5	12.5	10.0	9.0	11.0	10.5	10.0	10.0	11.5	9.0	14.0	10.0
20	13.5	12.5	9.5	9.0	11.5	11.0	10.5	10.0	12.0	9.0	14.5	10.5
21	14.0	13.5	9.5	9.0	11.5	10.0	11.0	10.5	12.0	9.5	15.0	10.5
22	16.5	14.0	9.5	9.0	10.0	9.5	11.0	11.0	12.0	9.5	16.0	10.5
23	16.5	16.0	9.5	9.0	10.5	10.0	11.0	10.0	12.0	9.5	17.0	11.5
24	16.5	15.5	9.0	8.5	10.5	10.0	10.0	9.5	14.0	10.5	18.0	12.0
25	16.0	14.5	9.0	8.0	10.5	9.0	10.0	9.0	14.5	11.0	17.0	12.0
26	16.0	14.5	9.0	8.0	9.0	8.0	10.5	9.5	15.0	11.5	16.0	12.0
27	16.5	14.5	8.5	8.0	8.0	7.0	10.0	8.5	14.5	11.5	16.0	11.5
28	16.0	14.5	8.5	8.0	8.0	6.5	9.5	8.5	14.0	13.5	16.5	11.5
29	16.0	14.0	8.0	7.0	8.0	6.5	9.5	8.0	--	--	16.5	12.0
30	16.0	14.5	7.0	6.5	8.0	6.5	10.5	9.0	--	--	15.5	11.5
31	16.0	14.5	--	--	7.0	6.0	10.0	9.0	--	--	16.0	11.5
AVE	15.4	14.5	11.9	10.9	9.2	8.3	9.0	8.3	12.3	10.3	14.6	11.0

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	11.0	21.5	15.5	24.5	19.5	--	--	--	--	20.5	17.5
2	17.0	13.0	22.0	16.0	24.5	20.0	--	--	--	--	20.0	16.5
3	18.0	13.0	22.0	16.0	25.0	19.5	--	--	--	--	20.5	18.5
4	18.0	13.0	21.0	16.5	25.0	19.5	--	--	--	--	20.5	18.5
5	18.5	13.0	20.0	16.5	23.5	19.5	--	--	--	--	19.5	17.5
6	18.0	13.0	18.0	15.5	23.5	18.0	--	--	--	--	20.5	17.0
7	17.0	13.0	19.5	15.0	21.0	19.0	--	--	--	--	21.0	20.0
8	17.0	13.0	18.5	16.0	20.5	19.0	--	--	24.0	19.0	21.0	18.0
9	18.0	13.0	21.5	16.0	22.0	19.5	--	--	25.5	20.0	20.0	17.5
10	18.0	14.5	20.5	16.0	22.0	19.0	--	--	25.0	20.0	20.0	17.0
11	17.0	13.0	17.0	15.0	23.5	19.0	--	--	25.0	19.5	19.5	16.5
12	18.0	12.0	17.0	14.5	22.0	19.0	--	--	24.0	19.5	19.0	16.5
13	15.0	13.0	20.5	16.0	23.0	20.5	--	--	24.0	19.5	18.5	14.0
14	14.5	11.5	21.5	16.5	23.0	20.0	--	--	23.5	19.0	19.0	15.5
15	15.0	11.0	23.0	19.5	24.0	19.5	--	--	22.5	18.5	17.5	14.5
16	16.0	11.5	23.5	19.5	24.0	20.5	--	--	22.5	18.5	18.0	15.0
17	18.0	11.5	23.5	19.5	24.5	20.0	--	--	22.0	19.0	18.0	16.0
18	17.0	13.0	22.0	19.0	25.5	19.0	--	--	21.5	17.5	18.0	16.0
19	19.0	14.0	21.5	18.0	25.5	18.5	--	--	20.5	17.0	18.0	16.0
20	18.0	13.0	21.5	17.0	25.5	18.5	--	--	21.0	17.5	18.5	15.5
21	16.0	13.0	23.0	18.0	25.5	19.0	--	--	22.0	18.0	18.0	16.0
22	18.0	12.0	23.5	18.5	26.0	20.0	--	--	21.5	18.5	18.0	16.5
23	17.0	12.0	23.5	19.5	25.0	19.0	--	--	21.5	18.0	17.5	15.0
24	19.0	13.5	24.0	19.0	24.5	19.0	--	--	22.0	17.5	17.5	16.0
25	19.0	14.0	23.0	19.0	24.5	19.0	--	--	21.5	18.5	17.0	15.5
26	18.0	14.5	21.5	18.5	25.0	19.0	--	--	20.5	18.5	17.0	14.0
27	16.0	12.0	22.0	18.5	22.5	18.5	--	--	20.5	18.0	17.5	15.5
28	17.0	12.0	23.5	18.5	23.5	17.5	--	--	20.5	18.5	17.5	15.5
29	19.0	13.0	24.0	18.5	24.0	17.5	--	--	20.5	18.5	17.0	15.0
30	20.0	14.5	24.0	19.5	24.5	18.0	--	--	20.5	18.0	16.5	14.0
31	--	--	24.5	19.5	--	--	--	--	20.5	18.0	--	--
AVE	17.4	12.8	21.7	17.4	23.9	19.1	--	--	--	--	18.7	16.2

11460170 PINE CREEK AT BOLINAS, CALIF.

LOCATION.--Lat 37°55'07", long 122°41'31", in Las Baulines Grant, Marin County, at gaging station 100 ft upstream from highway bridge, 0.4 mile upstream from mouth, and 0.9 mile north of Bolinas.
DRAINAGE AREA.--7.83 sq mi.
PERIOD OF RECORD.--Water temperatures: May 1967 to September 1970 (discontinued).
Sediment records: June 1967 to September 1970 (discontinued).
EXTREMES, 1969-70.--Sediment concentrations: Maximum daily, 5,370 mg/l Jan. 21; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 11,100 tons Jan. 21; minimum daily, 0 tons on many days.
EXTREMES, 1967-70.--Water temperatures: Minimum (1967-69), 4.0°C Dec. 14, 1967.
Sediment concentrations: Maximum daily, 5,370 mg/l Jan. 21, 1970; minimum daily, no flow Sept. 22, 1968.
Sediment loads: Maximum daily, 11,100 tons Jan. 21, 1970; minimum daily, 0 tons on many days each year.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	10.0	--	--	--	--	--	--	--	--	--
4	--	--	--	--	10.0	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	14.5	--	--	--
6	--	--	10.0	--	--	--	--	--	--	--	--	--
7	--	--	--	10.0	--	--	--	--	--	--	--	--
8	15.0	--	--	--	--	--	--	--	--	--	--	--
9	--	--	12.0	--	13.0	11.5	--	--	--	--	--	--
10	--	11.5	--	11.0	--	--	--	--	--	--	--	--
11	--	--	--	--	12.0	11.0	--	--	--	--	--	--
12	--	--	12.0	--	--	--	--	--	--	--	--	--
13	--	--	--	--	13.0	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	10.0	--	--	10.0	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--
17	12.5	--	13.0	--	--	--	--	--	--	--	--	--
18	--	11.0	13.0	--	--	10.0	--	--	--	--	--	--
19	--	--	14.0	--	11.0	--	--	--	--	--	13.5	--
20	12.0	--	--	--	--	--	11.5	--	--	--	--	--
21	--	--	14.0	14.0	12.0	--	--	--	--	--	--	--
22	--	--	12.0	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	13.0	13.5	--	--	--	--	--	--	--	--
25	--	--	13.0	--	--	--	--	--	--	--	--	--
26	--	--	11.0	--	--	--	--	--	--	--	--	--
27	--	--	--	--	11.0	--	--	--	--	--	--	--
28	--	10.5	10.0	--	--	--	--	--	--	--	--	--
29	13.0	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	14.5	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

11460170 PINE CREEK AT BOLINAS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.70	3	.01	1.1	2	.01	1.0	2	.01
2	.70	3	.01	1.1	2	.01	1.0	3	.01
3	.51	2	0	1.1	2	.01	1.1	3	.01
4	.39	2	0	1.2	2	.01	1.1	3	.01
5	.32	1	0	5.3	15	.21	1.1	2	.01
6	.29	1	0	3.7	9	.09	1.1	2	.01
7	.32	1	0	2.9	5	.04	1.0	2	.01
8	.39	1	0	2.3	3	.02	1.2	8	.03
9	.32	1	0	2.0	2	.01	1.5	14	.06
10	.29	1	0	1.7	1	0	1.8	10	.05
11	.17	1	0	1.6	1	0	2.0	7	.04
12	.14	1	0	1.4	1	0	2.5	5	.03
13	.17	1	0	1.4	1	0	3.0	5	.04
14	.32	2	0	1.4	1	0	4.3	15	.17
15	3.6	10	.10	1.1	1	0	5.9	10	.16
16	3.0	8	.06	1.1	1	0	4.9	5	.07
17	2.3	5	.03	1.1	1	0	4.7	3	.04
18	1.7	4	.02	1.0	1	0	4.7	10	.13
19	1.3	3	.01	1.0	1	0	49	549	137
20	1.3	2	.01	.95	1	0	274	2410	2830
21	1.3	2	.01	.95	1	0	124	600	213
22	1.3	2	.01	.95	1	0	83	178	40
23	1.3	2	.01	.95	1	0	112	532	214
24	1.3	2	.01	.95	1	0	159	822	385
25	1.3	2	.01	.95	1	0	102	223	61
26	1.2	2	.01	.90	1	0	78	92	19
27	1.2	2	.01	.85	1	0	66	41	7.3
28	1.2	2	.01	.90	1	0	60	14	2.3
29	1.2	2	.01	1.1	2	.01	55	14	2.1
30	1.2	2	.01	1.0	2	.01	50	14	1.9
31	1.1	2	.01	--	--	--	47	14	1.8
TOTAL	31.83	--	.36	43.95	--	.43	1302.9	--	3915.29

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	45	14	1.7	34	60	5.5	21	41	2.3
2	43	14	1.6	31	54	4.5	17	30	1.4
3	42	14	1.6	29	47	3.7	16	26	1.1
4	40	14	1.5	27	35	2.6	50	261	52
5	39	14	1.5	25	32	2.2	38	92	9.4
6	38	15	1.5	23	29	1.8	31	40	3.3
7	37	15	1.5	22	25	1.5	27	34	2.5
8	41	23	2.5	21	19	1.1	27	31	2.3
9	66	121	27	20	14	.76	24	24	1.6
10	62	52	8.7	20	11	.59	22	22	1.3
11	57	35	5.4	19	8	.41	19	24	1.2
12	55	35	5.2	21	11	.62	16	21	.91
13	69	151	43	37	97	14	15	17	.69
14	523	4030	6250	25	48	3.2	14	15	.57
15	239	1280	966	21	42	2.4	12	13	.42
16	429	3150	4070	25	47	3.5	11	11	.33
17	220	590	350	30	41	3.3	11	9	.27
18	166	280	125	26	35	2.5	10	8	.22
19	149	270	109	23	31	1.9	9.4	8	.20
20	293	1760	3260	21	30	1.7	8.8	7	.17
21	706	5370	11100	19	39	2.0	8.4	7	.16
22	203	1900	1040	18	34	1.7	7.8	7	.15
23	179	1430	963	17	32	1.5	7.6	6	.12
24	203	1270	793	16	32	1.4	7.2	6	.12
25	98	254	67	15	34	1.4	6.9	6	.11
26	68	98	18	15	48	1.9	6.7	5	.09
27	78	154	35	15	56	2.3	6.5	5	.09
28	59	99	16	18	45	2.2	6.3	5	.09
29	54	77	11	--	--	--	6.1	5	.08
30	44	70	8.3	--	--	--	5.9	5	.08
31	38	63	6.5	--	--	--	5.7	5	.08
TOTAL	4383	--	29290.5	633	--	72.18	474.3	--	83.35

11460170 PINE CREEK AT BOLINAS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.6	5	.08	2.8	3	.02	1.3	4	.01
2	5.4	5	.07	2.7	3	.02	1.3	4	.01
3	5.2	5	.07	2.7	3	.02	1.3	4	.01
4	5.1	5	.07	2.6	3	.02	1.3	4	.01
5	5.0	5	.07	2.5	3	.02	1.3	4	.01
6	4.9	5	.07	2.5	3	.02	1.4	4	.02
7	4.8	5	.06	2.4	3	.02	1.5	4	.02
8	4.7	4	.05	2.4	3	.02	1.7	4	.02
9	4.6	4	.05	2.3	3	.02	.98	4	.01
10	4.5	4	.05	2.2	3	.02	.19	4	0
11	4.5	4	.05	2.2	3	.02	.25	4	0
12	4.4	4	.05	2.1	3	.02	.31	4	0
13	4.3	4	.05	2.1	3	.02	.31	4	0
14	4.2	4	.05	2.0	3	.02	.31	4	0
15	4.1	3	.03	2.0	3	.02	.34	4	0
16	4.0	3	.03	1.9	4	.02	.40	4	0
17	3.9	3	.03	1.9	4	.02	.34	4	0
18	3.9	3	.03	1.8	4	.02	.44	3	0
19	3.8	3	.03	1.8	4	.02	.56	3	0
20	3.8	3	.03	1.8	4	.02	.56	3	0
21	3.6	3	.03	1.7	4	.02	.60	3	0
22	3.5	3	.03	1.7	4	.02	.56	3	0
23	3.4	3	.03	1.6	4	.02	.64	3	.01
24	3.3	3	.03	1.6	4	.02	.72	3	.01
25	3.2	3	.03	1.6	4	.02	.76	3	.01
26	3.2	3	.03	1.5	4	.02	.80	3	.01
27	3.1	3	.03	1.5	4	.02	.86	3	.01
28	3.0	3	.02	1.5	4	.02	.92	3	.01
29	3.0	3	.02	1.4	4	.02	.80	3	.01
30	2.9	3	.02	1.4	4	.02	.86	3	.01
31	--	--	--	1.3	4	.01	--	--	--
TOTAL	122.9	--	1.29	61.5	--	.61	23.61	--	.20

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.72	3	.01	.21	2	0	.08	1	0
2	.68	3	.01	.21	2	0	.07	1	0
3	.68	3	.01	.21	2	0	.08	1	0
4	.68	3	.01	.21	2	0	.13	1	0
5	.68	3	.01	.19	2	0	.08	1	0
6	.60	3	0	.15	2	0	.10	1	0
7	.64	3	.01	.14	2	0	.07	1	0
8	.80	3	.01	.11	2	0	.11	1	0
9	.72	3	.01	.11	2	0	.10	1	0
10	.72	3	.01	.05	1	0	.31	1	0
11	.76	3	.01	.09	1	0	.15	1	0
12	.64	3	.01	.13	1	0	.17	1	0
13	.60	3	0	.10	1	0	.10	1	0
14	.56	3	0	.09	1	0	.05	1	0
15	.56	3	0	.17	1	0	.03	1	0
16	.56	3	0	.13	1	0	.04	1	0
17	.48	3	0	.10	1	0	.02	1	0
18	.40	3	0	.05	1	0	.05	1	0
19	.48	3	0	.04	1	0	.09	1	0
20	.34	3	0	.07	1	0	.07	1	0
21	.34	3	0	.08	1	0	.04	1	0
22	.34	3	0	.14	1	0	.03	1	0
23	.37	3	0	.10	1	0	.02	1	0
24	.37	3	0	.10	1	0	.03	1	0
25	.40	3	0	.08	1	0	.03	1	0
26	.28	3	0	.07	1	0	.02	1	0
27	.37	3	0	.07	1	0	.05	1	0
28	.34	3	0	.19	1	0	.01	1	0
29	.23	2	0	.10	1	0	.01	1	0
30	.15	2	0	.07	1	0	.01	1	0
31	.19	2	0	.07	1	0	--	--	--
TOTAL	15.68	--	.11	3.63	--	0	2.15	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 7098.45
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 33364.32

11460170 PINE CREEK AT BOLINAS, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 19, 1969	1340	14.0	109	1940	571	21	32	42	50	63	71	86	97	100	--	--	VPWC
DEC 19.....	1405	14.0	148	1900	759	25	37	47	58	68	80	94	100	--	--	--	VBWC
DEC 19.....	1500	14.0	144	1450	564	33	47	57	69	78	85	93	99	100	--	--	VBWC
DEC 21.....	1130	14.0	162	1180	516	20	27	34	40	49	58	76	91	100	--	--	VPWC
JAN 21, 1970	1320	14.0	838	4400	9960	31	35	41	50	60	71	87	94	98	100	--	VPWC
JAN 21.....	1515	14.0	660	4270	7610	24	27	40	48	56	67	84	94	96	100	--	VPWC
JAN 24.....	1400	13.5	193	1150	599	34	34	48	57	64	75	88	97	100	--	--	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
OCT 17, 1969	1035	12.5	6	2.5	2	4	12	25	42	60	73	87	97	100	--	S
DEC 19.....	1630	14.0	4	104	1	3	18	37	44	54	67	84	98	100	--	S

11460920 SALMON CREEK AT BODEGA, CALIF.

LOCATION.--Lat 38°20'54", long 122°58'45", in Estero Americano Grant, Sonoma County, temperature recorder at gaging station on left bank, 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 22.0°C May 2, 15, 16; minimum, freezing point Jan. 5.
EXTREMES, 1964-70.--Water temperatures: Maximum, 23.5°C Apr. 26, 1965; minimum (1964-66, 1967-70), freezing point on many days during winter period.
REMARKS.--No flow Oct. 1-9, 12, 13, July 4, 5, 11, 12, Aug. 5-23, 28, Sept. 4-30. Recorder malfunction Nov. 4 to Dec. 4.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	15.0	9.0	--	--	9.5	3.5	13.5	6.5	13.0	8.5
2	--	--	13.0	10.5	--	--	8.0	1.0	14.0	6.0	12.0	4.5
3	--	--	14.0	11.0	--	--	7.0	0.5	14.0	6.5	13.5	6.5
4	--	--	--	--	--	--	6.5	0.5	15.0	8.0	10.0	7.0
5	--	--	--	--	5.5	1.0	5.5	0.0	12.0	8.0	12.0	4.0
6	--	--	--	--	6.5	2.5	4.5	0.5	13.0	8.0	14.0	5.0
7	--	--	--	--	6.5	4.5	5.5	3.0	14.5	7.0	13.0	8.0
8	--	--	--	--	9.0	6.0	6.5	5.0	14.0	7.5	14.0	7.0
9	--	--	--	--	7.5	4.0	10.0	6.5	12.0	7.0	9.5	5.5
10	13.0	9.0	--	--	10.0	6.0	11.0	8.5	14.0	7.5	11.5	4.0
11	15.0	7.0	--	--	11.0	9.0	10.0	9.0	13.0	9.0	10.0	8.0
12	--	--	--	--	11.5	11.0	11.5	10.0	13.0	9.5	14.5	8.0
13	--	--	--	--	12.0	11.0	12.0	11.5	12.0	9.0	11.5	7.5
14	11.0	9.5	--	--	12.0	9.5	13.0	11.5	12.5	7.0	13.0	6.0
15	12.5	10.5	--	--	12.5	8.5	12.0	11.0	11.5	6.0	12.5	7.5
16	14.0	12.0	--	--	10.0	8.0	13.5	12.0	10.0	8.0	15.0	5.5
17	13.5	10.0	--	--	11.0	9.5	13.5	12.0	11.5	6.5	15.0	7.5
18	13.0	8.5	--	--	10.5	9.5	13.5	11.0	12.5	4.5	14.0	7.5
19	13.0	7.0	--	--	12.0	10.0	13.0	11.0	13.5	5.0	15.5	9.5
20	13.0	6.5	--	--	13.5	12.0	14.0	12.5	13.0	2.5	13.0	7.5
21	13.0	8.0	--	--	13.5	9.0	14.5	14.0	12.5	3.5	16.0	6.5
22	12.0	11.5	--	--	10.5	8.0	14.5	14.0	12.0	3.5	17.0	9.0
23	13.0	12.0	--	--	12.0	9.5	14.5	13.0	13.0	5.0	18.5	9.0
24	14.5	10.5	--	--	14.0	12.0	14.0	10.5	15.0	7.0	19.5	8.0
25	13.5	9.5	--	--	12.0	8.0	14.5	9.5	15.5	5.5	21.0	9.0
26	12.0	10.5	--	--	10.5	5.5	14.0	11.0	16.0	5.5	20.0	9.0
27	13.5	10.5	--	--	10.5	5.5	14.5	9.0	14.0	6.0	19.5	10.0
28	13.5	9.5	--	--	10.0	2.5	12.0	6.0	12.0	10.0	18.5	9.0
29	14.5	8.5	--	--	9.0	2.0	12.0	5.0	--	--	17.5	8.5
30	14.5	8.5	--	--	8.5	2.0	12.5	6.5	--	--	17.0	8.5
31	15.0	8.5	--	--	9.5	3.5	11.0	6.0	--	--	19.0	8.5
AVE	--	--	--	--	10.4	7.0	11.2	7.9	13.2	6.6	14.8	7.4

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	7.5	21.0	12.0	20.5	16.5	19.5	14.0	16.0	11.5	14.5	10.5
2	19.0	8.5	22.0	13.5	20.0	17.0	20.5	15.0	17.0	10.5	15.0	9.5
3	19.0	8.0	20.0	14.5	20.0	16.0	20.0	14.5	15.5	11.0	13.5	9.5
4	19.5	8.0	18.0	15.0	20.0	15.5	--	--	14.5	11.5	--	--
5	19.5	10.0	17.0	15.0	17.0	16.0	--	--	--	--	--	--
6	16.5	8.5	16.0	13.0	17.0	16.0	17.0	12.5	--	--	--	--
7	15.5	8.0	15.5	9.0	17.0	15.0	15.5	13.0	--	--	--	--
8	15.5	8.0	17.0	13.5	16.0	15.5	15.5	13.0	--	--	--	--
9	16.5	9.5	17.5	13.5	19.5	14.5	15.0	12.5	--	--	--	--
10	17.0	12.0	16.5	13.0	20.0	16.0	15.0	12.5	--	--	--	--
11	17.0	8.0	15.0	11.0	17.5	14.5	--	--	--	--	--	--
12	16.0	8.0	15.0	10.5	18.0	14.0	--	--	--	--	--	--
13	16.5	8.5	18.0	14.0	17.5	15.0	15.5	11.0	--	--	--	--
14	17.0	11.5	20.0	12.5	17.5	15.5	15.0	12.0	--	--	--	--
15	17.0	8.0	22.0	15.0	17.5	14.0	15.0	13.0	--	--	--	--
16	17.0	9.0	22.0	15.5	18.0	14.5	16.5	13.5	--	--	--	--
17	17.0	8.5	19.0	17.0	17.0	13.5	17.0	12.5	--	--	--	--
18	17.5	9.0	18.5	16.5	18.0	13.0	17.5	13.0	--	--	--	--
19	18.0	6.5	17.0	14.0	18.5	14.5	17.0	12.5	--	--	--	--
20	16.5	6.0	16.5	12.0	18.5	16.0	16.5	13.0	--	--	--	--
21	13.5	8.5	17.5	12.5	19.0	15.5	16.5	12.5	--	--	--	--
22	15.0	7.0	19.0	13.5	19.0	16.0	16.5	11.0	--	--	--	--
23	15.0	8.0	20.0	14.0	18.5	16.5	15.0	11.0	--	--	--	--
24	16.0	9.0	17.5	14.5	18.5	16.5	14.5	12.0	14.5	9.5	--	--
25	15.5	11.5	18.0	16.0	17.5	15.5	14.5	11.5	13.5	8.0	--	--
26	16.0	11.5	17.5	15.5	17.5	16.0	14.5	12.0	13.0	9.5	--	--
27	14.0	9.0	18.0	14.5	17.5	15.0	15.0	12.0	14.0	9.5	--	--
28	15.5	7.5	17.0	13.0	17.5	14.5	15.5	12.5	--	--	--	--
29	17.0	9.0	18.0	13.0	17.5	13.0	15.5	11.0	13.0	10.5	--	--
30	19.0	11.0	20.5	14.5	18.5	13.0	15.5	11.5	13.5	11.0	--	--
31	--	--	21.0	15.5	--	--	15.0	12.0	14.5	10.5	--	--
AVE	16.7	8.8	18.3	13.8	18.2	15.1	16.1	12.5	--	--	--	--

11461500 EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.

LOCATION.--Lat 39°14'48", long 123°07'45", in NW¼NW¼ sec.18, T.16 N., R.11 W., Mendocino County, temperature recorder at gaging station on left bank 0.1 mile downstream from Cold Creek, and 3.9 miles east of Calpella.
DRAINAGE AREA.--92.2 sq mi.
PERIOD OF RECORD.--Chemical analyses: Water years 1951-52 (partial-record station), October 1952 to September 1958.
Water temperatures: March 1964 to September 1970.
Sediment records: March to September 1964, October 1966 to September 1968.
Turbidity: Water years 1964-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.5°C May 22; minimum, 4.5°C Dec. 2.
EXTREMES, 1965-70.--Water temperatures: Maximum (1965-66, 1967-70), 26.0°C June 19, 1968; minimum (1965-67, 1968-70), 4.0°C on several days in 1965 and 1969.
REMARKS.--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 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	18.0	14.0	13.0	6.5	5.0	7.5	6.5	8.0	8.0	9.0	7.5
2	18.5	17.5	14.0	13.0	6.5	4.5	7.0	6.0	8.5	8.0	8.5	6.5
3	17.5	16.0	14.0	13.0	7.0	5.0	6.5	5.5	9.0	8.5	8.5	7.0
4	17.0	15.5	13.5	13.5	6.5	5.0	6.5	6.0	9.0	8.0	10.0	7.0
5	17.0	15.5	14.0	13.5	6.5	5.0	6.5	5.5	8.5	7.5	10.0	7.0
6	16.5	15.5	13.5	13.0	7.0	5.5	6.0	5.5	8.5	7.5	10.0	8.0
7	16.0	15.5	13.0	12.5	7.5	6.5	6.5	6.0	8.5	7.5	10.0	9.0
8	17.0	16.0	13.0	12.5	8.5	7.0	7.5	6.5	8.5	7.5	11.0	9.0
9	16.5	15.0	12.5	11.5	8.5	7.0	9.0	7.5	8.5	8.0	9.0	8.0
10	17.5	16.0	12.0	11.5	8.5	7.5	9.0	8.5	8.5	8.0	10.0	7.5
11	16.5	15.0	12.5	11.5	9.0	8.0	9.0	8.0	9.0	8.0	9.5	8.5
12	15.5	14.5	12.5	11.5	11.5	9.0	9.5	8.5	9.5	8.0	10.5	9.0
13	15.0	14.0	12.5	11.5	11.5	10.5	10.0	9.0	9.5	7.0	11.0	8.5
14	14.5	14.0	12.5	11.5	11.0	10.5	11.0	10.0	9.5	9.0	11.5	9.5
15	14.5	14.5	12.5	12.0	10.5	9.5	10.0	9.0	9.0	8.0	11.0	9.0
16	15.0	14.5	12.0	10.5	9.5	9.0	10.0	8.5	9.0	7.5	12.0	9.5
17	15.0	14.0	10.5	9.5	9.5	9.0	10.5	9.5	9.5	7.5	11.0	9.0
18	14.5	14.0	10.5	9.5	10.0	9.5	10.5	9.5	10.0	8.5	11.0	8.5
19	14.0	13.0	10.0	9.5	12.0	10.0	11.0	10.0	9.5	8.5	11.0	8.5
20	14.5	13.0	10.0	9.0	12.0	11.0	10.5	10.0	9.0	7.5	10.5	8.5
21	15.5	14.5	10.0	9.0	12.5	10.0	11.5	10.5	9.0	6.5	10.5	8.5
22	15.0	14.0	10.0	9.0	10.0	9.5	11.5	11.0	9.0	7.0	11.0	9.0
23	15.0	14.0	10.0	9.0	11.0	10.0	11.5	11.0	9.0	7.0	11.5	9.5
24	15.0	14.0	9.5	8.5	11.0	10.5	11.0	10.0	9.5	8.0	12.5	10.0
25	14.5	13.5	9.5	8.5	10.5	9.0	11.0	9.0	9.5	7.5	13.0	10.5
26	14.5	13.5	9.5	8.0	9.0	8.5	11.0	10.0	10.0	8.0	13.0	10.5
27	15.0	14.5	9.0	7.0	8.5	7.5	10.5	9.5	10.0	8.0	12.5	10.0
28	14.5	13.5	8.0	6.5	8.0	7.0	10.5	9.5	9.5	9.0	13.0	10.5
29	14.0	13.0	7.5	6.0	8.0	7.0	9.5	8.0	--	--	12.5	10.5
30	14.5	13.5	7.0	5.5	8.0	7.0	8.0	7.5	--	--	12.0	10.0
31	14.5	13.5	--	--	7.5	6.5	8.0	8.0	--	--	12.5	9.5
AVE	15.6	14.6	11.3	10.3	9.1	8.0	9.3	8.4	9.1	7.8	10.9	8.8

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	9.5	18.0	13.0	21.5	16.5	21.0	16.0	21.5	16.5	19.5	15.5
2	12.5	10.0	19.5	14.0	22.5	17.0	22.0	17.0	21.5	16.5	19.5	15.5
3	12.5	10.0	20.0	15.0	22.0	17.5	22.5	17.5	21.5	17.0	19.5	16.0
4	14.0	10.0	20.0	14.5	21.5	17.0	23.0	18.0	21.5	17.0	19.5	16.5
5	15.0	10.5	18.5	14.5	21.5	17.0	23.0	18.0	21.0	17.0	18.5	15.0
6	14.5	10.0	16.5	14.0	21.0	16.5	23.0	18.0	21.5	17.0	19.5	15.0
7	15.0	10.0	17.0	12.5	19.0	16.5	22.5	18.0	21.0	16.5	21.0	16.5
8	15.0	11.0	15.5	14.0	17.0	15.5	22.5	18.0	21.0	16.5	21.5	17.5
9	15.5	11.0	16.5	14.0	16.0	14.5	22.5	17.5	21.5	16.5	21.0	17.5
10	15.0	13.0	17.0	13.5	17.5	13.5	22.0	17.5	21.5	17.0	20.0	18.0
11	14.5	12.0	16.5	13.0	19.0	13.5	22.0	17.0	21.5	17.0	19.5	18.0
12	15.5	11.5	16.0	11.5	18.5	14.0	22.0	17.0	21.5	17.0	19.0	17.5
13	13.0	11.5	18.0	12.5	17.5	14.5	22.5	17.5	21.5	17.0	18.0	16.5
14	12.5	10.5	18.5	13.0	18.5	15.0	22.5	17.5	21.5	17.0	18.0	16.0
15	14.5	10.5	20.0	14.5	19.0	14.0	22.0	18.0	21.5	17.0	18.0	16.0
16	14.0	10.0	21.0	16.0	20.0	15.0	22.0	17.5	21.5	17.0	18.5	16.5
17	14.5	10.0	20.5	16.5	20.5	15.5	22.0	17.0	21.0	17.0	19.0	17.5
18	13.5	10.5	21.0	16.0	20.0	15.5	22.5	17.5	20.5	16.0	19.5	18.0
19	15.0	11.5	21.5	16.5	18.5	15.0	22.5	18.0	20.5	15.5	18.5	17.0
20	14.0	10.5	22.5	17.0	19.5	14.5	22.5	18.0	20.0	15.5	18.0	16.5
21	13.0	10.0	23.0	17.5	20.0	14.5	22.5	18.0	20.5	16.0	18.5	16.5
22	14.0	10.0	23.5	18.5	20.0	15.5	22.0	17.5	20.5	16.0	18.5	17.0
23	14.5	10.0	22.5	18.0	20.5	15.5	22.5	17.5	20.0	16.0	19.0	17.5
24	15.0	10.5	21.0	18.0	21.0	16.0	22.5	17.5	20.0	15.5	18.5	17.0
25	15.5	11.5	21.5	17.5	21.0	16.0	22.5	17.5	20.0	15.5	17.5	16.0
26	14.0	11.5	21.5	17.0	21.0	16.0	22.5	17.5	20.0	15.5	17.5	16.0
27	14.0	10.0	20.0	17.0	19.5	16.0	22.5	18.0	20.0	15.5	17.5	16.0
28	14.5	10.0	20.0	16.0	18.5	15.0	22.0	17.5	20.0	15.5	17.5	16.0
29	14.0	10.0	20.0	15.0	19.0	14.5	21.5	17.0	20.0	16.0	17.5	16.5
30	16.5	11.5	20.5	15.5	19.5	14.5	21.0	16.5	20.0	16.5	17.5	16.0
31	--	--	21.5	16.0	--	--	21.0	16.5	20.0	16.0	--	--
AVE	14.2	10.6	19.6	15.2	19.7	15.4	22.2	17.5	20.8	16.4	18.8	16.6

11461500 EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

PERIODIC DETERMINATIONS OF TURBIDITY, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE OF COLLECTION	TIME (24-HR)	WATER TEM-PERA-TURE (DEG C)	DIS-CHARGE (CFS)	TURBIDITY (MG/L SILICA) TOTAL	RESIDUAL 1/
Nov. 7, 1969...	0930	13.0	313	23	1
Nov. 14.....	1110	12.0	310	20	1
Nov. 21.....	1215	10.0	301	22	1
Nov. 28.....	1045	7.0	66	5	1
Dec. 5.....	1350	6.0	66	3	1
Dec. 12.....	1345	10.0	1970	277	57
Dec. 19.....	1320	11.0	3530	273	52
Dec. 26.....	--	9.0	D 592	137	12
Jan. 2, 1970...	--	7.0	D 360	135	26
Jan. 9.....	1319	8.0	3020	290	118
Jan. 16.....	1145	10.0	4030	277	66
Jan. 23.....	1045	11.0	7940	290	74
Jan. 30.....	1035	8.0	688	203	35
Feb. 6.....	1357	8.0	438	180	18
Feb. 13.....	1330	8.0	1720	230	30
Feb. 21.....	1145	7.0	518	123	12
Feb. 27.....	1405	10.0	411	122	12
Mar. 6.....	1315	10.0	452	130	15
Mar. 13.....	1320	11.0	438	110	12
Mar. 20.....	1315	10.0	360	73	11
Mar. 27.....	1355	10.0	330	73	7
Apr. 17.....	1610	14.0	126	23	1
May 5.....	1315	18.0	55	18	6
June 19.....	1400	17.0	105	24	3

D Daily mean discharge.
1/ Turbidity measured after a 7-day settling period.

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 1970.
EXTREMES, 1969-70.--Water temperatures: Minimum, 8.0°C Jan. 9-13.
EXTREMES, 1965-70.--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.--Recorder malfunction Oct. 1 to Nov. 5, July 16 to Aug. 17; probe inoperative Feb. 6 to Apr. 7, Apr. 23 to July 15. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	--	--	--	--	--	--	10.0	--	9.0	11.5	--	10.5	10.5	--	10.0	--	--	--
2	--	--	--	--	--	--	10.0	--	9.5	11.0	--	10.5	11.5	--	10.0	--	--	--
3	--	--	--	--	--	--	10.5	--	9.0	11.0	--	10.0	12.0	--	11.0	--	11.0	--
4	--	--	--	--	--	--	10.5	--	9.0	10.5	--	10.0	12.0	--	11.5	--	--	--
5	--	--	--	--	--	--	10.5	--	9.0	10.0	--	8.5	12.0	--	11.5	--	--	--
6	--	--	--	15.5	--	14.5	11.0	--	9.5	9.5	--	9.5	--	--	--	--	--	--
7	--	--	--	15.5	--	14.0	11.0	--	10.0	9.5	--	9.0	--	--	--	--	--	--
8	--	--	--	15.5	--	14.5	11.5	--	10.5	9.0	--	8.5	--	--	--	--	--	--
9	--	--	--	15.5	--	13.5	11.0	--	10.0	8.5	--	8.0	--	--	--	--	--	--
10	--	--	--	15.5	--	13.5	11.5	--	10.5	8.5	--	8.0	--	--	--	--	--	--
11	--	--	--	15.5	--	13.5	11.5	--	11.0	8.0	--	8.0	--	--	--	--	--	--
12	--	--	--	15.5	--	13.5	11.5	--	11.0	8.5	--	8.0	--	--	--	--	--	--
13	--	--	--	15.0	--	13.0	12.0	--	11.0	8.5	--	8.0	--	--	--	--	--	--
14	--	--	--	15.0	--	13.5	12.0	--	11.0	10.5	--	8.5	--	--	--	--	--	--
15	--	--	--	15.0	--	14.0	11.0	--	11.0	10.5	--	10.0	--	--	--	--	--	--
16	--	--	--	14.5	--	13.5	11.0	--	11.0	10.5	--	9.5	--	--	--	--	--	--
17	--	--	--	14.0	--	12.5	11.5	--	11.0	10.5	--	9.5	--	--	--	--	--	--
18	--	--	--	13.0	--	11.5	12.0	--	11.0	10.0	--	9.5	--	--	--	--	--	--
19	--	--	--	12.5	--	11.0	11.5	--	11.0	9.5	--	9.5	--	--	--	--	--	--
20	--	--	--	12.5	--	11.5	12.5	--	11.5	10.0	--	9.5	--	--	--	--	--	--
21	--	--	--	12.5	--	11.0	12.5	--	11.5	11.5	--	10.0	--	--	--	--	--	--
22	--	--	--	12.5	--	11.0	11.5	--	11.5	11.5	--	11.0	--	--	--	--	--	--
23	--	--	--	12.0	--	11.0	11.5	--	11.5	12.0	--	11.5	--	--	--	--	--	--
24	--	--	--	12.0	--	11.0	11.5	--	11.5	12.0	--	10.5	--	--	--	--	--	--
25	--	--	--	12.0	--	11.0	11.5	--	11.5	11.5	--	10.5	--	--	--	--	--	--
26	--	--	--	11.5	--	10.5	11.5	--	11.0	11.5	--	11.0	--	--	--	--	--	--
27	--	--	--	11.0	--	10.0	11.5	--	11.0	11.5	--	10.5	--	--	--	--	--	--
28	--	--	--	11.0	--	10.0	11.5	--	11.0	11.5	--	10.5	--	--	--	--	--	--
29	--	--	--	10.5	--	10.0	11.5	--	11.0	11.0	--	10.0	--	--	--	--	--	--
30	--	--	--	10.0	--	9.5	11.5	--	11.0	11.0	--	10.0	--	--	--	--	--	--
31	--	--	--	--	--	--	11.5	--	11.0	10.5	--	10.0	--	--	--	--	--	--
AVE	--	--	--	13.4	--	12.1	11.3	--	10.6	10.4	--	9.6	--	--	--	--	--	--

11462500 RUSSIAN RIVER NEAR HOPLAND, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR DAILY	APR MIN	MAY MAX	MAY DAILY	MAY MIN	JUN MAX	JUN DAILY	JUN MIN	JUL MAX	JUL DAILY	JUL MIN	AUG MAX	AUG DAILY	AUG MIN	SEP MAX	SEP DAILY	SEP MIN
1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19.0	--	17.5
2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18.5	--	17.5
3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19.0	--	17.5
4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18.5	--	17.5
5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18.0	--	17.0
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18.5	--	17.0
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19.5	--	18.0
8	14.0	--	13.0	--	--	--	--	--	--	--	--	--	--	--	--	20.0	--	18.0
9	14.5	--	12.5	--	--	--	--	--	--	--	--	--	--	--	--	20.0	--	18.5
10	15.5	--	13.5	--	--	--	--	--	--	--	--	--	--	--	--	20.0	--	18.0
11	14.0	--	13.0	--	--	--	--	--	--	--	--	--	--	--	--	20.5	--	18.0
12	14.5	--	12.5	--	--	--	--	--	--	--	--	--	--	--	--	20.5	--	17.5
13	13.5	--	12.5	--	--	--	--	--	--	--	--	--	--	--	--	18.0	--	15.5
14	13.0	--	12.0	--	--	--	--	--	--	--	--	--	--	--	--	17.5	--	15.5
15	13.5	--	12.0	--	13.0	--	--	--	--	--	--	--	--	--	--	17.5	--	15.0
16	13.5	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--	18.0	--	15.0
17	14.5	--	12.0	--	--	--	--	--	--	--	--	--	--	--	--	18.5	--	15.5
18	14.0	--	12.0	--	--	--	--	--	--	--	--	--	19.5	--	18.0	20.0	--	17.0
19	15.5	--	12.5	--	--	--	--	--	--	--	--	--	19.5	--	18.0	18.5	--	16.0
20	13.5	--	11.5	--	--	--	--	--	--	--	--	--	19.5	--	18.0	17.0	--	14.5
21	13.5	--	11.5	--	--	--	--	--	--	--	--	--	19.5	--	18.0	17.0	--	15.0
22	13.5	--	11.0	--	--	--	--	--	--	--	--	--	19.5	--	18.0	17.5	--	15.0
23	--	--	--	--	--	--	--	--	--	--	--	--	19.0	--	18.0	18.0	--	15.5
24	--	--	--	--	--	--	--	--	--	--	--	--	19.0	--	17.5	18.0	--	16.0
25	--	--	--	--	--	--	--	--	--	--	--	--	19.0	--	17.5	17.5	--	15.0
26	--	--	--	--	--	--	--	--	--	--	--	--	19.0	--	17.5	17.0	--	14.5
27	--	--	--	--	--	--	--	--	--	--	--	--	19.0	--	17.5	17.0	--	14.5
28	--	--	--	--	--	--	--	--	--	--	--	--	19.0	--	17.5	17.0	--	15.0
29	--	--	--	--	--	--	--	--	--	--	--	--	19.5	--	17.5	17.5	--	16.0
30	--	--	--	--	--	--	--	17.0	--	--	--	--	19.0	--	18.0	17.0	--	15.5
31	--	--	--	--	--	--	--	--	--	--	--	--	19.0	--	17.5	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18.3	--	16.3

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: Water years 1951-53 (partial-record station), October 1953 to September 1965. Water temperatures: October 1965 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 27.0°C July 2-5.
EXTREMES, 1965-70.--Water temperatures: Maximum (1965-68, 1969-70), 27.0°C July 2-5, 1970; minimum (1965-69), 6.0°C Dec. 21-23, 1965, Jan. 26, 1966.
REMARKS.--Recorder malfunction Oct. 1 to Jan. 30, Apr. 1-30, May 21 to June 2, Sept. 1-30. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT DAILY	OCT MIN	NOV MAX	NOV DAILY	NOV MIN	DEC MAX	DEC DAILY	DEC MIN	JAN MAX	JAN DAILY	JAN MIN	FEB MAX	FEB DAILY	FEB MIN	MAR MAX	MAR DAILY	MAR MIN
1	--	19.0	--	--	--	--	--	9.0	--	--	--	--	13.5	--	12.5	13.5	--	13.0
2	--	--	--	--	--	--	--	--	--	--	--	--	14.0	--	12.0	13.5	--	11.5
3	--	--	--	--	15.0	--	--	--	--	--	--	--	13.5	--	12.5	13.0	--	12.0
4	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5	13.0	--	12.5
5	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5	13.5	--	12.5
6	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	13.0	13.5	--	12.5
7	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	13.0	13.5	--	12.5
8	--	--	--	--	--	--	--	--	--	--	--	--	14.0	--	13.0	13.5	--	12.5
9	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	13.0	14.0	--	13.0
10	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	13.0	14.5	--	13.0
11	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	12.5	13.5	--	13.0
12	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	13.0	14.0	--	13.0
13	--	15.5	--	--	--	--	--	--	--	--	--	--	13.0	--	12.5	14.0	--	13.0
14	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5	14.0	--	13.0
15	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5	14.5	--	13.5
16	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	13.0	14.0	--	13.5
17	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	13.0	14.5	--	13.5
18	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5	14.5	--	13.5
19	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.0	14.5	--	13.5
20	--	--	--	--	--	--	--	--	--	--	12.0	--	13.5	--	12.0	15.0	--	14.0
21	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5	15.0	--	14.0
22	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5	15.0	--	14.0
23	--	--	--	--	--	--	--	--	--	--	--	--	14.0	--	12.5	15.0	--	14.0
24	--	--	--	--	--	--	--	--	--	--	12.5	--	13.5	--	12.5	15.0	--	14.0
25	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5	15.5	--	14.5
26	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.0	15.5	--	15.0
27	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5	15.0	--	14.5
28	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	13.0	15.5	--	15.0
29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.5	--	15.0
30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.5	--	15.0
31	--	--	--	--	--	--	--	10.0	--	13.5	--	12.5	--	--	--	16.0	--	15.0
AVE	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.6	14.4	--	13.5

DAY	APR MAX	APR DAILY	APR MIN	MAY MAX	MAY DAILY	MAY MIN	JUN MAX	JUN DAILY	JUN MIN	JUL MAX	JUL DAILY	JUL MIN	AUG MAX	AUG DAILY	AUG MIN	SEP MAX	SEP DAILY	SEP MIN
1	--	--	--	19.5	--	16.5	--	24.0	--	25.0	--	21.0	24.5	--	21.0	--	--	--
2	--	--	--	20.0	--	17.0	--	--	--	27.0	--	22.5	25.0	--	22.0	--	--	--
3	--	--	--	20.0	--	17.0	26.0	--	22.5	27.0	--	24.0	25.0	--	22.0	--	--	--
4	--	--	--	20.0	--	17.0	26.0	--	23.0	27.0	--	24.0	24.5	--	21.5	--	--	--
5	--	--	--	18.5	--	17.0	25.5	--	21.5	27.0	--	23.0	24.5	--	21.0	--	--	--
6	--	--	--	18.5	--	16.5	23.5	--	20.5	25.5	--	22.0	25.0	--	22.0	--	--	--
7	--	--	--	18.5	--	16.5	23.5	--	20.5	24.5	--	21.5	25.0	--	22.0	--	--	--
8	--	--	--	18.0	--	16.5	22.5	--	19.5	24.5	--	21.5	25.5	--	21.5	--	--	--
9	--	--	--	18.5	--	16.5	21.0	--	18.5	24.0	--	20.5	26.0	--	22.5	--	--	--
10	--	--	--	18.5	--	16.5	23.0	--	19.0	23.0	--	20.5	26.0	--	23.0	--	--	--
11	--	--	--	17.0	--	15.5	23.0	--	19.5	23.5	--	20.5	25.5	--	22.5	--	--	--
12	--	--	--	16.0	--	13.5	22.5	--	19.0	24.5	--	20.5	25.0	--	21.5	--	--	--
13	--	--	--	21.0	--	15.0	22.5	--	20.0	25.0	--	21.0	24.5	--	21.0	--	--	--
14	--	--	--	23.0	--	17.0	22.5	--	20.0	25.0	--	22.0	24.5	--	21.5	--	--	--
15	--	--	--	24.5	--	19.0	23.5	--	20.0	24.5	--	21.5	24.0	--	21.0	--	--	--
16	--	--	--	25.5	--	20.0	23.5	--	21.0	24.5	--	21.0	23.5	--	20.5	--	--	--
17	--	--	--	24.5	--	20.0	23.5	--	20.5	25.0	--	21.5	23.5	--	20.5	--	--	--
18	--	--	--	23.0	--	19.5	23.5	--	20.5	25.5	--	22.0	23.0	--	20.0	--	--	--
19	--	--	--	23.0	--	18.5	24.5	--	21.5	25.5	--	22.0	22.5	--	20.0	--	--	--
20	--	--	--	23.5	--	18.0	24.5	--	22.0	25.5	--	22.5	22.5	--	20.0	--	--	--
21	--	--	--	--	--	--	24.0	--	21.5	24.5	--	22.0	22.0	--	19.5	--	--	--
22	--	--	--	--	--	--	24.5	--	22.0	25.0	--	22.0	21.5	--	19.0	--	--	--
23	--	--	--	--	--	--	24.5	--	21.5	25.0	--	22.0	22.0	--	19.0	--	--	--
24	--	--	--	--	--	--	23.5	--	21.0	24.5	--	21.0	22.5	--	19.5	--	--	--
25	--	--	--	--	--	--	23.5	--	20.5	23.5	--	20.5	22.5	--	20.0	--	--	--
26	--	--	--	--	--	--	23.5	--	21.5	24.0	--	21.0	22.0	--	19.5	--	--	--
27	--	--	--	--	--	--	23.5	--	21.0	24.0	--	21.5	22.0	--	19.5	--	--	--
28	--	--	--	--	--	--	22.5	--	20.5	25.0	--	21.5	22.0	--	19.5	--	--	--
29	--	--	--	--	--	--	22.5	--	19.0	25.0	--	21.5	22.0	--	19.5	--	--	--
30	--	--	--	--	--	--	23.5	--	19.5	24.0	--	21.0	22.0	--	19.5	--	--	--
31	--	--	--	--	--	--	--	--	--	24.0	--	21.0	22.5	--	20.0	--	--	--
AVE	--	--	--	--	--	--	23.6	--	20.6	24.9	--	21.6	23.6	--	20.7	--	--	--

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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 29.0°C July 4; minimum, 6.5°C Dec. 2.
EXTREMES, 1965-70.--Water temperatures: Maximum (1965-66, 1967-70), 33.5°C Aug. 6, 7, 1966; minimum (1966-70), 3.0°C Dec. 15, 1967.
REMARKS.--Recorder stopped Jan. 21, 22, Feb. 10-26.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.5	17.0	18.5	13.0	11.0	7.0	10.0	9.0	12.0	10.5	13.5	12.5
2	22.5	15.5	18.0	13.0	11.0	6.5	9.5	8.0	12.0	10.5	13.0	12.0
3	23.0	14.5	18.0	13.0	11.0	7.5	9.0	8.0	12.5	11.0	12.5	12.0
4	23.0	12.0	16.0	13.5	11.5	7.5	8.5	7.5	12.5	11.5	12.0	10.5
5	22.0	11.5	16.0	15.0	11.0	7.0	8.5	7.0	13.5	11.5	11.5	10.0
6	21.0	11.5	17.5	14.5	12.0	8.0	8.0	7.0	13.5	12.0	12.0	10.0
7	18.5	12.0	15.0	14.0	12.0	8.5	9.0	8.0	13.5	11.0	13.0	12.0
8	19.5	12.0	15.0	14.0	12.5	10.5	10.0	9.0	13.5	10.5	13.5	11.5
9	20.5	14.5	16.5	12.0	12.0	9.5	11.0	9.5	13.0	10.5	14.5	11.0
10	23.0	17.0	16.0	11.5	12.0	10.0	11.5	11.0	--	--	12.5	10.0
11	20.5	13.5	16.0	11.5	12.0	11.0	12.0	11.5	--	--	12.5	11.5
12	19.5	11.0	16.5	12.0	13.5	12.0	12.0	12.0	--	--	13.5	11.5
13	16.0	13.0	16.0	12.0	13.5	13.5	13.0	12.0	--	--	14.0	12.5
14	16.0	15.0	16.0	12.5	14.0	13.5	13.0	12.5	--	--	14.0	13.5
15	15.5	15.0	15.5	14.0	13.5	13.0	13.0	12.5	--	--	15.0	13.0
16	17.5	15.5	14.5	12.0	13.5	13.0	13.0	12.5	--	--	15.5	13.0
17	18.5	15.0	14.0	10.0	13.0	13.0	13.5	13.0	--	--	15.0	11.5
18	18.0	13.5	13.5	9.0	13.5	13.0	13.0	13.0	--	--	15.5	10.5
19	18.5	13.0	13.0	8.5	14.0	13.5	13.5	13.0	--	--	15.5	10.0
20	19.0	12.5	13.0	8.5	14.5	14.0	14.0	13.5	--	--	15.5	10.0
21	19.5	14.0	14.5	9.0	14.5	14.5	--	--	--	--	16.5	10.5
22	18.0	15.0	14.0	10.0	14.5	14.0	--	--	--	--	17.5	11.5
23	16.5	16.5	13.5	9.5	14.0	13.0	14.0	14.0	--	--	17.5	11.5
24	18.0	16.0	13.5	9.5	14.0	13.5	14.0	12.5	--	--	18.5	12.5
25	18.5	13.5	13.5	10.0	14.0	13.0	13.5	12.0	--	--	18.5	13.0
26	17.5	14.5	13.0	8.5	13.5	11.0	13.0	12.0	--	--	19.0	13.5
27	18.0	15.5	14.0	9.5	11.5	10.0	13.0	12.5	14.0	13.0	18.5	12.5
28	18.0	13.5	13.5	8.5	10.5	9.0	13.5	11.5	13.0	12.5	18.5	13.0
29	18.5	13.5	12.0	7.5	10.5	9.0	12.5	11.0	--	--	18.0	12.5
30	18.5	13.5	11.5	8.0	10.0	9.0	12.0	10.5	--	--	17.5	12.0
31	18.5	13.5	--	--	10.0	9.5	12.0	11.0	--	--	17.5	11.5
AVE	19.3	14.0	14.9	11.1	12.5	10.9	11.8	10.9	--	--	15.2	11.7

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	11.5	21.0	13.5	23.5	19.5	26.5	18.0	26.0	19.5	26.0	18.0
2	18.0	13.0	21.5	14.0	24.0	20.0	27.5	19.5	27.0	19.5	25.0	18.0
3	18.0	12.5	21.5	14.5	24.0	20.0	27.5	20.0	26.5	20.0	25.0	18.0
4	18.5	12.5	21.0	15.0	23.5	19.5	29.0	20.0	26.0	19.5	24.0	17.0
5	18.5	13.0	20.0	15.5	22.5	19.5	27.5	20.0	26.5	18.5	24.0	17.0
6	18.5	13.0	18.0	14.0	23.0	19.5	26.5	19.0	28.0	21.0	26.5	18.0
7	18.0	12.5	19.0	13.0	21.5	19.5	27.0	19.5	28.0	21.0	27.5	19.5
8	17.0	13.0	17.0	14.5	19.5	18.0	26.5	19.5	28.5	20.5	27.0	20.0
9	18.0	13.0	20.0	13.5	20.0	17.5	27.0	19.0	27.5	21.0	27.0	19.0
10	19.0	14.0	19.5	13.5	22.0	17.0	27.0	19.0	27.5	20.5	27.0	18.5
11	18.0	13.0	17.0	13.0	21.5	17.0	26.0	19.5	27.5	21.0	26.0	18.0
12	18.5	13.5	16.0	12.5	21.5	17.0	26.5	19.0	28.0	20.5	24.5	18.0
13	14.5	13.5	20.0	14.5	21.0	17.5	28.5	19.5	28.5	20.5	24.0	16.0
14	17.0	12.0	21.5	14.0	21.5	18.0	27.5	20.0	28.5	20.5	24.0	15.0
15	16.5	12.5	22.5	15.5	22.5	17.5	27.0	20.0	27.5	20.5	24.0	15.5
16	15.0	12.0	23.0	16.5	22.5	18.0	27.5	20.0	28.0	20.0	24.0	16.0
17	17.5	12.0	22.5	17.0	22.5	18.5	28.5	20.0	27.0	20.0	24.0	16.0
18	17.0	12.5	22.0	17.5	23.5	18.5	28.5	20.5	26.5	19.5	24.0	18.5
19	18.0	13.0	20.5	16.0	24.0	19.0	28.0	20.5	26.0	19.0	22.0	17.0
20	17.0	12.5	22.0	15.0	24.0	19.5	27.5	21.5	26.0	19.0	23.5	16.5
21	17.0	11.0	21.0	16.0	24.0	19.5	27.5	20.5	26.0	19.0	24.0	16.5
22	17.0	9.5	21.0	17.0	24.5	20.0	27.5	20.0	26.0	19.0	25.0	15.5
23	17.5	10.0	22.0	17.0	24.0	19.0	27.0	20.5	26.0	19.0	24.5	16.0
24	18.5	11.0	23.0	17.5	22.5	20.0	26.0	20.0	26.5	18.5	24.5	17.0
25	18.5	11.5	22.5	18.5	24.0	20.0	26.5	20.0	26.0	18.5	23.0	14.5
26	16.0	12.0	22.0	18.5	26.0	20.0	26.5	20.0	25.0	19.0	23.5	14.0
27	17.0	10.5	22.0	18.0	26.0	18.5	27.0	20.0	25.0	18.0	23.0	14.5
28	17.5	10.5	22.0	17.5	24.5	18.0	27.5	20.5	25.0	19.0	23.0	14.5
29	18.5	11.0	22.0	17.5	25.5	16.5	27.0	19.5	25.0	19.0	22.5	15.0
30	20.0	12.5	22.5	17.5	25.0	17.5	26.0	19.5	26.0	19.0	22.0	15.0
31	--	--	23.5	18.5	--	--	26.0	20.0	26.5	18.0	--	--
AVE	17.6	12.1	20.9	15.7	23.1	18.6	27.2	19.8	26.7	19.6	24.5	16.7

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.--Water temperatures: March 1964 to September 1970.
Sediment records: March 1964 to September 1970.
Turbidity: Water years 1964-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 25.0°C July 17; minimum, 5.0°C Jan. 5.
Sediment concentrations: Maximum daily, 5,550 mg/l Jan. 24; minimum daily, no flow for several days.
Sediment loads: Maximum daily, 220,000 tons Jan. 24; minimum daily, 0 tons on many days.
EXTREMES, 1964-70.--Water temperatures: Maximum, 25.0°C on several days in 1965, 1969-70; minimum (1964-66, 1967-70), 5.0°C Jan. 5, 1970.
Sediment concentrations: Maximum daily, 15,000 mg/l (estimated) Dec. 22, 1964; minimum daily, no flow for many days in 1964, 1966, and 1970.
Sediment loads: Maximum daily, 830,000 tons (estimated) Dec. 22, 1964; minimum daily, 0 tons on many days in 1964, 1966, 1968-70.
REMARKS.--No flow Sept. 25-30. No temperature record Oct. 1-15, Dec. 10 to Mar. 24, June 17 to Aug. 18, Aug. 24 to Sept. 14, probe inoperative. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT DAILY	OCT MIN	NOV MAX	NOV DAILY	NOV MIN	DEC MAX	DEC DAILY	DEC MIN	JAN MAX	JAN DAILY	JAN MIN	FEB MAX	FEB DAILY	FEB MIN	MAR MAX	MAR DAILY	MAR MIN
1	--	22.0	--	18.0	--	15.0	14.0	--	11.5	--	9.0	--	--	13.0	--	--	14.0	--
2	--	--	--	18.0	--	15.0	14.0	--	11.5	--	8.0	--	--	13.0	--	--	15.0	--
3	--	--	--	18.0	--	15.0	14.0	--	12.0	--	8.0	--	--	14.0	--	--	13.0	--
4	--	--	--	17.0	--	15.5	14.0	--	12.0	--	7.0	--	--	11.0	--	--	11.0	--
5	--	--	--	17.0	--	16.0	14.0	--	11.5	--	5.0	--	--	14.0	--	--	13.0	--
6	--	--	--	17.0	--	15.0	14.0	--	12.0	--	7.0	--	--	12.0	--	--	15.0	--
7	--	--	--	16.0	--	15.0	14.0	--	12.0	--	8.0	--	--	10.0	--	--	16.0	--
8	--	15.0	--	16.0	--	14.0	14.5	--	12.5	--	8.0	--	--	11.0	--	--	12.0	--
9	--	--	--	16.5	--	13.5	14.5	--	12.5	--	10.0	--	--	11.0	--	--	10.0	--
10	--	--	--	16.5	--	13.5	--	13.0	--	--	10.0	--	--	11.0	--	--	--	--
11	--	--	--	17.0	--	14.0	--	14.0	--	--	13.0	--	--	13.0	--	--	13.0	--
12	--	--	--	17.0	--	14.5	--	15.0	--	--	10.0	--	--	12.0	--	--	13.0	--
13	--	17.0	--	17.0	--	14.5	--	15.0	--	--	13.0	--	--	12.0	--	--	--	--
14	--	--	--	17.0	--	15.0	--	14.0	--	--	14.0	--	--	11.0	--	--	--	--
15	--	--	--	16.5	--	15.5	--	--	--	--	13.0	--	--	12.0	--	--	15.0	--
16	18.0	--	15.0	16.5	--	13.5	--	14.0	--	--	--	--	--	13.0	--	--	15.0	--
17	18.0	--	15.0	15.5	--	13.0	--	12.0	--	--	13.0	--	--	--	--	--	10.0	--
18	17.5	--	14.5	15.0	--	12.5	--	13.0	--	--	13.0	--	--	--	--	--	11.0	--
19	17.5	--	14.0	15.0	--	12.5	--	14.0	--	--	--	--	--	14.0	--	--	10.0	--
20	18.0	--	14.5	15.0	--	12.5	--	15.0	--	--	13.0	--	--	15.0	--	--	16.0	--
21	18.5	--	15.0	15.0	--	12.5	--	14.0	--	--	15.0	--	--	10.0	--	--	12.0	--
22	17.5	--	15.5	15.5	--	13.0	--	13.0	--	--	13.0	--	--	10.0	--	--	15.0	--
23	17.0	--	16.0	15.5	--	13.0	--	--	--	--	14.0	--	--	11.0	--	--	--	--
24	17.5	--	15.0	15.0	--	13.0	--	--	--	--	13.0	--	--	16.0	--	17.5	--	--
25	17.5	--	14.5	15.0	--	13.0	--	--	--	--	--	--	--	12.0	--	17.5	--	12.5
26	17.0	--	15.0	15.0	--	12.5	--	13.0	--	--	14.0	--	--	10.0	--	17.5	--	12.5
27	18.0	--	15.5	15.0	--	12.5	--	12.0	--	--	12.0	--	--	14.0	--	16.5	--	12.0
28	17.5	--	15.0	15.0	--	12.5	--	14.0	--	--	13.0	--	--	14.0	--	17.0	--	12.0
29	17.5	--	15.0	14.5	--	12.0	--	9.0	--	--	12.0	--	--	--	--	17.0	--	12.0
30	18.0	--	15.0	14.0	--	11.5	--	7.0	--	--	13.0	--	--	--	--	16.0	--	11.5
31	18.0	--	15.0	--	--	--	--	10.0	--	--	11.0	--	--	--	--	16.0	--	11.0
AVE	--	--	--	16.0	--	13.7	--	--	--	--	11.1	--	--	12.3	--	--	--	--

11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR MIN	APR DAILY	MAY MAX	MAY MIN	MAY DAILY	JUN MAX	JUN MIN	JUN DAILY	JUL MAX	JUL MIN	JUL DAILY	AUG MAX	AUG MIN	AUG DAILY	SEP MAX	SEP MIN	SEP DAILY
1	16.5	--	11.0	19.5	--	13.5	22.0	--	16.5	--	--	--	--	--	--	--	16.0	--
2	17.0	--	12.0	20.0	--	14.0	22.0	--	16.5	--	--	--	--	--	--	--	--	--
3	17.0	--	11.5	20.0	--	14.0	22.5	--	16.5	--	19.5	--	--	--	--	--	--	--
4	17.0	--	12.0	19.5	--	14.5	23.0	--	16.0	--	--	--	--	23.0	--	--	--	--
5	18.0	--	12.0	18.5	--	14.0	21.5	--	16.5	--	--	--	--	--	--	21.0	--	17.0
6	17.0	--	12.0	18.5	--	13.5	22.5	--	16.5	--	--	--	--	--	--	21.0	--	17.0
7	17.0	--	11.5	18.5	--	13.0	21.0	--	16.5	--	18.0	--	--	15.0	--	22.0	--	18.0
8	16.0	--	12.0	17.0	--	14.0	17.5	--	16.0	--	--	--	--	--	--	22.5	--	18.0
9	17.0	--	12.0	19.0	--	14.0	21.0	--	16.0	--	--	--	--	--	--	22.0	--	18.0
10	17.5	--	13.5	18.0	--	13.5	22.5	--	15.5	--	15.0	--	--	--	--	22.0	--	18.0
11	17.0	--	12.0	17.0	--	13.0	22.0	--	15.0	--	--	--	--	15.0	--	22.0	--	17.5
12	17.5	--	12.0	16.0	--	14.0	22.0	--	15.0	--	--	--	--	--	--	21.5	--	17.5
13	15.0	--	11.5	19.5	--	14.0	20.5	--	15.5	--	--	--	--	--	--	21.0	--	17.0
14	15.0	--	11.0	20.0	--	14.0	21.5	--	16.0	--	23.0	--	--	24.0	--	20.0	--	17.0
15	15.5	--	11.0	20.5	--	15.0	22.5	--	15.5	--	--	--	--	--	--	21.0	--	17.0
16	14.0	--	11.0	21.5	--	15.5	22.0	--	16.0	--	--	--	--	--	--	21.0	--	16.0
17	16.5	--	11.0	21.0	--	15.5	--	--	--	--	25.0	--	--	--	--	21.0	--	15.0
18	16.5	--	11.5	20.5	--	15.0	--	--	--	--	--	--	--	22.0	--	21.0	--	15.5
19	17.0	--	12.0	19.0	--	14.5	--	23.0	--	--	--	--	22.0	--	18.0	20.5	--	16.0
20	16.0	--	11.5	20.5	--	14.5	--	--	--	--	--	--	22.0	--	18.0	--	--	--
21	15.5	--	11.5	21.0	--	14.5	--	--	--	--	23.0	--	22.0	--	17.5	--	--	--
22	15.0	--	11.0	21.0	--	15.0	--	--	--	--	--	--	22.0	--	17.5	--	--	--
23	16.5	--	11.5	22.0	--	15.0	--	23.0	--	--	--	--	21.5	--	17.5	--	--	--
24	17.5	--	12.0	21.5	--	15.5	--	--	--	--	--	--	--	--	--	--	--	--
25	17.5	--	12.5	21.0	--	16.0	--	--	--	--	--	--	--	--	--	--	--	--
26	16.0	--	12.0	20.0	--	15.5	--	18.0	--	--	--	--	--	--	--	--	--	--
27	16.0	--	11.0	21.0	--	15.5	--	--	--	--	--	--	--	--	--	--	--	--
28	16.5	--	11.0	21.0	--	15.0	--	--	--	--	15.0	--	--	--	--	--	--	--
29	17.5	--	11.5	21.0	--	15.0	--	--	--	--	--	--	--	--	--	--	--	--
30	19.0	--	12.5	22.0	--	15.5	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	22.0	--	16.0	--	--	--	--	--	--	--	--	--	--	--	--
AVE	16.6	--	11.7	19.9	--	14.6	--	--	--	--	--	--	--	--	--	--	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCTOBER MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCEN-TRATION (MG/L)	OCTOBER SEDIMENT DISCHARGE (TONS/DAY)	NOVEMBER MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCEN-TRATION (MG/L)	NOVEMBER SEDIMENT DISCHARGE (TONS/DAY)	DECEMBER MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCEN-TRATION (MG/L)	DECEMBER SEDIMENT DISCHARGE (TONS/DAY)
1	.48	4	.01	5.4	4	.06	9.9	1	.03
2	.39	4	0	5.4	4	.06	9.9	1	.03
3	.39	5	.01	5.4	4	.06	9.9	2	.05
4	.31	6	.01	5.4	4	.06	9.9	2	.05
5	.31	7	.01	11	5	.15	9.9	2	.05
6	.31	8	.01	25	7	.47	9.9	2	.05
7	.31	10	.01	23	6	.37	9.9	2	.05
8	.39	12	.01	47	12	1.5	15	4	.16
9	.31	10	.01	51	10	1.4	25	5	.34
10	.31	7	.01	35	8	.76	57	92	19
11	.31	4	0	26	6	.42	278	288	306
12	.23	1	0	21	5	.28	2770	2360	21200
13	.23	1	0	19	5	.26	1430	1280	6330
14	.23	1	0	17	5	.23	694	232	444
15	8.9	20	.48	15	5	.20	422	115	137
16	33	15	1.3	15	4	.16	249	27	18
17	18	12	.58	13	4	.14	210	13	7.4
18	13	9	.32	12	4	.13	342	63	72
19	11	6	.18	11	4	.12	4580	2150	32500
20	9.9	5	.13	9.9	4	.11	4520	1090	14300
21	8.2	5	.11	9.9	4	.11	5990	2050	37300
22	6.2	4	.07	9.9	3	.08	1920	433	2560
23	6.2	4	.07	9.9	3	.08	2920	534	4920
24	6.2	4	.07	9.9	3	.08	3020	402	3440
25	6.2	4	.07	9.9	2	.05	1510	162	670
26	6.2	4	.07	9.9	2	.05	978	77	203
27	6.2	3	.05	9.9	2	.05	706	48	91
28	6.2	3	.05	9.9	2	.05	530	40	57
29	6.2	3	.05	9.9	2	.05	410	38	42
30	5.8	3	.05	9.9	2	.05	328	28	25
31	5.8	3	.05	--	--	--	269	27	20
TOTAL	167.71	--	3.79	471.5	--	7.59	34242.3	--	124662.21

11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	231	20	12	841	152	345	698	278	591
2	196	17	9.0	695	150	281	434	62	73
3	178	13	6.2	590	71	113	382	31	32
4	162	10	4.4	486	55	72	1410	1890	10300
5	143	8	3.1	438	35	41	1050	718	2170
6	133	10	3.6	394	33	35	518	101	141
7	131	5	1.8	353	26	25	631	122	210
8	578	46	198	321	25	22	730	208	410
9	7590	2120	54000	291	15	12	562	135	205
10	3850	755	8820	263	13	9.2	522	81	114
11	1850	302	1510	247	16	11	462	50	62
12	1580	275	1170	512	242	443	420	28	32
13	2520	688	5920	2530	3680	28900	375	40	41
14	9360	2870	78700	1520	839	3690	357	29	28
15	4120	945	11100	1080	170	496	320	21	18
16	12400	3610	131000	1630	337	2070	296	13	10
17	6040	1370	23300	1970	423	2270	269	13	9.4
18	2800	850	6430	1500	262	1060	248	7	4.7
19	3230	620	5410	1200	239	774	238	9	5.8
20	3540	1600	22000	940	183	464	220	10	5.9
21	12200	4250	142000	760	115	236	206	6	3.3
22	7340	1930	41000	675	82	149	200	4	2.2
23	11400	3840	203000	542	138	202	192	5	2.6
24	11500	5550	220000	480	78	101	174	6	2.8
25	4270	1850	21700	431	28	33	168	2	.91
26	3020	1640	14200	392	18	19	164	2	.89
27	4910	2250	32800	354	22	21	154	5	2.1
28	2580	907	6480	461	83	171	148	6	2.4
29	1710	400	1850	--	--	--	141	4	1.5
30	1250	395	1330	--	--	--	136	2	.73
31	1020	152	419	--	--	--	129	2	.70
TOTAL	121832	--	1034377.1	21896	--	42065.2	11954	--	14482.93

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	124	3	1.0	57	4	.62	21	4	.23
2	122	4	1.3	55	5	.74	19	4	.21
3	119	5	1.6	53	4	.57	17	3	.14
4	113	6	1.8	53	4	.57	15	2	.08
5	112	6	1.8	53	4	.57	12	3	.10
6	109	7	2.1	53	3	.43	13	3	.11
7	107	8	2.3	53	2	.29	13	3	.11
8	101	7	1.9	53	2	.29	15	7	.28
9	95	8	2.1	53	1	.14	23	12	.75
10	94	8	2.0	53	1	.14	19	10	.51
11	94	6	1.5	53	1	.14	16	8	.35
12	93	5	1.3	53	1	.14	13	7	.25
13	93	4	1.0	53	1	.14	13	6	.21
14	94	3	.76	52	3	.42	12	5	.16
15	93	2	.50	51	5	.69	12	4	.13
16	90	2	.49	48	6	.78	11	4	.12
17	91	1	.25	44	7	.83	10	4	.11
18	84	1	.23	41	8	.89	10	5	.14
19	83	2	.45	38	10	1.0	9.4	5	.13
20	83	2	.45	34	8	.73	8.5	5	.11
21	83	2	.45	37	7	.70	8.1	6	.13
22	83	2	.45	34	6	.55	7.3	7	.14
23	82	1	.22	31	6	.50	7.1	7	.13
24	77	1	.21	28	5	.38	7.0	6	.11
25	74	1	.20	26	5	.35	7.6	4	.08
26	69	1	.19	28	4	.30	7.2	3	.06
27	66	1	.18	28	4	.30	7.0	3	.06
28	62	1	.17	28	5	.38	6.7	3	.05
29	58	2	.31	26	6	.42	6.4	3	.05
30	57	3	.46	24	5	.32	5.8	3	.05
31	--	--	--	24	5	.32	--	--	--
TOTAL	2705	--	27.67	1317	--	14.64	352.1	--	5.09

11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.0	3	.05	1.2	6	.02	.16	11	0
2	6.2	3	.05	1.1	5	.01	.14	10	0
3	5.8	3	.05	1.0	3	.01	.13	9	0
4	5.7	3	.05	.98	2	.01	.11	8	0
5	5.3	2	.03	.94	2	.01	.11	13	0
6	4.9	1	.01	.82	2	0	.10	19	.01
7	4.5	1	.01	.72	2	0	.10	25	.01
8	4.0	1	.01	.68	2	0	.09	30	.01
9	3.7	1	.01	.70	2	0	.09	20	0
10	3.6	1	.01	.64	2	0	.08	10	0
11	3.4	3	.03	.77	2	0	.08	4	0
12	3.3	5	.04	.72	2	0	.07	4	0
13	3.0	7	.06	.67	2	0	.08	3	0
14	2.3	9	.06	.63	2	0	.09	3	0
15	2.0	6	.03	.61	2	0	.10	3	0
16	2.0	4	.02	.59	2	0	.12	4	0
17	1.5	2	.01	.76	2	0	.11	4	0
18	1.5	2	.01	.75	2	0	.10	5	0
19	1.7	3	.01	.73	3	.01	.09	5	0
20	1.8	4	.02	.71	4	.01	.07	4	0
21	1.5	5	.02	.68	5	.01	.06	4	0
22	1.6	6	.03	.60	5	.01	.04	3	0
23	1.7	7	.03	.51	4	.01	.03	2	0
24	1.7	6	.03	.44	3	0	.01	1	0
25	1.6	5	.02	.38	3	0	0	--	0
26	1.5	5	.02	.33	4	0	0	--	0
27	1.2	5	.02	.29	5	0	0	--	0
28	1.3	5	.02	.25	6	0	0	--	0
29	1.2	7	.02	.22	7	0	0	--	0
30	1.1	8	.02	.20	8	0	0	--	0
31	1.2	7	.02	.18	9	0	--	--	--
TOTAL	87.8	--	.82	19.80	--	.11	2.16	--	.03

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 195047.37
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1215647.18

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 13, 1969	0920	15.0	1420	1410	5410	32	40	58	73	84	93	95	98	100	--	--	SPWC
DEC 19.....	1650	14.0	5870	2200	34900	22	29	42	56	71	88	94	99	100	--	--	VPWC
DEC 20.....	0830	15.0	6410	1940	33600	25	35	50	64	79	90	96	99	100	--	--	VPWC
DEC 21.....	0905	14.0	9280	3240	81200	--	--	--	--	--	74	76	90	94	95	100	SPWC
DEC 22.....	1835	13.0	1390	229	859	30	38	50	61	71	76	86	96	100	--	--	SBWC
JAN 9, 1970	0935	10.0	5780	2230	34800	19	26	29	45	56	66	80	99	100	--	--	VPWC
JAN 10.....	0835	10.0	4040	778	8490	24	33	44	55	66	77	92	100	--	--	--	VBWC
JAN 13.....	1745	13.0	2900	951	7450	14	20	27	35	44	54	66	92	100	--	--	VBWC
JAN 14.....	1030	14.0	14100	3560	136000	22	32	42	57	70	80	90	99	100	--	--	VPWC
JAN 20.....	1135	13.0	2130	410	2360	22	32	42	50	57	66	73	96	100	--	--	VBWC
JAN 22.....	1215	13.0	6780	1520	27800	16	24	30	42	52	62	76	94	99	100	--	VPWC
JAN 24.....	1230	13.0	9530	3320	85400	17	24	32	43	54	65	83	96	99	100	--	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
OCT 13, 1969	1245	17.0	6	0.23	1	1	5	8	15	22	33	50	65	77	100	S
DEC 22.....	1915	13.0	6	1370	--	--	3	6	8	15	25	47	75	91	100	S

11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE OF COLLECTION	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (MG/L SILICA)	DATE OF COLLECTION	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (MG/L SILICA)
Oct. 1, 1969...	4	1	Feb. 7.....	26	50
Oct. 8.....	12	1	Feb. 8.....	26	23
Oct. 13.....	0	1	Feb. 9.....	15	30
Oct. 29.....	3	1	Feb. 10.....	12	18
Nov. 3.....	4	4	Feb. 11.....	16	18
Nov. 5.....	5	5	Feb. 12.....	224	145
Nov. 12.....	5	5	Feb. 13.....	6000	250
Nov. 19.....	4	1	Feb. 15.....	170	120
Nov. 26.....	2	1	Feb. 16.....	140	120
Dec. 2.....	1	1	Feb. 17.....	450	245
Dec. 3.....	2	1	Feb. 18.....	264	205
Dec. 10.....	32	38	Feb. 19.....	240	205
Dec. 11.....	526	64	Feb. 20.....	157	135
Dec. 12.....	1940	300	Feb. 21.....	126	125
Dec. 13.....	1410	300	Feb. 22.....	67	80
Dec. 14.....	262	160	Feb. 23.....	150	85
Dec. 15.....	117	150	Feb. 24.....	54	50
Dec. 16.....	24	25	Feb. 25.....	30	50
Dec. 17.....	13	19	Feb. 27.....	18	20
Dec. 18.....	14	19	Feb. 28.....	18	24
Dec. 19.....	2200	300	Mar. 2.....	64	57
Dec. 20.....	1940	290	Mar. 3.....	30	34
Dec. 21.....	3240	290	Mar. 4.....	4010	280
Dec. 22.....	229	200	Mar. 6.....	90	96
Dec. 27.....	48	54	Mar. 7.....	130	94
Dec. 28.....	38	89	Mar. 8.....	226	145
Dec. 29.....	39	48	Mar. 9.....	146	150
Dec. 30.....	28	30	Mar. 10.....	82	64
Dec. 31.....	27	30	Mar. 11.....	57	63
Jan. 1, 1970...	19	13	Mar. 12.....	27	31
Jan. 2.....	18	13	Mar. 13.....	52	35
Jan. 4.....	10	6	Mar. 14.....	26	66
Jan. 5.....	8	8	Mar. 15.....	22	62
Jan. 6.....	12	8	Mar. 16.....	13	15
Jan. 7.....	5	4	Mar. 17.....	14	20
Jan. 8.....	5	5	Mar. 18.....	7	10
Jan. 9.....	2230	310	Mar. 19.....	9	10
Jan. 10.....	778	280	Mar. 20.....	11	9
Jan. 11.....	294	200	Mar. 21.....	5	8
Jan. 12.....	243	180	Mar. 22.....	4	4
Jan. 13.....	1010	236	Mar. 23.....	5	6
Jan. 14.....	3560	275	Mar. 24.....	6	5
Jan. 15.....	750	275	Mar. 25.....	2	4
Jan. 16.....	4680	250	Mar. 26.....	2	3
Jan. 17.....	1410	300	Mar. 27.....	5	3
Jan. 18.....	860	275	Mar. 28.....	5	4
Jan. 19.....	546	230	Mar. 29.....	4	4
Jan. 20.....	410	230	Mar. 30.....	2	3
Jan. 21.....	3900	290	Apr. 1.....	5	4
Jan. 22.....	1520	300	Apr. 3.....	5	3
Jan. 23.....	854	290	Apr. 7.....	8	1
Jan. 24.....	3320	310	Apr. 10.....	8	1
Jan. 25.....	1760	290	Apr. 14.....	3	1
Jan. 26.....	1480	305	Apr. 17.....	1	1
Jan. 27.....	2350	320	Apr. 21.....	2	1
Jan. 28.....	2380	320	Apr. 24.....	1	1
Jan. 29.....	289	235	Apr. 28.....	1	1
Jan. 30.....	440	230	May 1.....	4	1
Jan. 31.....	104	120	May 5.....	4	1
Feb. 1.....	161	130	May 8.....	2	1
Feb. 2.....	150	130	May 12.....	0	1
Feb. 3.....	74	74	May 15.....	5	1
Feb. 4.....	57	70	May 19.....	10	7
Feb. 5.....	32	37	May 22.....	6	1
Feb. 6.....	36	37	May 27.....	4	2

11465200 DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE OF COLLECTION	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (MG/L SILICA)	DATE OF COLLECTION	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (MG/L SILICA)
May 29, 1970...	6	1	Aug. 4.....	2	3
June 2.....	4	2	Aug. 7.....	2	3
June 4.....	2	1	Aug. 11.....	2	2
June 5.....	3	3	Aug. 14.....	2	2
June 9.....	12	2	Aug. 18.....	2	3
June 12.....	7	2			
June 16.....	4	1	Aug. 21.....	5	3
June 19.....	5	1	Aug. 25.....	3	3
June 23.....	7	1	Aug. 28.....	6	4
June 26.....	3	1	Sept. 1.....	11	3
June 30.....	8	2	Sept. 4.....	8	5
July 3.....	3	1	Sept. 8.....	30	9
July 7.....	1	1	Sept. 11.....	4	2
July 10.....	1	1	Sept. 15.....	3	5
July 14.....	9	4	Sept. 18.....	5	6
July 17.....	2	2	Sept. 22.....	3	2
July 21.....	5	3	Sept. 25.....	27	33
July 28.....	5	7	Sept. 29.....	2	3

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.

