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1968

Water Resources Data for California

Part 2. Water Quality Records

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Rcd. Nov. 18, 1970

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Water Resources Division

WATER RESOURCES DATA FOR CALIFORNIA 1968

Part 2: Water Quality Records

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

Menlo Park, California
1970

Water-resources records, 1968, for California are in the following reports of the U.S. Geological Survey:

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

2. Water Resources Data for California
   Part 1: Surface Water Records
   Volume 2: Northern Great Basin and Central Valley

3. Water Resources Data for California
   Part 2: Water Quality Records

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

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Symbols after station name designate type of data: c, chemical; t, temperature; s, sediment

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WATER RESOURCES DATA FOR CALIFORNIA, 1968

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 1968 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.

Water-quality information is presented for chemical quality, fluvial sediment, and water temperatures. 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. Fluvial-sediment information includes suspended-sediment discharges and concentrations and the particle-size distribution of suspended sediment and bed material. Water-temperature data represent once-daily observations except for stations where a continuous record of temperature is obtained. Daily minimums and maximums are reported for the continuous temperature stations.

The Geological Survey has published the annual series of water-supply papers, "Quality of Surface Waters of the United States," from 1941 through 1964 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 1965 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 1964 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.

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).

COOPERATION

In California the work was done under cooperative agreements with:

California Department of Water Resources
California Water Quality Control Board
Bolinas Harbor District
Monterey County Flood Control and Water Conservation District
Orange County 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.

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
Metropolitan Water District of Southern California
Kings River Water Association
Sierra Pacific Power Company.

DEFINITION OF TERMS AND ABBREVIATIONS

The terms and abbreviations 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.

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.

Cubic feet per second (cfs) is a unit expressing rates of discharge. One cubic foot per second is equal to the discharge of a stream of rectangular cross section, 1 foot wide and 1 foot deep, and at an average velocity of 1 foot per second.

Discharge, in its simplest concept, means outflow; therefore, the use of this term is not restricted as to course or location. In this report it represents the total fluids measured in the stream.

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 is that area, in a specified location, measured in a horizontal plane, which is enclosed by a drainage 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 the property of water attributable to the presence of alkaline earths and is expressed as equivalent calcium carbonate ($CaCO_3$). Hardness is a physical-chemical characteristic, not a substance.

Milligrams per liter (mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of the dissolved constituent per unit volume of water. Concentration of suspended sediment expressed in milligrams per liter is based on the weight of sediment in a liter of water-sediment mixture. Sediment concentrations that are expressed in parts per million may be converted to milligrams per liter by using the factors in table 1.

TABLE 1.--Factors for conversion of sediment concentration in parts per million to milligrams per liter1/

[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

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

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.

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.

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.

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 is 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.

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.

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

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

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

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, 1968, is called the "1968 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 station and partial-record station has been assigned a station number. The numbers have been assigned in the same downstream order used in the annual series of water-supply papers. In assigning station numbers, no distinction is made between partial- and continuous-record stations, so that the number for a partial-record station indicates downstream order position in a list made up of both types of stations. 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 11-3035.00 includes the part number "11" plus a 6-digit number. In this report, the nonessential zeros are not shown. For example, the complete number 11-3035.00 would appear as 11-3035. 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.

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."

COLLECTION AND EXAMINATION OF SAMPLES

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, 1968, 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.

Dissolved Solids

Data for daily chemical-quality sites include the average chemical characteristics of water for "composite periods" of about a month or less. The methods of collecting and compositing water samples for determination of the kinds and concentrations of material dissolved in water are described by Rainwater and Thatcher (1960). One sample can define adequately the water quality at a given time if the mixture of dissolved material throughout the stream cross section is homogeneous. However, the concentration at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals across the channel to determine accurately the load of dissolved solids. The daily chemical-quality data in this report generally represent equal-volume composites for 2- to 31-day periods; the composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

Samples collected at monthly and miscellaneous water-quality stations were analyzed individually.

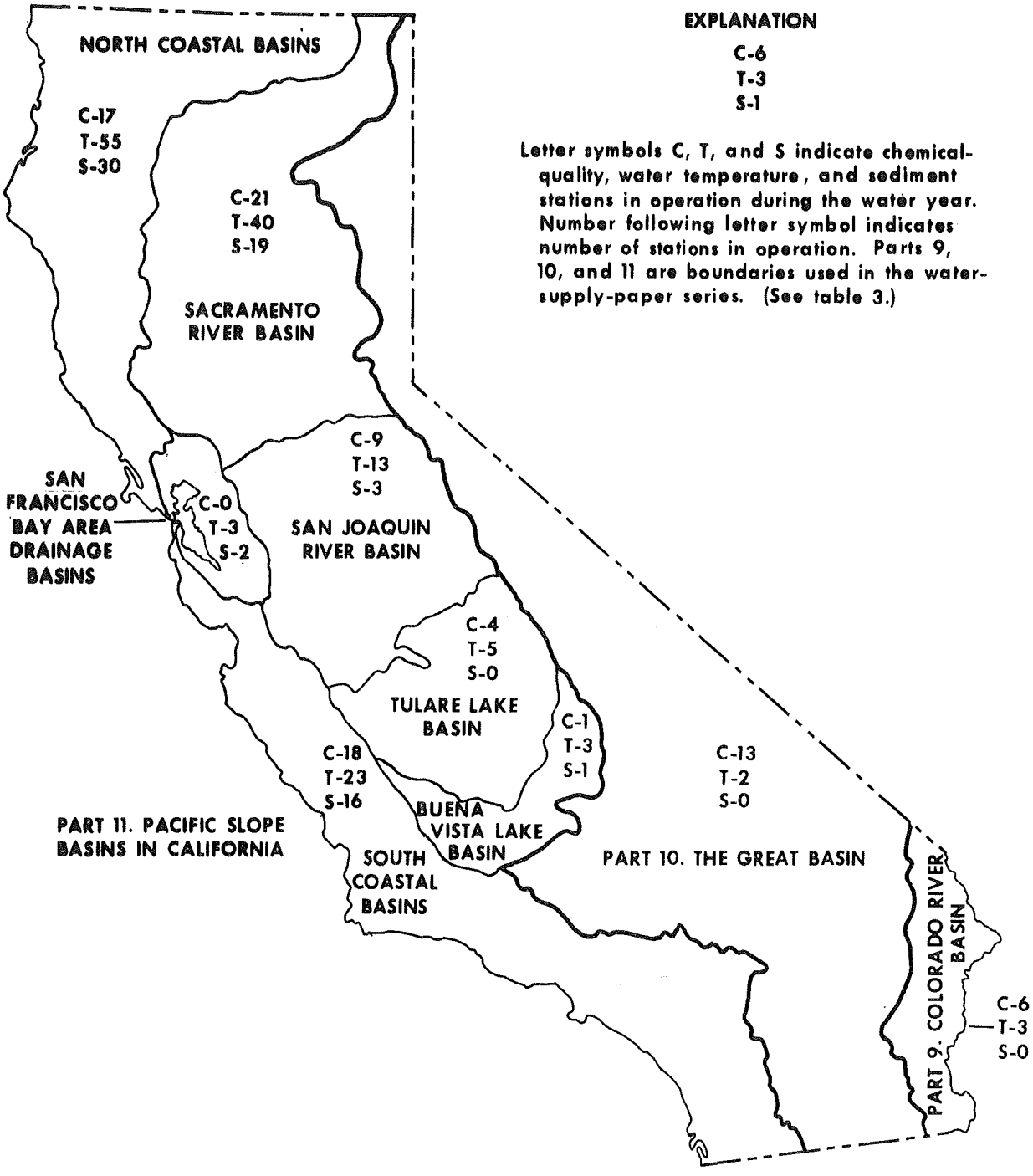

FIGURE 1.--Drainage-basin boundaries and number and distribution of water-quality stations.

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.

To convert temperatures in degrees Fahrenheit to degrees Celsius, substract 32° and divide by 1.8. The conversions shown by table 2 are to the nearest degree.

TABLE 2.--Temperature conversion table, degrees Fahrenheit (°F) to degrees Celsius (°C)

°F	°C	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C
32	0	45	7	58	14	71	22	84	29	97	36	110	43
33	1	46	8	59	15	72	22	85	29	98	37	111	44
34	1	47	8	60	16	73	23	86	30	99	37	112	44
35	2	48	9	61	16	74	23	87	31	100	38	113	45
36	2	49	9	62	17	75	24	88	31	101	38	114	46
37	3	50	10	63	17	76	24	89	32	102	39	115	46
38	3	51	11	64	18	77	25	90	32	103	39	116	47
39	4	52	11	65	18	78	26	91	33	104	40	117	47
40	4	53	12	66	19	79	26	92	33	105	41	118	48
41	5	54	12	67	19	80	27	93	34	106	41	119	48
42	6	55	13	68	20	81	27	94	34	107	42	120	49
43	6	56	13	69	21	82	28	95	35	108	42	121	49
44	7	57	14	70	21	83	28	96	36	109	43	122	50

Sediment

At some stations, suspended-sediment samples were collected daily with depth-integrating cable-suspended samplers from a fixed sampling point at one vertical in the cross section. A hand sampler was used at many stations during periods of low flow. Depth-integrated samples were collected periodically at many verticals in the cross section to determine the ratio of the cross-sectional distribution of the concentration of suspended sediment to the daily sampling verticals. During periods of high or rapidly changing flow, samples were taken twice or more often throughout the day at most stations. 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 with depth-integrating cable-suspended or hand samplers 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 periodic measurements of the particle-size distribution of the suspended sediment and the 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 1941-64

Water year	Water-supply paper	Water year	Water-supply paper	Water year	Water-supply paper
1941	942	1949	1163	1957	1523
1942	950	1950	1189	1958	1574
1943	970	1951	1200	1959	1645
1944	1022	1952	1253	1960	1745
1945	1030	1953	1293	1961	1885
1946	1050	1954	1353	1962	1945
1947	1102	1955	1403	1963	1951
1948	1133	1956	1453	1964	1958

SELECTED REFERENCES

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Colby, B. R., and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geol. Survey Water-Supply Paper 1357, 187 p.

Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geol. Survey Water-Supply Paper 1593, 17 p.

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Lane, E. W., and others, 1947, Report of subcommittee on sediment terminology: Am. Geophys. Union Trans., v. 28, no. 6, p. 936-938.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

Rainwater, F. H., and Thatcher, L. L., 1960, Methods for collection and analysis of water samples: U.S. Geol. Survey Water-Supply Paper 1454, 301 p.

U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams:

Report 11, 1957, The development and calibration of visual accumulation tube: Minneapolis, Minn., St. Anthony Falls Hydraulic Lab., 109 p.

Report 12, 1957, Some fundamentals of particle-size analysis: Washington, U.S. Govt. Printing Office, 55 p.

Report AA, 1959, Federal Inter-agency sedimentation instruments and reports: Minneapolis, Minn., St. Anthony Falls Hydraulic Lab., 41 p.

Report 13, 1961, The single stage sampler for suspended sediment: Washington, U.S. Govt. Printing Office, 105 p.

Report 14, 1963, Determinations of fluvial sediment discharge: Washington, U.S. Govt. Printing Office, 151 p.

Report S, 1963, A summary of the work of the Inter-agency sedimentation project: Minneapolis, Minn., St. Anthony Falls Hydraulic Lab., 29 p.

PART 9. COLORADO RIVER BASIN

COLORADO RIVER MAIN STEM

9-4210. LAKE MEAD AT HOOVER DAM, ARIZ.-NEV.

LOCATION (revised).--Lat 36°00'58", long 114°44'13", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, at gaging station midway between Hoover Dam intake towers, on state line between Mohave County, Ariz., and Clark County, Nev.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DEPTH (FT)	STAGE (FT ABOVE DATUM)	TEMP-ERATURE (DEG C)	SILICA (SIO2)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)
OCT.									
31...	0	1129	22	8.3	80	32	106	5.0	126
31...	5	1124	22	--	--	--	--	--	126
31...	25	1104	22	--	--	--	--	--	126
31...	75	1054	22	8.8	80	32	105	5.0	127
31...	125	1004	17	8.4	86	29	98	5.0	151
31...	175	954	15	--	--	--	--	--	154
31...	225	904	13	8.8	85	28	93	4.0	159
31...	275	854	13	10	83	28	94	4.0	153
31...	325	804	12	--	--	--	--	--	156
31...	375	754	12	9.3	83	28	94	4.0	160
31...	408	721	12	--	--	--	--	--	160
NOV.									
30...	0	1128	18	8.6	83	30	106	5.0	137
30...	5	1123	18	--	--	--	--	--	137
30...	25	1103	18	--	--	--	--	--	137
30...	75	1053	18	8.7	86	29	98	5.0	151
30...	125	1003	16	8.7	83	30	106	5.0	137
30...	175	953	15	--	--	--	--	--	155
30...	225	903	13	9.1	84	28	94	4.0	157
30...	275	853	12	9.2	83	28	94	4.0	157
30...	325	803	12	--	--	--	--	--	157
30...	375	753	12	9.6	83	28	95	4.0	159
30...	407	721	12	--	--	--	--	--	--
JAN.									
02...	0	1130	14	8.9	84	30	94	5.0	144
02...	5	1125	14	--	--	--	--	--	--
02...	25	1105	14	--	--	--	--	--	--
02...	75	1055	14	--	--	--	--	--	--
02...	125	1005	14	--	--	--	--	--	--
02...	175	955	14	8.9	85	30	96	5.0	144
02...	225	905	13	9.4	84	29	93	4.0	155
02...	275	855	13	8.9	83	28	92	4.0	155
02...	325	805	12	--	--	--	--	--	--
02...	375	755	12	9.4	83	28	90	4.0	159
02...	400	730	12	--	--	--	--	--	--
31...	0	1132	13	8.4	85	30	100	5.0	150
31...	5	1127	13	--	--	--	--	--	150
31...	25	1107	13	--	--	--	--	--	149
31...	75	1057	13	--	--	--	--	--	149
31...	125	1007	13	--	--	--	--	--	149
31...	175	957	13	7.6	84	30	100	4.0	149
31...	225	907	13	9.0	84	30	98	4.0	149
31...	275	857	12	8.6	84	30	100	5.0	156
31...	325	807	12	--	--	--	--	--	157
31...	375	757	12	8.0	84	30	100	4.0	159
31...	411	721	12	--	--	--	--	--	--
MAR.									
06...	0	1133	14	7.2	84	30	97	5.0	149
06...	5	1128	14	--	--	--	--	--	--
06...	25	1108	13	--	--	--	--	--	--
06...	75	1058	13	--	--	--	--	--	--
06...	125	1008	13	8.0	84	30	98	5.0	149
06...	175	958	13	7.6	84	30	99	5.0	155
06...	225	908	12	8.0	84	30	99	5.0	161
06...	275	858	12	8.2	84	30	97	5.0	162
06...	325	808	12	--	--	--	--	--	--
06...	375	758	12	--	--	--	--	--	--
06...	411	722	12	--	--	--	--	--	--
29...	0	1132	17	8.0	85	30	99	5.0	150
29...	5	1127	17	--	--	--	--	--	150
29...	25	1107	16	--	--	--	--	--	150
29...	75	1057	14	--	--	--	--	--	150
29...	125	1007	13	--	--	--	--	--	150
29...	175	957	12	8.2	86	30	99	5.0	154
29...	225	907	12	8.5	86	30	100	5.0	159
29...	275	857	12	8.7	84	30	100	5.0	161
29...	325	807	11	--	--	--	--	--	161
29...	375	757	11	8.5	84	30	99	5.0	166
29...	411	721	11	--	--	--	--	--	--

9-4210. LAKE MEAD AT HOOVER DAM, ARIZ.-NEV.--Continued

DRAINAGE AREA.--167,800 sq mi, approximately.
RECORDS AVAILABLE.--Chemical analyses: October 1940 to September 1968.
REMARKS.--Samples collected by Bureau of Reclamation and analyzed by the Metropolitan Water District of Southern California, LaVerne, Calif.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	CARBONATE (CO3)	SULFATE (SO4)	CHLORIDE (CL)	NITRATE (NO3)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS)	HARDNESS (CA,MG)	NONCARBONATE HARDNESS	SPECIFIC CONDUCTANCE (MICROMHOS)	PH
OCT.									
31...	0	316	96	.7	707	331	228	1230	7.9
31...	0	--	95	--	--	--	--	1220	8.2
31...	0	--	95	--	--	--	--	1230	7.9
31...	0	314	95	.1	703	331	227	1230	7.4
31...	0	289	86	2.3	679	334	210	1200	7.8
31...	0	--	86	--	--	--	--	1190	7.3
31...	0	277	81	1.7	658	327	197	1150	7.6
31...	0	281	83	1.6	662	325	200	1160	7.7
31...	0	--	81	--	--	--	--	1140	7.6
31...	0	273	81	1.2	654	322	191	1140	7.4
31...	0	--	81	--	--	--	--	1140	7.5
NOV.									
30...	0	309	93	1.3	705	333	221	1100	7.9
30...	0	--	93	--	--	--	--	1100	7.8
30...	0	--	93	--	--	--	--	1100	8.0
30...	0	290	87	2.3	682	334	210	1080	8.0
30...	0	309	93	1.4	705	333	221	1100	7.8
30...	0	--	83	--	--	--	--	1060	7.8
30...	0	272	80	2.2	651	323	194	1030	7.7
30...	0	272	80	2.2	650	320	191	1030	7.8
30...	0	--	82	--	--	--	--	1020	7.8
30...	0	272	82	1.9	655	322	192	1020	7.8
30...	--	--	81	--	--	322	--	1030	7.4
JAN.									
02...	0	290	88	1.8	674	335	217	1090	7.7
02...	--	--	86	--	--	--	--	1100	7.7
02...	--	--	86	--	--	--	--	1100	7.8
02...	--	--	86	--	--	--	--	1100	7.8
02...	--	--	84	--	--	--	--	1100	7.7
02...	0	300	84	1.4	682	336	218	1100	7.7
02...	0	280	78	1.8	657	329	202	1050	7.7
02...	1	274	78	1.9	649	324	195	1040	8.2
02...	--	--	78	--	--	--	--	1040	7.6
02...	0	270	78	1.7	644	324	194	1040	7.5
02...	--	--	76	--	--	325	--	1040	7.3
31...	0	295	88	2.2	689	336	213	1090	7.8
31...	0	--	89	--	--	--	--	1080	7.9
31...	0	--	89	--	--	--	--	1080	8.1
31...	0	--	88	--	--	--	--	1080	8.1
31...	0	--	88	--	--	--	--	1080	8.0
31...	0	294	88	1.8	684	333	211	1080	8.0
31...	0	287	88	2.1	677	333	211	1080	8.0
31...	0	288	87	2.6	683	331	203	1080	8.0
31...	0	--	87	--	--	--	--	1080	8.0
31...	0	291	87	2.4	686	333	203	1080	7.8
31...	--	--	87	--	--	332	--	1080	7.7
MAR.									
06...	0	293	89	1.9	682	335	213	1090	7.8
06...	--	--	89	--	--	--	--	1090	8.0
06...	--	--	89	--	--	--	--	1090	7.7
06...	--	--	89	--	--	--	--	1090	7.9
06...	0	294	89	1.5	685	335	213	1090	7.5
06...	0	289	89	1.8	683	333	206	1090	7.7
06...	0	282	88	2.6	679	331	199	1080	7.7
06...	0	279	88	2.4	675	333	200	1080	7.7
06...	--	--	88	--	--	--	--	1080	7.7
06...	--	--	88	--	--	--	--	1080	7.7
06...	--	--	88	--	--	--	--	1080	8.3
29...	0	297	86	1.9	687	336	213	1090	7.9
29...	0	--	87	--	--	--	--	1090	7.9
29...	0	--	87	--	--	--	--	1090	8.1
29...	0	--	87	--	--	--	--	1090	8.0
29...	0	--	86	--	--	--	--	1090	8.1
29...	0	296	86	2.1	689	338	212	1090	8.1
29...	0	295	86	2.4	692	338	208	1090	7.9
29...	0	292	86	2.5	689	333	201	1080	8.0
29...	1	--	87	--	--	--	--	1080	8.4
29...	0	284	85	2.9	681	333	197	1080	8.0
29...	--	--	85	--	--	--	--	1090	7.9