LOCATION.--Lat 38°30'03", long 122°55'59", in NW¼NE¼ 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: Water years 1951-53 (partial-record station), October 1953 to September 1965, water years 1969-70 (partial-record station).
Water temperatures: January 1964 to September 1970.
Sediment records: Water years 1965-67 (partial-record station), April 1967 to September 1970.
Turbidity: Water years 1967-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.0°C July 4; minimum, 7.5°C Jan. 6, 7.
Sediment concentrations: Maximum daily, 1,630 mg/l Jan. 24; minimum daily, 5 mg/l Oct. 1, Nov. 30 to Dec. 2.
Sediment loads: Maximum daily, 305,000 tons Jan. 24; minimum daily, 2.4 tons Oct. 1.
EXTREMES, 1964-70.--Water temperatures: Maximum, 28.5°C June 24, 1964, June 23, 1968; minimum (1965-70), 4.5°C Dec. 15, 1967, Jan. 12, 1968.
Sediment concentrations (1969-70): Maximum daily, 1,630 mg/l Jan. 24, 1970; minimum daily, 5 mg/l Oct. 1, Nov. 30 to Dec. 2, 1969.
Sediment loads (1969-70): 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 and reviewed by Geological Survey. Temperature recorder malfunction Mar. 3-14, July 27 to Aug. 20. Where no maximum or minimum is shown temperature is once-daily reading.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
MAR. 27...	1330	1440	15.0	9.6	25	9.5	139
MAY 07...	0920	284	18.0	9.3	29	11	173
JULY 14...	1600	205	25.0	9.2	26	12	148

DATE	CAR-BONATE (CO3) (MG/L)	CHLO-RIDE (CL) (MG/L)	HARD-NESS (CA,MG) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
MAR. 27...	0	5.1	122	114	264	8.1	35
MAY 07...	0	10	150	142	330	7.7	7
JULY 14...	0	9.6	132	121	290	7.8	5

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	20.5	16.0	16.0	10.5	9.5	9.5	9.0	11.5	11.0	11.0	10.5
2	20.5	19.5	16.0	16.0	10.0	9.5	9.0	8.5	11.5	11.0	11.0	10.5
3	20.0	18.0	16.0	16.0	10.0	9.5	9.0	8.5	11.0	11.0	--	--
4	18.0	16.5	16.0	15.5	10.5	9.5	8.5	8.5	12.0	11.0	--	--
5	17.5	16.0	15.5	15.5	10.5	9.5	8.5	8.0	12.5	12.0	--	--
6	17.0	16.5	15.5	15.0	11.0	9.5	8.0	7.5	13.0	12.5	--	--
7	17.0	16.5	15.0	14.5	11.0	10.5	8.0	7.5	13.0	12.5	--	--
8	17.0	16.5	14.5	14.0	11.5	11.0	8.5	8.0	13.5	12.5	--	--
9	17.5	17.0	14.5	14.0	11.5	10.5	9.5	8.5	13.5	13.0	--	--
10	18.5	17.5	14.0	13.5	11.5	10.5	10.5	9.5	13.0	13.0	--	--
11	18.0	16.5	14.0	14.0	12.5	11.5	10.5	10.0	13.0	13.0	--	--
12	17.0	16.0	14.5	14.0	13.0	12.5	11.5	10.5	13.0	13.0	--	--
13	16.0	15.5	14.5	14.0	13.0	13.0	11.5	11.5	13.0	12.0	--	--
14	15.5	15.0	15.0	14.5	13.0	13.0	12.5	11.5	12.0	11.5	--	--
15	15.0	15.0	15.0	15.0	13.0	12.0	12.5	12.5	11.5	11.0	15.5	13.5
16	16.0	15.0	15.0	14.0	12.5	12.0	12.5	12.5	11.5	11.5	16.0	13.5
17	16.0	15.5	14.0	12.0	13.0	12.5	13.0	12.5	11.5	10.0	16.0	14.0
18	16.0	15.5	12.0	11.0	13.0	13.0	13.0	12.5	11.0	10.0	15.0	12.5
19	15.5	15.0	11.0	10.5	13.5	13.0	12.5	12.5	11.0	9.5	14.0	12.0
20	16.0	15.0	11.0	10.5	14.0	13.5	13.0	12.5	10.5	9.5	14.0	12.0
21	17.0	15.5	11.0	10.5	14.5	14.0	13.5	13.0	11.0	10.0	14.5	13.0
22	17.0	16.5	11.5	11.0	14.0	12.0	14.0	13.5	11.5	11.0	15.0	13.5
23	16.5	16.0	11.5	11.0	12.5	12.0	14.0	13.5	12.5	11.5	16.0	14.0
24	16.0	16.0	12.0	11.5	13.5	12.5	13.5	13.0	13.0	12.0	16.5	14.5
25	16.0	16.0	12.0	12.0	13.5	13.0	13.0	12.5	13.0	12.5	17.5	15.5
26	16.0	16.0	12.0	12.0	13.0	11.5	12.5	12.5	13.5	13.0	18.0	15.5
27	16.0	16.0	12.0	11.5	11.5	10.5	12.5	12.5	14.0	13.0	17.5	14.5
28	16.0	16.0	11.5	11.5	10.5	10.0	12.5	10.5	13.0	11.5	17.0	15.0
29	16.0	16.0	11.5	11.0	10.0	9.0	10.5	9.5	--	--	16.5	15.0
30	16.0	16.0	11.0	10.5	9.5	9.5	11.0	10.0	--	--	16.0	14.0
31	16.0	16.0	--	--	9.5	9.5	11.0	11.0	--	--	16.0	14.0
AVE	16.9	16.3	13.5	13.1	12.0	11.3	11.3	10.8	12.3	11.6	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	14.0	19.5	18.0	25.5	22.5	25.5	22.0	--	--	22.5	21.0
2	16.0	15.0	20.5	19.5	25.5	22.5	27.5	23.5	--	--	22.5	21.0
3	17.0	15.5	21.0	20.0	25.5	22.5	27.5	24.5	--	--	23.0	21.0
4	17.0	15.5	20.5	20.0	25.0	22.5	28.0	25.5	--	--	22.5	21.0
5	17.0	15.5	20.0	19.0	23.0	21.0	27.0	24.5	--	--	22.5	20.0
6	17.0	16.0	19.0	18.0	22.0	20.5	25.5	24.0	--	--	24.0	20.0
7	17.0	15.5	18.5	17.0	22.0	20.5	25.0	23.5	--	--	24.0	21.5
8	16.0	15.5	19.0	18.0	20.5	18.5	25.0	23.0	--	--	24.0	22.0
9	16.0	15.0	19.0	18.0	19.5	18.5	24.5	22.5	--	--	24.0	22.0
10	17.0	16.5	20.0	18.5	21.0	19.5	23.5	22.0	--	--	24.0	22.0
11	17.0	15.5	18.5	17.5	21.5	20.5	23.5	21.5	--	--	23.5	21.0
12	16.5	15.5	17.5	16.5	22.0	20.5	24.0	21.5	--	--	22.5	21.0
13	16.5	15.0	18.0	16.0	22.5	20.0	24.5	22.0	--	--	21.0	19.5
14	15.0	14.0	21.5	18.0	22.0	20.5	25.5	22.5	--	--	20.5	19.0
15	14.5	13.5	24.5	20.5	23.0	20.0	24.5	22.5	--	--	20.0	18.0
16	15.0	14.0	24.5	21.5	24.0	21.0	25.0	22.0	--	--	20.5	18.5
17	15.5	14.0	24.5	22.0	24.0	21.0	25.5	22.5	--	--	21.5	19.0
18	15.5	15.0	24.0	21.0	23.0	20.5	26.0	22.5	--	--	22.0	20.0
19	16.0	15.5	26.0	21.5	22.0	20.0	26.0	23.0	--	--	22.0	20.5
20	16.0	15.0	25.5	22.0	22.5	19.5	26.0	22.5	--	--	21.0	19.5
21	15.0	14.5	25.5	22.5	22.5	19.5	25.5	22.5	21.5	21.0	21.0	18.5
22	15.0	14.0	25.0	22.5	23.5	20.5	25.5	22.5	21.5	21.0	21.0	19.0
23	15.5	15.0	24.5	22.5	24.5	21.0	25.5	22.5	21.5	20.5	21.0	19.0
24	16.5	15.5	24.0	21.5	24.0	22.0	24.5	22.5	22.5	20.5	21.0	19.0
25	17.0	16.5	23.5	22.0	24.0	21.5	24.5	22.0	22.5	21.0	21.0	19.0
26	17.0	16.0	22.0	20.5	25.0	22.0	24.5	22.0	22.0	21.0	21.5	19.0
27	16.0	14.0	22.5	20.0	23.5	21.5	--	--	22.5	21.0	21.0	19.0
28	15.0	13.5	23.0	20.0	24.0	20.5	--	--	23.0	21.0	21.0	19.0
29	16.5	15.0	23.0	20.0	23.5	21.0	--	--	22.0	21.0	20.5	19.0
30	18.0	16.5	24.5	21.0	24.0	21.0	--	--	22.0	21.0	20.5	19.0
31	--	--	25.0	22.0	--	--	--	--	22.5	21.0	--	--
AVE	16.1	15.0	22.1	19.9	23.1	20.8	25.4	22.8	--	--	21.9	19.9

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	180	5	2.4	314	16	14	204	5	2.8
2	183	7	3.5	314	16	14	194	5	2.6
3	183	9	4.4	312	16	13	187	6	3.0
4	180	10	4.9	314	16	14	182	7	3.4
5	183	10	4.9	378	19	19	172	8	3.7
6	185	10	5.0	435	17	20	167	8	3.6
7	185	10	5.0	378	13	13	163	8	3.5
8	179	10	4.8	348	11	10	179	9	4.3
9	185	10	5.0	375	10	10	193	8	4.2
10	187	10	5.0	365	9	8.9	218	25	17
11	187	10	5.0	348	8	7.5	485	99	141
12	185	10	5.0	340	7	6.4	5250	840	19200
13	187	10	5.0	338	8	7.3	10800	1010	32900
14	187	10	5.0	336	8	7.3	3700	235	2480
15	242	15	9.8	338	10	9.1	3650	175	1720
16	413	22	25	338	9	8.2	2650	110	787
17	322	21	18	332	9	8.1	1620	22	96
18	272	20	15	326	8	7.0	1520	12	49
19	254	19	13	328	8	7.1	14800	386	25300
20	244	18	12	328	8	7.1	30700	870	72100
21	234	17	11	318	8	6.9	34600	1070	100000
22	228	16	9.8	330	10	8.9	23400	574	39000
23	226	15	9.2	334	12	11	15400	321	14400
24	228	15	9.2	332	12	11	31300	670	56600
25	240	15	9.7	328	11	9.7	18200	263	13300
26	270	16	12	330	11	9.8	10700	180	5200
27	292	17	13	318	10	8.6	7760	150	3140
28	300	18	15	272	8	5.9	5500	130	1930
29	306	18	15	250	7	4.7	4080	110	1210
30	308	17	14	226	5	3.1	3300	92	820
31	312	16	13	--	--	--	2780	75	563
TOTAL	7267	--	288.6	9923	--	290.6	234054	--	390984.1

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2350	58	368	9790	382	10100	5400	623	9540
2	1930	47	245	8700	322	7560	4540	698	8560
3	1670	37	167	6560	262	4640	5570	950	14300
4	1500	29	117	5070	206	2820	9360	1020	27200
5	1340	21	76	4470	165	1990	10600	677	20800
6	1280	16	55	4000	130	1400	5970	205	3450
7	1390	14	53	3650	92	907	4640	78	977
8	2000	14	86	3370	76	692	5150	100	1390
9	18800	547	44600	3130	87	735	4570	83	1020
10	31000	768	68700	2910	95	746	4540	60	735
11	13400	318	11500	2720	92	676	4000	44	475
12	9890	200	5340	3300	179	1750	3620	39	381
13	15700	272	12500	14000	749	31700	3250	36	316
14	42900	1110	137000	13300	502	19300	2970	35	281
15	40400	820	89400	7590	211	4320	2740	35	259
16	49300	1380	192000	7440	273	6970	2520	34	231
17	48100	880	114000	15600	702	29600	2460	36	239
18	27900	510	38400	12300	408	13500	2520	37	252
19	19400	500	26200	9750	283	7450	2390	33	213
20	22000	416	25100	8210	211	4680	2260	26	159
21	53600	1600	242000	5990	158	2560	2100	22	125
22	61000	1210	201000	4700	117	1480	2020	21	115
23	50700	848	118000	4060	90	987	1950	21	111
24	69800	1630	305000	3660	72	712	1860	21	105
25	55500	695	106000	3300	59	526	1710	21	97
26	32400	582	51100	3010	50	406	1580	20	85
27	33000	800	71300	2780	47	353	1450	20	78
28	25600	728	50300	2820	57	434	1310	20	71
29	19800	608	32500	--	--	--	1230	20	66
30	16100	520	22600	--	--	--	1150	19	59
31	11700	441	13900	--	--	--	1090	19	56
TOTAL	781450	--	1979607	176180	--	158994	106520	--	91746

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1030	19	53	365	22	22	111	24	7.2
2	974	19	50	354	22	21	141	23	8.8
3	938	18	46	337	22	20	157	22	9.3
4	854	18	42	323	22	19	173	21	9.8
5	794	17	36	305	22	18	183	20	9.9
6	746	17	34	296	21	17	191	22	11
7	698	16	30	281	21	16	203	25	14
8	645	16	28	254	20	14	213	28	16
9	635	15	26	248	19	13	243	31	20
10	625	15	25	243	18	12	269	34	25
11	600	14	23	238	18	12	257	34	24
12	585	14	22	235	18	11	230	34	21
13	570	14	22	235	18	11	213	33	19
14	560	14	21	228	17	10	205	33	18
15	550	13	19	213	16	9.2	198	33	18
16	530	14	20	198	20	11	189	32	16
17	522	16	23	181	25	12	191	32	17
18	506	16	22	173	30	14	181	32	16
19	486	17	22	165	28	12	181	32	16
20	474	18	23	158	26	11	173	31	14
21	462	19	24	143	25	9.7	175	31	15
22	450	20	24	130	24	8.4	179	30	14
23	430	21	24	121	23	7.5	179	29	14
24	418	22	25	108	22	6.4	179	29	14
25	407	22	24	97	21	5.5	175	28	13
26	403	22	24	94	20	5.1	173	27	13
27	403	22	24	82	19	4.2	175	27	13
28	403	22	24	63	20	3.4	177	26	12
29	389	22	23	63	21	3.6	183	24	12
30	379	22	23	70	22	4.2	181	24	12
31	--	--	--	87	23	5.4	--	--	--
TOTAL	17466	--	826	6088	--	348.6	5678	--	442.0

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	185	22	11	182	14	6.9	198	10	5.3
2	187	20	10	184	14	7.0	194	12	6.3
3	189	20	10	187	14	7.1	187	12	6.1
4	206	20	11	188	13	6.6	184	12	6.0
5	198	20	11	187	13	6.6	182	11	5.4
6	207	19	11	201	13	7.1	180	11	5.3
7	215	19	11	207	13	7.3	179	11	5.3
8	212	19	11	212	12	6.9	174	11	5.2
9	205	19	11	216	12	7.0	169	10	4.6
10	205	19	11	217	12	7.0	166	10	4.5
11	212	18	10	216	12	7.0	189	12	6.1
12	206	18	10	217	12	7.0	196	12	6.4
13	205	18	10	207	12	6.7	173	13	6.1
14	205	18	10	180	11	5.3	176	13	6.2
15	196	18	9.5	191	11	5.7	183	13	6.4
16	188	17	8.6	199	11	5.9	177	13	6.2
17	183	17	8.4	202	11	6.0	148	13	5.2
18	180	17	8.3	198	10	5.3	124	13	4.4
19	182	17	8.4	198	10	5.3	117	13	4.1
20	176	17	8.1	195	9	4.7	117	13	4.1
21	177	16	7.6	192	10	5.2	150	13	5.3
22	170	16	7.3	190	10	5.1	119	12	3.9
23	158	16	6.8	197	9	4.8	111	12	3.6
24	171	16	7.4	200	9	4.9	109	12	3.5
25	172	16	7.4	190	8	4.1	111	11	3.3
26	178	15	7.2	193	8	4.2	114	11	3.4
27	186	15	7.5	193	7	3.6	120	12	3.9
28	183	15	7.4	193	7	3.6	128	14	4.8
29	180	15	7.3	193	6	3.1	137	15	5.5
30	166	15	6.7	198	6	3.2	134	15	5.4
31	170	15	6.9	204	8	4.4	--	--	--
TOTAL	5853	--	278.8	6127	--	174.6	4646	--	151.8

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1361252
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 2624132.1

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
DEC 13, 1969	0825	13.0	14300	1170	45200	51	54	64	76	86	95	99	100	--	--	--	VPWC
DEC 16.....	1130	12.0	2440	118	777	--	--	--	--	--	88	94	99	100	--	--	S
DEC 20.....	1015	14.0	27800	844	63400	35	47	59	71	81	88	97	100	--	--	--	SBWC
DEC 20.....	1630	14.0	33800	944	86100	41	51	64	77	87	93	98	100	--	--	--	SBWC
DEC 21.....	1800	14.5	38300	1330	138000	35	49	61	75	85	90	97	99	100	--	--	SBWC
DEC 22.....	1430	12.5	19300	449	23400	32	41	51	62	74	86	98	100	--	--	--	VBWC
JAN 10, 1970	0730	10.5	36100	905	88200	35	48	62	74	85	92	99	100	--	--	--	SBWC
JAN 10.....	1600	10.5	26200	532	37600	35	48	59	73	84	91	99	100	--	--	--	SBWC
JAN 12.....	1010	11.5	9520	193	4960	31	42	52	62	72	83	96	100	--	--	--	VBWC
JAN 14.....	1015	12.5	43100	1250	145000	28	39	51	63	79	86	96	100	--	--	--	VPWC
JAN 25.....	1300	13.0	53000	652	93300	39	52	64	80	90	96	98	99	100	--	--	SPWC
FEB 19.....	1230	10.0	9680	265	6930	32	41	51	60	71	78	89	99	100	--	--	SBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
OCT 13, 1969	1750	16.0	5	178	2	10	33	35	40	49	62	78	92	100	--	S
DEC 16.....	1200	12.0	5	2420	--	2	33	61	77	86	95	98	99	100	--	S
MAY 28, 1970	1350	21.5	5	61	1	3	9	18	27	35	46	65	87	98	100	S

PERIODIC DETERMINATION OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE OF COLLECTION	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (MG/L SILICA)	DATE OF COLLECTION	CONCENTRATION OF SUSPENDED SEDIMENT (MG/L)	TURBIDITY (MG/L SILICA)
Oct. 13, 1969..	10	10	Feb. 21.....	170	160
Oct. 23.....	15	13	Feb. 25.....	56	60
Nov. 4.....	16	12	Feb. 28.....	50	50
Nov. 8.....	11	11	Mar. 3.....	932	250
Nov. 11.....	8	9	Mar. 7.....	72	95
Nov. 16.....	9	7			
Nov. 19.....	8	9	Mar. 8.....	108	90
Nov. 23.....	12	9	Mar. 14.....	35	50
Nov. 27.....	10	7	Mar. 18.....	36	40
Nov. 30.....	5	6	Mar. 20.....	26	33
			Mar. 31.....	19	11
Dec. 4.....	7	8			
Dec. 7.....	8	7			
Dec. 11.....	51	62	Apr. 12.....	14	12
Dec. 13.....	1170	320	Apr. 15.....	13	12
Dec. 14.....	232	126	Apr. 17.....	16	14
			Apr. 25.....	22	14
Dec. 16.....	118	120	May 3.....	22	11
Dec. 20.....	844	270			
Dec. 21.....	1330	310	May 7.....	21	18
Dec. 22.....	449	240	May 10.....	18	14
Dec. 25.....	252	200	May 15.....	16	15
			May 18.....	30	25
Dec. 29.....	114	90	May 27.....	19	11
Jan. 1, 1970...	56	50			
Jan. 4.....	28	47			
Jan. 10.....	905	310	May 28.....	20	14
Jan. 11.....	332	210	June 1.....	24	9
			June 5.....	20	14
Jan. 12.....	193	160	June 10.....	34	14
Jan. 14.....	1250	310	June 19.....	32	15
Jan. 18.....	520	250			
Jan. 20.....	472	250			
Jan. 25.....	652	260	June 28.....	26	21
			June 29.....	24	10
Jan. 29.....	628	230	Aug. 20.....	9	13
Feb. 1.....	367	200	Aug. 21.....	10	14
Feb. 7.....	92	68	Aug. 30.....	6	8
Feb. 8.....	78	50			
Feb. 9.....	87	56	Sept. 2.....	12	12
			Sept. 6.....	11	13
Feb. 12.....	235	97	Sept. 11.....	12	11
Feb. 14.....	528	230	Sept. 13.....	12	11
Feb. 15.....	214	154	Sept. 20.....	13	11
Feb. 18.....	361	215	Sept. 26.....	11	10
Feb. 19.....	265	180	Sept. 29.....	15	13

11467600 GARCIA RIVER NEAR POINT ARENA, CALIF.

LOCATION.--Lat 38°55'35", long 123°37'45", in SW¼SW¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.5°C on several days during May to August; minimum, 7.5°C Jan. 3-6.
EXTREMES, 1963-70.--Water temperatures: Maximum (1963-70), 22.0°C June 22, 1964, Aug. 29, 1968; minimum, 5.0°C Dec. 14-16, 1967.
REMARKS.--Recorder stopped Oct. 20 to Dec. 2.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	15.0	--	--	--	--	10.0	9.0	11.0	10.0	12.0	10.0
2	17.5	14.5	--	--	--	--	9.5	8.0	11.0	9.5	11.5	9.5
3	17.5	13.5	--	--	13.5	11.0	9.0	7.5	11.5	9.5	12.0	9.5
4	17.5	14.0	--	--	14.0	11.0	9.5	7.5	12.0	10.5	11.0	9.5
5	18.0	12.5	--	--	13.5	10.5	9.0	7.5	12.5	10.5	11.5	8.5
6	17.5	12.5	--	--	14.0	11.5	9.0	7.5	13.5	11.5	12.5	9.5
7	17.0	13.0	--	--	14.0	12.0	10.0	9.0	13.5	11.5	12.0	11.0
8	18.0	15.0	--	--	14.5	13.0	10.5	9.5	13.5	11.5	13.0	10.5
9	18.0	14.0	--	--	13.5	12.0	11.5	10.5	13.0	11.5	13.0	11.0
10	18.5	15.5	--	--	13.5	12.5	11.5	11.5	13.5	11.5	13.0	11.0
11	18.0	13.0	--	--	13.0	12.5	12.0	11.0	13.0	11.5	13.0	10.5
12	18.0	13.0	--	--	13.5	13.0	12.5	12.0	13.0	12.0	13.0	10.5
13	17.5	13.5	--	--	13.5	13.0	13.0	12.5	12.0	11.5	14.0	11.0
14	15.5	14.5	--	--	13.5	12.5	13.0	12.5	12.5	11.0	14.5	12.5
15	15.0	14.0	--	--	12.5	11.5	13.0	12.0	12.0	10.5	14.0	11.0
16	15.5	14.0	--	--	13.0	12.0	13.0	12.0	12.0	11.5	14.0	11.5
17	17.0	14.0	--	--	13.5	12.5	13.0	12.5	11.5	10.5	14.0	11.0
18	16.5	13.0	--	--	13.5	12.5	13.0	12.5	12.0	10.0	13.5	10.0
19	17.0	13.0	--	--	14.0	13.5	13.0	12.5	11.5	9.5	13.5	10.0
20	--	--	--	--	14.5	14.0	13.5	13.0	11.5	9.0	14.0	10.0
21	--	--	--	--	14.5	13.5	14.0	13.5	11.5	9.0	14.0	10.0
22	--	--	--	--	13.5	12.5	14.0	13.5	12.0	9.0	15.0	11.0
23	--	--	--	--	13.5	13.0	14.0	13.5	12.0	9.5	15.5	11.0
24	--	--	--	--	13.5	13.0	13.5	12.5	13.0	10.0	16.0	11.5
25	--	--	--	--	13.0	12.0	12.5	12.0	13.0	10.0	16.0	12.0
26	--	--	--	--	12.0	11.0	12.5	12.0	13.0	10.0	15.5	12.0
27	--	--	--	--	11.0	10.0	12.5	11.0	12.5	10.0	15.5	11.0
28	--	--	--	--	10.0	9.0	11.0	10.0	12.5	11.5	15.0	11.5
29	--	--	--	--	10.0	9.0	10.5	9.0	--	--	15.0	11.0
30	--	--	--	--	10.0	9.0	11.5	10.0	--	--	14.5	10.5
31	--	--	--	--	10.5	9.0	11.0	10.0	--	--	15.0	10.0
AVE	--	--	--	--	13.0	11.8	11.8	10.9	12.3	10.5	13.7	10.6

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	10.5	17.0	12.0	20.5	15.0	20.5	14.5	19.0	15.5	19.5	16.0
2	15.5	11.0	17.5	13.0	19.5	15.0	20.5	15.0	19.0	15.0	19.0	15.5
3	15.5	11.0	18.0	13.5	18.5	14.5	20.0	16.0	18.5	15.5	19.0	15.5
4	15.5	11.0	17.0	13.5	18.5	14.5	19.5	16.0	19.0	15.5	18.5	15.5
5	16.0	11.5	15.5	13.0	19.5	14.5	17.5	15.0	19.5	15.0	18.5	15.0
6	15.0	11.5	15.5	12.0	17.0	15.0	18.0	14.5	20.0	16.0	19.5	15.5
7	14.5	11.0	16.0	11.5	17.5	14.5	19.5	15.0	19.5	16.0	20.0	16.0
8	15.0	11.0	15.0	13.5	15.5	14.5	20.0	14.5	20.0	15.5	19.0	16.0
9	16.0	11.5	17.0	13.0	17.5	14.5	20.0	15.5	20.0	15.5	19.5	15.5
10	16.0	13.0	16.5	13.0	18.5	14.5	19.0	16.0	20.5	16.0	19.5	15.5
11	15.5	11.0	15.5	12.5	18.0	14.0	19.5	15.5	20.0	16.0	19.0	15.5
12	15.5	11.0	14.5	11.5	18.5	13.5	19.0	15.5	19.0	16.0	18.5	15.5
13	13.0	11.0	17.5	13.0	18.5	14.0	20.0	15.0	19.0	15.5	18.0	14.5
14	14.5	10.5	18.0	12.5	19.0	14.5	20.5	15.5	18.5	15.0	18.0	14.0
15	14.5	11.0	19.0	13.5	18.5	14.5	19.5	16.0	19.5	15.5	17.5	14.0
16	16.0	10.0	18.5	13.5	18.5	14.0	20.0	16.5	19.5	15.5	18.0	14.0
17	15.5	11.0	18.0	13.5	18.5	14.0	19.0	16.0	19.5	15.0	18.5	14.5
18	14.5	11.5	16.5	13.5	19.0	14.0	19.5	15.5	19.5	15.5	19.0	16.0
19	15.5	12.0	16.5	12.5	19.5	15.5	19.5	16.0	18.5	15.5	18.0	15.0
20	14.0	11.0	17.5	12.5	19.5	15.0	19.0	15.5	18.5	15.5	18.5	15.0
21	15.5	11.5	17.5	12.5	19.0	15.5	19.0	15.5	19.5	15.5	18.0	15.0
22	16.0	11.0	17.5	13.0	20.0	15.5	19.0	15.0	19.0	15.5	19.0	15.0
23	15.5	11.0	18.5	13.0	20.5	16.0	19.0	15.5	19.0	15.5	18.0	15.5
24	16.0	12.0	19.5	13.5	19.0	16.0	19.5	15.5	19.0	15.5	18.5	15.0
25	16.0	12.5	19.5	14.5	19.0	15.5	20.0	15.5	19.0	16.0	18.5	14.5
26	15.0	12.5	16.0	15.0	18.0	15.5	20.0	16.0	19.0	16.0	18.5	14.5
27	15.0	11.0	17.5	13.5	17.0	15.5	20.0	16.0	18.5	16.0	18.0	15.0
28	15.5	11.0	18.0	13.0	17.5	15.0	19.5	16.0	19.0	15.5	17.5	14.5
29	16.0	11.0	18.0	13.0	18.0	14.0	19.0	15.0	18.0	16.0	18.0	14.5
30	17.0	12.0	19.0	13.5	19.0	14.5	19.0	15.5	18.5	16.5	18.0	14.5
31	--	--	20.5	14.5	--	--	18.5	15.5	19.5	16.0	--	--
AVE	15.3	11.3	17.4	13.1	18.6	14.8	19.4	15.5	19.2	15.6	18.6	15.1

11468000 NAVARRO RIVER NEAR NAVARRO, CALIF.

LOCATION.--Lat 39°10'20", long 123°40'06", in SE¼ 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: January 1959 to July 1965.
Water temperatures: October 1965 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 22.5°C May 25, 31, June 1, 2.
EXTREMES, 1965-68, 1969-70.--Water temperatures: Maximum, 25.0°C Aug. 20, 1966, June 20, 1967; minimum (1967-68), 5.5°C Jan. 3-5, 11, 1967.
REMARKS.--Probe inoperative Oct. 1 to Feb. 26; recorder malfunction Sept. 26-30. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	--	--	--	--	--	--	--	7.0	--	--	--	--	--	--	--	12.5	--	11.5
2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.5	--	10.5
3	--	--	--	--	--	--	--	--	--	--	--	--	--	10.5	--	11.5	--	10.5
4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.5	--	10.5
5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.5	--	11.0
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.0	--	10.5
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.5	--	11.0
8	--	--	--	--	--	--	--	--	--	--	9.0	--	--	--	--	12.0	--	11.5
9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.0	--	12.0
10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.0	--	11.5
11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.5	--	11.5
12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.0	--	11.5
13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.0	--	12.0
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.5	--	12.0
15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.5	--	12.0
16	--	14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	12.5	--	11.5
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.0	--	12.0
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.0	--	12.0
19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.5	--	11.5
20	--	--	--	--	--	--	--	14.0	--	--	--	--	--	--	--	12.0	--	11.5
21	--	--	--	--	--	--	--	14.0	--	--	--	--	--	--	--	12.0	--	11.5
22	--	--	--	--	--	--	--	--	--	--	13.0	--	--	--	--	12.5	--	11.5
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.5	--	12.0
24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	12.0
25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5
26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	13.0
27	--	--	--	--	--	--	--	--	--	--	--	--	12.0	--	11.5	14.0	--	13.0
28	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	11.5	14.0	--	13.0
29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14.0	--	13.0
30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	13.0
31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.5	--	12.5
AVE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.4	--	11.8

11468000 NAVARRO RIVER NEAR NAVARRO, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR MIN	MAY MAX	MAY MIN	JUN MAX	JUN MIN	JUL MAX	JUL MIN	AUG MAX	AUG MIN	SEP MAX	SEP MIN
	DAILY		DAILY		DAILY		DAILY		DAILY		DAILY	
1	13.5	13.0	16.5	15.0	22.5	21.5	20.5	19.0	19.5	18.5	20.5	18.0
2	13.5	12.5	17.5	16.0	22.5	21.0	21.0	19.5	19.5	18.5	20.0	17.5
3	14.0	13.0	17.5	17.0	22.0	21.0	21.5	20.5	21.0	19.0	20.0	17.0
4	14.0	13.0	18.0	17.0	22.0	21.0	21.5	20.5	21.0	18.5	19.5	18.0
5	14.0	13.0	17.5	17.0	22.0	21.0	21.0	20.5	21.5	18.0	19.5	17.0
6	14.0	13.5	17.5	16.5	22.0	20.5	20.5	19.5	22.0	20.0	20.5	17.0
7	14.0	13.5	17.0	16.5	20.5	20.0	22.0	19.5	22.0	19.5	21.5	18.0
8	14.0	13.0	17.0	17.0	20.5	19.5	22.0	19.0	22.0	19.0	21.0	19.0
9	13.5	13.0	17.5	17.0	20.0	19.0	21.0	18.5	22.0	19.0	21.0	18.0
10	14.0	13.5	18.0	17.5	21.0	19.0	20.5	19.0	22.0	20.0	20.5	18.0
11	14.0	13.5	18.0	17.0	20.5	19.0	20.5	19.0	22.0	19.5	20.0	18.0
12	14.0	13.0	17.5	16.5	20.5	19.0	20.5	19.0	21.0	19.5	19.5	17.0
13	14.0	13.5	17.5	16.5	20.5	19.5	21.0	19.0	21.0	19.0	18.0	15.5
14	13.5	13.0	18.5	17.5	21.0	20.0	21.0	19.5	20.5	19.0	17.5	15.5
15	13.0	12.5	19.5	18.5	21.0	19.5	21.0	19.5	20.0	18.5	17.0	15.0
16	13.5	12.5	20.5	19.0	21.0	20.0	21.0	19.5	20.0	18.5	17.5	15.0
17	14.0	12.5	20.5	20.0	21.0	20.0	21.0	20.0	19.5	18.0	19.0	15.5
18	14.0	13.5	20.5	20.0	21.0	19.5	21.0	19.5	20.0	18.5	19.0	18.0
19	14.0	13.5	20.0	19.0	21.0	20.0	20.5	19.5	20.0	18.0	19.0	16.5
20	14.5	13.5	19.5	19.0	21.0	20.0	21.0	19.5	19.5	18.0	18.5	16.5
21	14.0	13.5	19.5	19.0	21.0	20.0	21.0	19.5	19.5	17.5	18.5	16.5
22	14.5	13.5	20.0	19.0	21.5	20.0	21.0	19.5	19.0	17.5	19.0	16.0
23	14.5	13.5	20.5	19.5	21.5	20.5	20.5	19.0	18.5	17.0	19.0	16.0
24	15.0	14.0	22.0	20.5	21.5	20.5	20.0	19.0	19.5	17.0	19.0	16.0
25	15.0	14.5	22.5	21.0	20.5	20.0	20.0	18.5	20.0	17.5	18.5	15.5
26	15.5	15.0	22.0	20.5	20.5	19.5	20.0	19.0	20.5	18.0	--	--
27	15.5	14.5	21.5	19.5	20.0	19.0	20.5	19.0	20.0	18.0	--	--
28	15.0	14.5	21.5	19.5	19.5	19.0	20.5	19.5	20.5	18.0	--	--
29	15.0	14.5	21.5	19.5	20.0	18.5	20.5	19.0	20.0	18.0	--	--
30	16.0	14.5	21.5	19.5	20.0	19.0	20.0	19.0	20.0	18.0	--	--
31	--	--	22.5	20.5	--	--	19.5	19.0	20.0	17.5	--	--
AVE	14.2	13.5	19.4	18.3	21.0	19.9	20.8	19.3	20.4	18.4	19.3	16.8

11468500 NOYO RIVER NEAR FORT BRAGG, CALIF.

LOCATION.--Lat 39°25'42", long 123°44'12", in NE¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.0°C July 10.
EXTREMES, 1965-70.--Water temperatures: Maximum, 23.0°C July 10, 1970; minimum (1965-69), 2.0°C Dec. 17-21, 1965.
REMARKS.--Recorder malfunction Nov. 9 to Dec. 2; probe inoperative Jan. 3 to Apr. 14; recorder stopped May 25 to July 7.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT DAILY	OCT MIN	NOV MAX	NOV DAILY	NOV MIN	DEC MAX	DEC DAILY	DEC MIN	JAN MAX	JAN DAILY	JAN MIN	FEB MAX	FEB DAILY	FEB MIN	MAR MAX	MAR DAILY	MAR MIN
1	14.5	--	12.0	10.5	--	8.5	--	--	--	9.0	--	8.0	--	--	--	--	--	--
2	14.0	--	11.5	10.5	--	9.5	--	6.0	--	8.0	--	7.0	--	--	--	--	--	--
3	12.5	--	9.5	11.0	--	9.5	5.5	--	4.5	--	--	--	--	--	--	--	--	--
4	11.5	--	8.0	11.0	--	10.0	6.0	--	5.0	--	--	--	--	--	--	--	--	--
5	10.5	--	6.5	10.0	--	9.0	6.0	--	5.0	--	--	--	--	--	--	--	--	--
6	10.0	--	6.5	9.5	--	8.5	8.0	--	6.0	--	--	--	--	--	--	--	--	--
7	11.0	--	7.5	10.0	--	9.0	8.5	--	8.0	--	--	--	--	--	--	--	--	--
8	12.0	--	11.0	9.0	--	7.0	9.5	--	8.5	--	--	--	--	--	--	--	--	--
9	13.0	--	10.5	--	--	--	9.0	--	8.0	--	--	--	--	--	--	--	--	--
10	13.0	--	10.0	--	--	--	9.5	--	8.0	--	--	--	--	--	--	--	--	--
11	11.5	--	8.5	--	--	--	10.5	--	9.0	--	--	--	--	--	--	--	--	--
12	11.0	--	8.0	--	--	--	11.0	--	10.5	--	--	--	--	--	--	--	--	--
13	10.0	--	7.0	--	--	--	11.5	--	11.0	--	--	--	--	--	--	--	--	--
14	10.5	--	9.0	--	--	--	11.5	--	11.0	--	--	--	--	--	--	--	--	--
15	11.0	--	10.5	--	--	--	11.0	--	10.5	--	11.0	--	--	--	--	--	--	--
16	11.0	--	10.0	--	--	--	11.0	--	10.5	--	--	--	--	--	--	--	--	--
17	11.0	--	9.0	--	--	--	11.0	--	10.5	--	--	--	--	--	--	--	--	--
18	10.5	--	8.0	--	--	--	11.5	--	11.0	--	--	--	--	--	--	--	--	--
19	11.0	--	7.5	--	--	--	12.0	--	11.5	--	--	--	--	--	--	--	--	--
20	10.5	--	8.0	--	--	--	13.0	--	12.0	--	--	--	--	--	--	--	--	--
21	11.0	--	9.0	--	--	--	13.0	--	12.5	--	--	--	--	--	--	--	--	--
22	11.5	--	10.5	--	--	--	12.5	--	12.0	--	--	--	--	--	--	--	--	--
23	12.0	--	11.0	--	--	--	12.5	--	12.0	--	--	--	--	--	--	--	--	--
24	12.0	--	10.0	--	--	--	12.5	--	12.0	--	--	--	--	--	--	--	--	--
25	11.5	--	9.0	--	--	--	12.5	--	12.0	--	--	--	--	--	--	--	--	--
26	12.0	--	10.5	--	--	--	12.0	--	10.5	--	--	--	--	--	--	--	--	--
27	12.5	--	10.0	--	--	--	10.5	--	9.5	--	--	--	--	--	--	--	--	--
28	12.0	--	9.5	--	--	--	9.5	--	9.0	--	--	--	--	--	--	--	--	--
29	11.5	--	9.5	--	--	--	9.0	--	8.5	--	--	--	--	--	--	--	--	--
30	11.5	--	9.0	--	--	--	8.5	--	8.0	--	--	--	--	--	--	--	--	--
31	11.0	--	9.0	--	--	--	8.5	--	8.0	--	--	--	--	--	--	--	--	--
AVE	11.6	--	9.2	--	--	--	10.2	--	9.5	--	--	--	--	--	--	--	--	--

DAY	APR MAX	APR DAILY	APR MIN	MAY MAX	MAY DAILY	MAY MIN	JUN MAX	JUN DAILY	JUN MIN	JUL MAX	JUL DAILY	JUL MIN	AUG MAX	AUG DAILY	AUG MIN	SEP MAX	SEP DAILY	SEP MIN
1	--	--	--	16.5	--	11.0	--	--	--	--	--	--	20.0	--	15.5	20.0	--	16.0
2	--	--	--	17.0	--	12.0	--	--	--	--	--	--	20.0	--	15.0	19.5	--	15.5
3	--	--	--	17.0	--	12.5	--	--	--	--	--	--	20.0	--	16.0	19.0	--	15.0
4	--	--	--	15.5	--	13.0	--	--	--	--	--	--	19.5	--	16.0	19.0	--	16.0
5	--	--	--	15.0	--	13.0	--	--	--	--	--	--	21.0	--	15.5	18.5	--	15.0
6	--	--	--	14.0	--	12.0	--	--	--	--	--	--	21.5	--	17.5	19.0	--	15.0
7	--	--	--	15.5	--	10.5	--	--	--	--	18.0	--	21.0	--	17.0	20.5	--	16.0
8	--	--	--	14.5	--	13.0	--	--	--	21.0	--	16.0	20.5	--	15.5	20.0	--	16.0
9	--	--	--	16.0	--	12.5	--	--	--	22.0	--	15.5	20.0	--	15.5	20.0	--	15.5
10	--	--	--	16.0	--	12.0	--	--	--	23.0	--	17.0	17.0	--	15.5	20.0	--	15.5
11	--	--	--	13.5	--	11.0	--	--	--	21.0	--	17.0	19.5	--	15.0	19.0	--	15.0
12	--	--	--	13.0	--	10.0	--	--	--	20.0	--	16.5	20.5	--	15.0	17.5	--	14.5
13	--	--	--	16.5	--	11.0	--	--	--	21.5	--	15.5	20.0	--	15.0	17.0	--	13.0
14	--	12.0	--	17.5	--	12.0	--	--	--	22.0	--	16.5	19.5	--	15.5	17.0	--	12.5
15	12.5	--	9.0	19.0	--	13.0	--	--	--	20.0	--	17.0	20.5	--	15.0	16.5	--	12.0
16	13.0	--	8.0	19.0	--	14.5	--	--	--	20.0	--	17.5	19.5	--	15.0	16.5	--	12.0
17	13.0	--	9.0	18.0	--	14.5	--	--	--	20.5	--	17.0	18.0	--	14.0	18.0	--	12.5
18	12.0	--	9.5	16.5	--	14.0	--	--	--	21.0	--	16.5	18.0	--	14.0	17.5	--	15.5
19	13.5	--	10.0	16.0	--	13.0	--	--	--	20.5	--	15.5	18.0	--	14.5	17.0	--	14.0
20	12.0	--	8.5	17.0	--	12.5	--	--	--	18.5	--	16.0	18.5	--	15.0	18.0	--	14.5
21	13.0	--	8.5	17.0	--	12.5	--	--	--	20.5	--	16.0	18.0	--	14.5	18.0	--	14.0
22	13.0	--	8.5	17.5	--	13.0	--	--	--	20.5	--	15.5	16.5	--	15.0	18.0	--	13.5
23	13.0	--	9.0	19.0	--	13.0	--	--	--	20.5	--	16.0	18.0	--	15.0	18.0	--	14.0
24	14.0	--	11.0	20.0	--	14.0	--	--	--	20.5	--	15.5	20.0	--	14.5	17.0	--	13.0
25	14.5	--	11.0	--	--	--	--	--	--	21.0	--	15.0	20.0	--	15.5	17.0	--	12.0
26	13.0	--	10.5	--	--	--	--	--	--	21.5	--	16.0	19.0	--	16.0	16.5	--	12.0
27	12.0	--	9.0	--	--	--	--	--	--	20.5	--	16.0	19.0	--	16.0	16.0	--	12.0
28	13.5	--	8.0	--	--	--	--	--	--	21.0	--	17.0	20.0	--	16.0	15.0	--	12.5
29	13.5	--	9.0	--	--	--	--	--	--	20.0	--	15.5	20.0	--	16.0	16.0	--	12.0
30	15.0	--	10.0	--	--	--	--	--	--	19.5	--	15.0	17.5	--	17.0	16.0	--	12.0
31	--	--	--	--	--	--	--	--	--	18.5	--	16.0	20.0	--	16.0	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--	19.4	--	15.4	17.9	--	13.9

11468600 MIDDLE FORK TENMILE RIVER NEAR FORT BRAGG, CALIF.

LOCATION.--Lat 39°34'22", long 123°41'57", in NE¼NE¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.0°C July 3; minimum, 3.5°C Dec. 2.
EXTREMES, 1964-70.--Water temperatures: Maximum, 20.5°C June 14, 18, 1966; minimum (1964-65, 1966-70), 3.5°C Dec. 2, 1969.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	14.5	11.0	10.5	5.0	4.0	6.5	6.5	10.0	9.5	10.0	9.0
2	15.0	14.0	11.0	10.0	4.0	3.5	6.5	5.5	10.0	9.5	9.0	9.0
3	14.5	13.0	10.5	10.5	4.5	4.0	5.5	5.5	10.0	10.0	10.0	9.0
4	13.5	12.0	11.5	10.5	4.5	4.5	5.5	5.0	10.0	9.5	9.5	9.0
5	13.0	11.0	11.5	11.0	4.5	4.5	5.0	4.5	10.0	10.0	9.5	9.0
6	12.0	11.0	11.0	10.5	6.0	4.5	4.5	4.5	10.0	10.0	10.0	9.0
7	12.0	11.5	11.0	10.5	6.5	5.5	5.0	4.5	10.0	10.0	10.5	10.0
8	14.0	12.0	10.5	10.0	6.5	6.5	6.5	5.0	10.0	9.5	10.5	10.0
9	14.0	13.0	10.0	9.0	6.5	6.5	8.0	6.5	10.5	10.0	10.5	10.0
10	14.5	13.5	9.5	9.0	6.5	6.5	8.0	8.0	10.5	10.0	10.0	9.5
11	14.0	12.0	9.5	9.0	8.0	6.5	9.0	8.0	10.5	10.5	10.5	10.0
12	13.0	11.5	9.0	9.0	9.0	8.0	9.0	9.0	10.5	10.5	10.5	10.5
13	12.0	11.0	9.0	8.5	9.0	9.0	9.0	9.0	10.5	10.5	11.5	10.5
14	12.0	11.5	9.0	8.5	9.0	9.0	9.5	9.0	10.5	10.0	13.0	11.5
15	13.0	12.0	9.0	8.5	9.0	9.0	9.5	9.5	10.0	10.0	13.0	11.5
16	13.5	13.0	9.0	8.0	9.0	9.0	9.5	9.5	10.0	10.0	13.0	11.5
17	13.5	13.0	8.0	6.5	9.0	9.0	10.0	9.5	10.0	10.0	13.0	12.0
18	13.0	11.5	7.0	6.0	9.0	9.0	10.0	10.0	10.0	10.0	12.0	11.0
19	11.5	11.0	6.5	5.5	9.5	9.0	10.0	10.0	10.0	9.5	12.0	10.0
20	11.5	11.0	6.0	5.5	10.0	9.5	10.0	10.0	10.0	9.0	12.0	10.0
21	11.5	11.0	6.0	6.0	10.0	9.5	10.5	10.0	9.0	9.0	13.0	11.0
22	11.5	11.0	6.5	6.0	9.5	9.5	10.5	10.5	9.0	9.0	13.5	11.5
23	11.5	11.5	6.0	6.0	9.5	9.5	10.5	10.5	9.5	9.0	13.5	11.0
24	12.0	11.5	6.0	6.0	9.5	9.5	10.5	10.5	10.0	9.0	14.5	11.5
25	11.5	11.0	6.0	6.0	9.5	9.0	10.5	10.5	10.0	9.5	14.5	12.0
26	11.0	10.5	6.0	5.5	9.0	9.0	10.5	10.5	10.0	9.5	14.0	12.0
27	12.0	11.0	5.5	5.5	9.0	8.0	10.5	10.5	10.0	9.5	13.5	11.0
28	12.0	11.0	5.5	5.5	8.0	7.0	10.5	10.0	10.0	10.0	13.5	11.5
29	11.5	11.0	5.5	5.0	7.0	6.5	10.0	9.5	--	--	13.5	11.0
30	11.5	11.0	5.0	5.0	6.5	6.5	10.0	9.5	--	--	13.0	11.0
31	11.5	11.0	--	--	6.5	6.5	9.5	9.5	--	--	13.0	10.5
AVE	12.6	11.8	8.3	7.8	7.7	7.3	8.7	8.4	10.0	9.7	11.9	10.5

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	11.0	15.0	11.5	18.0	15.5	18.0	14.5	16.5	15.5	16.5	14.5
2	14.0	11.0	15.0	12.0	18.0	15.5	19.5	15.5	16.5	14.5	16.0	14.5
3	13.5	11.0	15.0	13.0	18.0	15.5	20.0	17.0	16.5	14.5	16.0	14.0
4	13.5	11.0	14.0	13.0	18.0	15.5	19.5	17.0	16.5	15.0	15.5	14.5
5	14.5	12.0	14.0	13.0	17.0	15.5	18.5	16.5	17.0	14.5	15.5	13.5
6	13.5	12.0	13.0	11.5	16.0	15.5	18.0	16.0	18.5	16.5	16.5	14.0
7	13.0	11.0	13.5	10.5	16.5	15.0	18.0	15.0	18.0	15.5	18.0	15.0
8	13.0	11.0	13.0	12.0	16.0	15.0	17.0	15.5	18.0	15.0	16.5	14.5
9	13.5	11.0	13.0	12.0	15.5	15.0	17.0	15.5	19.0	15.0	17.0	14.5
10	14.5	12.0	14.0	12.0	17.0	15.0	17.0	15.5	19.0	16.0	16.5	14.5
11	13.5	11.0	13.0	11.5	16.5	14.5	17.0	15.5	18.0	15.5	16.5	14.0
12	13.5	11.0	11.5	10.5	16.5	14.0	18.0	15.0	17.0	15.5	15.5	13.5
13	13.0	12.0	14.0	11.0	16.5	14.5	18.5	15.0	17.0	15.0	14.5	12.0
14	12.0	9.5	15.0	11.5	16.5	15.5	18.0	16.0	16.5	14.5	14.5	11.5
15	11.5	9.5	16.5	13.0	17.0	15.0	18.0	16.0	16.5	14.5	14.5	11.0
16	11.5	9.5	17.0	14.0	17.0	15.5	18.0	16.5	16.0	14.5	14.5	12.0
17	12.0	9.5	16.5	14.5	17.0	14.5	18.0	16.0	15.5	14.0	15.0	12.0
18	11.0	9.5	15.0	14.0	17.0	14.5	18.0	16.0	15.5	14.0	16.0	14.5
19	11.5	10.5	14.5	13.5	18.0	15.0	18.5	15.5	15.5	14.0	15.0	13.5
20	11.0	9.5	15.0	12.0	18.0	15.5	18.0	15.5	15.5	14.5	15.5	13.5
21	11.5	9.5	15.5	13.0	18.0	15.5	18.0	15.5	15.5	14.5	15.5	13.5
22	11.5	9.5	16.0	13.5	18.0	16.0	18.0	15.0	15.5	14.5	16.0	11.5
23	11.5	9.5	16.5	13.5	18.0	16.0	17.0	15.0	16.0	14.5	15.5	13.5
24	12.0	10.5	17.0	14.0	17.0	16.0	17.0	15.0	15.5	14.0	16.0	12.0
25	12.0	11.0	16.5	15.0	18.0	15.5	16.5	15.0	15.5	13.5	15.5	12.0
26	12.0	10.5	16.0	15.0	17.0	16.0	17.0	15.0	15.5	14.0	16.5	11.5
27	11.0	10.0	16.5	14.5	16.0	15.5	18.0	15.0	16.0	14.5	15.5	12.0
28	11.5	9.0	16.5	13.5	16.5	15.5	18.0	16.0	16.5	14.5	14.5	12.0
29	11.5	9.5	16.5	13.5	16.5	14.0	17.0	14.5	16.5	14.5	15.5	12.0
30	14.0	10.5	17.0	14.0	16.5	14.5	16.5	14.5	15.5	15.0	15.5	12.0
31	--	--	18.5	15.0	--	--	16.5	15.5	16.5	15.0	--	--
AVE	12.5	10.5	15.2	12.9	17.0	15.2	17.8	15.5	16.5	14.7	15.7	13.1

11469000 MATTOLE RIVER NEAR PETROLIA, CALIF.

LOCATION.--Lat 40°18'42", long 124°15'48", in NW¼ sec.11, T.2 S., R.2 W., Humboldt County, at gaging station on right bank, 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 1969-70 (partial-record station). Water temperatures: November 1965 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 22.5°C July 25-28, Aug. 1; minimum, 8.0°C Nov. 19.
EXTREMES, 1966-70.--Water temperatures: Maximum (1966-68, 1969-70), 27.0°C June 24, 1968; minimum, 3.0°C Jan. 9, 1969.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
JAN.												
06...	1220	989	--	12.9	--	--	5.1	--	64	0	--	3.4
MAY												
12...	1135	225	14.2	11.6	26	4.6	7.9	1.0	87	0	20	5.7
SEPT.												
15...	1210	20	17.0	10.6	40	5.6	8.9	1.3	125	0	33	5.2

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 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 (MG/L)
JAN.												
06...	--	70	--	--	59	6	52	16	.3	146	7.3	47
MAY												
12...	.1	110	120	72.9	84	13	71	17	.4	198	8.1	3
SEP.												
15...	.4	40	150	8.10	123	20	103	13	.3	278	8.1	3

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	12.0	10.0	8.5	11.0	9.0	9.5	9.0	11.5	11.0
2	16.5	15.5	12.5	11.5	10.0	8.5	10.5	9.0	9.5	9.0	11.5	10.0
3	16.5	15.5	12.5	11.5	10.0	9.5	11.0	9.0	9.5	9.0	12.0	11.5
4	16.0	15.5	12.5	12.5	10.0	8.5	11.0	9.0	10.0	9.5	12.0	11.5
5	16.0	15.5	13.0	12.0	10.5	9.0	11.5	10.5	10.0	9.5	12.0	10.5
6	16.5	15.0	13.0	11.5	10.0	10.0	10.5	10.0	10.0	10.0	11.5	11.0
7	16.5	15.5	13.0	12.5	10.0	9.5	10.5	10.0	10.0	9.0	12.0	11.0
8	16.5	15.5	13.0	12.0	10.0	9.5	10.0	10.0	10.0	9.0	12.0	11.0
9	16.0	15.5	13.0	11.5	10.5	10.0	10.5	10.0	10.0	9.5	12.0	11.0
10	16.5	15.5	12.0	10.0	10.5	10.0	10.5	10.5	10.0	10.0	12.0	11.0
11	16.5	15.0	11.5	10.0	10.0	10.0	10.5	10.5	10.0	10.0	12.5	11.5
12	16.0	15.5	11.5	10.0	10.0	10.0	10.5	10.5	10.0	10.0	12.5	11.5
13	16.5	15.5	11.5	10.0	10.0	10.0	10.5	10.5	10.0	10.0	12.0	11.0
14	15.0	14.5	11.5	10.0	10.5	10.0	10.5	10.5	10.0	10.0	12.5	11.5
15	15.0	14.0	11.5	11.0	10.5	10.0	10.5	10.0	10.5	10.0	12.5	11.5
16	15.5	14.5	11.0	10.0	10.5	10.5	10.0	10.0	10.5	10.5	12.0	11.5
17	15.5	14.5	11.0	9.0	10.5	10.5	10.0	10.0	10.5	10.0	12.0	11.0
18	15.5	14.5	11.0	9.0	10.5	10.5	10.0	10.0	11.0	9.5	12.5	11.5
19	15.5	14.5	10.0	8.0	10.5	10.5	10.5	10.0	11.0	9.5	12.5	11.5
20	15.5	14.5	10.0	8.5	10.5	10.5	10.5	10.5	11.0	9.0	12.5	11.5
21	15.5	14.5	10.0	10.0	11.0	10.0	10.5	10.5	11.0	9.5	12.5	11.5
22	15.5	14.0	10.0	8.5	11.0	11.0	10.5	10.5	11.0	9.5	12.5	11.5
23	15.5	15.0	10.5	8.5	11.0	11.0	10.5	10.5	11.5	10.0	12.5	11.0
24	15.0	14.0	10.0	8.5	11.0	10.0	10.5	10.0	11.0	10.0	12.5	11.5
25	14.5	13.5	10.5	8.5	11.0	10.5	10.5	10.0	11.0	10.0	13.0	11.5
26	14.5	14.0	10.0	8.5	11.0	10.5	10.0	10.0	11.0	10.0	13.0	12.5
27	14.0	13.0	10.0	8.5	11.0	10.5	10.5	10.0	11.0	10.0	13.0	12.0
28	14.0	13.0	10.0	8.5	10.5	9.5	10.5	9.0	11.5	11.0	13.0	12.0
29	14.0	12.0	10.0	8.5	10.5	9.5	10.0	9.5	--	--	13.0	12.0
30	13.5	12.0	10.0	8.5	10.5	9.0	9.5	9.0	--	--	13.0	12.0
31	13.5	12.0	--	--	10.5	9.5	9.5	9.5	--	--	13.0	12.0
AVE	15.5	14.5	11.3	10.0	10.5	9.9	10.4	9.9	10.4	9.7	12.4	11.4

11469000 MATTOLE RIVER NEAR PETROLIA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

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	12.0	18.0	16.0	20.5	20.0	22.5	21.0	20.0	19.0
2	13.5	12.5	13.5	12.0	18.0	17.0	20.5	19.5	22.0	21.0	20.0	18.5
3	13.5	12.0	13.0	12.5	18.5	17.0	20.5	19.5	22.0	21.0	19.5	18.5
4	13.5	12.0	13.5	12.0	18.5	17.5	20.5	20.0	22.0	21.0	19.5	19.0
5	13.5	12.0	13.0	13.0	18.5	18.0	21.0	20.0	22.0	21.0	19.5	18.5
6	13.5	13.0	13.0	12.5	19.0	18.0	21.5	20.5	22.0	21.0	19.0	18.0
7	13.5	12.5	13.5	12.0	19.0	18.0	21.5	20.5	21.5	20.5	19.0	18.5
8	13.5	12.0	13.5	13.5	19.5	19.0	21.5	21.0	21.5	20.5	19.0	18.0
9	13.5	12.5	13.5	12.0	20.0	19.5	21.5	21.0	21.5	20.5	19.5	18.0
10	13.5	13.0	13.5	12.5	20.5	19.5	21.5	21.0	21.5	20.5	19.0	18.0
11	13.5	12.5	13.5	13.0	21.0	20.0	21.5	20.5	21.5	20.0	18.5	17.5
12	13.5	12.5	14.0	12.5	21.0	20.0	21.5	20.5	22.0	20.5	18.0	17.5
13	13.5	13.5	14.0	13.0	21.0	20.0	21.0	20.0	21.0	20.0	18.5	18.0
14	13.5	12.5	14.0	13.0	21.5	20.0	21.5	20.0	21.0	20.0	19.5	18.0
15	13.5	12.5	15.0	13.5	20.0	19.5	21.5	20.0	21.0	20.0	19.5	17.0
16	13.5	12.5	15.0	14.0	20.0	19.0	21.5	21.0	21.5	20.0	19.5	18.0
17	13.5	12.5	15.5	14.0	20.0	19.0	22.0	21.0	21.5	20.5	19.5	18.0
18	13.5	13.0	15.5	14.5	20.0	19.0	22.0	21.0	21.5	20.5	19.0	18.5
19	13.5	13.0	15.5	14.5	20.0	19.0	22.0	21.0	21.0	20.0	19.5	18.5
20	13.5	13.0	16.0	14.5	20.0	19.0	22.0	20.5	21.0	20.0	19.5	18.5
21	13.5	12.5	16.0	15.0	20.0	19.0	22.0	21.0	21.0	20.0	19.5	18.0
22	13.5	12.5	15.5	14.5	20.5	19.0	22.0	21.0	21.0	20.0	19.5	17.5
23	13.5	13.0	16.0	15.0	20.0	19.0	22.0	21.0	21.0	20.0	19.0	18.5
24	13.5	13.0	17.0	15.0	20.0	19.0	22.0	21.5	21.0	20.0	19.0	18.0
25	13.5	13.0	17.0	16.0	20.5	19.0	22.5	21.5	20.5	19.0	19.0	17.5
26	13.5	13.0	17.0	16.0	20.5	19.5	22.5	22.0	20.5	19.5	19.0	17.0
27	13.5	13.0	17.0	16.0	20.5	19.5	22.5	22.0	20.5	19.5	18.5	17.0
28	13.5	12.5	17.0	16.5	20.5	19.5	22.5	22.0	20.5	19.0	19.0	18.0
29	13.5	12.5	17.0	16.0	20.5	20.0	22.0	22.0	20.5	19.5	19.0	18.0
30	13.0	12.5	17.5	16.5	20.5	20.0	22.0	21.5	20.5	19.5	19.0	17.5
31	--	--	17.5	16.0	--	--	22.0	21.5	20.0	19.0	--	--
AVE	13.5	12.6	15.0	14.0	19.9	18.9	21.6	20.8	21.2	20.1	19.2	18.0

11470500 EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CALIF.

LOCATION.--Lat 39°24'29", long 122°58'13", in SE¼ sec.15, T.18 N., R.10 W., Lake County, Mendocino National Forest, temperature recorder at gaging station on left bank, 0.4 mile upstream from Soda Creek, 0.7 mile downstream from Scott Dam, and 9.7 miles northeast of town of Potter Valley.
DRAINAGE AREA.--290 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1963 to September 1970.
Sediment records: Water years 1966-67 (partial-record station).
Turbidity: Water years 1966-67, 1969-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.5°C Oct. 1; minimum, 7.0°C on several days during January.
EXTREMES, 1963-70.--Water temperatures: Maximum, 23.0°C on several days in 1967; minimum (1966-70), 4.5°C on several days in 1969.
REMARKS.--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 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	20.0	14.5	14.5	9.5	9.0	8.5	8.0	8.5	8.5	9.0	8.5
2	20.0	20.0	14.5	14.5	9.0	9.0	8.0	8.0	8.5	8.5	8.5	8.5
3	20.0	19.0	14.5	14.5	9.0	9.0	8.0	8.0	8.5	8.5	8.5	8.5
4	19.0	18.5	14.5	14.5	9.0	8.5	8.0	7.0	8.5	8.5	8.5	8.5
5	18.5	18.5	14.5	14.5	8.5	8.5	7.0	7.0	8.5	8.5	9.0	8.5
6	18.5	18.0	14.5	14.5	8.5	8.5	7.0	7.0	8.5	8.5	8.5	8.5
7	18.0	18.0	14.5	14.0	8.5	8.5	7.0	7.0	9.0	8.5	9.0	8.5
8	18.0	18.0	14.0	13.5	8.5	8.5	7.0	7.0	8.5	8.5	9.0	8.5
9	18.0	17.0	13.5	13.5	8.5	8.5	7.0	7.0	8.5	8.5	8.5	8.5
10	17.0	17.0	13.5	13.5	8.5	8.5	7.0	7.0	9.0	8.5	8.5	8.5
11	17.0	16.5	13.5	13.5	8.5	8.5	7.0	7.0	9.0	9.0	9.0	8.5
12	16.5	16.5	13.5	13.5	9.0	8.5	7.0	7.0	9.0	9.0	9.0	9.0
13	16.5	16.0	13.5	13.5	9.0	9.0	7.0	7.0	9.0	9.0	9.5	9.0
14	16.0	16.0	13.5	13.5	9.0	9.0	7.0	7.0	9.0	9.0	10.5	9.0
15	16.0	16.0	13.5	13.0	9.0	9.0	7.0	7.0	9.0	9.0	10.5	10.0
16	16.0	16.0	13.0	13.0	9.0	9.0	7.0	7.0	9.0	8.5	10.0	10.0
17	16.0	15.5	13.0	13.0	9.0	9.0	7.0	7.0	8.5	8.5	10.0	9.5
18	15.5	15.5	13.0	12.0	9.0	8.5	7.0	7.0	8.5	8.5	9.5	9.5
19	15.5	15.0	12.0	12.0	9.0	8.5	8.0	7.0	8.5	8.5	9.5	9.5
20	15.0	15.0	12.0	11.5	9.0	9.0	8.0	8.0	8.5	8.5	9.5	9.0
21	15.0	15.0	11.5	11.5	9.5	9.0	8.5	8.0	8.5	8.0	10.0	9.0
22	15.0	15.0	11.5	11.0	9.5	9.0	8.5	8.5	8.0	8.0	10.0	9.0
23	15.0	15.0	11.0	11.0	9.5	9.0	9.0	8.5	8.0	8.0	11.5	9.0
24	15.0	15.0	11.0	11.0	9.0	9.0	9.0	9.0	8.0	8.0	11.5	9.5
25	15.0	15.0	11.0	10.0	9.5	9.0	9.0	9.0	9.0	8.0	13.0	10.0
26	15.0	15.0	10.0	10.0	9.5	9.0	9.0	9.0	9.0	8.5	13.0	11.0
27	15.0	15.0	10.0	10.0	9.0	8.5	9.0	9.0	9.0	8.5	11.5	10.5
28	15.0	15.0	10.0	9.5	8.5	8.5	9.0	9.0	9.0	8.5	11.0	10.5
29	15.0	15.0	9.5	9.5	8.5	8.5	9.0	8.5	--	--	11.0	10.0
30	15.0	14.5	9.5	9.0	8.5	8.5	8.5	8.5	--	--	10.5	10.5
31	14.5	14.5	--	--	8.5	8.5	8.5	8.5	--	--	10.5	10.5
AVE	16.5	16.3	12.6	12.4	8.9	8.7	7.9	7.7	8.7	8.5	9.9	9.3

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	13.0	11.0	12.0	11.0	13.0	12.0	13.5	13.5	16.0	15.5
2	12.0	10.5	13.5	11.0	12.0	11.0	13.0	12.0	13.5	13.0	16.5	15.5
3	11.5	10.5	13.5	11.5	12.0	11.0	13.0	12.0	13.5	13.5	16.5	16.0
4	11.0	10.0	14.0	11.5	12.0	11.0	13.0	12.0	13.5	13.5	17.0	16.0
5	11.0	10.0	13.5	11.5	12.0	11.0	13.5	12.0	13.5	13.5	17.0	16.0
6	11.0	10.0	14.0	12.0	12.0	11.0	13.5	12.0	14.0	13.5	18.0	17.0
7	11.5	10.0	14.0	13.0	11.5	11.0	13.5	12.0	13.5	13.5	18.0	17.0
8	11.5	10.0	13.5	12.0	11.0	10.5	13.5	12.0	13.5	13.5	18.5	18.0
9	11.5	10.0	13.5	12.0	11.5	11.0	13.5	12.0	14.0	13.5	18.5	18.5
10	11.5	10.5	13.0	12.0	11.5	11.0	13.5	12.0	14.0	13.5	19.0	18.5
11	12.0	10.5	13.0	12.0	11.5	11.0	13.5	12.0	14.0	13.5	19.5	19.0
12	11.5	10.5	13.0	12.0	11.5	11.0	13.5	12.0	14.0	13.5	19.5	19.0
13	10.5	10.5	13.5	12.0	11.5	11.0	13.5	12.0	14.0	13.5	20.0	19.5
14	11.0	10.5	14.0	12.0	11.5	11.0	13.5	12.0	14.5	13.5	20.0	20.0
15	11.5	11.0	14.5	13.5	12.0	11.0	13.5	12.0	14.5	13.5	20.0	20.0
16	11.5	11.0	15.5	14.0	13.0	11.5	13.5	12.0	15.0	14.0	20.0	20.0
17	12.0	11.0	15.5	14.0	13.0	11.5	13.5	12.0	15.0	14.0	20.0	20.0
18	12.0	11.0	16.0	14.0	13.0	11.5	13.5	12.0	15.0	14.0	20.0	20.0
19	12.0	11.0	15.5	14.0	13.0	11.5	13.5	12.0	15.0	14.5	20.0	20.0
20	11.5	11.0	15.5	14.0	13.0	11.5	13.5	12.0	15.5	14.5	20.0	20.0
21	11.5	11.0	15.5	12.0	13.0	11.5	13.5	12.0	15.5	14.5	20.0	20.0
22	12.0	11.0	12.0	11.0	13.0	11.5	13.5	12.0	15.5	14.5	20.0	19.5
23	11.5	10.5	12.0	11.0	13.0	11.5	13.5	12.0	15.5	14.5	19.5	19.5
24	12.0	10.5	12.0	11.0	13.0	11.5	13.5	13.0	15.5	15.0	19.5	19.5
25	11.5	10.5	12.0	11.0	13.0	11.5	13.5	13.0	15.5	15.0	20.0	19.5
26	11.0	10.5	13.0	11.0	13.0	11.5	14.0	13.0	16.0	15.0	19.5	19.5
27	11.0	10.0	12.0	11.0	13.0	11.5	14.0	13.0	16.0	15.0	19.5	19.5
28	11.5	10.5	12.0	11.0	13.0	11.5	14.0	13.0	16.0	15.0	19.5	19.5
29	12.0	10.5	12.0	11.0	13.0	11.5	13.5	13.0	16.0	15.0	19.5	19.5
30	12.0	11.0	12.0	11.0	13.0	11.5	13.5	13.0	16.0	15.0	19.5	19.5
31	--	--	12.0	11.0	--	--	13.5	13.5	16.0	15.5	--	--
AVE	11.5	10.5	13.5	12.0	12.3	11.2	13.5	12.3	14.7	14.1	19.0	18.7

11470500 EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CALIF.--Continued

PERIODIC DETERMINATIONS OF TURBIDITY, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE OF COLLECTION	TIME (24-HOUR)	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	TURBIDITY (MG/L SILICA) TOTAL	RESIDUAL 1/
Nov. 7, 1969...	1100	11	318	23	1
Nov. 14.....	1120	13	310	12	1
Nov. 21.....	0930	10	306	52	1
Nov. 28.....	1145	9	56	30	1
Dec. 5.....	1100	8	55	12	1
Dec. 12.....	1015	9	99	265	16
Dec. 26.....	1100	11	2120	215	37
Jan. 2, 1970...	1115	7	466	180	29
Jan. 9.....	1100	8	1930	160	66
Jan. 16.....	1125	10	12800	230	88
Jan. 22.....	1100	10	10200	220	42
Jan. 29.....	1115	8	4010	310	70
Feb. 6.....	1200	10	992	220	48
Feb. 19.....	1203	9	1770	205	33
Mar. 1.....	1200	9	1110	200	26
Mar. 9.....	1100	8	1170	193	36
Mar. 13.....	1310	10	860	115	18
Mar. 20.....	1020	10	530	145	24
Mar. 27.....	1120	12	335	135	24
Apr. 17.....	--	--	--	115	18
May 15.....	--	--	--	60	12
June 19.....	1200	12	142	29	5

1/ Turbidity measured after a 7-day settling period.

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, temperature recorder 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: October 1953 to September 1965, water year 1966 (partial-record station).
Water temperatures: March 1964 to September 1970.
Sediment records: March 1964 to May 1968.
Turbidity: Water years 1964-70 (partial-record station).

EXTREMES, 1969-70.--Water temperatures: Maximum, 21.0°C on many days during September; minimum, 6.0°C on several days during December.

EXTREMES, 1964-70.--Water temperatures (1964-65, 1966-70): Maximum (1967-70), 24.0°C June 22, 1969; minimum, 4.0°C on several days in 1967 and 1968.