9-4210. LAKE MEAD AT HOOVER DAM, ARIZ.-NEV.--Continued

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DEPTH (FT)	STAGE (FT ABOVE DATUM)	TEMP-ERATURE (DEG C)	SILICA (SIO2)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)
MAY									
02...	0	1134	19	8.2	86	30	103	4.0	150
02...	5	1129	19	--	--	--	--	--	150
02...	25	1109	19	--	--	--	--	--	148
02...	75	1059	16	--	--	--	--	--	149
02...	125	1009	13	8.0	85	30	102	4.0	150
02...	175	959	13	--	--	--	--	--	151
02...	225	909	12	8.5	85	30	100	4.0	156
02...	275	859	12	8.5	85	30	102	4.0	159
02...	325	809	12	--	--	--	--	--	161
02...	375	759	12	8.7	84	30	102	4.0	155
02...	413	723	12	--	--	--	--	--	163
22...	0	1135	20	8.0	87	30	106	5.0	151
22...	5	1130	19	--	--	--	--	--	--
22...	25	1110	18	8.0	87	29	103	6.0	151
22...	75	1060	15	8.5	87	30	103	5.0	150
22...	125	1010	14	--	--	--	--	--	--
22...	175	960	14	--	--	--	--	--	--
22...	225	910	13	8.0	86	30	105	5.0	151
22...	275	860	13	8.5	86	30	103	5.0	156
22...	325	810	12	--	--	--	--	--	--
22...	375	760	12	8.7	85	29	104	5.0	162
22...	411	724	12	--	--	--	--	--	--
JUNE									
28...	0	1136	22	7.2	88	30	99	5.0	149
28...	5	1131	21	--	--	--	--	--	--
28...	25	1111	21	--	--	--	--	--	--
28...	75	1061	18	--	--	--	--	--	--
28...	125	1011	16	--	--	--	--	--	--
28...	175	961	14	7.0	87	30	99	5.0	153
28...	225	911	13	7.0	87	30	99	5.0	154
28...	275	861	13	7.2	86	30	99	5.0	159
28...	325	811	12	--	--	--	--	--	--
28...	375	761	12	7.2	86	30	99	5.0	161
28...	412	724	12	--	--	--	--	--	--
JULY									
31...	0	1137	29	7.6	79	32	105	4.0	117
31...	5	1132	29	--	--	--	--	--	117
31...	25	1112	29	7.4	79	32	105	4.0	117
31...	75	1062	21	7.2	86	31	101	4.0	146
31...	125	1012	16	--	--	--	--	--	149
31...	175	962	15	--	--	--	--	--	154
31...	225	912	13	7.2	87	30	102	4.0	159
31...	275	862	13	7.4	86	30	99	4.0	159
31...	325	812	13	--	--	--	--	--	157
31...	375	762	12	7.6	85	31	99	4.0	160
31...	412	725	12	--	--	--	--	--	161
AUG.									
27...	0	1137	27	9.5	81	32	109	5.0	124
27...	5	1132	27	--	--	--	--	--	123
27...	25	1112	26	--	--	--	--	--	122
27...	75	1062	21	8.8	87	31	103	4.0	145
27...	125	1012	17	9.2	86	32	103	4.0	151
27...	175	962	15	--	--	--	--	--	154
27...	225	912	14	9.5	88	30	97	4.0	160
27...	275	862	13	8.9	86	30	100	4.0	160
27...	325	812	13	--	--	--	--	--	162
27...	375	762	12	9.2	87	30	96	4.0	162
27...	412	725	12	--	--	--	--	--	155

9-4210. LAKE MEAD AT HOOVER DAM, ARIZ.-NEV.--Continued

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	CARBONATE (CO3)	SULFATE (SO4)	CHLORIDE (CL)	NITRATE (NO3)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS)	HARDNESS (CA,MG)	NONCARBONATE HARDNESS	SPECIFIC CONDUCTANCE (MICROMHOS)	PH
MAY									
02...	0	304	90	1.3	702	340	217	1080	7.7
02...	0	--	90	--	--	--	--	1090	8.0
02...	0	--	90	--	--	--	--	1090	7.8
02...	0	--	90	--	--	--	--	1090	8.0
02...	0	298	89	1.3	692	336	213	1090	8.0
02...	0	--	89	--	--	--	--	1090	8.1
02...	0	291	88	2.2	687	336	208	1090	7.9
02...	0	293	89	1.7	692	334	204	1090	7.9
02...	0	--	88	--	--	--	--	1080	7.5
02...	0	292	89	1.7	688	331	204	1090	7.8
02...	0	--	88	--	--	--	--	1090	7.5
22...	0	305	92	1.5	710	341	217	1120	7.8
22...	--	--	91	--	--	--	--	1120	7.6
22...	0	303	90	1.1	703	337	213	1120	7.6
22...	0	300	92	1.5	702	339	216	1110	8.0
22...	--	--	90	--	--	--	--	1110	7.5
22...	--	--	90	--	--	--	--	1110	7.5
22...	0	300	90	1.3	700	336	212	1110	7.6
22...	0	293	89	1.9	694	336	208	1100	7.6
22...	--	--	89	--	--	--	--	1100	7.6
22...	0	292	88	2.0	695	332	199	1100	7.6
22...	--	--	88	--	--	--	--	1100	7.5
JUNE									
28...	0	303	90	.8	698	343	221	1040	7.8
28...	--	--	90	--	--	--	--	1040	7.6
28...	--	--	90	--	--	--	--	1040	7.6
28...	--	--	90	--	--	--	--	1030	7.7
28...	--	--	90	--	--	--	--	1020	7.9
28...	0	294	89	1.9	689	341	216	1020	8.2
28...	0	292	89	1.7	687	339	213	1020	7.6
28...	0	292	89	1.6	689	338	208	1020	7.9
28...	--	--	88	--	--	--	--	1020	7.6
28...	0	292	88	1.6	689	338	206	1010	7.8
28...	--	--	88	--	--	--	--	1010	7.7
JULY									
31...	0	321	94	.1	701	329	233	1130	7.8
31...	0	--	94	--	--	--	--	1100	7.8
31...	0	321	93	.0	700	329	233	1110	7.9
31...	0	308	91	.9	702	342	222	1120	7.6
31...	0	--	91	--	--	--	--	1100	7.8
31...	0	--	89	--	--	--	--	1100	7.9
31...	0	296	88	1.6	695	341	211	1100	7.6
31...	0	289	88	1.6	695	338	208	1100	7.7
31...	0	--	88	--	--	--	--	1100	7.9
31...	0	289	88	1.6	695	340	209	1100	7.5
31...	0	--	88	--	--	--	--	1100	7.6
AUG.									
27...	0	326	98	.2	723	336	234	1140	7.5
27...	0	--	97	--	--	--	--	1150	7.7
27...	0	--	97	--	--	--	--	1170	7.9
27...	0	312	92	.5	711	345	226	1140	7.4
27...	0	305	91	1.1	706	344	220	1130	7.5
27...	0	--	91	--	--	--	--	1110	7.6
27...	0	291	90	1.3	691	343	212	1100	7.4
27...	0	291	89	1.9	691	338	207	1100	8.0
27...	0	--	88	--	--	--	--	1100	7.5
27...	0	289	88	1.1	686	343	210	1100	7.3
27...	0	--	90	--	--	--	--	1100	7.2

9-4215. COLORADO RIVER BELOW HOOVER DAM, ARIZ.-NEV.
(Irrigation network station)

LOCATION (revised).--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 powerhouse.
DRAINAGE AREA.--167,800 sq mi, approximately.
RECORDS AVAILABLE.--Chemical analyses: October 1939 to September 1968.
Water temperatures: October 1941 to September 1965.
REMARKS.--Samples are taken on or about the fifth, fifteenth, and twenty-fifth of each month and composited for analysis. Records of specific conductance and temperature of individual samples available in district office at Tucson, Ariz.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	SODIUM PLUS PO-TAS-SIUM (NA+K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)
OCT.												
01-31	9365	8.9	--	86	30	--	--	103	160	0	288	90
NOV.												
01-30	9352	8.6	--	86	30	--	--	97	160	0	283	86
DEC.												
01-31	5783	8.6	--	87	28	--	--	99	158	0	286	86
JAN.												
01-31	6437	9.6	--	87	28	--	--	104	154	0	296	89
FEB.												
01-29	8615	8.8	--	86	30	--	--	100	156	0	289	88
MAR.												
01-31	13820	8.9	--	86	31	--	--	101	160	0	289	89
APR.												
01-30	14840	9.2	--	87	28	--	--	102	160	0	283	91
MAY												
01-31	13870	9.3	.00	84	32	107	5.0	--	158	0	286	92
JUNE												
01-30	12640	9.3	--	84	32	--	--	99	152	0	290	92
JULY												
01-31	12310	8.9	--	88	30	--	--	101	160	0	288	92
AUG.												
01-31	11270	9.0	.00	91	27	102	4.6	--	165	0	298	97
SEPT.												
01-30	11150	8.9	--	90	29	--	--	110	166	0	299	95
WTD. AVG. TIME	--	9.0	--	87	30	--	--	102	159	0	289	91
WTD. AVG. TONS PER DAY	10800	9.0	--	87	30	--	--	102	159	0	290	91
	--	262	--	2530	866	--	--	2860	4640	0	8430	2650

DATE	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	SODIUM AD-SORP-TION RATIO	SPECI-FIC CONDU-CTANCE (MICRO-MHOS)	PH
OCT.												
01-31	--	1.3	--	--	686	.93	17300	336	205	2.4	1050	7.9
NOV.												
01-30	--	1.4	--	--	671	.91	16900	338	207	2.3	1050	7.6
DEC.												
01-31	--	1.3	--	--	674	.92	10500	334	204	2.4	1070	7.6
JAN.												
01-31	--	2.0	--	--	692	.94	12000	334	208	2.5	1080	7.6
FEB.												
01-29	--	1.6	--	--	680	.92	15800	338	210	2.3	1090	7.7
MAR.												
01-31	--	2.2	--	--	686	.93	25600	340	209	2.4	1090	7.6
APR.												
01-30	--	2.3	--	--	682	.93	27300	334	203	2.4	1100	7.6
MAY												
01-31	.4	2.1	.14	740	696	1.01	27700	340	210	2.5	1100	7.6
JUNE												
01-30	--	2.1	--	--	683	.93	23300	342	217	2.3	1100	7.4
JULY												
01-31	--	2.1	--	--	689	.94	22900	344	213	2.4	1110	7.6
AUG.												
01-31	.4	2.0	.22	738	712	1.00	22500	340	205	2.4	1110	7.7
SEPT.												
01-30	--	2.4	--	--	716	.97	21600	345	209	2.6	1110	7.9
WTD. AVG. TIME	--	2.0	--	--	690	--	--	339	209	--	1090	7.6
WTD. AVG. TONS PER DAY	--	1.9	--	--	689	--	--	339	208	2.4	1090	7.6
	--	57	--	--	--	--	--	--	--	--	--	--

9-4241.5. COLORADO RIVER AQUEDUCT NEAR PARKER DAM, ARIZ.-CALIF.

LOCATION.--Lat 34°19'00", long 114°09'25", in NW¼SW¼ sec.28, T.3 N., R.27 E., San Bernardino meridian, 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.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	SILICA (SIO2)	CALCIUM (CA)	MAGNESIUM (MG)	SODIUM (NA)	POTASSIUM (K)	BICARBONATE (HCO3)	CARBONATE (CO3)	SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	NITRATE (NO3)
OCT.											
09...	10	79	30	102	5.0	140	0	295	87	.4	1.0
NOV.											
08...	9.0	82	29	104	4.0	143	0	295	90	.4	.6
DEC.											
06...	9.0	81	30	100	5.0	144	0	293	90	.4	.9
JAN.											
08...	10	83	31	97	5.0	146	1	292	88	.5	1.0
25...	8.0	82	30	--	--	148	--	305	95	--	--
FEB.											
07...	9.0	83	30	100	4.0	149	0	288	90	.4	1.4
MAR.											
06...	9.0	83	30	98	4.0	149	0	288	88	.3	1.3
19...	--	82	31	--	--	144	--	--	93	--	--
APR.											
08...	8.0	85	30	103	5.0	146	2	295	91	.4	1.4
MAY											
08...	--	76	30	106	5.0	117	4	302	93	.4	.8
JUNE											
09...	8.0	85	31	105	5.0	145	4	300	96	.4	1.2
JULY											
08...	8.0	80	32	105	5.0	137	1	301	94	.4	1.0
AUG.											
07...	8.0	78	31	111	5.0	126	2	306	96	.8	.4
SEPT.											
09...	9.0	76	32	105	5.0	121	2	308	94	.5	.9

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS)	HARDNESS (CA,MG)	NONCARBONATE HARDNESS	DISSOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	ALKALINITY AS CACO3	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)
OCT.											
08...	679	668	321	206	.92	40	2.5	115	955	8.1	--
NOV.											
08...	686	675	324	207	.93	41	2.5	117	1140	8.2	20
DEC.											
06...	682	671	326	208	.93	40	2.4	118	1080	8.1	16
JAN.											
08...	681	670	335	214	.93	38	2.3	121	1090	8.3	11
25...	--	706	328	206	.96	42	2.7	121	1110	7.6	9
FEB.											
07...	680	670	331	209	.92	39	2.4	122	1090	8.2	11
MAR.											
06...	676	666	331	209	.92	39	2.3	122	1080	8.2	16
19...	--	660	330	212	.90	--	--	118	1100	7.6	15
APR.											
08...	694	684	336	213	.94	40	2.4	123	1090	8.4	18
MAY											
08...	678	675	313	210	.92	42	2.6	103	1080	8.5	21
JUNE											
09...	708	699	340	214	.96	40	2.5	125	1120	8.5	21
JULY											
08...	695	687	331	217	.95	40	2.5	114	1100	8.4	27
AUG.											
07...	701	692	322	215	.95	42	2.7	107	1100	8.4	27
SEPT.											
08...	692	683	321	218	.94	41	2.5	103	1110	8.5	27

9-4280. COLORADO RIVER BELOW PARKER DAM, ARIZ.-CALIF.

LOCATION.--Lat 34°15'30", long 114°09'00", in NE¼SW¼ sec.16, T.2 N., R.27 E., San Bernardino meridian, San Bernardino County, Calif., at gaging station 3.9 miles downstream from Parker Dam, 10.4 miles upstream from Headgate Rock Dam, and 11 miles northeast of Parker, Ariz.
DRAINAGE AREA.--178,000 sq mi, approximately.
RECORDS AVAILABLE.--Chemical analyses: October 1963 to September 1968.
Water temperatures: February 1954 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C on many days during July to September; minimum, 9°C on several days during January.
EXTREMES, 1954-68.--Water temperatures: Maximum, 28°C Aug. 12, 13, 18, 1955; minimum (1954-65, 1966-68), 8°C Jan. 12, 1964.
REMARKS.--Temperature recorder inoperative Jan. 23 to Feb, 5, May 29 to June 3, July 8-15.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	SODIUM PLUS PO-TAS-SIUM (NA+K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)
OCT.												
03...	7900	9.1	--	90	31	--	--	101	172	0	291	91
31...	6940	8.9	--	83	31	--	--	103	150	0	294	92
DEC.												
18...	2090	9.3	--	87	30	--	--	106	146	0	307	95
JAN.												
02...	4730	9.0	--	84	30	--	--	105	150	0	296	93
FEB.												
01...	4870	9.4	--	82	28	--	--	98	154	0	271	89
MAR.												
01...	9240	9.1	--	86	29	--	--	103	158	0	287	90
APR.												
01...	14200	8.3	--	87	28	--	--	103	156	0	289	91
MAY												
14...	8830	8.1	.00	88	30	106	5.4	--	164	0	298	96
JUNE												
03...	12000	7.8	--	86	31	--	--	106	158	0	292	96
JULY												
01...	12800	8.2	--	86	31	--	--	107	154	0	298	96
AUG.												
01...	10300	8.7	.00	90	26	106	5.3	--	146	0	290	96
SEPT.												
03...	11600	9.1	--	83	31	--	--	115	160	0	304	98

DATE	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH
OCT.												
03...	--	.3	--	--	698	.95	14900	352	211	2.4	1100	7.5
31...	--	.1	--	--	686	.93	12900	336	213	2.4	1090	7.3
DEC.												
18...	--	.8	--	--	707	.96	3990	342	222	2.5	1120	7.1
JAN.												
02...	--	.1	--	--	691	.94	8830	334	211	2.5	1090	7.5
FEB.												
01...	--	.4	--	--	654	.89	8600	320	194	2.4	1060	7.4
MAR.												
01...	--	1.1	--	--	683	.93	17000	332	202	2.5	1090	7.7
APR.												
01...	--	1.5	--	--	685	.93	26300	334	206	2.5	1100	7.9
MAY												
14...	.4	1.4	.03	757	714	1.03	18000	344	209	2.5	1120	7.0
JUNE												
03...	--	.8	--	--	698	.95	22600	340	210	2.5	1100	7.2
JULY												
01...	--	1.0	--	--	703	.96	24300	340	214	2.5	1110	7.3
AUG.												
01...	.4	1.4	.15	728	696	.99	20200	330	210	2.5	1110	7.0
SEPT.												
03...	--	.6	--	--	720	.98	22600	335	204	2.7	1120	7.5