REMARKS.--Recorder stopped Jan. 3-16. 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 1969 TO SEPTEMBER 1970

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	20.0	18.0	15.0	13.0	--	--	8.5	7.0	9.0	8.5	9.5	8.5
2	20.0	17.5	14.5	13.0	7.5	6.0	8.0	7.0	9.0	8.0	9.5	8.0
3	19.0	17.0	14.5	13.0	7.5	6.0	--	--	9.0	8.0	10.0	8.0
4	18.5	16.5	14.5	13.5	7.5	6.0	--	--	9.0	8.0	9.0	8.0
5	18.0	15.5	14.0	13.5	7.0	6.0	--	--	9.5	8.5	10.0	8.0
6	18.0	15.5	14.0	13.0	7.5	6.0	--	--	9.5	8.5	10.5	8.0
7	17.5	15.5	13.5	13.0	8.0	7.0	--	--	9.5	8.0	10.0	9.0
8	18.0	17.0	14.0	13.0	8.5	7.5	--	--	9.5	8.0	10.5	9.0
9	17.5	16.0	13.0	11.5	8.5	8.0	--	--	9.5	8.5	9.5	9.0
10	18.5	17.0	13.0	11.5	8.5	8.0	--	--	9.5	9.0	10.0	8.5
11	17.0	14.5	13.0	12.0	9.5	8.5	--	--	9.5	9.0	10.0	9.0
12	17.0	14.5	13.0	12.0	10.5	8.0	--	--	9.5	9.0	11.0	9.0
13	16.0	14.0	13.0	11.5	11.0	10.5	--	--	9.0	8.5	11.0	9.0
14	15.5	15.0	13.0	11.5	11.0	10.0	--	--	9.0	8.5	12.0	9.5
15	15.5	14.5	13.0	12.0	10.5	9.0	--	--	9.0	8.5	12.0	10.0
16	15.5	15.0	13.0	11.0	9.5	9.0	--	--	9.0	8.5	12.5	10.0
17	15.5	14.0	11.5	10.0	10.0	9.5	9.5	9.0	8.5	8.5	12.0	10.0
18	15.5	13.5	11.0	10.0	10.5	9.5	9.5	9.0	9.0	8.0	11.5	9.5
19	15.0	13.0	11.0	9.5	11.0	10.0	10.0	9.5	9.0	7.5	12.0	9.0
20	15.5	13.0	11.0	9.5	12.0	11.0	10.0	9.5	9.0	8.0	11.5	9.0
21	16.0	14.0	11.0	9.5	12.5	10.0	10.5	10.0	9.5	8.0	12.0	9.0
22	16.0	14.0	11.0	9.0	10.5	9.5	11.0	10.5	9.0	8.0	12.0	9.0
23	16.0	14.5	10.5	9.5	10.5	10.5	11.0	10.5	9.0	7.5	12.5	9.5
24	15.5	15.0	10.5	9.0	11.0	10.5	11.0	10.5	9.5	8.0	13.0	10.0
25	15.0	13.0	10.0	9.0	10.5	10.0	10.5	10.0	10.0	8.0	13.0	11.0
26	15.0	13.0	10.0	8.5	10.0	9.5	10.5	10.0	10.0	8.5	13.5	11.5
27	15.0	14.5	9.5	8.0	9.5	9.0	10.5	10.0	10.0	8.5	13.5	11.0
28	15.0	13.5	9.0	7.5	9.5	8.5	10.0	9.0	10.0	9.0	13.5	11.0
29	14.5	13.5	8.5	7.0	9.0	8.0	9.5	8.5	--	--	13.5	11.0
30	14.5	13.5	8.0	6.5	9.0	8.0	9.5	8.5	--	--	13.0	10.5
31	15.0	13.5	--	--	8.5	7.5	9.0	8.5	--	--	13.0	10.5
AVE	16.5	14.8	12.0	10.7	9.5	8.5	--	--	9.3	8.3	11.5	9.4

11471000 POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	10.0	16.5	14.0	20.0	17.5	19.5	17.0	19.5	17.5	19.5	17.5
2	13.5	11.0	17.0	14.0	20.5	18.0	20.0	17.5	19.5	17.5	19.5	17.5
3	13.5	11.0	17.5	15.0	20.5	17.0	20.5	18.0	19.5	17.5	19.5	18.0
4	14.0	11.0	17.5	15.5	19.5	16.5	20.5	18.0	20.0	18.0	20.0	18.5
5	14.0	11.5	17.5	16.0	19.5	17.5	20.5	18.5	18.5	17.0	20.0	18.0
6	14.0	12.0	17.0	15.0	19.5	18.0	20.5	18.5	20.0	17.0	20.0	18.0
7	14.0	12.0	16.5	13.5	19.0	17.0	20.5	18.5	20.0	17.5	21.0	19.0
8	13.5	11.5	16.5	15.0	18.0	15.5	20.5	18.5	19.5	17.0	21.0	19.5
9	13.5	12.0	16.0	14.5	15.5	14.0	20.5	18.0	20.0	17.0	21.0	19.0
10	14.5	12.5	16.0	13.5	16.5	14.0	20.0	18.0	20.0	17.5	21.0	18.0
11	14.0	11.5	16.0	13.0	16.5	15.5	20.0	18.0	20.0	18.0	21.0	18.0
12	13.5	11.5	14.0	12.0	16.5	15.5	20.0	18.0	20.0	18.0	21.0	18.0
13	13.5	11.0	17.0	12.5	16.5	15.5	20.0	18.0	20.0	18.0	20.0	17.0
14	12.0	10.0	19.0	14.5	16.5	15.0	20.5	18.0	20.0	17.5	20.0	17.0
15	12.5	10.0	19.5	16.0	18.0	15.5	20.5	18.5	20.0	17.5	20.0	17.0
16	11.5	10.5	20.5	17.0	18.5	16.5	20.0	18.0	20.0	18.0	20.5	17.5
17	13.5	10.0	20.5	17.5	19.0	17.0	20.0	17.5	20.0	18.0	21.0	18.0
18	13.0	11.0	20.0	17.5	19.0	16.5	20.5	18.0	19.5	17.5	21.0	18.5
19	13.5	11.0	20.0	17.5	20.0	17.0	20.5	18.0	19.5	17.0	21.0	18.5
20	13.0	11.0	18.5	16.0	20.5	18.0	20.5	18.5	19.0	17.0	20.0	17.5
21	12.0	10.0	20.0	16.5	21.0	18.5	20.5	18.5	19.5	17.5	20.0	17.5
22	12.5	9.5	20.0	17.0	21.0	18.5	20.0	18.0	19.5	18.0	20.5	17.5
23	13.5	11.0	20.0	17.0	21.0	19.0	20.5	18.0	19.5	17.5	20.5	18.0
24	14.5	11.0	20.0	16.5	21.0	18.5	20.5	18.0	19.5	17.0	20.5	18.0
25	14.5	12.5	20.5	17.0	20.0	17.0	20.5	18.0	19.0	17.0	19.5	17.0
26	13.5	12.0	20.0	17.5	20.0	17.0	20.5	18.0	19.0	17.5	19.5	17.0
27	13.0	10.5	20.0	17.5	19.5	17.0	20.5	18.5	19.0	17.0	19.5	17.0
28	13.0	10.5	19.5	16.0	17.5	16.5	20.5	18.5	19.5	17.5	19.5	17.0
29	14.5	10.5	19.0	16.5	18.0	15.0	20.0	18.0	19.5	17.5	19.5	17.0
30	16.0	12.5	20.0	16.5	18.5	15.5	19.5	17.5	19.5	18.0	19.5	17.0
31	--	--	20.0	17.0	--	--	19.5	17.5	19.0	17.5	--	--
AVE	13.5	11.1	18.5	15.6	18.9	16.6	20.3	18.0	19.6	17.5	20.2	17.8

PERIODIC DETERMINATIONS OF TURBIDITY, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE OF COLLECTION	TIME (24-HOUR)	WATER TEMPERATURE (DEG C)	DISCHARGE (CFS)	TURBIDITY (MG/L SILICA) TOTAL	RESIDUAL 1/
Nov. 7, 1969....	1300	13	293	10	1
Nov. 14.....	1300	13	294	10	1
Nov. 21.....	0900	9	296	8	1
Nov. 28.....	0900	8	68	39	1
Dec. 5.....	1000	7	53	38	1
Dec. 12.....	1000	8	299	220	16
Dec. 19.....	0900	10	296	205	32
Dec. 26.....	0900	10	296	200	30
Jan. 2, 1970....	1000	7	294	150	20
Jan. 9.....	1000	8	296	260	45
Jan. 16.....	0900	8	296	260	56
Jan. 23.....	0900	11	284	225	48
Jan. 30.....	1000	9	299	228	42
Feb. 6.....	0900	9	300	230	44
Feb. 13.....	0900	9	290	238	53

1/ Turbidity measured after a 7-day settling period.

11472150 EEL RIVER NEAR DOS RIOS, CALIF.

LOCATION.--Lat 39°37'30", long 123°20'25", in SW¼SW¼ 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: October 1958 to September 1970.
Water temperatures: October 1966 to September 1970.
Sediment records: October 1966 to September 1970.
Turbidity: Water years 1967-68 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Minimum, 1.5°C Jan. 6.
Sediment concentrations: Maximum daily, 2,750 mg/l Jan. 14; minimum, 0 mg/l on several days.
Sediment loads: Maximum daily, 351,000 tons Jan. 24; minimum daily, 0 tons on several days.
EXTREMES, 1966-70.--Water temperatures (1966-67, 1968-70): 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 loads: 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 and reviewed by Geological Survey. 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 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
08...	0850	5.1	15.0	9.7	--	--	8.9	--	124	0	--	5.7
NOV.												
05...	0810	99	13.3	10.2	--	--	9.9	--	122	0	--	9.4
DEC.												
03...	0950	16	5.0	12.4	--	--	8.9	--	132	0	--	9.4
JAN.												
07...	--	236	3.3	13.4	--	--	4.6	--	79	0	--	2.1
FEB.												
04...	1130	1880	8.9	12.3	--	--	3.8	--	65	0	--	1.8
MAR.												
11...	0850	1570	8.9	12.1	--	--	4.2	--	66	0	--	1.8
APR.												
08...	1505	122	15.5	10.8	--	--	5.6	--	101	0	--	2.3
MAY												
13...	0800	65	13.5	11.3	27	8.4	9.2	1.1	115	0	18	5.4
JUNE												
10...	0800	23	17.8	9.7	--	--	8.5	--	116	0	--	3.1
JULY												
08...	0720	9.6	23.3	7.6	--	--	10	--	107	0	--	3.9
AUG.												
12...	0730	4.0	23.0	6.6	--	--	11	--	105	0	--	8.6
SEPT.												
16...	0840	2.9	16.0	9.6	--	--	12	--	118	0	--	8.6

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 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 (MG/L)
OCT.												
08...	.1	420	--	--	115	13	102	14	.4	267	8.2	0
NOV.												
05...	.2	540	--	--	122	22	100	15	.4	278	8.1	10
DEC.												
03...	.1	740	--	--	127	19	108	13	.3	288	8.2	1
JAN.												
07...	--	200	--	--	72	7	65	12	.2	160	7.4	91
FEB.												
04...	.2	130	--	--	54	1	53	13	.2	120	7.5	150
MAR.												
11...	.3	120	--	--	55	1	54	14	.2	124	7.8	90
APR.												
08...	.0	190	--	--	102	19	83	11	.2	202	8.2	3
MAY												
13...	.1	300	127	22.3	102	8	94	13	.3	228	8.3	2
JUNE												
10...	.1	330	--	--	101	6	95	15	.4	231	8.3	2
JULY												
08...	.1	370	--	--	98	10	88	18	.4	237	8.1	0
AUG.												
12...	.1	640	--	--	102	16	86	--	--	248	7.9	1
SEP.												
16...	.1	610	--	--	115	18	97	19	.5	274	8.3	1

11472150 EEL RIVER NEAR DOS RIOS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	--	7.0	--	8.0	8.5	11.5	13.5	26.5	24.0	--	--
2	--	--	--	4.5	8.0	9.0	14.0	--	--	--	--	--
3	17.0	16.0	8.0	4.0	9.0	9.0	17.0	--	22.0	27.0	24.0	--
4	--	--	--	--	9.0	7.0	16.5	--	--	--	--	--
5	--	14.5	8.5	3.5	9.5	7.0	17.5	21.0	26.5	--	25.0	--
6	18.0	13.0	--	1.5	10.0	10.5	10.5	15.5	--	26.0	--	--
7	--	13.5	9.0	4.5	10.0	10.5	13.0	--	--	--	21.0	25.5
8	17.0	13.0	--	6.5	8.5	11.0	--	16.5	21.0	25.0	--	--
9	--	10.0	10.0	7.5	9.5	7.0	14.0	--	--	--	--	24.5
10	21.0	14.5	9.5	7.5	10.5	9.0	--	--	20.0	25.0	26.0	--
11	--	14.0	10.0	7.5	10.5	10.0	11.5	15.0	--	--	--	20.0
12	--	--	11.0	8.5	9.5	10.5	--	--	20.5	--	25.5	--
13	14.5	15.0	10.0	9.0	9.0	11.5	13.0	15.5	--	21.5	--	--
14	--	--	12.0	10.0	8.5	12.0	13.0	--	--	--	24.5	21.0
15	14.0	13.5	11.5	9.0	8.5	13.5	14.5	19.5	21.0	28.5	--	--
16	--	10.5	10.0	11.5	10.0	12.0	--	--	--	--	--	21.0
17	13.5	11.0	10.5	10.0	8.5	13.0	17.0	--	23.5	27.0	23.0	--
18	16.5	10.0	11.0	10.0	7.5	11.0	--	24.5	--	--	--	20.0
19	15.5	6.0	12.0	10.0	10.0	9.0	13.5	--	26.5	--	24.0	--
20	--	--	12.0	10.5	7.0	11.5	10.0	19.0	--	27.0	--	--
21	12.0	7.0	12.0	11.0	9.0	11.0	--	--	--	--	22.0	18.0
22	16.0	9.0	14.5	11.5	8.0	13.0	11.5	21.0	25.0	25.0	--	--
23	--	--	10.0	11.5	9.0	13.5	--	--	--	--	--	18.5
24	16.0	10.5	10.0	10.5	10.0	14.5	17.0	--	26.5	26.5	20.5	--
25	--	--	--	10.0	9.0	15.0	--	24.0	--	--	--	19.0
26	--	8.5	9.0	10.0	11.5	12.0	14.5	--	26.0	--	25.5	--
27	16.0	--	10.0	10.0	9.0	14.5	11.5	21.0	--	30.0	--	--
28	--	5.5	--	9.0	10.0	13.0	--	--	--	--	23.0	18.0
29	15.5	--	4.5	8.0	--	14.5	13.0	22.0	24.0	28.0	--	--
30	--	--	6.5	9.5	--	13.5	--	--	--	--	--	17.0
31	16.5	--	5.5	8.5	--	13.5	--	--	--	23.0	22.0	--
AVE	--	--	9.8	8.4	9.2	11.3	--	--	--	--	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.4	1	.01	8.2	2	.04	16	1	.04
2	5.1	1	.01	11	1	.03	16	1	.04
3	4.9	1	.01	11	1	.03	16	1	.04
4	4.9	1	.01	11	1	.03	16	1	.04
5	4.9	1	.01	72	11	2.1	16	0	0
6	4.9	1	.01	74	10	2.0	16	0	0
7	4.9	1	.01	42	8	.91	16	1	.04
8	5.4	1	.01	35	6	.57	18	1	.05
9	5.6	1	.02	35	4	.38	21	1	.06
10	5.9	1	.02	33	3	.27	35	6	.57
11	5.9	1	.02	29	4	.31	167	41	21
12	5.9	1	.02	24	4	.26	6130	1260	23100
13	5.9	1	.02	21	3	.17	2880	360	2800
14	5.9	1	.02	21	3	.17	2000	280	1510
15	17	1	.05	20	3	.16	1110	60	180
16	48	2	.26	19	3	.15	680	18	33
17	46	4	.50	18	1	.05	625	103	234
18	28	5	.38	17	5	.23	888	165	396
19	21	5	.28	17	2	.09	6900	1440	26800
20	16	4	.17	17	1	.05	4950	750	10000
21	12	3	.10	17	1	.05	10200	2030	55900
22	11	2	.06	17	0	0	4700	260	3300
23	10	2	.05	17	0	0	6970	451	8690
24	11	2	.06	17	0	0	6720	275	4990
25	9.6	2	.05	17	0	0	5200	225	3160
26	8.9	2	.05	17	1	.05	3500	195	1840
27	8.5	2	.05	17	1	.05	2350	111	704
28	8.5	3	.07	17	1	.05	1660	83	372
29	8.5	3	.07	17	1	.05	1260	65	221
30	8.5	2	.05	17	1	.05	972	58	152
31	8.5	2	.05	--	--	--	785	45	95
TOTAL	356.5	--	2.50	705.2	--	8.30	70833	--	144498.88

11472150 EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	640	39	67	2910	235	1850	1210	71	232
2	531	33	47	2460	170	1130	1150	54	168
3	437	28	33	2140	145	838	954	48	124
4	381	22	23	1880	105	533	1330	93	370
5	314	16	14	1680	100	454	1650	75	334
6	259	13	9.1	1470	84	333	1240	55	184
7	236	12	7.6	1330	68	244	1350	72	285
8	245	18	12	1210	55	180	2090	133	751
9	1500	290	1170	1090	60	177	1890	90	459
10	8100	710	15500	1010	65	177	1870	80	404
11	4850	220	2880	912	55	135	1570	58	246
12	5400	430	6270	1400	208	964	1400	49	185
13	8000	650	14000	3660	515	5630	1220	36	119
14	14000	2750	104000	3640	280	2750	1190	37	119
15	8600	1050	24400	2430	145	951	1080	32	93
16	23000	1670	104000	4250	467	7120	966	28	73
17	16000	980	42300	6130	582	9630	864	22	51
18	8050	650	14100	4200	305	3460	785	20	42
19	6100	515	8480	3090	270	2250	685	17	31
20	9130	815	24100	2420	115	751	620	18	30
21	26800	2050	145000	1980	85	454	558	17	26
22	22800	760	46800	1680	65	295	499	19	26
23	39300	2560	334000	1440	52	202	454	20	25
24	45000	2710	351000	1280	48	166	413	16	18
25	17500	1450	68500	1120	44	133	291	13	10
26	12400	1440	60500	1010	40	109	252	8	5.4
27	22200	1840	117000	936	38	96	252	5	3.4
28	10500	910	25800	954	40	103	219	5	3.0
29	6380	590	10200	--	--	--	203	4	2.2
30	4490	410	4970	--	--	--	213	4	2.3
31	3440	305	2830	--	--	--	197	4	2.1
TOTAL	326583	--	1528012.7	59712	--	41115	28665	--	4423.4

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	159	4	1.7	70	1	.19	27	4	.29
2	159	5	2.1	68	1	.18	26	3	.21
3	150	3	1.2	73	1	.20	25	3	.20
4	139	2	.75	65	1	.18	22	2	.12
5	133	3	1.1	58	1	.16	20	1	.05
6	127	3	1.0	56	1	.15	19	1	.05
7	127	3	1.0	56	1	.15	20	1	.05
8	124	3	1.0	58	1	.16	19	1	.05
9	119	3	.96	58	1	.16	21	1	.06
10	114	5	1.5	58	1	.16	23	1	.06
11	147	7	2.8	58	1	.16	25	1	.07
12	116	5	1.6	68	1	.18	23	1	.06
13	108	3	.87	65	1	.18	23	1	.06
14	108	2	.58	61	1	.16	25	1	.07
15	108	1	.29	51	2	.28	23	0	0
16	105	1	.28	47	2	.25	22	0	0
17	105	1	.28	45	2	.24	22	0	0
18	100	2	.54	45	3	.36	23	1	.06
19	98	2	.53	43	2	.23	22	1	.06
20	98	3	.79	43	1	.12	21	1	.06
21	95	3	.77	43	1	.12	19	1	.05
22	100	3	.81	43	0	0	15	1	.04
23	100	2	.54	41	0	0	14	1	.04
24	93	2	.50	39	0	0	10	1	.03
25	88	4	.95	39	0	0	11	1	.03
26	85	7	1.6	37	1	.10	12	1	.03
27	85	3	.69	37	1	.10	12	1	.03
28	85	3	.69	35	1	.09	12	3	.10
29	85	2	.46	33	1	.09	12	4	.13
30	75	2	.41	31	1	.08	12	3	.10
31	--	--	--	29	1	.08	--	--	--
TOTAL	3335	--	28.29	1553	--	4.51	580	--	2.16

11472150 EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	12	2	.06	5.0	2	.03	3.7	1	.01
2	12	2	.06	5.0	2	.03	3.4	1	.01
3	12	5	.16	5.0	2	.03	3.4	1	.01
4	12	3	.10	4.3	2	.02	3.1	1	.01
5	6.5	2	.04	4.0	2	.02	2.9	1	.01
6	8.9	1	.02	3.7	1	.01	2.9	2	.02
7	9.6	1	.03	3.7	1	.01	2.9	2	.02
8	9.6	1	.03	3.4	1	.01	2.9	2	.02
9	9.6	1	.03	3.4	1	.01	2.9	2	.02
10	9.6	1	.03	3.4	2	.02	2.9	1	.01
11	9.6	1	.03	4.0	2	.02	2.9	1	.01
12	9.6	1	.03	4.0	2	.02	2.9	1	.01
13	8.9	1	.02	4.0	2	.02	2.9	1	.01
14	8.2	3	.07	3.4	3	.03	3.1	1	.01
15	8.2	5	.11	3.4	3	.03	2.9	1	.01
16	8.2	3	.07	3.4	2	.02	2.9	1	.01
17	8.2	2	.04	3.4	2	.02	2.9	1	.01
18	7.6	2	.04	3.4	2	.02	2.9	1	.01
19	7.0	2	.04	3.4	4	.04	3.4	1	.01
20	7.0	2	.04	3.4	3	.03	3.7	2	.02
21	7.0	2	.04	3.4	2	.02	3.7	2	.02
22	6.5	2	.04	3.4	2	.02	4.0	2	.02
23	6.5	2	.04	3.4	3	.03	4.0	1	.01
24	6.5	2	.04	3.7	5	.05	3.7	1	.01
25	6.5	2	.04	3.7	3	.03	3.7	1	.01
26	6.5	2	.04	3.7	2	.02	3.7	1	.01
27	6.5	2	.04	3.7	2	.02	3.7	1	.01
28	5.9	2	.03	3.4	3	.03	3.7	1	.01
29	5.4	2	.03	3.4	3	.03	3.4	2	.02
30	5.0	2	.03	3.7	2	.02	3.1	3	.03
31	5.0	2	.03	3.7	1	.01	--	--	--
TOTAL	251.6	--	1.45	115.9	--	.72	98.2	--	.40

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 492788.4
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1718098.31

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

						PARTICLE SIZE											
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED											
DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 12, 1969	1305	11.0	7440	2770	55600	29	37	49	62	76	85	94	100	--	--	--	VPWC
DEC 19.....	1455	12.0	7820	1750	36900	18	25	34	45	57	71	88	98	100	--	--	VBWC
DEC 21.....	1135	12.0	10000	2590	69900	22	30	41	52	64	76	89	97	100	--	--	VPWC
DEC 27.....	1530	10.0	2300	108	671	--	--	--	--	--	86	95	96	100	--	--	S
JAN 11, 1970	1130	8.0	4270	229	2640	--	--	--	--	--	84	96	97	99	100	--	S
JAN 13.....	1440	9.0	6690	504	9100	--	--	--	--	--	68	80	97	100	--	--	V
JAN 15.....	1125	9.0	12300	867	28800	24	33	44	52	61	70	81	94	99	100	--	VBWC
JAN 16.....	1055	11.5	26700	1970	142000	12	29	40	50	61	71	86	94	98	100	--	VPWC
JAN 17.....	1210	10.0	24500	1010	66800	21	30	44	54	64	73	84	95	99	100	--	VBWC
JAN 23.....	1045	11.5	36200	2130	208000	25	27	41	53	63	76	90	99	100	--	--	VPWC
JAN 23.....	1655	11.5	51100	3380	466000	22	29	39	51	62	74	89	98	100	--	--	VPWC
JAN 25.....	1110	10.0	17700	1480	70700	30	41	52	61	70	77	87	96	100	--	--	VBWC
FEB 18.....	1230	7.5	4200	343	3890	24	33	36	41	45	65	74	82	92	100	--	VBWC

11472200 OUTLET CREEK NEAR LONGVALE, CALIF.

LOCATION.--Lat 39°37'05", long 123°21'20", in NE¼ sec.1, T.20 N., R.14 W., Mendocino County, at gaging station, 0.2 mile downstream from Bloody Run Creek, 0.9 mile upstream from mouth, and 6.9 miles northeast of Longvale.
DRAINAGE AREA.--161 sq mi.
PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1966.
Water temperatures: October 1967 to September 1970 (discontinued).
Sediment records: Water year 1967 (partial-record station), March 1967 to September 1970 (discontinued).
Turbidity: Water years 1967-68 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Minimum, 3.0°C Jan. 5.
Sediment concentrations: Maximum daily, 1,480 mg/l Jan. 23; minimum daily, 0 mg/l on several days.
Sediment loads: Maximum daily, 65,300 tons Jan. 23; minimum daily, 0 tons on several days.
EXTREMES, 1967-70.--Water temperatures (1968-70): Minimum, 3.0°C Dec. 22, 1968, Jan. 5, 1970.
Sediment concentrations: Maximum daily, 1,480 mg/l Jan. 23, 1970; minimum daily, 0 mg/l on several days in 1970.
Sediment loads: Maximum daily, 65,300 tons Jan. 23, 1970; minimum daily, 0 tons on many days each year.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	--	6.5	--	9.0	8.5	12.0	13.5	26.5	24.5	--	--
2	--	--	--	3.5	9.0	9.0	14.5	--	--	--	--	--
3	19.0	14.5	6.5	3.5	9.5	9.0	17.0	--	22.0	29.5	24.0	--
4	--	--	--	--	9.0	7.0	16.5	19.5	--	--	--	--
5	--	14.0	5.5	3.0	10.0	7.0	17.0	--	26.5	--	25.5	--
6	18.5	13.5	--	3.5	10.5	11.5	15.0	16.0	--	27.0	--	--
7	--	13.0	--	5.5	10.5	11.5	14.0	--	--	--	21.5	25.0
8	17.0	13.0	8.5	6.5	10.0	11.0	--	16.0	20.5	24.5	--	--
9	--	10.5	8.5	8.5	10.0	10.0	14.0	--	--	--	--	25.0
10	20.5	13.0	8.5	8.5	10.5	9.0	--	--	20.0	24.5	22.0	--
11	--	11.0	10.0	9.0	11.5	11.0	12.0	14.5	--	--	--	21.0
12	--	--	12.0	9.0	10.5	11.5	--	--	21.0	--	24.0	--
13	14.5	15.0	13.0	10.5	9.0	13.0	13.0	14.5	--	24.0	--	--
14	--	--	12.0	10.5	9.5	11.5	12.0	--	--	--	26.5	21.5
15	14.0	13.5	11.0	10.5	8.5	13.0	13.0	20.0	21.5	27.0	--	--
16	--	11.5	10.0	12.0	10.0	13.0	--	--	--	--	--	22.0
17	13.0	10.0	14.0	11.0	9.0	11.0	15.0	--	24.0	27.0	22.0	--
18	16.0	10.0	14.0	12.0	10.0	13.0	--	24.5	--	--	--	22.0
19	14.5	9.0	12.0	11.0	11.5	10.5	15.5	--	26.5	--	23.0	--
20	--	--	13.0	10.5	9.0	13.0	11.5	19.5	--	28.0	--	--
21	11.0	5.5	11.5	12.0	9.0	11.5	--	--	--	--	22.0	19.5
22	15.5	8.5	10.0	13.0	10.0	14.0	11.5	20.5	25.5	25.5	--	--
23	--	--	10.0	12.0	10.5	14.5	--	--	--	--	--	19.0
24	15.0	10.0	10.0	10.5	10.0	15.5	15.5	--	26.0	26.0	20.0	--
25	--	--	--	10.5	10.0	14.0	--	23.5	--	--	--	21.5
26	--	7.0	8.5	10.5	13.0	14.0	14.0	--	25.5	--	25.0	--
27	15.5	--	6.0	10.0	10.5	15.0	13.0	21.0	--	30.5	--	--
28	--	4.5	--	10.0	11.0	13.5	14.5	--	--	--	24.0	18.5
29	15.5	--	4.5	8.5	--	15.5	13.5	21.5	24.0	28.0	--	--
30	--	--	5.5	9.5	--	13.5	--	--	--	--	21.0	16.5
31	16.0	--	5.0	9.0	--	13.5	--	--	--	22.0	--	--
AVE	--	--	9.4	9.1	10.0	11.9	--	--	--	--	--	--

11472200 OUTLET CREEK NEAR LONGVALE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.2	2	.01	3.7	2	.02	6.1	1	.02
2	1.2	2	.01	3.6	2	.02	6.1	1	.02
3	1.2	2	.01	3.7	2	.02	5.9	1	.02
4	1.2	2	.01	4.9	3	.04	5.6	1	.02
5	1.3	2	.01	92	20	6.0	5.6	1	.02
6	1.3	2	.01	51	16	2.2	5.9	1	.02
7	1.4	2	.01	31	4	.33	5.9	1	.02
8	1.9	2	.01	27	3	.22	8.6	1	.02
9	2.0	2	.01	26	3	.21	12	1	.03
10	2.5	3	.02	21	1	.06	33	4	.36
11	2.3	3	.02	16	2	.09	209	65	47
12	2.3	2	.01	14	2	.08	5030	370	5350
13	2.2	1	.01	12	4	.13	2370	255	1800
14	2.5	1	.01	10	1	.03	1970	146	848
15	12	14	.45	9.3	1	.03	853	55	127
16	28	12	.91	8.6	1	.02	459	27	33
17	24	2	.13	7.8	1	.02	439	33	57
18	19	2	.10	7.1	1	.02	699	35	66
19	14	4	.15	6.8	1	.02	3840	383	5210
20	10	4	.11	6.4	1	.02	2650	266	1970
21	7.8	7	.15	6.4	1	.02	5940	580	10800
22	6.6	2	.04	6.1	1	.02	2320	195	1220
23	5.6	2	.03	6.4	1	.02	4180	289	3440
24	4.9	2	.03	6.1	1	.02	2330	105	661
25	4.6	2	.02	5.9	1	.02	1830	38	188
26	4.3	2	.02	6.1	1	.02	1310	22	78
27	4.0	3	.03	6.1	1	.02	814	15	33
28	4.3	2	.02	6.1	1	.02	550	10	15
29	4.0	1	.01	6.1	1	.02	403	6	6.5
30	3.5	1	.01	6.1	1	.02	301	6	4.9
31	3.5	2	.02	--	--	--	236	5	3.2
TOTAL	184.6	--	2.39	423.3	--	9.78	38827.7	--	31958.15

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	199	4	2.1	647	13	23	356	13	12
2	167	4	1.8	511	11	15	234	8	5.1
3	142	4	1.5	425	10	11	193	9	4.7
4	127	3	1.0	372	9	9.0	765	40	101
5	112	3	.91	321	8	6.9	1080	28	82
6	100	4	1.1	274	6	4.4	567	10	15
7	106	4	1.1	244	4	2.6	848	23	81
8	172	6	4.2	220	4	2.4	1170	31	98
9	1790	141	951	200	4	2.2	800	16	35
10	3130	205	1960	182	3	1.5	776	18	38
11	1610	60	261	167	3	1.4	586	6	9.5
12	1760	81	550	553	32	80	483	6	7.8
13	2830	136	1100	1970	183	1170	395	4	4.3
14	6330	521	9310	1650	110	490	495	7	9.4
15	3770	334	3530	891	27	65	388	6	6.3
16	9460	698	18200	2870	228	2830	310	4	3.3
17	7080	385	7360	3040	208	1710	258	4	2.8
18	3400	180	1650	2030	50	274	226	3	1.8
19	2830	162	1270	1240	25	84	197	3	1.6
20	3730	183	2900	755	10	20	178	3	1.4
21	10600	726	21100	574	8	12	163	2	.88
22	7740	411	8720	457	6	7.4	153	4	1.7
23	14400	1480	65300	383	8	8.3	143	3	1.2
24	12000	1300	42100	329	5	4.4	133	3	1.1
25	4710	400	5090	273	5	3.7	122	2	.66
26	4770	429	11000	239	5	3.2	112	3	.91
27	7470	707	16800	216	5	2.9	104	2	.56
28	3110	220	1850	224	5	3.0	96	2	.52
29	1840	74	368	--	--	--	90	2	.49
30	1120	34	103	--	--	--	85	2	.46
31	760	17	35	--	--	--	81	2	.44
TOTAL	117365	--	221521.71	21257	--	6847.3	11587	--	528.92

11472200 OUTLET CREEK NEAR LONGVALE, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	77	2	.42	37	2	.20	11	1	.03
2	74	2	.40	33	2	.18	11	1	.03
3	71	3	.58	30	2	.16	9.6	1	.03
4	66	3	.53	28	2	.15	9.3	1	.03
5	63	1	.17	28	2	.15	8.6	2	.05
6	62	2	.33	28	2	.15	8.2	2	.04
7	57	2	.31	28	2	.15	7.8	1	.02
8	54	2	.29	27	2	.15	8.2	1	.02
9	54	2	.29	27	2	.15	9.6	1	.03
10	53	2	.29	30	2	.16	10	1	.03
11	51	2	.28	34	2	.18	11	1	.03
12	50	2	.27	39	2	.21	10	1	.03
13	50	2	.27	37	2	.20	9.3	1	.03
14	53	2	.29	31	2	.17	9.6	2	.05
15	51	2	.28	28	2	.15	8.6	2	.05
16	50	2	.27	25	2	.14	7.8	1	.02
17	50	2	.27	23	2	.12	7.8	1	.02
18	50	2	.27	21	2	.11	7.8	1	.02
19	53	2	.29	20	1	.05	7.5	2	.04
20	54	2	.29	19	1	.05	6.8	3	.06
21	51	2	.28	18	1	.05	6.4	3	.05
22	54	2	.29	17	1	.05	5.9	5	.08
23	50	2	.27	17	1	.05	5.6	3	.05
24	48	2	.26	16	0	0	5.0	1	.01
25	46	2	.25	15	0	0	5.0	1	.01
26	45	2	.24	14	0	0	5.0	2	.03
27	44	2	.24	14	0	0	4.8	2	.03
28	43	1	.12	13	0	0	5.0	3	.04
29	42	1	.11	13	0	0	5.0	3	.04
30	39	1	.11	12	0	0	4.5	2	.02
31	--	--	--	12	1	.03	--	--	--
TOTAL	1605	--	8.56	734	--	3.16	231.7	--	1.02

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.5	1	.01	1.4	3	.01	1.3	3	.01
2	4.5	3	.04	1.4	3	.01	1.2	3	.01
3	4.5	5	.06	1.4	3	.01	1.2	3	.01
4	4.2	5	.06	1.3	3	.01	1.2	3	.01
5	4.2	5	.06	1.3	3	.01	1.2	3	.01
6	3.9	5	.05	1.3	3	.01	1.2	3	.01
7	3.9	4	.04	1.3	3	.01	1.2	3	.01
8	3.5	4	.04	1.2	3	.01	1.4	2	.01
9	3.5	4	.04	1.2	6	.02	1.6	2	.01
10	3.4	5	.05	1.1	9	.03	1.3	5	.02
11	3.4	4	.04	1.1	5	.01	1.1	5	.01
12	3.4	3	.03	1.0	2	.01	1.1	5	.01
13	3.2	2	.02	.93	3	.01	.99	5	.01
14	3.1	2	.02	.78	3	.01	.86	5	.01
15	3.0	3	.02	.78	3	.01	.84	3	.01
16	2.8	3	.02	.78	3	.01	.82	2	0
17	2.6	3	.02	.78	3	.01	1.1	3	.01
18	2.4	3	.02	.78	3	.01	.95	3	.01
19	2.2	3	.02	.78	3	.01	.95	3	.01
20	2.1	3	.02	.70	2	0	.95	2	.01
21	2.0	3	.02	.78	2	0	1.1	2	.01
22	2.0	3	.02	.86	2	0	1.2	2	.01
23	1.8	3	.01	.86	2	0	1.2	2	.01
24	1.8	3	.01	.91	3	.01	1.1	2	.01
25	1.8	3	.01	1.0	3	.01	.95	2	.01
26	1.7	4	.02	1.1	3	.01	.93	2	.01
27	1.7	4	.02	.95	2	.01	.86	2	0
28	1.7	4	.02	.95	2	.01	.86	2	0
29	1.7	4	.02	1.1	2	.01	.86	3	.01
30	1.7	4	.02	1.3	2	.01	.78	3	.01
31	1.6	4	.02	1.3	3	.01	--	--	--
TOTAL	87.8	--	.87	32.42	--	.30	32.30	--	.28

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 192367.82
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 260882.44

11472200 OUTLET CREEK NEAR LONGVALE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
DEC 15, 1969	1510	11.0	745	46	93	--	--	--	--	--	99	100	--	--	--	--	S
DEC 19.....	1420	12.0	5670	508	7780	32	40	51	62	69	80	87	96	100	--	--	VBWC
DEC 20.....	1215	13.0	2680	247	1790	--	--	--	--	--	71	80	87	92	97	100	S
DEC 21.....	1220	12.0	6310	620	10600	24	32	40	49	57	64	76	86	99	100	--	VBWC
DEC 22.....	1545	10.0	2040	165	909	68	83	86	90	92	94	97	99	100	--	--	SBWC
JAN 9, 1970	1410	8.5	1400	135	510	--	--	--	--	--	96	98	99	100	--	--	S
JAN 14.....	1140	11.0	7170	554	10700	25	33	43	52	61	69	79	90	99	100	--	VBWC
JAN 16.....	1135	12.0	10100	686	18700	22	29	39	49	59	68	81	92	99	100	--	VBWC
JAN 23.....	1400	12.0	16500	1550	69100	25	32	41	51	61	71	84	94	99	100	--	VPWC
JAN 23.....	1725	12.0	19200	2480	129000	21	27	36	46	56	68	83	95	99	100	--	VPWC
JAN 24.....	1120	11.0	12300	808	26800	26	36	44	53	61	68	79	91	98	100	--	VBWC
JAN 25.....	1145	11.0	4650	372	4670	34	47	55	62	69	73	79	88	95	100	--	SBWC

11472500 EEL RIVER ABOVE DOS RIOS, CALIF.

LOCATION.--Lat 39°41'20", long 123°21'30", in SW¼ 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.
DRAINAGE AREA.--705 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1957 to September 1959, October 1960 to September 1965, May 1966 to September 1970.
Sediment records: Water year 1957 (partial-record station), October 1957 to September 1965.
EXTREMES, 1962-67.--Water temperatures: Maximum (1962-66), 29.0°C June 15, 1966; minimum, 3.0°C Dec. 28, 1966.
REMARKS.--Recorder malfunction Oct. 17 to Nov. 1, Dec. 16 to Sept. 30. Temperature table omitted for period Apr. 1 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	20.5	17.0	--	--	6.5	4.5	--	--	--	--	--	--
2	18.0	15.0	15.0	12.0	6.0	4.5	--	--	--	--	--	--
3	17.5	14.5	15.0	12.5	5.5	4.5	--	--	--	--	--	--
4	17.0	13.5	15.0	12.5	6.0	5.0	--	--	--	--	--	--
5	16.5	13.5	14.5	13.0	6.5	4.5	--	--	--	--	--	--
6	16.0	13.0	13.5	12.0	6.5	5.5	--	--	--	--	--	--
7	14.5	13.0	13.5	12.0	7.5	6.5	--	--	--	--	--	--
8	15.5	13.5	12.5	11.5	7.5	6.5	--	--	--	--	--	--
9	15.5	12.5	11.5	11.0	8.0	7.0	--	--	--	--	--	--
10	17.5	14.0	12.0	9.5	8.0	7.5	--	--	--	--	--	--
11	16.0	13.0	11.0	9.5	9.5	8.0	--	--	--	--	--	--
12	16.0	13.0	11.5	9.5	11.0	9.5	--	--	--	--	--	--
13	14.0	12.0	12.5	11.5	11.5	11.0	--	--	--	--	--	--
14	12.5	12.0	13.0	11.5	11.0	10.5	--	--	--	--	--	--
15	12.5	11.0	13.0	12.0	10.5	9.5	--	--	--	--	--	--
16	13.5	12.0	13.0	11.0	--	--	--	--	--	--	--	--
17	--	--	11.0	7.5	--	--	--	--	--	--	--	--
18	--	--	8.5	7.0	--	--	--	--	--	--	--	--
19	--	--	8.5	7.0	--	--	--	--	--	--	--	--
20	--	--	8.0	6.5	--	--	--	--	--	--	--	--
21	--	--	7.5	6.0	--	--	--	--	--	--	--	--
22	--	--	6.5	6.0	--	--	--	--	--	--	--	--
23	--	--	8.5	6.5	--	--	--	--	--	--	--	--
24	--	--	8.5	7.0	--	--	--	--	--	--	--	--
25	--	--	8.0	6.5	--	--	--	--	--	--	--	--
26	--	--	8.0	6.5	--	--	--	--	--	--	--	--
27	--	--	8.0	6.5	--	--	--	--	--	--	--	--
28	--	--	7.5	6.5	--	--	--	--	--	--	--	--
29	--	--	7.5	6.0	--	--	--	--	--	--	--	--
30	--	--	6.5	6.5	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	10.7	9.1	--	--	--	--	--	--	--	--

11472800 MIDDLE FORK EEL RIVER ABOVE BLACK BUTTE RIVER, NEAR COVELO, CALIF.

LOCATION.--Lat 39°49'45", long 123°04'11", in SE¼SW¼ sec.22, T.23 N., R.11 W., Mendocino County, at gaging station 1.2 miles upstream from Black Butte River, and 9.8 miles northeast of Covelo.
DRAINAGE AREA.--204 sq mi.
PERIOD OF RECORD.--Water temperatures: May to October 1966, October 1967 to September 1970 (discontinued).
Sediment records: October 1967 to September 1970 (discontinued).
Turbidity: Water year 1968 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Minimum, 3.0°C on several days during January.
Sediment concentrations: Maximum daily, 4,470 mg/l Jan. 23; minimum daily, 0 mg/l on several days.
Sediment loads: Maximum daily, 437,000 tons Jan. 23; minimum daily, 0 tons on several days.
EXTREMES, 1966, 1967-70.--Water temperatures: Maximum (1966, 1967-68), 29.0°C July 5, 1968; minimum, 1.0°C on several days in 1968-69.
Sediment concentrations (1967-70): Maximum daily, 7,150 mg/l Jan. 14, 1968; minimum daily, 0 mg/l on several days in 1969.
Sediment loads (1967-70): Maximum daily, 437,000 tons Jan. 23, 1970; minimum daily, 0 tons on several days in 1969.
REMARKS.--No temperature record Oct. 1 to Dec. 11, Dec. 15-18, Dec. 21 to Jan. 8, 22-24, Jan. 29 to Sept. 30; probe inoperative. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	--	--	--	--	--	--	--	11.0	--	--	5.0	--	--	--	--	--	5.5	--
2	--	--	--	--	--	--	--	--	--	--	--	--	--	6.5	--	--	5.5	--
3	--	--	--	--	--	--	--	--	--	--	--	--	--	6.0	--	--	6.5	--
4	--	--	--	--	--	--	--	--	--	--	3.0	--	--	6.5	--	--	5.5	--
5	--	14.5	--	--	10.5	--	--	--	--	--	3.5	--	--	6.5	--	--	5.0	--
6	--	--	--	--	--	--	--	--	--	--	3.0	--	--	--	--	--	8.0	--
7	--	--	--	--	10.5	--	--	5.5	--	--	--	--	--	--	--	--	6.5	--
8	--	--	--	--	10.0	--	--	8.0	--	--	--	--	--	8.5	--	--	6.5	--
9	--	--	--	--	--	--	--	6.5	--	8.0	--	6.5	--	8.5	--	--	6.0	--
10	--	16.0	--	--	8.0	--	--	6.5	--	7.0	--	6.5	--	--	--	--	6.5	--
11	--	--	--	--	--	--	--	8.0	--	8.0	--	7.0	--	8.0	--	--	7.0	--
12	--	16.5	--	--	--	--	7.5	--	7.0	7.5	--	7.0	--	7.0	--	--	6.5	--
13	--	--	--	--	--	--	8.0	--	7.5	8.0	--	7.5	--	7.0	--	--	6.5	--
14	--	14.0	--	--	--	--	8.0	--	7.0	8.0	--	8.0	--	6.5	--	--	9.5	--
15	--	13.0	--	--	--	--	--	7.0	--	8.0	--	8.0	--	6.0	--	--	9.0	--
16	--	13.0	--	--	11.0	--	--	6.5	--	8.5	--	8.0	--	6.5	--	--	6.5	--
17	--	13.5	--	--	--	--	--	8.0	--	8.5	--	8.5	--	6.5	--	--	6.5	--
18	--	10.0	--	--	--	--	--	7.0	--	9.0	--	8.5	--	6.0	--	--	6.0	--
19	--	12.0	--	--	8.0	--	9.5	--	9.0	9.5	--	9.0	--	5.5	--	--	7.0	--
20	--	--	--	--	--	--	10.5	--	9.0	9.0	--	8.0	--	--	--	--	--	--
21	--	11.0	--	--	--	--	--	9.5	--	10.0	--	9.0	--	7.0	--	--	5.5	--
22	--	--	--	--	--	--	--	6.5	--	--	10.0	--	--	--	--	--	10.0	--
23	--	--	--	--	8.0	--	--	8.0	--	--	9.0	--	--	7.0	--	--	--	--
24	--	15.0	--	--	--	--	--	8.5	--	--	7.0	--	--	8.0	--	--	8.5	--
25	--	--	--	--	--	--	--	7.0	--	10.5	--	9.0	--	8.0	--	--	11.0	--
26	--	14.0	--	--	--	--	--	6.0	--	9.5	--	9.0	--	--	--	--	--	--
27	--	--	--	--	6.5	--	--	4.5	--	10.0	--	9.5	--	8.5	--	--	--	--
28	--	--	--	--	--	--	--	4.5	--	10.0	--	8.0	--	7.0	--	--	--	--
29	--	--	--	--	--	--	--	4.5	--	--	8.0	--	--	--	--	--	10.5	--
30	--	--	--	--	7.0	--	--	--	--	--	6.0	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	4.0	--	--	6.0	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11472800 MIDDLE FORK EEL RIVER ABOVE BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR DAILY	APR MIN	MAY MAX	MAY DAILY	MAY MIN	JUN MAX	JUN DAILY	JUN MIN	JUL MAX	JUL DAILY	JUL MIN	AUG MAX	AUG DAILY	AUG MIN	SEP MAX	SEP DAILY	SEP MIN
1	--	--	--	--	15.0	--	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	--	9.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--	--	23.5	--	--	--	--	--	19.5	--
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8	--	11.5	--	--	12.0	--	--	18.5	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25.0	--
11	--	10.5	--	--	9.5	--	--	--	--	--	--	--	--	--	--	--	25.0	--
12	--	--	--	--	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	5.0	--	--	--	--	--	--	--	--	23.0	--	--	--	--
14	--	8.0	--	--	--	--	--	19.5	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	12.0	--	--	19.0	--	--	--	--	--	--	--	--	--	--
17	--	9.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--	--	25.5	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	--	9.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	18.0	--	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	25.0	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	--	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
27	--	6.5	--	--	--	--	--	23.5	--	--	26.0	--	--	--	--	--	--	--
28	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--	--	--	--	--	21.5	--	--	--	--
30	--	--	--	--	17.0	--	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	24.5	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9.8	1	.03	16	1	.04	25	4	.27
2	9.8	1	.03	15	1	.04	25	3	.20
3	9.5	0	0	15	1	.04	24	3	.19
4	9.5	0	0	15	1	.04	24	2	.13
5	9.5	0	0	545	74	128	25	2	.14
6	9.5	0	0	208	7	4.2	24	1	.06
7	9.5	0	0	116	2	.63	24	1	.06
8	9.8	0	0	101	2	.55	28	1	.08
9	10	0	0	89	2	.48	38	1	.10
10	10	0	0	73	2	.39	52	3	.42
11	10	0	0	62	2	.33	182	36	23
12	10	1	.03	58	2	.31	7850	1850	43200
13	10	1	.03	52	2	.28	3400	950	9420
14	10	1	.03	47	1	.13	2920	246	2170
15	31	18	4.6	44	1	.12	1620	95	416
16	177	80	48	45	1	.12	810	31	68
17	172	53	31	44	1	.12	800	24	52
18	67	3	.54	40	1	.11	1100	84	249
19	44	1	.12	36	2	.19	4200	1240	14100
20	33	1	.09	36	2	.19	1700	410	1880
21	28	1	.08	34	2	.18	10800	3480	101000
22	25	1	.07	32	1	.09	1600	700	3020
23	23	2	.12	32	0	0	6300	1120	19100
24	21	2	.11	30	0	0	3700	600	5990
25	19	1	.05	30	0	0	2700	310	2260
26	18	3	.15	29	0	0	1650	172	766
27	18	3	.15	24	0	0	1080	94	274
28	17	2	.09	28	0	0	850	56	129
29	17	2	.09	27	0	0	650	35	61
30	16	2	.09	26	0	0	560	23	35
31	16	1	.04	--	--	--	495	18	24
TOTAL	878.9	--	85.54	1949	--	136.58	55256	--	204238.65

11472800 MIDDLE FORK EEL RIVER ABOVE BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	470	16	20	1290	200	697	1040	105	292
2	410	14	15	1040	167	469	760	42	86
3	375	10	10	895	107	259	670	23	42
4	360	7	6.8	832	102	229	600	26	42
5	320	5	4.3	766	67	139	610	22	36
6	300	5	4.1	718	55	107	600	24	39
7	310	5	4.2	660	49	87	1500	648	5180
8	460	96	119	625	44	74	1940	475	2930
9	1500	530	2150	595	26	42	1220	168	553
10	3300	445	3960	565	30	46	923	112	279
11	2300	145	900	540	48	70	846	66	151
12	2550	158	1090	600	65	105	766	45	93
13	3750	630	6380	694	123	230	718	32	62
14	12000	1700	55100	650	42	74	909	78	201
15	6050	600	9800	615	25	42	853	50	115
16	14000	2620	99000	1390	638	3820	754	34	69
17	6700	1780	32200	1520	442	1890	722	32	62
18	6000	790	12800	965	140	365	690	24	45
19	2500	690	4660	874	71	168	658	17	30
20	1750	520	2460	790	53	113	626	14	24
21	13200	1380	49200	754	41	83	594	12	19
22	8000	1180	25500	712	31	60	562	10	15
23	30400	4470	437000	665	26	47	530	10	14
24	12500	3540	137000	635	21	36	494	11	15
25	4780	1530	19700	615	16	27	510	8	11
26	3300	1130	10100	610	13	21	490	7	9.3
27	7970	2000	47700	615	11	18	485	6	7.9
28	5060	920	12600	712	52	117	445	5	6.0
29	3600	520	5050	--	--	--	435	5	5.9
30	2560	362	2500	--	--	--	395	5	5.3
31	1710	250	1150	--	--	--	375	4	4.1
TOTAL	158485	--	978183.4	21942	--	9435	22720	--	10443.5

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	342	4	3.7	180	4	1.9	86	4	.93
2	337	3	2.7	202	4	2.2	86	4	.93
3	323	2	1.7	202	5	2.7	72	4	.78
4	314	2	1.7	220	6	3.6	72	3	.58
5	296	2	1.6	242	7	4.6	61	3	.49
6	286	2	1.5	246	8	5.3	50	3	.41
7	268	2	1.4	228	9	5.5	50	3	.41
8	268	2	1.4	255	10	6.9	50	3	.41
9	268	2	1.4	268	10	7.2	61	3	.49
10	268	2	1.4	282	9	6.9	57	3	.46
11	268	2	1.4	273	9	6.6	50	3	.41
12	268	2	1.4	250	4	2.7	50	3	.41
13	250	2	1.4	268	4	2.9	50	3	.41
14	246	2	1.3	255	4	2.8	61	3	.49
15	228	2	1.2	268	4	2.9	50	3	.41
16	224	2	1.2	286	4	3.1	50	2	.27
17	224	2	1.2	291	4	3.1	34	2	.18
18	211	2	1.1	291	4	3.1	34	2	.18
19	237	2	1.3	268	4	2.9	34	2	.18
20	211	3	1.7	268	4	2.9	34	2	.18
21	193	4	2.1	237	4	2.6	34	2	.18
22	180	4	1.9	224	4	2.4	30	2	.16
23	180	3	1.5	211	4	2.3	28	2	.15
24	158	3	1.3	189	4	2.0	28	2	.15
25	158	2	.85	180	4	1.9	28	2	.15
26	158	2	.85	162	4	1.7	28	2	.15
27	158	3	1.3	158	4	1.7	22	2	.12
28	158	1	.43	136	4	1.5	28	2	.15
29	158	2	.85	125	4	1.4	34	2	.18
30	180	3	1.5	100	4	1.1	34	2	.18
31	--	--	--	100	4	1.1	--	--	--
TOTAL	7018	--	44.28	6865	--	99.5	1386	--	10.58

11472800 MIDDLE FORK EEL RIVER ABOVE BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	29	2	.16	9.2	2	.05	5.6	2	.03
2	22	2	.12	9.2	2	.05	5.3	2	.03
3	22	2	.12	9.2	2	.05	5.3	2	.03
4	19	2	.10	9.2	2	.05	4.9	2	.03
5	22	3	.18	9.2	2	.05	4.9	2	.03
6	22	3	.18	8.7	2	.05	4.2	2	.02
7	22	2	.12	8.1	2	.04	4.2	2	.02
8	22	2	.12	8.1	2	.04	4.6	3	.04
9	22	2	.12	8.1	2	.04	5.3	3	.04
10	22	2	.12	7.6	2	.04	5.3	3	.04
11	22	2	.12	7.6	2	.04	4.2	2	.02
12	21	2	.11	7.6	2	.04	3.9	2	.02
13	17	2	.09	7.6	2	.04	3.5	2	.02
14	17	2	.09	7.6	2	.04	3.5	2	.02
15	17	2	.09	7.0	2	.04	3.5	2	.02
16	17	2	.09	7.0	2	.04	3.5	2	.02
17	17	2	.09	7.0	2	.04	3.5	2	.02
18	17	2	.09	7.0	2	.04	3.5	2	.02
19	17	2	.09	7.0	2	.04	3.5	1	.01
20	17	2	.09	6.7	2	.04	3.5	1	.01
21	13	2	.07	6.7	2	.04	4.2	1	.01
22	9.8	2	.05	6.7	2	.04	4.9	1	.01
23	9.8	2	.05	6.7	2	.04	5.3	1	.01
24	9.8	2	.05	6.7	2	.04	5.3	1	.01
25	9.8	2	.05	6.7	2	.04	5.6	1	.02
26	13	2	.07	6.7	2	.04	5.6	1	.02
27	13	2	.07	6.3	2	.03	5.3	1	.01
28	9.8	2	.05	6.3	2	.03	5.3	1	.01
29	9.8	2	.05	6.0	2	.03	4.9	1	.01
30	9.8	2	.05	6.0	2	.03	4.9	1	.01
31	9.8	2	.05	6.0	2	.03	--	--	--
TOTAL	520.4	--	2.90	229.5	--	1.25	137.0	--	.61

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 277386.8
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1202681.79

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 12, 1969	0740	7.5	10300	2510	69800	17	25	31	44	55	66	79	93	99	100	--	VPWC
DEC 12.....	1600	7.5	9050	2000	48900	17	21	25	36	44	53	64	79	95	100	--	VPWC
DEC 16.....	1045	6.5	811	40	88	--	--	--	--	--	91	94	95	98	100	--	S
DEC 21.....	0755	9.5	D 10800	5770	168000	21	27	33	47	59	71	85	96	100	--	--	VPWC
DEC 21.....	1710	8.0	D 10800	2130	62100	25	28	43	56	69	79	91	99	100	--	--	VPWC
DEC 22.....	0800	6.5	D 1600	800	3460	23	33	46	59	70	81	90	99	100	--	--	VBWC
JAN 14, 1970	0945	8.0	D 12000	2540	82300	20	24	34	44	55	65	76	87	95	99	100	VPWC
JAN 16.....	0730	8.0	D 14000	3790	143000	19	25	33	44	53	62	77	91	98	100	--	VPWC
JAN 22.....	1410	9.0	7000	1940	36700	13	17	23	31	38	45	53	62	79	100	--	VPWC
JAN 23.....	1430	9.0	38100	6690	688000	22	29	38	48	60	71	85	96	100	--	--	VPWC
JAN 23.....	1650	9.0	41000	6810	754000	26	31	37	47	60	71	87	97	100	--	--	VPWC
JAN 24.....	0810	7.0	12500	4080	138000	26	31	42	53	65	77	90	98	100	--	--	VPWC
JAN 26.....	1645	9.0	3300	1640	14600	30	35	45	61	72	82	93	99	100	--	--	VPWC
FEB 17.....	1310	6.5	1450	531	2080	17	23	31	38	43	52	57	63	75	100	--	VBWC

D Daily mean discharge.

11472900 BLACK BUTTE RIVER NEAR COVELO, CALIF.

LOCATION.--Lat 39°49'15", long 123°04'50", in SE¼ 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 1970.
Sediment records: Water year 1966 (partial-record station), December 1966 to September 1970.
Turbidity: Water years 1966-68 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.5°C July 19, Aug. 12; minimum, 2.0°C Jan. 4.
Sediment concentrations: Maximum daily, 9,510 mg/l Jan. 24; minimum daily, 0 mg/l on several days.
Sediment loads: Maximum daily, 249,000 tons Jan. 24; minimum daily, 0 tons on several days.
EXTREMES, 1964-70.--Water temperatures: Maximum (1965-68, 1969-70), 31.5°C Aug. 23, 1964, Aug. 2, 1967; minimum (1965-70), freezing point on several days in 1965-69.
Sediment concentrations (1965-70): Maximum daily, 10,600 mg/l Jan. 4, 1966; minimum daily, 0 mg/l on several days in 1969.
Sediment loads (1965-70): Maximum daily, 218,000 tons Jan. 20, 1969; minimum daily, 0 tons on several days in 1969.
REMARKS.--No temperature record Nov. 21 to Dec. 9, 11, Dec. 24 to Jan. 7, 24, 25, 27, Jan. 29 to Feb. 3, 6-13, 15, 19-28, Mar. 2, 3, 5, 6, 9, 12, 16-23, Mar. 25 to July 11, probe inoperative. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	27.5	--	14.5	19.5	--	9.0	--	--	--	--	4.5	--	--	6.0	--	6.5	--	6.0
2	24.5	--	13.0	20.5	--	10.5	--	--	--	--	--	--	--	--	--	--	6.5	--
3	24.5	--	11.0	20.5	--	10.5	--	--	--	--	--	--	--	6.0	--	--	6.5	--
4	24.5	--	10.0	15.5	--	11.0	--	--	--	--	2.0	--	7.5	--	7.0	5.5	--	3.5
5	24.0	--	8.5	14.5	--	11.0	--	--	--	--	3.0	--	7.0	--	6.5	--	--	--
6	23.5	--	9.0	14.5	--	9.5	--	--	--	--	3.0	--	--	--	--	--	6.5	--
7	20.5	--	10.5	12.5	--	9.0	--	5.0	--	--	--	--	--	--	--	9.0	--	5.0
8	19.0	--	12.5	14.5	--	9.0	--	6.5	--	4.5	--	2.5	--	9.5	--	8.5	--	6.0
9	21.5	--	11.0	16.0	--	6.0	--	6.0	--	5.0	--	3.5	--	9.0	--	--	6.5	--
10	24.0	--	12.5	16.0	--	6.0	8.0	--	6.0	6.0	--	4.5	--	--	--	8.0	--	5.0
11	21.5	--	10.5	17.0	--	7.0	--	8.0	--	6.5	--	4.5	--	--	--	8.0	--	6.0
12	22.5	--	9.0	17.5	--	7.5	8.0	--	7.5	6.5	--	4.0	--	5.5	--	--	6.0	--
13	17.0	--	8.0	17.5	--	7.5	10.5	--	8.0	6.5	--	5.5	--	6.5	--	--	6.5	--
14	16.0	--	9.0	16.5	--	7.5	9.5	--	8.0	7.5	--	6.0	7.0	--	5.0	10.0	--	8.0
15	14.0	--	12.0	15.0	--	8.5	8.5	--	6.5	6.5	--	5.5	--	6.0	--	10.0	--	6.5
16	14.0	--	12.0	15.0	--	7.0	7.5	--	7.0	7.5	--	6.5	8.0	--	6.5	--	6.5	--
17	15.0	--	10.0	12.5	--	4.0	8.5	--	6.0	8.0	--	7.0	7.0	--	5.5	--	6.0	--
18	17.5	--	8.0	13.0	--	3.0	10.0	--	7.5	8.5	--	6.5	6.5	--	6.0	--	6.5	--
19	18.0	--	7.5	11.5	--	3.5	9.5	--	7.5	9.0	--	8.0	--	6.0	--	--	9.0	--
20	20.5	--	8.5	--	--	--	10.0	--	8.5	8.5	--	6.5	--	--	--	--	--	--
21	22.0	--	10.5	--	--	--	11.0	--	6.0	9.5	--	8.5	--	8.0	--	--	5.5	--
22	21.5	--	10.5	--	--	--	7.0	--	5.5	10.5	--	9.5	--	--	--	--	11.0	--
23	17.5	--	11.0	--	8.0	--	8.5	--	6.5	11.0	--	8.0	--	4.0	--	--	--	--
24	18.5	--	11.0	--	--	--	--	8.5	--	--	8.0	--	--	8.0	--	14.5	--	11.5
25	18.5	--	8.0	--	--	--	--	7.0	--	--	8.5	--	--	9.0	--	--	12.0	--
26	18.0	--	9.5	--	--	--	--	6.0	--	7.0	--	6.5	--	9.5	--	--	11.5	--
27	16.5	--	11.0	--	6.0	--	--	4.0	--	--	--	--	--	--	--	--	--	--
28	19.0	--	10.0	--	--	--	--	4.0	--	5.5	--	5.0	--	8.0	--	--	--	--
29	19.0	--	8.5	--	--	--	--	4.0	--	--	--	--	--	--	--	--	12.0	--
30	19.5	--	9.0	--	6.5	--	--	--	--	--	5.5	--	--	--	--	--	--	--
31	20.0	--	9.0	--	--	--	--	3.0	--	--	6.0	--	--	--	--	--	--	--
AVE	20.0	--	10.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11472900 BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR DAILY	APR MIN	MAY MAX	MAY DAILY	MAY MIN	JUN MAX	JUN DAILY	JUN MIN	JUL MAX	JUL DAILY	JUL MIN	AUG MAX	AUG DAILY	AUG MIN	SEP MAX	SEP DAILY	SEP MIN
1	--	--	--	--	16.5	--	--	--	--	--	--	--	26.5	--	17.0	25.0	--	15.0
2	--	--	--	--	--	--	--	--	--	--	--	--	27.0	--	16.5	25.0	--	14.5
3	--	--	--	--	--	--	--	--	--	--	--	--	27.5	--	17.0	25.0	--	14.5
4	--	10.0	--	--	--	--	--	--	--	--	--	--	26.5	--	17.0	22.5	--	15.0
5	--	--	--	--	--	--	--	--	--	--	25.0	--	26.0	--	16.0	23.0	--	13.0
6	--	--	--	--	--	--	--	--	--	--	--	--	26.5	--	16.5	25.0	--	14.5
7	--	--	--	--	--	--	--	--	--	--	--	--	26.0	--	16.5	26.0	--	16.0
8	--	13.5	--	--	13.5	--	--	17.5	--	--	--	--	26.0	--	15.5	25.5	--	15.5
9	--	--	--	--	--	--	--	--	--	--	--	--	27.5	--	16.5	26.0	--	15.0
10	--	--	--	--	--	--	--	--	--	--	--	--	28.0	--	16.5	26.0	--	15.5
11	--	11.0	--	--	--	--	--	--	--	--	26.0	--	28.0	--	17.0	26.0	--	15.5
12	--	--	--	--	8.0	--	--	--	--	27.0	--	16.0	28.5	--	17.0	23.5	--	14.5
13	--	--	--	--	9.0	--	--	--	--	27.5	--	16.5	27.5	--	17.0	22.5	--	13.0
14	--	8.5	--	--	--	--	--	17.0	--	28.0	--	17.0	27.5	--	17.0	22.5	--	11.5
15	--	--	--	--	--	--	--	--	--	27.0	--	17.5	28.0	--	17.0	22.5	--	12.5
16	--	--	--	--	--	--	--	19.5	--	26.5	--	16.5	27.5	--	17.5	23.5	--	12.5
17	--	--	--	--	--	--	--	--	--	27.5	--	16.5	27.5	--	17.0	24.0	--	13.5
18	--	10.5	--	--	--	--	--	--	--	28.0	--	17.0	27.0	--	16.5	23.5	--	14.5
19	--	--	--	--	--	--	--	--	--	28.5	--	17.5	26.5	--	15.5	22.0	--	14.0
20	--	--	--	--	--	--	--	--	--	28.0	--	18.0	26.5	--	16.0	22.0	--	12.5
21	--	10.0	--	--	--	--	--	--	--	27.5	--	17.5	27.0	--	16.5	22.5	--	12.0
22	--	--	--	--	20.5	--	--	--	--	27.5	--	17.0	26.5	--	16.5	23.5	--	12.5
23	--	--	--	--	--	--	--	--	--	28.0	--	17.5	26.0	--	16.0	23.5	--	13.0
24	--	--	--	--	--	--	--	--	--	28.0	--	18.0	26.0	--	15.0	23.0	--	12.0
25	--	--	--	--	--	--	--	--	--	28.0	--	18.5	25.5	--	15.5	22.5	--	11.5
26	--	9.5	--	--	--	--	--	--	--	28.0	--	18.5	25.5	--	15.5	23.0	--	11.5
27	--	6.0	--	--	--	--	--	17.0	--	28.0	--	18.5	26.0	--	15.5	23.0	--	11.5
28	--	10.0	--	--	--	--	--	--	--	27.0	--	20.5	26.0	--	15.5	22.5	--	12.0
29	--	--	--	--	--	--	--	--	--	26.5	--	19.5	26.5	--	16.5	22.0	--	12.0
30	--	--	--	--	19.5	--	--	--	--	26.5	--	16.5	25.0	--	16.0	22.5	--	11.5
31	--	--	--	--	--	--	--	--	--	26.5	--	17.0	25.0	--	14.5	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--	26.7	--	16.3	23.6	--	13.4

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.0	1	.01	10	0	0	9.7	1	.03
2	5.0	1	.01	9.9	0	0	9.5	1	.03
3	5.0	1	.01	9.9	1	.03	9.3	1	.03
4	5.3	1	.01	11	2	.06	9.4	1	.03
5	5.3	1	.01	104	66	22	9.4	1	.03
6	5.3	1	.01	69	4	.75	9.2	1	.02
7	5.3	2	.03	37	1	.10	9.9	1	.03
8	5.3	2	.03	48	1	.13	13	2	.07
9	5.3	2	.03	55	0	0	17	1	.05
10	5.3	2	.03	36	0	0	22	17	1.0
11	5.6	3	.05	27	0	0	50	66	8.1
12	5.6	3	.05	24	0	0	3200	3850	33300
13	5.6	3	.05	23	1	.06	1810	790	3860
14	5.6	3	.05	20	1	.05	900	350	851
15	30	17	2.2	18	1	.05	530	88	126
16	97	41	11	17	1	.05	162	57	25
17	117	18	5.9	17	1	.05	115	59	18
18	51	3	.41	15	0	0	184	65	32
19	31	1	.08	13	0	0	2410	2110	18200
20	22	1	.06	13	0	0	1350	780	2840
21	17	1	.05	13	0	0	4710	4540	73100
22	15	1	.04	13	1	.04	1230	1050	3490
23	13	1	.04	12	1	.03	3630	2280	23300
24	13	1	.04	12	1	.03	2750	1120	8320
25	12	1	.03	12	1	.03	2350	720	4570
26	11	1	.03	11	1	.03	1400	310	1170
27	11	1	.03	11	1	.03	978	160	422
28	11	1	.03	11	1	.03	693	105	196
29	11	0	0	10	1	.03	543	85	125
30	10	0	0	9.5	1	.03	444	63	76
31	10	0	0	--	--	--	393	39	41
TOTAL	556.5	--	20.32	691.3	--	23.61	29950.4	--	174071.42

11472900 BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	393	25	27	1080	1660	4840	648	627	1160
2	315	16	14	853	1570	3620	426	349	401
3	315	12	10	790	1390	2960	355	254	243
4	279	9	6.8	740	930	1860	372	326	327
5	262	6	4.2	684	1050	1940	345	263	245
6	250	6	4.1	684	940	1740	350	233	220
7	250	5	3.4	693	800	1500	855	722	2410
8	348	217	403	693	670	1250	1190	804	2800
9	3060	2420	26200	648	605	1060	750	480	972
10	2460	1310	8700	582	600	943	630	395	672
11	1470	460	1830	590	580	924	515	340	473
12	2030	759	5760	1010	2090	6910	480	270	350
13	4150	1430	16000	1730	2780	13200	456	280	345
14	5000	4640	62600	1290	1360	4740	536	384	556
15	1500	1700	6890	1000	790	2130	474	265	339
16	5500	4810	71400	2190	3400	29500	390	245	258
17	5000	3270	44100	1740	2570	13400	438	208	246
18	2760	2170	16200	760	1320	2710	396	160	171
19	1800	2000	9720	639	560	966	366	146	144
20	1400	1290	4880	529	430	614	355	119	114
21	5420	2240	32800	474	480	614	320	102	88
22	3950	2410	25700	420	435	493	275	98	73
23	10100	9060	247000	378	340	347	235	101	64
24	8950	9510	249000	378	320	327	250	106	72
25	3690	5170	52900	378	290	296	260	82	58
26	3860	4950	69500	372	269	270	260	72	51
27	6580	6900	133000	372	265	266	260	57	40
28	2770	4200	31400	432	415	540	295	42	33
29	2040	2900	16000	--	--	--	280	26	20
30	1650	2200	9800	--	--	--	275	24	18
31	1590	1780	7640	--	--	--	260	22	15
TOTAL	89142	--	1149492.5	22129	--	99960	13297	--	12978

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	250	21	14	88	6	1.4	43	5	.58
2	250	19	13	83	6	1.3	41	5	.55
3	245	17	11	82	6	1.3	39	4	.42
4	235	15	9.5	82	7	1.5	38	4	.41
5	215	13	7.5	78	7	1.5	37	3	.30
6	194	12	6.3	76	8	1.6	36	3	.29
7	178	11	5.3	76	9	1.8	34	2	.18
8	178	10	4.8	80	10	2.2	31	2	.17
9	178	9	4.3	98	9	2.4	39	2	.21
10	178	8	3.8	87	8	1.9	36	2	.19
11	178	7	3.4	88	8	1.9	33	2	.18
12	167	7	3.2	94	8	2.0	31	4	.33
13	160	7	3.0	102	12	3.3	30	5	.41
14	170	7	3.2	96	8	2.1	45	6	.73
15	170	7	3.2	87	7	1.6	38	6	.62
16	170	7	3.2	80	6	1.3	34	6	.55
17	163	9	4.0	76	6	1.2	32	5	.43
18	149	11	4.4	73	6	1.2	29	5	.39
19	160	8	3.5	72	6	1.2	27	5	.36
20	153	7	2.9	70	6	1.1	25	5	.34
21	153	6	2.5	67	6	1.1	23	5	.31
22	146	6	2.4	65	6	1.1	22	5	.30
23	139	6	2.3	62	6	1.0	21	4	.23
24	135	5	1.8	58	6	.94	20	4	.22
25	130	5	1.8	55	6	.89	19	4	.21
26	135	5	1.8	54	6	.87	19	4	.21
27	139	9	3.4	53	6	.86	18	4	.19
28	108	5	1.5	51	5	.69	18	4	.19
29	94	5	1.3	51	5	.69	18	4	.19
30	90	6	1.5	47	5	.63	16	4	.17
31	--	--	--	45	5	.61	--	--	--
TOTAL	5010	--	133.8	2276	--	43.18	892	--	9.86

11472900 BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	15	4	.16	5.2	4	.06	2.5	3	.02
2	14	4	.15	5.2	4	.06	2.3	4	.02
3	14	4	.15	5.8	4	.06	2.3	4	.02
4	13	4	.14	5.0	4	.05	2.3	4	.02
5	12	4	.13	5.0	4	.05	2.0	4	.02
6	12	4	.13	4.8	3	.04	2.3	4	.02
7	12	4	.13	4.8	3	.04	2.5	4	.03
8	11	3	.09	4.8	3	.04	2.5	3	.02
9	12	3	.10	4.8	3	.04	2.6	3	.02
10	12	3	.10	4.8	3	.04	2.3	3	.02
11	11	3	.09	4.6	3	.04	2.2	4	.02
12	11	3	.09	4.4	3	.04	1.9	4	.02
13	9.9	3	.08	4.2	3	.03	1.9	4	.02
14	9.2	3	.07	4.2	3	.03	2.0	4	.02
15	8.5	3	.07	4.0	4	.04	1.9	3	.02
16	8.3	3	.07	3.2	5	.04	2.0	3	.02
17	8.0	3	.06	3.2	6	.05	2.0	3	.02
18	7.8	3	.06	3.0	7	.06	2.0	3	.02
19	7.5	3	.06	3.0	8	.06	2.2	3	.02
20	7.5	3	.06	3.0	7	.06	2.2	2	.01
21	7.3	3	.06	2.8	6	.05	2.5	2	.01
22	7.0	3	.06	2.8	5	.04	2.6	2	.01
23	6.8	3	.06	2.8	4	.03	2.6	2	.01
24	6.5	3	.05	2.8	3	.02	2.8	2	.02
25	6.3	3	.05	2.8	3	.02	2.6	2	.01
26	6.3	4	.07	2.6	3	.02	2.6	2	.01
27	6.0	5	.08	2.6	3	.02	2.6	2	.01
28	5.6	5	.08	2.6	3	.02	2.5	2	.01
29	5.6	4	.06	2.6	3	.02	2.5	2	.01
30	5.4	4	.06	2.6	3	.02	2.5	2	.01
31	5.2	4	.06	2.5	3	.02	--	--	--
TOTAL	283.7	--	2.68	116.5	--	1.21	69.7	--	.51

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 164414.1
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1436737.09

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 12, 1969	0720	8.0	3450	4910	45700	22	24	36	45	56	64	74	88	97	100	--	VPWC
DEC 12.....	1540	8.5	4300	3930	45600	18	26	32	42	51	60	69	82	95	99	100	VPWC
DEC 13.....	0820	8.0	1250	852	2880	26	37	47	58	65	76	83	93	99	100	--	VBWC
DEC 21.....	0945	9.5	8300	7740	173000	21	28	37	47	57	67	80	92	96	99	100	VPWC
JAN 16, 1970	0715	8.5	9800	8390	222000	19	27	36	47	59	68	80	92	99	100	--	VPWC
JAN 22.....	1510	11.0	3810	2590	26600	14	18	27	35	42	48	55	64	77	99	100	VPWC
JAN 23.....	1400	9.5	13500	13700	499000	22	30	38	51	61	74	87	97	100	--	--	VPWC
FEB 17.....	1330	7.5	1260	1950	6630	21	26	37	47	56	62	68	76	90	100	--	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
OCT 14, 1969	1600	14.5	2	5.5	1	2	5	6	11	19	29	45	65	92	100	S
FEB 17, 1970	1410	7.0	5	1260	--	--	--	2	7	18	35	60	82	96	100	S