9-4280. COLORADO RIVER BELOW PARKER DAM, ARIZ.-CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	25	24	24	24	24	24	24	24	23	23	23	23	23	23	23	23	23	23	23	23	23	22	22	22	22	22	22	22	21	21	21	22
MINIMUM	24	24	24	23	23	23	23	23	23	23	23	23	23	23	22	22	22	22	22	22	22	22	22	22	22	21	21	21	21	20	20	22
NOVEMBER																																
MAXIMUM	21	21	21	21	21	21	21	21	21	21	21	21	20	20	20	20	20	20	20	19	19	19	19	19	19	19	19	19	18	18	--	19
MINIMUM	21	21	21	21	21	21	21	21	21	20	20	20	20	20	20	20	19	19	19	19	19	19	19	19	18	19	18	18	18	18	--	19
DECEMBER																																
MAXIMUM	18	18	17	17	17	17	16	16	16	16	15	15	14	14	14	13	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	14
MINIMUM	17	17	17	17	16	16	16	16	16	15	15	14	14	14	13	13	12	12	12	12	12	12	11	11	11	12	12	12	12	12	12	13
JANUARY																																
MAXIMUM	12	11	11	11	11	11	10	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9	--	--	--	--	--	--	--	--	--	--
MINIMUM	11	11	11	11	11	11	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	12	12	12	12	12	12	13	13	13	12	13	13	13	13	13	13	14	14	14	15	15	15	16	16	--	--	13
MINIMUM	--	--	--	--	--	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	14	14	14	15	15	15	16	--	--	13
MARCH																																
MAXIMUM	16	16	16	16	16	16	15	16	16	16	16	16	16	16	16	16	16	17	17	16	16	16	16	16	17	16	17	17	17	17	17	16
MINIMUM	16	15	15	15	16	15	14	15	15	15	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	17	17	17	17	15
APRIL																																
MAXIMUM	16	17	17	18	18	18	18	18	18	18	18	18	18	18	19	18	18	18	19	18	18	18	19	19	19	19	19	19	19	20	--	18
MINIMUM	16	16	17	17	17	17	18	18	17	17	18	18	17	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	--	17
MAY																																
MAXIMUM	20	19	19	19	19	19	21	21	21	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	23	23	23	23	--	--	--	21
MINIMUM	19	19	19	19	19	19	19	20	20	20	21	20	19	19	21	21	21	22	22	22	21	21	21	21	22	22	23	23	--	--	--	20
JUNE																																
MAXIMUM	--	--	--	22	22	22	22	22	22	22	22	23	23	22	22	23	23	23	23	23	24	23	23	23	23	23	23	23	23	24	--	22
MINIMUM	--	--	--	22	21	20	21	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	22	23	23	23	23	22	22	--	22
JULY																																
MAXIMUM	24	24	24	24	24	24	23	--	--	--	--	--	--	--	--	24	24	24	25	25	25	25	26	26	25	25	25	25	25	25	26	--
MINIMUM	23	23	23	23	23	23	23	--	--	--	--	--	--	--	--	24	24	24	24	24	24	24	24	24	24	24	24	24	25	24	25	--
AUGUST																																
MAXIMUM	26	25	25	25	25	26	26	26	26	26	26	26	26	25	25	25	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25	24
MINIMUM	25	25	25	24	24	25	24	25	25	25	26	25	25	24	24	25	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
SEPTEMBER																																
MAXIMUM	25	25	24	25	26	26	26	26	26	26	26	26	26	26	24	25	26	26	26	24	25	24	24	24	24	24	24	24	--	--	--	25
MINIMUM	24	24	24	24	25	25	26	26	26	26	26	25	25	24	24	24	25	25	25	24	24	24	24	23	24	24	24	23	--	--	--	24

9-5225. GILA GRAVITY MAIN CANAL AT IMPERIAL DAM, ARIZ.-CALIF.

LOCATION.--Lat 32°52'35", long 114°27'15", in SE¼SW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian, Yuma County, Ariz., at gaging station 0.6 mile (revised) downstream from intake at east end of Imperial Dam.
RECORDS AVAILABLE.--Water temperatures: January 1956 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 32°C July 10, 11, Aug. 8; minimum, 9°C on several days during December and January.
EXTREMES, 1956-68.--Water temperatures: Maximum, 32°C on many days during July and August of most years; minimum, 7°C Jan. 13-17, 1964.
REMARKS.--No flow Nov. 23 to Dec. 1.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	MAN-GANESE (MN)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM PLUS PO-TAS-SIUM (NA+K)	BICAR-BONATE (HCO3)	SULFATE (SO4)	CHLO-RIDE (CL)
DEC. 14...	699	13	.01	.01	102	34	179	192	380	164
SEPT. 12...	1600	9.0	--	--	89	34	136	164	335	123

DATE	FLUO-RIDE (F)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH
DEC. 14...	.5	966	1.32	1830	396	239	3.9	1480	8.1
SEPT. 12...	--	808	1.10	3490	360	226	3.1	1280	7.8

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	28	28	28	28	27	27	25	24	24	24	24	24	24	25	25	23	23	22	22	22	22	23	23	23	23	23	23	23	22	21	18	24
MINIMUM	28	27	27	27	27	25	24	23	23	23	23	24	24	24	23	23	22	22	21	22	22	22	23	22	22	22	22	22	21	18	17	23
NOVEMBER																																
MAXIMUM	18	19	19	19	19	19	19	19	19	19	19	19	19	18	18	18	18	18	18	18	18	18	--	--	--	--	--	--	--	--	--	--
MINIMUM	17	17	18	18	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	18	18	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	14	13	13	13	13	13	13	13	12	11	11	11	11	10	10	10	10	10	10	9	9	9	9	--	10	11	12	12	12	12	11
MINIMUM	--	13	13	13	13	13	13	13	12	11	11	11	11	10	10	10	10	10	10	9	9	9	9	9	--	9	10	11	12	12	12	11
JANUARY																																
MAXIMUM	12	11	10	10	10	10	10	9	9	9	10	10	10	10	10	10	10	11	11	11	11	11	11	11	11	12	12	12	12	12	12	11
MINIMUM	11	10	10	10	10	10	9	9	9	9	9	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	10
FEBRUARY																																
MAXIMUM	12	12	12	12	12	12	12	13	13	13	13	14	14	14	14	15	15	16	16	16	16	17	17	18	18	18	18	17	17	--	--	15
MINIMUM	12	12	12	12	12	12	12	12	13	13	13	13	14	13	14	14	14	14	15	16	16	16	16	17	17	17	17	17	17	--	--	14
MARCH																																
MAXIMUM	18	18	19	19	19	19	18	17	17	17	16	17	18	18	19	19	18	18	18	17	17	17	18	18	18	19	20	20	21	21	21	18
MINIMUM	17	17	18	18	19	18	17	17	17	16	16	16	17	17	18	18	18	17	17	16	16	17	17	17	18	18	19	19	19	20	20	18
APRIL																																
MAXIMUM	20	19	18	19	19	19	20	20	19	20	21	21	22	23	23	22	21	19	19	19	19	19	19	20	21	22	23	23	23	23	--	21
MINIMUM	19	18	18	18	19	18	19	19	19	19	20	20	21	21	22	21	19	19	18	18	19	18	18	19	19	21	21	21	22	22	--	20
MAY																																
MAXIMUM	24	24	26	25	25	24	24	24	24	24	25	24	23	23	23	24	25	26	27	27	27	27	26	26	26	27	28	28	29	28	28	26
MINIMUM	23	24	24	24	24	23	24	24	23	23	24	23	22	22	22	23	24	24	25	26	26	25	24	24	24	25	27	[illegible]	.8	28	27	24
JUNE																																
MAXIMUM	28	29	29	29	28	27	26	25	26	27	27	27	27	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	28	28	--	28
MINIMUM	27	28	28	28	27	25	24	24	24	24	25	26	26	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	27	26	--	27
JULY																																
MAXIMUM	28	28	29	29	29	29	29	29	30	32	32	31	31	29	29	29	29	29	30	31	31	31	31	31	31	30	30	31	31	31		30
MINIMUM	27	27	28	28	28	28	28	28	29	30	30	30	29	28	28	28	28	28	29	29	30	29	29	29	30	30	29	29	30	30	30	29
AUGUST																																
MAXIMUM	31	31	31	31	31	31	31	32	31	31	30	31	31	29	28	28	28	28	28	28	28	28	29	28	28	28	28	29	29	30	30	30
MINIMUM	30	29	30	30	30	30	30	30	30	29	29	29	29	28	27	27	27	27	27	27	27	27	28	27	27	27	27	28	28	29	29	28
SEPTEMBER																																
MAXIMUM	30	30	29	28	29	29	29	30	30	30	30	30	30	30	29	28	27	27	27	26	26	25	24	24	24	24	26	26	26	26	--	28
MINIMUM	29	29	28	28	27	28	28	29	29	29	29	29	29	29	28	27	26	26	26	26	25	24	23	23	23	24	24	25	25	24	--	27

9-5255. YUMA MAIN CANAL BELOW COLORADO RIVER SIPHON, AT YUMA, ARIZ.
(Irrigation network station)

LOCATION (revised).--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.

RECORDS AVAILABLE.--Chemical analyses: September 1926 to September 1928, October 1942 to September 1968. Water temperatures: May 1961 to September 1968.

EXTREMES, 1967-68.--Dissolved solids: Maximum, 1,010 mg/l Jan. 1-3; minimum, 803 mg/l Apr. 1-30.
Hardness: Maximum, 400 mg/l Dec. 1-31; minimum, 352 mg/l Oct. 1-31.
Specific conductance: Maximum daily, 1,680 micromhos Dec. 5; minimum daily, 1,210 micromhos Mar. 1, Apr. 3.
Water temperatures: Maximum, 30°C on several days during July and August; minimum, 8°C Dec. 16, 17, 22.

EXTREMES, 1943-68.--Dissolved solids: Maximum, 1,010 mg/l Jan. 1-3, 1968; minimum, 532 mg/l Jan. 1-10, 1953.
Hardness: Maximum, 520 mg/l July 7, 1962; minimum, 260 mg/l Jan. 1-10, 1953.
Specific conductance: Maximum daily, 1,680 micromhos Dec. 5, 1967; minimum daily, 795 micromhos Jan. 5, 1953.
Water temperatures (1967-68): Maximum, 30°C on several days during July and August 1968; minimum, 8°C Dec. 16, 17, 22, 1967.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	SODIUM PLUS PO-TAS-SIUM (NA+K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)
OCT.												
01-31	450	20	--	88	32	--	--	143	164	0	330	130
NOV.												
01-30	288	16	--	96	33	--	--	161	182	0	350	148
DEC.												
01-31	138	19	--	102	35	--	--	187	200	0	378	176
JAN.												
01-03	155	29	--	101	35	--	--	189	192	0	378	180
04-31	259	20	--	92	31	--	--	150	172	0	329	141
FEB.												
01-29	466	17	--	92	31	--	--	136	176	0	318	125
MAR.												
01-31	465	17	--	93	30	--	--	137	172	0	325	122
APR.												
01-30	481	12	--	96	29	--	--	134	172	0	323	121
MAY												
01-31	516	12	.01	92	32	137	5.2	--	172	0	323	132
JUNE												
01-30	587	14	--	89	33	--	--	135	170	0	320	126
JULY												
01-31	531	15	--	91	32	--	--	146	185	0	330	128
AUG.												
01-31	500	14	.00	90	33	138	5.2	--	180	0	333	129
SEPT.												
01-30	440	14	--	94	32	--	--	153	181	0	342	137
WTD. AVG. TIME	--	15	--	92	32	--	--	144	176	0	330	131
WTD. AVG. TONS PER DAY	425	16	--	93	32	--	--	149	177	0	334	135
	--	18	--	106	36	--	--	159	202	0	379	150

DATE	FLUO-RIDE (F)	NITRATE (NO3)	TOTAL NITRO-GEN (N)	PHOS-PHATE (PO4)	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	SODIUM AD-SORP-TION RATIO
OCT.												
01-31	--	1.0	.1	.08	--	--	825	1.12	1000	352	217	3.3
NOV.												
01-30	--	.7	.2	.34	--	--	894	1.22	695	374	225	3.6
DEC.												
01-31	--	.4	.3	.06	--	1050	996	1.43	391	400	236	4.1
JAN.												
01-03	--	.6	1.7	.10	--	--	1010	1.37	423	394	236	4.1
04-31	--	1.5	1.0	.12	--	--	851	1.16	595	358	217	3.4
FEB.												
01-29	--	4.5	7.9	.10	--	--	812	1.10	1020	356	212	3.1
MAR.												
01-31	--	1.8	.8	.10	--	--	812	1.10	1020	356	215	3.2
APR.												
01-30	--	1.5	1.3	.08	--	--	803	1.09	1040	358	217	3.1
MAY												
01-31	.5	2.4	2.3	.01	.22	870	829	1.18	1210	360	219	3.1
JUNE												
01-30	--	1.3	2.0	.67	--	--	811	1.10	1290	358	218	3.1
JULY												
01-31	--	1.6	.6	.00	--	--	836	1.14	1200	360	208	3.3
AUG.												
01-31	.5	1.3	.5	.00	.23	852	834	1.16	1150	360	212	3.2
SEPT.												
01-30	--	1.1	.4	.00	--	--	863	1.17	1030	365	216	3.5
WTD. AVG. TIME	--	1.7	1.6	.14	--	--	835	--	--	360	216	--
WTD. AVG. TONS PER DAY	--	1.6	1.4	.13	--	--	849	--	--	363	218	3.3
	--	1.9	1.8	.16	--	--	--	--	--	--	--	--

9-5255. YUMA MAIN CANAL BELOW COLORADO RIVER SIPHON, AT YUMA, ARIZ.--Continued

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	SPECIFIC COND-UCTANCE (MICRO-MHOS)	PH	COLOR
OCT.			
01-31	1300	8.1	--
NOV.			
01-30	1400	8.2	--
DEC.			
01-31	1550	8.2	--
JAN.			
01-03	1570	8.1	--
04-31	1300	8.0	--
FEB.			
01-29	1280	7.8	--
MAR.			
01-31	1270	8.0	--
APR.			
01-30	1260	8.2	--
MAY			
01-31	1310	7.9	5
JUNE			
01-30	1290	7.9	--
JULY			
01-31	1280	8.0	--
AUG.			
01-31	1290	8.0	0
SEPT.			
01-30	1320	8.0	--
TIME WTD. AVG.	1320	8.0	--

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1967 TO SEPTEMPBER 1968

DAY	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
1.....	1290	1410	1550	1610	1350	1210	1220	1320	1310	1290	1310	1340
2.....	1310	1380	1500	1650	1360	1230	1220	1300	1270	1280	1290	1360
3.....	1310	1350	1590	1460	1320	1230	1210	1300	1290	1290	1290	1350
4.....	1220	1340	1640	1320	1320	1260	1220	1310	1290	1290	1290	1330
5.....	1260	1320	1680	1320	1330	1270	1240	1300	1280	1290	1320	1290
6.....	1270	1340	1640	1330	1340	1270	1260	1310	1290	1280	1330	1290
7.....	1300	1380	1620	1330	1280	1260	1250	1310	1290	1250	1280	1290
8.....	1320	1370	1590	1320	1250	1240	1280	1300	1310	1270	1280	1290
9.....	1340	1330	1590	1290	1230	1270	1270	1300	1300	1230	1310	1320
10.....	1350	1340	1610	1300	1240	1300	1250	1270	1330	1280	1310	1300
11.....	1330	1360	1640	1280	1260	1340	1240	1340	1300	1360	1310	1320
12.....	1300	1370	1650	1280	1270	1290	1240	1370	1290	1370	1300	1310
13.....	1270	1380	1650	1280	1260	1380	1260	1390	1260	1340	1300	1300
14.....	1290	1400	1580	1290	1250	1430	1270	1310	1290	1310	1300	1320
15.....	1250	1370	1490	1320	1250	1340	--	1310	1290	1280	1250	1330
16.....	1310	1340	1450	1300	1230	1280	--	1300	1300	1280	1300	1350
17.....	1300	1340	1420	1300	1270	1260	--	1330	1300	1260	1300	1370
18.....	1310	1330	--	1280	1360	--	1260	1330	1270	1270	1260	1370
19.....	1320	--	--	1270	--	--	1280	1350	1280	1260	1290	1360
20.....	1280	--	1370	1290	--	--	1280	1370	1270	1270	--	1330
21.....	1290	--	1410	1290	--	1230	1280	1320	1220	1280	--	1330
22.....	1300	--	1420	1320	1270	1220	1280	1310	1280	1280	1290	1360
23.....	1290	--	1520	1330	1250	1240	1270	1260	1270	1260	1320	1380
24.....	1330	--	1550	1290	1260	1250	1290	1270	1270	1280	1310	1340
25.....	1270	--	1540	1260	1260	1230	1280	1300	1290	1300	1310	1320
26.....	1280	1520	1570	1270	1260	1220	1290	1300	1280	1290	1310	1310
27.....	1290	1600	1600	1300	1250	1240	1280	1270	1270	1290	1280	1310
28.....	1320	1590	1600	1320	1220	1250	--	1290	1270	1300	1270	1320
29.....	1310	1560	1580	1340	1220	1250	1330	1290	1280	1270	1290	1330
30.....	1350	1570	1550	1350	--	1250	1290	1290	1290	1290	1300	1370
31.....	1340	--	1560	1350	--	1250	--	1310	--	1270	1310	--
AVERAGE	1300	--	1560	1330	1280	1270	1260	1310	1280	1290	1300	1330

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	28	27	27	27	26	26	24	23	24	22	23	23	23	23	23	22	21	21	21	21	21	22	22	22	22	22	27	21	21	19	18	23
NOVEMBER.	17	17	18	18	18	19	19	19	18	18	18	18	18	18	18	18	18	18	--	--	--	--	--	--	--	18	17	17	16	16	--	--
DECEMBER.	16	14	13	14	12	13	12	13	12	12	11	11	10	9	9	8	8	--	--	9	9	8	9	9	9	9	11	11	12	12	11	11
JANUARY..	11	11	11	10	9	9	9	9	9	10	9	11	10	10	10	9	9	10	10	9	9	11	11	11	11	12	13	12	11	11	12	10
FEBRUARY.	12	12	12	12	12	13	13	13	14	14	13	14	14	16	14	14	14	14	--	--	--	16	16	17	17	18	17	17	17	--	--	14
MARCH....	17	19	17	17	17	18	16	16	16	14	14	14	14	15	16	15	17	--	--	--	15	16	15	16	17	18	18	18	18	19	19	16
APRIL....	19	18	18	17	18	17	17	18	18	18	19	20	21	20	--	--	--	17	17	17	18	17	18	19	19	20	20	--	22	22	--	19
MAY.....	23	22	24	22	23	29	22	22	22	22	22	22	21	21	21	22	23	22	24	26	25	25	22	22	23	23	25	26	27	26	26	23
JUNE.....	26	26	27	26	26	23	23	23	22	23	24	26	26	26	26	26	27	27	27	27	27	28	28	28	28	27	27	27	27	26	--	26
JULY.....	26	27	28	28	28	27	27	28	28	29	29	29	29	28	28	28	29	29	28	29	29	29	29	29	29	29	29	29	29	30	29	28
AUGUST...	30	30	30	29	30	30	29	29	30	29	29	29	29	27	27	27	27	27	--	--	26	26	25	26	27	27	27	27	28	29	28	28
SEPTEMBER	27	28	28	26	26	26	26	27	28	27	27	28	28	28	26	27	26	25	25	25	23	24	22	22	22	22	24	23	25	24	--	26

SALTON SEA BASIN

10-2560. WHITEWATER RIVER AT WHITE WATER, CALIF.