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 1970.
Sediment records: October 1962 to September 1967.
Turbidity: Water years 1965-67 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 27.5°C July 26, 27; minimum, 3.5°C Jan. 4, 5.
EXTREMES, 1962-63, 1965-66, 1967-68, 1969-70.--Water temperatures: Maximum, 27.5°C July 26, 27, 1970; minimum (1969-70), 3.5°C Jan. 4, 5, 1970.
REMARKS.--Probe inoperative Oct. 1-14; recorder stopped Aug. 5-25, Aug. 31 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	15.0	12.5	8.0	6.5	5.5	5.0	7.0	6.5	7.5	6.0
2	--	--	15.0	12.5	8.0	6.5	5.5	4.5	7.0	6.5	6.5	6.0
3	--	--	15.0	12.5	8.0	7.0	5.0	4.5	7.0	6.0	6.5	5.5
4	--	--	14.0	13.0	8.0	6.5	4.5	3.5	7.5	7.0	6.5	5.5
5	--	--	13.5	11.0	7.5	6.5	4.0	3.5	7.5	7.0	6.5	5.5
6	--	--	11.5	10.5	8.5	7.0	4.0	3.5	8.0	7.5	7.0	6.0
7	--	--	11.0	11.0	8.0	7.5	5.0	4.0	8.0	7.5	7.5	7.0
8	--	--	11.5	10.5	9.5	7.5	5.5	5.0	8.0	7.0	7.5	6.5
9	--	--	10.5	9.5	8.5	8.0	6.5	5.5	8.0	7.5	7.0	6.5
10	--	--	10.5	9.5	8.5	8.5	6.5	6.5	8.0	7.5	7.0	6.0
11	--	--	11.5	9.5	8.5	8.0	7.0	6.5	8.5	8.0	7.5	6.5
12	--	--	11.5	10.0	8.5	8.0	7.0	6.5	9.0	8.0	7.5	7.0
13	--	--	11.5	10.5	8.5	8.0	7.5	7.0	8.0	7.5	8.5	7.5
14	--	--	11.5	10.0	8.5	8.5	7.5	7.5	7.5	6.5	9.0	8.0
15	15.0	13.5	11.5	10.5	8.5	7.5	7.5	7.5	7.0	6.0	8.5	7.5
16	13.5	12.5	11.5	10.0	8.0	7.5	8.0	7.5	7.0	6.0	9.5	7.5
17	13.0	12.0	10.0	8.5	8.0	7.5	8.0	8.0	7.0	6.5	8.5	7.0
18	13.5	11.5	9.5	8.5	8.5	8.0	8.5	8.0	6.5	6.0	7.5	6.5
19	14.0	11.5	9.5	8.5	8.5	8.0	8.5	8.5	6.5	5.5	7.5	6.0
20	15.0	12.0	9.5	8.5	9.5	8.5	9.0	8.5	6.5	5.5	8.5	6.0
21	16.0	13.0	9.5	8.0	10.0	8.5	9.5	9.0	6.5	5.5	8.5	6.5
22	16.0	13.5	9.5	8.5	8.5	8.0	9.5	9.0	6.5	5.5	9.5	7.0
23	15.0	14.0	9.5	8.0	9.0	8.5	9.5	9.0	6.0	5.5	10.5	8.0
24	15.5	14.0	9.5	8.0	9.0	8.5	9.5	9.0	7.0	5.5	11.0	8.5
25	14.5	12.5	9.5	8.0	9.0	8.0	9.0	8.5	7.5	6.0	11.0	9.0
26	14.0	12.5	9.0	8.0	8.0	7.0	8.5	8.5	8.0	6.5	10.5	8.5
27	14.5	13.5	9.0	8.0	7.0	5.5	8.5	8.5	8.0	6.5	10.5	8.0
28	15.0	13.0	8.5	7.5	6.0	5.0	8.5	7.0	8.0	7.5	10.5	8.5
29	15.0	12.5	8.5	7.0	5.5	5.0	7.0	6.0	--	--	10.5	8.5
30	15.0	13.0	8.0	7.0	5.5	5.0	6.5	6.0	--	--	10.0	8.0
31	15.0	13.0	--	--	5.5	4.5	7.0	6.5	--	--	10.0	7.5
AVE	--	--	10.8	9.5	8.1	7.2	7.2	6.7	7.4	6.6	8.5	7.0

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.5	14.5	10.5	21.5	17.0	24.5	20.0	26.0	22.0	--	--
2	10.5	8.5	15.0	11.5	22.0	18.0	26.0	21.0	26.5	22.0	--	--
3	10.5	7.5	15.5	12.0	22.0	18.0	26.0	21.5	27.0	22.0	--	--
4	11.0	8.0	15.5	12.0	22.5	18.0	27.0	21.5	26.5	22.0	--	--
5	11.5	8.5	14.0	12.0	23.5	19.0	27.0	22.0	--	--	--	--
6	11.5	9.0	13.0	12.0	24.0	19.5	26.5	22.0	--	--	--	--
7	10.5	8.5	14.0	11.5	22.0	19.0	26.5	21.5	--	--	--	--
8	11.0	8.5	13.0	12.5	19.5	18.5	26.5	21.5	--	--	--	--
9	11.0	9.0	13.5	12.0	19.5	17.0	26.0	21.5	--	--	--	--
10	12.5	10.0	12.5	11.5	20.5	17.5	26.0	21.0	--	--	--	--
11	11.5	9.0	11.5	10.5	20.5	17.5	26.0	21.0	--	--	--	--
12	11.5	8.5	11.0	9.5	21.0	17.5	26.0	21.0	--	--	--	--
13	9.0	8.5	14.0	10.0	19.0	17.5	26.5	21.5	--	--	--	--
14	9.5	8.0	15.5	11.5	20.5	17.5	26.5	21.5	--	--	--	--
15	10.0	7.5	17.0	13.0	21.0	17.0	26.0	21.5	--	--	--	--
16	9.5	8.0	18.0	14.0	22.0	18.0	25.5	21.5	--	--	--	--
17	10.0	8.0	17.5	14.5	22.5	18.5	26.5	21.5	--	--	--	--
18	9.5	8.5	17.0	14.5	23.0	18.0	26.5	21.5	--	--	--	--
19	11.5	8.5	16.0	14.5	24.5	19.5	27.0	22.0	--	--	--	--
20	9.5	8.0	16.5	14.0	25.5	20.0	26.5	22.0	--	--	--	--
21	9.5	8.0	17.5	14.0	26.0	21.0	26.5	22.0	--	--	--	--
22	10.5	7.5	18.0	15.0	26.0	21.5	26.5	22.0	--	--	--	--
23	11.0	8.5	18.5	15.0	26.0	22.0	27.0	22.0	--	--	--	--
24	10.5	9.0	19.5	15.0	24.5	21.5	27.0	22.5	--	--	--	--
25	11.0	9.0	20.0	15.5	25.5	21.5	27.0	22.5	--	--	--	--
26	10.0	8.5	20.0	16.0	26.0	21.5	27.5	22.5	25.5	21.0	--	--
27	10.0	8.0	19.0	16.5	23.5	21.5	27.5	22.5	25.5	21.0	--	--
28	11.0	8.5	19.5	16.0	22.0	20.0	26.5	22.5	25.5	21.0	--	--
29	11.0	8.0	19.5	16.0	23.0	19.5	26.5	22.0	26.0	21.5	--	--
30	13.0	9.0	20.5	16.0	23.5	20.0	26.5	22.0	--	--	--	--
31	--	--	21.0	16.5	--	--	26.5	22.0	--	--	--	--
AVE	10.6	8.4	16.4	13.4	22.8	19.1	26.5	21.7	--	--	--	--

11473800 ELK CREEK NEAR HEARST, CALIF.

LOCATION.--Lat 39°38'50", long 123°07'13", in NE¼SE¼ sec.30, T.21 N., R.11 W., Mendocino County, temperature recorder at gaging station on left bank, 900 ft upstream from small left bank tributary , and 13.5 miles northeast of Hearst. Prior to Nov. 6, 1969, at site 600 ft downstream.
DRAINAGE AREA.--84.1 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1964 to September 1970.
Sediment records: Water years 1966-70 (partial-record station).
Turbidity: Water year 1967 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Minimum, 1.0°C Jan. 3, 6-8.
EXTREMES, 1965-67, 1968-70.--Water temperatures: Maximum, (1965-67, 1968-69), 34.5°C Aug. 2, 1967; minimum (1966-67, 1969-70), 1.0°C Jan. 3, 6-8, 1970.
REMARKS.--Recorder stopped Nov. 4-17; recorder malfunction Dec. 17-19, 23-26; probe inoperative Apr. 7 to Sept. 30. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT DAILY	OCT MIN	NOV MAX	NOV DAILY	NOV MIN	DEC MAX	DEC DAILY	DEC MIN	JAN MAX	JAN DAILY	JAN MIN	FEB MAX	FEB DAILY	FEB MIN	MAR MAX	MAR DAILY	MAR MIN
1	18.0	--	18.0	11.0	--	10.5	4.5	--	4.5	3.0	--	1.5	9.0	--	8.5	11.5	--	9.5
2	18.5	--	18.0	11.0	--	10.5	5.0	--	4.5	2.5	--	1.5	9.0	--	8.5	9.5	--	7.5
3	18.5	--	18.0	11.0	--	10.5	5.0	--	4.5	2.5	--	1.0	9.0	--	8.5	9.5	--	8.0
4	18.5	--	18.0	11.0	--	10.5	7.0	--	4.0	3.0	--	2.0	9.5	--	9.0	10.0	--	8.5
5	18.0	--	17.5	--	11.0	--	5.0	--	4.0	3.0	--	1.5	10.0	--	9.5	8.5	--	7.5
6	17.5	--	17.0	--	--	--	4.5	--	2.0	2.5	--	1.0	10.0	--	9.5	10.0	--	7.5
7	17.0	--	17.0	--	--	--	6.0	--	4.0	2.0	--	1.0	10.0	--	9.5	11.0	--	10.0
8	17.0	--	16.5	--	--	--	4.5	--	4.5	2.0	--	1.0	10.0	--	9.5	11.0	--	9.5
9	17.0	--	16.5	--	--	--	4.5	--	4.5	3.0	--	2.0	10.0	--	9.5	12.0	--	8.5
10	16.5	--	16.0	--	--	--	5.5	--	4.0	5.0	--	3.0	10.0	--	10.0	11.5	--	8.5
11	16.0	--	15.0	--	--	--	5.5	--	5.0	7.0	--	5.0	10.5	--	10.0	12.0	--	9.0
12	15.0	--	14.5	--	--	--	5.5	--	5.0	7.0	--	6.5	11.0	--	10.5	12.0	--	9.5
13	14.5	--	14.0	--	--	--	5.5	--	5.5	7.5	--	6.5	11.0	--	9.5	13.5	--	9.5
14	14.5	--	14.0	--	--	--	5.5	--	5.0	7.5	--	6.5	10.0	--	9.5	14.0	--	11.0
15	14.0	--	13.5	--	--	--	5.5	--	4.5	8.0	--	7.0	9.5	--	8.5	13.5	--	10.0
16	13.5	--	13.5	--	--	--	5.5	--	5.0	9.0	--	8.0	9.5	--	8.5	14.5	--	9.5
17	13.5	--	13.0	--	--	--	--	--	--	8.5	--	8.0	9.0	--	8.0	14.0	--	8.5
18	13.0	--	13.0	7.5	--	5.5	--	--	--	8.5	--	7.5	10.0	--	8.5	13.0	--	7.5
19	13.5	--	12.5	7.0	--	5.5	--	--	--	8.5	--	8.0	10.5	--	7.0	13.5	--	7.0
20	12.5	--	12.0	7.0	--	7.0	5.5	--	4.0	9.0	--	8.5	10.0	--	6.0	13.5	--	7.0
21	12.0	--	12.0	7.5	--	6.0	5.0	--	4.0	9.5	--	8.5	10.5	--	6.5	14.0	--	7.0
22	12.0	--	12.0	7.0	--	6.0	5.5	--	5.0	11.0	--	9.0	10.5	--	6.5	14.5	--	8.5
23	12.0	--	12.0	6.5	--	6.0	--	--	--	11.0	--	10.5	10.0	--	6.0	14.5	--	9.5
24	12.0	--	12.0	6.0	--	5.0	--	--	--	13.0	--	10.5	11.5	--	7.5	14.0	--	10.5
25	12.0	--	12.0	5.0	--	4.5	--	--	--	11.5	--	9.0	11.5	--	7.5	13.0	--	10.5
26	12.0	--	12.0	5.0	--	5.0	--	--	--	10.5	--	9.5	12.0	--	8.0	14.0	--	11.5
27	12.0	--	12.0	6.5	--	5.0	6.0	--	5.5	10.5	--	8.0	12.0	--	8.5	13.5	--	11.0
28	12.0	--	11.0	6.5	--	5.0	5.5	--	4.5	8.5	--	8.0	11.5	--	10.0	13.0	--	11.0
29	11.0	--	11.0	5.0	--	4.0	4.5	--	3.5	8.5	--	7.0	--	--	--	13.5	--	11.5
30	11.0	--	11.0	4.5	--	4.0	5.5	--	2.5	10.0	--	8.5	--	--	--	13.0	--	11.5
31	11.0	--	10.5	--	--	--	3.0	--	2.5	9.5	--	8.5	--	--	--	12.5	--	11.0
AVE	14.4	--	14.0	--	--	--	--	--	--	7.2	--	5.9	10.3	--	8.5	12.5	--	9.3

DAY	APR MAX	APR DAILY	APR MIN	MAY MAX	MAY DAILY	MAY MIN	JUN MAX	JUN DAILY	JUN MIN	JUL MAX	JUL DAILY	JUL MIN	AUG MAX	AUG DAILY	AUG MIN	SEP MAX	SEP DAILY	SEP MIN
1	12.5	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	13.0	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	13.5	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	13.5	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	13.5	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	14.0	--	12.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20.0	--
11	--	--	--	--	--	--	--	--	--	--	24.0	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	25.5	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11473800 ELK CREEK NEAR HEARST, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
NOV 5, 1969	0900	11.0	96	148	38	--	--	--	--	--	--	--	--	--	--	--	
NOV 5.....	1415	11.0	59	41	6.5	--	--	--	--	--	--	--	--	--	--	--	
DEC 19.....	1030		2480	3880	26000	23	29	33	44	53	61	70	83	94	99	100	VPWC
JAN 28, 1970	1400	8.5	1350	2460	8970	26	30	42	50	59	64	70	78	90	97	100	VPWC
MAR 12.....	1210	9.5	282	328	250	--	--	--	--	--	--	--	--	--	--	--	
APR 29.....	1130	11.0	45	3	.36	--	--	--	--	--	--	--	--	--	--	--	
SEP 10.....	1050	20.0	.61	4	.01	--	--	--	--	--	--	--	--	--	--	--	

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	128	METHOD OF ANALYSIS
NOV 5, 1969	1410	11.0	2	59	--	--	1	2	6	10	22	51	92	100	--	S
MAR 12, 1970	1200	9.5	5	282	1	1	2	2	5	8	17	29	52	89	100	S

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.
Specific conductance: October 1966 to September 1967.
Water temperatures: October 1957 to September 1959, October 1960 to September 1970.
Sediment records: Water years 1956-57 (partial-record station), October 1957 to September 1970.
Turbidity: Water years 1965-68 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Minimum, 3.5°C Jan. 2, 6.
Sediment concentrations: Maximum daily, 7,620 mg/l Jan. 24; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 1,160,000 tons Jan. 24; minimum daily, 0.02 ton Sept. 21, 28, 29.
EXTREMES, 1965-70.--Water temperatures (1968-70): 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 1965-70.
Sediment loads: Maximum daily, 1,430,000 tons Jan. 4, 1966; minimum daily, 0.02 ton Sept. 21, 28, 29, 1970.
REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT MIN	OCT DAILY	NOV MAX	NOV MIN	NOV DAILY	DEC MAX	DEC MIN	DEC DAILY	JAN MAX	JAN MIN	JAN DAILY	FEB MAX	FEB MIN	FEB DAILY	MAR MAX	MAR MIN	MAR DAILY
1	--	--	20.0	--	--	--	--	--	5.5	--	--	--	--	--	--	--	--	7.0
2	--	--	--	--	--	--	--	--	--	--	--	3.5	--	--	6.0	--	--	6.5
3	--	--	16.5	--	--	13.5	--	--	6.0	--	--	4.0	--	--	7.0	--	--	8.0
4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.0	--	--	6.5
5	--	--	--	--	--	13.5	--	--	5.0	--	--	4.5	--	--	9.0	--	--	6.0
6	--	--	16.0	--	--	13.0	--	--	--	--	--	3.5	--	--	8.5	--	--	9.0
7	--	--	--	--	--	12.0	--	--	--	--	--	4.0	--	--	9.0	--	--	9.5
8	--	--	16.5	--	--	12.0	--	--	7.2	--	--	5.5	--	--	7.0	--	--	9.5
9	--	--	--	--	--	10.0	--	--	8.0	--	--	7.0	--	--	9.5	--	--	7.0
10	--	--	19.5	--	--	10.5	--	--	8.0	--	--	8.0	--	--	8.5	--	--	7.0
11	--	--	--	--	--	11.5	--	--	10.0	--	--	7.0	--	--	10.0	--	--	8.0
12	--	--	--	--	--	--	--	--	10.0	--	--	7.0	--	--	9.5	--	--	9.5
13	--	--	14.5	--	--	11.5	--	--	10.0	--	--	8.5	--	--	8.5	--	--	10.0
14	--	--	--	--	--	--	--	--	10.0	--	--	9.0	--	--	7.0	--	--	10.0
15	--	--	18.0	--	--	11.5	--	--	7.5	--	--	8.5	--	--	7.0	--	--	10.0
16	--	--	--	--	--	10.0	--	--	8.5	--	--	10.0	--	--	10.0	--	--	10.0
17	--	--	15.0	--	--	10.0	--	--	9.0	--	--	9.5	--	--	6.0	--	--	9.0
18	--	--	15.5	--	--	8.5	--	--	9.5	--	--	9.5	--	--	9.0	--	--	10.0
19	--	--	13.0	--	--	9.0	--	--	10.5	--	--	10.0	--	--	7.0	--	--	8.5
20	--	--	--	--	--	--	--	--	10.0	--	--	9.5	--	--	5.5	--	--	11.0
21	--	--	--	--	--	6.5	--	--	11.0	--	--	10.0	--	--	6.0	--	--	9.0
22	--	--	16.5	--	--	8.0	--	--	8.0	--	--	11.0	--	--	6.0	--	--	10.5
23	--	--	--	--	--	--	--	--	9.5	--	--	11.0	--	--	7.0	--	--	--
24	--	--	15.0	--	--	8.0	--	--	9.5	--	--	9.5	--	--	8.0	13.5	--	11.5
25	--	--	--	--	--	--	--	--	--	--	--	8.5	--	--	9.5	13.5	--	12.0
26	--	--	--	--	--	--	--	--	6.5	--	--	9.5	--	--	9.0	13.5	--	12.0
27	--	--	15.5	--	--	7.0	--	--	5.5	--	--	8.5	--	--	8.5	13.5	--	11.5
28	--	--	--	--	--	--	--	--	--	--	--	7.0	--	--	9.0	13.0	--	12.0
29	--	--	14.5	--	--	6.5	--	--	5.5	--	--	5.5	--	--	--	13.0	--	11.5
30	--	--	--	--	--	--	--	--	4.0	--	--	7.0	--	--	--	13.0	--	11.0
31	--	--	14.5	--	--	--	--	--	4.0	--	--	6.5	--	--	--	12.5	--	11.0
AVE	--	--	--	--	--	--	--	--	7.9	--	--	7.7	--	--	8.0	--	--	--

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR MIN	MAY MAX	MAY MIN	JUN MAX	JUN MIN	JUL MAX	JUL MIN	AUG MAX	AUG MIN	SEP MAX	SEP MIN
	DAILY		DAILY		DAILY		DAILY		DAILY		DAILY	
1	12.5	11.0	18.0	15.5	22.5	18.5	22.5	19.5	--	--	--	--
2	13.5	11.5	19.0	16.0	23.0	19.0	22.0	20.0	--	--	--	--
3	13.5	11.5	18.5	16.0	22.5	18.5	26.0	24.0	22.0	--	--	--
4	13.5	11.5	18.5	15.5	22.5	19.0	26.5	24.5	--	--	--	--
5	14.0	12.0	18.0	15.5	23.5	19.5	26.0	24.5	24.0	--	--	--
6	14.0	12.5	16.5	15.0	23.0	19.5	26.0	24.0	--	--	--	--
7	13.5	11.5	16.5	14.0	21.0	19.5	26.5	24.5	21.5	--	25.5	--
8	14.0	12.0	15.5	14.5	19.5	19.0	26.0	23.5	--	--	--	--
9	14.0	12.0	15.0	14.0	19.0	19.0	25.5	24.0	--	--	24.0	--
10	15.0	13.5	15.0	13.0	19.0	19.0	24.5	24.0	23.0	--	--	--
11	14.5	12.0	14.5	12.0	19.0	19.0	23.5	21.5	--	--	22.0	--
12	14.0	12.0	12.5	11.0	19.0	18.5	21.5	18.0	23.0	--	--	--
13	14.0	11.0	15.5	11.5	18.5	18.0	24.0	18.0	--	--	--	--
14	12.0	10.5	17.5	14.0	19.0	18.0	23.5	22.5	25.5	--	23.0	--
15	13.0	11.0	19.0	15.0	19.5	18.5	23.5	23.0	--	--	--	--
16	13.0	11.0	20.5	16.0	20.5	18.0	--	--	--	--	20.0	--
17	13.5	11.0	20.0	16.0	20.5	19.0	26.5	--	22.0	--	--	--
18	13.5	11.5	19.5	16.0	20.0	19.0	--	--	--	--	20.0	--
19	13.5	11.5	17.5	15.0	24.5	20.0	--	--	26.5	--	--	--
20	12.0	11.0	18.0	15.0	25.0	22.0	25.5	--	--	--	--	--
21	12.5	11.0	19.0	15.0	24.5	22.0	--	--	21.5	--	18.5	--
22	13.5	11.0	19.5	15.5	24.5	22.5	24.0	--	--	--	--	--
23	14.0	11.5	20.5	15.5	24.5	22.5	--	--	--	--	18.5	--
24	14.5	12.0	20.5	16.0	24.0	21.5	23.5	--	21.0	--	--	--
25	14.0	12.0	21.0	16.5	24.0	21.5	--	--	--	--	19.0	--
26	14.0	12.0	21.0	18.5	24.0	21.5	--	--	26.5	--	--	--
27	13.5	11.0	20.0	19.0	22.5	20.5	28.0	--	--	--	--	--
28	13.5	10.5	20.5	17.5	21.0	19.5	--	--	24.0	--	16.5	--
29	14.5	11.0	20.0	17.5	22.0	19.5	28.0	--	--	--	--	--
30	16.5	12.0	21.0	18.0	22.5	19.5	--	--	--	--	16.5	--
31	--	--	22.0	19.0	--	--	22.0	--	21.0	--	--	--
AVE	13.7	11.5	18.4	15.4	21.8	19.7	--	--	--	--	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCTOBER MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCEN-TRATION (MG/L)	OCTOBER SEDIMENT DISCHARGE (TONS/DAY)	NOVEMBER MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCEN-TRATION (MG/L)	NOVEMBER SEDIMENT DISCHARGE (TONS/DAY)	DECEMBER MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCEN-TRATION (MG/L)	DECEMBER SEDIMENT DISCHARGE (TONS/DAY)
1	14	2	.08	37	2	.20	50	1	.14
2	14	2	.08	36	2	.19	49	1	.13
3	14	1	.04	36	1	.10	49	1	.13
4	14	1	.04	36	2	.19	49	1	.13
5	14	1	.04	551	116	224	49	1	.13
6	14	1	.04	463	30	38	49	1	.13
7	14	1	.04	266	7	5.0	48	1	.13
8	14	1	.04	210	6	3.4	52	1	.14
9	15	1	.04	218	5	2.9	58	1	.16
10	16	1	.04	168	4	1.8	85	19	4.4
11	16	1	.04	138	2	.75	337	176	230
12	16	1	.04	115	2	.62	14100	4720	230000
13	16	1	.04	107	2	.58	9740	1900	62500
14	16	1	.04	97	2	.52	4510	968	12200
15	24	3	.19	90	3	.73	2880	400	3110
16	184	25	12	82	5	1.1	1660	260	1170
17	383	70	72	83	2	.45	1420	245	939
18	210	20	11	83	1	.22	2050	260	1440
19	109	13	3.8	69	1	.19	11700	2330	97600
20	75	8	1.6	67	1	.18	8080	1100	24000
21	59	5	.80	66	1	.18	22100	4410	342000
22	52	3	.42	63	1	.17	7510	1660	39500
23	47	3	.38	62	1	.17	11100	2060	69400
24	45	3	.36	59	1	.16	8880	1250	30000
25	43	3	.35	58	1	.16	5750	700	10900
26	42	3	.34	57	1	.15	4450	450	5410
27	40	3	.32	56	1	.15	2900	285	2230
28	38	2	.21	55	1	.15	2080	185	1040
29	37	2	.20	54	1	.15	1630	135	594
30	36	2	.19	52	1	.14	1340	100	362
31	36	3	.29	--	--	--	1100	70	208
TOTAL	1667	--	105.09	3534	--	282.70	125855	--	934838.62

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	925	50	125	3730	720	7250	2970	995	8390
2	789	45	96	3060	640	5290	2120	400	2290
3	671	35	63	2690	570	4140	1800	260	1260
4	576	30	47	2310	520	3240	2210	529	3470
5	483	20	26	1940	440	2300	2300	390	2420
6	414	15	17	1620	350	1530	1960	260	1380
7	401	15	16	1410	290	1100	3440	561	7140
8	451	60	73	1310	250	884	7760	1410	32000
9	4650	1410	26100	1140	210	646	4330	720	8420
10	9060	1860	52300	1010	180	491	3770	620	6310
11	4140	600	6710	920	170	422	3010	420	3410
12	4040	400	4360	1500	390	1580	2620	340	2410
13	9680	1600	47400	4200	1300	14700	2310	310	1930
14	25500	4380	328000	3400	730	6700	2640	350	2490
15	10500	1800	51000	2550	460	3170	2590	360	2520
16	34300	4230	426000	5100	2350	32400	2250	300	1820
17	27500	3100	230000	8380	2150	56800	2090	177	999
18	12500	2100	70900	4270	800	9220	1860	185	929
19	9650	1500	39100	3210	650	5630	1660	130	583
20	9830	1200	31800	2620	510	3610	1530	115	475
21	32400	3180	288000	2240	440	2660	1420	105	403
22	25700	2450	170000	1930	360	1880	1340	95	344
23	52700	6340	1080000	1720	300	1390	1270	85	291
24	52400	7620	1160000	1600	180	778	1200	77	249
25	17800	4250	204000	1490	210	845	1170	70	221
26	12500	2960	112000	1450	340	1330	1110	55	165
27	31400	5990	561000	1460	320	1260	1050	50	142
28	11200	3050	92200	1490	180	724	959	52	135
29	7470	1900	38300	--	--	--	925	57	142
30	5580	1400	21100	--	--	--	874	43	101
31	4400	950	11300	--	--	--	818	54	119
TOTAL	419610	--	5052033	69750	--	171970	67356	--	92958

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	767	43	89	383	7	7.2	194	7	3.7
2	745	35	70	376	7	7.1	186	3	1.5
3	708	25	48	383	9	9.3	178	1	.48
4	664	20	36	390	11	12	170	2	.92
5	642	20	35	390	9	9.5	167	3	1.4
6	620	17	28	382	8	8.3	150	2	.81
7	601	17	28	382	9	9.3	143	1	.39
8	576	18	28	376	10	10	139	1	.38
9	558	12	18	436	12	14	136	1	.37
10	545	12	18	490	12	16	136	1	.37
11	570	12	18	490	12	16	139	1	.38
12	533	10	14	490	12	16	143	1	.39
13	520	11	15	490	12	16	139	1	.38
14	551	12	18	442	14	17	133	1	.36
15	526	9	13	424	16	18	130	1	.35
16	508	8	11	394	15	16	122	1	.33
17	483	8	10	388	13	14	122	1	.33
18	464	8	10	382	12	12	122	1	.33
19	514	8	11	376	11	11	114	1	.31
20	489	8	11	352	10	9.5	108	1	.29
21	439	8	9.5	334	10	9.0	101	1	.27
22	439	12	14	322	10	8.7	96	1	.26
23	395	12	13	305	8	6.6	89	1	.24
24	383	12	12	290	6	4.7	86	1	.23
25	370	12	12	270	5	3.6	80	1	.22
26	389	12	13	255	5	3.4	78	1	.21
27	420	12	14	240	5	3.2	78	1	.21
28	383	12	12	230	5	3.1	78	1	.21
29	376	12	12	225	5	3.0	76	1	.21
30	376	10	10	215	5	2.9	78	1	.21
31	--	--	--	206	6	3.3	--	--	--
TOTAL	15554	--	650.5	11108	--	299.7	3711	--	16.04

11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	76	1	.21	18	2	.10	7.2	2	.04
2	72	1	.19	18	2	.10	7.9	2	.04
3	72	1	.19	17	2	.09	7.9	2	.04
4	68	1	.18	17	2	.09	7.9	2	.04
5	62	1	.17	16	2	.09	7.2	2	.04
6	66	1	.18	12	2	.06	7.9	3	.06
7	58	1	.16	12	2	.06	8.6	4	.09
8	53	1	.14	12	2	.06	8.6	3	.07
9	51	1	.14	12	2	.06	8.6	3	.07
10	50	1	.14	12	2	.06	7.2	2	.04
11	56	1	.15	11	2	.06	7.2	2	.04
12	50	1	.14	11	2	.06	7.2	2	.04
13	38	1	.10	9.3	2	.05	6.5	2	.04
14	40	1	.11	9.3	3	.08	5.8	2	.03
15	34	2	.18	10	3	.08	5.8	2	.03
16	29	2	.16	9.3	3	.08	5.8	3	.05
17	29	2	.16	8.6	3	.07	6.5	2	.04
18	27	2	.15	8.6	3	.07	7.9	2	.04
19	27	2	.15	7.9	3	.06	7.9	2	.04
20	26	2	.14	7.9	3	.06	7.9	1	.04
21	25	3	.20	8.6	3	.07	7.9	1	.02
22	23	4	.25	7.9	3	.06	9.3	1	.03
23	23	3	.19	7.9	2	.04	9.3	1	.03
24	22	2	.12	7.9	2	.04	10	1	.03
25	22	2	.12	7.9	2	.04	10	2	.05
26	22	2	.12	7.2	3	.06	10	1	.03
27	22	2	.12	7.2	6	.12	9.3	1	.03
28	21	2	.11	7.9	9	.19	8.6	1	.02
29	20	2	.11	7.2	7	.14	8.6	1	.02
30	20	2	.11	7.2	5	.10	8.6	2	.05
31	18	2	.10	7.2	2	.04	--	--	--
TOTAL	1222	--	4.69	323.0	--	2.34	239.1	--	1.23

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 719929.1
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 6253161.91

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

						PARTICLE SIZE											
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED											
DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 12, 1969	1230	10.0	18300	6110	302000	18	24	33	46	58	68	79	92	99	100	--	VPWC
DEC 13.....	1140	10.0	8960	1730	41900	20	27	35	44	52	61	72	84	92	100	--	VBWC
DEC 14.....	1005	8.0	4240	671	7680	23	28	36	44	53	61	73	87	99	100	--	VBWC
DEC 14.....	1215	10.0	5140	1270	17600	18	25	33	42	51	61	76	91	100	--	--	VBWC
DEC 15.....	1435	7.5	2500	350	2360	32	41	50	58	64	68	77	85	93	99	100	SBWC
DEC 18.....	1210	9.5	2370	506	3240	--	--	--	--	--	44	52	62	76	92	100	S
DEC 19.....	1525	10.5	21100	4200	239000	17	24	33	43	55	65	79	92	98	100	--	VPWC
DEC 21.....	1105	11.0	40300	8050	876000	23	27	36	47	60	71	84	94	98	99	100	VPWC
DEC 26.....	1015	6.5	4510	499	6080	--	--	--	--	--	73	83	90	97	100	--	S
JAN 16, 1970	1015	10.0	48100	5820	756000	19	27	37	50	60	69	84	94	99	100	--	VPWC
JAN 17.....	1141	9.5	30500	3180	262000	18	27	36	47	59	69	84	94	98	100	--	VPWC
JAN 24.....	1005	9.0	53800	6420	933000	24	32	41	58	72	84	91	97	99	100	--	VPWC
JAN 24.....	1310	9.5	46500	7840	984000	22	28	40	52	63	75	87	95	99	100	--	VPWC
FEB 4.....	1010	8.0	2340	522	3300	26	39	49	58	63	68	71	77	85	92	100	SBWC
FEB 19.....	1145	7.0	3260	634	5580	17	21	21	21	27	63	69	80	97	100	--	VBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

					PARTICLE SIZE											
					PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED											
DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
OCT 13, 1969	1615		5	16	--	1	4	4	6	9	14	23	36	60	100	S
FEB 19, 1970	1100	7.0	5	3260	--	--	--	2	7	16	28	47	75	100	--	S

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 Dobbyn Creek, and 11.8 miles northeast of Garberville.
DRAINAGE AREA.--2,107 sq mi.
PERIOD OF RECORD.--Water temperatures: November 1960 to September 1970.
Sediment records: October 1965 to September 1970.
Turbidity: Water years 1966-68 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.0°C July 10, Aug. 10; minimum, 3.5°C Jan. 7.
Sediment concentrations: Maximum daily, 6,460 mg/l Jan. 24; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 2,970,000 tons Jan. 24; minimum daily, 0.06 ton Sept. 23, 24.
EXTREMES, 1960-64, 1965-70.--Water temperatures: Maximum, 34.5°C June 25, 1968; minimum, freezing point Dec. 14-17, 1968.
Sediment concentrations (1965-70): Maximum daily, 13,900 mg/l Jan. 4, 1966; minimum daily, 1 mg/l on many days in 1965-70.
Sediment loads (1965-70): Maximum daily, 4,270,000 tons Jan. 4, 1966; minimum daily, 0.06 ton Sept. 23, 24, 1970.
REMARKS.--No temperature record Oct. 1-6, probe inoperative; Apr. 30 to May 7, May 24-27, recorder malfunction; Aug. 11-13, probe inoperative.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	16.5	15.0	8.0	7.0	6.0	5.0	8.5	8.0	10.5	9.5
2	--	--	16.0	15.0	7.5	6.5	6.0	5.0	8.5	8.0	9.5	8.5
3	--	--	16.0	15.0	7.5	6.5	5.5	5.0	8.5	8.0	9.0	8.0
4	--	--	16.0	15.0	7.5	6.5	5.0	4.5	9.0	8.5	9.0	8.5
5	--	--	15.0	14.0	8.0	7.0	4.5	4.0	9.5	9.0	8.5	7.5
6	--	--	14.0	13.0	8.0	7.0	5.0	4.0	9.5	8.5	9.5	8.0
7	18.0	16.5	13.5	12.5	8.0	7.5	4.0	3.5	10.0	9.0	10.5	9.5
8	18.0	17.0	13.5	12.0	9.0	8.0	6.0	4.0	9.5	9.0	10.5	9.5
9	18.0	17.0	13.0	12.0	9.5	8.5	6.5	5.0	9.5	9.0	9.5	9.0
10	18.5	17.0	13.0	12.0	9.5	9.0	8.0	6.5	10.0	9.0	9.5	8.5
11	18.0	16.0	13.0	12.0	9.5	9.0	8.5	8.0	10.5	10.0	10.0	9.0
12	18.0	15.5	13.5	12.0	9.5	9.0	8.5	8.0	10.5	10.0	10.5	9.5
13	17.0	15.0	13.5	12.5	10.0	9.5	9.0	8.5	10.0	8.5	11.0	10.0
14	16.0	15.0	14.0	12.5	10.5	10.0	10.0	9.0	9.0	8.5	12.5	11.0
15	15.0	14.5	14.0	12.5	11.0	10.0	9.5	9.0	9.0	8.5	12.5	11.5
16	15.0	14.5	13.0	12.0	10.0	9.5	10.0	9.0	9.5	8.5	12.5	11.0
17	15.0	14.0	12.0	10.5	10.0	9.5	10.0	10.0	8.5	8.0	12.0	11.0
18	15.0	14.0	11.0	10.0	10.5	10.0	10.0	10.0	9.0	8.0	11.5	10.5
19	14.5	13.5	10.5	9.0	11.0	10.0	10.0	10.0	9.0	8.5	11.5	9.5
20	15.5	14.0	10.0	8.5	12.0	10.5	10.5	10.0	8.5	8.0	12.0	10.5
21	17.0	14.5	10.0	8.5	12.5	10.5	11.0	10.5	9.0	8.0	12.5	11.0
22	17.5	15.0	10.5	9.0	10.5	9.0	12.0	11.5	8.5	8.0	13.5	11.5
23	17.0	15.5	10.5	9.5	10.0	9.5	12.0	11.0	8.5	8.0	14.0	12.5
24	16.5	15.5	10.5	9.5	10.0	10.0	11.0	10.0	9.5	8.0	15.0	13.0
25	16.5	14.5	10.0	9.0	10.0	8.5	10.5	9.5	10.0	8.5	15.5	13.5
26	15.5	15.0	10.0	9.0	8.5	7.5	10.5	10.5	10.5	9.0	15.5	13.5
27	16.0	14.5	9.5	9.0	8.0	6.5	11.0	9.5	11.0	9.5	15.5	13.5
28	16.0	14.5	9.5	8.5	6.5	6.0	9.5	8.0	10.5	10.0	15.0	13.5
29	15.5	14.5	9.0	8.5	6.5	6.0	8.5	7.5	--	--	14.5	13.0
30	16.0	15.0	8.5	8.0	6.5	6.0	8.5	8.0	--	--	14.0	12.5
31	16.0	15.0	--	--	6.0	5.5	8.5	8.0	--	--	14.0	12.0
AVE	16.4	15.1	12.3	11.2	9.1	8.2	8.6	7.8	9.4	8.6	12.0	10.6

11475000 EEL RIVER AT FORT SEWARD, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR MIN	MAY MAX	MAY MIN	JUN MAX	JUN MIN	JUL MAX	JUL MIN	AUG MAX	AUG MIN	SEP MAX	SEP MIN
1	14.0	11.5	--	--	24.0	22.0	23.5	20.5	26.0	21.5	24.5	22.0
2	15.0	12.0	--	--	25.0	23.0	24.5	21.5	26.0	20.5	24.5	21.5
3	15.0	12.0	--	--	25.0	23.5	26.0	22.5	25.5	21.5	25.0	22.0
4	15.0	12.5	--	--	24.5	23.0	26.5	23.5	24.5	21.0	23.0	21.5
5	15.5	13.0	--	--	25.0	22.5	26.5	23.5	26.0	21.5	23.5	20.5
6	15.0	13.5	--	--	25.0	23.0	26.0	23.0	26.5	22.0	24.5	21.0
7	13.5	11.5	--	--	24.0	22.0	26.5	22.5	26.5	22.0	25.0	22.0
8	13.5	11.5	16.0	15.0	22.0	20.5	27.0	23.5	26.5	22.5	24.5	22.0
9	14.0	12.0	16.5	15.0	21.0	19.5	27.5	23.5	27.0	22.5	24.5	21.5
10	15.5	13.5	16.0	14.5	21.5	19.0	28.0	23.5	28.0	23.0	25.0	21.5
11	15.0	13.0	15.0	13.5	22.0	19.0	27.5	23.5	--	--	25.0	22.0
12	15.0	13.0	16.5	13.5	21.0	19.0	27.0	22.5	--	--	23.0	21.5
13	13.0	11.5	18.5	15.0	22.0	19.0	27.0	22.5	--	--	22.5	20.0
14	12.5	11.5	21.0	17.0	22.5	19.5	27.5	22.5	26.0	22.0	22.0	19.0
15	13.0	10.5	21.5	19.0	22.5	20.0	27.5	23.0	26.0	22.0	22.0	18.5
16	14.0	12.0	22.0	20.0	22.5	21.0	27.0	22.5	26.0	22.0	22.0	19.0
17	14.5	12.5	21.0	18.5	22.5	21.0	27.0	22.0	25.5	22.0	22.5	20.0
18	13.5	12.5	18.5	17.0	24.0	21.0	27.0	22.0	26.0	22.0	22.0	20.0
19	14.0	12.5	18.5	16.5	25.0	21.5	27.0	22.0	25.0	22.0	22.5	19.5
20	13.5	12.0	19.5	17.5	25.5	22.0	27.0	22.0	25.5	22.0	22.5	19.5
21	14.0	12.0	20.0	18.5	25.0	23.5	26.5	22.0	25.5	22.5	22.0	19.0
22	14.0	12.0	20.5	19.0	26.0	23.5	26.0	21.5	25.0	22.0	22.0	19.0
23	14.5	12.5	22.0	19.5	26.0	24.0	26.5	21.0	25.0	22.0	22.0	19.0
24	14.0	12.5	--	--	25.0	24.0	26.5	21.0	25.0	22.0	21.0	18.5
25	13.5	12.5	--	--	25.5	23.5	26.5	21.5	25.0	22.5	21.0	17.5
26	13.0	12.0	--	--	25.5	24.0	27.0	22.0	25.0	22.0	21.0	18.0
27	13.5	11.0	--	--	24.5	23.5	27.0	22.5	24.0	21.5	21.0	18.0
28	14.0	11.5	21.0	20.0	23.5	20.5	26.5	22.0	24.5	22.0	20.0	18.0
29	14.5	12.0	20.5	19.5	22.0	20.5	26.5	22.0	25.0	22.5	20.5	18.0
30	--	--	21.0	20.0	22.5	20.0	26.5	22.0	25.0	22.0	21.0	18.0
31	--	--	23.0	20.5	--	--	26.0	21.5	25.0	22.0	--	--
AVE	14.1	12.1	--	--	23.7	21.6	26.6	22.3	25.6	22.0	22.7	19.9

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCTOBER MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCEN-TRATION (MG/L)	OCTOBER SEDIMENT DISCHARGE (TONS/DAY)	NOVEMBER MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCEN-TRATION (MG/L)	NOVEMBER SEDIMENT DISCHARGE (TONS/DAY)	DECEMBER MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCEN-TRATION (MG/L)	DECEMBER SEDIMENT DISCHARGE (TONS/DAY)
1	38	3	.31	111	2	.60	107	1	.29
2	38	3	.31	107	2	.58	102	1	.28
3	38	3	.31	105	1	.28	100	1	.27
4	36	3	.29	124	7	3.6	98	1	.26
5	36	3	.29	596	92	169	98	2	.53
6	34	3	.28	1290	140	500	98	2	.53
7	31	3	.25	785	55	117	98	2	.53
8	34	3	.28	550	16	24	102	2	.55
9	38	3	.31	462	8	10	113	4	1.2
10	38	3	.31	427	5	5.8	202	31	17
11	38	3	.31	366	3	3.0	910	209	1010
12	38	3	.31	315	3	2.6	20400	5500	377000
13	40	3	.32	273	2	1.5	28300	2950	254000
14	40	3	.32	230	2	1.2	14600	1630	65300
15	100	16	5.9	214	3	1.7	9680	780	20400
16	200	52	34	188	3	1.5	5020	240	3250
17	539	90	131	168	2	.91	3700	120	1200
18	688	38	71	166	2	.90	4780	230	2970
19	466	14	18	159	3	1.3	19600	2450	198000
20	333	7	6.3	152	3	1.2	24400	2000	144000
21	261	5	3.5	142	2	.77	54800	4310	673000
22	212	5	2.9	138	2	.75	28700	2070	160000
23	180	4	1.9	133	1	.36	30400	2390	204000
24	161	4	1.7	127	1	.34	30900	1600	133000
25	147	3	1.2	124	1	.33	21600	1000	58300
26	138	3	1.1	122	1	.33	18100	740	36200
27	131	3	1.1	120	1	.32	12500	485	16400
28	124	3	1.0	116	1	.31	8680	320	7500
29	118	3	.96	113	1	.31	6420	230	3990
30	113	3	.92	109	1	.29	4960	158	2120
31	111	3	.90	--	--	--	4020	105	1140
TOTAL	4539	--	287.58	8032	--	850.78	353588	--	2362801.44

11475000 EEL RIVER AT FORT SEWARD, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3400	75	689	11000	625	18600	5520	287	4470
2	2880	55	428	9000	466	11300	5100	255	3510
3	2430	45	295	7600	355	7280	4110	120	1330
4	2090	32	181	6600	295	5260	4500	164	2240
5	1830	22	109	5700	248	3820	6960	497	9580
6	1590	19	82	5200	195	2740	5780	170	2650
7	1460	17	67	4650	156	1960	7280	234	5610
8	1530	30	131	4150	128	1430	16700	1620	74100
9	6240	674	18300	3760	110	1120	11800	550	17500
10	27900	2550	194000	3360	98	889	10400	380	10700
11	17100	910	42000	3040	84	689	8480	275	6300
12	12500	520	17600	3280	174	1690	7450	205	4120
13	21800	1640	96500	9400	1760	51400	6620	160	2860
14	58700	4550	753000	14000	1350	54500	6720	205	3720
15	43000	2330	283000	7430	440	8830	6660	210	3780
16	82100	3420	810000	11900	954	48000	5840	145	2290
17	61000	2600	428000	31000	3440	305000	5280	105	1500
18	47100	1800	229000	19000	1170	60000	4640	85	1060
19	31600	1580	138000	12800	565	19500	4040	75	818
20	30000	1500	122000	9550	397	10200	3630	63	617
21	43000	2970	345000	7730	282	5890	3310	53	474
22	68000	2310	424000	6560	210	3720	3050	46	379
23	110000	4270	1270000	5840	165	2600	2850	41	315
24	170000	6460	2970000	5240	135	1910	2670	37	267
25	77000	3400	707000	4590	108	1340	2510	33	224
26	51000	2790	384000	4120	95	1060	2280	30	185
27	90000	5110	1240000	3790	88	901	2190	27	160
28	45000	2540	309000	3780	90	919	2040	24	132
29	25300	1740	119000	--	--	--	1900	21	108
30	18000	1170	56900	--	--	--	1830	19	94
31	14000	835	31600	--	--	--	1760	18	86
TOTAL	1167550	--	10989882	224070	--	632548	163900	--	161179

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1600	17	73	713	3	5.8	336	2	1.8
2	1480	16	64	699	2	3.8	315	1	.85
3	1410	14	53	685	2	3.7	295	1	.80
4	1340	12	43	678	3	5.5	280	1	.76
5	1270	11	38	678	3	5.5	270	2	1.5
6	1230	10	33	671	4	7.2	255	2	1.4
7	1200	9	29	692	4	7.5	240	2	1.3
8	1150	8	25	643	2	3.5	230	2	1.2
9	1110	9	27	657	2	3.5	230	2	1.2
10	1070	9	26	832	5	11	230	3	1.9
11	1040	8	22	818	5	11	240	3	1.9
12	1070	7	20	818	5	11	240	3	1.9
13	1020	7	19	825	4	8.9	230	2	1.2
14	1030	6	17	776	4	8.4	221	2	1.2
15	1040	6	17	741	4	8.0	212	2	1.1
16	1000	5	14	685	3	5.5	226	2	1.2
17	972	5	13	657	3	5.3	226	2	1.2
18	930	5	13	657	3	5.3	212	2	1.1
19	923	5	12	636	4	6.9	203	2	1.1
20	972	7	18	601	4	6.5	194	2	1.0
21	916	6	15	573	3	4.6	185	2	1.0
22	867	4	9.4	538	3	4.4	173	2	.93
23	846	4	9.1	504	2	2.7	157	2	.85
24	790	4	8.5	486	2	2.6	145	2	.78
25	755	4	8.2	462	2	2.5	138	2	.75
26	748	4	8.1	438	2	2.4	135	1	.36
27	825	6	13	408	2	2.2	128	1	.35
28	825	5	11	396	2	2.1	124	1	.33
29	762	4	8.2	384	2	2.1	117	1	.32
30	727	4	7.9	366	3	3.0	117	2	.63
31	--	--	--	354	3	2.9	--	--	--
TOTAL	30918	--	674.4	19071	--	165.3	6304	--	31.91

11475000 EEL RIVER AT FORT SEWARD, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	117	1	.32	37	2	.20	22	3	.18
2	117	1	.32	37	2	.20	22	4	.24
3	117	1	.32	37	2	.20	22	4	.24
4	114	1	.31	34	1	.09	22	4	.24
5	107	2	.58	34	2	.18	21	5	.28
6	98	3	.79	33	4	.36	21	8	.45
7	95	3	.77	32	4	.35	21	6	.34
8	92	2	.50	31	4	.33	21	6	.34
9	86	2	.46	31	4	.33	21	4	.23
10	80	1	.22	30	5	.41	21	3	.17
11	78	1	.21	29	5	.39	21	3	.17
12	75	1	.20	28	4	.30	21	3	.17
13	70	1	.19	28	4	.30	21	4	.23
14	68	2	.37	27	4	.29	21	4	.23
15	68	2	.37	26	3	.21	21	4	.23
16	66	2	.36	26	3	.21	21	2	.11
17	63	2	.34	25	3	.20	21	2	.11
18	61	3	.49	25	3	.20	21	2	.11
19	58	3	.47	25	2	.14	21	2	.11
20	58	3	.47	25	2	.14	21	2	.11
21	56	5	.76	24	2	.13	23	2	.12
22	54	4	.58	24	2	.13	23	2	.12
23	51	3	.41	24	3	.19	23	1	.06
24	49	2	.26	24	3	.19	23	1	.06
25	46	2	.25	23	3	.19	25	1	.07
26	46	2	.25	23	6	.37	25	1	.07
27	46	2	.25	23	4	.25	25	2	.14
28	46	2	.25	23	4	.25	25	2	.14
29	44	2	.24	23	2	.12	25	2	.14
30	42	2	.23	22	2	.12	25	2	.14
31	39	2	.21	22	2	.12	--	--	--
TOTAL	2207	--	11.75	855	--	7.09	666	--	5.35

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1981700
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 14148444.60

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
DEC 12, 1969	0800	9.5	9580	4170	108000	30	40	51	63	77	86	95	99	100	--	--	VPWC
DEC 13.....	1545	10.0	22500	2030	123000	25	35	43	52	67	74	89	98	100	--	--	VPWC
DEC 14.....	1030	10.5	15300	1630	67300	28	37	48	59	70	78	89	97	100	--	--	VBWC
DEC 18.....	1320	10.5	5200	319	4480	--	--	--	--	--	61	72	76	92	99	100	S
DEC 19.....	1600	11.0	26900	3670	267000	23	24	38	49	61	74	90	99	100	--	--	VPWC
DEC 21.....	1110	12.0	60700	6450	1060000	27	30	40	53	66	80	94	100	--	--	--	VPWC
DEC 21.....	1615	12.0	77100	4930	1030000	26	28	41	54	68	80	94	100	--	--	--	VPWC
DEC 23.....	1615	10.0	37700	2730	278000	21	23	33	45	56	69	86	97	100	--	--	VPWC
JAN 16, 1970	1200	10.0	97800	4280	1130000	22	24	37	49	61	74	90	99	100	--	--	VPWC
JAN 16.....	1635	10.0	104000	4330	1220000	24	27	41	54	67	80	93	100	--	--	--	VPWC
JAN 18.....	0940	10.0	48700	1820	239000	23	32	42	53	64	76	90	99	100	--	--	VBWC
JAN 20.....	1620	10.5	28200	1210	92100	27	28	43	54	65	75	88	96	99	100	--	VPWC
JAN 24.....	0840	10.0	193000	7150	3730000	30	38	46	57	73	85	96	100	--	--	--	VPWC
JAN 24.....	1550	10.5	140000	5060	1910000	30	33	47	59	73	84	96	100	--	--	--	VPWC
JAN 25.....	1630	10.0	52100	3230	454000	28	32	46	57	68	80	94	99	100	--	--	VPWC
JAN 27.....	0735	10.0	115000	5860	1820000	29	32	42	54	70	83	95	100	--	--	--	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
OCT 14, 1969	1715		4	40	--	1	6	10	16	22	27	35	51	98	100	S
FEB 3, 1970	1535		7	7480	1	2	8	34	58	78	85	89	93	97	100	S

11475250 EEL RIVER AT SOUTH FORK, CALIF.

LOCATION.--Lat 40°21'04", long 123°54'48", in SE¼NE¼ 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: October 1953 to September 1970.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey. 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 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)
OCT.											
07...	1430	31	17.8	10.3	--	--	7.5	--	158	0	--
NOV.											
04...	1430	124	15.0	10.4	--	--	8.0	--	146	0	--
DEC.											
02...	1530	102	8.9	12.7	--	--	7.0	--	146	0	--
JAN.											
07...	--	1460	4.4	13.3	--	--	4.6	--	93	0	--
FEB.											
04...	0840	6600	8.9	12.4	--	--	3.7	--	78	0	--
MAR.											
10...	1520	10400	9.4	12.4	--	--	4.0	--	74	0	--
APR.											
08...	0845	1150	12.0	11.5	--	--	5.0	--	110	0	--
MAY											
12...	1500	818	15.0	11.3	29	8.1	8.1	1.0	113	0	19
JUNE											
09...	1210	230	18.3	9.6	--	--	6.8	--	135	0	--
JULY											
07...	--	95	20.6	9.5	--	--	9.6	--	119	0	--
AUG.											
11...	1200	29	23.3	8.0	--	--	8.0	--	161	0	--
SEPT.											
15...	1540	21	17.8	10.1	--	--	9.8	--	171	0	--

DATE	CHLO-RIDE (CL) (MG/L)	NITRATE (NO3) (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	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
OCT.											
07...	7.4	--	210	156	26	130	9	.3	325	8.2	1
NOV.											
04...	10	--	260	153	33	120	10	.3	330	8.3	2
DEC.											
02...	8.2	--	310	148	28	120	9	.3	316	7.9	1
JAN.											
07...	2.5	--	90	85	9	76	--	--	187	7.4	24
FEB.											
04...	1.6	--	170	69	5	64	10	.2	149	7.9	240
MAR.											
10...	1.6	--	20	64	3	61	12	.2	138	8.0	250
APR.											
08...	3.5	--	80	99	9	90	10	.2	216	8.2	7
MAY											
12...	4.4	.1	170	106	13	93	14	.3	226	8.2	6
JUNE											
09...	3.0	--	150	129	18	111	53	.8	259	8.3	6
JULY											
07...	3.2	--	20	106	8	98	16	.4	225	7.9	1
AUG.											
11...	5.9	--	190	154	22	132	10	.3	329	7.8	1
SEP.											
15...	7.2	--	170	166	26	140	11	.3	345	8.2	1

11475500 SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.

LOCATION.--Lat 39°43'09", long 123°39'06", in NW¼ sec.32, T.22 N., R.16 W., Mendocino County, at gaging station 0.4 mile upstream from Jack of Hearts Creek, and 4.7 miles north of Branscomb.
DRAINAGE AREA.--43.9 sq mi.
PERIOD OF RECORD.--Water temperatures: October 1960 to September 1970 (discontinued).
Sediment records: Water years 1957-62 (partial-record station), October 1962 to September 1970 (discontinued).
Turbidity: Water years 1966-68 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.5°C July 4, 5; minimum, 0.5°C Dec. 2.
Sediment concentrations: Maximum daily, 1,030 mg/l Jan. 21; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 15,500 tons Jan. 23; minimum daily, 0 tons on many days.
EXTREMES, 1960-70.--Water temperatures: Maximum (1960-61, 1962-68, 1969-70), 28.5° July 4, 5, 1970; minimum (1961-65, 1966-68, 1969-70), 0.5°C Dec. 2, 1969.
Sediment concentrations (1962-70): Maximum daily, 4,900 mg/l (estimated) Dec. 22, 1964; minimum daily, 1 mg/l on many days in 1963-70.
Sediment loads (1962-70): Maximum daily, 230,000 tons (estimated) Dec. 22, 1964; minimum daily, 0 tons on many days in 1964-65, 1967, 1970.
REMARKS.--No temperature record Jan. 9-20, recorder malfunction. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	19.0	--	14.5	13.0	--	9.5	3.0	--	1.0	5.0	--	4.0	9.0	--	7.5	9.0	--	7.5
2	18.0	--	14.0	11.5	--	8.5	2.5	--	0.5	5.0	--	3.0	9.0	--	7.0	8.5	--	6.5
3	16.5	--	12.5	12.0	--	9.0	3.5	--	1.0	4.5	--	3.0	10.0	--	8.5	9.0	--	7.0
4	15.5	--	11.0	11.0	--	9.5	3.5	--	2.0	4.0	--	2.5	10.0	--	9.0	8.5	--	6.5
5	14.5	--	10.0	11.0	--	10.0	4.0	--	2.0	5.5	--	4.0	10.0	--	8.5	9.5	--	6.5
6	14.5	--	9.5	10.5	--	9.5	5.5	--	3.0	7.0	--	5.5	11.0	--	9.5	10.0	--	7.5
7	14.0	--	10.0	10.0	--	9.5	6.0	--	4.0	7.5	--	7.0	10.5	--	9.0	10.0	--	9.5
8	16.0	--	13.0	10.5	--	9.5	6.5	--	5.0	8.0	--	7.0	10.5	--	8.5	10.5	--	8.5
9	15.0	--	12.5	9.5	--	8.0	6.0	--	5.0	--	--	--	10.5	--	9.0	9.0	--	8.0
10	17.5	--	14.0	9.0	--	7.0	6.0	--	5.5	--	--	--	11.0	--	9.5	9.5	--	7.5
11	16.0	--	12.5	8.5	--	6.5	8.0	--	6.0	--	10.0	--	10.5	--	9.5	10.0	--	8.5
12	14.5	--	10.5	8.5	--	7.0	9.0	--	8.0	--	10.0	--	10.0	--	9.0	10.5	--	9.0
13	12.0	--	9.5	8.5	--	6.5	9.5	--	9.0	--	10.0	--	9.0	--	8.5	11.5	--	9.0
14	12.0	--	11.0	8.5	--	7.0	9.0	--	8.0	--	10.0	--	9.5	--	8.5	11.5	--	10.0
15	12.5	--	12.0	9.0	--	8.0	8.5	--	7.5	--	10.0	--	9.5	--	8.0	11.5	--	8.5
16	13.0	--	12.5	8.5	--	6.0	8.5	--	7.5	--	11.5	--	9.0	--	8.5	12.0	--	9.0
17	13.0	--	12.0	6.0	--	4.5	8.5	--	8.0	--	10.0	--	9.0	--	8.0	11.0	--	8.0
18	13.0	--	11.0	5.5	--	4.0	9.0	--	8.0	--	12.0	--	9.5	--	8.5	10.5	--	7.0
19	13.0	--	10.5	4.5	--	3.0	9.5	--	9.0	--	12.0	--	9.5	--	7.5	10.5	--	6.5
20	13.5	--	10.5	4.0	--	2.5	10.0	--	9.0	--	--	--	9.5	--	7.0	10.5	--	6.5
21	15.0	--	11.5	5.0	--	3.0	10.0	--	8.5	11.5	--	11.0	9.0	--	7.0	11.0	--	7.0
22	15.0	--	11.5	6.0	--	4.0	9.0	--	8.5	11.5	--	11.5	9.0	--	6.5	12.0	--	8.0
23	12.5	--	12.0	6.0	--	4.0	9.5	--	8.5	11.5	--	11.0	9.0	--	6.5	12.5	--	8.0
24	13.0	--	11.0	6.0	--	4.0	9.5	--	9.0	11.0	--	10.5	10.5	--	7.5	13.5	--	9.0
25	13.5	--	10.5	6.0	--	4.0	9.0	--	7.5	11.0	--	10.0	10.5	--	8.0	12.5	--	9.5
26	11.5	--	10.0	5.0	--	3.0	8.0	--	7.0	10.5	--	10.5	11.0	--	8.0	12.0	--	10.0
27	12.5	--	11.0	5.0	--	3.0	7.0	--	6.0	10.5	--	9.0	10.5	--	8.0	11.0	--	8.0
28	13.0	--	10.5	5.0	--	2.5	7.0	--	5.5	9.5	--	8.5	10.0	--	9.0	12.0	--	7.5
29	13.0	--	9.5	4.0	--	2.0	7.0	--	4.5	9.0	--	7.5	--	--	--	11.5	--	8.0
30	13.0	--	10.0	3.5	--	1.5	6.0	--	4.0	9.5	--	8.5	--	--	--	12.0	--	8.0
31	13.0	--	9.5	--	--	--	6.0	--	4.0	9.0	--	7.5	--	--	--	12.0	--	7.5
AVE	14.1	--	11.3	7.7	--	5.9	7.2	--	5.9	--	--	--	9.9	--	8.2	10.8	--	8.0

11475500 SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR MIN	MAY MAX	MAY MIN	JUN MAX	JUN MIN	JUL MAX	JUL MIN	AUG MAX	AUG MIN	SEP MAX	SEP MIN
	DAILY		DAILY		DAILY		DAILY		DAILY		DAILY	
1	12.5	7.5	18.0	13.0	24.0	18.0	25.0	18.5	24.5	17.0	21.5	16.5
2	13.0	8.5	19.0	14.0	25.0	18.5	26.5	19.0	25.0	18.5	20.5	16.0
3	13.0	8.0	19.5	14.5	25.0	19.0	28.0	20.5	25.5	19.0	21.5	16.5
4	13.0	8.0	19.0	14.5	25.0	18.5	28.5	21.0	25.0	18.5	20.0	17.0
5	13.0	8.5	18.0	14.5	25.0	19.0	28.5	21.5	24.0	18.0	20.0	15.5
6	13.0	9.0	15.5	13.5	24.5	18.5	27.0	20.5	24.5	19.0	22.0	16.5
7	12.0	9.0	16.5	11.5	22.0	17.5	28.0	21.0	24.0	18.5	23.5	18.5
8	12.5	8.5	15.0	14.0	18.5	16.0	27.0	20.5	25.0	19.0	23.0	18.0
9	12.5	9.0	15.5	13.5	17.0	15.5	26.5	20.5	25.5	19.0	23.0	18.5
10	14.5	11.5	16.0	13.0	20.5	15.0	26.0	19.5	25.5	19.5	23.0	18.0
11	13.5	9.5	14.0	11.5	21.5	15.5	26.0	19.0	26.0	19.5	22.0	17.5
12	13.0	9.0	12.5	10.5	21.5	15.5	26.0	19.0	25.5	19.0	20.0	17.0
13	12.0	9.5	17.0	11.5	22.5	16.0	26.5	19.5	25.0	19.0	18.0	15.0
14	12.0	8.5	19.0	13.5	23.0	17.5	27.0	20.0	25.0	19.0	17.5	13.5
15	12.5	8.5	21.0	15.5	23.0	16.5	26.0	20.0	25.5	19.5	17.5	13.0
16	10.5	8.5	22.0	17.0	24.0	17.0	26.0	20.0	25.0	19.5	18.5	13.5
17	12.5	8.5	22.0	17.5	23.5	16.5	26.0	19.0	24.0	18.5	19.0	14.0
18	11.5	9.0	21.0	17.5	24.0	16.5	27.0	20.0	23.5	18.5	19.5	16.0
19	13.5	10.0	19.0	16.0	26.0	18.5	28.0	20.5	23.0	17.5	18.5	15.5
20	12.0	9.0	19.5	14.5	27.0	20.0	27.0	20.5	23.0	17.5	17.5	15.0
21	13.5	8.5	20.0	15.0	27.0	20.5	26.5	20.5	22.5	17.5	18.0	13.0
22	14.0	9.5	21.0	16.5	28.0	21.5	26.5	19.5	22.0	18.0	18.5	13.5
23	14.0	10.0	21.5	16.5	27.0	21.5	26.5	20.0	22.5	17.5	19.0	14.5
24	14.0	10.5	22.0	17.0	26.5	21.0	26.5	20.5	22.0	16.5	18.5	14.5
25	13.5	11.0	22.5	17.5	26.5	20.5	24.0	20.5	21.5	16.5	17.5	13.5
26	14.5	11.0	22.0	17.5	27.0	21.0	24.5	19.5	21.5	16.5	17.5	13.0
27	13.5	9.5	21.0	16.5	25.5	20.5	24.0	19.5	21.5	16.5	17.0	13.0
28	14.0	10.0	21.0	15.5	25.0	19.0	20.5	18.5	22.0	16.5	16.5	13.0
29	13.5	10.0	21.0	15.5	25.0	18.5	19.5	17.0	22.0	17.0	17.0	13.0
30	16.0	10.0	22.5	16.5	25.0	18.5	21.5	15.5	21.5	17.5	17.0	13.0
31	--	--	23.0	18.0	--	--	22.0	16.0	21.5	17.0	--	--
AVE	13.1	9.3	19.2	14.9	24.2	18.3	25.8	19.6	23.7	18.1	19.4	15.2

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCTOBER MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCEN-TRATION (MG/L)	OCTOBER SEDIMENT DISCHARGE (TONS/DAY)	NOVEMBER MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCEN-TRATION (MG/L)	NOVEMBER SEDIMENT DISCHARGE (TONS/DAY)	DECEMBER MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCEN-TRATION (MG/L)	DECEMBER SEDIMENT DISCHARGE (TONS/DAY)
1	1.3	2	.01	7.0	3	.06	6.6	2	.04
2	1.6	3	.01	6.6	3	.05	6.3	3	.05
3	1.3	3	.01	6.6	3	.05	6.3	3	.05
4	1.2	3	.01	44	24	11	6.3	3	.05
5	1.3	4	.01	178	86	46	6.3	3	.05
6	1.3	4	.01	55	38	5.6	6.3	3	.05
7	1.4	4	.02	34	20	1.8	6.3	3	.05
8	5.2	13	.18	30	8	.65	14	16	.60
9	5.2	8	.11	25	5	.34	16	11	.48
10	6.3	7	.13	22	4	.24	30	32	2.6
11	6.1	7	.12	19	4	.21	81	94	23
12	4.1	7	.08	17	4	.18	1090	365	1140
13	3.4	7	.06	15	3	.12	670	227	441
14	3.4	7	.06	14	3	.11	686	143	270
15	41	73	13	13	2	.07	400	55	59
16	42	148	17	12	2	.06	254	20	14
17	34	122	11	11	3	.09	210	20	11
18	22	100	5.9	11	3	.09	239	20	13
19	16	80	3.5	10	2	.05	782	193	574
20	13	56	2.0	10	1	.03	823	183	453
21	11	31	.92	9.1	1	.02	2700	898	6870
22	9.2	14	.35	8.7	1	.02	964	420	1090
23	8.2	8	.18	8.7	2	.05	1450	440	1850
24	8.2	6	.13	8.2	3	.07	878	66	156
25	7.7	5	.10	8.2	3	.07	671	60	109
26	7.7	4	.08	7.7	3	.06	558	43	65
27	10	3	.08	7.7	3	.06	444	24	29
28	8.7	3	.07	7.3	2	.04	350	9	8.5
29	8.2	3	.07	7.3	2	.04	310	7	5.9
30	7.7	3	.06	6.6	2	.04	265	7	5.0
31	7.3	3	.06	--	--	--	235	7	4.4
TOTAL	305.6	--	55.32	619.7	--	67.27	14164.4	--	13194.82

11475500 SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	205	7	3.9	295	20	16	138	3	1.1
2	180	6	2.9	247	20	13	129	3	1.0
3	155	6	2.5	214	18	10	122	3	.99
4	140	6	2.3	190	16	8.2	200	42	28
5	125	6	2.0	170	14	6.4	185	26	13
6	115	6	1.9	155	13	5.4	155	4	1.7
7	108	6	1.7	143	12	4.6	277	77	82
8	107	6	1.7	138	11	4.1	361	60	58
9	130	21	7.4	131	10	3.5	329	48	45
10	520	132	185	127	9	3.1	298	60	48
11	450	40	49	122	9	3.0	256	28	19
12	430	32	37	185	67	35	228	13	8.0
13	750	100	203	315	71	66	200	7	3.8
14	1900	560	2870	222	12	7.2	239	19	12
15	1500	230	932	201	15	8.1	193	7	3.6
16	2700	910	6630	1070	519	1610	175	5	2.4
17	2400	400	2590	733	220	435	140	5	1.9
18	1700	170	780	576	80	124	122	5	1.6
19	1600	190	821	454	17	21	112	5	1.5
20	2300	320	1990	358	6	5.8	103	5	1.4
21	4300	1030	12000	286	4	3.1	96	4	1.0
22	3590	420	4070	239	3	1.9	91	4	.98
23	5920	916	15500	206	2	1.1	85	4	.92
24	3710	480	5360	178	2	.96	80	4	.86
25	1560	140	590	155	2	.84	75	4	.81
26	1810	285	2880	140	3	1.1	71	4	.77
27	3040	434	4410	136	3	1.1	67	4	.72
28	1050	50	142	138	4	1.5	64	4	.69
29	620	25	42	--	--	--	60	4	.65
30	457	22	27	--	--	--	57	4	.62
31	365	20	20	--	--	--	55	5	.74
TOTAL	43937	--	62154.3	7524	--	2401.00	4763	--	342.75

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	52	5	.70	22	3	.18	12	4	.13
2	50	5	.68	21	3	.17	12	4	.13
3	48	5	.65	20	3	.16	11	4	.12
4	46	5	.62	19	3	.15	11	3	.09
5	44	5	.59	18	3	.15	11	3	.09
6	43	4	.46	17	3	.14	11	3	.09
7	42	4	.45	17	3	.14	11	3	.09
8	40	4	.43	17	4	.18	12	3	.10
9	39	4	.42	18	4	.19	15	3	.12
10	38	4	.41	19	5	.26	14	3	.11
11	37	5	.50	20	5	.27	12	3	.10
12	37	5	.50	24	5	.32	12	3	.10
13	39	5	.53	22	5	.30	11	3	.09
14	37	6	.60	19	5	.26	11	4	.12
15	35	6	.57	18	4	.19	11	4	.12
16	35	7	.66	18	4	.19	11	4	.12
17	34	7	.64	17	3	.14	11	4	.12
18	33	8	.71	16	2	.09	10	4	.11
19	39	9	.95	16	2	.09	9.6	4	.10
20	34	7	.64	16	1	.04	9.1	4	.10
21	31	5	.42	16	1	.04	9.1	4	.10
22	30	4	.32	15	1	.04	8.2	5	.11
23	29	4	.31	14	2	.08	7.7	5	.10
24	28	4	.30	14	2	.08	7.7	6	.12
25	27	4	.29	14	2	.08	7.7	6	.12
26	31	4	.33	14	3	.11	7.7	7	.15
27	29	3	.23	14	3	.11	8.2	7	.15
28	27	3	.22	14	3	.11	8.7	8	.19
29	25	3	.20	13	4	.14	8.2	8	.18
30	23	3	.19	13	4	.14	7.7	8	.17
31	--	--	--	13	4	.14	--	--	--
TOTAL	1082	--	14.52	528	--	4.68	308.6	--	3.54

11475500 SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	7.3	8	.16	2.7	6	.04	1.5	3	.01
2	7.0	8	.15	2.7	5	.04	1.7	3	.01
3	6.6	8	.14	2.4	4	.03	1.5	2	.01
4	5.9	9	.14	2.7	3	.02	1.5	2	.01
5	5.9	9	.14	2.4	2	.01	1.3	2	.01
6	5.2	9	.13	2.4	2	.01	1.1	2	.01
7	5.2	9	.13	2.4	2	.01	1.1	3	.01
8	5.0	9	.12	2.4	2	.01	1.2	4	.01
9	4.8	8	.10	2.4	2	.01	1.1	4	.01
10	4.6	8	.10	1.9	2	.01	1.2	3	.01
11	4.4	7	.08	1.9	1	.01	1.2	2	.01
12	4.3	7	.08	1.7	1	0	.92	2	0
13	4.0	6	.06	1.4	1	0	.92	2	0
14	3.8	6	.06	1.4	1	0	1.2	2	.01
15	3.5	5	.05	1.4	1	0	1.1	2	.01
16	3.5	5	.05	1.4	1	0	1.2	2	.01
17	3.9	5	.05	1.4	1	0	1.2	1	0
18	3.9	5	.05	1.3	1	0	1.3	1	0
19	3.9	6	.06	1.3	1	0	1.3	1	0
20	3.6	6	.06	1.3	1	0	1.4	1	0
21	3.4	7	.06	1.4	1	0	1.7	1	0
22	3.4	7	.06	1.3	1	0	1.4	1	0
23	2.9	8	.06	1.5	2	.01	1.4	1	0
24	3.1	8	.07	1.9	2	.01	1.3	1	0
25	2.7	8	.06	1.5	2	.01	.92	1	0
26	2.7	8	.06	1.5	2	.01	.92	1	0
27	2.9	8	.06	1.5	3	.01	.92	1	0
28	2.7	7	.05	1.5	3	.01	.92	1	0
29	2.7	7	.05	1.4	3	.01	.79	1	0
30	2.7	7	.05	1.5	3	.01	.79	1	0
31	2.7	7	.05	1.5	3	.01	--	--	--
TOTAL	128.2	--	2.54	55.4	--	.29	36.00	--	.14

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 73451.90
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 78241.17

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

						PARTICLE SIZE											
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED											
DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
NOV 5, 1969	1155	11.0	150	84	34	--	--	--	--	--	99	100	--	--	--	--	S
DEC 12.....	1030	10.0	1250	419	1410	34	50	67	83	92	96	99	100	--	--	--	SBWC
DEC 21.....	1205	11.0	3270	816	7200	14	24	35	46	55	64	72	81	99	100	--	VPWC
JAN 14, 1970	1030	10.0	2140	689	3980	14	23	35	47	56	64	72	87	98	100	--	VBWC
JAN 17.....	1730	10.0	2470	337	2250	16	37	52	69	79	87	95	99	100	--	--	SBWC
JAN 21.....	0750	12.0	4580	1120	13800	24	27	43	57	71	79	86	93	98	100	--	VPWC
JAN 23.....	1610	11.0	6440	940	16300	16	31	43	58	70	80	92	99	100	--	--	VBWC
FEB 16.....	1650	9.0	1310	404	1430	2	17	33	52	63	72	78	98	100	--	--	SBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

					PARTICLE SIZE											
					PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED											
DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
OCT 23, 1969	1300	12.0	3	8.2	--	--	4	5	8	13	18	29	53	98	100	S

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 1970.
Water temperatures: October 1967 to September 1970.
Sediment records: Water years 1969-70 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 20.5°C on several days during July; minimum, 5.0°C Dec. 2, 4.
EXTREMES, 1967-70.--Water temperatures: Maximum, 21.0°C on several days in 1968 and 1969; minimum, 5.0°C on several days in 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.											
23...	1030	1.6	10.0	12.8	12	--	14	4.3	7.1	.6	72
NOV.											
21...	1200	1.8	6.0	8.8	13	--	13	4.0	7.2	.5	70
DEC.											
23...	1230	214	10.0	12.2	12	--	7.0	2.3	4.6	.6	40
JAN.											
21...	1000	556	10.0	10.9	12	--	5.4	1.8	4.0	.5	30
FEB.											
19...	1030	68	7.0	10.9	15	30	7.5	2.6	5.0	.6	42
MAR.											
26...	1230	17	10.0	10.4	14	0	12	3.3	5.8	.6	61
APR.											
30...	1100	6.2	8.0	10.2	14	10	10	3.5	6.5	.5	58
MAY											
02...	1840	6.1	9.0	--	--	2	--	--	--	--	--
JUNE											
16...	1300	3.8	15.0	9.7	14	0	12	3.9	7.4	.7	67
SEP.											
08...	1700	.60	16.5	--	13	0	14	4.6	8.0	.7	72
17...	1130	.68	12.0	--	--	--	--	--	--	--	--

DATE	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	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 (NH4) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)
OCT.										
23...	0	4.0	2.8	.2	.08	.08	.00	.0	.12	.10
NOV.										
21...	0	4.0	1.4	.1	.24	.24	.00	.0	.13	.00
DEC.										
23...	0	1.0	1.4	.2	.09	--	--	.8	.13	.13
JAN.										
21...	0	1.0	1.5	.1	.11	--	--	1.1	.40	.40
FEB.										
19...	0	2.0	1.7	.1	.21	.21	.00	.0	.10	.03
MAR.										
26...	0	4.0	1.7	.1	.00	.03	.04	.0	.10	.09
APR.										
30...	0	5.0	1.0	.1	.13	.13	.00	.1	.32	.14
MAY										
02...	--	--	--	--	--	--	--	--	--	--
JUNE										
16...	0	3.0	1.6	.1	--	--	--	--	--	--
SEP.										
08...	0	4.0	2.2	.2	--	--	--	.0	--	--
17...	--	--	--	--	.31	.58	.35	12	.14	.00

DATE	DIS-SOLVED BORON (B) (UG/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)	PERCENT SODIUM	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
OCT.										
23...	30	80	.11	52	0	22	133	7.5	1.1	52
NOV.										
21...	30	77	.10	49	0	24	126	7.7	.8	60
DEC.										
23...	20	49	.07	27	0	27	72	7.4	.0	103
JAN.										
21...	0	41	.06	21	0	29	59	7.1	.0	--
FEB.										
19...	40	56	.08	29	0	26	80	7.4	--	44
MAR.										
26...	10	72	.10	44	0	22	111	8.1	.0	14
APR.										
30...	10	71	.10	40	0	26	107	7.6	.0	10
MAY										
02...	--	--	--	--	--	--	--	--	--	--
JUNE										
16...	30	76	.10	46	0	26	122	7.2	--	--
SEP.										
08...	0	82	.11	54	0	24	139	7.8	.2	--
17...	--	--	--	--	--	--	--	--	--	--