LOCATION.--Lat 33°56'48", long 116°38'24", in NW¼NW¼NE¼ sec.2, T.3 S., R.3 E., Riverside County, at gaging station 1.5 miles north of White Water, and 3.5 miles upstream from San Gorgonio River.
DRAINAGE AREA.--57.4 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
NOV.												
03...	22	49	12	13	4.0	161	19	31	4.0	1.0	1.5	.02
JAN.												
22...	16	48	13	14	4.0	200	0	34	4.0	.9	1.8	.00
MAR.												
04...	22	48	12	12	4.0	193	0	32	4.0	.9	1.6	.00
MAY												
06...	18	44	13	14	5.0	182	0	34	6.0	1.1	1.2	.00
SEPT.												
09...	8.0	48	13	14	5.0	196	0	37	4.0	1.0	1.7	.00

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
NOV.												
03...	225	213	172	8	.31	14	.4	163	377	8.4	20	10.0
JAN.												
22...	219	217	173	9	.30	15	.5	164	364	8.2	15	9.0
MAR.												
04...	234	209	169	11	.32	13	.4	158	384	8.2	15	9.0
MAY												
06...	191	207	163	14	.26	15	.5	149	394	8.2	20	8.3
SEPT.												
09...	219	219	173	12	.30	14	.5	161	378	8.1	26	7.2

10-2611. MOJAVE RIVER AT THE FORKS, NEAR CEDAR SPRINGS, CALIF.

LOCATION.--Lat 34°20'35", long 117°14'01", in SW¼ sec.18, T.3 N., R.3 W., San Bernardino County, 100 ft downstream from confluence of Deep Creek and West Fork Mojave River, and 12 miles south of Apple Valley.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	CALCIUM (CA)	MAGNESIUM (MG)	SODIUM (NA)	POTASSIUM (K)	BICARBONATE (HCO3)	CARBONATE (CO3)	SULFATE (SO4)	CHLORIDE (CL)	FLUORIDE (F)	NITRATE (NO3)	BORON (B)	DISSOLVED SOLIDS (RESIDUE AT 180 C)
OCT.												
05...	12	5.0	12	2.0	73	0	5.0	9.0	.3	1.5	.04	115
NOV.												
09...	19	5.0	27	2.0	112	0	23	7.0	1.5	.0	.06	160
DEC.												
13...	22	6.0	17	2.0	112	0	15	9.0	.6	.5	.04	148
JAN.												
12...	17	4.0	16	1.0	88	0	12	7.0	.7	.5	.01	114
MAR.												
12...	19	4.0	13	2.0	88	0	9.0	8.0	.4	1.2	.00	136
APR.												
02...	13	4.0	12	1.0	76	0	5.0	6.0	.5	.0	.00	118
JULY												
24...	22	4.0	38	3.0	88	6	56	10	2.4	.0	.09	212

DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS)	HARDNESS (CA,MG)	NONCARBONATE HARDNESS	DISSOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	ALKALINITY AS CACO3	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	DISSOLVED OXYGEN
OCT.											
05...	83	50	0	.16	33	.7	60	154	7.2	12	11.2
NOV.											
09...	138	68	0	.22	45	1.4	92	250	8.1	15	8.7
DEC.											
13...	127	80	0	.20	31	.8	92	236	7.8	2	12.5
JAN.											
12...	101	59	0	.16	37	.9	72	180	7.7	7	12.3
MAR.											
12...	100	64	0	.18	30	.7	72	188	7.9	13	9.4
APR.											
02...	79	49	0	.16	34	.7	62	158	7.8	11	14.9
JULY											
24...	183	71	0	.29	52	2.0	82	327	8.9	28	13.0

10-2615. MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CALIF.

LOCATION.--Lat 34°34'22", long 117°19'08", in SW¼SW¼SE¼ sec.29, T.6 N., R.4 W., San Bernardino County, at gaging station 1,000 ft upstream from bridge on county road, formerly U.S. Highway 66, 2,500 ft downstream from Atchison, Topeka and Santa Fe Railway bridge, and 3 miles northwest of Victorville.
DRAINAGE AREA.--514 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
Water temperatures: March 1962 to September 1965.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
OCT.												
05...	19	40	13	56	5.0	224	0	44	32	.6	6.5	.08
NOV.												
09...	29	40	10	52	5.0	217	0	36	29	.6	4.0	.08
DEC.												
13...	42	39	10	44	5.0	205	0	38	24	.5	4.5	.12
JAN.												
12...	39	41	9.0	45	5.0	199	0	38	22	.5	4.5	.07
FEB.												
09...	44	40	9.0	40	4.0	189	0	35	20	.5	5.5	.05
MAR.												
13...	32	42	10	42	4.0	201	0	36	24	.5	4.8	.06
APR.												
02...	28	42	11	48	5.0	211	0	38	25	.6	3.0	.11
MAY												
01...	21	44	11	44	5.0	205	0	40	28	.4	5.0	.10
JUNE												
13...	20	42	10	48	5.0	200	0	44	26	.6	3.7	.11
JULY												
24...	10	45	10	56	6.0	221	0	49	32	.7	2.0	.15

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.												
05...	365	307	153	0	.50	43	2.0	184	519	7.8	14	12.5
NOV.												
09...	310	283	141	0	.42	43	1.9	178	493	7.9	18	9.3
DEC.												
13...	287	265	138	0	.39	40	1.6	168	478	7.5	4	11.2
JAN.												
12...	275	262	139	0	.37	40	1.7	163	437	8.1	11	10.6
FEB.												
09...	276	247	137	0	.38	38	1.5	155	451	7.9	11	11.3
MAR.												
13...	298	262	146	0	.41	38	1.5	165	475	7.9	12	8.6
APR.												
02...	317	276	150	0	.43	40	1.7	173	506	8.2	19	10.6
MAY												
01...	293	278	155	0	.40	37	1.5	168	517	8.2	16	10.5
JUNE												
13...	323	277	146	0	.44	41	1.7	164	504	7.1	28	5.6
JULY												
24...	345	309	153	0	.47	43	2.0	181	543	8.1	25	9.3

10-2635. BIG ROCK CREEK NEAR VALYERMO, CALIF.

LOCATION.--Lat 34°25'15", long 117°50'19", in NW¼SE¼NE¼ sec.20, T.4 N., R.9 W., Los Angeles County, temperature recorder at gaging station 0.1 mile upstream from Punchbowl Canyon, and 1.9 miles southeast of Valyermo.
DRAINAGE AREA.--23.0 sq mi.
RECORDS AVAILABLE.--Water temperatures: January 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 21°C on many days in July and August; minimum, 4°C Jan. 27.
EXTREMES, 1962-68.--Water temperatures: Maximum, 21°C on many days in 1967 and 1968; minimum, 4 °C Jan. 27, 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	19	18	19	19	19	17	17	18	18	18	18	18	18	18	16	16	17	17	17	17	17	17	17	17	17	17	17	17	14	14	16	17
MINIMUM	13	13	13	13	12	11	11	11	12	12	13	13	12	12	11	9	9	10	11	11	11	11	10	11	11	11	11	12	11	10	11	11
NOVEMBER																																
MAXIMUM	17	16	16	16	15	16	16	15	16	14	14	15	15	16	16	14	16	15	12	12	12	13	13	13	13	14	13	12	12	12	--	14
MINIMUM	11	11	11	10	11	12	11	11	10	9	10	11	11	12	10	10	12	12	10	11	11	11	11	10	11	11	10	10	9	10	--	10
DECEMBER																																
MAXIMUM	12	12	12	12	13	12	13	12	11	12	13	11	8	8	9	11	10	9	9	9	8	9	11	11	11	11	11	11	11	10	9	10
MINIMUM	10	9	9	9	9	9	9	9	9	9	9	8	6	6	6	8	8	8	8	7	6	6	7	8	8	9	8	8	8	7	7	7
JANUARY																																
MAXIMUM	11	9	9	9	9	9	8	8	9	10	9	8	8	9	10	10	10	9	10	11	11	9	11	11	10	9	8	9	9	9	10	9
MINIMUM	7	7	6	6	6	6	6	6	7	7	7	6	6	6	7	7	7	6	6	7	7	7	7	7	9	7	4	6	6	6	7	6
FEBRUARY																																
MAXIMUM	9	12	11	10	11	11	11	10	9	9	9	10	9	11	9	10	11	11	11	12	13	11	12	12	12	11	12	10	11	--	--	10
MINIMUM	7	8	7	7	7	7	7	7	7	6	6	6	7	6	6	8	8	7	7	8	7	7	8	7	7	8	8	7	6	--	--	7
MARCH																																
MAXIMUM	11	11	12	12	12	11	9	11	10	11	11	9	10	12	11	12	11	9	11	11	12	12	12	13	13	13	13	14	14	14	13	11
MINIMUM	6	7	7	7	7	7	7	7	7	7	6	7	6	6	6	7	6	6	6	6	6	7	6	6	8	7	7	7	7	8	8	6
APRIL																																
MAXIMUM	12	13	13	14	13	13	14	14	14	14	14	15	14	16	14	13	13	13	14	14	14	14	14	16	16	16	16	16	16	16	--	14
MINIMUM	7	7	7	7	8	7	7	7	7	7	8	8	7	8	8	8	8	7	7	7	7	7	7	8	8	9	9	9	8	9	--	7
MAY																																
MAXIMUM	16	12	15	17	16	16	15	13	16	17	16	13	15	16	17	17	18	18	18	18	18	17	17	17	18	18	19	19	19	18	18	16
MINIMUM	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	9	9	10	11	11	9	9	9	9	10	11	11	11	11	11	11	9
JUNE																																
MAXIMUM	19	19	19	18	17	17	17	17	17	18	18	18	19	19	19	19	18	19	19	19	19	19	19	19	20	20	20	19	19	19	--	18
MINIMUM	11	11	11	12	11	11	11	10	11	11	11	10	11	11	11	11	11	12	11	11	11	11	12	12	12	13	13	12	11	11	--	11
JULY																																
MAXIMUM	12	19	19	20	20	17	19	17	19	20	21	21	20	20	21	21	21	21	20	19	21	20	19	19	20	20	17	17	18	21	21	19
MINIMUM	12	12	11	12	13	13	13	13	13	12	12	13	13	12	13	13	12	12	13	13	13	13	13	14	13	13	14	14	14	14	14	12
AUGUST																																
MAXIMUM	21	21	21	21	21	21	19	20	21	20	20	19	18	19	19	17	17	17	18	18	17	17	17	17	17	17	17	17	17	17	18	18
MINIMUM	14	13	13	13	14	14	15	14	13	13	13	13	13	12	11	14	14	14	14	14	14	13	13	14	14	14	14	14	14	14	14	13
SEPTEMBER																																
MAXIMUM	18	18	18	18	18	18	18	18	18	18	18	18	18	17	17	17	17	19	18	16	16	16	17	17	18	18	18	17	17	17	--	17
MINIMUM	15	14	14	14	15	15	15	15	15	15	14	14	14	14	14	14	14	12	12	11	11	11	11	11	12	12	12	12	12	12	--	13