11475560 ELDER CREEK NEAR BRANSCOMB, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	13.0	9.0	9.0	6.0	5.5	8.0	8.0	8.5	8.5	7.5	7.5
2	13.0	12.5	9.0	9.0	5.5	5.0	8.0	8.0	9.0	8.5	7.5	7.5
3	12.5	12.0	9.0	9.0	5.5	5.0	8.0	7.5	9.0	9.0	7.5	7.5
4	12.0	11.0	9.0	9.0	5.5	5.0	7.5	7.0	9.0	8.5	7.5	7.5
5	11.0	10.0	9.0	9.0	5.5	5.5	7.0	7.0	8.5	8.0	7.5	7.0
6	10.0	10.0	9.0	9.0	5.5	5.5	7.0	7.0	8.0	8.0	7.9	7.0
7	10.0	10.0	9.0	9.0	5.5	5.5	7.0	7.0	8.5	8.0	7.5	7.5
8	10.0	10.0	9.0	9.0	6.0	5.5	7.5	7.0	8.5	8.5	7.5	7.5
9	10.0	10.0	9.0	9.0	6.0	6.0	8.0	7.5	8.5	8.5	8.0	7.5
10	10.0	10.0	9.0	8.5	6.5	6.0	8.0	8.0	8.5	7.5	8.0	8.0
11	10.0	10.0	8.5	8.5	9.5	6.5	8.0	8.0	7.5	7.5	8.0	8.0
12	10.0	10.0	8.5	8.5	9.5	9.0	8.5	8.0	7.5	7.5	8.0	8.0
13	10.0	9.5	8.5	8.5	9.5	9.5	9.5	8.5	7.5	7.5	8.0	8.0
14	9.5	9.5	8.5	8.5	9.5	9.5	9.5	9.5	7.5	7.0	8.0	8.0
15	10.5	9.5	8.5	8.5	9.5	9.5	9.5	9.5	7.0	7.0	8.0	8.0
16	10.0	10.0	8.5	8.5	9.5	9.5	9.5	9.5	7.0	7.0	8.0	8.0
17	10.0	10.0	8.5	7.0	9.5	9.5	10.0	9.5	7.0	7.0	8.0	8.0
18	10.0	10.0	7.0	6.5	9.5	9.5	10.0	10.0	7.0	7.0	8.5	8.0
19	10.0	9.5	6.5	6.0	10.0	9.5	10.0	10.0	7.0	7.0	8.5	8.5
20	9.5	9.5	6.5	6.0	11.0	10.0	10.0	10.0	7.0	7.0	8.5	8.5
21	9.5	9.5	6.5	6.0	11.0	10.5	10.0	10.0	7.0	7.0	8.5	8.5
22	9.5	9.5	6.5	6.5	10.5	10.0	10.0	10.0	7.0	7.0	8.5	8.5
23	10.0	9.5	6.5	6.5	10.0	10.0	10.0	10.0	7.0	7.0	8.5	8.5
24	10.0	10.0	6.5	6.5	10.0	10.0	10.0	10.0	7.0	7.0	9.0	8.5
25	10.0	10.0	6.5	6.5	10.0	9.5	10.0	9.5	7.0	7.0	9.0	9.0
26	10.0	10.0	6.5	6.5	9.5	9.0	9.5	9.5	7.0	7.0	10.0	9.0
27	10.0	10.0	6.5	6.5	9.0	9.0	9.5	9.5	7.0	7.0	9.0	9.0
28	10.0	10.0	6.5	6.5	9.0	9.0	9.5	9.5	7.5	7.0	9.0	9.0
29	10.0	9.0	6.5	6.0	9.0	9.0	9.5	9.0	--	--	9.0	9.0
30	9.0	9.0	6.0	6.0	9.0	8.5	9.0	9.0	--	--	9.0	9.0
31	9.0	9.0	--	--	8.5	8.0	9.0	8.5	--	--	9.0	8.5
AVE	10.3	10.0	7.8	7.6	8.4	8.0	8.9	8.7	7.7	7.5	8.3	8.1

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.5	8.5	8.0	16.5	13.0	17.0	15.5	17.0	14.0	15.0	13.5
2	8.5	8.5	9.0	8.5	17.5	13.5	19.0	15.0	18.0	15.0	14.5	13.5
3	9.0	8.5	9.5	9.0	17.5	14.0	20.0	16.0	18.5	15.0	15.0	13.5
4	9.0	9.0	9.5	9.5	17.5	13.5	20.5	16.5	18.0	15.5	15.0	14.0
5	9.0	9.0	9.5	9.5	17.5	14.0	20.5	17.0	17.5	15.5	14.0	13.0
6	9.0	9.0	9.5	9.5	17.0	14.0	20.5	16.5	17.5	15.5	15.0	13.5
7	9.0	9.0	9.5	9.5	15.5	13.5	20.5	17.0	17.5	15.5	16.0	14.5
8	9.0	9.0	9.5	9.5	13.5	13.0	20.5	16.5	17.5	15.5	16.0	14.5
9	9.0	9.0	9.5	9.5	13.0	12.5	19.5	16.0	18.0	15.5	16.5	14.5
10	9.0	9.0	9.5	9.5	14.5	12.0	19.5	16.0	18.5	15.5	16.5	14.5
11	9.0	9.0	9.5	9.5	14.0	12.0	19.0	15.5	18.5	15.5	16.0	14.0
12	9.0	8.5	9.5	9.0	14.5	11.5	19.5	15.5	18.5	15.5	14.5	13.0
13	8.5	8.5	11.5	9.0	15.0	12.0	19.5	16.0	18.0	15.5	13.0	12.5
14	8.5	8.5	13.0	9.5	15.5	13.0	19.5	16.0	18.0	15.5	12.5	11.5
15	8.5	8.0	14.5	10.5	15.5	12.5	19.0	16.0	18.5	16.0	12.0	11.0
16	8.0	8.0	15.5	11.5	16.0	13.0	19.0	16.0	18.0	16.0	12.5	11.5
17	8.0	8.0	15.0	12.0	16.0	13.0	19.5	15.5	17.5	15.5	12.5	11.5
18	8.0	8.0	14.0	11.5	16.5	13.0	20.0	16.0	17.0	15.5	13.5	12.5
19	8.0	8.0	12.5	11.0	18.5	14.0	20.5	16.5	16.5	15.0	13.5	12.5
20	8.0	8.0	13.0	10.5	19.5	15.0	20.0	17.0	16.5	15.0	12.5	12.0
21	8.0	8.0	14.0	10.5	20.0	16.0	19.5	17.0	17.0	15.0	12.0	11.5
22	8.0	8.0	14.0	11.5	19.5	16.5	20.0	16.5	16.5	15.0	12.5	11.5
23	8.0	8.0	15.0	11.5	19.5	16.5	20.5	17.0	16.0	14.5	13.0	12.0
24	8.0	8.0	15.5	12.0	19.5	17.0	20.0	17.0	15.5	14.0	12.0	11.5
25	8.0	8.0	16.0	12.5	20.0	17.0	18.5	16.5	15.5	14.0	12.0	11.0
26	8.0	8.0	15.0	13.0	19.5	17.0	19.0	16.0	15.5	14.0	11.5	10.5
27	8.0	8.0	15.0	12.5	19.0	17.0	18.0	16.0	15.5	14.0	11.0	10.5
28	8.0	8.0	14.5	11.5	18.5	16.0	16.0	15.0	15.5	14.0	11.0	10.5
29	8.0	8.0	14.5	11.5	18.0	15.0	15.5	14.0	16.0	14.5	11.0	10.5
30	8.0	8.0	15.5	12.0	18.0	15.0	15.5	13.0	15.5	14.5	11.0	10.5
31	--	--	16.5	13.0	--	--	16.0	13.0	15.0	14.0	--	--
AVE	8.4	8.4	12.5	10.6	17.1	14.2	19.1	15.9	17.0	15.0	13.4	12.4

11475560 ELDER CREEK NEAR BRANSCOMB, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 23, 1969	0945	10.0	1.6	13	.06	--	--	--	--	--	--	--	--	--	--	--	
NOV 21.....	1200	6.0	1.8	3	.01	--	--	--	--	--	--	--	--	--	--	--	
DEC 12.....	1110	9.0	124	33	11	--	--	--	--	--	--	--	--	--	--	--	
DEC 12.....	1305	9.5	124	22	7.4	--	--	--	--	--	--	--	--	--	--	--	
DEC 12.....	1535	9.5	124	23	7.7	--	--	--	--	--	--	--	--	--	--	--	
DEC 12.....	1710	9.5	138	26	9.7	--	--	--	--	--	--	--	--	--	--	--	
DEC 12.....	2055	9.0	112	14	4.2	--	--	--	--	--	--	--	--	--	--	--	
DEC 12.....	2230	9.0	104	16	4.5	--	--	--	--	--	--	--	--	--	--	--	
DEC 23.....	1230	10.0	214	17	9.8	--	--	--	--	--	--	--	--	--	--	--	
JAN 21, 1970	1100	10.0	530	125	179	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1030	7.0	68	2	.37	--	--	--	--	--	--	--	--	--	--	--	
MAR 26.....	1245	10.0	17	2	.09	--	--	--	--	--	--	--	--	--	--	--	
APR 30.....	1100	8.0	6.2	5	.08	--	--	--	--	--	--	--	--	--	--	--	
SEP 17.....	1130	12.0	.68	1	0	--	--	--	--	--	--	--	--	--	--	--	

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
NOV 21, 1969	1200	6.0	1	1.8	--	--	--	--	1	2	8	26	65	100	--	S

11475800 SOUTH FORK EEL RIVER AT LEGGETT, CALIF.

LOCATION.--Lat 39°52'30", long 123°43'10", in NE¼SE¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Minimum, 4.5°C on several days during December and January.
EXTREMES, 1965-70.--Water temperatures: Maximum (1965-69), 26.0°C on several days in 1969; minimum, 3.5°C on several days in 1967 and 1968.
REMARKS.--Recorder malfunction Feb. 16 to Apr. 27, May 29 to June 15, Sept. 13-30; recorder stopped July 28 to Sept. 12.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	17.5	15.5	13.0	5.5	5.0	6.0	6.0	10.0	10.0	--	--
2	20.0	17.5	15.0	12.0	5.5	4.5	6.0	5.5	10.0	9.5	--	--
3	19.5	16.0	15.0	13.0	6.0	4.5	5.5	5.0	10.0	9.5	--	--
4	19.5	15.0	14.0	13.0	6.0	5.0	5.0	4.5	10.5	10.0	--	--
5	19.5	14.5	14.0	13.0	6.0	5.5	4.5	4.5	10.5	10.5	--	--
6	19.0	14.5	13.0	12.5	6.5	5.5	4.5	4.5	11.5	10.5	--	--
7	18.5	15.0	13.0	12.0	6.5	6.0	5.0	4.5	11.5	11.0	--	--
8	18.5	17.0	13.0	12.5	7.0	6.5	7.5	5.0	11.5	11.0	--	--
9	18.0	16.0	13.0	11.5	6.5	5.5	8.5	7.5	11.0	11.0	--	--
10	19.5	16.5	12.0	10.5	6.0	5.5	9.0	8.5	11.5	11.0	--	--
11	18.5	15.0	12.0	10.5	6.5	6.0	9.0	8.5	11.5	11.5	--	--
12	18.5	14.5	12.0	10.0	8.0	6.5	9.0	9.0	11.5	11.5	--	--
13	17.0	14.0	11.5	10.0	8.5	8.0	9.5	9.0	11.5	10.5	--	--
14	16.0	15.0	11.5	10.0	8.5	8.5	11.0	9.5	10.5	10.0	--	--
15	15.5	15.5	11.5	11.5	8.5	8.0	11.0	11.0	10.0	10.0	--	--
16	15.5	15.0	11.5	10.0	8.0	7.0	11.5	11.0	--	--	--	--
17	15.0	14.5	10.5	8.5	7.0	7.0	11.5	11.5	--	--	--	--
18	16.0	14.0	10.5	8.0	7.5	7.0	11.5	11.5	--	--	--	--
19	16.0	13.5	10.5	8.0	8.0	7.5	11.5	11.0	--	--	--	--
20	16.5	13.5	10.0	8.0	8.5	8.0	11.5	11.5	--	--	--	--
21	17.0	14.0	10.5	8.0	9.0	8.5	12.5	11.5	--	--	--	--
22	16.5	14.0	10.5	8.5	8.5	8.0	12.5	12.5	--	--	--	--
23	16.0	15.0	9.5	8.5	8.0	8.0	12.5	12.5	--	--	--	--
24	16.5	15.0	9.0	7.5	8.0	8.0	12.5	11.5	--	--	--	--
25	16.0	14.0	9.0	7.5	8.0	7.5	11.5	11.5	--	--	--	--
26	15.0	13.5	8.5	7.0	8.5	7.5	11.5	11.5	--	--	--	--
27	15.5	15.0	8.0	7.0	7.5	6.5	11.5	11.0	--	--	--	--
28	16.0	14.0	8.0	7.0	6.5	6.0	11.0	10.5	--	--	--	--
29	15.5	13.0	7.5	5.5	6.0	6.0	10.5	9.5	--	--	--	--
30	16.0	13.5	6.0	5.0	6.0	5.5	10.0	9.0	--	--	--	--
31	15.5	13.5	--	--	6.0	5.0	10.0	10.0	--	--	--	--
AVE	17.2	14.8	11.2	9.6	7.2	6.6	9.5	9.0	--	--	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	17.0	12.5	--	--	23.0	17.0	--	--	--	--
2	--	--	17.5	12.5	--	--	24.0	18.5	--	--	--	--
3	--	--	18.0	13.5	--	--	24.5	19.5	--	--	--	--
4	--	--	18.0	13.5	--	--	25.0	20.0	--	--	--	--
5	--	--	17.5	14.5	--	--	25.0	18.5	--	--	--	--
6	--	--	16.5	13.5	--	--	25.5	18.0	--	--	--	--
7	--	--	17.0	12.0	--	--	25.5	19.0	--	--	--	--
8	--	--	15.5	13.5	--	--	26.0	18.5	--	--	--	--
9	--	--	15.5	13.5	--	--	25.5	18.5	--	--	--	--
10	--	--	16.5	12.5	--	--	25.5	17.0	--	--	--	--
11	--	--	14.5	12.0	--	--	26.0	17.0	--	--	--	--
12	--	--	14.0	12.0	--	--	26.0	17.0	--	--	--	--
13	--	--	17.0	12.0	--	--	26.5	16.5	--	--	--	--
14	--	--	17.5	12.0	--	--	27.0	18.5	--	--	--	--
15	--	--	19.0	13.5	--	--	26.0	17.0	--	--	--	--
16	--	--	19.5	14.5	22.0	16.5	26.0	18.5	--	--	--	--
17	--	--	20.0	15.0	22.0	16.0	27.0	18.0	--	--	--	--
18	--	--	20.0	15.5	22.0	16.0	28.5	18.5	--	--	--	--
19	--	--	18.5	14.5	22.5	17.5	28.5	19.0	--	--	--	--
20	--	--	19.0	14.0	24.0	19.0	28.5	18.5	--	--	--	--
21	--	--	19.5	14.0	24.0	19.5	27.0	18.0	--	--	--	--
22	--	--	19.5	15.5	24.0	20.0	28.0	17.0	--	--	--	--
23	--	--	20.0	14.5	24.0	19.0	29.5	18.0	--	--	--	--
24	--	--	20.5	15.0	23.0	18.5	29.0	18.5	--	--	--	--
25	--	--	20.5	15.5	23.5	18.5	29.0	19.0	--	--	--	--
26	--	--	20.5	15.0	23.0	18.5	30.0	19.5	--	--	--	--
27	--	--	20.0	15.5	21.0	18.5	29.0	20.0	--	--	--	--
28	14.5	10.0	20.0	14.5	20.5	16.5	--	--	--	--	--	--
29	14.0	10.0	--	--	21.5	16.0	--	--	--	--	--	--
30	16.0	11.5	--	--	21.5	17.0	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--
AVE	--	--	18.2	13.8	--	--	26.7	18.3	--	--	--	--

11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CALIF.

LOCATION.--Lat 40°10'55", long 123°46'30", in NW¼ sec.30, T.3 S., R.4 E., Humboldt County, at gaging station on right bank at Sylvandale 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 1970. Water temperatures: November 1960 to September 1970.
Sediment records: Water years 1955-62 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Minimum, 5.5°C Jan. 5, 6.
EXTREMES, 1960-64, 1965-70.--Water temperatures: Maximum (1960-61, 1963-64, 1965-68), 34.0°C July 25, 1964; minimum, 1.0°C Jan. 20, 21, 1963.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Temperature recorder malfunction Oct. 1 to Nov. 17, Jan. 31 to Mar. 26, June 18 to Aug. 4. Where no maximum or minimum is shown, temperature is once-daily reading.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
07...	1510	46	16.1	12.4	--	--	8.5	--	152	0	--	7.4
NOV.												
04...	1510	93	14.4	10.9	--	--	8.5	--	140	0	--	8.1
DEC.												
02...	1615	107	8.3	12.6	--	--	7.5	--	131	0	--	7.8
JAN.												
07...	0330	860	6.1	12.5	--	--	5.5	--	82	0	--	3.2
FEB.												
04...	0920	3040	9.4	12.0	--	--	5.2	--	65	0	--	3.3
MAR.												
10...	1600	3460	10.6	11.8	--	--	5.1	--	61	0	--	3.4
APR.												
08...	0925	505	10.5	11.7	--	--	5.8	--	90	0	--	3.0
MAY												
12...	1600	329	14.8	12.0	22	7.5	10	1.0	102	0	11	5.7
JUNE												
09...	1245	140	18.9	11.2	--	--	8.5	--	125	0	--	4.0
JULY												
07...	1200	82	23.9	11.4	--	--	9.8	--	132	0	--	5.4
AUG.												
11...	1230	42	--	12.3	--	--	8.9	--	111	0	--	7.9
SEP.												
15...	1610	29	18.5	11.6	--	--	11	--	144	0	--	9.8

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 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 (MG/L)
OCT.												
07...	--	150	--	--	128	3	125	13	.3	288	8.2	0
NOV.												
04...	--	70	--	--	124	9	115	13	.3	276	8.2	2
DEC.												
02...	--	240	--	--	118	11	107	12	.3	255	8.2	2
JAN.												
07...	--	60	--	--	72	5	67	14	.3	166	7.3	32
FEB.												
04...	--	40	--	--	54	1	53	17	.3	126	7.5	150
MAR.												
10...	--	40	--	--	50	0	50	18	.3	118	7.8	180
APR.												
08...	--	0	--	--	80	6	74	14	.3	174	8.0	3
MAY												
12...	.1	140	115	102	86	2	84	20	.5	198	8.3	3
JUNE												
09...	--	90	--	--	105	2	103	15	.4	230	8.3	2
JULY												
07...	--	140	--	--	109	1	108	16	.4	255	8.1	0
AUG.												
11...	--	170	--	--	95	4	91	17	.4	226	8.1	1
SEP.												
15...	--	190	--	--	126	8	118	16	.4	275	8.3	1

11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT DAILY	OCT MIN	NOV MAX	NOV DAILY	NOV MIN	DEC MAX	DEC DAILY	DEC MIN	JAN MAX	JAN DAILY	JAN MIN	FEB MAX	FEB DAILY	FEB MIN	MAR MAX	MAR DAILY	MAR MIN
1	--	--	--	--	--	--	9.5	--	9.0	7.5	--	7.5	--	--	--	--	--	--
2	--	--	--	--	--	--	9.0	--	8.5	7.5	--	7.0	--	--	--	--	--	--
3	--	--	--	--	--	--	9.5	--	8.5	7.0	--	6.5	--	--	--	--	--	--
4	--	--	--	--	14.5	--	10.0	--	9.0	6.5	--	6.0	--	9.5	--	--	--	--
5	--	--	--	--	--	--	9.0	--	8.5	6.5	--	5.5	--	--	--	--	--	--
6	--	--	--	--	--	--	10.0	--	9.0	6.0	--	5.5	--	--	--	--	--	--
7	--	--	--	--	--	--	11.0	--	9.5	7.5	--	6.0	--	--	--	--	--	--
8	--	--	--	--	--	--	11.5	--	10.0	9.0	--	7.5	--	--	--	--	--	--
9	--	--	--	--	--	--	11.0	--	10.5	10.0	--	9.0	--	--	--	--	--	--
10	--	--	--	--	--	--	11.0	--	10.5	10.0	--	10.0	--	--	--	--	10.5	--
11	--	--	--	--	--	--	11.5	--	10.5	10.0	--	10.0	--	--	--	--	--	--
12	--	--	--	--	--	--	12.5	--	11.5	11.0	--	10.0	--	--	--	--	--	--
13	--	--	--	--	--	--	13.0	--	12.5	11.5	--	11.0	--	--	--	--	--	--
14	--	--	--	--	--	--	13.0	--	12.0	12.0	--	11.5	--	--	--	--	--	--
15	--	--	--	--	--	--	12.0	--	11.5	12.0	--	11.5	--	--	--	--	--	--
16	--	--	--	--	--	--	12.0	--	11.5	12.0	--	11.5	--	--	--	--	--	--
17	--	--	--	--	--	--	12.0	--	12.0	12.0	--	12.0	--	--	--	--	--	--
18	--	--	--	12.5	--	10.5	12.5	--	12.0	12.0	--	12.0	--	--	--	--	--	--
19	--	--	--	12.0	--	10.0	13.0	--	12.5	12.0	--	12.0	--	--	--	--	--	--
20	--	--	--	11.5	--	10.0	14.0	--	13.0	12.5	--	12.0	--	--	--	--	--	--
21	--	--	--	11.5	--	10.0	14.5	--	13.0	13.0	--	12.5	--	--	--	--	--	--
22	--	--	--	12.5	--	11.0	13.0	--	12.5	13.0	--	13.0	--	--	--	--	--	--
23	--	--	--	12.0	--	11.0	12.5	--	12.5	13.0	--	13.0	--	--	--	--	--	--
24	--	--	--	12.0	--	11.0	12.5	--	12.5	13.0	--	12.0	--	--	--	--	--	--
25	--	--	--	12.0	--	11.5	12.5	--	11.0	12.0	--	12.0	--	--	--	--	--	--
26	--	--	--	12.0	--	11.0	11.0	--	10.0	12.0	--	12.0	--	--	--	--	--	--
27	--	--	--	12.0	--	11.0	10.0	--	9.0	12.0	--	11.5	--	--	--	15.0	--	12.5
28	--	--	--	11.5	--	11.0	9.0	--	8.0	11.5	--	10.0	--	--	--	14.0	--	12.0
29	--	--	--	11.5	--	10.0	8.5	--	8.0	10.0	--	9.5	--	--	--	13.5	--	11.5
30	--	--	--	10.0	--	9.0	8.5	--	8.0	10.0	--	9.5	--	--	--	13.5	--	11.5
31	--	--	--	--	--	--	8.0	--	7.5	--	--	--	--	--	--	14.5	--	11.5
AVE	--	--	--	--	--	--	11.2	--	10.5	10.5	--	10.0	--	--	--	--	--	--

DAY	APR MAX	APR DAILY	APR MIN	MAY MAX	MAY DAILY	MAY MIN	JUN MAX	JUN DAILY	JUN MIN	JUL MAX	JUL DAILY	JUL MIN	AUG MAX	AUG DAILY	AUG MIN	SEP MAX	SEP DAILY	SEP MIN
1	14.0	--	12.0	19.0	--	15.0	22.5	--	19.5	--	--	--	--	--	--	20.5	--	18.5
2	15.0	--	12.5	20.0	--	15.5	23.5	--	18.5	--	--	--	--	--	--	20.5	--	18.0
3	14.5	--	12.5	20.0	--	15.5	22.0	--	18.0	--	--	--	--	--	--	20.5	--	18.0
4	15.0	--	12.5	19.5	--	16.0	22.0	--	17.5	--	--	--	--	--	--	19.5	--	17.5
5	15.5	--	13.5	16.5	--	14.5	22.5	--	17.5	--	--	--	21.5	--	18.0	19.5	--	17.5
6	14.0	--	11.0	15.5	--	13.0	21.5	--	17.5	--	--	--	23.0	--	21.0	20.0	--	17.0
7	14.0	--	11.5	16.0	--	12.5	21.0	--	16.0	--	24.0	--	22.0	--	19.5	21.0	--	18.5
8	14.0	--	11.5	15.5	--	14.5	17.5	--	17.0	--	--	--	22.0	--	18.5	20.5	--	18.0
9	14.5	--	13.0	16.0	--	14.0	19.0	--	16.5	--	--	--	22.0	--	17.5	21.0	--	17.5
10	15.5	--	12.5	16.0	--	13.5	20.0	--	16.5	--	--	--	23.5	--	20.5	22.0	--	17.5
11	14.5	--	12.5	13.5	--	12.5	19.0	--	16.5	--	--	--	23.5	--	20.0	21.5	--	18.5
12	14.5	--	12.5	14.0	--	12.0	20.0	--	16.0	--	--	--	22.5	--	19.5	21.0	--	17.0
13	13.0	--	11.0	17.5	--	13.0	19.5	--	16.5	--	--	--	22.0	--	18.5	20.0	--	15.5
14	12.5	--	11.0	19.5	--	14.0	20.0	--	17.5	--	--	--	22.0	--	18.5	19.0	--	14.0
15	14.0	--	11.5	21.0	--	15.5	20.5	--	16.0	--	--	--	21.5	--	19.0	19.0	--	14.5
16	14.5	--	12.5	21.5	--	17.0	20.0	--	17.5	--	--	--	22.0	--	19.0	19.5	--	15.0
17	15.0	--	13.0	21.0	--	16.5	21.0	--	17.0	--	--	--	22.0	--	18.0	20.0	--	15.5
18	14.0	--	13.0	19.5	--	16.5	--	--	--	--	--	--	22.0	--	18.0	21.0	--	19.0
19	15.0	--	12.0	17.5	--	16.0	--	--	--	--	--	--	21.5	--	18.5	20.5	--	18.0
20	13.5	--	12.0	19.0	--	15.0	--	--	--	--	--	--	21.5	--	18.5	20.5	--	17.0
21	15.0	--	12.0	20.0	--	15.0	--	--	--	--	--	--	21.5	--	18.5	21.0	--	15.5
22	15.5	--	13.5	20.0	--	15.0	--	--	--	--	--	--	21.5	--	18.5	20.5	--	16.5
23	15.0	--	13.5	20.5	--	15.5	--	--	--	--	--	--	21.5	--	19.0	21.0	--	18.0
24	15.0	--	14.0	21.5	--	15.5	--	--	--	--	--	--	21.5	--	19.0	19.5	--	16.0
25	14.5	--	13.0	22.0	--	17.5	--	--	--	--	--	--	20.5	--	17.5	19.5	--	15.5
26	13.5	--	12.0	21.0	--	17.5	--	--	--	--	--	--	20.5	--	18.0	20.0	--	16.0
27	14.5	--	12.0	19.5	--	16.0	--	--	--	--	--	--	20.5	--	18.5	20.0	--	16.5
28	15.0	--	13.0	19.5	--	15.5	--	--	--	--	--	--	20.5	--	18.5	20.0	--	16.5
29	15.5	--	14.0	20.0	--	14.5	--	--	--	--	--	--	21.5	--	19.0	20.0	--	17.0
30	16.5	--	15.0	20.5	--	15.0	--	--	--	--	--	--	21.0	--	19.0	20.5	--	16.5
31	--	--	--	22.0	--	16.5	--	--	--	--	--	--	21.0	--	18.0	--	--	--
AVE	14.5	--	12.5	18.9	--	15.0	--	--	--	--	--	--	21.7	--	18.7	20.3	--	16.9

11477000 EEL RIVER AT SCOTIA, CALIF.
(International Hydrological Decade Station)

LOCATION.--Lat 40°29'30", long 124°05'55", in SW¼ 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 1970.
Water temperatures: October 1957 to September 1970.
Sediment records: Water years 1955-57 (partial-record station), October 1957 to September 1970.
Turbidity: Water years 1965-68 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 24.5°C Aug. 10, 11; minimum, 6.5°C Jan. 5-8.
Sediment concentrations: Maximum daily, 10,500 mg/l Dec. 12; minimum daily, 1 mg/l on several days.
Sediment loads: Maximum daily, 5,430,000 tons Jan. 24; minimum daily, 0.25 tons Aug. 21.
EXTREMES, 1957-70.--Water temperatures: Maximum (1960-64, 1965-70), 24.5°C Aug. 10, 11, 1970; 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 loads: 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. No temperature record Apr. 11-27, recorder stopped. Where no maximum or minimum is shown, temperature is once-daily reading.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)
OCT.										
07...	1340	100	13.9	8.5	10	39	13	630	10	1.5
NOV.										
04...	1335	251	11.4	7.3	20	40	11	450	8.3	1.3
DEC.										
02...	1425	304	12.7	8.1	0	41	12	450	8.9	1.4
JAN.										
06...	1545	A 3350	13.2	11	30	23	7.2	250	5.8	1.0
FEB.										
03...	1550	A16300	12.4	11	10	18	5.1	230	4.8	.9
MAR.										
10...	1430	A17000	12.1	10	50	17	5.5	200	4.7	1.6
APR.										
07...	1400	A 2250	11.4	10	40	27	7.8	320	6.4	1.1
MAY										
12...	1415	A 1620	12.0	9.9	10	27	8.1	210	6.5	1.1
JUNE										
09...	--	A 530	11.8	13	10	34	10	430	7.8	1.4
JULY										
07...	1030	A 267	12.5	7.2	0	36	11	350	8.8	1.7
AUG.										
11...	1015	A 101	10.7	7.2	0	41	12	530	9.8	1.6
SEP.										
15...	1455	A 80	12.1	8.0	0	41	13	460	9.5	1.7

DATE	DIS-SOLVED LITHIUM (LI) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
07...	10	172	0	23	7.6	.1	.0	.10	70	188
NOV.										
04...	10	156	0	29	8.0	.1	.0	.04	110	183
DEC.										
02...	20	157	0	29	5.5	.1	.1	.03	150	183
JAN.										
06...	20	97	0	15	2.1	.2	.3	.26	60	114
FEB.										
03...	10	76	0	9.0	1.8	.1	.4	.23	40	88
MAR.										
10...	10	71	0	11	2.4	.0	.5	.80	40	88
APR.										
07...	10	112	0	17	3.4	.3	.0	.30	70	128
MAY										
12...	10	118	0	19	3.6	.1	.0	.00	70	133
JUNE										
09...	10	143	0	22	5.2	.2	.0	.03	200	164
JULY										
07...	10	152	0	22	4.6	.2	.0	.00	190	167
AUG.										
11...	10	170	0	22	7.0	.1	.0	.12	0	185
SEP.										
15...	10	165	0	22	7.2	.3	.1	.09	10	184

A Daily mean discharge.

11477000 EEL RIVER AT SCOTIA, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	TUR-BID-ITY (MG/L)	TUR-BID-ITY (JTU)
OCT.										
07...	50.8	151	10	141	12	.4	322	8.3	1	--
NOV.										
04...	124	146	18	128	11	.3	314	8.3	1	--
DEC.										
02...	150	152	23	129	11	.3	321	8.1	3	--
JAN.										
06...	1030	87	7	80	13	.3	174	7.7	24	--
FEB.										
03...	3870	66	4	62	13	.3	149	7.8	100	--
MAR.										
10...	4040	65	7	58	13	.3	138	7.9	180	--
APR.										
07...	778	100	8	92	12	.3	215	8.0	5	--
MAY										
12...	582	101	4	97	12	.3	228	8.2	10	--
JUNE										
09...	235	126	9	117	12	.3	272	8.1	--	0
JULY										
07...	120	135	10	125	12	.3	299	8.0	7	--
AUG.										
11...	50.4	152	13	139	12	.3	324	8.1	--	5
SEP.										
15...	39.7	156	21	135	12	.3	325	8.3	--	8

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT DAILY	OCT MIN	NOV MAX	NOV DAILY	NOV MIN	DEC MAX	DEC DAILY	DEC MIN	JAN MAX	JAN DAILY	JAN MIN	FEB MAX	FEB DAILY	FEB MIN	MAR MAX	MAR DAILY	MAR MIN
1	17.0	--	16.0	16.0	--	14.0	9.5	--	8.5	8.0	--	8.0	9.5	--	9.5	11.0	--	10.5
2	17.0	--	15.0	15.5	--	14.5	9.0	--	8.0	8.0	--	8.0	9.5	--	9.5	10.5	--	10.0
3	16.0	--	14.0	16.0	--	15.0	9.0	--	8.5	8.0	--	7.5	9.5	--	9.5	10.0	--	10.0
4	15.0	--	12.5	15.5	--	15.0	10.0	--	9.0	7.5	--	7.0	10.0	--	9.5	10.0	--	10.0
5	15.0	--	12.0	15.0	--	14.0	9.0	--	8.0	7.0	--	6.5	10.5	--	10.0	10.0	--	9.5
6	15.5	--	12.5	14.0	--	13.5	9.5	--	9.0	7.0	--	6.5	10.5	--	10.0	10.0	--	9.5
7	15.0	--	13.5	13.5	--	13.0	10.5	--	10.0	6.5	--	6.5	11.0	--	10.5	10.0	--	10.0
8	16.0	--	14.5	13.0	--	13.0	10.5	--	10.5	8.0	--	6.5	11.0	--	11.0	11.0	--	10.0
9	15.0	--	14.0	13.5	--	13.0	11.0	--	10.5	9.0	--	8.0	11.0	--	11.0	11.0	--	10.5
10	15.5	--	13.5	14.0	--	13.5	11.0	--	10.5	9.0	--	9.0	11.0	--	11.0	10.5	--	10.0
11	15.5	--	12.5	14.0	--	13.5	11.0	--	10.5	9.0	--	9.0	11.5	--	11.0	10.0	--	10.0
12	15.0	--	12.0	14.5	--	13.5	11.0	--	11.0	9.0	--	9.0	11.5	--	11.5	10.5	--	10.0
13	13.5	--	12.0	14.5	--	13.5	11.0	--	11.0	9.5	--	9.0	11.5	--	10.5	11.0	--	10.5
14	13.5	--	12.0	14.5	--	13.5	11.0	--	11.0	10.0	--	9.5	10.5	--	10.0	11.5	--	11.0
15	13.5	--	13.0	14.5	--	13.5	11.0	--	11.0	10.0	--	10.0	10.0	--	10.0	12.0	--	11.5
16	13.5	--	13.0	14.0	--	12.0	11.0	--	11.0	10.5	--	10.0	10.0	--	10.0	12.0	--	12.0
17	13.0	--	12.5	12.5	--	11.5	11.0	--	11.0	10.5	--	10.5	10.0	--	10.0	12.0	--	12.0
18	13.0	--	13.0	11.5	--	10.5	11.0	--	11.0	10.5	--	10.5	10.0	--	10.0	12.0	--	11.5
19	13.5	--	12.5	11.0	--	10.0	11.5	--	10.5	10.5	--	10.5	10.0	--	10.0	12.0	--	11.0
20	14.0	--	12.0	11.0	--	9.5	11.0	--	10.0	11.0	--	10.5	10.0	--	9.5	12.0	--	11.0
21	14.0	--	13.0	11.0	--	10.5	11.0	--	9.5	11.0	--	11.0	9.5	--	9.5	12.0	--	12.0
22	15.5	--	14.0	11.0	--	10.5	11.0	--	10.5	12.0	--	11.0	9.5	--	9.0	12.5	--	12.0
23	15.0	--	14.5	11.0	--	11.0	11.5	--	10.5	12.0	--	12.0	9.5	--	9.5	13.5	--	12.5
24	15.0	--	14.5	11.5	--	11.0	11.5	--	11.0	12.0	--	11.5	10.0	--	9.5	13.5	--	13.0
25	15.5	--	13.5	11.5	--	11.0	11.5	--	10.5	11.5	--	11.0	10.0	--	10.0	13.5	--	13.0
26	15.0	--	14.0	11.5	--	10.0	11.5	--	11.0	11.0	--	11.0	10.5	--	10.0	13.5	--	13.0
27	15.0	--	14.5	11.0	--	10.0	11.0	--	10.0	11.0	--	11.0	11.0	--	10.5	13.5	--	13.0
28	15.0	--	14.0	11.0	--	10.0	10.0	--	9.5	11.0	--	10.0	11.0	--	11.0	13.5	--	13.0
29	15.0	--	13.5	10.5	--	9.5	9.5	--	9.0	10.0	--	9.5	--	--	--	13.0	--	12.5
30	16.0	--	14.5	10.0	--	9.0	9.0	--	9.0	9.5	--	9.5	--	--	--	12.5	--	12.0
31	16.0	--	15.0	--	--	--	9.0	--	8.0	9.5	--	9.5	--	--	--	13.0	--	12.5
AVE	14.9	--	13.5	12.9	--	12.1	10.5	--	10.0	9.6	--	9.3	10.3	--	10.1	11.7	--	11.3

11477000 EEL RIVER AT SCOTIA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR MIN	MAY MAX	MAY MIN	JUN MAX	JUN MIN	JUL MAX	JUL MIN	AUG MAX	AUG MIN	SEP MAX	SEP MIN
	DAILY		DAILY		DAILY		DAILY		DAILY		DAILY	
1	13.0	12.5	17.0	14.0	23.0	20.5	20.5	15.0	21.0	18.0	21.0	18.5
2	14.0	13.0	18.0	16.0	23.0	19.5	21.5	17.0	21.5	18.5	21.0	18.0
3	14.0	12.5	19.5	17.0	21.5	19.5	21.5	17.5	20.5	18.5	22.5	18.5
4	14.0	13.0	18.5	17.0	21.0	18.0	18.5	17.5	19.0	17.0	20.5	18.5
5	14.5	13.5	17.5	15.5	21.0	17.5	18.0	15.0	22.0	16.5	21.0	17.5
6	14.5	13.0	15.5	14.0	19.5	18.0	19.5	15.5	23.0	19.5	22.0	18.0
7	13.0	12.0	15.5	13.5	20.0	17.0	21.0	16.5	23.0	19.5	23.5	19.5
8	12.5	12.5	15.5	15.0	18.5	17.0	21.0	17.5	23.5	19.5	20.5	18.0
9	13.0	12.5	15.5	15.0	18.5	17.0	21.5	17.5	24.0	18.5	21.0	16.0
10	14.0	13.0	16.0	15.0	19.5	17.0	21.0	17.5	24.5	19.5	21.5	17.0
11	--	14.5	16.5	15.5	19.0	16.5	22.0	18.0	24.5	20.0	20.5	17.5
12	--	11.0	15.5	14.5	19.0	15.5	21.0	18.0	22.0	20.0	19.5	16.5
13	--	11.0	17.0	14.5	16.5	15.5	22.0	17.5	23.0	19.0	18.5	15.5
14	--	12.0	18.0	15.5	16.0	15.5	22.5	18.0	22.5	19.0	18.0	13.5
15	--	12.0	19.5	16.5	18.0	16.5	22.0	18.0	22.5	19.0	18.5	15.0
16	--	12.0	20.0	18.0	17.0	15.5	22.5	19.0	23.0	19.5	19.5	16.5
17	--	12.0	19.5	18.0	19.0	15.5	21.5	18.5	23.0	18.5	20.5	16.0
18	--	13.5	19.0	17.0	20.5	16.5	22.0	18.5	22.5	18.5	19.5	18.5
19	--	13.5	17.0	16.0	20.5	17.0	22.0	18.0	21.5	19.0	20.5	17.0
20	--	14.5	18.0	15.5	21.5	18.0	20.5	18.0	21.0	18.5	20.0	17.0
21	--	15.5	19.0	16.5	20.0	18.0	21.5	18.0	21.0	18.5	20.0	17.0
22	--	15.0	19.0	17.0	22.0	18.0	22.0	18.0	20.0	18.5	20.0	16.5
23	--	14.5	20.0	17.5	21.0	18.0	21.0	18.0	21.5	18.5	19.0	17.0
24	--	14.5	21.0	18.0	21.5	18.5	21.5	18.0	22.5	19.5	18.5	15.0
25	--	14.5	21.5	19.0	21.5	18.5	22.5	17.0	22.5	18.0	19.0	14.0
26	--	13.5	20.5	19.0	20.5	18.0	23.5	19.0	20.5	19.0	19.0	14.5
27	--	13.5	19.0	18.0	19.0	17.5	20.5	18.0	19.0	18.0	19.0	15.0
28	13.5	12.5	20.0	17.0	17.5	15.0	21.5	17.5	21.5	17.5	18.0	15.5
29	14.5	12.5	20.5	17.5	18.5	14.5	22.0	17.5	22.0	19.0	19.0	15.5
30	15.0	13.5	21.5	18.5	19.5	15.5	22.0	18.5	23.5	19.0	19.5	15.5
31	--	--	23.0	18.5	--	--	21.5	18.0	22.5	19.0	--	--
AVE	--	--	18.5	16.4	19.8	17.1	21.3	17.6	22.1	18.7	20.0	16.6

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCTOBER MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCEN-TRATION (MG/L)	OCTOBER SEDIMENT DISCHARGE (TONS/DAY)	NOVEMBER MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCEN-TRATION (MG/L)	NOVEMBER SEDIMENT DISCHARGE (TONS/DAY)	DECEMBER MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCEN-TRATION (MG/L)	DECEMBER SEDIMENT DISCHARGE (TONS/DAY)
1	123	4	1.3	243	3	2.0	313	1	.85
2	118	4	1.3	247	2	1.3	318	1	.86
3	118	4	1.3	247	5	3.3	304	1	.82
4	118	4	1.3	263	64	45	300	1	.81
5	115	4	1.2	1380	1100	5400	309	1	.83
6	113	4	1.2	2890	334	2490	304	2	1.6
7	105	5	1.4	2160	105	612	300	3	2.4
8	113	5	1.5	1450	135	529	331	3	2.7
9	128	5	1.7	1100	123	365	380	3	3.1
10	138	5	1.9	960	45	117	546	21	31
11	140	5	1.9	820	27	60	5980	1560	90100
12	138	5	1.9	740	18	36	47000	10500	1330000
13	138	5	1.9	660	10	18	60000	3430	556000
14	145	5	2.0	600	7	11	43000	1600	186000
15	180	23	11	552	4	6.0	27500	950	70500
16	498	46	77	498	4	5.4	15000	600	24300
17	1180	63	199	462	4	5.0	12500	400	13500
18	1180	17	54	438	1	1.2	14500	400	15700
19	970	15	39	420	1	1.1	22000	800	47500
20	668	10	18	420	1	1.1	42000	2450	278000
21	516	8	11	390	1	1.1	102000	6240	1530000
22	420	6	6.8	390	21	22	64400	1730	346000
23	365	5	4.9	370	13	13	48200	4920	666000
24	322	4	3.5	345	3	2.8	50700	2200	306000
25	300	3	2.4	340	4	3.7	31500	1200	102000
26	291	4	3.1	340	1	.92	25200	600	40800
27	287	5	3.9	340	4	3.7	16400	800	35400
28	271	5	3.7	327	2	1.8	13400	485	17500
29	267	6	4.3	331	1	.89	11000	446	13200
30	259	7	4.9	336	1	.91	8800	415	9860
31	243	8	5.2	--	--	--	8100	380	8310
TOTAL	9967	--	473.5	20059	--	9760.22	672585	--	5686714.97

11477000 EEL RIVER AT SCOTIA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6600	285	5080	23000	960	59600	9800	645	17100
2	5600	105	1590	19000	810	41600	8600	355	8240
3	4850	75	982	16300	700	30800	6900	320	5960
4	4200	60	680	14200	610	23400	8600	495	11500
5	3650	40	394	13000	520	18300	12000	620	20100
6	3350	30	271	10000	440	11900	10400	380	10700
7	3200	30	259	9200	360	8940	14500	230	9000
8	3650	45	443	7900	300	6400	27000	1820	133000
9	9800	900	23800	7050	250	4760	21000	850	48200
10	48000	4050	525000	6400	195	3370	17000	560	25700
11	36000	1250	122000	6050	195	3190	14200	415	15900
12	32000	700	60500	6400	370	6390	12200	295	9720
13	38000	1250	128000	14100	2030	94200	11000	225	6680
14	120000	4360	1410000	25000	2410	165000	12000	318	10300
15	83600	3080	717000	16700	800	36100	10500	215	6100
16	113000	3900	1290000	20700	1710	115000	9500	275	7050
17	148000	2700	1080000	57000	4300	680000	8500	285	6540
18	98300	2150	571000	35800	1600	155000	7600	165	3390
19	63700	2200	378000	23900	950	61300	7000	125	2360
20	63700	1600	275000	17800	700	33600	6100	135	2220
21	136000	4520	1750000	14400	560	21800	5440	135	1980
22	174000	3500	1640000	11900	515	16500	5000	170	2300
23	167000	8190	3690000	10500	470	13300	4600	115	1430
24	267000	7410	5430000	8800	418	9930	4300	85	987
25	127000	4790	1640000	7800	380	8000	4000	80	864
26	76300	4400	906000	7050	340	6470	3700	65	649
27	150000	6490	2690000	6400	317	5480	3500	65	614
28	76000	3730	765000	7000	415	7840	3300	65	579
29	43900	2350	279000	--	--	--	3150	55	468
30	34500	1750	163000	--	--	--	3000	65	527
31	27500	1300	96500	--	--	--	2870	55	426
TOTAL	2168400	--	25639499	423350	--	1648170	277260	--	370584

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2730	46	339	1520	12	49	675	4	7.3
2	2610	37	261	1480	10	40	647	6	10
3	2540	34	233	1420	8	31	612	8	13
4	2460	25	166	1390	6	23	591	10	16
5	2390	18	116	1350	6	22	570	14	22
6	2320	25	157	1320	2	7.1	552	17	25
7	2250	12	73	1350	3	11	528	11	16
8	2190	14	83	1290	5	17	522	15	21
9	2120	21	120	1300	10	35	530	8	11
10	2070	21	117	1560	16	67	550	8	12
11	2020	8	44	1600	13	56	570	8	12
12	1990	15	81	1620	10	44	555	8	12
13	1950	14	74	1590	14	60	525	8	11
14	2010	13	71	1500	18	73	510	9	12
15	1980	17	91	1400	13	49	498	9	12
16	1890	21	107	1320	15	53	506	10	14
17	1850	11	55	1280	8	28	500	10	14
18	1810	14	68	1250	16	54	475	9	12
19	1830	11	54	1200	10	32	465	7	8.8
20	1890	9	46	1120	7	21	450	5	6.1
21	1800	8	39	1060	9	26	425	5	5.7
22	1700	7	32	1000	7	19	395	5	5.3
23	1620	9	39	980	14	37	375	6	6.1
24	1590	19	82	940	10	25	360	6	5.8
25	1560	8	34	900	10	24	340	7	6.4
26	1590	11	47	826	9	20	328	7	6.2
27	1790	9	43	766	9	19	320	8	6.9
28	1730	9	42	742	8	16	310	7	5.9
29	1680	9	41	710	8	15	307	5	4.1
30	1590	6	26	689	7	13	307	7	5.8
31	--	--	--	696	6	11	--	--	--
TOTAL	59550	--	2781	37169	--	997.1	14298	--	325.4

11477000 EEL RIVER AT SCOTIA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	305	10	8.2	125	4	1.4	84	3	.68
2	300	9	7.3	121	4	1.3	84	7	1.6
3	295	8	6.4	118	5	1.6	84	10	2.3
4	290	8	6.3	116	6	1.9	82	9	2.0
5	285	9	6.9	113	7	2.1	82	8	1.8
6	279	9	6.8	111	6	1.8	80	9	1.9
7	267	10	7.2	109	6	1.8	80	10	2.2
8	255	10	6.9	107	6	1.7	80	10	2.2
9	246	11	7.3	105	6	1.7	88	11	2.6
10	235	12	7.6	103	6	1.7	94	10	2.5
11	227	7	4.3	101	6	1.6	90	9	2.2
12	220	2	1.2	99	5	1.3	86	9	2.1
13	210	3	1.7	99	5	1.3	82	10	2.2
14	202	3	1.6	99	3	.80	82	11	2.4
15	196	4	2.1	97	2	.52	80	12	2.6
16	192	3	1.6	95	2	.51	78	11	2.3
17	187	3	1.5	94	3	.76	78	10	2.1
18	182	4	2.0	93	4	1.0	78	10	2.1
19	179	4	1.9	92	3	.75	78	9	1.9
20	175	4	1.9	92	3	.75	78	13	2.7
21	170	4	1.8	92	1	.25	78	17	3.6
22	165	5	2.2	90	3	.73	78	14	2.9
23	160	6	2.6	90	4	.97	76	11	2.3
24	156	9	3.8	88	3	.71	76	8	1.6
25	153	13	5.4	88	3	.71	76	4	.82
26	150	12	4.9	86	3	.70	76	5	1.0
27	146	11	4.3	86	3	.70	76	7	1.4
28	142	8	3.1	86	3	.70	76	7	1.4
29	138	4	1.5	86	4	.93	76	7	1.4
30	134	8	2.9	86	4	.93	75	7	1.4
31	128	5	1.7	86	3	.70	--	--	--
TOTAL	6369	--	124.9	3053	--	34.32	2411	--	60.20

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 3694471
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 33359524.61

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

						PARTICLE SIZE											
						PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED											
DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
NOV 5, 1969	1600	13.5	1610	2840	12300	59	80	92	97	98	100	--	--	--	--	--	SPWC
DEC 24.....	1500	9.5	43000	1800	209000	23	28	44	59	73	85	96	100	--	--	--	VPWC
JAN 9, 1970	1600		D 9800	1350	35700	30	42	54	66	79	89	97	100	--	--	--	VBWC
JAN 10.....	1600	10.0	D 48000	3570	463000	24	26	37	51	66	77	92	100	--	--	--	VPWC
JAN 12.....	1600	11.0	D 32000	654	56500	32	45	54	64	73	82	95	99	100	--	--	VBWC
JAN 14.....	0800	11.0	D120000	2870	930000	21	26	38	51	65	78	94	99	100	--	--	VPWC
JAN 16.....	0800	11.0	79800	2930	631000	19	26	35	49	60	72	92	100	--	--	--	VPWC
JAN 17.....	1600	11.0	149000	2580	1040000	21	30	40	53	66	80	95	100	--	--	--	VBWC
JAN 21.....	0800		118000	4480	1430000	26	28	38	50	66	79	93	100	--	--	--	VPWC
JAN 22.....	1330		178000	3340	1610000	25	29	42	56	71	83	96	99	100	--	--	VPWC
JAN 24.....	1600	11.0	257000	6400	4440000	28	37	47	60	76	88	96	100	--	--	--	VPWC
JAN 27.....	1540	11.0	169000	7220	3290000	15	18	26	42	62	79	93	99	100	--	--	VPWC
JAN 28.....	1600	11.0	65200	3360	591000	22	26	36	46	60	74	92	100	--	--	--	VPWC
FEB 14.....	1300	11.0	26900	2120	154000	24	28	41	53	68	79	92	100	--	--	--	VPWC

D Daily mean discharge.

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

					PARTICLE SIZE											
					PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED											
DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	.062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
OCT 14, 1969	1115	12.0	5	146	--	1	8	12	18	22	28	40	56	78	92	S
APR 2, 1970	1355	13.0	5	2610	--	--	8	63	72	78	90	93	99	100	--	S

11477500 VAN DUZEN RIVER NEAR DINSMORES, CALIF.

LOCATION.--Lat 40°29'05", long 123°39'25", in NW¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 25.0°C Aug. 10; minimum, 3.5°C Jan. 3-6.
EXTREMES, 1965-70.--Water temperatures: Maximum, 25.0°C July 22-24, 1969, Aug. 10, 1970; minimum (1965-68, 1969-70), freezing point on several days in 1965-68.
REMARKS.--Probe inoperative Oct. 8 to Nov. 24; recorder malfunction Mar. 24, 25, May 8 to July 3.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	14.5	--	--	7.0	5.0	6.0	4.5	6.5	5.5	8.0	7.5
2	17.0	13.5	--	--	6.5	5.0	6.0	4.0	6.0	5.5	8.0	7.5
3	16.5	12.5	--	--	7.5	5.5	6.5	3.5	6.0	6.0	8.0	7.5
4	16.0	11.5	--	--	8.0	7.0	5.0	3.5	7.0	6.0	8.0	7.5
5	16.0	11.5	--	--	7.0	6.0	5.0	3.5	7.0	7.0	8.5	8.0
6	15.0	11.0	--	--	8.0	6.5	5.0	3.5	7.0	7.0	9.0	8.5
7	14.5	11.5	--	--	8.0	7.0	5.5	4.5	7.5	7.0	9.0	8.5
8	--	--	--	--	8.5	7.5	6.0	5.5	7.0	6.5	8.5	8.5
9	--	--	--	--	8.5	7.5	6.5	6.0	7.5	7.0	9.0	8.0
10	--	--	--	--	7.5	7.0	7.0	6.5	7.5	7.5	9.0	8.0
11	--	--	--	--	8.0	7.0	7.0	7.0	7.5	7.5	9.0	8.5
12	--	--	--	--	8.0	7.5	7.5	7.0	7.5	7.5	9.5	8.5
13	--	--	--	--	9.5	8.0	8.0	7.5	8.0	7.5	9.5	9.0
14	--	--	--	--	9.0	8.0	8.5	8.0	7.5	7.5	9.5	9.0
15	--	--	--	--	8.0	7.0	8.0	7.5	7.5	7.5	9.5	9.0
16	--	--	--	--	9.0	8.0	9.0	7.5	7.5	7.5	9.5	9.5
17	--	--	--	--	9.0	7.0	9.0	8.0	7.5	7.0	9.5	9.0
18	--	--	--	--	9.0	7.0	9.0	8.0	7.5	7.0	9.5	9.0
19	--	--	--	--	9.0	8.5	9.0	8.0	7.5	7.0	9.5	9.0
20	--	--	--	--	10.0	8.5	8.5	8.0	7.5	7.0	9.5	9.0
21	--	--	--	--	10.5	8.5	9.5	8.5	8.0	7.5	10.0	9.5
22	--	--	--	--	8.5	7.0	9.0	8.5	8.0	7.5	10.0	9.5
23	--	--	--	--	8.0	7.5	9.5	8.0	7.5	7.0	9.5	9.5
24	--	--	--	--	8.0	8.0	8.0	7.0	8.0	7.5	--	--
25	--	--	8.0	7.0	8.5	7.5	7.5	6.5	8.0	7.5	--	--
26	--	--	8.0	7.0	7.5	6.5	7.5	6.5	8.0	7.5	13.0	10.0
27	--	--	8.0	7.0	7.0	6.0	7.5	6.0	8.0	7.5	13.5	10.0
28	--	--	8.0	6.5	7.0	5.5	6.5	5.5	8.0	7.5	13.0	10.5
29	--	--	7.0	6.0	7.0	5.0	5.5	5.0	--	--	13.0	10.5
30	--	--	7.0	6.0	7.0	5.0	6.0	5.5	--	--	12.5	10.5
31	--	--	--	--	6.5	4.5	6.5	6.0	--	--	12.5	10.5
AVE	--	--	--	--	8.1	6.8	7.3	6.3	7.4	7.1	9.9	8.9

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	10.5	14.5	11.0	--	--	--	--	21.5	18.0	22.0	16.5
2	13.5	11.0	15.0	12.0	--	--	--	--	21.0	18.0	22.0	15.5
3	13.5	10.5	15.0	12.0	--	--	--	--	21.0	18.0	21.5	15.5
4	13.5	10.5	15.0	11.5	--	--	22.5	19.5	21.5	18.0	18.0	16.0
5	13.5	10.5	14.0	12.0	--	--	21.5	19.0	23.0	18.0	20.0	14.0
6	12.5	11.0	12.0	11.0	--	--	21.5	18.5	23.5	17.5	21.5	14.5
7	12.0	10.0	12.0	10.0	--	--	22.0	19.0	23.5	17.5	22.0	15.5
8	12.5	10.0	--	--	--	--	22.5	19.0	23.5	16.5	22.0	16.5
9	13.0	10.5	--	--	--	--	22.5	19.5	24.0	17.0	22.5	15.5
10	13.5	12.5	--	--	--	--	22.5	19.5	25.0	18.0	22.5	16.0
11	13.0	10.5	--	--	--	--	22.0	19.0	24.5	17.5	22.0	15.0
12	12.5	10.0	--	--	--	--	22.0	19.0	24.0	18.0	20.0	14.5
13	12.0	10.0	--	--	--	--	22.5	19.0	23.5	17.0	19.0	13.0
14	11.0	9.5	--	--	--	--	22.5	19.5	23.5	17.0	18.5	12.0
15	11.5	9.5	--	--	--	--	23.0	20.0	23.5	17.0	18.0	11.5
16	11.5	9.5	--	--	--	--	22.5	19.5	24.0	18.0	18.0	12.0
17	12.5	9.5	--	--	--	--	22.5	19.5	24.0	17.5	19.0	13.0
18	11.5	10.0	--	--	--	--	22.5	19.0	23.5	17.0	17.0	14.0
19	11.0	9.5	--	--	--	--	23.0	19.5	23.0	16.5	17.5	13.5
20	10.0	9.0	--	--	--	--	22.5	19.5	23.0	16.5	17.5	13.5
21	11.0	8.5	--	--	--	--	22.0	19.0	23.0	16.5	17.5	12.0
22	12.0	10.0	--	--	--	--	22.0	18.5	22.0	17.0	18.0	12.5
23	12.0	10.0	--	--	--	--	22.0	19.0	22.5	16.5	18.0	13.0
24	11.5	10.0	--	--	--	--	22.0	19.0	22.5	16.0	17.5	12.0
25	11.0	10.0	--	--	--	--	22.5	19.0	22.0	15.5	16.5	11.5
26	10.0	9.0	--	--	--	--	23.0	19.5	22.0	15.5	17.0	12.0
27	10.0	8.0	--	--	--	--	23.0	19.5	22.0	15.5	17.5	12.0
28	10.5	8.0	--	--	--	--	22.5	20.0	22.0	16.0	16.0	12.0
29	12.0	8.5	--	--	--	--	22.0	18.5	22.5	16.0	16.5	12.0
30	13.5	11.0	--	--	--	--	21.5	18.5	22.0	16.5	16.5	11.5
31	--	--	--	--	--	--	22.0	18.5	22.0	16.0	--	--
AVE	12.0	9.9	--	--	--	--	22.3	19.2	22.9	17.0	19.0	13.6

11478500 VAN DUZEN RIVER NEAR BRIDGEVILLE, CALIF.

LOCATION.--Lat 40°28'50", long 123°53'23", in NE¼SE¼ 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 1970.
Water temperatures: December 1960 to September 1970.
Sediment records: Water years 1955-67 (partial-record station).
Turbidity: Water years 1964-67 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.0°C July 23; minimum, 2.5°C Jan. 5, 6.
EXTREMES, 1960-64, 1965-70.--Water temperatures: 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 and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
07...	1245	12	16.1	11.5	--	--	8.0	--	150	0	--	5.9
NOV.												
04...	1240	31	14.4	11.2	--	--	6.6	--	130	0	--	4.4
DEC.												
02...	1330	33	8.9	12.7	--	--	5.2	--	123	0	--	4.5
JAN.												
06...	1500	A650	4.4	13.3	--	--	3.1	--	76	0	--	1.4
FEB.												
03...	1445	1120	8.9	12.5	--	--	3.0	--	62	0	--	1.0
MAR.												
10...	1335	1460	8.3	12.5	--	--	3.4	--	62	0	--	1.7
APR.												
07...	1310	165	13.0	11.6	--	--	3.8	--	89	0	--	2.5
MAY												
12...	1320	424	12.0	11.8	2.0	5.8	5.5	.9	79	0	14	2.2
JUNE												
09...	1000	64	17.2	10.5	--	--	6.0	--	115	0	--	1.5
JULY												
07...	0930	26	20.6	9.8	--	--	7.8	--	140	0	--	2.5
AUG.												
11...	0930	10	20.6	9.0	--	--	8.0	--	151	0	--	4.9
SEPT.												
15...	1410	8.2	18.0	10.3	44	8.3	8.9	1.6	151	0	34	5.2

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 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 (MG/L)
OCT.												
07...	--	140	--	--	144	21	123	11	.3	305	8.3	1
NOV.												
04...	--	140	--	--	125	18	107	10	.3	269	8.3	1
DEC.												
02...	--	170	--	--	118	17	101	9	.2	252	8.0	1
JAN.												
06...	--	0	--	--	69	7	62	9	.2	152	7.4	30
FEB.												
03...	--	160	--	--	54	3	51	11	.2	120	7.5	200
MAR.												
10...	--	20	--	--	53	2	51	12	.2	117	7.8	160
APR.												
07...	--	100	--	--	80	7	73	9	.2	175	8.1	2
MAY												
12...	.2	80	92	105	74	9	65	29	.4	160	8.1	35
JUNE												
09...	--	30	--	--	108	14	94	11	.3	223	8.2	4
JULY												
07...	--	50	--	--	126	11	115	12	.3	272	8.2	0
AUG.												
11...	--	150	--	--	144	20	124	11	.3	301	8.2	1
SEP.												
15...	.1	30	169	3.74	144	20	124	12	.3	314	8.3	2

A Daily mean discharge.

11478500 VAN DUZEN RIVER NEAR BRIDGEVILLE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	16.0	16.5	11.5	7.5	3.5	5.5	4.5	7.5	6.5	7.5	6.5
2	18.0	14.5	16.5	11.5	9.0	3.5	5.5	4.5	8.0	6.5	8.0	6.5
3	18.5	13.0	16.5	13.0	8.5	5.0	4.5	3.5	8.5	7.5	9.0	7.0
4	18.5	12.0	15.5	12.5	8.0	6.5	4.0	3.0	9.0	8.0	7.5	6.5
5	18.5	11.5	13.5	11.0	8.0	4.5	4.0	2.5	10.0	8.0	9.0	5.5
6	18.0	12.0	12.5	10.5	9.5	6.0	4.0	2.5	10.5	8.5	10.0	7.5
7	18.0	13.0	12.0	10.5	10.0	8.0	6.5	4.0	10.5	8.5	9.5	8.5
8	18.0	14.5	13.0	11.0	10.0	8.0	8.0	6.5	11.0	8.5	9.5	7.5
9	17.0	13.0	12.0	9.5	9.5	8.0	8.5	7.5	11.0	9.0	9.0	7.5
10	18.0	13.5	12.5	9.5	9.0	8.0	8.0	7.5	10.5	9.0	9.0	6.5
11	17.5	12.0	13.0	9.0	9.5	8.5	8.0	7.5	10.5	9.5	9.5	8.5
12	17.5	10.5	13.5	9.5	10.0	9.5	8.5	8.0	10.5	9.0	10.0	9.0
13	15.5	10.5	13.5	9.5	11.0	10.0	9.0	8.0	9.0	7.5	10.5	9.0
14	14.5	12.0	13.5	9.5	11.0	10.0	9.0	9.0	8.0	6.5	11.5	10.0
15	15.0	13.5	12.5	11.0	10.0	8.5	9.0	8.5	8.5	7.5	11.0	9.0
16	14.5	11.5	11.5	9.0	9.5	8.5	10.0	9.0	8.5	7.0	12.5	9.5
17	12.5	10.5	10.5	7.0	10.0	9.5	9.5	9.0	7.5	7.0	11.0	8.5
18	13.5	11.0	10.5	7.0	10.0	9.5	10.0	9.5	8.0	6.5	11.0	7.5
19	14.5	10.5	10.5	7.0	11.0	10.0	10.5	9.5	8.0	6.0	11.5	7.0
20	15.5	10.0	10.0	6.0	11.5	10.5	10.5	9.5	8.0	5.5	12.0	7.0
21	17.5	11.5	9.5	7.0	12.0	10.0	11.0	10.0	8.5	6.5	12.5	9.0
22	15.5	12.5	10.5	8.0	10.0	9.0	11.5	11.0	8.5	6.5	14.0	9.5
23	16.0	13.0	10.5	7.0	9.5	9.5	11.0	10.5	8.0	6.0	15.0	10.0
24	15.5	12.5	10.0	6.0	9.5	9.0	10.5	9.5	10.5	7.0	15.5	10.0
25	16.0	11.0	9.5	6.0	9.5	8.5	9.5	9.5	11.0	8.0	15.5	11.0
26	14.5	11.5	9.5	5.5	8.5	7.5	9.5	9.5	11.5	8.0	15.0	10.5
27	15.0	13.0	9.0	5.0	8.5	6.0	9.5	8.0	12.0	8.0	15.5	9.0
28	16.5	12.0	8.5	5.0	6.5	5.5	8.0	7.0	9.5	7.5	15.5	10.5
29	16.0	12.0	8.0	4.0	6.0	5.5	7.0	5.5	--	--	14.0	8.0
30	16.5	12.5	7.5	4.0	6.0	5.0	7.5	6.5	--	--	14.0	8.5
31	17.5	12.5	--	--	5.5	4.5	7.5	6.5	--	--	14.0	8.0
AVE	16.4	12.2	11.7	8.4	9.2	7.6	8.2	7.3	9.4	7.5	11.6	8.3

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	8.0	20.5	12.0	27.0	16.5	26.0	16.0	24.0	18.5	21.5	18.0
2	15.0	10.0	22.0	12.5	26.5	17.5	24.0	18.0	27.5	18.5	21.5	17.5
3	15.0	8.5	22.5	13.5	21.5	17.5	19.5	18.0	27.5	18.5	23.5	17.5
4	16.0	10.0	20.0	14.0	21.0	17.0	19.0	17.5	26.0	19.0	20.5	17.5
5	17.0	11.0	15.5	13.0	25.5	15.5	20.5	18.0	25.0	16.5	21.5	16.5
6	14.0	9.5	15.5	12.5	20.0	17.0	24.5	17.0	26.0	19.5	23.5	17.5
7	14.5	8.0	18.0	10.5	23.5	16.0	26.5	16.5	25.0	21.0	23.5	20.5
8	15.0	8.5	15.0	13.0	17.5	16.5	26.5	18.0	24.5	19.5	22.0	17.5
9	15.0	9.0	16.0	12.5	19.0	16.5	26.5	18.0	26.0	17.0	23.5	16.0
10	16.5	11.0	15.5	10.5	22.0	15.5	26.0	18.5	27.0	18.5	24.0	17.5
11	16.0	9.5	12.0	9.5	21.5	15.5	26.5	18.0	26.0	18.5	23.0	19.0
12	15.5	10.0	12.0	8.0	23.0	15.0	26.0	18.0	24.0	18.5	21.0	16.0
13	11.0	9.0	17.5	10.0	17.0	15.5	27.0	18.0	24.5	18.0	20.0	14.0
14	13.0	8.5	19.0	11.0	20.5	15.5	27.0	18.0	24.5	18.0	19.5	13.0
15	14.5	8.5	21.5	12.5	24.0	15.5	27.5	18.5	24.0	18.0	19.5	14.5
16	12.5	9.0	22.0	14.5	17.5	15.5	26.5	19.5	24.5	18.0	20.5	15.5
17	15.5	8.0	18.0	15.5	24.0	15.0	25.0	19.0	25.0	18.0	21.5	14.5
18	13.5	9.0	15.5	14.0	25.0	15.0	26.5	18.5	24.0	16.5	20.0	17.5
19	13.5	9.0	14.5	13.5	26.5	17.0	27.0	19.0	23.0	17.5	21.0	16.5
20	14.5	7.5	20.0	12.5	27.5	17.5	25.0	19.0	23.5	17.5	21.0	16.5
21	15.5	8.5	21.0	13.5	25.5	18.5	25.0	18.5	23.5	17.5	21.0	15.5
22	16.5	10.0	22.0	14.0	25.5	18.0	25.5	18.5	22.5	17.5	20.5	14.5
23	16.5	9.0	22.5	15.0	26.5	18.5	28.0	18.0	23.0	18.0	19.0	16.5
24	14.5	10.5	24.0	14.0	26.0	17.5	25.0	18.5	23.0	18.0	19.5	14.5
25	13.0	10.5	24.5	15.5	27.0	18.5	26.0	19.0	23.5	18.0	19.5	13.5
26	14.0	9.0	20.5	16.5	26.0	18.5	27.0	19.5	23.0	18.0	20.0	13.5
27	12.5	8.0	20.5	15.0	21.5	18.5	23.0	20.0	19.5	17.5	19.5	13.5
28	15.0	7.5	22.0	15.0	20.0	16.5	25.0	18.0	22.5	17.0	18.0	13.5
29	16.0	9.0	23.0	14.5	23.5	15.0	25.0	18.5	24.0	18.0	18.5	13.5
30	17.5	10.5	23.5	15.5	25.0	16.5	25.5	18.5	24.5	18.0	18.5	13.5
31	--	--	26.0	15.0	--	--	24.0	18.5	23.5	18.0	--	--
AVE	14.8	9.1	19.4	13.2	23.2	16.6	25.2	18.3	24.3	18.1	20.9	15.8

11480500 MAD RIVER NEAR FOREST GLEN, CALIF.

LOCATION.--Lat 40°27'30", long 123°30'35", in SW¼ sec.16, T.1 N., R.6 E., Trinity County, Six Rivers National Forest, temperature recorder at gaging station on right bank, 0.7 mile downstream from Lamb Creek, and 11.1 miles northwest of Forest glen.
DRAINAGE AREA.--143 sq mi.
PERIOD OF RECORD.--Water temperatures: November 1960 to September 1970.
Sediment records: Water years 1957-70 (partial-record station).
Turbidity: Water years 1964-67 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 24.0°C June 21, 22; minimum, 5.5°C on several days during December and January.
EXTREMES, 1960-70.--Water temperatures: Maximum (1960-66, 1967-70), 26.0°C June 25, 1961; minimum, freezing point Jan. 5, 6, 1968.
REMARKS.--Recorder stopped Oct. 1-16, Feb. 5-18, Feb. 21 to Apr. 1, Apr. 11 to May 6. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	--	11.0	9.0	--	7.0	7.5	--	6.5	8.0	--	7.0	--	--	--
2	--	--	--	14.0	--	11.0	9.0	--	7.0	7.0	--	5.5	8.5	--	7.0	--	--	--
3	--	--	--	14.0	--	11.5	9.0	--	7.0	7.0	--	5.5	8.0	--	7.0	--	--	--
4	--	--	--	13.0	--	11.5	8.5	--	7.0	6.5	--	5.5	9.0	--	7.0	--	--	--
5	--	--	--	13.0	--	12.0	8.0	--	5.5	6.5	--	5.5	--	--	--	--	--	--
6	--	--	--	13.0	--	11.5	8.5	--	7.0	6.5	--	5.5	--	--	--	--	--	--
7	--	--	--	12.0	--	11.5	8.5	--	7.0	6.5	--	6.0	--	--	--	--	--	--
8	--	--	--	13.5	--	11.5	8.5	--	7.5	7.0	--	6.0	--	--	--	--	--	--
9	--	--	--	13.0	--	10.5	8.5	--	7.5	6.5	--	6.0	--	--	--	--	--	--
10	--	--	--	12.5	--	10.0	8.0	--	6.5	7.5	--	6.5	--	--	--	--	--	--
11	--	--	--	13.0	--	10.5	8.0	--	7.5	7.5	--	7.0	--	--	--	--	--	--
12	--	--	--	13.0	--	10.0	8.5	--	8.0	7.5	--	7.0	--	--	--	--	--	--
13	--	--	--	12.5	--	10.0	9.0	--	8.5	7.5	--	7.0	--	--	--	--	--	--
14	--	--	--	12.0	--	9.5	9.0	--	8.0	7.5	--	7.0	--	--	--	--	--	--
15	--	14.0	--	12.0	--	10.5	8.0	--	7.0	7.5	--	7.0	--	--	--	--	--	--
16	--	--	--	12.0	--	9.5	8.5	--	7.5	7.5	--	7.5	--	--	--	--	--	--
17	14.0	--	12.5	10.5	--	8.0	9.0	--	8.0	7.5	--	7.5	--	--	--	--	--	--
18	15.0	--	12.5	11.0	--	8.5	9.0	--	8.5	7.5	--	7.5	--	8.0	--	--	--	--
19	15.0	--	12.0	10.5	--	8.0	9.5	--	8.5	8.0	--	7.5	8.5	--	6.5	--	--	--
20	15.5	--	11.5	10.0	--	8.0	10.5	--	8.5	8.0	--	7.5	8.5	--	6.5	--	--	--
21	16.0	--	12.5	10.5	--	8.0	10.5	--	8.5	9.0	--	8.0	--	--	--	--	--	--
22	15.5	--	12.0	10.5	--	8.5	8.5	--	8.0	9.0	--	9.0	--	--	--	--	--	--
23	15.0	--	12.5	10.5	--	7.5	8.5	--	8.5	9.0	--	9.0	--	--	--	--	--	--
24	14.5	--	12.5	10.0	--	8.0	9.0	--	8.5	9.0	--	9.0	--	--	--	--	--	--
25	14.5	--	11.5	10.0	--	8.0	8.5	--	8.0	9.0	--	9.0	--	--	--	--	--	--
26	13.5	--	11.0	10.0	--	8.0	8.5	--	8.0	9.0	--	8.5	--	--	--	--	--	--
27	13.5	--	12.5	10.0	--	8.0	8.0	--	7.5	8.5	--	7.0	--	--	--	--	--	--
28	14.0	--	11.5	9.5	--	7.5	8.0	--	7.0	8.5	--	7.5	--	--	--	--	--	--
29	14.0	--	11.0	9.0	--	7.0	8.0	--	7.0	8.0	--	7.5	--	--	--	--	--	--
30	14.5	--	11.5	9.0	--	7.0	7.5	--	6.5	8.0	--	7.5	--	--	--	--	--	--
31	14.5	--	11.0	--	--	--	7.5	--	6.5	7.5	--	7.0	--	--	--	--	--	--
AVE	--	--	--	11.6	--	9.4	8.6	--	7.5	7.7	--	7.1	--	--	--	--	--	--

11480500 MAD RIVER NEAR FOREST GLEN, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	APR MAX	APR MIN	APR DAILY	MAY MAX	MAY MIN	MAY DAILY	JUN MAX	JUN MIN	JUN DAILY	JUL MAX	JUL MIN	JUL DAILY	AUG MAX	AUG MIN	AUG DAILY	SEP MAX	SEP MIN	SEP DAILY
1	--	10.5	--	--	--	--	18.5	--	13.5	18.0	--	12.5	17.5	--	12.0	17.0	--	12.5
2	11.5	--	7.5	--	--	--	19.0	--	14.0	21.0	--	14.0	17.5	--	11.5	17.0	--	12.0
3	11.5	--	6.0	--	--	--	18.5	--	13.5	21.5	--	15.5	18.5	--	12.5	17.0	--	12.0
4	12.0	--	6.5	--	--	--	19.0	--	13.5	22.0	--	16.0	18.0	--	13.0	15.5	--	13.0
5	12.0	--	7.5	--	--	--	19.5	--	14.0	22.5	--	16.0	17.5	--	12.0	16.5	--	11.5
6	9.5	--	7.5	--	13.0	--	19.0	--	14.5	22.0	--	16.0	18.0	--	12.0	17.5	--	12.5
7	10.5	--	6.0	13.0	--	9.5	17.5	--	13.5	22.0	--	16.5	18.5	--	13.0	17.5	--	13.0
8	11.5	--	7.5	12.0	--	11.0	13.5	--	11.0	21.5	--	15.5	18.5	--	14.0	17.5	--	12.0
9	11.5	--	7.5	13.0	--	10.5	13.5	--	11.0	19.5	--	14.5	18.0	--	12.5	18.0	--	12.5
10	12.0	--	9.0	12.0	--	10.0	17.5	--	11.5	19.0	--	14.5	18.5	--	13.0	18.0	--	13.0
11	--	--	--	10.0	--	8.5	18.0	--	12.5	19.0	--	14.0	18.0	--	12.5	17.5	--	12.5
12	--	--	--	11.0	--	8.5	18.0	--	12.5	19.0	--	13.5	18.0	--	12.5	16.0	--	12.0
13	--	--	--	15.5	--	10.0	17.0	--	12.5	19.0	--	13.5	17.5	--	12.0	15.5	--	10.5
14	--	--	--	17.0	--	11.5	18.5	--	13.5	19.5	--	14.0	18.0	--	12.0	15.0	--	10.0
15	--	--	--	18.0	--	12.5	19.5	--	13.5	19.0	--	14.5	18.5	--	12.5	15.5	--	10.5
16	--	--	--	18.5	--	13.5	20.5	--	14.5	18.5	--	13.5	18.5	--	13.0	16.5	--	11.5
17	--	--	--	19.0	--	14.0	20.5	--	14.5	18.5	--	12.5	18.0	--	13.0	16.5	--	12.0
18	--	--	--	18.0	--	14.0	21.5	--	14.5	18.5	--	13.0	18.0	--	12.5	15.5	--	13.5
19	--	--	--	14.0	--	12.0	23.0	--	15.5	19.0	--	13.0	17.5	--	12.0	16.0	--	12.5
20	--	--	--	16.5	--	11.5	23.5	--	16.5	18.5	--	13.0	17.5	--	12.0	15.5	--	12.5
21	--	--	--	17.5	--	12.0	24.0	--	17.5	18.0	--	13.0	18.0	--	12.5	16.0	--	11.5
22	--	--	--	18.0	--	13.0	24.0	--	17.5	18.0	--	12.5	18.0	--	12.5	16.5	--	12.0
23	--	--	--	18.0	--	12.5	20.0	--	16.5	18.5	--	13.0	17.5	--	12.5	17.0	--	12.5
24	--	--	--	19.0	--	13.5	18.5	--	15.0	18.5	--	13.0	17.5	--	12.0	16.0	--	12.0
25	--	--	--	20.0	--	14.5	19.0	--	13.0	19.5	--	13.0	17.5	--	12.0	16.0	--	11.5
26	--	--	--	20.0	--	15.0	19.5	--	13.5	19.0	--	14.0	17.5	--	12.0	16.5	--	12.0
27	--	--	--	18.5	--	14.5	16.5	--	14.5	19.0	--	15.0	17.5	--	12.0	17.0	--	12.5
28	--	--	--	17.5	--	13.5	14.5	--	11.5	19.5	--	15.5	17.5	--	13.0	16.5	--	12.5
29	--	--	--	17.5	--	12.5	16.0	--	10.0	18.5	--	14.0	18.0	--	13.0	16.5	--	13.0
30	--	--	--	17.5	--	12.5	16.5	--	11.5	19.0	--	13.5	18.0	--	13.5	17.0	--	12.5
31	--	--	--	18.5	--	13.0	--	--	--	18.0	--	13.0	17.5	--	12.5	--	--	--
AVE	--	--	--	16.4	--	12.1	18.8	--	13.7	19.5	--	14.0	17.9	--	12.5	16.5	--	12.1

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (°C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 17, 1969	1225	13.0	121	13	4.2	--	--	--	--	--	--	--	--	--	--	--	
NOV 18.....	1650	11.0	116	5	1.6	--	--	--	--	--	--	--	--	--	--	--	
DEC 17.....	1315	9.0	44	11	1.3	--	--	--	--	--	--	--	--	--	--	--	
JAN 22, 1970	0915	9.0	7080	242	4630	27	38	46	53	61	67	70	81	93	97	100	SBWC
FEB 4.....	1730	8.5	590	129	205	--	--	--	--	--	--	--	--	--	--	--	
FEB 18.....	1350	8.0	1350	95	346	--	--	--	--	--	85	91	96	100	--	--	S
APR 1.....	1350	10.5	132	16	5.7	--	--	--	--	--	--	--	--	--	--	--	
MAY 6.....	1610	13.0	41	5	.55	--	--	--	--	--	--	--	--	--	--	--	
JUN 24.....	1540	18.5	83	11	2.5	--	--	--	--	--	--	--	--	--	--	--	
AUG 5.....	1520	17.5	104	12	3.4	--	--	--	--	--	--	--	--	--	--	--	

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (°C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
OCT 17, 1969	1055	13.0	5	121	--	1	4	4	9	20	32	41	50	63	100	S

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, temperature recorder at gaging station on left bank 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.--Water temperatures: November 1965 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Minimum, 4.5°C Dec. 28, 29, Jan. 2, 8.
EXTREMES, 1965-70.--Water temperatures: Maximum (1965-69), 28.0°C July 19-22, 1968; minimum, 2.0°C Mar. 2, 1966.
REMARKS.--Probe inoperative Oct. 20 to Nov. 18, Jan. 16 to Feb. 2, Aug. 3 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	16.5	--	--	6.0	6.0	5.0	5.0	--	--	9.5	9.0
2	18.0	16.5	--	--	6.0	6.0	5.0	4.5	--	--	9.0	9.0
3	18.0	16.5	--	--	6.0	6.0	5.5	5.0	9.0	8.5	9.0	9.0
4	18.0	17.0	--	--	6.5	6.0	5.0	5.0	9.5	9.0	9.0	9.0
5	17.0	16.0	--	--	6.5	6.5	5.0	5.0	9.5	9.5	9.0	8.5
6	16.5	16.0	--	--	6.5	6.5	5.0	5.0	9.5	9.5	9.0	8.5
7	16.5	15.5	--	--	6.5	6.5	5.0	5.0	9.5	9.0	9.5	9.0
8	16.0	15.5	--	--	6.5	6.0	5.0	4.5	9.5	9.0	9.5	9.5
9	16.0	15.5	--	--	6.5	6.5	5.0	5.0	9.5	9.5	9.5	9.5
10	15.5	15.0	--	--	6.5	6.0	6.5	5.0	10.0	9.5	10.0	9.5
11	16.0	15.0	--	--	6.0	6.0	7.0	6.5	10.0	10.0	10.0	10.0
12	15.0	14.0	--	--	6.5	6.0	7.0	6.5	10.0	10.0	10.0	10.0
13	15.0	14.0	--	--	7.5	6.5	7.0	7.0	10.5	10.0	10.0	10.0
14	14.5	14.0	--	--	8.0	7.5	7.5	7.0	10.0	9.5	10.0	10.0
15	14.0	14.0	--	--	8.0	7.5	7.5	7.0	9.5	9.0	10.5	10.0
16	14.0	13.0	--	--	7.5	7.0	--	--	9.5	9.5	10.5	10.0
17	13.0	13.0	--	--	7.5	7.5	--	--	9.5	9.0	10.0	10.0
18	13.0	13.0	--	--	7.5	7.5	--	--	9.0	9.0	10.0	10.0
19	13.0	13.0	8.0	7.5	8.0	7.5	--	--	9.0	8.5	10.0	9.5
20	--	--	8.0	7.5	10.0	8.0	--	--	9.0	8.5	9.5	9.5
21	--	--	7.5	7.5	10.0	7.5	--	--	9.0	8.5	10.0	9.5
22	--	--	7.5	7.0	9.0	7.0	--	--	9.0	8.5	10.0	10.0
23	--	--	8.5	7.5	8.0	6.5	--	--	9.0	8.5	10.5	10.0
24	--	--	7.5	7.0	7.0	6.5	--	--	8.5	8.5	11.0	10.5
25	--	--	7.5	7.0	7.0	6.5	--	--	9.0	8.5	11.0	10.5
26	--	--	7.0	6.5	6.5	5.5	--	--	9.5	9.0	11.0	11.0
27	--	--	7.0	6.5	6.0	5.5	--	--	9.5	9.5	11.5	11.0
28	--	--	7.0	6.5	5.5	4.5	--	--	9.5	9.5	11.5	10.5
29	--	--	6.5	6.0	5.5	4.5	--	--	--	--	10.5	10.0
30	--	--	6.5	6.0	5.5	5.0	--	--	--	--	11.0	10.5
31	--	--	--	--	5.0	5.0	--	--	--	--	11.0	10.5
AVE	--	--	--	--	6.9	6.4	--	--	9.4	9.1	10.1	9.8

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	10.5	10.0	14.0	13.0	17.0	16.0	18.0	18.0	--	--
2	11.0	10.5	10.5	10.0	14.5	13.5	16.5	16.0	18.0	18.0	--	--
3	11.0	10.5	11.0	10.5	15.0	14.5	16.5	16.0	--	--	--	--
4	11.0	10.5	11.5	11.0	15.0	15.0	16.5	16.0	--	--	--	--
5	11.0	10.5	12.0	11.5	15.0	14.5	16.5	16.5	--	--	--	--
6	11.0	10.5	12.0	12.0	15.0	15.0	17.0	16.5	--	--	--	--
7	11.0	11.0	12.0	11.5	15.0	15.0	17.0	16.0	--	--	--	--
8	11.0	11.0	12.0	11.5	15.0	15.0	17.0	16.5	--	--	--	--
9	11.0	10.5	12.0	11.5	15.5	15.0	17.0	16.5	--	--	--	--
10	11.0	11.0	12.0	12.0	15.5	15.5	17.5	17.0	--	--	--	--
11	11.0	11.0	12.0	12.0	15.5	15.5	17.5	17.0	--	--	--	--
12	11.0	11.0	12.0	11.0	15.5	15.5	17.5	17.0	--	--	--	--
13	11.0	11.0	11.0	10.5	15.5	15.0	17.5	17.0	--	--	--	--
14	11.0	11.0	11.0	10.5	15.0	15.0	17.5	17.0	--	--	--	--
15	11.0	10.5	11.5	11.0	15.0	15.0	17.5	17.5	--	--	--	--
16	11.0	10.5	12.5	11.5	15.0	15.0	18.0	17.5	--	--	--	--
17	11.0	10.5	12.5	12.0	15.5	15.0	18.0	17.5	--	--	--	--
18	11.0	10.5	13.0	12.5	15.5	14.5	18.0	18.0	--	--	--	--
19	11.0	11.0	13.0	13.0	15.0	14.5	18.0	18.0	--	--	--	--
20	11.0	10.5	13.0	13.0	15.5	14.5	18.0	18.0	--	--	--	--
21	10.5	10.5	13.0	13.0	15.5	15.0	18.5	18.0	--	--	--	--
22	10.5	10.5	13.0	12.5	15.5	15.0	18.5	18.0	--	--	--	--
23	10.5	10.5	13.0	13.0	16.0	15.5	18.5	18.0	--	--	--	--
24	10.5	10.5	13.5	12.5	16.5	16.0	18.5	18.0	--	--	--	--
25	11.0	10.5	13.5	13.0	16.5	16.0	18.5	18.0	--	--	--	--
26	11.0	11.0	14.0	13.5	17.0	16.5	18.5	18.0	--	--	--	--
27	11.0	10.5	14.0	14.0	17.0	17.0	18.5	18.0	--	--	--	--
28	11.0	10.5	14.0	14.0	17.5	17.0	18.5	18.0	--	--	--	--
29	10.5	10.0	14.0	13.5	17.5	17.0	18.5	18.0	--	--	--	--
30	10.5	10.0	14.0	13.5	17.0	16.5	18.5	18.0	--	--	--	--
31	--	--	14.0	13.0	--	--	18.0	18.0	--	--	--	--
AVE	10.9	10.6	12.5	12.1	15.6	15.2	17.7	17.3	--	--	--	--

11481000 MAD RIVER NEAR ARCATA, CALIF.

LOCATION.--Lat 40°54'35", long 124°03'35", in NW¼ 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 1970.
Water temperatures: December 1957 to September 1970.
Sediment records: Water years 1955-57 (partial-record station), December 1957 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.5°C July 14; minimum, 4°C Jan. 6.
Sediment concentrations: Maximum daily, 6,440 mg/l Dec. 21; minimum daily, 1 mg/l Nov. 24, 25, Dec. 7, 8.
Sediment loads: Maximum daily, 481,000 tons Jan. 24; minimum daily, 0.01 ton July 31.
EXTREMES, 1957-70.--Water temperatures: Maximum (1963-64, 1965-70), 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 loads: 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 and reviewed by Geological Survey. Temperature recorder stopped Oct. 1-21, Oct. 29 to Dec. 8, 13-16, Dec. 24 to Jan. 26, Apr. 27 to May 6, July 23 to Sept. 23. Where no maximum or minimum is shown, temperature is once-daily reading.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
07...	1050	30	14.4	10.9	--	--	4.7	--	106	0	--	3.5
NOV.												
04...	1055	44	13.9	11.1	--	--	4.5	--	103	0	--	3.0
DEC.												
02...	1130	197	7.2	13.1	--	--	3.2	--	78	0	--	2.6
JAN.												
06...	1300	776	4.4	13.6	--	--	2.9	--	63	0	--	1.9
FEB.												
03...	1310	2480	9.4	12.7	--	--	2.7	--	49	0	--	2.5
MAR.												
10...	1205	2700	9.4	12.8	--	--	3.2	--	49	0	--	2.2
APR.												
07...	1125	570	11.0	13.1	--	--	3.5	--	77	0	--	3.3
MAY												
12...	0930	1240	10.0	12.3	15	2.6	3.8	1.4	52	0	7.2	4.8
JUNE												
09...	0840	90	15.0	10.1	--	--	5.3	--	102	0	--	2.1
JULY												
07...	0800	25	17.8	9.1	--	--	8.7	--	147	0	--	3.9
SEPT.												
15...	1010	27	13.0	10.8	--	--	4.3	--	109	0	--	2.9

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 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 (MG/L)
OCT.												
07...	--	110	--	--	94	7	87	10	.2	196	8.1	1
NOV.												
04...	--	140	--	--	93	9	84	10	.2	200	8.1	5
DEC.												
02...	--	100	--	--	71	7	64	9	.2	155	7.6	3
JAN.												
06...	--	50	--	--	57	5	52	10	.2	128	7.3	33
FEB.												
03...	--	140	--	--	43	3	40	12	.2	98	7.2	200
MAR.												
10...	--	30	--	--	43	3	40	14	.2	98	7.6	190
APR.												
07...	--	30	--	--	69	6	63	10	.2	156	8.1	12
MAY												
12...	.5	120	80	268	48	5	43	14	.2	114	7.6	60
JUNE												
09...	--	80	--	--	91	7	84	11	.2	195	7.8	3
JULY												
07...	--	120	--	--	137	16	121	12	.3	299	8.2	0
SEP.												
15...	--	100	--	--	95	6	89	9	.2	202	8.1	10

11481000 MAD RIVER NEAR ARCATA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT DAILY	OCT MIN	NOV MAX	NOV DAILY	NOV MIN	DEC MAX	DEC DAILY	DEC MIN	JAN MAX	JAN DAILY	JAN MIN	FEB MAX	FEB DAILY	FEB MIN	MAR MAX	MAR DAILY	MAR MIN
1	--	15.0	--	--	13.0	--	--	5.0	--	--	6.0	--	10.0	--	8.0	10.0	--	7.0
2	--	--	--	--	--	--	--	6.0	--	--	5.0	--	11.0	--	6.5	9.5	--	7.0
3	--	13.0	--	--	13.0	--	--	7.0	--	--	6.0	--	10.0	--	8.5	8.0	--	8.0
4	--	--	--	--	--	--	--	8.0	--	--	6.0	--	10.0	--	9.5	10.0	--	7.5
5	--	15.0	--	--	12.0	--	--	5.0	--	--	5.0	--	11.5	--	8.5	9.0	--	7.0
6	--	--	--	--	11.0	--	--	9.0	--	--	4.0	--	10.0	--	8.5	9.0	--	8.0
7	--	16.0	--	--	13.0	--	--	8.0	--	--	7.0	--	10.5	--	7.5	10.0	--	8.0
8	--	--	--	--	11.0	--	--	11.0	--	--	10.0	--	10.0	--	8.5	10.0	--	8.5
9	--	14.0	--	--	10.0	--	10.5	--	8.5	--	10.0	--	10.0	--	9.0	10.5	--	9.0
10	--	--	--	--	10.0	--	9.0	--	8.5	--	--	--	12.5	--	9.0	12.5	--	8.5
11	--	18.0	--	--	10.0	--	9.5	--	8.5	--	--	--	12.0	--	9.5	11.5	--	8.5
12	--	--	--	--	11.0	--	9.5	--	9.0	--	--	--	13.0	--	10.0	11.5	--	9.0
13	--	16.0	--	--	11.0	--	--	13.0	--	--	14.0	--	11.5	--	8.5	10.5	--	9.5
14	--	--	--	--	13.0	--	--	10.0	--	--	13.0	--	9.5	--	8.5	12.5	--	10.0
15	--	14.0	--	--	13.0	--	--	9.0	--	--	10.0	--	9.5	--	8.0	11.0	--	9.5
16	14.0	--	14.0	--	10.0	--	--	10.0	--	--	13.0	--	9.0	--	8.5	12.0	--	8.5
17	--	13.0	--	--	7.0	--	10.5	--	9.5	--	11.0	--	9.0	--	7.5	12.5	--	8.5
18	--	--	--	9.0	--	8.0	11.5	--	10.5	--	12.0	--	10.0	--	7.5	12.5	--	9.5
19	--	--	--	--	8.0	--	11.5	--	10.5	--	12.0	--	10.0	--	7.0	12.5	--	7.0
20	--	10.0	--	--	9.0	--	11.5	--	10.5	--	11.0	--	10.0	--	6.0	13.0	--	7.5
21	--	14.0	--	--	9.0	--	12.0	--	10.0	--	13.0	--	10.5	--	6.5	14.0	--	8.5
22	14.5	--	14.0	--	11.0	--	10.0	--	9.0	--	12.0	--	10.5	--	6.5	14.5	--	9.0
23	14.5	--	13.5	--	12.0	--	10.0	--	9.5	--	12.0	--	9.5	--	6.5	15.5	--	9.5
24	15.5	--	13.5	--	8.0	--	--	10.0	--	--	11.0	--	11.0	--	7.0	14.0	--	10.5
25	16.0	--	12.0	--	9.0	--	--	10.0	--	--	11.0	--	12.0	--	8.0	16.5	--	10.5
26	14.5	--	12.5	--	7.0	--	--	7.0	--	11.0	--	9.5	12.5	--	8.0	15.5	--	10.5
27	--	--	--	--	6.0	--	--	7.0	--	10.5	--	8.5	12.5	--	8.5	16.0	--	9.5
28	--	14.0	--	--	7.0	--	--	5.0	--	9.5	--	8.0	9.5	--	8.5	15.5	--	9.5
29	--	--	--	--	6.0	--	--	5.0	--	8.0	--	7.0	--	--	--	15.5	--	9.5
30	--	14.0	--	--	7.0	--	--	5.0	--	9.5	--	7.5	--	--	--	15.5	--	9.5
31	--	--	--	--	--	--	--	5.0	--	10.0	--	7.5	--	--	--	15.5	--	9.0
AVE	--	--	--	--	9.9	--	--	--	--	--	--	--	10.6	--	8.0	12.5	--	8.8

DAY	APR MAX	APR DAILY	APR MIN	MAY MAX	MAY DAILY	MAY MIN	JUN MAX	JUN DAILY	JUN MIN	JUL MAX	JUL DAILY	JUL MIN	AUG MAX	AUG DAILY	AUG MIN	SEP MAX	SEP DAILY	SEP MIN
1	16.0	--	9.0	--	15.0	--	22.0	--	16.0	22.0	--	15.5	--	--	--	--	--	--
2	17.5	--	10.0	--	--	--	21.0	--	16.0	22.0	--	17.0	--	--	--	--	--	--
3	17.0	--	10.0	--	15.0	--	20.0	--	15.5	22.0	--	17.0	--	18.0	--	--	--	--
4	17.5	--	10.0	--	--	--	19.5	--	15.5	19.5	--	17.0	--	--	--	--	--	--
5	18.0	--	10.5	--	14.0	--	17.0	--	15.0	18.0	--	17.0	--	--	--	--	--	--
6	13.5	--	8.5	--	14.0	--	17.0	--	15.0	21.5	--	17.0	--	--	--	--	--	--
7	15.5	--	8.5	14.0	--	8.5	20.0	--	15.0	23.0	--	15.0	--	--	--	--	--	--
8	16.5	--	9.5	12.5	--	11.0	16.0	--	15.0	23.0	--	15.5	--	--	--	--	--	--
9	14.5	--	10.0	13.0	--	9.5	17.0	--	14.5	18.5	--	16.0	--	--	--	--	--	--
10	16.5	--	10.0	13.0	--	8.5	20.0	--	15.0	21.0	--	15.5	--	--	--	--	--	--
11	16.5	--	10.0	10.5	--	8.0	20.0	--	14.0	22.0	--	15.0	--	--	--	--	--	--
12	16.0	--	9.5	11.0	--	7.5	20.5	--	14.5	21.0	--	16.0	--	--	--	--	--	--
13	12.0	--	9.0	15.5	--	9.0	20.5	--	16.0	23.0	--	15.0	--	--	--	--	--	--
14	13.5	--	9.0	17.0	--	10.0	17.5	--	15.0	23.5	--	15.5	--	--	--	--	--	--
15	14.5	--	8.5	19.0	--	12.0	21.0	--	15.5	19.5	--	16.5	--	--	--	--	--	--
16	15.0	--	9.0	19.0	--	13.5	18.5	--	16.0	22.0	--	15.5	--	--	--	--	--	--
17	17.0	--	9.5	15.0	--	13.5	21.5	--	15.0	19.0	--	16.5	--	--	--	--	--	--
18	14.5	--	10.5	14.0	--	12.0	21.5	--	15.5	20.5	--	16.0	--	--	--	--	--	--
19	14.5	--	9.0	14.5	--	11.0	21.0	--	15.5	22.0	--	16.5	--	--	--	--	--	--
20	14.5	--	8.5	18.0	--	11.0	22.0	--	16.5	20.0	--	16.0	--	--	--	--	--	--
21	16.0	--	9.5	19.0	--	11.5	18.5	--	17.0	22.0	--	16.0	--	--	--	--	--	--
22	16.0	--	10.5	20.5	--	13.0	18.5	--	17.0	23.0	--	15.0	--	--	--	--	--	--
23	16.5	--	10.0	21.5	--	13.5	18.0	--	17.0	--	--	--	--	--	--	--	--	--
24	16.0	--	10.5	21.5	--	13.5	18.5	--	17.0	--	--	--	--	--	--	18.0	--	14.0
25	13.5	--	10.5	15.5	--	14.5	21.5	--	17.0	--	--	--	--	--	--	18.5	--	11.5
26	13.0	--	9.5	17.0	--	14.5	18.0	--	17.0	--	--	--	--	--	--	18.0	--	10.5
27	--	9.0	--	18.5	--	13.5	18.0	--	17.0	--	--	--	--	--	--	18.0	--	11.0
28	--	9.0	--	19.5	--	13.0	21.0	--	17.0	--	--	--	--	--	--	16.5	--	13.0
29	--	12.0	--	20.0	--	13.0	21.0	--	15.5	--	--	--	--	--	--	17.5	--	13.0
30	--	13.0	--	20.5	--	14.5	21.0	--	15.0	--	--	--	--	--	--	17.5	--	12.0
31	--	--	--	21.0	--	14.0	--	--	--	--	--	--	--	--	--	--	--	--
AVE	15.4	--	9.6	16.8	--	11.7	19.6	--	15.8	--	--	--	--	--	--	--	--	--

11481000 MAD RIVER NEAR ARCATA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	31	6	.50	50	2	.27	186	3	1.5
2	35	6	.57	47	2	.25	197	2	1.1
3	31	5	.42	41	2	.22	199	2	1.1
4	30	5	.41	79	46	22	175	3	1.4
5	31	3	.25	1090	199	599	70	2	.38
6	30	3	.24	612	78	129	66	2	.36
7	28	4	.30	346	23	21	68	1	.18
8	84	46	10	382	23	24	104	1	.28
9	128	51	18	379	22	23	212	10	5.7
10	91	26	6.4	275	9	6.7	325	26	23
11	88	13	3.1	215	5	2.9	604	40	76
12	75	8	1.6	172	4	1.9	5560	3140	50200
13	65	4	.70	150	7	2.8	4020	980	10600
14	64	4	.69	132	3	1.1	3620	1140	13500
15	75	9	1.8	131	3	1.1	2610	310	2180
16	240	186	139	140	2	.76	1390	102	383
17	528	201	294	123	2	.66	1050	73	207
18	391	109	115	123	2	.66	812	54	118
19	233	26	16	101	2	.55	3120	1760	33300
20	164	9	4.0	93	2	.50	4620	1710	23600
21	132	7	2.5	90	2	.49	19700	6440	378000
22	110	4	1.2	85	3	.69	7580	1280	26200
23	97	4	1.0	84	3	.68	10300	2270	65300
24	96	4	1.0	78	1	.21	6830	850	15700
25	83	3	.67	85	1	.23	5800	650	10200
26	69	2	.37	182	3	1.5	6000	600	9720
27	64	2	.35	201	3	1.6	4800	350	4540
28	70	2	.38	199	7	3.8	3360	274	2490
29	67	2	.36	195	3	1.6	2520	184	1250
30	63	3	.51	190	3	1.5	1950	141	742
31	54	3	.44	--	--	--	1480	128	511
TOTAL	3347	--	621.76	6070	--	850.67	99328	--	648852.00

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1280	94	325	3640	740	7270	1240	116	388
2	1100	74	220	2910	460	3610	1050	66	187
3	992	53	142	2420	386	2520	976	56	148
4	920	49	122	2100	253	1430	1050	115	326
5	348	48	110	1930	188	980	1180	115	366
6	776	42	88	1800	162	787	1020	50	138
7	758	40	82	1710	138	637	2450	185	1220
8	758	46	94	1600	83	359	5000	412	5560
9	1720	320	2040	1480	78	312	3300	230	2050
10	3260	950	8360	1390	73	274	2700	203	1480
11	2480	390	2610	1330	68	244	2340	175	1110
12	2390	389	2880	1280	65	225	2040	139	766
13	4160	690	7750	1890	118	602	1800	133	646
14	8840	3020	76200	2050	84	465	2300	201	1250
15	8230	1880	41800	1650	54	241	2130	161	926
16	11200	2730	86900	3120	1010	18200	1800	107	520
17	19500	4760	258000	7580	1010	20700	1570	83	352
18	13500	2650	96600	4600	360	4470	1390	68	255
19	8630	1580	36800	3440	239	2220	1210	59	193
20	7850	1470	31200	2700	163	1190	1090	50	147
21	14200	3010	117000	2040	122	672	1000	40	108
22	20500	3370	191000	1670	106	478	888	37	89
23	21100	4360	279000	1440	97	377	826	46	103
24	30000	5850	481000	1210	73	238	772	33	69
25	17300	3000	140000	1060	64	183	724	27	53
26	15500	2760	127000	896	57	138	660	25	45
27	26700	5320	408000	796	47	101	585	23	36
28	13900	2560	96100	912	114	281	590	20	32
29	6730	1510	27400	--	--	--	555	17	25
30	5220	880	12400	--	--	--	560	16	24
31	3920	790	8360	--	--	--	625	13	22
TOTAL	274262	--	2539583	60644	--	69204	45421	--	18634

11481000 MAD RIVER NEAR ARCATA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	600	11	18	347	10	9.4	101	7	1.9
2	585	10	16	293	9	7.1	94	5	1.3
3	550	9	13	245	7	4.6	90	4	.97
4	540	7	10	181	8	3.9	91	5	1.2
5	535	9	13	149	8	3.2	87	6	1.4
6	565	9	14	152	7	2.9	86	5	1.2
7	585	7	11	148	3	1.2	84	4	.91
8	535	9	13	266	13	9.3	80	5	1.1
9	500	7	9.5	1030	73	203	93	7	1.8
10	545	8	12	1270	162	555	125	5	1.7
11	555	9	13	1050	87	247	101	4	1.1
12	500	8	11	1160	82	257	74	4	.80
13	488	6	7.9	874	42	99	62	4	.67
14	540	5	7.3	718	31	60	59	4	.64
15	540	6	8.7	575	24	37	58	6	.94
16	464	5	6.3	456	18	22	52	6	.84
17	464	5	6.3	374	13	13	52	4	.56
18	452	30	37	329	11	9.8	46	4	.50
19	976	325	856	290	10	7.8	44	3	.36
20	665	48	86	258	9	6.3	41	3	.33
21	580	33	52	233	8	5.0	37	3	.30
22	802	35	76	208	7	3.9	35	3	.28
23	296	13	10	190	7	3.6	33	6	.53
24	208	8	4.5	176	6	2.9	35	6	.57
25	284	48	37	159	5	2.1	56	6	.91
26	790	55	117	152	5	2.1	58	5	.78
27	1010	26	71	148	4	1.6	56	4	.60
28	650	15	26	138	3	1.1	53	4	.57
29	436	22	26	130	3	1.1	51	3	.41
30	371	11	11	125	3	1.0	46	3	.37
31	--	--	--	114	9	2.8	--	--	--
TOTAL	16611	--	1599.5	11938	--	1585.7	1980	--	25.54

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	44	3	.36	6.8	3	.06	11	17	.50
2	41	3	.33	31	3	.25	14	17	.64
3	39	4	.42	31	20	1.7	21	17	.96
4	48	4	.52	37	20	2.0	21	17	.96
5	41	4	.44	39	20	2.1	23	17	1.1
6	30	4	.32	37	20	2.0	25	17	1.1
7	19	4	.21	35	20	1.9	48	17	2.2
8	17	4	.18	30	19	1.5	46	17	2.1
9	12	8	.26	33	19	1.7	42	16	1.8
10	11	8	.24	29	19	1.5	38	16	1.6
11	24	16	1.0	24	19	1.2	26	16	1.1
12	25	13	.88	24	19	1.2	27	16	1.2
13	19	10	.51	25	19	1.3	29	16	1.3
14	17	8	.37	22	19	1.1	28	16	1.2
15	18	5	.24	24	19	1.2	27	16	1.2
16	18	4	.19	24	19	1.2	27	16	1.2
17	15	4	.16	23	18	1.1	27	16	1.2
18	21	4	.23	22	18	1.1	29	16	1.3
19	27	16	1.2	22	18	1.1	31	16	1.3
20	28	10	.76	21	18	1.0	33	16	1.4
21	29	6	.47	23	18	1.1	30	16	1.3
22	25	5	.34	24	18	1.2	31	16	1.3
23	24	4	.26	25	18	1.2	31	15	1.3
24	27	3	.22	24	18	1.2	30	15	1.2
25	25	3	.20	23	18	1.1	29	15	1.2
26	24	3	.19	22	18	1.1	24	15	.97
27	24	3	.19	24	17	1.1	22	15	.89
28	24	3	.19	23	17	1.1	20	15	.81
29	22	3	.18	19	17	.87	20	15	.81
30	5.3	3	.04	16	17	.73	24	15	.97
31	.75	3	.01	12	17	.55	--	--	--
TOTAL	744.05	--	11.11	774.8	--	37.46	834	--	36.11

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 521953.85
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 3281040.85

11481000 MAD RIVER NEAR ARCATA, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
OCT 16, 1969	1000	14.0	248	377	252	56	75	89	96	98	100	--	--	--	--	--	SBWC
DEC 12.....	0900	9.0	4660	3040	38200	27	35	47	60	76	83	90	95	100	--	--	VPWC
DEC 12.....	1530	9.5	7330	4120	81500	19	25	34	50	65	78	91	96	99	100	--	VPWC
DEC 14.....	1000	10.0	2630	538	3820	27	36	43	50	55	58	61	66	93	100	--	SBWC
DEC 21.....	0830	11.0	30200	10400	848000	19	21	28	40	51	65	86	98	100	--	--	VPWC
DEC 21.....	1700	11.0	20600	6040	336000	21	26	32	45	59	71	88	98	100	--	--	VPWC
DEC 23.....	0900	10.0	12800	3020	104000	15	24	32	44	58	73	90	98	100	--	--	VPWC
DEC 23.....	1600	10.0	11500	1640	50900	26	36	48	64	80	91	99	100	--	--	--	VPWC
JAN 17, 1970	1000	11.0	21900	5810	344000	17	18	26	38	50	63	86	98	100	--	--	VPWC
JAN 21.....	1600	13.0	15600	3050	128000	16	19	26	37	50	63	82	96	99	100	--	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
OCT 21, 1969	1130	14.0		131	1	2	25	39	47	50	55	62	75	98	100	S

11482500 REDWOOD CREEK AT ORICK, CALIF.

LOCATION.--Lat 41°17'20", long 124°03'30", in NE¼ sec.4, T.10 N., R.1 E., Humboldt County, at gaging station at bridge on U.S. Highway 101 at Orick, and 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 1970.
Sediment records: Water years 1955-56 (partial-record station), March to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 23.0°C Sept. 18; minimum, 6.5°C Jan. 5.
Sediment concentrations (March to September 1970): Maximum daily, 190 mg/l May 11; minimum daily, 1 mg/l on many days.
Sediment loads (March to September 1970): Maximum daily, 770 tons May 11; minimum daily, 0.04 ton Sept. 30.
EXTREMES, 1966-68, 1969-70.--Water temperatures: Maximum (1969-70), Maximum, 23.0°C Sept. 18, 1970; minimum, 1.0°C Dec. 14, 1967.
REMARKS.--Temperature recorder stopped Jan. 22.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	14.5	15.5	13.0	10.0	8.5	8.5	7.5	10.0	10.0	9.5	8.5
2	17.0	13.0	14.5	13.0	10.0	8.5	8.0	7.0	10.0	9.5	9.5	8.5
3	16.0	13.0	15.0	13.0	10.0	9.0	8.0	8.0	10.0	10.0	10.5	9.0
4	15.5	13.0	15.0	14.0	10.5	9.0	9.5	7.0	10.5	10.0	10.0	9.5
5	16.0	12.5	14.0	13.0	10.0	8.5	7.5	6.5	11.0	10.5	11.0	9.0
6	15.5	12.5	14.0	13.0	10.5	9.5	9.0	7.5	10.5	10.0	11.0	10.0
7	15.5	13.0	14.0	12.5	10.5	9.5	9.5	9.0	10.5	9.5	12.0	11.0
8	16.0	14.0	14.0	12.5	11.0	10.5	10.0	9.5	11.0	10.5	11.5	10.5
9	15.0	14.0	14.0	12.0	10.5	10.0	10.0	10.0	11.0	11.0	11.5	11.0
10	17.0	14.0	14.0	11.5	10.5	9.5	10.0	10.0	11.5	11.0	12.0	11.0
11	16.0	13.0	14.0	11.5	11.0	10.5	10.5	10.0	11.5	11.0	11.0	10.5
12	16.0	12.5	14.5	12.0	11.5	11.0	10.5	10.5	11.5	10.5	11.5	10.0
13	15.0	12.0	14.0	12.0	11.5	11.5	11.0	10.5	11.0	10.0	11.5	11.0
14	15.0	12.0	13.5	12.0	12.0	11.5	11.0	11.0	10.5	9.5	12.0	11.0
15	15.0	14.0	13.0	12.5	11.5	10.5	11.5	11.0	10.5	10.0	11.5	11.0
16	15.0	14.0	13.0	11.5	10.5	10.5	11.5	11.5	10.5	9.5	11.5	11.0
17	14.5	13.0	12.0	10.0	11.5	10.5	11.5	10.0	10.0	9.5	11.5	11.0
18	15.0	12.5	12.0	10.0	12.0	11.5	12.0	11.5	10.0	9.5	11.5	10.0
19	15.0	12.0	12.0	10.5	12.0	11.5	12.0	11.5	10.0	9.0	11.0	9.5
20	15.0	12.5	11.5	10.0	13.0	12.0	12.0	11.5	10.0	8.5	11.0	9.5
21	16.5	13.5	11.5	10.5	13.0	11.0	12.5	12.0	10.0	8.5	11.0	10.0
22	14.5	14.0	12.5	10.5	11.5	11.0	--	--	10.0	8.5	11.5	10.0
23	15.0	14.0	11.5	10.0	11.0	11.0	12.0	12.0	10.0	8.5	11.5	10.0
24	15.0	13.0	11.5	10.0	11.0	10.5	12.0	11.0	11.0	9.5	12.0	11.0
25	15.0	12.0	11.0	9.5	11.0	10.0	11.0	11.0	11.0	9.0	12.0	11.0
26	14.0	12.5	11.0	9.5	10.0	9.5	11.5	11.0	11.0	9.5	12.0	11.0
27	14.5	13.5	11.0	9.5	9.5	9.0	11.5	10.5	11.5	9.5	12.0	10.0
28	15.5	13.5	11.0	9.0	9.0	8.5	10.5	9.5	10.0	9.0	12.0	10.5
29	15.0	12.5	10.5	9.0	9.0	8.5	9.5	9.0	--	--	12.0	10.0
30	15.5	13.0	10.0	9.0	8.5	8.0	10.0	9.5	--	--	12.0	10.0
31	16.0	13.0	--	--	8.5	8.0	10.0	10.0	--	--	12.0	9.5
AVE	15.4	13.1	12.8	11.2	10.7	10.0	10.5	9.9	10.6	9.7	11.4	10.2

11482500 REDWOOD CREEK AT ORICK, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	10.0	14.0	12.0	16.5	14.5	18.0	15.5	20.0	14.0	19.0	17.5
2	12.5	10.5	14.5	12.0	16.5	15.0	19.0	15.5	20.0	15.5	19.5	17.0
3	12.0	10.0	15.0	13.0	16.5	15.0	17.0	15.5	20.0	16.0	19.5	17.0
4	12.0	10.0	14.5	13.0	16.5	15.0	16.0	15.5	18.5	16.0	20.0	18.0
5	12.5	10.5	14.0	12.5	16.5	15.0	19.0	14.0	17.0	15.5	20.5	17.0
6	11.5	10.0	13.5	12.0	16.5	14.5	19.0	16.0	18.0	15.0	20.5	18.5
7	11.5	9.5	13.5	11.5	16.0	14.5	20.0	16.5	19.5	15.0	21.5	18.5
8	12.5	10.5	13.5	12.5	16.0	14.5	19.5	15.5	19.0	15.5	21.5	19.0
9	12.0	10.5	13.0	12.0	15.0	14.5	19.5	15.5	19.5	15.5	21.0	18.0
10	12.5	11.5	12.5	11.5	15.5	14.0	18.5	15.5	18.5	15.5	21.0	18.0
11	12.5	10.5	11.5	10.0	16.0	14.5	18.5	15.0	19.0	15.5	21.0	18.0
12	12.0	10.0	11.5	10.0	16.0	13.5	18.5	15.5	17.0	16.0	20.5	18.5
13	11.5	10.5	12.5	11.0	16.0	14.5	19.5	15.0	18.5	15.5	20.0	17.0
14	11.5	10.0	13.5	11.5	15.5	15.0	20.0	15.5	17.5	15.5	20.0	15.5
15	12.0	10.0	14.0	12.5	15.5	14.5	17.5	16.0	17.0	16.0	20.5	16.0
16	11.5	9.5	14.5	13.5	15.5	14.5	17.5	16.0	18.0	16.0	21.0	18.0
17	12.5	10.0	14.5	14.0	16.5	14.5	18.5	15.5	18.5	14.5	22.0	17.5
18	12.0	11.0	14.5	13.5	16.5	14.0	18.5	16.0	18.0	16.5	23.0	19.0
19	12.0	10.5	13.5	13.0	17.0	15.5	19.0	16.0	17.0	16.0	22.0	19.5
20	12.0	10.0	14.5	12.5	19.0	16.0	18.0	16.0	17.0	16.0	22.0	19.5
21	12.0	10.0	14.5	12.5	19.0	15.0	17.0	15.5	17.0	16.0	20.5	17.5
22	12.5	10.5	14.5	13.0	18.5	15.0	17.5	16.0	17.0	15.5	20.5	17.0
23	12.0	10.5	15.0	13.0	18.0	15.5	17.5	16.0	17.5	16.5	20.0	17.5
24	12.0	11.5	15.5	13.5	19.5	15.0	17.5	16.0	19.0	15.5	19.0	16.0
25	11.5	11.0	15.5	14.0	20.0	16.0	16.5	15.5	19.0	16.0	20.0	15.5
26	11.5	10.0	15.5	14.5	18.0	15.5	17.0	15.5	18.0	16.5	20.0	15.5
27	11.0	9.5	15.0	14.0	19.0	15.5	17.0	15.5	17.5	16.5	20.0	16.0
28	11.5	10.0	15.0	13.5	19.0	15.5	16.5	15.5	19.5	16.5	17.5	15.5
29	12.0	10.0	15.0	13.0	18.0	15.5	16.0	15.0	18.5	17.5	18.0	15.5
30	13.0	11.0	15.5	13.5	17.0	16.0	18.5	14.0	19.0	18.0	18.5	15.5
31	--	--	16.5	14.0	--	--	19.0	14.0	19.5	18.0	--	--
AVE	12.0	10.3	14.2	12.6	17.0	14.9	18.1	15.5	18.4	15.9	20.3	17.3

SUSPENDED-SEDIMENT DISCHARGE, MARCH TO SEPTEMBER 1970

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							--	--	--
4							--	--	--
5							--	--	--
6							--	--	--
7							--	--	--
8							--	--	--
9							--	--	--
10							--	--	--
11							--	--	--
12							--	--	--
13							--	--	--
14							--	--	--
15							--	--	--
16							--	--	--
17							--	--	--
18							--	--	--
19							943	120	306
20							874	114	269
21							814	96	211
22							748	72	145
23							690	52	97
24							660	45	80
25							650	42	74
26							595	41	66
27							575	39	61
28							545	34	50
29							545	31	46
30							515	28	39
31							488	25	33
TOTAL							8642	--	1477

11482500 REDWOOD CREEK AT ORICK, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, MARCH TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	468	23	29	370	21	21	275	8	5.9
2	440	20	24	350	15	14	265	7	5.0
3	412	18	20	335	11	9.9	255	7	4.8
4	404	17	19	320	10	8.6	247	6	4.0
5	372	16	16	312	9	7.6	240	5	3.2
6	360	15	15	305	8	6.6	233	4	2.5
7	340	14	13	300	12	9.7	228	4	2.5
8	315	12	10	450	18	22	225	5	3.0
9	288	11	8.6	800	11	24	222	5	3.0
10	392	47	50	1610	20	87	255	10	6.9
11	328	24	21	1500	190	770	225	8	4.9
12	276	17	13	1900	146	749	206	4	2.2
13	256	12	8.3	1380	100	373	194	4	2.1
14	264	9	6.4	1040	74	208	182	4	2.0
15	248	8	5.4	880	52	124	174	4	1.9
16	236	9	5.7	760	38	78	166	5	2.2
17	252	9	6.1	670	29	52	158	5	2.1
18	248	13	8.7	610	23	38	152	5	2.1
19	525	75	106	570	16	25	145	4	1.6
20	424	31	35	530	12	17	139	4	1.5
21	364	21	21	490	12	16	136	3	1.1
22	308	22	18	460	12	15	132	3	1.1
23	272	24	18	435	11	13	129	3	1.0
24	248	24	16	415	11	12	126	3	1.0
25	268	22	16	390	10	11	122	3	.99
26	432	74	93	365	10	9.9	119	2	.64
27	515	58	81	345	10	9.3	115	2	.62
28	428	60	69	330	9	8.0	111	2	.60
29	404	32	35	315	8	6.8	108	2	.58
30	392	22	23	300	8	6.5	105	2	.57
31	--	--	--	285	8	6.2	--	--	--
TOTAL	10479	--	810.2	19122	--	2758.1	5389	--	71.60

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	103	2	.56	38	2	.21	22	1	.06
2	101	2	.55	37	2	.20	22	1	.06
3	97	2	.52	36	3	.29	21	2	.11
4	94	2	.51	35	3	.28	21	2	.11
5	91	2	.49	34	3	.28	21	2	.11
6	89	2	.48	33	2	.18	20	1	.05
7	86	2	.46	32	2	.17	20	1	.05
8	83	2	.45	31	2	.17	20	1	.05
9	81	2	.44	30	2	.16	20	1	.05
10	78	2	.42	29	2	.16	20	1	.05
11	74	3	.60	29	2	.16	19	3	.15
12	71	2	.38	28	1	.08	19	2	.10
13	68	2	.37	27	2	.15	19	2	.10
14	66	2	.36	27	2	.15	19	1	.05
15	64	2	.35	27	2	.15	19	1	.05
16	62	2	.33	26	2	.14	18	1	.05
17	60	2	.32	26	2	.14	18	1	.05
18	58	2	.31	26	2	.14	18	1	.05
19	56	2	.30	25	2	.14	18	1	.05
20	54	1	.15	25	2	.14	17	1	.05
21	52	1	.14	25	2	.14	17	2	.09
22	50	3	.41	25	2	.14	17	1	.05
23	49	2	.26	24	2	.13	17	1	.05
24	48	2	.26	24	2	.13	16	2	.09
25	47	2	.25	24	2	.13	16	2	.09
26	46	2	.25	23	2	.12	15	2	.08
27	44	2	.24	23	1	.06	13	2	.07
28	43	2	.23	23	2	.12	13	2	.07
29	41	2	.22	23	2	.12	13	2	.07
30	40	2	.22	22	2	.12	13	1	.04
31	39	2	.21	22	1	.06	--	--	--
TOTAL	2035	--	11.04	859	--	4.76	541	--	2.10

TOTAL DISCHARGE FOR PERIOD MAR. 19 TO SEPT. 30, 1970 (CFS-DAYS) 47067
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR PERIOD MAR. 19 TO SEPT. 30, 1970 (TONS) 5134.80

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CALIF.

LOCATION.--Lat 41°55'41", long 122°26'35", in SE¼NE¼ 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.
PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1970.
Water temperatures: October 1962 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 22.0°C July 12, 20, 21, Aug. 1; minimum, 3.0°C Jan. 12-14.
EXTREMES, 1962-70.--Water temperatures: Maximum, 23.0°C Aug. 6, 1967; minimum, 1.5°C on several days in 1965, 1968, and 1969.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
15...	0750	1310	13.5	6.3	--	--	19	--	90	0	--	3.0
NOV.												
17...	1530	2970	8.5	8.9	--	--	19	--	89	0	--	4.6
DEC.												
08...	1350	1690	5.0	10.5	--	--	15	--	79	0	--	4.8
JAN.												
12...	1450	2940	3.0	12.7	--	--	20	--	92	0	--	5.6
FEB.												
09...	1600	5240	4.5	13.8	--	--	15	--	84	0	--	2.9
MAR.												
09...	1500	5110	7.0	13.8	--	--	18	--	88	0	--	4.8
APR.												
14...	1600	1360	10.5	12.3	--	--	22	--	105	0	--	5.8
MAY												
12...	1445	1330	11.0	12.8	11	15	29	3.9	115	0	46	4.9
JUNE												
16...	1215	710	18.0	13.4	--	--	29	--	105	5	--	6.9
JULY												
13...	1040	721	21.5	12.6	--	--	26	--	104	3	--	5.8
AUG.												
03...	1030	1040	21.5	9.7	15	12	29	4.0	114	0	44	6.5
31...	1150	1020	19.0	9.7	--	--	25	--	111	0	--	5.8

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 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 (MG/L)
OCT.												
15...	5.3	110	--	--	63	0	74	40	1.0	217	7.7	0
NOV.												
17...	3.2	110	--	--	60	0	73	41	1.1	201	7.3	4
DEC.												
08...	5.4	140	--	--	65	0	65	33	.8	172	7.4	6
JAN.												
12...	5.7	130	--	--	62	0	75	41	1.1	208	7.0	14
FEB.												
09...	4.2	70	--	--	45	0	69	42	1.0	154	7.6	25
MAR.												
09...	.1	140	--	--	55	0	72	42	1.1	183	8.3	25
APR.												
14...	.7	160	--	--	78	0	86	38	1.1	237	8.3	7
MAY												
12...	1.9	130	214	768	88	0	94	40	1.3	297	7.9	2
JUNE												
16...	3.1	160	--	--	90	0	94	41	1.3	304	8.4	2
JULY												
13...	1.6	160	--	--	86	0	90	40	1.2	274	8.4	3
AUG.												
03...	.9	0	187	525	88	0	94	41	1.4	295	8.3	0
31...	.7	240	--	--	79	0	91	41	1.2	281	8.0	2

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	17.0	10.0	10.0	5.5	5.0	4.5	4.5	4.5	4.5	6.0	6.0
2	17.0	16.5	10.0	10.0	5.5	5.5	4.5	4.5	4.5	4.5	6.0	6.0
3	16.5	16.0	10.0	10.0	5.5	5.5	4.5	4.0	4.5	4.5	6.0	6.0
4	16.5	16.0	10.0	10.0	5.5	5.0	4.0	4.0	4.5	4.5	6.0	6.0
5	16.0	16.0	10.0	10.0	5.5	5.0	4.0	4.0	4.5	4.5	6.0	6.0
6	16.0	15.5	10.0	10.0	5.0	5.0	4.0	4.0	4.5	4.5	6.5	6.0
7	15.5	15.0	10.0	10.0	5.0	5.0	4.0	3.5	4.5	4.5	7.0	6.5
8	15.0	15.0	10.0	10.0	5.0	5.0	3.5	3.5	4.5	4.5	7.0	7.0
9	15.0	14.5	10.0	9.0	5.0	5.0	3.5	3.5	4.5	4.5	7.0	7.0
10	14.5	14.5	9.0	9.0	5.0	5.0	3.5	3.5	4.5	4.5	7.0	7.0
11	14.5	14.0	9.0	9.0	5.0	5.0	3.5	3.5	4.5	4.5	7.0	7.0
12	14.0	13.5	9.0	8.5	5.0	5.0	3.5	3.0	5.0	4.5	7.0	7.0
13	13.5	13.5	8.5	8.5	5.0	5.0	3.0	3.0	5.0	5.0	7.0	7.0
14	13.5	13.5	8.5	8.5	5.0	5.0	3.5	3.0	5.0	5.0	7.0	7.0
15	13.5	13.5	8.5	8.5	5.0	5.0	3.5	3.5	5.0	5.0	7.5	7.0
16	13.5	13.0	8.5	8.5	5.0	5.0	4.0	3.5	5.0	5.0	7.5	7.0
17	13.0	12.5	8.5	8.5	5.0	5.0	3.5	3.5	5.0	5.0	7.5	7.5
18	12.5	12.5	8.5	8.0	5.0	5.0	3.5	3.5	5.0	5.0	7.5	7.5
19	12.5	12.0	8.0	7.0	5.0	5.0	3.5	3.5	6.0	5.5	7.5	7.5
20	12.0	12.0	7.0	7.0	5.0	5.0	4.0	3.5	6.0	6.0	8.0	7.5
21	12.0	11.5	7.0	7.0	6.0	5.0	4.5	4.0	6.0	6.0	8.5	8.0
22	11.5	11.0	7.0	7.0	5.0	5.0	5.0	4.5	6.0	6.0	8.5	8.0
23	11.0	11.0	7.0	7.0	5.0	4.5	5.5	5.0	6.0	6.0	8.5	8.0
24	11.0	11.0	7.0	7.0	5.0	5.0	5.5	5.0	6.0	6.0	9.0	8.5
25	11.0	10.5	7.0	6.5	5.0	5.0	5.0	5.0	6.0	6.0	9.0	8.5
26	10.5	10.5	6.5	6.0	5.0	5.0	5.0	5.0	6.0	6.0	9.0	8.5
27	10.5	10.5	6.0	5.5	5.0	5.0	5.0	5.0	6.0	6.0	9.0	8.5
28	10.5	10.5	5.5	5.0	5.0	5.0	5.0	5.0	6.0	6.0	9.0	9.0
29	10.5	10.5	5.0	5.0	5.0	5.0	5.0	5.0	--	--	9.0	9.0
30	10.5	10.0	5.0	5.0	5.0	5.0	5.0	5.0	--	--	9.0	9.0
31	10.0	10.0	--	--	5.0	4.5	5.0	4.5	--	--	9.5	9.0
AVE	13.2	13.0	8.2	8.0	5.1	5.0	4.2	4.0	5.2	5.1	7.6	7.4

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.0	10.5	10.5	18.0	17.0	19.0	18.0	22.0	21.0	19.5	19.0
2	10.0	9.5	11.0	10.5	20.0	17.5	19.0	19.0	21.5	21.0	19.5	19.0
3	10.0	9.5	11.0	11.0	21.0	19.0	19.0	19.0	21.5	21.0	19.5	19.0
4	10.0	9.5	12.0	11.0	20.0	18.5	21.0	19.0	21.5	21.0	19.0	19.0
5	10.0	10.0	13.5	12.0	20.5	18.5	20.5	20.0	21.0	21.0	19.0	18.0
6	10.5	10.0	14.0	12.0	20.0	19.0	21.0	19.5	21.0	21.0	18.5	18.5
7	10.5	10.0	13.0	12.0	21.5	20.0	20.0	19.0	21.0	21.0	18.5	18.0
8	10.0	10.0	12.5	12.0	21.0	18.5	20.0	19.0	21.0	20.5	18.5	18.0
9	10.0	10.0	12.0	12.0	18.5	17.5	20.0	19.5	20.5	20.5	18.5	18.0
10	11.0	9.5	12.0	12.0	18.5	17.5	20.5	19.5	20.5	20.5	18.5	18.0
11	10.5	10.5	12.0	11.0	18.5	17.5	20.5	20.0	20.5	20.5	18.5	18.0
12	10.5	10.0	11.0	11.0	18.0	17.0	22.0	20.0	21.0	20.5	18.5	18.0
13	10.5	10.5	12.0	11.0	17.5	17.0	21.5	20.0	20.5	20.5	18.0	17.5
14	10.5	10.0	12.5	12.0	17.0	17.0	21.0	20.0	20.5	20.5	17.5	17.0
15	10.0	10.0	13.0	12.0	18.0	17.0	20.5	19.5	20.5	20.5	17.0	17.0
16	10.0	10.0	14.0	13.0	18.0	17.0	20.5	19.5	21.0	20.5	17.0	16.5
17	10.5	10.0	14.0	13.0	18.0	17.5	21.0	20.0	20.5	20.5	16.5	16.0
18	10.0	10.0	15.0	14.0	18.5	17.5	21.0	20.5	20.5	20.5	16.5	16.0
19	10.5	10.0	15.0	14.0	18.5	18.0	21.0	20.5	20.5	20.5	16.5	16.0
20	10.5	10.5	15.5	14.0	18.5	18.5	22.0	20.5	20.5	20.5	16.0	16.0
21	11.0	10.5	15.5	14.0	19.5	18.5	22.0	20.5	20.5	20.5	16.0	16.0
22	11.0	10.0	16.5	14.5	19.0	18.5	21.5	20.5	20.5	19.5	16.0	15.5
23	11.0	10.5	15.5	15.5	19.5	18.5	21.0	20.5	20.0	19.5	16.0	15.5
24	10.5	10.0	16.5	15.5	18.5	18.5	21.5	20.5	20.0	19.5	16.0	15.5
25	10.0	10.0	16.5	15.5	18.5	17.0	21.0	20.5	20.0	19.5	15.5	15.0
26	10.0	10.0	17.5	16.0	18.0	17.0	21.0	20.5	20.0	19.5	15.0	15.0
27	10.5	10.0	18.5	16.5	19.5	18.0	21.5	21.0	20.0	19.5	15.0	14.5
28	10.5	10.5	17.5	16.5	19.5	18.5	21.5	21.0	20.0	20.0	14.5	14.5
29	10.5	10.0	17.5	16.5	19.0	18.0	21.5	20.5	20.0	20.0	14.5	14.5
30	11.0	10.5	17.5	16.5	19.0	17.5	21.0	21.0	20.0	19.0	14.5	14.5
31	--	--	17.5	17.0	--	--	21.0	21.0	19.0	19.0	--	--
AVE	10.4	10.0	14.3	13.4	19.0	17.9	20.8	20.0	20.6	20.3	17.1	16.8

11516600 COTTONWOOD CREEK AT HORNBROOK, CALIF.

LOCATION.--Lat 41°55'06", long 122°33'45", in SW¼SE¼ 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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.0°C July 18; minimum, 0.5°C on several days during December and January.
EXTREMES, 1964-70.--Water temperatures: Maximum (1964-65, 1966-70), 30.0°C July 7, 8, 1968; minimum, freezing point on several days in most years.
REMARKS.--Recorder malfunction Oct. 10-12, Oct. 28 to Nov. 3; probe buried Apr. 1-30, June 7-28.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	14.0	--	--	1.5	1.0	3.0	1.5	6.0	3.5	5.0	3.0
2	16.5	13.0	--	--	2.0	1.0	2.0	0.5	5.5	3.5	5.5	3.5
3	17.0	12.0	--	--	2.0	1.0	1.0	0.5	5.5	5.0	6.5	3.5
4	17.0	11.0	12.5	9.5	3.0	1.0	2.0	0.5	6.0	4.0	6.0	4.5
5	16.5	11.0	12.0	9.5	2.0	1.0	1.5	0.5	5.5	4.5	7.0	3.0
6	16.0	12.5	10.0	7.5	3.5	2.0	2.0	0.5	6.5	5.0	8.5	6.0
7	16.0	13.5	9.5	7.5	3.0	1.0	3.0	1.0	7.0	5.0	8.5	6.5
8	18.0	14.0	11.0	8.5	4.0	2.0	3.0	1.0	6.5	5.5	7.5	4.5
9	15.0	13.5	10.0	7.5	4.0	2.5	5.0	1.5	6.5	5.0	6.0	4.5
10	--	--	9.0	6.0	4.5	3.0	5.5	3.5	7.0	5.5	8.0	4.5
11	--	--	9.0	6.5	5.5	4.0	5.5	4.0	7.0	6.0	7.5	5.0
12	--	--	9.5	6.5	5.5	5.0	5.5	3.5	7.0	6.5	8.5	6.0
13	14.0	12.0	9.0	6.5	6.5	5.0	6.0	4.0	7.0	5.5	10.0	6.0
14	14.0	11.5	8.5	5.5	6.5	6.0	6.0	4.5	6.0	4.5	9.5	7.0
15	12.5	11.5	8.0	5.5	6.0	5.0	6.0	4.5	5.5	5.0	9.0	5.5
16	13.5	12.0	7.5	5.5	5.0	4.5	6.0	5.0	6.0	5.5	9.5	6.0
17	13.0	11.5	7.5	5.5	6.0	5.0	7.0	5.5	6.0	4.5	8.0	5.0
18	13.0	10.0	6.5	4.5	7.0	6.0	8.0	6.5	6.0	4.5	7.5	3.5
19	13.0	10.5	6.5	4.0	7.0	6.0	7.5	6.5	5.5	3.5	8.0	3.5
20	13.5	11.0	6.0	3.0	7.5	5.5	7.0	5.5	5.5	3.0	8.5	4.0
21	14.0	11.0	6.0	3.5	8.5	5.5	8.0	7.0	6.0	3.0	9.0	5.0
22	14.5	11.5	6.0	3.5	7.0	5.0	9.5	8.0	6.0	3.5	9.0	5.5
23	14.5	12.0	5.0	3.0	6.5	4.0	8.5	7.5	6.0	4.0	9.5	6.0
24	14.0	10.5	5.0	2.5	6.5	5.5	7.5	6.5	5.5	4.5	9.5	6.5
25	13.0	10.0	5.0	2.5	6.0	5.0	7.5	6.0	6.0	4.5	9.5	6.5
26	13.0	10.0	4.5	2.0	5.0	3.5	7.0	6.0	6.0	5.0	9.0	6.5
27	13.0	11.0	4.0	2.0	4.5	3.0	6.5	5.5	6.5	5.0	8.5	5.5
28	--	--	2.5	1.0	4.0	3.0	5.5	4.0	6.5	5.0	8.5	6.5
29	--	--	2.0	1.0	3.0	1.5	5.5	3.5	--	--	8.5	6.0
30	--	--	2.0	1.0	3.0	0.5	6.5	5.0	--	--	8.0	6.0
31	--	--	--	--	3.5	1.0	6.0	4.0	--	--	7.5	5.0
AVE	--	--	7.2	4.9	4.8	3.4	5.5	4.0	6.1	4.6	8.1	5.2

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	17.0	8.5	21.5	14.0	24.5	16.5	25.5	19.0	20.5	14.5
2	--	--	18.5	10.5	22.0	15.5	25.5	18.0	25.5	18.0	20.5	14.0
3	--	--	19.0	12.0	21.0	16.5	25.0	18.5	25.5	18.5	20.0	13.5
4	--	--	18.0	13.0	20.0	15.0	27.5	20.0	24.5	19.5	18.0	14.0
5	--	--	15.0	13.0	21.5	16.0	27.0	20.5	24.0	16.5	16.0	13.0
6	--	--	14.5	11.5	22.5	17.5	26.5	19.0	24.5	16.5	19.5	15.0
7	--	--	16.0	10.0	--	--	27.0	19.0	25.0	16.0	20.0	14.0
8	--	--	14.5	12.5	--	--	27.0	19.0	24.5	15.5	19.5	14.5
9	--	--	13.0	11.5	--	--	27.5	20.0	25.0	16.0	19.0	12.5
10	--	--	14.5	9.5	--	--	27.5	19.5	26.0	17.0	19.0	13.0
11	--	--	11.5	8.5	--	--	27.0	19.5	26.0	17.5	19.5	13.5
12	--	--	12.0	7.5	--	--	27.5	19.0	26.0	18.0	18.5	12.0
13	--	--	16.0	9.5	--	--	27.0	18.0	25.5	17.0	15.5	9.5
14	--	--	17.5	10.0	--	--	27.0	18.0	26.0	16.5	16.5	8.0
15	--	--	19.5	12.0	--	--	27.5	20.0	26.0	17.5	17.5	9.5
16	--	--	21.0	13.5	--	--	27.0	19.5	26.0	18.0	18.0	10.0
17	--	--	20.5	14.5	--	--	27.0	19.0	25.0	16.5	19.0	11.0
18	--	--	20.0	14.5	--	--	28.0	19.5	24.5	16.5	18.5	14.0
19	--	--	19.0	13.0	--	--	27.5	20.0	23.5	15.5	19.5	13.5
20	--	--	18.5	12.0	--	--	27.5	20.5	23.5	16.0	19.0	13.0
21	--	--	19.5	12.0	--	--	26.5	19.5	23.5	16.0	19.0	11.0
22	--	--	20.5	13.5	--	--	25.5	18.0	23.5	16.0	19.5	11.0
23	--	--	20.0	13.0	--	--	25.5	18.0	23.0	15.0	19.0	12.5
24	--	--	21.0	13.5	--	--	25.5	19.0	22.0	14.5	17.5	10.0
25	--	--	22.0	14.5	--	--	25.5	18.5	22.5	15.0	18.0	10.0
26	--	--	21.5	16.0	--	--	26.5	20.5	23.0	15.0	18.5	9.5
27	--	--	20.0	14.5	--	--	26.5	20.5	22.0	15.0	18.0	9.0
28	--	--	19.5	13.0	--	--	26.5	19.5	21.0	15.0	18.0	9.5
29	--	--	18.0	13.5	21.0	16.5	25.5	18.0	22.0	15.5	17.5	10.0
30	--	--	19.0	13.0	22.5	15.0	25.0	18.0	22.5	15.5	18.0	9.5
31	--	--	20.5	14.0	--	--	25.5	18.5	20.0	13.5	--	--
AVE	--	--	18.0	12.2	--	--	26.5	19.1	24.1	16.4	18.5	11.8

11517500 SHASTA RIVER NEAR YREKA, CALIF.

LOCATION.--Lat 41°49'23", long 122°35'40", in SE¼NE¼ 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 1970.
Water temperatures: June 1965 to September 1970.
Sediment records: Water years 1955-56, 1958-62 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 29.0°C July 4, 19; minimum, 2.0°C Jan. 3, 4, 6.
EXTREMES, 1965-70.--Water temperatures: Maximum, 30.0°C on several days in 1966-68; minimum, 1.5°C Dec. 14-18, 1967, and sometime during period Jan. 8 to Feb. 3, 1969.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Thermograph clock stopped May 22 to June 4; range in temperature, 14.5°C to 24.5°C.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
15...	0705	192	10.0	10.2	--	--	40	--	296	0	--	22
NOV.												
17...	1430	196	--	11.5	--	--	36	--	273	0	--	23
DEC.												
08...	--	191	--	12.7	--	--	35	--	265	5	--	22
JAN.												
12...	1545	262	--	11.9	--	--	40	--	299	0	--	22
FEB.												
09...	1715	487	--	11.4	--	--	29	--	278	0	--	17
MAR.												
09...	1545	575	--	11.6	--	--	33	--	273	4	--	19
APR.												
14...	1640	178	11.0	11.1	--	--	41	--	321	7	--	21
MAY												
12...	1355	235	--	11.3	24	43	42	3.2	339	9	9.2	21
JUNE												
16...	1135	99	18.9	9.7	--	--	45	--	367	0	--	26
JULY												
13...	1000	31	21.1	9.4	--	--	40	--	355	5	--	24
AUG.												
13...	1110	--	--	--	--	--	--	--	--	--	--	--
31...	1110	29	19.4	10.5	39	41	46	3.6	391	0	9.0	30

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 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 (MG/L)
OCT.												
15...	--	450	--	--	201	0	243	30	1.2	502	8.3	8
NOV.												
17...	--	520	--	--	171	0	224	31	1.2	473	8.3	4
DEC.												
08...	--	470	--	--	186	0	226	29	1.1	476	8.4	2
JAN.												
12...	--	570	--	--	233	0	245	27	1.1	515	8.1	20
FEB.												
09...	--	400	--	--	206	0	228	23	.9	478	8.2	25
MAR.												
09...	--	540	--	--	209	0	230	26	1.0	491	8.4	30
APR.												
14...	--	430	--	--	236	0	275	27	1.2	554	8.5	7
MAY												
12...	1.8	700	315	200	239	0	293	28	1.2	580	8.5	9
JUNE												
16...	--	700	--	--	252	0	301	28	1.2	600	8.3	2
JULY												
13...	--	580	--	--	254	0	299	26	1.1	583	8.5	5
AUG.												
13...	--	--	--	--	--	--	--	--	--	--	--	10
31...	.1	690	384	30.1	265	0	321	27	1.2	660	8.3	--

11517500 SHASTA RIVER NEAR YREKA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	13.5	12.0	9.5	4.0	3.0	4.5	3.5	6.0	5.0	7.0	5.0
2	15.0	12.5	12.0	9.5	4.0	3.0	4.0	3.0	7.0	5.0	8.0	6.0
3	14.5	11.0	12.0	10.0	5.0	3.0	3.0	2.0	7.5	6.5	9.0	6.5
4	14.0	10.0	11.5	10.5	5.0	4.0	3.0	2.0	7.0	6.0	8.0	6.5
5	13.5	10.0	11.5	10.0	5.0	3.5	3.0	2.5	7.5	6.5	9.0	5.5
6	13.5	9.5	11.0	9.0	5.5	4.5	3.5	2.0	8.5	7.0	11.0	8.0
7	12.5	10.5	10.0	8.5	6.5	4.0	4.5	3.5	9.0	7.0	10.0	8.5
8	12.5	11.0	10.0	8.5	6.0	5.5	5.0	4.0	9.0	7.0	9.5	7.5
9	11.5	10.0	9.0	7.5	6.5	6.0	5.5	4.5	9.0	7.0	9.0	8.0
10	13.0	10.0	9.0	7.0	7.0	6.0	6.5	5.0	9.5	7.5	10.0	7.5
11	12.5	9.0	9.5	8.0	6.5	6.0	7.5	6.5	10.0	8.0	9.0	8.0
12	12.5	9.5	10.0	8.0	6.5	6.5	7.0	6.0	9.5	8.5	9.0	7.5
13	12.0	9.0	9.5	7.5	7.5	6.0	8.0	6.5	8.5	7.0	10.5	8.0
14	12.5	9.5	9.0	7.5	8.0	7.0	8.0	7.5	8.0	6.0	11.0	9.0
15	11.0	10.0	9.0	7.5	7.0	6.0	7.5	7.0	8.5	7.0	11.5	9.0
16	10.5	9.5	8.0	7.0	7.0	6.0	7.5	7.0	7.5	6.0	12.0	9.0
17	11.0	9.0	7.5	6.5	7.5	6.5	8.0	7.0	7.0	5.5	11.0	8.0
18	11.5	9.5	7.5	6.0	8.0	7.0	9.0	8.0	7.5	6.0	10.5	7.0
19	11.5	9.0	7.0	5.5	8.0	7.5	9.0	8.5	8.0	5.5	11.0	7.0
20	12.0	9.0	6.5	5.0	8.0	7.0	8.5	8.0	8.0	5.5	12.0	7.5
21	13.0	10.0	7.0	5.5	8.5	7.0	9.5	8.5	8.5	5.5	12.5	8.5
22	13.5	11.0	7.0	5.5	7.0	6.5	10.0	9.0	9.0	6.5	13.0	9.0
23	13.0	11.0	6.5	5.0	6.5	5.0	10.0	8.5	9.5	6.5	13.0	9.0
24	12.5	11.0	6.5	5.0	6.0	5.5	8.5	7.5	9.0	7.0	14.0	10.0
25	12.5	10.5	6.5	5.0	6.0	5.5	7.5	7.0	10.0	7.0	14.0	10.0
26	12.0	10.0	6.5	5.0	5.5	5.0	7.0	6.5	10.5	7.5	13.0	9.5
27	11.5	10.0	6.0	4.5	5.5	4.5	6.5	5.5	11.0	7.5	13.0	8.5
28	12.0	9.5	5.5	4.5	5.0	4.5	5.5	4.5	9.5	6.0	13.0	9.0
29	12.0	9.5	5.0	3.5	5.0	4.0	5.5	4.5	--	--	13.0	9.0
30	11.5	9.5	4.5	3.5	4.5	3.5	6.5	5.0	--	--	11.0	8.0
31	11.5	9.5	--	--	4.5	3.0	6.5	5.5	--	--	12.0	7.5
AVE	12.5	10.1	8.4	6.8	6.2	5.2	6.6	5.7	8.6	6.5	11.0	8.0

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	8.0	17.5	11.5	--	--	24.0	17.0	24.0	17.0	22.5	16.5
2	13.0	9.0	19.0	13.0	--	--	27.0	19.0	24.0	16.0	22.0	16.0
3	13.5	8.5	20.0	15.0	--	--	27.0	20.0	25.0	16.5	21.0	15.0
4	14.0	9.0	20.5	15.5	--	--	29.0	21.5	24.0	17.5	17.5	15.0
5	15.5	10.0	17.5	14.0	26.5	19.0	27.5	21.5	23.0	16.0	16.0	13.5
6	13.5	10.0	15.0	12.0	25.5	20.0	28.0	21.0	23.5	16.0	18.0	14.5
7	12.5	8.0	16.5	11.5	25.5	19.0	27.0	20.0	22.5	16.0	21.0	15.0
8	14.0	9.5	15.0	12.5	21.5	16.5	27.5	20.0	22.5	15.5	20.0	15.0
9	15.0	10.0	13.5	11.0	18.5	15.0	27.5	20.5	24.0	16.0	20.5	14.0
10	15.0	11.5	14.0	10.0	20.5	14.0	26.5	19.5	24.5	17.5	21.0	14.5
11	14.0	9.0	10.5	8.5	20.0	14.0	27.0	20.0	25.5	18.0	21.0	15.0
12	12.5	8.0	11.5	8.0	19.0	13.0	26.5	19.5	25.5	18.5	18.0	13.5
13	10.5	9.0	15.0	9.5	18.0	15.0	26.0	18.5	24.5	17.5	15.5	10.5
14	11.0	8.0	18.0	11.5	18.5	14.5	27.5	19.0	24.5	17.0	16.0	10.0
15	13.0	8.0	20.5	13.5	21.0	14.0	28.0	21.0	25.5	18.0	17.0	10.5
16	12.0	9.0	22.0	15.5	23.0	15.0	26.5	19.0	26.0	19.0	17.0	11.0
17	13.5	8.0	22.0	16.0	24.0	16.5	27.0	18.5	25.0	18.0	18.0	12.5
18	12.5	9.0	21.5	16.0	26.0	18.0	28.0	20.0	24.5	18.0	19.0	15.0
19	14.0	9.0	20.0	15.0	27.0	19.5	29.0	21.0	24.5	17.0	17.5	14.0
20	11.5	7.5	20.0	13.5	28.0	21.0	28.0	21.0	24.5	17.5	17.0	15.5
21	12.5	7.5	20.5	13.5	27.5	22.0	26.0	20.0	24.0	17.5	17.5	12.0
22	14.0	8.0	--	--	28.0	21.5	25.5	18.0	23.5	17.0	18.0	12.0
23	13.5	9.5	--	--	28.5	22.5	25.5	17.0	23.5	16.5	17.5	13.0
24	13.0	10.0	--	--	26.5	21.0	25.5	18.0	23.0	15.5	15.5	11.5
25	12.5	9.0	--	--	26.0	20.5	25.5	18.0	23.5	16.0	15.5	10.5
26	11.0	8.5	--	--	24.5	20.0	26.0	19.5	23.0	16.5	16.0	10.5
27	10.0	7.5	--	--	24.0	20.0	26.5	19.5	23.5	16.5	16.0	11.0
28	12.0	7.5	--	--	21.0	18.0	25.0	18.5	23.0	16.5	16.0	11.5
29	11.0	7.5	--	--	21.5	15.5	24.5	17.0	23.5	17.0	15.5	11.5
30	14.5	11.0	--	--	22.0	15.0	24.5	16.5	22.5	17.5	15.5	11.0
31	--	--	--	--	--	--	24.5	17.0	22.0	15.5	--	--
AVE	12.9	8.8	--	--	23.5	17.7	26.6	19.2	23.9	16.9	17.9	13.0

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CALIF.

LOCATION.--Lat 41°51'14", long 123°13'52", in SW¼SW¼ 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.--6,980 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 1970.
Sediment records: Water years 1955-56 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 29.5°C July 26; minimum, 3.5°C Jan. 6.
EXTREMES, 1963-70.--Water temperatures: Maximum, 29.5°C July 26, 1970; minimum (1963-64, 1966-70), 0.5°C on several days in 1967 and 1968.
REMARKS.--Recorder malfunction July 16, 17.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	18.0	12.5	12.0	5.5	5.5	5.0	5.0	5.5	5.0	6.5	5.5
2	19.0	17.5	12.5	12.0	5.5	5.5	5.0	4.5	5.0	5.0	6.0	5.5
3	17.5	17.0	12.5	12.0	5.5	5.5	4.5	4.0	5.0	5.0	6.0	6.0
4	17.0	15.5	12.5	12.0	6.0	5.5	4.0	4.0	5.0	5.0	6.5	6.0
5	16.5	15.0	12.5	12.0	5.5	5.5	4.0	4.0	5.5	5.0	7.0	6.0
6	16.5	15.0	12.0	11.5	6.0	5.5	4.0	3.5	5.5	5.0	8.5	7.0
7	17.0	15.5	11.5	11.5	6.0	6.0	4.0	4.0	5.5	5.0	8.5	8.0
8	17.0	16.5	11.5	11.0	6.0	6.0	4.5	4.0	5.5	5.0	8.0	7.5
9	16.5	15.5	11.0	11.0	6.5	6.0	5.0	4.5	5.5	5.0	8.0	7.5
10	16.0	15.0	11.0	10.5	6.5	6.5	5.0	5.0	6.0	5.5	8.0	7.0
11	15.0	14.0	11.0	10.5	6.5	6.5	5.0	5.0	6.5	6.0	8.0	7.5
12	14.5	13.5	11.0	10.5	6.5	6.5	5.0	5.0	6.5	6.0	8.0	7.5
13	14.5	13.0	11.0	10.5	6.5	6.5	5.0	5.0	6.0	5.5	8.5	8.0
14	14.0	13.0	10.5	10.0	7.0	6.5	5.0	5.0	5.5	5.0	8.5	8.0
15	14.0	13.5	10.5	10.0	7.0	6.5	5.5	5.0	5.5	5.0	8.0	7.5
16	14.0	13.5	10.0	9.5	6.5	6.5	5.5	5.5	5.5	4.5	9.0	8.0
17	13.5	13.5	9.5	9.5	6.5	6.5	6.0	5.5	5.5	5.0	8.5	7.5
18	13.5	13.5	9.5	9.0	7.0	6.5	6.5	6.0	6.0	5.5	8.0	7.0
19	13.5	13.0	9.5	9.0	7.0	7.0	7.0	6.5	6.0	5.5	8.0	7.0
20	14.0	12.5	9.0	9.0	7.0	7.0	7.0	6.5	6.0	5.5	8.5	7.5
21	14.5	13.5	9.0	9.0	7.5	7.0	7.0	6.5	6.0	5.5	9.5	8.0
22	15.0	14.0	9.0	9.0	7.5	6.5	8.0	7.0	6.5	6.0	10.0	8.5
23	15.0	14.5	9.0	9.0	6.5	6.5	8.0	7.5	6.5	6.0	10.0	9.0
24	14.5	14.0	9.0	8.5	6.5	6.5	7.5	7.0	6.5	6.0	11.0	9.5
25	14.0	13.5	8.5	7.5	6.5	6.5	7.0	6.5	7.0	6.0	10.5	9.5
26	14.0	13.5	8.0	7.5	6.5	6.0	6.5	6.5	7.0	6.5	10.0	9.5
27	13.5	13.0	7.5	7.0	6.0	6.0	6.5	6.0	7.0	7.0	10.0	8.5
28	13.0	12.5	7.0	6.5	6.0	5.5	6.0	5.5	7.0	6.5	10.0	9.0
29	12.5	12.0	6.5	6.0	5.5	5.5	5.5	5.0	--	--	10.0	9.0
30	12.5	12.0	6.0	5.5	5.5	5.0	6.0	5.5	--	--	9.5	8.5
31	12.5	12.0	--	--	5.0	5.0	6.0	5.5	--	--	9.5	7.5
AVE	15.0	14.1	10.0	9.6	6.3	6.1	5.7	5.4	5.9	5.5	8.6	7.7

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	8.0	14.5	10.5	19.0	16.0	20.5	16.0	25.5	17.5	20.5	17.0
2	11.0	9.0	16.5	12.0	19.5	17.0	22.5	18.0	23.0	19.0	21.0	17.0
3	11.0	8.0	17.5	13.5	20.5	17.0	24.0	20.0	23.5	19.0	20.0	17.0
4	11.5	8.5	16.5	14.0	20.5	17.5	25.0	21.0	23.0	19.5	19.5	17.0
5	12.0	9.0	15.0	13.5	21.0	18.5	26.0	22.0	22.0	18.5	18.0	15.5
6	11.5	9.0	14.0	12.5	21.5	19.0	25.0	21.5	22.5	19.0	19.5	17.0
7	10.0	8.0	13.0	11.5	21.0	18.5	25.0	21.0	22.5	18.0	20.5	17.0
8	11.5	9.0	13.0	12.0	19.5	16.0	25.0	21.0	22.5	18.5	20.5	17.5
9	12.0	10.0	12.5	11.0	16.0	14.5	25.0	20.5	23.0	18.5	20.0	16.0
10	12.5	11.0	11.5	10.0	17.0	14.0	25.0	20.0	24.0	19.5	20.0	16.5
11	11.5	9.5	10.0	8.5	17.0	14.0	25.0	19.5	24.5	20.0	20.0	16.5
12	11.0	8.5	9.5	8.0	16.0	14.5	25.0	19.0	25.0	20.5	18.5	15.5
13	10.0	9.0	13.0	9.0	16.5	15.0	25.0	18.5	24.5	20.0	16.5	14.0
14	9.5	8.5	14.5	11.5	16.5	14.0	28.0	17.5	24.0	19.5	16.0	12.5
15	11.0	8.0	16.0	13.0	17.5	14.0	28.0	20.0	25.0	20.0	17.0	13.0
16	10.5	9.0	17.0	14.5	19.0	15.0	--	--	25.0	20.5	17.0	13.5
17	11.5	9.0	16.5	14.5	20.0	16.5	--	--	24.0	19.5	17.5	14.5
18	10.5	9.0	16.0	14.5	21.0	17.5	27.5	19.0	24.0	19.0	18.0	16.5
19	10.5	9.0	15.0	13.5	22.5	18.5	28.5	20.0	23.0	18.0	17.0	15.0
20	10.0	8.5	15.0	12.5	24.0	20.0	29.0	20.0	23.5	18.5	17.5	15.5
21	11.5	8.0	15.5	13.0	24.5	21.0	27.5	20.0	24.0	19.0	17.0	14.0
22	11.5	8.0	16.5	14.0	23.5	20.5	28.0	18.0	23.5	19.5	17.5	13.5
23	12.0	9.5	17.0	14.0	25.0	21.5	29.0	18.0	22.5	18.5	17.5	15.0
24	11.5	10.0	17.5	14.0	24.0	21.0	29.0	18.5	21.5	17.5	16.0	13.0
25	11.0	9.5	18.0	15.0	23.0	20.0	29.0	18.5	22.0	17.0	15.5	13.0
26	10.0	9.0	18.0	15.5	23.5	20.0	29.5	19.5	22.5	18.0	15.5	12.5
27	10.5	8.0	17.0	15.0	21.5	19.0	27.5	19.5	23.0	18.5	15.5	12.5
28	10.5	8.5	17.0	14.5	19.0	16.5	25.0	18.5	22.5	18.0	16.0	13.0
29	11.0	8.0	17.0	14.5	19.0	15.0	25.5	16.5	23.5	18.5	15.5	13.0
30	13.0	10.0	17.0	15.0	19.0	15.5	26.5	17.5	23.0	19.5	15.5	12.5
31	--	--	18.0	15.0	--	--	26.5	17.5	22.0	18.5	--	--
AVE	11.1	8.9	15.3	12.9	20.3	17.2	26.3	19.2	23.4	18.9	17.9	14.9

11522500 SALMON RIVER AT SOMES BAR, CALIF.

LOCATION.--Lat 41°22'40", long 123°28'35", in NE¼ 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 1970.
Sediment records: Water years 1955-56 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 25.0°C July 26, 27; minimum, 3.0°C Jan. 5, 6.
EXTREMES, 1965-70.--Water temperatures: Maximum (1965-66, 1967-70), 32.0°C Sept. 4, 5, 1966; minimum, freezing point Dec. 14, 15, 1967.
REMARKS.--Recorder malfunction Oct. 28 to Nov. 25; recorder stopped May 3-25.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	15.0	--	--	4.5	4.0	5.0	4.5	8.0	8.0	8.0	7.5
2	17.0	14.0	--	--	4.5	3.5	5.0	4.0	8.0	7.5	7.5	7.0
3	16.0	13.0	--	--	5.0	3.5	4.0	4.0	9.0	8.0	8.0	7.5
4	15.0	12.0	--	--	6.0	5.0	4.0	3.5	9.0	8.0	8.0	7.5
5	15.0	11.5	--	--	5.0	4.5	3.5	3.0	9.5	8.5	8.5	7.0
6	14.5	11.5	--	--	5.5	4.5	4.0	3.0	9.5	9.0	9.5	8.0
7	14.0	12.0	--	--	5.5	5.0	5.0	4.0	9.5	9.0	9.5	9.0
8	13.5	12.5	--	--	6.5	5.5	6.5	5.0	9.5	8.5	9.5	8.5
9	13.0	12.0	--	--	7.0	6.5	7.5	6.5	10.0	9.0	9.0	8.0
10	14.0	12.5	--	--	7.5	7.0	8.0	7.0	10.0	9.0	9.5	8.0
11	13.0	11.0	--	--	8.0	7.0	8.0	7.5	10.0	9.5	9.5	8.5
12	13.0	10.5	--	--	8.5	8.0	8.0	7.5	9.5	8.5	10.0	9.5
13	12.0	10.0	--	--	9.0	8.5	8.5	8.0	9.5	8.5	11.0	10.0
14	12.0	10.0	--	--	9.0	8.5	8.5	8.0	9.0	8.5	11.0	10.0
15	11.0	10.5	--	--	8.5	7.5	9.0	8.5	8.5	8.0	10.5	9.0
16	11.0	10.0	--	--	8.5	7.5	9.0	9.0	8.5	8.0	11.5	9.5
17	10.0	9.5	--	--	8.5	8.5	9.5	9.0	8.0	7.0	10.5	8.5
18	11.0	9.5	--	--	9.0	8.5	10.0	9.5	8.0	7.5	9.0	7.0
19	10.5	9.0	--	--	9.5	9.0	10.0	10.0	7.5	7.0	9.0	7.0
20	11.0	9.0	--	--	10.0	9.0	10.0	9.0	7.5	6.5	9.5	7.5
21	11.0	10.0	--	--	10.0	9.0	10.0	9.5	8.0	7.0	10.0	8.0
22	12.0	10.5	--	--	9.0	8.5	10.0	10.0	8.0	7.0	10.5	8.5
23	12.0	11.0	--	--	9.0	9.0	10.0	10.0	7.5	7.0	10.5	9.0
24	12.0	11.0	--	--	9.5	9.0	10.0	9.5	8.5	7.5	11.5	10.0
25	11.5	10.0	--	--	9.0	8.0	10.0	9.5	8.5	7.5	11.0	9.5
26	10.0	10.0	6.5	6.0	8.0	7.5	9.5	9.5	9.0	8.0	10.5	9.0
27	11.5	10.0	6.0	5.5	7.5	7.0	10.0	9.0	9.0	8.5	10.5	9.0
28	--	--	5.5	5.0	7.0	6.0	9.0	8.0	9.0	8.0	10.5	9.0
29	--	--	5.0	4.5	6.0	6.0	8.0	7.0	--	--	10.0	8.5
30	--	--	4.5	4.0	6.0	5.5	8.5	7.5	--	--	9.5	8.0
31	--	--	--	--	5.5	5.0	8.0	7.5	--	--	9.5	8.0
AVE	12.7	11.0	--	--	7.5	6.8	7.9	7.3	8.8	8.0	9.8	8.4

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	8.5	14.5	11.5	17.5	16.0	20.5	18.0	23.0	21.0	21.5	19.5
2	10.5	8.5	15.5	12.5	17.5	16.0	21.5	19.5	23.0	21.0	21.5	19.0
3	10.0	8.5	--	--	18.5	16.0	23.0	20.5	23.0	21.0	21.0	19.0
4	11.0	8.5	--	--	18.0	16.0	23.5	21.0	23.0	21.0	20.0	18.5
5	11.5	9.5	--	--	18.5	17.0	24.0	22.0	23.0	22.0	20.0	17.5
6	10.0	8.5	--	--	19.0	17.0	24.0	21.5	23.0	21.0	21.0	18.5
7	9.5	8.5	--	--	18.5	16.5	24.5	23.0	22.5	21.0	22.0	19.0
8	10.0	9.0	--	--	18.0	15.0	24.0	23.0	22.5	20.5	21.5	19.5
9	11.5	9.5	--	--	15.0	14.0	24.0	22.0	23.0	21.0	21.5	19.0
10	12.0	9.5	--	--	16.0	14.0	24.0	21.5	23.5	21.5	21.5	19.0
11	11.0	9.0	--	--	16.0	14.0	23.5	21.5	24.0	21.5	21.5	19.0
12	10.0	8.5	--	--	16.5	14.5	23.5	21.5	24.0	22.0	20.0	18.0
13	9.5	8.5	--	--	15.0	13.5	23.5	21.0	23.5	22.0	18.5	17.0
14	9.5	8.5	--	--	16.0	14.0	24.0	21.0	23.5	21.5	18.0	16.0
15	10.0	8.5	--	--	16.5	14.5	24.0	22.0	24.0	22.0	18.0	15.5
16	9.5	8.5	--	--	17.5	15.5	24.0	21.5	24.0	22.0	18.0	15.5
17	10.5	8.5	--	--	17.5	15.5	24.0	21.5	24.0	22.0	18.5	16.0
18	9.5	9.0	--	--	17.5	15.0	24.0	21.5	23.5	21.5	19.0	17.5
19	10.5	8.5	--	--	18.0	17.0	24.5	22.0	23.0	21.0	18.5	17.0
20	10.0	8.5	--	--	20.0	18.0	24.5	22.5	23.0	21.0	18.5	17.0
21	10.5	9.0	--	--	21.0	19.0	24.5	22.5	22.5	21.0	18.0	16.0
22	11.0	10.0	--	--	21.0	19.5	24.0	22.0	22.5	21.0	18.0	15.5
23	11.0	9.5	--	--	21.5	20.0	24.5	22.0	22.5	20.5	18.5	16.0
24	10.5	10.0	--	--	21.0	19.5	24.5	23.0	22.0	20.5	17.5	16.0
25	10.0	9.0	--	--	22.0	20.5	24.5	23.0	22.0	20.0	17.0	14.5
26	10.0	8.5	17.5	15.0	22.0	20.5	25.0	23.0	22.0	20.0	17.5	15.0
27	10.0	9.0	16.5	15.0	21.5	19.5	25.0	23.0	22.0	20.0	17.5	15.0
28	10.5	8.5	16.0	14.0	19.5	18.0	24.0	22.0	22.0	20.0	17.0	15.0
29	11.0	9.0	16.0	14.0	19.0	17.0	23.0	21.5	22.5	20.0	17.5	15.5
30	13.0	10.5	16.0	14.5	19.5	17.0	23.0	21.0	22.5	20.5	17.5	15.0
31	--	--	16.5	14.5	--	--	23.0	21.0	22.0	20.0	--	--
AVE	10.4	8.9	--	--	18.5	16.6	23.8	21.7	22.9	21.0	19.2	17.0

11523000 KLAMATH RIVER AT ORLEANS, CALIF.

LOCATION.--Lat 41°18'13", long 123°32'00", in SW¼NE¼ 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 (revised), 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 1970. Prior to October 1966 published as "at Somesbar".

Water temperatures: October 1965 to September 1970.

Sediment records: Water years 1955-59 (partial-record station), January 1967 to September 1970.

EXTREMES, 1969-70.--Water temperatures: Minimum, 3.0°C Jan. 5-7.

Sediment concentrations: Maximum daily, 2,100 mg/l Jan. 25; minimum daily, 4 mg/l Oct. 2, 3, June 22, Sept. 17, 18.

Sediment loads: Maximum daily, 750,000 tons Jan. 24; minimum daily, 21 tons on several days.

EXTREMES, 1965-70.--Water temperatures: Maximum (1965-69), 28.0°C on several days in 1967-68; minimum (1965-66, 1967-70), freezing point Dec. 22, 23, 1968.

Sediment concentrations (1967-70): Maximum daily, 3,220 mg/l Feb. 23, 1968; minimum daily, 2 mg/l on several days in 1968.

Sediment loads (1967-70): Maximum daily, 825,000 tons Feb. 28, 1968; minimum daily, 7.7 tons Oct. 9, 1968.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Temperature recorder stopped Jan. 21-29, Mar. 10-31; probe inoperative July 21 to Aug. 25.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
06...	1210	A 1980	13.9	12.2	--	--	15	--	111	0	--	6.7
NOV.												
03...	1405	A 2180	12.2	12.1	--	--	20	--	116	0	--	6.4
DEC.												
01...	1315	3590	6.1	14.0	--	--	15	--	102	0	--	6.5
03...	1315	--	--	--	--	--	--	--	--	--	--	--
JAN.												
05...	1445	7520	3.3	14.8	--	--	8.8	--	84	0	--	3.5
FEB.												
02...	1235	29700	6.1	14.5	--	--	6.5	--	79	0	--	1.9
MAR.												
09...	1350	18900	7.8	13.4	--	--	7.7	--	82	0	--	3.1
APR.												
06...	1250	7070	10.0	12.7	--	--	6.9	--	85	0	--	2.5
MAY												
11...	1230	6670	9.0	12.8	14	6.6	6.2	1.2	76	0	9.7	3.2
JUNE												
08...	1035	5750	17.2	10.1	--	--	8.5	--	77	0	--	2.8
JULY												
06...	1100	2560	22.8	9.3	--	--	12	--	106	0	--	3.5
AUG.												
10...	1015	1730	22.8	9.3	--	--	19	--	127	0	--	7.1
SEP.												
14...	1150	1900	16.0	11.0	17	9.8	17	2.8	112	0	19	5.5

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 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 (MG/L)
OCT.												
06...	--	130	--	--	81	0	91	29	.7	223	8.0	2
NOV.												
03...	--	130	--	--	82	0	95	35	1.0	247	7.9	4
DEC.												
01...	--	180	--	--	72	0	84	31	.8	210	7.7	--
03...	--	--	--	--	--	--	--	--	--	--	--	3
JAN.												
05...	--	60	--	--	67	0	69	22	.5	170	7.3	20
FEB.												
02...	--	170	--	--	62	0	65	19	.4	148	7.6	220
MAR.												
09...	--	90	--	--	61	0	67	22	.4	150	8.0	80
APR.												
06...	--	180	--	--	68	0	70	18	.4	164	8.0	8
MAY												
11...	.2	120	95	1710	62	0	62	17	.3	152	8.1	8
JUNE												
08...	--	60	--	--	61	0	63	23	.5	152	8.2	10
JULY												
06...	--	60	--	--	84	0	87	24	.6	218	8.0	2
AUG.												
10...	--	150	--	--	95	0	104	30	.8	270	7.6	4
SEP.												
14...	.7	50	144	739	83	0	92	30	.8	238	8.3	10

A Daily mean discharge.

11523000 KLAMATH RIVER AT ORLEANS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	16.5	12.0	11.0	6.0	5.0	5.0	4.5	7.0	6.5	8.0	7.0
2	17.0	16.0	12.0	11.5	5.5	5.0	4.5	4.0	6.5	6.0	7.5	6.5
3	16.0	14.5	12.5	11.5	5.5	5.0	4.0	3.5	7.0	6.5	8.0	7.0
4	15.0	13.0	12.5	12.0	6.0	5.5	3.5	3.5	7.0	6.5	8.0	7.0
5	14.5	13.0	12.0	10.5	5.5	5.0	3.5	3.0	7.5	7.0	8.5	7.0
6	14.5	12.5	11.0	10.5	6.0	5.5	3.0	3.0	8.0	7.5	9.0	8.0
7	15.0	13.0	10.5	10.0	6.5	6.0	4.0	3.0	8.0	7.5	9.5	9.0
8	15.0	14.0	10.5	10.0	7.0	6.5	5.0	4.0	8.0	7.5	9.5	8.0
9	14.0	13.5	10.0	9.5	7.0	7.0	6.0	5.0	8.5	7.5	8.5	8.0
10	13.5	12.5	10.0	9.5	7.5	7.0	6.5	6.0	8.5	8.0	--	--
11	13.0	11.5	10.0	9.0	7.5	7.0	6.5	6.5	9.0	8.5	--	--
12	12.5	11.5	10.5	10.0	8.0	7.5	6.5	6.5	9.0	8.5	--	--
13	12.0	11.0	11.0	10.0	8.5	7.5	7.5	6.5	8.5	7.5	--	--
14	12.0	11.0	10.5	9.0	8.5	8.5	8.0	7.5	8.0	7.5	--	--
15	12.0	12.0	10.0	10.0	8.5	7.5	8.0	8.0	8.0	7.5	--	--
16	12.0	11.0	10.0	9.0	7.5	7.5	8.0	8.0	8.0	7.0	--	--
17	11.0	11.0	9.0	8.0	8.0	7.5	8.5	8.0	7.0	6.5	--	--
18	11.5	10.5	8.0	7.5	8.5	8.0	8.5	8.5	8.0	7.0	--	--
19	11.0	10.0	8.0	7.5	9.0	8.5	9.0	8.5	8.0	6.5	--	--
20	11.5	10.0	8.0	7.5	9.0	9.0	9.0	9.0	7.5	6.0	--	--
21	12.5	11.0	8.0	7.5	9.5	9.0	--	--	8.0	6.5	--	--
22	13.0	12.0	8.5	8.0	9.0	9.0	--	--	8.0	7.0	--	--
23	13.0	12.5	8.5	8.0	9.0	9.0	--	--	8.0	7.0	--	--
24	13.0	12.0	8.0	8.0	9.0	9.0	--	--	8.5	7.5	--	--
25	12.0	11.5	8.0	8.0	9.0	8.5	--	--	9.0	7.5	--	--
26	12.0	11.0	8.0	7.5	8.5	7.5	--	--	9.0	7.5	--	--
27	12.0	11.5	7.5	6.5	7.5	6.5	--	--	9.5	8.5	--	--
28	12.0	11.5	7.0	6.5	6.5	6.0	--	--	9.0	8.0	--	--
29	11.5	11.0	6.5	5.5	6.0	5.5	--	--	--	--	--	--
30	12.0	11.0	6.0	5.5	5.5	5.5	7.0	6.5	--	--	--	--
31	12.0	11.0	--	--	5.5	5.0	7.0	7.0	--	--	--	--
AVE	13.1	12.1	9.5	8.8	7.4	7.0	--	--	8.1	7.2	--	--

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	9.5	15.0	11.5	20.0	17.5	21.5	18.0	--	--	21.5	19.5
2	12.0	9.5	16.5	13.0	21.5	18.0	23.5	19.5	--	--	21.5	19.0
3	11.5	8.5	17.0	14.0	20.5	18.5	25.0	22.0	--	--	21.5	19.0
4	12.0	9.0	16.5	14.5	21.5	18.5	25.5	22.0	--	--	20.5	18.5
5	12.5	9.5	15.0	13.5	22.5	19.5	25.5	22.5	--	--	20.0	17.0
6	11.5	9.0	13.5	12.0	21.5	19.5	24.0	22.0	--	--	21.5	18.0
7	11.0	8.5	13.5	11.0	20.5	18.5	25.5	22.0	--	--	22.0	19.0
8	12.0	9.0	13.0	12.5	18.5	16.0	26.5	23.0	--	--	21.5	19.0
9	12.0	9.5	12.5	11.5	16.0	15.0	26.0	22.5	--	--	21.5	18.0
10	12.5	11.5	11.5	10.0	17.5	15.0	25.0	21.5	--	--	22.0	18.5
11	12.0	10.0	10.0	8.5	18.0	15.5	24.5	21.0	--	--	22.0	18.0
12	11.5	9.5	10.0	8.5	18.0	15.5	24.5	20.5	--	--	20.0	17.0
13	10.0	8.5	12.5	9.0	18.0	16.0	25.5	20.5	--	--	18.0	15.5
14	10.5	9.0	15.0	11.5	18.5	15.5	25.0	20.5	--	--	17.0	14.0
15	11.0	9.0	17.0	13.5	18.5	15.5	25.5	21.5	--	--	18.0	14.0
16	11.0	9.0	17.5	15.0	20.0	17.0	24.5	21.0	--	--	18.5	14.5
17	12.0	9.0	17.0	15.5	20.0	17.0	25.0	20.5	--	--	19.5	15.5
18	11.0	9.5	16.5	15.0	20.5	17.0	25.5	21.0	--	--	19.5	18.0
19	11.0	9.5	15.0	14.5	23.5	19.0	25.0	21.0	--	--	19.0	17.0
20	11.0	9.0	16.0	14.0	25.0	21.0	26.5	21.5	--	--	18.5	16.5
21	11.5	9.0	16.5	14.0	25.0	22.5	--	--	--	--	18.5	15.0
22	12.0	9.5	17.0	15.0	26.0	23.0	--	--	--	--	19.0	16.0
23	12.0	9.5	17.5	15.0	26.0	23.5	--	--	--	--	19.5	16.5
24	11.5	11.0	18.5	15.5	26.0	23.0	--	--	--	--	18.5	15.5
25	11.0	10.0	19.0	16.0	26.0	23.0	--	--	--	--	18.0	15.0
26	10.0	9.0	18.5	16.5	25.0	22.5	--	--	22.5	19.5	17.5	14.5
27	11.0	8.5	18.0	16.0	22.5	20.0	--	--	22.5	19.5	18.0	14.5
28	11.0	8.0	17.5	15.5	21.0	19.0	--	--	22.5	19.5	18.0	15.0
29	11.5	8.5	17.5	15.5	20.5	17.5	--	--	23.5	20.0	18.0	15.5
30	13.5	10.0	18.5	15.5	20.5	17.5	--	--	23.0	21.0	18.0	15.5
31	--	--	19.5	16.5	--	--	--	--	22.5	20.0	--	--
AVE	11.5	9.3	15.8	13.5	21.3	18.5	--	--	--	--	19.5	16.6

11523000 KLAMATH RIVER AT ORLEANS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1980	5	27	2250	18	109	3590	12	116
2	1980	4	21	2200	16	95	3570	12	116
3	1980	4	21	2180	43	253	3570	12	116
4	1980	6	32	2180	110	647	3570	12	116
5	1980	6	32	10000	185	5030	3590	13	126
6	1980	6	32	6680	43	776	3490	16	151
7	1980	8	43	5560	12	180	2730	15	111
8	2250	23	140	5100	8	110	2900	17	133
9	2630	7	50	4880	12	158	3110	48	403
10	2600	20	140	4700	17	216	3120	44	371
11	2550	13	90	4600	15	186	6000	38	616
12	2500	10	68	4580	12	148	21000	320	18100
13	2300	10	62	4520	10	122	18800	143	7530
14	2250	10	61	4090	10	110	23100	335	22600
15	2450	15	99	4240	12	137	16100	80	3480
16	3000	55	446	4300	12	139	11100	39	1170
17	5200	75	1050	4260	12	138	9950	40	1070
18	4200	34	386	4220	11	125	9560	40	1030
19	3400	16	147	4240	11	126	13100	579	28000
20	3050	9	74	4160	11	124	27300	680	58800
21	2860	7	54	3870	11	115	92500	1790	434000
22	2790	10	75	3690	11	110	50900	350	48100
23	2810	16	121	3670	11	109	43100	782	93800
24	2900	16	125	3620	11	108	30800	250	20800
25	3000	25	203	3600	11	107	21900	125	7390
26	3190	17	146	3670	11	109	18600	105	5270
27	3350	14	127	3670	12	119	14300	90	3470
28	3420	13	120	3660	12	119	11900	75	2410
29	3390	13	119	3620	12	117	10800	66	1920
30	3340	14	126	3590	12	116	9980	50	1350
31	2290	15	93	--	--	--	9490	46	1180
TOTAL	85580	--	4330	125600	--	10058	503520	--	763845

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9030	35	853	33200	490	43900	13600	101	3710
2	8580	30	695	29800	350	28200	12800	84	2900
3	8190	25	553	27900	280	21100	12800	96	3320
4	7880	20	426	26300	275	19500	13100	96	3400
5	7570	15	307	24400	275	18100	12600	94	3200
6	7230	10	195	22600	275	16800	12000	95	3080
7	7060	7	133	21200	275	15700	16900	205	10200
8	7080	6	115	19800	255	13600	21300	198	11400
9	8050	15	326	18500	240	12000	19200	144	7460
10	9130	17	419	16600	215	9640	18400	124	6160
11	8770	7	166	14600	150	5910	18300	114	5630
12	9800	43	1450	14500	175	6850	17500	108	5100
13	16500	265	12000	14800	160	6390	18000	102	4960
14	29000	798	68400	14100	150	5710	21600	131	7700
15	31200	560	47200	14000	190	7180	21800	75	4410
16	60100	849	150000	16800	450	20400	20200	58	3160
17	94200	1390	354000	21500	410	23800	18900	54	2760
18	63900	1000	173000	19300	380	19800	17000	52	2390
19	55500	930	140000	18700	250	12600	15800	51	2180
20	62000	1000	175000	18200	180	8850	14400	50	1940
21	72000	1200	230000	16900	180	8210	13200	47	1680
22	120000	2000	650000	15600	175	7370	12500	46	1550
23	123000	2000	652000	15100	150	6120	12200	45	1480
24	145000	1900	750000	14600	130	5120	12000	44	1430
25	106000	2100	600000	13500	125	4560	11800	42	1340
26	88000	1400	340000	12400	94	3150	11600	40	1250
27	131000	2000	700000	11500	88	2730	11300	38	1160
28	82000	1300	290000	12400	122	4190	10800	34	991
29	55700	1190	179000	--	--	--	10200	32	881
30	43900	880	104000	--	--	--	9900	29	775
31	37500	670	67800	--	--	--	9330	27	680
TOTAL	1514870	--	5688038	518800	--	357480	461030	--	108277

11523000 KLAMATH RIVER AT ORLEANS, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8010	26	562	5480	20	296	6590	28	498
2	7650	26	537	5510	20	298	6740	44	801
3	7360	25	497	6140	34	564	6710	40	725
4	7140	26	501	6930	37	692	6940	38	712
5	7050	28	533	7090	28	536	6790	28	513
6	7030	30	569	6800	27	496	6670	25	450
7	6940	27	506	6460	26	453	6070	23	377
8	6770	26	475	6580	46	817	5650	21	320
9	6640	24	430	7650	60	1240	5320	20	287
10	7050	23	438	7230	40	781	5140	20	278
11	7200	24	467	6700	26	470	4720	18	229
12	6840	25	462	6490	21	368	4300	16	186
13	6700	27	488	6430	21	365	4130	14	156
14	6650	25	449	6620	24	429	4150	10	112
15	6490	25	438	7300	34	670	4120	10	111
16	6220	25	420	8560	48	1110	4010	10	108
17	6070	24	393	10900	62	1820	3910	10	106
18	5950	22	353	11400	74	2280	3820	10	103
19	6220	21	353	10500	64	1810	3800	12	123
20	5870	22	349	9090	51	1250	3820	14	144
21	5750	21	326	8650	40	934	3790	20	205
22	5650	22	336	8470	40	915	3740	4	40
23	5560	21	315	7960	42	903	3620	5	49
24	5500	20	297	7450	42	845	3530	6	57
25	5450	23	338	7560	40	816	3410	7	64
26	5600	25	378	8050	47	1020	3240	7	61
27	5440	23	338	8070	46	1000	3170	8	68
28	5300	23	329	7940	33	707	3300	9	80
29	5230	21	297	7410	33	660	3090	9	75
30	5270	20	285	7160	30	580	2980	9	72
31	--	--	--	6890	28	521	--	--	--
TOTAL	190600	--	12459	235470	--	25646	137270	--	7110

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2880	9	70	1540	7	29	1590	7	30
2	2810	8	61	1650	7	31	1610	8	35
3	2740	7	52	1820	7	34	1890	6	31
4	2640	6	43	1790	27	130	2000	6	32
5	2550	6	41	1780	15	72	2050	6	33
6	2540	6	41	1780	13	62	2110	7	40
7	2560	7	48	1770	11	53	2110	8	46
8	2430	11	72	1750	11	52	2060	8	44
9	2310	9	56	1750	11	52	1970	8	43
10	2210	9	54	1730	11	51	1950	8	42
11	2160	8	47	1700	10	46	1920	7	36
12	2090	7	40	1680	10	45	1920	7	36
13	2050	7	39	1670	10	45	1920	6	31
14	1990	7	38	1660	8	36	1900	6	31
15	1920	8	41	1640	7	31	1920	5	26
16	1880	8	41	1620	6	26	1940	5	26
17	1860	8	40	1590	6	26	1950	4	21
18	1880	8	41	1580	6	26	1950	4	21
19	1830	9	44	1580	7	30	1970	8	43
20	1780	9	43	1580	8	34	1970	10	53
21	1750	9	43	1580	8	34	1980	9	48
22	1700	8	37	1580	8	34	1980	9	48
23	1660	7	31	1590	8	34	1960	8	42
24	1650	7	31	1610	8	35	1960	8	42
25	1630	6	26	1610	8	35	1960	8	42
26	1610	5	22	1600	8	35	1940	8	42
27	1600	5	22	1600	12	52	1960	8	42
28	1600	5	22	1590	10	43	1970	8	43
29	1590	5	21	1580	9	38	1970	9	48
30	1570	7	30	1570	7	30	1980	9	48
31	1560	7	29	1580	5	21	--	--	--
TOTAL	63030	--	1266	51150	--	1302	58360	--	1145

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 3945280
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 6980956

11523000 KLAMATH RIVER AT ORLEANS, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
DEC 19, 1969	1730	9.0	16000	1230	53100	14	22	31	41	47	66	80	99	100	--	--	VBWC
DEC 21.....	1530	9.0	105000	1120	318000	15	24	34	45	54	72	90	99	100	--	--	VBWC
DEC 23.....	1600	9.0	43300	683	79800	13	21	32	44	56	66	79	92	98	100	--	VBWC
JAN 17, 1970	1030	8.0	102000	1250	344000	15	24	37	52	66	81	94	100	--	--	--	VBWC
JAN 24.....	1620	7.0	D145000	3200	1250000	16	23	32	45	58	71	85	95	100	--	--	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
OCT 23, 1969	1400	14.5	5	D 2810	--	1	2	5	10	13	15	27	58	89	100	S

D Daily mean discharge.

11525500 TRINITY RIVER AT LEWISTON, CALIF.

LOCATION.--Lat 40°43'10", long 122°48'09", in SW¼NW¼ 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.--728 sq mi.
PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), December 1953 to September 1968, water years 1969-70 (partial-record station).
Water temperatures: September 1951 to September 1955, October 1957 to September 1958, July 1959 to September 1970.
Sediment records: Water years 1956-61 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 12.0°C June 1, 4-6, July 10; minimum, 5.5°C on several days during December and January.
EXTREMES, 1951-55, 1957-58, 1959-70.--Water temperatures: Maximm (1951-55, 1957-58, 1959-63, 1964-70), 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 and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DISCHARGE (CFS)	DISSOLVED OXYGEN (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
NOV. 03...	0930	242	10.7	--	--	2.2	--	54	0	--	2.4
JAN. 05...	0930	155	9.6	--	--	2.6	--	55	0	--	1.5
MAR. 09...	0955	148	12.1	--	--	2.1	--	47	0	--	1.7
MAY 11...	0840	160	12.4	4.3	6.7	2.1	.9	46	0	1.8	1.8
JULY 06...	0730	155	11.0	--	--	2.8	--	48	0	--	.4
SEP. 14...	0830	195	10.6	--	--	2.2	--	47	0	--	1.6

DATE	NITRATE (NO3) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	ALKALINITY AS CACO3 (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TURBIDITY (MG/L)
NOV. 03...	.1	0	--	--	43	0	44	10	.1	94	7.8	3
JAN. 05...	.5	60	--	--	43	0	45	12	.2	97	7.1	7
MAR. 09...	.2	60	--	--	36	0	39	11	.2	80	7.3	12
MAY 11...	.2	70	44	19.0	38	0	38	10	.1	83	8.0	5
JULY 06...	.1	20	--	--	38	0	39	14	.2	86	7.6	2
SEP. 14...	.1	100	--	--	37	0	39	11	.2	79	7.9	1

11525500 TRINITY RIVER AT LEWISTON, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.5	9.0	9.0	8.0	7.0	5.5	5.5	7.5	7.5	7.0	7.0
2	9.0	8.5	9.0	9.0	7.0	6.0	5.5	5.5	7.5	7.0	7.0	7.0
3	9.0	8.5	9.0	9.0	6.0	6.0	5.5	5.5	7.5	7.0	7.0	7.0
4	9.0	8.5	9.0	9.0	6.0	6.0	5.5	5.5	7.5	7.0	7.0	7.0
5	9.0	8.5	9.0	9.0	6.0	6.0	5.5	5.5	7.5	7.0	7.5	7.0
6	9.0	8.5	9.0	9.0	6.0	6.0	5.5	5.5	7.5	7.0	7.5	7.0
7	8.5	8.5	9.0	9.0	6.0	6.0	5.5	5.5	7.5	7.0	7.5	7.5
8	8.5	8.5	9.0	9.0	6.0	6.0	5.5	5.5	7.5	7.0	7.5	7.5
9	8.5	8.5	9.0	8.5	6.0	6.0	5.5	5.5	7.5	7.0	7.5	7.0
10	9.0	8.5	8.5	8.5	6.0	6.0	5.5	5.5	7.5	7.0	7.0	7.0
11	9.0	8.5	8.5	8.5	6.0	6.0	5.5	5.5	7.5	7.0	7.0	7.0
12	9.0	8.5	8.5	8.5	6.0	6.0	5.5	5.5	7.5	7.0	7.0	7.0
13	9.0	8.5	8.5	8.5	6.0	6.0	5.5	5.5	7.5	7.0	7.0	7.0
14	8.5	8.5	8.5	8.5	6.0	6.0	5.5	5.5	7.5	7.0	7.5	7.0
15	8.5	8.5	8.5	8.5	6.0	6.0	5.5	5.5	7.5	7.5	7.0	7.0
16	8.5	8.5	8.5	8.5	6.0	6.0	6.0	5.5	7.5	7.5	7.5	7.0
17	8.5	8.5	8.5	8.5	6.0	6.0	6.0	6.0	7.5	7.0	8.0	7.5
18	8.5	8.5	8.5	8.5	6.0	6.0	6.0	6.0	7.0	6.5	8.0	7.5
19	8.5	8.5	8.5	8.5	6.0	6.0	6.5	6.0	6.5	6.5	8.0	7.5
20	8.5	8.5	8.5	8.0	6.0	6.0	6.5	6.5	7.0	6.5	8.0	7.5
21	8.5	8.5	8.0	8.0	6.0	6.0	6.5	6.5	7.0	6.5	8.0	7.5
22	8.5	8.5	8.0	8.0	6.0	6.0	6.5	6.5	7.0	6.5	8.0	7.5
23	8.5	8.5	8.0	8.0	6.0	6.0	7.0	6.5	7.0	7.0	8.0	7.5
24	8.5	8.5	8.0	8.0	6.0	6.0	7.0	7.0	7.0	7.0	8.5	7.5
25	9.0	8.5	8.0	8.0	6.0	6.0	7.5	7.0	7.0	7.0	8.5	8.0
26	9.0	8.5	8.0	8.0	6.0	6.0	7.5	7.0	7.0	7.0	8.0	7.5
27	9.0	9.0	8.0	8.0	6.0	6.0	7.5	7.0	7.0	7.0	8.0	7.5
28	9.0	9.0	8.0	8.0	6.0	6.0	7.0	7.0	7.0	7.0	8.0	7.5
29	9.0	9.0	8.0	8.0	6.0	6.0	7.0	7.0	--	--	8.0	7.5
30	9.0	9.0	8.0	8.0	6.0	5.5	7.0	7.0	--	--	8.0	7.5
31	9.0	9.0	--	--	5.5	5.5	7.5	7.0	--	--	8.0	7.5
AVE	8.8	8.6	8.5	8.4	6.1	6.0	6.2	6.1	7.3	7.0	7.6	7.3

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.5	9.0	8.0	12.0	10.5	11.5	9.5	11.0	9.5	10.0	9.5
2	8.0	7.5	9.5	8.5	11.5	10.0	11.5	9.5	11.0	9.5	10.5	9.5
3	8.5	7.5	9.5	8.5	11.5	10.0	11.0	10.0	11.0	9.5	10.5	9.5
4	8.5	8.0	9.0	8.5	12.0	10.5	11.5	9.5	11.0	9.5	10.5	9.5
5	8.5	8.0	8.5	8.5	12.0	10.5	11.5	9.5	11.0	9.5	10.5	9.5
6	8.5	8.0	9.0	8.5	12.0	10.5	11.5	9.5	11.0	9.5	10.5	9.5
7	8.5	8.0	9.0	8.5	11.5	10.5	11.5	9.5	11.0	9.5	10.5	9.5
8	8.5	8.0	8.5	8.5	11.0	10.5	11.5	9.5	11.0	9.5	10.5	9.5
9	8.5	8.0	9.0	8.5	10.5	10.0	11.5	9.5	11.0	9.5	10.5	9.5
10	9.0	8.0	9.0	8.5	11.0	10.0	12.0	9.5	11.0	9.5	10.5	9.5
11	9.0	8.0	9.0	9.0	11.0	10.0	11.5	9.5	11.0	9.5	10.5	9.5
12	9.0	8.0	9.0	9.0	11.0	10.0	11.5	9.5	11.0	9.5	10.0	9.0
13	8.0	8.0	9.5	9.0	10.5	10.0	11.5	9.5	11.0	9.5	10.0	9.0
14	8.0	8.0	10.0	8.5	11.0	10.0	11.5	10.0	11.0	9.5	10.0	9.0
15	8.5	8.0	10.0	9.0	11.0	10.0	11.5	9.5	11.0	9.5	10.0	9.0
16	8.0	8.0	10.5	9.0	11.0	10.0	11.5	9.5	11.0	9.5	9.5	9.0
17	8.5	8.0	10.5	9.5	11.0	9.5	11.5	9.5	11.0	9.5	9.5	9.0
18	8.0	8.0	10.5	9.5	11.5	9.5	11.5	9.5	11.0	9.5	10.0	9.0
19	8.5	8.0	10.5	9.5	11.5	10.0	11.5	9.5	11.0	9.5	10.0	9.0
20	8.5	8.0	10.5	10.0	11.5	10.0	11.5	9.5	11.0	9.5	10.0	9.0
21	8.5	8.0	10.5	9.5	11.0	10.0	11.5	9.5	11.0	9.5	10.0	9.0
22	8.5	8.0	10.5	10.0	11.5	10.0	11.5	9.5	11.0	9.5	9.5	9.0
23	8.5	8.0	11.0	9.5	11.5	10.0	11.5	9.5	11.0	9.5	9.5	8.5
24	8.5	8.0	11.0	10.0	11.0	9.5	11.0	9.5	11.0	9.5	9.0	8.5
25	8.5	8.0	11.0	10.0	11.0	10.0	10.5	9.5	11.0	9.5	9.0	8.5
26	8.5	8.0	11.0	10.0	11.5	10.0	11.0	9.5	11.0	9.5	9.0	8.5
27	8.0	8.0	11.0	10.0	11.5	9.5	11.5	9.5	11.0	9.5	9.0	8.5
28	8.5	8.0	11.0	10.5	10.5	10.0	11.5	10.0	10.5	9.5	9.5	8.5
29	8.5	8.0	11.0	10.0	11.5	10.0	11.5	9.5	10.5	9.5	8.5	8.5
30	9.0	8.0	11.0	10.5	11.0	10.0	11.5	9.5	11.0	9.5	8.5	8.5
31	--	--	11.5	10.5	--	--	11.0	9.5	10.5	9.5	--	--
AVE	8.4	7.9	10.0	9.3	11.3	10.0	11.4	9.5	11.0	9.5	9.8	9.0

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 1970.
Sediment records: Water year 1968 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Maximum, 21.5°C Aug. 11; minimum, 4.5°C Jan. 5, 6.
EXTREMES, 1962-64, 1966-67, 1968-70.--Water temperatures: Maximum, 27.0°C Aug. 17-19, 24, 1967; minimum (1962-63, 1966-67, 1968-70), 1.0°C Dec. 28, 29, 1966.
REMARKS.--Recorder stopped Oct. 19, 20, Mar. 7.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	14.5	13.0	11.5	6.5	6.0	7.5	7.0	8.0	7.5	8.0	7.0
2	15.5	14.0	13.5	11.0	6.5	6.0	7.0	6.5	8.5	8.0	8.0	6.5
3	15.5	12.5	13.0	11.5	7.5	6.5	6.5	6.5	9.0	8.0	9.0	7.0
4	15.0	12.0	13.0	12.0	8.0	7.0	6.5	6.0	9.0	8.5	8.0	7.0
5	15.0	11.5	12.5	11.5	7.5	6.5	6.0	4.5	9.5	8.5	8.5	7.0
6	14.5	11.5	12.5	11.5	8.0	7.5	5.5	4.5	10.0	8.5	9.5	8.0
7	15.0	12.5	12.0	11.0	8.5	8.0	6.5	5.5	9.5	8.5	--	--
8	15.0	13.5	12.0	10.5	9.0	8.5	7.0	6.5	10.0	8.5	9.0	8.0
9	14.5	13.5	11.0	10.5	9.0	9.0	7.5	7.0	10.0	9.0	9.0	7.5
10	15.0	13.5	11.0	10.5	9.0	9.0	8.5	7.5	10.5	10.0	9.0	7.5
11	14.5	11.5	11.5	10.5	9.5	9.0	8.5	8.0	10.5	9.5	10.0	8.5
12	13.5	11.0	11.5	11.0	9.5	9.5	8.0	8.0	9.5	8.5	10.5	9.0
13	13.5	10.5	11.0	10.0	10.5	9.5	8.5	8.0	9.0	8.5	11.0	9.5
14	13.0	10.5	10.5	9.5	10.5	9.5	8.5	8.5	9.0	8.0	11.0	9.5
15	13.0	12.0	10.5	9.5	10.0	9.5	8.5	8.5	8.5	8.0	11.0	9.5
16	12.0	11.5	10.5	9.0	10.0	9.5	8.5	8.5	8.0	7.5	11.0	9.0
17	12.0	11.0	9.0	8.0	10.5	9.5	9.0	8.5	8.0	7.5	11.0	8.0
18	12.5	11.5	9.0	7.5	10.5	10.0	10.0	9.0	8.5	7.0	11.0	7.0
19	--	--	8.5	7.5	10.5	10.0	10.0	9.5	8.5	6.5	11.5	7.0
20	--	--	8.0	7.0	10.5	10.0	9.5	9.0	8.0	6.5	11.5	7.5
21	15.5	13.5	9.0	8.0	11.0	10.0	9.5	9.5	8.5	6.5	12.0	7.5
22	16.0	13.5	9.5	9.0	10.0	9.0	10.0	9.5	8.5	7.0	13.0	8.5
23	16.0	14.0	9.5	8.5	9.5	9.0	10.0	9.5	9.0	7.0	13.5	9.0
24	15.0	13.0	9.5	9.0	9.5	8.5	9.5	9.0	9.5	7.5	14.0	9.0
25	14.0	12.5	9.0	8.5	9.0	8.5	9.5	8.5	9.5	7.5	13.5	9.0
26	14.5	12.5	8.5	8.0	8.5	8.5	9.0	9.0	9.5	7.5	13.0	8.5
27	14.5	13.5	8.5	8.0	8.5	8.0	9.0	8.0	10.0	8.0	13.0	8.5
28	13.5	11.5	8.0	7.5	8.0	8.0	8.0	7.0	9.0	7.5	12.0	8.5
29	12.5	10.5	7.5	7.0	8.0	7.5	7.5	6.5	--	--	12.0	8.0
30	13.0	11.0	7.0	6.5	7.5	7.0	8.5	7.5	--	--	12.0	7.5
31	13.0	11.5	--	--	7.5	7.0	8.0	7.5	--	--	12.0	7.5
AVE	14.2	12.3	10.3	9.4	9.0	8.4	8.3	7.7	9.1	7.9	10.9	8.0

11527000 TRINITY RIVER NEAR BURNT RANCH, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	7.5	16.0	11.0	17.0	13.5	19.0	16.0	19.0	15.5	20.0	17.5
2	13.0	7.5	16.0	11.5	17.5	14.5	20.0	16.0	19.0	16.0	20.0	17.5
3	13.5	7.5	16.0	12.0	17.5	14.5	20.5	17.0	19.5	17.0	20.0	17.0
4	13.5	8.0	15.5	12.0	17.0	14.0	20.5	17.0	19.0	16.5	18.5	17.0
5	14.0	8.5	14.0	11.5	17.5	14.5	20.0	17.5	19.5	16.0	19.5	16.5
6	11.0	8.5	11.5	11.0	17.0	14.5	20.0	17.0	19.0	16.5	20.5	17.5
7	12.0	8.0	14.0	11.0	16.5	14.0	20.5	17.5	19.0	16.0	20.5	17.5
8	12.5	8.5	12.5	11.5	14.0	13.0	20.0	17.0	19.0	16.0	20.5	17.5
9	12.5	8.5	13.0	10.0	14.0	12.5	20.0	17.0	20.5	16.0	20.5	17.5
10	12.5	10.0	12.5	9.0	15.5	12.0	19.5	17.0	20.5	17.0	21.5	18.0
11	13.0	9.0	10.0	9.0	15.5	13.0	19.5	16.5	21.5	17.5	21.0	17.5
12	12.5	8.5	11.5	8.5	16.0	12.0	19.5	16.5	20.5	17.5	20.0	17.5
13	9.0	8.5	14.5	9.5	15.5	13.5	20.5	16.5	20.5	18.0	19.5	16.5
14	11.0	8.5	16.0	10.5	16.0	13.0	20.5	17.0	20.5	17.0	19.5	15.0
15	12.0	8.5	16.5	12.0	16.5	12.5	20.0	17.0	21.0	17.5	19.5	15.0
16	11.5	8.5	16.5	13.0	16.5	14.0	19.5	17.0	21.0	17.5	19.5	15.5
17	13.0	8.5	16.0	13.0	18.5	15.0	20.0	16.5	20.5	17.5	20.0	16.5
18	11.5	8.5	15.5	12.5	19.0	15.0	20.0	17.0	20.5	17.5	19.0	18.0
19	11.5	8.5	13.0	11.5	20.0	15.5	20.5	17.0	20.5	17.0	19.0	17.0
20	11.5	8.0	15.0	12.0	19.5	16.5	20.0	17.0	20.0	17.0	19.5	17.0
21	12.0	9.0	15.5	11.5	20.0	16.5	19.5	17.0	21.0	17.5	20.0	16.0
22	12.5	8.5	15.5	12.5	20.0	17.0	20.0	16.5	20.5	17.5	20.0	16.5
23	11.5	8.5	16.5	12.0	20.0	17.0	20.0	17.0	20.5	17.5	20.0	17.5
24	11.5	9.0	17.0	13.0	20.0	17.0	20.0	17.5	20.0	17.0	19.5	16.5
25	11.0	9.0	16.5	13.5	19.5	17.0	20.0	17.0	20.5	17.0	19.5	15.5
26	10.0	8.5	16.0	14.0	19.0	17.0	20.0	17.0	20.5	17.0	19.5	15.5
27	10.5	8.0	15.5	13.0	19.0	17.0	20.0	17.0	20.5	17.0	19.5	15.5
28	11.5	8.0	15.5	12.0	19.0	16.0	17.5	16.5	20.5	17.0	19.0	16.0
29	13.5	8.0	15.5	12.0	19.0	16.0	16.5	15.5	20.0	17.0	19.0	16.0
30	14.5	10.0	16.5	12.5	19.5	16.5	17.5	14.5	20.0	17.5	19.0	15.5
31	--	--	17.5	13.5	--	--	18.0	14.5	20.5	17.5	--	--
AVE	12.1	8.5	14.9	11.7	17.7	14.8	19.6	16.7	20.2	17.0	19.8	16.6

11528500 HAYFORK CREEK NEAR HYAMPOM, CALIF.

LOCATION.--Lat 40°37'34", long 123°26'01", in SE¼NW¼ 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 1970.
EXTREMES, 1960-68.--Water temperatures: 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 Dec. 16, Jan. 14-31, Feb. 8 to Sept. 30. Temperature table omitted for period Apr. 1 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	--	--	--	--	2.0	1.5	5.5	5.0	--	--
2	--	--	--	--	--	--	1.5	0.5	6.0	5.5	--	--
3	--	--	--	--	--	--	1.5	0.5	6.5	6.0	--	--
4	--	--	--	--	--	--	2.5	1.5	6.5	6.0	--	--
5	--	--	--	--	--	--	3.0	2.5	7.0	6.0	--	--
6	--	--	--	--	--	--	3.0	3.0	7.0	6.0	--	--
7	--	--	--	--	--	--	5.0	3.0	7.0	5.5	--	--
8	--	--	--	--	--	--	5.0	4.5	--	--	--	--
9	--	--	--	--	--	--	5.0	5.0	--	--	--	--
10	--	--	--	--	--	--	5.5	5.0	--	--	--	--
11	--	--	--	--	--	--	5.5	5.5	--	--	--	--
12	--	--	--	--	--	--	5.5	5.5	--	--	--	--
13	--	--	--	--	--	--	6.0	5.5	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	8.0	8.0	--	--	--	--	--	--
18	--	--	--	--	8.0	8.0	--	--	--	--	--	--
19	--	--	--	--	9.0	8.0	--	--	--	--	--	--
20	--	--	--	--	9.0	8.0	--	--	--	--	--	--
21	--	--	--	--	8.0	8.0	--	--	--	--	--	--
22	--	--	--	--	8.0	8.0	--	--	--	--	--	--
23	--	--	--	--	8.5	7.5	--	--	--	--	--	--
24	--	--	--	--	7.5	6.5	--	--	--	--	--	--
25	--	--	--	--	7.0	5.5	--	--	--	--	--	--
26	--	--	--	--	6.0	5.0	--	--	--	--	--	--
27	--	--	--	--	5.5	5.0	--	--	--	--	--	--
28	--	--	--	--	5.0	4.0	--	--	--	--	--	--
29	--	--	--	--	4.0	3.0	--	--	--	--	--	--
30	--	--	--	--	3.5	2.0	--	--	--	--	--	--
31	--	--	--	--	2.0	1.5	--	--	--	--	--	--
AVE	--	--	--	--	--	--	--	--	--	--	--	--

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, at gaging station 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 1970.
Sediment records: October 1966 to September 1970 (discontinued).
EXTREMES, 1969-70.--Water temperatures: Maximum, 28.0°C July 27; minimum, 1.0°C Dec. 2, Jan. 5, 6.
Sediment concentrations: Maximum daily, 5,080 mg/l Jan. 24; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 623,000 tons Jan. 24; minimum daily, 0.22 ton July 31,
EXTREMES, 1965-70.--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.
Sediment concentrations (1966-70): Maximum daily, 5,080 mg/l Jan. 24, 1970; minimum daily, 1 mg/l on many days in 1967-70.
Sediment loads (1966-70): Maximum daily, 623,000 tons Jan. 24, 1970; minimum daily, 0.22 ton July 31, 1970.
REMARKS.--Temperature recorder stopped Mar. 28; recorder malfunction June 8-15, Sept. 10-30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	13.5	13.5	8.5	5.5	1.5	4.5	2.5	7.5	5.5	6.5	4.5
2	18.0	12.5	13.0	8.5	5.5	1.0	4.0	2.0	6.5	5.5	5.5	4.0
3	18.5	11.5	13.5	9.0	5.5	2.0	3.5	1.5	7.5	6.0	8.0	5.0
4	18.0	10.0	12.5	9.5	7.0	3.5	3.5	1.5	8.0	6.5	6.0	4.5
5	18.0	9.5	11.5	9.0	6.0	2.0	3.0	1.0	8.5	7.0	7.5	4.5
6	18.0	9.5	10.5	8.5	7.5	3.5	2.5	1.0	8.5	7.0	8.0	6.0
7	17.0	11.0	10.0	8.5	7.5	5.0	4.0	2.5	8.5	6.5	8.5	7.0
8	16.0	13.0	10.5	8.0	7.5	5.5	4.5	4.0	8.5	6.5	8.5	6.5
9	16.5	12.5	10.0	7.5	6.5	5.5	5.0	4.5	8.5	7.0	7.0	5.5
10	17.5	11.0	10.0	7.0	6.5	5.5	6.0	5.0	9.0	7.0	7.5	5.5
11	16.5	9.5	10.5	7.0	7.0	6.0	6.5	6.0	9.0	8.0	8.0	6.5
12	16.0	9.0	10.5	7.0	7.0	7.0	6.5	6.0	8.0	6.5	8.5	7.0
13	14.0	8.5	10.5	7.0	8.5	7.0	7.5	6.5	6.5	6.0	9.5	7.5
14	14.0	9.0	10.0	6.5	8.5	7.5	7.5	7.0	7.0	5.5	9.5	7.5
15	11.5	11.0	9.5	7.0	7.5	7.0	7.0	7.0	7.0	5.5	10.0	7.5
16	11.0	9.0	9.0	5.5	8.0	7.0	8.0	7.0	6.5	5.0	11.0	6.5
17	11.0	9.0	9.0	4.5	8.0	7.5	8.5	7.5	6.0	5.0	9.0	5.5
18	12.5	9.0	8.5	4.5	9.0	8.0	9.0	8.0	7.0	5.0	9.0	4.5
19	13.0	8.5	8.0	4.5	9.0	8.0	9.0	8.5	7.0	4.5	9.0	4.5
20	14.0	8.5	8.5	4.0	10.5	9.0	9.0	8.0	6.5	3.5	9.5	4.5
21	15.5	9.5	9.0	4.5	10.5	8.0	10.0	9.0	8.0	5.0	10.0	5.5
22	15.0	9.5	9.5	6.0	8.0	7.5	10.0	10.0	7.0	4.0	11.0	6.0
23	14.0	10.5	9.0	5.0	8.0	8.0	10.0	8.5	6.5	3.5	11.5	7.0
24	14.0	10.0	8.5	4.5	8.0	8.0	8.5	7.5	8.5	5.0	12.5	7.5
25	14.5	9.5	8.0	4.5	8.0	6.5	8.0	7.5	8.5	5.0	12.5	7.5
26	12.0	9.0	8.0	4.0	6.5	5.5	8.5	8.0	9.0	5.5	12.5	6.5
27	13.0	10.0	7.5	3.5	6.0	5.0	8.0	6.0	9.0	5.5	12.0	5.5
28	13.5	9.0	7.0	2.5	5.0	4.5	6.5	4.5	7.5	5.5	--	--
29	13.0	8.0	6.0	2.0	5.0	4.0	5.5	4.5	--	--	11.5	6.5
30	13.5	9.0	6.0	1.5	5.0	4.0	6.5	5.5	--	--	11.0	5.5
31	14.0	9.0	--	--	4.5	3.5	6.0	5.5	--	--	11.0	5.0
AVE	14.9	9.9	9.6	6.0	7.2	5.6	6.7	5.6	7.7	5.6	9.4	5.9

11528700 SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	5.5	17.0	9.0	23.0	14.5	22.0	15.0	25.0	16.5	23.5	16.5
2	12.0	6.5	18.5	10.5	23.5	15.5	25.0	16.0	25.0	16.0	23.5	16.5
3	12.0	5.5	19.0	11.0	23.0	16.0	26.0	17.0	25.5	17.0	24.0	16.0
4	12.5	6.0	19.0	11.5	23.5	15.0	27.0	18.0	25.0	17.0	20.5	16.0
5	12.5	6.5	16.0	12.0	24.5	16.5	27.0	19.0	25.5	16.5	22.0	15.5
6	10.5	6.5	16.0	10.5	24.0	16.5	26.0	19.0	26.0	17.0	24.0	16.0
7	11.5	5.5	15.0	9.0	22.0	16.0	27.0	19.0	25.0	17.0	24.5	17.0
8	12.0	6.5	14.0	11.5	--	--	27.0	19.0	25.0	18.5	24.5	16.0
9	13.0	7.0	14.5	11.5	--	--	27.0	18.0	27.0	17.0	25.0	16.0
10	13.5	8.0	13.5	9.5	--	--	27.0	18.0	27.0	18.0	--	--
11	13.0	6.5	11.5	8.5	--	--	26.0	19.0	27.0	18.0	--	--
12	13.0	6.0	12.5	7.5	--	--	26.0	18.0	26.0	18.0	--	--
13	8.5	6.5	16.0	9.0	--	--	26.5	18.0	25.5	17.0	--	--
14	11.5	6.0	18.0	9.5	--	--	27.0	18.5	26.0	17.0	--	--
15	11.0	6.5	19.5	11.5	--	--	26.5	19.0	27.0	18.0	--	--
16	12.0	6.0	21.0	13.0	21.0	14.0	25.5	18.5	26.5	18.0	--	--
17	13.0	6.0	20.5	13.0	23.0	16.0	25.5	18.0	26.5	18.0	--	--
18	11.0	6.5	19.5	13.0	23.0	15.0	26.5	18.5	26.5	18.0	--	--
19	11.5	5.5	17.5	12.5	23.0	15.0	27.0	18.5	26.0	17.0	--	--
20	10.0	5.5	19.0	12.0	26.0	16.0	26.0	18.5	26.0	17.0	--	--
21	12.5	6.5	19.5	11.5	26.0	18.0	25.0	18.5	26.0	17.0	--	--
22	12.5	6.0	20.0	12.5	27.0	19.0	25.5	17.0	26.0	17.5	--	--
23	11.0	6.5	20.5	12.5	26.0	20.0	27.0	18.0	25.5	17.0	--	--
24	11.0	6.5	21.5	13.5	26.0	20.0	27.0	18.5	25.0	17.0	--	--
25	10.5	7.0	22.5	14.5	26.0	20.0	26.0	18.5	25.5	16.5	--	--
26	9.5	6.0	21.5	14.5	27.0	19.0	27.0	19.0	25.5	16.5	--	--
27	10.5	5.5	20.0	14.0	26.0	20.0	28.0	19.0	25.5	16.5	--	--
28	12.0	5.5	20.0	12.5	24.0	18.0	25.5	18.5	25.5	16.5	--	--
29	13.0	6.5	20.0	12.5	21.0	16.0	25.0	17.0	26.0	17.0	--	--
30	15.0	8.5	21.0	13.0	22.0	15.0	26.0	17.0	25.5	17.5	--	--
31	--	--	22.5	13.5	--	--	26.5	17.0	25.0	16.5	--	--
AVE	11.8	6.3	18.3	11.6	--	--	26.2	18.1	25.8	17.2	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	147	2	.79	140	1	.38	140	3	1.1
2	142	2	.77	140	1	.38	138	1	.37
3	136	2	.73	138	1	.37	140	3	1.1
4	132	2	.71	154	11	4.6	140	9	3.4
5	130	1	.35	540	197	276	140	4	1.5
6	130	1	.35	515	20	28	138	2	.75
7	130	1	.35	351	7	6.6	138	1	.37
8	146	1	.39	321	7	6.1	188	19	9.9
9	154	1	.42	293	3	2.4	208	7	3.9
10	154	2	.83	259	3	2.1	241	14	9.1
11	148	2	.80	238	2	1.3	469	171	303
12	138	3	1.1	214	1	.58	5850	1110	20000
13	132	2	.71	203	4	2.2	5220	578	8710
14	130	2	.70	190	3	1.5	4790	531	7120
15	183	85	42	180	1	.49	3140	320	2710
16	952	409	1050	178	3	1.4	1950	102	537
17	1040	90	253	178	3	1.4	1540	42	175
18	575	3	4.7	169	3	1.4	1540	35	146
19	383	1	1.0	165	3	1.3	6340	1050	23800
20	265	1	.72	165	4	1.8	8300	884	21300
21	205	1	.55	165	3	1.3	23400	2860	194000
22	190	1	.51	156	2	.84	8460	1200	27400
23	173	1	.47	156	2	.84	9460	1130	28900
24	165	2	.89	156	3	1.3	7890	600	12800
25	156	1	.42	152	2	.82	5920	475	7590
26	152	2	.82	152	1	.41	4990	425	5730
27	152	1	.41	150	1	.41	3860	275	2870
28	152	1	.41	148	1	.40	3020	150	1220
29	150	1	.41	148	1	.40	2500	115	776
30	144	1	.39	144	4	1.6	2120	96	550
31	140	1	.38	--	--	--	1910	77	397
TOTAL	7126	--	1366.08	6258	--	348.62	114280	--	367065.49

11528700 SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1780	56	269	4740	320	4100	2640	134	955
2	1650	38	169	4170	275	3100	2350	92	584
3	1550	30	126	3780	275	2810	2160	49	286
4	1460	21	83	3470	320	3000	2170	53	311
5	1380	21	78	3200	180	1560	2060	31	172
6	1300	18	63	2900	300	2350	1980	23	123
7	1250	18	61	2630	245	1740	2600	140	983
8	1290	30	104	2440	135	889	4350	421	5010
9	2930	511	5270	2240	161	974	3450	139	1290
10	6630	518	9400	1990	178	956	3140	138	1170
11	4730	162	2070	1830	152	751	2790	128	964
12	4340	217	2640	1860	148	743	2540	108	741
13	6630	760	14800	2140	235	1360	2390	87	561
14	13300	1340	47500	2040	130	716	2450	82	542
15	10100	975	27000	1860	109	547	2330	72	453
16	22800	2090	133000	3650	454	6230	2210	37	221
17	25700	2270	162000	6140	535	9760	2090	50	282
18	14000	1660	62700	4070	320	3520	1980	59	315
19	10800	1810	53900	3710	215	2150	1880	34	173
20	9950	960	25800	3270	248	2190	1800	29	141
21	18500	2040	103000	2960	239	1910	1700	23	106
22	22200	1940	119000	2720	151	1110	1610	26	113
23	30400	3580	359000	2560	92	636	1540	17	71
24	42600	5080	623000	2460	90	598	1480	17	68
25	21200	850	48700	2350	94	596	1420	17	65
26	17600	1660	87000	2270	91	558	1350	14	51
27	27100	2920	222000	2210	100	597	1300	16	56
28	14900	1850	74400	2290	83	513	1250	13	44
29	11100	1350	40500	--	--	--	1220	18	59
30	8800	750	17800	--	--	--	1180	21	67
31	5840	370	5830	--	--	--	1140	23	71
TOTAL	363810	--	2247263	81950	--	55964	64550	--	16048

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1090	15	44	616	8	13	328	2	1.8
2	1060	14	40	590	5	8.0	311	3	2.5
3	1040	17	48	565	2	3.1	307	5	4.1
4	1010	11	30	545	2	2.9	300	4	3.2
5	980	8	21	492	2	2.7	292	3	2.4
6	952	7	18	510	4	5.5	284	3	2.3
7	938	9	23	501	5	6.8	276	2	1.5
8	889	11	26	469	5	6.3	268	3	2.2
9	868	10	23	540	5	7.3	320	4	3.5
10	868	11	26	535	4	5.8	400	5	5.4
11	840	7	16	530	4	5.7	370	5	5.0
12	810	4	8.7	600	3	4.9	330	4	3.6
13	810	5	11	575	3	4.7	295	2	1.6
14	816	5	11	560	2	3.0	285	1	.77
15	798	6	13	530	3	4.3	275	2	1.5
16	786	7	15	501	4	5.4	268	3	2.2
17	768	7	15	478	3	3.9	263	3	2.1
18	750	7	14	469	2	2.5	247	3	2.0
19	822	11	24	465	19	24	232	3	1.9
20	756	7	14	451	15	18	217	3	1.8
21	744	8	16	438	12	14	205	3	1.7
22	732	6	12	424	12	14	198	3	1.6
23	708	7	13	411	11	12	185	4	2.0
24	696	9	17	403	11	12	178	4	1.9
25	690	6	11	379	6	6.1	173	4	1.9
26	714	7	13	379	1	1.0	169	6	2.7
27	714	8	15	371	1	1.0	167	4	1.8
28	684	11	20	363	2	2.0	171	3	1.4
29	655	10	18	359	3	2.9	171	4	1.8
30	638	7	12	351	3	2.8	176	5	2.4
31	--	--	--	339	2	1.8	--	--	--
TOTAL	24626	--	587.7	14739	--	207.4	7661	--	70.57

11528700 SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	173	6	2.8	80	2	.43	56	7	1.1
2	162	7	3.1	81	3	.66	57	4	.62
3	154	6	2.5	81	3	.66	57	3	.46
4	150	5	2.0	80	3	.65	58	3	.47
5	144	4	1.6	78	3	.63	59	3	.48
6	140	5	1.9	77	2	.42	60	4	.65
7	136	5	1.8	76	2	.41	58	5	.78
8	130	6	2.1	76	2	.41	58	8	1.3
9	124	5	1.7	73	2	.39	57	6	.92
10	116	5	1.6	72	3	.58	56	3	.45
11	113	5	1.5	70	3	.57	57	4	.62
12	118	5	1.6	70	3	.57	56	5	.76
13	113	6	1.8	68	3	.55	58	6	.94
14	107	6	1.7	66	3	.53	56	6	.91
15	107	6	1.7	65	3	.53	57	6	.92
16	105	5	1.4	64	3	.52	58	5	.78
17	102	4	1.1	62	3	.50	59	4	.64
18	100	3	.81	60	3	.49	60	3	.49
19	100	4	1.1	59	3	.48	68	3	.55
20	97	5	1.3	58	3	.47	64	2	.35
21	94	3	.76	55	3	.45	56	2	.30
22	94	2	.51	56	3	.45	55	3	.45
23	94	2	.51	55	3	.45	54	3	.44
24	92	2	.50	56	3	.45	56	4	.60
25	87	2	.47	57	3	.46	51	5	.69
26	84	2	.45	56	3	.45	49	3	.40
27	84	3	.68	56	3	.45	48	2	.26
28	84	3	.68	56	4	.60	47	2	.25
29	84	2	.45	56	3	.45	47	2	.25
30	83	3	.67	53	3	.43	47	2	.25
31	80	1	.22	54	3	.44	--	--	--
TOTAL	3451	--	41.01	2026	--	15.53	1679	--	18.08

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 692156
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 2688995.48

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
NOV 5, 1969	0615	9.0	438	442	523	37	56	75	91	97	99	100	--	--	--	--	SBWC
DEC 12.....	1345	7.0	8860	1410	33700	15	24	36	51	65	78	92	98	99	100	--	VBWC
DEC 13.....	1415	8.0	4710	615	7820	--	--	--	--	--	62	75	93	100	--	--	V
DEC 14.....	1500	8.0	6760	641	11700	16	22	31	41	49	57	72	92	100	--	--	VBWC
DEC 18.....	1525	8.0	1530	32	132	--	--	--	--	--	64	72	80	92	100	--	S
DEC 21.....	0805	10.0	29700	3820	306000	17	21	33	46	60	75	92	99	100	--	--	VPWC
DEC 21.....	1630	10.0	26700	2650	191000	16	19	30	40	50	62	80	96	99	100	--	VPWC
JAN 9, 1970	1240	5.0	2510	323	2190	--	--	--	--	--	62	75	89	93	100	--	V
JAN 16.....	0955	7.0	24900	2500	168000	14	16	26	34	42	54	71	92	100	--	--	VPWC
JAN 21.....	0805	9.0	19500	2430	128000	11	13	21	29	37	50	66	86	96	100	--	VPWC
JAN 23.....	1505	10.0	31400	3120	265000	14	19	30	42	55	70	89	99	100	--	--	VPWC
JAN 24.....	1130	8.0	43400	4890	573000	12	15	23	31	40	52	76	98	100	--	--	VPWC
JAN 26.....	1645	8.0	16000	1970	85100	14	19	29	38	49	59	73	89	99	100	--	VPWC
FEB 21.....	1400	8.0	2900	240	1880	8	14	21	27	32	35	41	52	83	100	--	VBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
OCT 2, 1969	1200		8	142	1	2	5	6	10	23	39	56	74	89	98	S
DEC 18.....	1630	8.0	6	1570	--	--	2	3	12	33	55	71	90	100	--	S
FEB 21, 1970	1715	7.5	5	2940	--	--	1	7	21	35	49	66	87	97	100	S
APR 23.....	1200	11.0	9	714	--	1	1	4	9	18	29	44	65	91	100	S

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, Hoopa Valley Indian Reservation, at gaging station at Hoopa, 0.4 mile upstream from Supply Creek.
DRAINAGE AREA.--2,865 sq mi.
PERIOD OF RECORD.--Chemical analyses: Water years 1951-53 (partial-record station), October 1953 to September 1970. Prior to October 1964 published as "near Hoopa".
Water temperatures: November 1956 to September 1970.
Sediment records: Water years 1955-56 (partial-record station), October 1956 to September 1970.
EXTREMES, 1969-70.--Water temperatures: Minimum, 3.5°C Jan. 5.
Sediment concentrations: Maximum daily, 4,110 mg/l Jan. 24; minimum daily, 1 mg/l on several days.
Sediment loads: Maximum daily, 1,120,000 tons Jan. 24; minimum daily, 0.83 ton Oct. 5-7.
EXTREMES, 1956-70.--Water temperatures (1963-70): Maximum (1963-66, 1968-69), 27.0°C July 16, 1965; minimum (1964-70), 2.0°C Dec. 17, 1967, Dec. 22-24, 1968.
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 loads: 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 and reviewed by Geological Survey. No temperature record Oct. 24 to Nov. 4, May 5 to Sept. 24, 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.--Revised figures for mean discharge, and suspended-sediment load for water year 1969 superseding those previously published are given herewith:

DATE	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	DATE	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
Aug. 26, 1969..	348	2	1.9	Sept. 13, 1969..	312	2	1.7
Aug. 27.....	348	3	2.8	Sept. 14.....	306	3	2.5
Aug. 28.....	348	3	2.8	Sept. 15.....	306	3	2.5
Aug. 29.....	342	3	2.8	Sept. 16.....	312	3	2.5
Aug. 30.....	342	3	2.8	Sept. 17.....	306	4	3.3
Aug. 31.....	336	3	2.7	Sept. 18.....	348	3	2.8
Sept. 1.....	330	3	2.7	Sept. 19.....	384	2	2.1
Sept. 2.....	306	2	1.7	Sept. 20.....	396	2	2.1
Sept. 3.....	330	2	1.8	Sept. 21.....	402	3	3.3
Sept. 4.....	342	2	1.8	Sept. 22.....	390	3	3.2
Sept. 5.....	342	2	1.8	Sept. 23.....	378	3	3.1
Sept. 6.....	336	2	1.8	Sept. 24.....	366	2	2.0
Sept. 7.....	330	1	.89	Sept. 25.....	354	1	.96
Sept. 8.....	330	1	.89	Sept. 26.....	342	1	.92
Sept. 9.....	324	1	.87	Sept. 27.....	330	1	.89
Sept. 10.....	324	2	1.7	Sept. 28.....	312	1	.84
Sept. 11.....	324	2	1.7	Sept. 29.....	306	1	.83
Sept. 12.....	318	2	1.7	Sept. 30.....	300	1	.81

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
06...	1050	418	16.1	15.0	--	--	3.4	--	119	0	--	3.9
NOV.												
03...	1230	761	13.3	11.9	--	--	4.3	--	110	0	--	5.8
DEC.												
01...	1130	690	7.2	12.3	--	--	4.0	--	111	0	--	6.0
JAN.												
05...	1215	4500	4.4	13.1	--	--	3.2	--	95	0	--	2.5
FEB.												
02...	1120	17900	7.8	13.0	--	--	2.6	--	83	0	--	1.8
MAR.												
09...	1240	10600	8.3	12.2	--	--	2.6	--	82	0	--	1.7
APR.												
06...	1145	3680	11.0	11.7	--	--	3.1	--	95	0	--	2.1
MAY												
11...	1130	2960	9.5	12.2	15	8.4	2.2	.9	82	0	7.1	3.1
JUNE												
08...	0925	1710	17.2	9.5	--	--	3.0	--	86	0	--	1.8
JULY												
06...	--	932	21.7	9.4	--	--	3.8	--	101	0	--	2.2
AUG.												
10...	--	484	20.0	9.0	--	--	3.7	--	127	0	--	4.1
SEPT.												
14...	--	434	18.0	9.8	27	7.7	4.5	1.4	108	0	--	5.0

11530000 TRINITY RIVER AT HOOPA, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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 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 (MG/L)
OCT.												
06...	1.1	100	--	--	106	8	98	7	.1	219	8.3	1
NOV.												
03...	.6	0	--	--	101	11	90	8	.2	212	8.1	2
DEC.												
01...	.4	150	--	--	100	9	91	8	.2	215	8.1	2
JAN.												
05...	.9	60	--	--	86	8	78	7	.2	178	7.3	47
FEB.												
02...	.5	80	--	--	72	4	68	7	.1	146	7.4	180
MAR.												
09...	.4	0	--	--	70	3	67	45	.4	144	7.8	140
APR.												
06...	.1	0	--	--	91	13	78	7	.1	177	8.0	20
MAY												
11...	.2	110	73	583	72	5	67	6	.1	148	8.1	6
JUNE												
08...	.1	0	--	--	77	6	71	8	.1	154	8.2	10
JULY												
06...	.3	0	--	--	90	7	83	8	.2	190	8.1	7
AUG.												
10...	.2	80	--	--	104	0	104	7	.2	216	7.9	2
SEP.												
14...	.1	0	112	131	99	10	89	9	.2	211	8.0	2

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT MAX	OCT DAILY	OCT MIN	NOV MAX	NOV DAILY	NOV MIN	DEC MAX	DEC DAILY	DEC MIN	JAN MAX	JAN DAILY	JAN MIN	FEB MAX	FEB DAILY	FEB MIN	MAR MAX	MAR DAILY	MAR MIN
1	18.0	--	16.0	--	--	--	7.0	--	4.5	5.5	--	5.0	7.5	--	6.5	6.5	--	6.0
2	17.5	--	16.0	--	--	--	5.5	--	4.5	5.0	--	4.5	8.0	--	6.5	6.5	--	6.0
3	17.0	--	14.5	--	--	--	5.0	--	4.0	4.5	--	4.5	7.0	--	6.5	7.0	--	6.0
4	16.0	--	13.5	--	--	--	6.0	--	5.0	4.5	--	4.0	7.5	--	7.0	7.0	--	6.5
5	15.0	--	13.0	10.5	--	9.5	5.5	--	4.5	4.5	--	3.5	8.0	--	7.0	7.5	--	6.0
6	16.0	--	13.0	10.5	--	9.0	6.0	--	5.0	5.0	--	4.0	8.0	--	7.0	7.0	--	6.5
7	15.0	--	13.0	9.5	--	8.5	6.0	--	5.5	5.0	--	4.0	8.0	--	7.0	8.0	--	7.0
8	15.5	--	15.0	10.0	--	9.0	6.5	--	6.0	5.5	--	5.0	8.0	--	7.0	8.0	--	7.0
9	15.0	--	14.0	9.5	--	8.5	6.5	--	6.0	6.0	--	5.5	8.0	--	7.0	8.5	--	6.5
10	16.0	--	14.5	9.0	--	8.0	6.5	--	6.0	6.0	--	5.5	8.0	--	7.0	7.0	--	6.0
11	15.0	--	13.0	9.0	--	8.0	7.0	--	6.0	6.5	--	6.0	9.0	--	7.5	7.5	--	6.5
12	15.0	--	13.0	9.5	--	8.0	7.5	--	7.0	6.5	--	6.0	8.0	--	8.0	7.5	--	6.5
13	14.0	--	12.5	9.0	--	8.5	8.0	--	7.5	7.0	--	6.5	8.0	--	7.0	8.0	--	7.0
14	14.0	--	12.0	9.5	--	8.5	8.0	--	7.0	7.0	--	7.0	7.0	--	6.5	8.5	--	7.5
15	15.0	--	14.0	9.5	--	8.5	7.5	--	7.0	7.0	--	7.0	7.0	--	7.0	8.5	--	7.5
16	14.0	--	13.5	9.0	--	8.0	7.5	--	7.0	7.5	--	7.0	7.0	--	6.5	9.0	--	7.5
17	13.5	--	13.0	9.0	--	7.5	8.0	--	7.5	8.0	--	7.0	6.5	--	6.0	8.5	--	7.0
18	14.0	--	13.0	8.0	--	7.0	8.0	--	8.0	8.0	--	8.0	6.5	--	6.0	8.0	--	6.5
19	14.0	--	12.5	7.5	--	7.0	8.0	--	8.0	8.0	--	8.0	7.0	--	6.0	8.0	--	6.5
20	14.0	--	12.0	8.5	--	6.5	8.5	--	8.0	8.0	--	7.5	6.5	--	5.5	8.5	--	6.5
21	15.0	--	13.0	8.0	--	6.0	8.5	--	7.0	8.0	--	8.0	7.0	--	5.5	9.0	--	7.0
22	16.0	--	14.5	8.0	--	7.0	7.5	--	7.0	8.5	--	8.0	7.0	--	6.0	9.5	--	7.5
23	16.0	--	15.0	7.5	--	7.0	7.5	--	7.0	8.5	--	8.0	6.0	--	5.5	9.5	--	8.0
24	--	14.5	--	7.5	--	6.5	7.5	--	7.0	8.0	--	7.5	7.5	--	6.0	10.0	--	8.0
25	--	--	--	7.5	--	6.5	7.0	--	6.5	7.5	--	7.0	8.0	--	6.5	9.5	--	8.0
26	--	--	--	7.5	--	6.0	6.5	--	6.0	8.0	--	7.5	8.0	--	6.5	9.5	--	8.0
27	--	--	--	7.0	--	6.0	6.0	--	5.5	8.0	--	7.0	8.0	--	6.5	9.5	--	8.0
28	--	--	--	7.0	--	5.5	6.0	--	5.5	7.0	--	6.0	7.5	--	6.5	9.5	--	7.5
29	--	--	--	6.5	--	5.0	6.0	--	5.5	6.5	--	6.0	--	--	--	9.0	--	7.0
30	--	--	--	5.5	--	5.0	6.0	--	5.5	6.5	--	6.0	--	--	--	9.0	--	7.0
31	--	--	--	--	--	--	5.5	--	5.0	8.0	--	7.5	--	--	--	9.5	--	7.0
AVE	--	--	--	8.4	--	7.3	6.9	--	6.2	6.8	--	6.3	7.5	--	6.6	8.3	--	7.0

11530000 TRINITY RIVER AT HOOPA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970--Continued

DAY	APR MAX	APR DAILY	APR MIN	MAY MAX	MAY DAILY	MAY MIN	JUN MAX	JUN DAILY	JUN MIN	JUL MAX	JUL DAILY	JUL MIN	AUG MAX	AUG DAILY	AUG MIN	SEP MAX	SEP DAILY	SEP MIN
1	10.0	--	7.5	14.0	--	10.5	--	--	--	--	--	--	--	--	--	--	--	--
2	9.5	--	7.5	14.5	--	11.0	--	--	--	--	--	--	--	--	--	--	--	--
3	9.5	--	7.5	14.5	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--
4	10.0	--	8.0	13.0	--	11.5	--	--	--	--	--	--	--	--	--	--	--	--
5	9.0	--	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	9.5	--	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	9.5	--	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8	9.5	--	8.0	--	--	--	--	--	--	--	--	--	--	19.0	--	--	--	--
9	10.0	--	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	10.5	--	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	9.5	--	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12	8.5	--	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13	8.5	--	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
14	9.5	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	9.5	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	10.0	--	7.5	--	--	--	--	16.0	--	--	--	--	--	--	--	--	--	--
17	9.0	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	9.0	--	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	8.5	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	9.5	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	10.0	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	9.5	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	9.0	--	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	19.5	--
24	9.5	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	8.0	--	7.0	--	--	--	--	--	--	--	--	--	--	--	--	17.0	--	15.0
26	8.5	--	7.0	--	--	--	--	--	--	--	--	--	--	--	--	17.0	--	15.0
27	9.5	--	7.0	--	--	--	--	--	--	--	--	--	--	--	--	17.0	--	15.0
28	10.0	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	17.0	--	15.0
29	11.5	--	8.0	--	--	--	--	--	--	--	--	--	--	--	--	17.0	--	15.0
30	13.0	--	9.5	--	--	--	--	--	--	--	--	--	--	--	--	17.0	--	15.0
31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AVE	9.6	--	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCTOBER MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCEN-TRATION (MG/L)	OCTOBER SEDIMENT DISCHARGE (TONS/DAY)	NOVEMBER MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCEN-TRATION (MG/L)	NOVEMBER SEDIMENT DISCHARGE (TONS/DAY)	DECEMBER MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCEN-TRATION (MG/L)	DECEMBER SEDIMENT DISCHARGE (TONS/DAY)
1	306	2	1.7	793	15	32	687	8	15
2	318	2	1.7	777	15	31	679	7	13
3	306	3	2.5	761	15	31	628	6	10
4	312	2	1.7	813	17	37	602	4	6.5
5	306	1	.83	1630	113	623	593	5	8.0
6	306	1	.83	1880	173	878	586	5	7.9
7	306	1	.83	1310	126	446	582	5	7.9
8	450	2	2.4	1230	103	342	738	11	22
9	520	2	2.8	1220	76	250	946	27	69
10	500	3	4.1	1120	41	124	970	16	42
11	474	2	2.6	1040	16	45	1150	93	289
12	426	2	2.3	994	13	35	10900	1230	53100
13	396	2	2.1	1000	12	32	17700	1060	53700
14	390	3	3.2	1000	15	41	13000	704	27100
15	490	4	5.3	970	20	52	11700	425	13400
16	1170	60	247	946	22	56	6560	190	3370
17	2340	97	613	923	23	57	5320	142	2040
18	1600	37	160	879	20	47	4750	101	1300
19	1150	20	62	845	12	27	9260	540	21900
20	1020	10	28	825	7	16	20900	657	38500
21	986	4	11	813	5	11	49200	3030	440000
22	986	33	88	798	5	11	32700	1610	142000
23	938	126	319	788	5	11	28200	1240	94900
24	938	93	236	772	6	13	25100	975	66100
25	905	29	71	760	5	10	17800	890	42800
26	877	11	26	746	5	10	15900	830	35600
27	867	12	28	727	5	9.8	12500	670	22600
28	859	14	32	716	5	9.7	9970	520	14000
29	835	16	36	711	6	12	8350	505	11400
30	818	18	40	698	7	13	7300	520	10200
31	805	16	35	--	--	--	6520	500	8800
TOTAL	22900	--	2066.89	28485	--	3312.5	321791	--	1103300.3

11530000 TRINITY RIVER AT HOOPA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5960	410	6600	21700	1060	62100	6530	410	7230
2	5540	340	5090	17900	850	41100	5800	350	5480
3	5160	240	3340	15400	770	32000	5380	310	4500
4	4850	190	2490	13400	660	23900	5310	300	4300
5	4510	150	1830	12200	675	22200	5510	340	5060
6	4240	110	1260	11100	710	21300	5180	290	4060
7	4060	100	1100	9920	740	19800	6840	300	5540
8	4050	120	1310	8990	710	17200	12200	1040	35000
9	6090	460	7560	8100	670	14700	10700	620	17900
10	12700	1280	44100	7580	610	12500	9590	500	12900
11	11500	660	20500	7340	420	8320	8360	500	11300
12	10400	430	12100	7060	430	8200	7840	470	9950
13	14000	680	25700	7620	530	10900	7380	470	9370
14	27000	1620	120000	7240	350	6840	7840	480	10200
15	27900	1000	75300	6550	275	4860	7880	375	7980
16	37500	1610	178000	7820	635	15600	7220	310	6040
17	59300	2370	385000	16800	1460	65700	6710	360	6520
18	45600	1490	183000	12200	775	25500	6320	350	5970
19	34500	1130	105000	10900	700	20600	5900	260	4140
20	32400	1020	89200	9370	700	17700	5650	210	3200
21	46700	1660	218000	8500	695	16000	5380	240	3490
22	70700	2410	458000	7480	660	13300	5200	290	4070
23	75700	1830	386000	6840	490	9050	4990	310	4180
24	98800	4110	1120000	6430	400	6940	4840	175	2290
25	61100	2590	427000	5990	340	5500	4730	48	613
26	50400	2220	306000	5720	350	5410	4620	21	262
27	81700	3840	853000	5540	340	5090	4490	29	352
28	56000	2310	349000	5650	370	5640	4330	25	292
29	40400	1950	213000	--	--	--	4200	28	318
30	30800	1610	134000	--	--	--	4120	32	356
31	25300	1370	93600	--	--	--	4030	25	272
TOTAL	994860	--	5826080	271340	--	517950	195070	--	193135

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3910	18	190	3070	8	66	2000	7	38
2	3850	14	146	3060	9	74	2050	16	89
3	3810	15	154	3060	11	91	2130	32	184
4	3740	21	212	3070	12	99	2040	26	143
5	3710	19	190	3130	11	93	1940	12	63
6	3680	15	149	3040	10	82	1890	12	61
7	3660	10	99	2820	12	91	1850	11	55
8	3580	8	77	2840	11	84	1740	10	47
9	3520	6	57	3170	9	77	1790	9	43
10	3530	6	57	3180	7	60	1740	8	38
11	3580	7	68	2960	8	64	1580	7	30
12	3500	9	85	2930	6	47	1450	6	23
13	3440	12	111	2800	5	38	1350	5	18
14	3460	11	103	2780	6	45	1330	4	14
15	3370	10	91	2740	10	74	1350	3	11
16	3310	11	98	2860	11	85	1300	3	11
17	3310	15	134	3130	10	85	1290	3	10
18	3250	16	140	3110	8	67	1270	3	10
19	3430	26	241	2880	14	109	1270	4	14
20	3290	45	400	2680	23	166	1340	6	22
21	3170	83	710	2500	22	149	1390	6	23
22	3060	101	834	2440	18	119	1370	8	30
23	2960	79	631	2500	13	88	1350	36	131
24	2900	67	525	2440	9	59	1310	36	127
25	2870	59	457	2350	7	44	1260	36	122
26	3040	55	451	2450	6	40	1180	43	137
27	3080	51	424	2460	5	33	1160	40	125
28	3080	30	249	2270	7	43	1150	36	112
29	3070	12	99	2100	8	45	1120	36	109
30	3070	8	66	2050	7	39	1070	10	29
31	--	--	--	2000	7	38	--	--	--
TOTAL	101230	--	7248	84870	--	2294	45060	--	1869

11530000 TRINITY RIVER AT HOOPA, CALIF.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	994	3	8.1	533	3	4.3	416	5	5.6
2	957	3	7.8	518	3	4.2	416	5	5.6
3	934	3	7.6	513	3	4.2	436	4	4.7
4	937	3	7.6	521	2	2.8	466	4	5.0
5	939	3	7.6	504	2	2.7	474	4	5.1
6	932	3	7.5	498	1	1.3	482	3	3.9
7	917	3	7.4	498	1	1.3	466	3	3.8
8	866	2	4.7	498	1	1.3	466	3	3.8
9	826	2	4.5	490	4	5.3	474	8	10
10	786	2	4.2	484	5	6.5	466	7	8.8
11	754	2	4.1	490	3	4.0	458	6	7.4
12	746	2	4.0	490	3	4.0	450	5	6.1
13	730	5	9.9	474	3	3.8	442	4	4.8
14	722	3	5.8	458	3	3.7	440	1	1.2
15	706	3	5.7	458	3	3.7	442	2	2.4
16	674	3	5.5	450	4	4.9	450	3	3.6
17	674	5	9.1	440	6	7.1	450	2	2.4
18	674	2	3.6	436	8	9.4	458	1	1.2
19	658	2	3.6	436	8	9.4	458	2	2.5
20	642	2	3.5	432	3	3.5	461	3	3.7
21	626	2	3.4	432	4	4.7	466	8	10
22	618	2	3.3	432	3	3.5	461	7	8.7
23	618	3	5.0	424	6	6.9	450	6	7.3
24	586	3	4.7	424	9	10	450	3	3.6
25	586	3	4.7	420	7	7.9	442	3	3.6
26	586	4	6.3	420	14	16	432	3	3.5
27	618	5	8.3	420	12	14	428	9	10
28	594	6	9.6	424	10	11	428	9	10
29	562	7	11	420	8	9.1	426	9	10
30	546	7	10	420	5	5.7	426	4	4.6
31	546	6	8.8	412	5	5.6	--	--	--
TOTAL	22554	--	196.9	14269	--	181.8	13480	--	162.9

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 2115909
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 7657797.29

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEM-PERA-TURE (C)	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALY-SIS
OCT 16, 1969	1500	13.0	1860	123	618	--	--	--	--	--	92	98	100	--	--	--	S
DEC 15.....	1340	9.0	10500	323	9160	--	--	--	--	--	52	64	75	90	95	100	S
DEC 16.....	1525	9.0	6210	181	3030	--	--	--	--	--	45	52	67	89	97	100	S
DEC 19.....	1610	10.0	8800	585	13900	--	--	--	--	--	58	64	76	94	99	100	S
DEC 21.....	1555	10.0	67900	4090	750000	14	24	36	51	64	73	84	95	99	100	--	VPWC
DEC 23.....	1450	9.0	29700	1380	111000	12	21	30	41	51	61	72	90	99	100	--	VBWC
JAN 10, 1970	1545	7.0	14500	1390	54400	14	20	27	35	44	54	67	84	99	100	--	VBWC
JAN 14.....	1600	9.0	31200	1900	160000	14	21	29	39	48	61	75	93	100	--	--	VBWC
JAN 16.....	1620	7.0	43700	2350	277000	16	18	28	41	52	63	78	93	98	100	--	VPWC
JAN 17.....	1540	7.0	64300	2240	389000	18	20	30	44	54	66	80	94	99	100	--	VPWC
JAN 17.....	1630	7.0	64300	1940	337000	13	23	33	46	57	69	82	94	99	100	--	VPWC
JAN 19.....	1630	10.0	34100	1180	109000	16	24	32	41	50	59	74	91	99	100	--	VBWC
JAN 22.....	1555	7.0	75500	2290	467000	17	19	31	44	57	69	83	95	100	--	--	VPWC
JAN 22.....	1620	7.0	75500	2100	428000	18	19	33	47	59	71	85	95	100	--	--	VPWC
JAN 24.....	1110	9.0	109000	4320	1270000	18	23	36	49	61	72	85	96	100	--	--	VPWC
FEB 2.....	1600	9.0	17100	819	37800	16	23	28	33	39	46	53	69	78	85	100	VBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEM-PERA-TURE (C)	NUMBER OF SAM-PLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALY-SIS
DEC 15, 1969	1650	9.0	5	9250	--	--	4	14	34	48	55	67	94	100	--	S
DEC 16.....	1700	9.0	4	6100	--	--	2	4	25	52	66	77	100	--	--	S
JAN 17, 1970	1720	7.0	4	64700	--	--	1	7	25	41	52	63	86	100	--	S
JAN 20.....	1245	9.0	5	31800	--	1	7	27	45	65	76	85	94	100	--	S
APR 21.....	1230	12.0	3	3140	--	--	--	3	12	23	28	37	78	100	--	S

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 1970.
EXTREMES, 1969-70.--Water temperatures: Maximum, 27.0°C July 23; minimum, 6.0°C Jan. 5, 6.
EXTREMES, 1966-70.--Water temperatures: Maximum, 27.0°C July 23, 1970; minimum, 4.0°C Feb. 15, Mar. 3, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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	11.0	8.5	7.5	8.0	7.5	9.0	8.0	8.5	7.5
2	16.0	13.0	13.0	11.0	8.5	7.0	7.5	7.0	9.0	8.0	8.5	7.5
3	16.0	12.0	13.0	11.5	9.0	7.5	7.5	6.5	9.0	8.5	8.5	7.5
4	16.0	12.0	13.5	11.5	9.5	8.5	7.0	6.5	9.0	8.0	9.0	8.0
5	16.0	11.0	11.5	11.0	8.5	7.5	7.0	6.0	9.5	9.0	9.5	7.5
6	15.5	11.5	11.5	10.5	9.5	8.5	7.0	6.0	10.0	9.5	9.0	8.5
7	15.5	13.0	12.0	11.0	9.5	8.5	8.0	7.0	10.0	9.0	9.0	8.0
8	14.5	13.5	12.0	11.0	10.0	9.5	8.5	8.0	10.5	9.5	9.0	8.0
9	14.0	12.5	11.5	10.5	10.0	9.0	8.5	8.0	10.5	9.5	8.5	8.0
10	14.5	13.0	11.5	10.0	10.0	9.0	8.5	8.5	10.5	9.5	9.0	7.5
11	14.0	11.5	11.5	10.5	9.5	9.0	8.5	8.5	10.5	9.5	9.0	8.5
12	14.5	11.5	11.5	10.5	9.5	9.0	9.0	8.5	10.0	9.0	9.0	8.5
13	14.0	11.0	11.5	10.5	10.0	9.5	9.0	8.5	9.5	9.0	10.0	9.0
14	14.0	11.0	11.5	10.0	10.0	9.0	9.0	9.0	9.0	8.0	9.5	9.0
15	13.5	13.0	12.0	11.0	9.0	8.5	9.0	9.0	9.5	8.5	10.0	8.5
16	12.5	12.0	11.5	9.5	9.5	9.0	9.5	9.0	9.0	8.5	10.5	9.0
17	12.5	11.5	10.0	8.5	10.0	9.5	9.5	9.5	9.0	8.0	9.5	8.0
18	12.5	10.5	11.0	9.0	10.0	9.5	10.0	10.0	9.0	8.0	9.5	7.5
19	12.5	10.5	10.5	9.0	10.5	10.0	10.0	10.0	9.0	7.5	10.0	7.5
20	13.0	11.0	10.5	9.0	10.5	10.0	11.0	10.0	9.0	7.5	10.0	7.5
21	14.0	12.0	11.0	9.5	11.0	9.5	11.0	10.5	9.5	7.5	10.5	8.0
22	14.0	12.0	10.5	9.0	10.0	9.5	10.5	10.5	9.0	7.5	11.0	8.5
23	14.0	13.0	10.5	8.5	10.0	9.5	10.5	10.5	9.0	7.5	11.0	8.5
24	14.0	12.0	10.0	8.5	10.0	9.5	10.5	10.0	10.0	8.5	12.0	9.0
25	13.0	10.5	9.5	8.5	9.5	9.0	10.0	10.0	10.0	8.0	11.5	9.0
26	13.0	11.5	9.5	8.0	9.0	8.5	10.0	9.5	10.5	8.5	11.0	9.0
27	13.5	12.0	9.5	8.0	8.5	8.0	9.5	8.5	10.0	8.5	11.0	8.5
28	13.5	11.5	9.0	8.0	8.5	8.0	8.5	8.0	9.0	8.0	11.5	8.5
29	12.5	11.0	8.5	7.5	8.0	8.0	8.5	8.0	--	--	11.0	8.0
30	12.5	11.0	8.5	7.5	8.0	7.5	9.0	8.0	--	--	11.0	8.0
31	13.0	11.0	--	--	8.5	7.5	8.5	8.0	--	--	11.0	8.0
AVE	14.0	11.8	11.0	9.6	9.4	8.7	9.0	8.5	9.6	8.4	9.9	8.2

DAY	APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	8.0	13.0	9.0	17.0	12.5	20.5	15.5	19.0	13.5	17.0	15.5
2	11.5	8.5	14.0	9.5	17.5	12.5	20.0	15.0	21.0	14.0	20.5	14.5
3	11.0	7.5	14.0	10.0	16.5	13.0	20.5	15.0	20.5	15.5	18.5	14.5
4	11.5	8.0	13.5	10.5	18.0	13.0	20.0	15.0	19.0	15.5	16.5	15.0
5	12.0	8.5	11.5	10.0	18.5	13.0	19.5	15.0	20.5	15.0	19.5	13.5
6	9.5	8.0	11.0	9.5	15.0	13.0	19.5	14.5	20.5	15.0	20.5	15.0
7	10.5	7.0	12.5	8.5	17.5	12.5	20.5	15.0	20.5	15.0	21.0	15.0
8	11.0	8.0	11.0	10.0	13.5	12.5	20.0	15.0	20.5	15.0	20.5	15.0
9	10.0	8.5	10.5	9.5	13.5	12.5	20.0	15.0	21.0	15.0	21.5	14.5
10	11.0	8.5	10.5	9.0	15.0	12.0	20.0	15.0	21.0	16.0	21.0	15.0
11	11.5	7.5	9.0	8.0	17.0	12.0	20.0	15.0	21.0	15.5	21.0	14.5
12	11.0	7.5	10.0	8.0	16.0	11.0	20.0	15.0	21.0	16.0	19.0	14.0
13	10.0	8.0	12.5	8.5	16.5	12.0	20.0	15.0	21.0	15.5	19.5	13.0
14	10.0	8.0	13.0	9.0	15.5	12.5	21.0	15.0	21.0	15.5	19.5	12.5
15	11.5	7.0	13.5	9.5	18.0	12.0	20.5	15.5	21.0	16.0	19.0	12.5
16	10.5	7.5	15.0	10.5	16.5	13.0	20.5	15.5	21.0	16.0	19.5	13.5
17	12.0	7.5	14.5	10.5	20.0	13.0	21.0	15.0	21.5	16.0	20.5	13.5
18	10.5	9.0	13.0	11.0	21.0	11.5	20.5	15.5	21.5	15.5	18.0	15.0
19	11.0	8.5	11.5	10.5	21.0	13.0	21.0	15.5	21.0	15.0	18.0	14.5
20	11.0	7.5	14.5	10.5	20.5	13.0	24.0	15.5	21.0	15.5	18.5	14.5
21	11.5	7.5	14.5	10.0	21.0	14.0	25.0	15.5	21.0	15.5	19.5	13.5
22	11.5	7.5	15.0	11.0	21.0	15.0	24.0	15.0	20.5	15.5	20.0	13.5
23	10.5	8.0	15.5	10.5	21.0	15.5	27.0	14.5	20.0	15.5	20.0	14.0
24	10.0	9.0	16.0	11.0	21.0	15.5	22.5	14.0	20.5	15.5	20.0	12.5
25	9.5	8.0	16.5	12.0	21.5	16.0	22.5	13.5	20.5	14.5	20.5	13.0
26	9.0	7.5	16.0	12.5	18.0	16.5	21.5	12.5	20.0	15.0	20.0	12.5
27	10.5	7.0	14.5	12.0	21.0	16.0	19.5	15.0	18.5	15.5	19.5	12.5
28	11.0	7.0	15.5	10.5	20.5	15.0	15.5	14.5	20.5	15.5	18.0	12.5
29	11.0	7.5	16.0	10.5	20.5	15.0	17.0	14.0	21.0	15.5	19.0	12.5
30	13.0	9.0	16.0	11.0	20.5	15.5	18.5	13.0	20.0	15.5	19.0	13.0
31	--	--	16.5	11.5	--	--	18.0	13.5	20.5	15.5	--	--
AVE	10.8	7.9	13.5	10.1	18.3	13.4	20.6	14.8	20.6	15.3	19.5	13.8

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 on right bank, 2.8 miles upstream from Turwar Creek, and 3.3 miles east of Klamath.
DRAINAGE AREA.--12,100 sq mi, approximately, 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 1970.
Water temperatures: November 1965 to September 1970.
Sediment records: Water years 1955-56 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Minimum, 3.5°C Jan. 5.
EXTREMES, 1965-70.--Water temperatures: Maximum (1966-68), 25.5°C on several days in 1968; minimum, 3.5°C Jan. 5, 1970.
REMARKS.--Chemical-quality samples collected by California Department of Water Resources. No temperature record Oct. 1-20, probe inoperative; Mar. 17 to Sept. 30, recorder malfunction; temperature table omitted for period Apr. 1 to Sept. 30.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)
OCT.											
07...	0900	2900	13.9	10.5	19	30	19	9.5	150	12	1.8
NOV.											
04...	0910	4330	13.0	10.7	24	50	18	9.4	130	15	2.2
DEC.											
01...	1530	4850	7.2	13.4	26	10	18	9.5	120	12	1.9
JAN.											
05...	1700	13600	5.0	13.6	18	40	16	7.4	90	6.2	1.0
FEB.											
03...	1050	60600	7.2	13.3	16	20	14	6.4	90	5.1	1.1
MAR.											
10...	0950	34600	8.3	11.8	15	50	17	7.4	90	5.5	1.2
APR.											
07...	0935	A12000	10.5	12.3	14	80	17	7.2	80	5.6	1.0
MAY											
11...	1815	12800	11.0	11.8	12	20	14	6.6	60	5.0	.9
JUNE											
08...	1250	8650	19.0	9.8	15	10	17	7.5	90	7.2	1.3
JULY											
06...	1330	4000	24.0	8.3	16	0	21	8.8	60	8.0	1.7
AUG.											
01...	1245	2420	23.0	9.5	7.8	0	22	9.8	160	14	2.0
SEP.											
14...	1415	2740	17.0	10.3	14	0	21	9.4	140	14	2.2

DATE	DIS-SOLVED LITHIUM (LI) (UG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	NITRATE (NO3) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
07...	10	113	0	14	5.2	.1	.1	.49	0	137
NOV.										
04...	10	113	0	19	4.8	.2	1.9	.40	50	151
DEC.										
01...	20	106	0	14	3.6	.1	2.4	.24	50	140
JAN.										
05...	20	86	0	9.0	1.8	.1	1.4	.28	30	103
FEB.										
03...	10	74	0	7.0	1.6	.1	1.0	.04	20	88
MAR.										
10...	10	85	0	10	3.2	.0	.3	.62	10	102
APR.										
07...	10	85	0	8.0	2.8	.2	.0	.41	40	98
MAY										
11...	10	74	0	13	2.1	.1	.1	.04	40	90
JUNE										
08...	10	85	0	14	2.7	.1	.0	.14	40	107
JULY										
06...	10	108	0	14	2.4	.2	.1	.09	10	125
AUG.										
01...	10	119	0	21	5.2	.0	.0	.28	20	141
SEP.										
14...	10	114	0	19	4.3	.2	.1	.26	50	140

A Daily mean discharge.

11530500 KLAMATH RIVER NEAR KLAMATH, CALIF.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	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)	TUR-BID-ITY (JTU)
OCT. 07...	.19	86	0	93	23	.6	221	8.1	2	--
NOV. 04...	.21	84	0	93	27	.7	233	8.0	5	--
DEC. 01...	.19	84	0	87	23	.6	215	7.8	7	--
JAN. 05...	.14	70	0	71	16	.3	166	7.6	33	--
FEB. 03...	.12	62	1	61	15	.3	141	7.8	180	--
MAR. 10...	.14	73	3	70	14	.3	161	7.8	85	--
APR. 07...	.13	72	2	70	14	.3	160	7.9	10	--
MAY 11...	.12	62	1	61	15	.3	145	7.8	25	--
JUNE 08...	.15	74	4	70	17	.4	169	7.6	--	3
JULY 06...	.17	88	0	89	16	.4	206	7.8	22	--
AUG. 01...	.19	96	0	98	24	.6	245	7.9	--	1
SEP. 14...	.19	91	0	94	24	.6	247	8.1	--	9

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	--	--	11.5	11.0	7.0	6.5	6.0	5.0	8.0	7.0	7.0	6.5
2	--	--	12.5	11.0	7.5	6.5	6.0	4.0	8.0	6.0	7.0	6.5
3	--	--	12.0	11.5	7.5	6.5	6.0	5.0	7.0	7.0	8.0	6.5
4	--	--	12.0	11.0	8.0	7.5	5.0	4.0	7.5	7.0	8.0	7.5
5	--	--	12.0	11.5	7.5	7.0	5.0	3.5	8.0	7.0	8.0	7.0
6	--	--	12.0	11.0	8.0	7.0	4.5	4.0	8.0	8.0	8.0	7.0
7	--	--	12.0	11.0	8.5	7.0	5.0	4.0	8.0	7.0	8.0	8.0
8	--	--	12.0	10.5	8.5	8.0	5.0	5.0	8.0	7.0	9.0	7.5
9	--	--	12.0	10.5	8.0	8.0	6.0	5.0	8.0	7.0	8.0	7.5
10	--	--	12.0	11.0	8.5	8.0	6.0	6.0	8.0	7.0	8.0	7.0
11	--	--	12.0	11.0	9.0	8.5	7.0	6.0	9.0	7.5	8.0	7.5
12	--	--	11.5	11.0	9.0	9.0	7.0	6.5	9.0	8.0	8.0	8.0
13	--	--	11.5	10.5	9.5	9.0	7.0	6.5	8.0	7.5	9.0	8.0
14	--	--	11.5	10.5	10.0	9.5	7.0	7.0	8.0	7.5	10.5	8.5
15	--	--	11.0	10.5	10.0	9.0	7.0	7.0	8.0	7.5	9.0	8.5
16	--	--	10.5	9.5	9.0	9.0	7.5	7.0	8.0	7.5	9.0	8.5
17	--	--	10.0	9.0	9.0	8.5	7.5	7.5	8.0	7.0	--	--
18	--	--	10.0	9.0	9.0	8.5	9.0	7.5	8.0	6.0	--	--
19	--	--	9.5	9.0	9.0	8.5	9.0	9.0	7.5	6.0	--	--
20	--	--	10.0	9.0	9.5	9.0	9.0	8.5	7.0	6.0	--	--
21	14.0	13.0	10.0	9.0	10.0	9.5	9.0	8.5	7.0	6.0	--	--
22	14.0	12.5	10.5	9.5	9.5	8.5	9.0	9.0	7.5	6.5	--	--
23	14.0	13.0	10.5	9.5	8.5	8.5	9.0	9.0	7.0	6.5	--	--
24	14.0	13.0	9.5	8.5	9.5	7.5	9.0	8.0	7.0	6.0	--	--
25	14.0	12.5	9.0	7.5	9.5	8.5	8.0	8.0	8.0	7.0	--	--
26	14.0	13.0	7.5	7.0	8.5	7.5	8.5	8.0	8.0	7.0	--	--
27	13.5	13.0	8.0	7.0	8.5	7.0	8.5	7.5	9.0	8.0	--	--
28	13.0	12.5	7.5	6.5	8.5	7.0	7.5	7.0	8.0	7.0	--	--
29	13.0	12.0	7.5	7.0	8.0	7.0	7.0	7.0	--	--	--	--
30	12.0	11.5	7.0	6.5	7.0	5.5	7.0	6.0	--	--	--	--
31	11.5	11.5	--	--	7.0	6.0	7.5	7.0	--	--	--	--
AVE	--	--	10.5	9.6	8.6	7.8	7.1	6.5	7.9	6.9	--	--

11532500 SMITH RIVER NEAR CRESCENT CITY, CALIF.

LOCATION.--Lat 41°47'20", long 124°03'20", in SW¼ sec.10, T.16 N., R.1 E., Del Norte County, at gaging station on left bank, 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 1970.
Water temperatures: October 1965 to September 1970.
Sediment records: Water years 1955-56 (partial-record station).
EXTREMES, 1969-70.--Water temperatures: Minimum, 3.5°C Jan. 6.
EXTREMES, 1966-70.--Water temperatures: Maximum (1966-69), 23.0°C on several days in 1968 and 1969; minimum, 3.5°C Jan. 6, 1970.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Temperature recorder stopped Dec. 13-15; probe inoperative Aug. 4 to Sept. 11.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
07...	0710	250	12.2	10.9	--	--	2.5	--	89	0	--	3.7
NOV.												
04...	0720	473	11.7	11.5	--	--	2.0	--	79	0	--	3.3
DEC.												
02...	0815	445	4.4	13.3	--	--	1.7	--	74	0	--	3.6
JAN.												
06...	0815	1990	3.3	14.0	--	--	1.6	--	56	0	--	2.4
FEB.												
03...	0800	6020	8.3	13.7	--	--	1.5	--	49	0	--	1.9
MAR.												
10...	0805	A 7600	--	13.5	--	--	1.6	--	50	0	--	2.7
APR.												
07...	0800	A 1280	8.0	13.3	--	--	1.8	--	58	0	--	2.6
MAY												
12...	0645	4120	8.0	13.7	6.6	7.7	1.7	.6	56	0	1.6	3.5
JUNE												
08...	1415	820	16.1	10.9	--	--	2.2	--	71	0	--	2.8
JULY												
06...	1445	499	--	10.6	--	--	2.6	--	81	0	--	1.8
AUG.												
10...	1415	284	22.2	10.5	--	--	2.6	--	95	0	--	3.3
SEPT.												
15...	0650	212	14.0	10.1	10	14	2.5	.9	93	0	4.4	3.2

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 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 (MG/L)
OCT.												
07...	--	40	--	--	80	7	73	6	.1	156	8.1	1
NOV.												
04...	--	40	--	--	67	2	65	6	.1	138	8.1	2
DEC.												
02...	--	90	--	--	64	3	61	5	.1	131	7.8	1
JAN.												
06...	--	0	--	--	48	2	46	7	.1	101	7.1	2
FEB.												
03...	--	140	--	--	42	2	40	7	.1	86	7.8	65
MAR.												
10...	--	40	--	--	42	1	41	8	.1	88	7.7	25
APR.												
07...	--	30	--	--	50	2	48	7	.1	107	8.0	1
MAY												
12...	.1	40	46	512	48	2	46	7	.1	101	7.8	4
JUNE												
08...	--	0	--	--	63	5	58	7	.1	122	8.2	2
JULY												
06...	--	0	--	--	69	3	66	8	.1	145	8.0	1
AUG.												
10...	--	0	--	--	77	0	78	7	.1	155	7.8	1
SEP.												
15...	.0	0	86	49.2	82	6	76	6	.1	165	7.6	4

A Daily mean discharge.

11532500 SMITH RIVER NEAR CRESCENT CITY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT		NOV		DEC		JAN		FEB		MAR	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	15.0	12.5	11.5	6.0	5.5	7.0	6.5	8.5	8.0	8.5	7.5
2	15.5	14.5	12.5	11.5	5.5	4.5	6.5	6.0	8.5	7.5	9.0	8.0
3	15.0	13.5	12.5	11.0	6.0	5.5	6.0	5.5	9.5	8.5	9.0	8.5
4	15.0	12.5	13.5	12.0	6.5	6.0	6.5	5.5	9.5	8.5	8.5	8.0
5	15.0	12.0	12.0	11.0	6.0	5.5	5.5	5.0	9.0	8.0	9.0	7.5
6	15.0	12.0	11.5	10.5	7.0	6.0	6.0	3.5	8.5	8.0	9.0	8.5
7	14.5	12.0	11.5	11.0	7.5	7.0	7.5	6.0	9.0	7.5	8.5	8.0
8	13.5	13.0	11.5	11.0	8.0	7.5	8.5	7.5	9.0	8.5	9.5	8.5
9	13.0	12.5	11.5	10.5	8.0	8.0	9.0	8.5	9.5	8.5	10.0	9.5
10	12.5	12.0	11.0	10.5	8.0	7.5	9.0	8.5	10.0	9.0	10.0	9.5
11	12.0	11.0	11.5	10.5	9.5	8.0	8.5	8.5	10.0	9.0	10.0	9.0
12	12.0	11.0	11.5	10.5	9.5	9.0	9.0	8.5	10.0	9.0	10.0	9.5
13	11.5	10.5	11.0	10.5	--	--	9.5	9.0	9.0	9.0	10.0	9.0
14	12.0	11.0	11.0	10.0	--	--	9.5	9.5	9.0	8.5	10.0	9.5
15	12.0	11.5	10.5	10.0	--	--	9.5	9.5	9.0	8.5	10.0	9.0
16	12.5	11.5	10.5	9.5	9.5	8.5	10.0	9.5	9.0	8.0	10.5	9.0
17	12.0	11.5	9.5	9.0	10.0	9.5	10.0	9.5	8.5	7.5	9.0	8.0
18	12.0	11.0	9.0	8.5	10.0	10.0	10.0	10.0	8.5	7.5	9.0	7.0
19	11.5	10.5	9.0	8.5	10.5	10.0	10.5	10.0	8.5	7.0	9.0	7.0
20	12.5	11.0	9.0	8.5	10.0	10.0	11.5	10.5	8.0	7.0	9.5	7.5
21	13.0	12.0	9.5	9.0	10.0	9.5	11.5	10.0	8.0	7.0	9.5	8.0
22	13.0	12.0	9.0	8.0	10.0	9.0	11.0	10.5	8.5	7.0	10.0	8.0
23	13.5	12.5	8.5	7.5	10.0	9.5	11.0	10.0	8.5	7.5	10.5	8.5
24	13.0	12.5	8.0	7.5	10.0	9.5	10.0	10.0	9.0	8.0	11.0	9.5
25	12.5	11.5	8.0	7.5	9.5	9.0	10.0	9.5	9.0	8.0	11.0	9.0
26	12.0	11.5	7.5	7.0	9.0	8.5	10.0	9.5	9.5	8.5	11.0	9.5
27	13.0	12.0	7.5	6.5	8.5	8.0	10.0	8.5	9.5	8.5	11.0	9.0
28	12.5	12.0	7.0	6.5	8.0	7.5	8.5	7.5	9.0	8.0	11.5	9.5
29	12.5	11.5	7.0	6.0	8.0	7.0	7.5	7.0	--	--	11.0	9.0
30	12.5	11.5	6.0	5.5	7.5	7.0	8.0	7.0	--	--	10.5	8.5
31	12.5	11.5	--	--	7.0	6.5	8.5	7.5	--	--	11.0	8.5
AVE	13.1	11.9	10.0	9.2	8.4	7.8	8.9	8.2	9.0	8.1	9.9	8.5

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	10.0	18.5	15.5	21.5	18.0	22.0	18.0	--	--
2	11.5	9.5	14.0	11.0	19.0	16.5	21.5	19.0	22.0	18.5	--	--
3	11.0	9.0	14.5	11.5	18.0	16.0	21.5	19.0	21.5	19.0	--	--
4	11.0	9.0	14.0	12.0	19.0	16.0	20.5	18.5	--	--	--	--
5	11.5	9.0	13.0	12.0	19.5	17.0	20.5	18.0	--	--	--	--
6	11.0	9.0	13.5	11.5	18.5	16.5	21.5	18.5	--	--	--	--
7	10.0	8.0	12.0	11.0	18.5	16.0	21.5	19.0	--	--	--	--
8	11.0	9.0	11.5	11.0	17.5	15.0	21.5	19.0	--	--	--	--
9	10.5	9.5	11.0	10.0	15.0	14.0	21.0	18.5	--	--	--	--
10	11.5	10.0	10.0	9.0	16.5	13.5	21.0	18.5	--	--	--	--
11	11.0	9.0	9.5	8.5	17.0	14.5	20.5	18.5	--	--	--	--
12	10.5	9.0	9.5	8.0	17.0	14.0	21.5	18.5	--	--	19.5	18.5
13	10.0	8.5	11.5	8.5	17.5	15.0	21.5	19.0	--	--	18.5	17.0
14	10.0	8.5	12.5	9.5	16.5	15.5	21.0	19.0	--	--	17.5	16.0
15	11.0	8.5	14.0	11.0	17.5	15.0	20.5	18.5	--	--	17.0	14.0
16	11.0	8.5	15.0	12.0	17.5	15.5	20.5	18.0	--	--	17.0	16.0
17	11.5	9.0	15.0	12.5	18.0	16.5	20.5	18.5	--	--	17.5	16.0
18	10.0	9.5	15.0	13.0	19.0	15.5	21.0	18.0	--	--	18.5	17.5
19	10.0	9.0	15.0	12.5	20.0	16.5	20.5	18.5	--	--	18.0	17.5
20	10.0	8.5	15.0	12.0	21.0	18.0	21.0	19.0	--	--	18.0	17.5
21	11.0	8.0	15.0	12.5	21.0	18.5	21.0	18.5	--	--	17.5	16.5
22	11.0	9.0	15.5	13.0	21.0	18.5	22.0	19.0	--	--	17.5	16.5
23	10.0	9.0	16.5	13.0	21.0	19.0	21.0	19.0	--	--	18.0	17.0
24	10.0	9.5	17.0	14.0	20.0	18.5	21.0	19.0	--	--	17.5	16.0
25	10.0	8.5	17.5	15.0	20.5	18.0	22.0	19.5	--	--	16.5	15.0
26	9.5	7.5	17.0	15.0	19.5	18.5	21.5	19.5	--	--	16.5	15.5
27	9.0	7.0	17.0	14.5	20.5	18.5	19.5	17.0	--	--	16.5	15.5
28	9.5	7.5	17.0	14.0	20.0	18.0	18.0	16.0	--	--	16.5	15.5
29	10.0	8.5	16.0	13.5	20.5	18.0	18.0	15.5	--	--	16.5	15.5
30	12.5	9.0	17.0	14.0	20.5	18.5	18.0	16.0	--	--	16.5	15.5
31	--	--	18.5	14.5	--	--	19.5	16.0	--	--	--	--
AVE	10.6	8.7	14.3	11.9	18.8	16.5	20.7	18.3	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(Formerly published as Miscellaneous Analyses)

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

SALTON SEA BASIN

10256000 WHITEWATER RIVER AT WHITE WATER, CALIF. (LAT 33°56'48", LONG 116°38'24") 1/

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
DEC.												
15...	1215	41	13.9	9.0	40	12	11	4.0	174	0	26	3.0
MAR.												
19...	0845	30	8.9	9.9	42	10	11	3.0	164	4	26	3.0
JUNE												
22...	1130	8.7	26.1	--	40	12	12	4.0	170	0	31	4.0
SEP.												
21...	1230	7.5	23.9	8.4	40	11	12	4.0	160	0	31	4.0

MOJAVE RIVER BASIN

10261100 MOJAVE RIVER AT THE FORKS, NEAR CEDAR SPRINGS, CALIF. (LAT 34°20'35", LONG 117°14'01") 1/

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
20...	0915	13	11.7	9.7	27	6.0	25	2.0	134	0	24	8.0
JAN.												
21...	1230	15	9.4	11.7	27	6.0	21	2.0	128	0	17	8.0
APR.												
16...	1330	25	11.7	10.4	22	6.0	19	2.0	113	0	13	8.0
JULY												
23...	0930	8.7	22.8	6.5	28	7.0	43	4.0	127	0	49	18

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CALIF. (LAT 34°34'23", LONG 117°19'11") 1/

OCT.												
20...	1215	40	18.3	7.7	37	8.0	45	18	204	0	40	24
JAN.												
21...	1345	37	15.6	8.8	35	9.0	47	26	207	0	44	25
APR.												
16...	1445	38	15.6	8.2	40	10	45	14	206	0	44	26
JULY												
23...	0830	14	22.8	7.3	44	12	47	7.0	206	0	53	32

WALKER LAKE BASIN

10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CALIF. (LAT 38°19'40", LONG 119°12'50") 1/

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)	SODIUM (NA) (MG/L)
APR.							
16...	1225	125	8.0	9.3	20	4.4	14
SEP.							
22...	1320	120	14.0	7.6	27	3.0	12

10296000 WEST WALKER RIVER NEAR COLEVILLE, CALIF. (LAT 38°22'47", LONG 119°26'57") 1//

APR.							
16...	1100	210	3.5	10.6	8.5	2.4	4.0
SEP.							
22...	1215	54	11.0	10.4	15	2.6	7.4

CARSON RIVER BASIN

10308200 EAST FORK CARSON RIVER NEAR MARKLEEVILLE, CALIF. (LAT 38°42'50", LONG 119°45'50") 1/

APR.							
16...	1000	425	1.5	11.0	10	2.9	6.7
SEP.							
22...	1000	68	9.0	10.2	12	2.9	7.8

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CALIF. (LAT 38°46'10", LONG 119°49'55") 1/

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)	SODIUM (NA) (MG/L)
APR.							
16...	0930	188	1.0	11.3	6.2	2.1	3.0
SEP.							
22...	0900	26	7.0	10.2	7.6	1.7	3.8

1/ Records furnished by California Department of Water Resources and reviewed by Geological Survey

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(Formerly published as Miscellaneous Analyses)

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	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 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)
SALTON SEA BASIN--Continued												
10256000 WHITEWATER RIVER AT WHITE WATER, CALIF.--Continued												
DEC.												
15...	.9	1.5	0	193	21.4	149	6	143	13	.4	339	8.3
MAR.												
19...	.8	2.0	0	183	14.8	146	5	141	14	.4	328	8.5
JUNE												
22...	.9	1.5	0	189	4.44	149	10	139	14	.4	340	7.6
SEP.												
21...	1.0	.0	0	191	3.87	145	14	131	15	.4	331	8.1
MOJAVE RIVER BASIN--Continued												
10261100 MOJAVE RIVER AT THE FORKS, NEAR CEDAR SPRINGS, CALIF.--Continued												
OCT.												
20...	1.4	.3	30	160	5.62	92	0	110	36	1.1	284	8.0
JAN.												
21...	.8	.3	30	161	6.52	92	0	105	33	1.0	272	8.0
APR.												
16...	.8	.5	40	142	9.58	80	0	93	33	.9	241	8.0
JULY												
23...	1.9	19	140	247	5.80	99	0	104	47	1.9	397	6.9
10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CALIF.--Continued												
OCT.												
20...	.6	4.2	60	280	30.2	125	0	167	40	1.7	479	7.9
JAN.												
21...	.6	6.7	70	314	31.4	124	0	170	39	1.8	514	8.3
APR.												
16...	.5	7.8	80	304	31.2	141	0	169	38	1.6	491	8.1
JULY												
23...	.5	3.5	110	309	11.7	159	0	169	38	1.6	518	7.9

DATE	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	CHLO-RIDE (CL) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
WALKER LAKE BASIN--Continued							
10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CALIF.--Continued							
APR.							
16...	106	0	3.0	68	192	8.3	20
SEP.							
22...	117	0	1.2	80	213	8.2	70
10296000 WEST WALKER RIVER NEAR COLEVILLE, CALIF.--Continued							
APR.							
16...	42	0	1.6	31	74	8.0	4
SEP.							
22...	69	0	1.8	48	130	8.2	1
CARSON RIVER BASIN--Continued							
10208200 EAST FORK CARSON RIVER NEAR MARKLEEVILLE, CALIF.--Continued							
APR.							
16...	52	0	2.8	37	99	8.0	6
SEP.							
22...	63	0	3.3	42	119	8.0	1
10310000 WEST FORK CARSON RIVER AT WOODFORDS, CALIF.--Continued							
APR.							
16...	34	0	1.0	24	56	7.8	4
SEP.							
22...	40	0	.5	26	70	7.8	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

PYRAMID AND WINNEMUCCA LAKES BASIN

10346000 TRUCKEE RIVER AT FARAD, CALIF. (LAT 39°25'41", LONG 120°01'59") 1/

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
APR.												
17...	0930	695	6.0	10.4	8.2	2.8	3.8	1.4	44	0	3.3	3.3
SEP.												
23...	0730	570	11.0	9.6	9.7	--	6.1	--	52	0	--	2.4

SANTA MARGARITA RIVER BASIN

11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CALIF. (LAT 33°23'54", LONG 117°15'44") 1/

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)
DEC.											
18...	1400	4.3	12.8	11.1	91	36	114	3.0	306	0	159
MAR.											
20...	1600	5.7	20.0	8.8	98	38	116	4.0	306	5	163
JUNE											
24...	1445	.39	31.7	7.3	91	39	118	4.0	315	10	137

VENTURA RIVER BASIN

11114500 MATILIJA CREEK ABOVE RESERVOIR, NEAR MATILIJA HOT SPRINGS, CALIF. 1/
(LAT 39°29'41", LONG 119°19'48")

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.											
21...	1115	18.3	10.0	105	29	52	3.0	203	0	266	34
JAN.											
19...	1130	15.0	10.7	111	31	46	2.0	198	0	302	23
APR.											
14...	1515	18.9	9.2	105	31	41	2.0	186	0	288	17
JULY											
21...	1000	22.2	8.7	91	35	49	3.0	168	0	284	30

SANTA MARIA RIVER BASIN

11138100 CUYAMA RIVER BELOW TWITCHELL DAM, CALIF. (LAT 34°56'40", LONG 120°17'30") 1/

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.											
21...	1615	17.2	--	83	28	40	3.0	190	0	202	26
JAN.											
19...	1530	17.2	--	129	54	78	4.0	285	0	390	49
APR.											
15...	1130	17.8	--	100	38	55	5.0	218	0	282	35
JULY											
21...	1430	30.6	--	116	62	95	5.0	222	0	455	63

TULARE LAKE BASIN

11204900 TULE RIVER BELOW SUCCESS DAM, CALIF. (LAT 36°03'23", LONG 118°55'22") 1/

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
OCT.												
06...	1515	459	23.5	9.3	--	--	8.3	--	103	0	--	4.8
NOV.												
10...	--	A 340	--	--	--	--	9.8	--	124	0	--	3.6
DEC.												
01...	1415	60	12.0	--	--	--	13	--	156	0	--	7.8
APR.												
08...	0850	116	13.5	10.5	23	3.6	12	2.3	105	0	5.6	4.8
AUG.												
03...	1305	273	24.5	7.0	27	4.2	11	2.5	123	0	2.5	5.0

1/ Records furnished by California Department of Water Resources and reviewed by Geological Survey.
A Daily mean discharge.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

PYRAMID AND WINNEMUCCA LAKES BASIN--Continued
10346000 TRUCKEE RIVER AT FARAD, CALIF.--Continued

DATE	NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	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)
APR. 17...	.00	0	59	111	32	0	36	20	.3	83	7.9
SEP. 23...	--	--	--	--	34	0	43	35	.5	97	7.9

SANTA MARGARITA RIVER BASIN--Continued
11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CALIF.--Continued

DATE	CHLO-RIDE (CL) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	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)
DEC. 18...	149	130	738	8.57	375	124	251	40	2.6	1210	8.1
MAR. 20...	158	160	758	11.7	401	142	259	38	2.5	1260	8.4
JUNE 24...	163	160	751	.79	388	113	275	40	2.6	1180	8.4

VENTURA RIVER BASIN--Continued
11114500 MATILIJA CREEK ABOVE RESERVOIR, NEAR MATILIJA HOT SPRINGS, CALIF.--Continued

DATE	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)	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)
OCT. 21...	.9	.0	1000	584	381	214	167	23	1.2	878	7.8
JAN. 19...	.7	.2	660	652	405	243	162	20	1.0	931	7.8
APR. 14...	.8	.0	590	607	390	237	153	19	.9	894	7.9
JULY 21...	.8	.0	740	619	371	233	138	22	1.1	866	8.0

SANTA MARIA RIVER BASIN--Continued
11138100 CUYAMA RIVER BELOW TWITCHELL DAM, CALIF.--Continued

DATE											
OCT. 21...	.5	4.4	170	470	322	166	156	21	1.0	726	7.1
JAN. 19...	.7	1.5	190	909	544	310	234	24	1.5	1260	7.9
APR. 15...	.6	.7	190	648	406	227	179	22	1.2	972	8.1
JULY 21...	.8	.0	300	977	545	363	182	27	1.8	1300	8.2

TULARE LAKE BASIN
11204900 TULE RIVER BELOW SUCCESS DAM, CALIF.--Continued

DATE	NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	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)
OCT. 06...	--	100	--	--	75	0	84	19	.4	183	7.8
NOV. 10...	--	0	--	--	89	0	102	19	.5	216	8.3
DEC. 01...	--	100	--	--	114	0	128	20	.5	248	7.5
APR. 08...	.2	0	110	34.5	73	0	86	26	.6	190	8.3
AUG. 03...	.4	0	140	103	85	0	101	21	.5	212	8.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
TULARE LAKE BASIN--Continued												
11210950 KAWEAH RIVER BELOW TERMINUS DAM, CALIF. (LAT 36°24'51", LONG 119°00'42") 1/												
OCT.												
06...	0800	1230	21.5	7.3	--	--	2.6	--	28	0	--	1.4
NOV.												
03...	1400	660	17.0	9.5	--	--	3.2	--	42	0	--	2.8
DEC.												
09...	1145	91	11.0	11.9	--	--	4.7	--	69	0	--	4.6
APR.												
06...	0845	160	12.0	8.0	10	1.4	4.8	1.6	43	0	4.5	3.2
AUG.												
03...	0900	528	25.5	8.0	8.2	.8	2.5	1.3	33	0	1.2	1.3
11222700 KINGS RIVER AT PEOPLES WEIR, NEAR KINGSBURG, CALIF. (LAT 36°29'06", LONG 119°32'22") 1/												
APR.												
08...	1430	462	16.5	10.1	7.6	1.9	5.4	1.1	37	0	4.0	2.0
AUG.												
03...	0740	1095	18.5	9.5	4.8	1.0	2.7	1.0	23	0	1.5	1.4
SAN JOAQUIN RIVER BASIN												
11313050 DELTA-MENDOTA CANAL NEAR MENDOTA, CALIF. (LAT 36°47'11", LONG 120°23'04") 1/												
APR.												
08...	1615	1760	18.0	9.2	21	10	37	2.3	75	0	50	45
JULY												
08...	1040	2480	25.5	--	--	--	34	--	84	0	--	38
AUG.												
03...	0915	2900	25.0	7.4	17	10	38	2.4	78	0	27	51
SEP.												
10...	0845	1500	23.5	7.0	--	--	70	--	139	0	--	106

DATE	RESER-VOIR STORAGE (AC-FT)	TEMP-ERATURE (DEG C)	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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
GOOSE LAKE BASIN												
11337705 GOOSE LAKE AT WILLOW RANCH, CALIF. (LAT 41°54'14", LONG 120°21'55")												
OCT.												
17...	419400	4.0	61	0	9.5	3.2	770	54	1030	226	140	268
MAY												
12...	668300	--	--	--	8.0	3.7	469	37	698	102	93	150
11337715 GOOSE LAKE NEAR EVERLY RANCH, NEAR WILLOW RANCH, CALIF. (LAT 41°52'17", LONG 120°29'49")												
OCT.												
17...	419400	4.6	60	10	7.3	2.8	845	58	1090	256	140	295
MAY												
13...	665400	--	--	--	7.8	3.7	480	37	786	63	93	155
11337720 GOOSE LAKE AT WEST SHORE LOG LANDING, NEAR WILLOW RANCH, CALIF. (LAT 41°57'51", LONG 120°29'37")												
OCT.												
16...	416700	4.5	62	0	10	3.5	772	57	1050	226	140	270
MAY												
13...	665400	--	--	--	8.2	3.7	424	34	701	55	85	135

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
SACRAMENTO RIVER BASIN												
11345500 SOUTH FORK PIT RIVER NEAR LIKELY, CALIF. (LAT 41°13'51", LONG 120°26'10") 1/												
JAN.												
13...	1150	46	2.2	12.1	--	--	6.3	--	68	0	--	1.0
MAY												
13...	1520	234	10.0	10.9	9.3	4.0	6.4	2.1	60	0	.5	.0
11365000 PIT RIVER NEAR MONTGOMERY CREEK, CALIF. (LAT 40°50'36", LONG 122°00'58") 1/												
NOV.												
18...	1030	5760	9.4	11.5	--	--	8.2	--	77	0	--	4.1
MAR.												
10...	1000	10400	8.3	13.2	--	--	6.7	--	68	0	--	1.8
MAY												
13...	1130	4730	13.3	12.6	9.7	6.7	12	2.0	86	0	.6	1.9
JULY												
14...	1000	4160	19.4	10.5	--	--	11	--	80	0	--	2.5
SEP.												
02...	1205	4410	17.0	10.3	10	5.6	10	1.9	77	0	1.2	3.5

1/ Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	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)
TULARE LAKE BASIN--Continued											
11210950 KAWEAH RIVER BELOW TERMINUS DAM, CALIF.--Continued											
OCT.											
06...	--	0	--	--	25	2	23	18	.2	58	7.9
NOV.											
03...	--	0	--	--	32	0	34	18	.2	82	7.7
DEC.											
09...	--	0	--	--	52	0	57	16	.3	134	7.2
APR.											
06...	.2	0	74	32.0	31	0	35	24	.4	87	7.9
AUG.											
03...	.1	0	50	71.3	24	0	27	18	.2	60	8.3
11222700 KINGS RIVER AT PEOPLES WEIR, NEAR KINGSBURG, CALIF.--Continued											
APR.											
08...	.3	0	50	62.4	27	0	30	29	.5	80	7.8
AUG.											
03...	.1	0	32	94.6	16	0	19	25	.3	48	7.1
SAN JOAQUIN RIVER BASIN--Continued											
11313050 DELTA-MENDOTA CANAL NEAR MENDOTA, CALIF.--Continued											
APR.											
08...	.7	200	213	1010	95	33	62	45	1.7	384	8.1
JULY											
08...	--	100	--	--	97	28	69	43	1.5	349	7.8
AUG.											
03...	.7	0	213	1670	85	21	64	49	1.8	350	7.7
SEP.											
10...	--	300	--	--	161	47	114	49	2.4	673	7.7

DATE	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 (SUM OF CONSTI-TUENTS) (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)
GOOSE LAKE BASIN--Continued											
11337705 GOOSE LAKE AT WILLOW RANCH, CALIF.--Continued											
OCT.											
17...	1.2	.5	6300	2140	2050	36	0	1220	55	3160	9.3
MAY											
12...	--	--	--	1360	--	35	0	740	34	1990	9.1
11337715 GOOSE LAKE NEAR EVERLY RANCH, NEAR WILLOW RANCH, CALIF.--Continued											
OCT.											
17...	1.2	.6	7300	2310	2210	30	0	1310	67	3430	9.3
MAY											
13...	--	--	--	1380	--	34	0	748	36	2030	8.9
11337720 GOOSE LAKE AT WEST SHORE LOG LANDING, NEAR WILLOW RANCH, CALIF.--Continued											
OCT.											
16...	1.3	.3	6500	2140	2070	40	0	1230	54	3180	9.3
MAY											
13...	--	--	--	1230	--	36	0	665	31	1810	9.0

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 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 (MG/L)
SACRAMENTO RIVER BASIN--Continued												
11345500 SOUTH FORK PIT RIVER NEAR LIKELY, CALIF.--Continued												
JAN.												
13...	--	30	--	--	46	0	56	23	.4	121	7.3	5
MAY												
13...	1.5	0	104	65.7	40	35	49	25	.4	105	7.8	15
11365000 PIT RIVER NEAR MONTGOMERY CREEK, CALIF.--Continued												
NOV.												
18...	--	60	--	--	47	0	63	28	.5	131	7.6	3
MAR.												
10...	--	70	--	--	46	0	56	24	.4	124	7.8	--
MAY												
13...	.5	60	116	1480	52	0	71	32	.7	148	8.0	--
JULY												
14...	--	50	--	--	52	0	66	32	.7	146	8.0	--
SEP.												
02...	.8	20	--	--	48	0	63	30	.6	137	8.3	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

SACRAMENTO RIVER BASIN--Continued

11381620 MILL CREEK AT MOUTH, NEAR LOS MOLINOS, CALIF. (LAT 40°02'34", LONG 122°05'57") 1/

DATE	TIME	TEMPERATURE (DEG C)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
NOV.										
12...	1145	13.3	--	--	16	--	57	0	--	21
JAN.										
05...	1040	2.8	--	--	12	--	47	0	--	13
MAR.										
06...	1214	10.0	--	--	7.2	--	46	0	--	6.7
MAY										
06...	0845	13.5	8.6	4.2	10	1.6	37	0	14	8.6
JULY										
02...	1150	23.9	--	--	10	--	40	0	--	8.9
SEP.										
03...	1510	26.5	13	6.9	14	2.5	71	0	15	17

11383800 SACRAMENTO RIVER NEAR HAMILTON CITY, CALIF. (LAT 39°45'06", LONG 121°59'40") 1/

DATE	TIME	DISCHARGE (CFS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
NOV.										
05...	1355	9430	13.9	11.6	--	--	6.2	--	64	0
JAN.										
07...	1420	17390	8.3	11.8	--	--	6.3	--	63	0
MAR.										
04...	1340	16640	9.4	12.2	--	--	5.6	--	60	0
MAY										
06...	1340	8340	16.1	11.4	12	4.9	6.2	1.1	64	0
JULY										
14...	1015	8920	17.2	10.4	--	--	5.0	--	57	0
SEP.										
04...	0815	6920	16.0	10.0	8.9	5.8	5.9	.8	61	0

11384000 BIG CHICO CREEK NEAR CHICO, CALIF. (LAT 39°46'35", LONG 121°45'10") 1/

DATE	TIME	DISCHARGE (CFS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV.									
05...	1500	196	12.8	12.0	--	--	9.6	--	92
JAN.									
07...	1610	70	5.0	14.8	--	--	7.8	--	72
MAR.									
04...	1450	621	8.3	13.3	--	--	3.5	--	43
MAY									
06...	1500	52	16.1	10.9	14	6.8	10	1.4	88
JULY									
14...	1130	30	23.9	9.3	--	--	14	--	104
SEP.									
04...	1100	24	18.0	9.8	--	--	14	--	111

1/ Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

SACRAMENTO RIVER BASIN--Continued

11381620 MILL CREEK AT MOUTH, NEAR LOS MOLINOS, CALIF.--Continued

DATE	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)	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.										
12...	--	640	--	54	7	47	39	.9	194	7.4
JAN.										
05...	--	370	--	40	1	39	40	.8	139	7.4
MAR.										
06...	--	250	--	34	0	38	32	.5	108	7.6
MAY										
06...	.1	300	94	39	9	30	35	.7	126	7.4
JULY										
02...	--	220	--	36	3	33	38	.7	144	7.8
SEP.										
03...	.0	490	137	61	3	58	32	.8	201	8.3

11383800 SACRAMENTO RIVER NEAR HAMILTON CITY, CALIF.--Continued

DATE	SULFATE (SO4) (MG/L)	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)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
NOV.									
05...	--	3.8	--	100	--	48	123	7.5	7
JAN.									
07...	--	3.4	--	50	--	49	125	7.4	15
MAR.									
04...	--	2.5	--	80	--	50	124	7.4	50
MAY									
06...	5.3	2.7	.8	0	86	50	125	8.0	40
JULY									
14...	--	1.9	--	130	--	42	108	7.6	7
SEP.									
04...	4.0	2.9	.0	50	78	46	117	7.7	15

11384000 BIG CHICO CREEK NEAR CHICO--Continued

DATE	CAR-BONATE (CO3) (MG/L)	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)	HARD-NESS (CA,MG) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
NOV.									
05...	0	8.0	--	190	--	70	180	7.2	14
JAN.									
07...	0	6.1	--	120	--	54	140	7.5	2
MAR.									
04...	0	1.4	--	130	--	32	80	7.6	20
MAY									
06...	0	5.8	.1	0	108	63	164	8.0	1
JULY									
14...	0	9.3	--	140	--	76	200	8.1	1
SEP.									
04...	1	13	--	310	--	77	211	8.4	1

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

SACRAMENTO RIVER BASIN--Continued
11424000 BEAR RIVER NEAR WHEATLAND, CALIF. (LAT 39°00'01", LONG 121°24'21") 1/

DATE	TIME	DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)
MAR.										
10...	1410	1810	11.5	12.0	.10	.1	.030	65	7.3	50
24...	1030	1090	14.0	12.0	.20	.00	.010	68	7.3	12
APR.										
14...	1105	120	11.5	12.0	.10	.1	.010	71	7.3	10
28...	1030	A 13	14.5	--	.30	.1	.010	134	7.8	12
MAY										
12...	1400	14	18.5	11.0	.20	.1	.090	145	8.0	5
26...	1100	30	23.5	10.0	.10	.00	.010	101	7.5	6
JUNE										
09...	1030	16	18.0	10.0	.00	.00	.020	151	7.8	2
23...	1100	10	26.5	9.0	.10	.00	.020	169	8.0	10
JULY										
14...	1100	9.6	30.0	8.0	.20	.2	.030	--	8.5	10
AUG.										
25...	1400	13	30.5	10.0	.20	.1	.040	164	--	1

KLAMATH RIVER BASIN
11519500 SCOTT RIVER NEAR FORT JONES, CALIF. (LAT 41°38'28", LONG 123°00'54")

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)	SODIUM (NA) (MG/L)	PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	SULFATE (SO4) (MG/L)	CHLO-RIDE (CL) (MG/L)
NOV.												
17...	1135	126	7.2	12.4	--	--	4.0	--	155	0	--	4.9
JAN.												
12...	1140	520	5.6	11.9	--	--	2.9	--	108	0	--	2.6
MAR.												
09...	1200	1430	6.7	11.8	--	--	2.8	--	106	0	--	1.0
MAY												
12...	1800	708	9.0	11.5	11	13	2.8	.9	98	0	1.5	.4
JULY												
13...	1330	71	22.2	13.6	--	--	5.3	--	157	0	--	3.0
AUG.												
31...	1505	45	22.2	12.4	--	--	5.6	--	161	0	--	6.0

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 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 (MG/L)
NOV.												
17...	--	0	--	--	131	4	127	6	.2	252	7.8	2
JAN.												
12...	--	10	--	--	99	10	89	6	.1	185	6.4	7
MAR.												
09...	--	120	--	--	87	0	87	7	.1	176	7.9	55
MAY												
12...	2.2	0	109	208	81	1	80	7	.1	167	8.0	5
JULY												
13...	--	0	--	--	134	5	129	8	.2	261	8.3	3
AUG.												
31...	--	90	--	--	139	7	132	8	.2	276	8.3	2

1/ Records furnished by California Department of Water Resources and reviewed by Geological Survey.
A Daily mean discharge.

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TUBE; C, CHEMICALLY DISPERSED; N, IN NATIVE WATER; P, PIPET; S, SIEVE; V, VISUAL ACCUMULATION TUBE; W, IN DISTILLED WATER)

DATE	TIME	WATER TEMPERATURE (C)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)	PARTICLE SIZE PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	METHOD OF ANALYSIS
SACRAMENTO RIVER BASIN																	
11375820 SOUTH FORK COTTONWOOD CREEK NEAR COTTONWOOD, CALIF. (LAT 40°18'59", LONG 122°26'52")																	
DEC 15, 1969	1410	9.5	328	35	31	--	--	--	--	--	--	--	--	--	--	--	
JAN 13, 1970	0915	8.5	605	175	286	--	--	--	--	--	--	--	--	--	--	--	
JAN 20.....	1515	9.5	1620	631	2760	21	30	39	49	57	64	74	89	99	100	--	VBWC
APR 14.....	1515	9.0	138	2	.75	--	--	--	--	--	--	--	--	--	--	--	
11379500 ELDER CREEK NEAR PASKENTA, CALIF. (LAT 40°01'29", LONG 122°30'31")																	
OCT 1, 1969	1105	14.5	3.6	1	.01	--	--	--	--	--	--	--	--	--	--	--	
NOV 19.....	0930	8.0	8.0	0	0	--	--	--	--	--	--	--	--	--	--	--	
DEC 23.....	1120	9.0	768	251	520	20	28	40	51	64	73	80	84	92	99	100	SBWC
JAN 20, 1970	1045	10.0	536	95	137	--	--	--	--	--	81	89	97	98	100	--	S
JAN 28.....	1705	7.5	940	860	2180	17	26	36	47	57	66	73	85	99	100	--	SBWC
FEB 16.....	1310	9.0	310	319	267	17	24	30	38	46	56	73	89	93	100	--	SBWC
MAR 19.....	0945	5.5	155	32	13	--	--	--	--	--	--	--	--	--	--	--	
APR 23.....	1045	9.5	50	2	.27	--	--	--	--	--	--	--	--	--	--	--	
MAY 25.....	1030	18.0	24	1	.06	--	--	--	--	--	--	--	--	--	--	--	
JUN 11.....	1020	16.5	19	2	.10	--	--	--	--	--	--	--	--	--	--	--	
JUN 29.....	1106	16.0	18	6	.29	--	--	--	--	--	--	--	--	--	--	--	
JUL 14.....	1020	22.0	5.8	2	.03	--	--	--	--	--	--	--	--	--	--	--	
AUG 11.....	0950	20.0	2.7	1	.01	--	--	--	--	--	--	--	--	--	--	--	
AUG 25.....	1035	18.0	2.3	3	.02	--	--	--	--	--	--	--	--	--	--	--	
SEP 22.....	0925	15.0	2.5	5	.03	--	--	--	--	--	--	--	--	--	--	--	
11386500 GRINDSTONE CREEK NEAR ELK CREEK, CALIF. (LAT 39°40'38", LONG 122°31'51")																	
OCT 2, 1969	1615	22.5	1.5	6	.02	--	--	--	--	--	--	--	--	--	--	--	
NOV 4.....	1000	14.5	4.2	3	.03	--	--	--	--	--	--	--	--	--	--	--	
DEC 1.....	1200	8.0	7.0	2	.04	--	--	--	--	--	--	--	--	--	--	--	
DEC 19.....	1510	9.0	1100	2830	8410	21	30	41	52	60	70	77	86	97	99	100	VPWC
DEC 19.....	1700	10.5	986	2550	6790	--	--	--	--	--	--	--	--	--	--	--	
DEC 19.....	2100	10.5	687	1660	3080	--	--	--	--	--	--	--	--	--	--	--	
JAN 7, 1970	1010	3.5	61	4	.66	--	--	--	--	--	--	--	--	--	--	--	
JAN 9.....	1530		1090	2260	6650	--	--	--	--	--	--	--	--	--	--	--	
JAN 9.....	1730	8.5	1150	3370	10500	14	20	28	37	48	60	72	87	97	100	--	VPWC
JAN 9.....	2045	7.0	1160	2690	8430	--	--	--	--	--	--	--	--	--	--	--	
JAN 16.....	1340	10.5	6810	18400	338000	--	--	--	--	--	--	--	--	--	--	--	
JAN 16.....	1355	10.5	6730	17400	316000	21	28	37	47	60	70	81	92	97	99	100	SPWC
JAN 16.....	1430	10.5	6330	17100	292000	--	--	--	--	--	--	--	--	--	--	--	
JAN 23.....	1600	10.0	10400	19400	545000	20	25	32	45	58	69	80	92	98	100	--	VPWC
JAN 24.....	0800	8.5	10800	20500	598000	16	22	30	41	52	65	77	92	99	100	--	VPWC
JAN 24.....	1100	9.0	8130	18400	404000	16	19	30	40	51	59	72	91	99	100	--	VPWC
JAN 24.....	1600	9.0	3780	17000	174000	16	20	29	40	50	57	70	89	99	100	--	VPWC
FEB 2.....	1240	8.0	588	1500	2380	21	33	46	59	69	76	80	86	96	100	--	VPWC
MAR 2.....	1515	10.0	262	450	318	27	43	58	73	83	90	95	98	100	--	--	VBWC
APR 1.....	1040	12.0	138	52	19	--	--	--	--	--	--	--	--	--	--	--	
JUN 1.....	1230	26.0	28	3	.23	--	--	--	--	--	--	--	--	--	--	--	
JUL 8.....	0830	21.5	6.0	10	.16	--	--	--	--	--	--	--	--	--	--	--	
JUL 30.....	1030	25.0	2.0	2	.01	--	--	--	--	--	--	--	--	--	--	--	
SEP 2.....	1230	28.0	1.0	10	.03	--	--	--	--	--	--	--	--	--	--	--	
EEL RIVER BASIN																	
11473700 MILL CREEK NEAR COVELO, CALIF. (LAT 39°44'57", LONG 123°10'48")																	
DEC 17, 1969	0930	9.0	44	13	1.5	--	--	--	--	--	--	--	--	--	--	--	
JAN 24, 1970	1530	10.5	3160	1880	16000	22	31	42	51	61	71	81	90	98	100	--	VPWC
FEB 3.....	1515	10.5	238	22	14	--	--	--	--	--	--	--	--	--	--	--	
FEB 18.....	1520	8.0	478	73	94	39	54	68	78	84	86	91	97	97	100	--	SBWC
MAR 25.....	1405	18.0	60	2	.32	--	--	--	--	--	--	--	--	--	--	--	
KLAMATH RIVER BASIN																	
11526500 NORTH FORK TRINITY RIVER AT HELENA, CALIF. (LAT 40°46'55", LONG 123°07'38")																	
DEC 17, 1969	0945	9.0	472	2	2.5	--	--	--	--	--	--	--	--	--	--	--	
DEC 19.....	1150	6.0	1260	93	316	--	--	--	--	--	29	41	69	93	100	--	V
JAN 10, 1970	1230	6.5	723	17	33	--	--	--	--	--	--	--	--	--	--	--	
JAN 18.....	1340	8.0	2920	268	2110	11	21	29	39	50	60	72	88	100	--	--	VBWC
FEB 19.....	1205	5.5	610	2	3.3	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1330	6.0	603	4	6.5	--	--	--	--	--	--	--	--	--	--	--	
APR 15.....	1115	6.5	231	1	.62	--	--	--	--	--	--	--	--	--	--	--	
JUL 30.....	1130	18.0	41	3	.33	--	--	--	--	--	--	--	--	--	--	--	

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970
(METHOD OF ANALYSIS: H, HYDROMETER; O, OPTICAL ANALYZER; S, SIEVE; V, VISUAL ACCUMULATION TUBE)

DATE	TIME	WATER TEMPERATURE (C)	NUMBER OF SAMPLING POINTS	DISCHARGE (CFS)	PARTICLE SIZE: PERCENT FINER THAN THE SIZE (IN MILLIMETERS) INDICATED .062	.125	.250	.500	1.00	2.00	4.00	8.00	16.0	32.0	64.0	METHOD OF ANALYSIS
EEL RIVER BASIN																
11473700 MILL CREEK NEAR COVELO, CALIF. (LAT 39°44'45", LONG 123°10'15")																
OCT 15, 1969	1400		3	0	--	1	4	5	7	11	17	28	51	87	100	S
FEB 18, 1970	1540	8.0	5	478	--	--	2	4	6	11	21	44	71	95	100	S
KLAMATH RIVER BASIN																
11526500 NORTH FORK TRINITY RIVER AT HELENA, CALIF. (LAT 40°46'55", LONG 123°07'38")																
OCT 1, 1969	1100		5	30	--	--	2	2	4	10	17	29	46	66	100	S
OCT 7.....	1220		5	31	--	1	2	5	9	15	21	30	42	54	81	S
DEC 19.....	1220		5	1260	--	--	7	13	25	32	40	45	56	79	100	S
JAN 18, 1970	1425	7.0	5	2990	--	--	4	15	28	37	47	62	79	90	100	S

PERIODIC DETERMINATIONS OF TURBIDITY, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE OF COLLECTION	TIME (24-HOUR)	WATER TEMPERATURE (DEG C)	DISCHARGE (CFS)	TURBIDITY (MG/L SILICA) TOTAL	RESIDUAL 1/
RUSSIAN RIVER BASIN					
11462000 EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF. (LAT 39°11'45", long 123°11'30") 2/					
Nov. 7, 1969....	0900	16	273	49	1
Nov. 14.....	1025	17	273	50	1
Nov. 21.....	1255	15	273	61	1.8
Nov. 28.....	1100	14	88	12	1
Dec. 5.....	1305	13	68	11	1
Dec. 12.....	1300	14	72	12	1
Dec. 19.....	1210	12	4.0	81	6.6
Dec. 26.....	--	13	D 2610	82	13
Jan. 2, 1970....	--	12	D 75	82	11
Jan. 9.....	1400	10	391	80	13
Jan. 16.....	1110	15	1.6	200	39
Jan. 23.....	1000	15	3.4	168	22
Jan. 30.....	1230	12	4270	220	64
Feb. 6.....	1325	13	34	188	9.3
Feb. 13.....	1300	13	36	170	17
Feb. 20.....	1100	12	402	175	30
Feb. 27.....	1515	13	33	140	27
Mar. 6.....	1230	12	31	170	27
Mar. 11.....	1350	15	33	99	26
Mar. 13.....	1355	12	33	120	27
Mar. 27.....	1310	13	148	95	23
Apr. 17.....	1705	12	68	79	24
May 15.....	1430	13	62	52	8.2
June 19.....	1430	14	227	27	8.3

DATE OF COLLECTION	TIME (24-HOUR)	WATER TEMPERATURE (DEG C)	TURBIDITY (MG/L SILICA) SURFACE TOTAL	SURFACE RESIDUAL 1/	10-FOOT DEPTH TOTAL	10-FOOT DEPTH RESIDUAL 1/
EEL RIVER BASIN						
11470000 LAKE PILLSBURY NEAR POTTER VALLEY, CALIF. (LAT 39°24'30", LONG 122°57'30") 2/						
Nov. 7, 1969....	1030	12	18	1	--	--
Nov. 14.....	1100	12	41	2.4	--	--
Nov. 21.....	1030	8	--	--	50	2.0
Nov. 28.....	1115	9	37	1.3	--	--
Dec. 5.....	1030	2	--	--	18	1.5
Dec. 12.....	1000	9	--	--	245	4.4
Dec. 26.....	1030	9	170	28	245	39
Jan. 2, 1970....	1000	7	180	28	200	35
Jan. 9.....	1000	7	160	40	170	42
Jan. 16.....	1050	9	200	52	270	70
Jan. 22.....	1015	11	205	40	230	45
Jan. 29.....	1115	8	315	67	280	53
Feb. 6.....	1115	9	185	35	280	62
Feb. 19.....	1030	8	190	33	190	38
Mar. 1.....	1015	8	160	21	180	29
Mar. 9.....	1040	8	160	29	205	35
Mar. 13.....	1045	10	60	6.6	145	21
Mar. 20.....	1050	10	120	20	130	20
Mar. 27.....	1300	17	125	25	125	25
Apr. 17.....	1145	12	105	20	130	22
May 15.....	1200	--	--	--	60	7.4

D Mean daily discharge.
1/ Turbidity measured after a 7-day settling period.
2/ Samples collected by Pacific Gas and Electric Company, and U.S. Forest Service.

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