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

10-2930. EAST WALKER RIVER NEAR BRIDGEPORT, CALIF. (LAT 38°19'40", LONG 119°12'50")

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	CHLO-RIDE (CL)	BORON (B)
NOV.								
15...	17	--	--	11	105	0	3.0	.02
JAN.								
03...	69	29	--	9.2	118	0	.5	--
MAR.								
06...	52	24	--	14	105	0	1.6	--
MAY								
08...	166	24	4.4	14	116	0	3.1	--
JULY								
16...	245	29	--	15	107	9	2.7	--
SEPT.								
18...	151	32	--	16	135	0	3.0	--

DATE	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
NOV.							
15...	77	0	86	197	8.0	8	9.3
JAN.							
03...	90	0	97	230	8.1	0	9.4
MAR.							
06...	77	0	86	210	8.1	6	9.7
MAY							
08...	78	0	95	222	8.2	14	9.5
JULY							
16...	88	0	103	233	9.0	--	7.1
SEPT.							
18...	101	0	111	247	8.1	16	7.2

MISCELLANEOUS ANALYSES OF STREAMS IN CARSON RIVER BASIN

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	CHLO-RIDE (CL)	BORON (B)
10-3082. EAST FORK CARSON RIVER NEAR MARKLEEVILLE, CALIF. (LAT 38°42'50", LONG 119°45'50")								
NOV. 15...	88	--	--	8.3	62	0	3.0	.05
JAN. 03...	100	14	--	7.8	68	0	2.2	--
MAR. 06...	251	12	--	7.5	57	0	3.8	--
MAY 08...	761	7.6	1.4	3.8	34	0	2.3	--
JULY 16...	148	11	--	6.0	52	0	1.9	--
SEPT. 18...	48	14	--	8.9	69	0	3.1	--

DATE	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
NOV. 15...	44	0	51	129	7.9	6	10.3
JAN. 03...	57	1	56	148	7.9	0	9.4
MAR. 06...	42	0	47	126	7.9	1	10.3
MAY 08...	25	0	28	77	--	9	10.1
JULY 16...	36	0	43	97	7.8	--	9.0
SEPT. 18...	55	0	57	137	8.0	24	9.0

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	CHLO-RIDE (CL)	BORON (B)
10-3100. WEST FORK CARSON RIVER AT WOODFORDS, CALIF. (LAT 38°46'10", LONG 119°49'55")								
NOV. 15...	46	--	--	3.7	42	0	1.3	.05
JAN. 03...	28	8.1	--	3.4	43	0	--	--
MAR. 06...	102	7.4	--	2.5	35	0	1.1	--
MAY 08...	250	5.7	1.2	2.1	26	0	.1	--
JULY 16...	55	8.5	--	3.0	40	0	.8	--
SEPT. 18...	12	9.1	--	4.3	47	0	.9	--

DATE	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
NOV. 15...	29	0	34	81	7.6	6	10.2
JAN. 03...	30	0	35	80	7.8	0	8.8
MAR. 06...	26	0	29	68	7.4	1	10.3
MAY 08...	19	0	21	50	7.5	8	10.6
JULY 16...	28	0	33	72	7.4	--	8.9
SEPT. 18...	32	0	39	84	7.7	12	9.3

10-2783. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	SILICA (SIO2)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
OCT. 17...	495	19	21	4.0	30	4.0	28	12	.4
NOV. 14...	464	19	22	5.0	31	4.0	28	13	.5
DEC. 19...	405	18	24	6.0	31	4.0	33	14	.4
JAN. 16...	409	19	24	6.0	34	4.0	28	14	.5
FEB. 20...	439	21	25	6.0	36	4.0	30	16	.7
MAR. 19...	442	23	25	6.0	43	4.0	36	16	.6
APR. 22...	485	23	27	7.0	41	4.0	30	17	.6
MAY 21...	495	23	25	6.0	44	4.0	30	17	.6
JUNE 18...	497	22	26	5.0	36	4.0	26	15	.6
JULY 16...	492	22	24	5.0	33	4.0	26	14	.6
AUG. 20...	502	22	24	5.0	31	4.0	24	13	.5
SEPT. 17...	502	22	23	6.0	33	4.0	22	14	.6

DATE	NITRATE (NO3)	BORON (B)	HARD-NESS (CA,MG)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT. 17...	.5	.48	69	47	1.6	291	8.2	18	8.4
NOV. 14...	.4	.40	75	46	1.6	322	8.3	15	9.6
DEC. 19...	.2	.39	85	43	1.5	335	8.5	9	11.2
JAN. 16...	.4	.40	85	45	1.6	339	8.2	5	12.0
FEB. 20...	.5	.49	87	46	1.7	348	8.4	7	11.6
MAR. 19...	.5	.79	87	50	2.0	368	8.4	10	10.8
APR. 22...	.3	.52	91	47	1.8	372	8.2	13	9.8
MAY 21...	.4	.45	87	51	2.1	363	8.1	--	10.1
JUNE 18...	.5	.51	85	46	1.7	345	8.2	19	8.4
JULY 16...	.4	.40	80	46	1.6	329	8.1	22	8.0
AUG. 20...	.5	.50	80	44	1.5	320	8.4	22	8.4
SEPT. 17...	1.1	.45	82	45	1.6	313	8.3	21	8.2

10-3435. SAGEHEN CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°25'50", long 120°14'10", in NE¼NE¼ sec.7, T.18 N., R.16 E., Nevada County, at gaging station on left bank, 0.1 mile upstream and 0.1 mile downstream from two unnamed right bank tributaries, 2.2 miles upstream from bridge on State Highway 89, and 7.5 miles north of Truckee.
DRAINAGE AREA.--10.8 sq mi.
RECORDS AVAILABLE.--Chemical analyses: May to September 1968.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
MAY												
16...	18	8.6	.03	7.0	2.3	3.0	.9	38	0	1.0	.1	.0
23...	16	--	--	--	--	--	--	--	--	--	--	--
30...	13	--	--	--	--	--	--	--	--	--	--	--
JUNE												
07...	13	--	--	--	--	--	--	--	--	--	--	--
13...	8.4	--	--	--	--	--	--	--	--	--	--	--
20...	6.0	--	--	--	--	--	--	--	--	--	--	--
27...	4.9	27	.05	11	3.8	4.8	1.6	67	0	.0	.4	.0
JULY												
04...	4.2	--	--	--	--	--	--	--	--	--	--	--
11...	3.3	--	--	--	--	--	--	--	--	--	--	--
19...	3.1	--	--	--	--	--	--	--	--	--	--	--
25...	2.9	--	--	--	--	--	--	--	--	--	--	--
AUG.												
06...	3.0	--	--	--	--	--	--	--	--	--	--	--
09...	2.3	--	--	--	--	--	--	--	--	--	--	--
17...	3.0	--	--	--	--	--	--	--	--	--	--	--
21...	3.0	--	--	--	--	--	--	--	--	--	--	--
21...	3.2	29	--	13	4.7	5.8	2.3	80	0	1.0	.4	--
29...	2.3	--	--	--	--	--	--	--	--	--	--	--
SEPT.												
05...	2.4	--	--	--	--	--	--	--	--	--	--	--
11...	2.4	--	--	--	--	--	--	--	--	--	--	--
19...	2.4	--	--	--	--	--	--	--	--	--	--	--
28...	2.3	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)
MAY											
16...	.1	.00	42	27	0	19	.3	31	64	7.2	10
23...	--	--	--	--	--	--	--	--	69	--	5
30...	--	--	--	--	--	--	--	--	73	--	5
JUNE											
07...	--	--	--	--	--	--	--	--	79	--	9
13...	--	--	--	--	--	--	--	--	86	--	10
20...	--	--	--	--	--	--	--	--	105	--	10
27...	1.0	.00	83	43	0	19	.3	55	108	7.9	12
JULY											
04...	--	--	--	--	--	--	--	--	114	--	15
11...	--	--	--	--	--	--	--	--	119	--	11
19...	--	--	--	--	--	--	--	--	130	--	9
25...	--	--	--	--	--	--	--	--	134	--	8
AUG.											
06...	--	--	--	--	--	--	--	--	128	--	17
09...	--	--	--	--	--	--	--	--	135	--	15
17...	--	--	--	--	--	--	--	--	131	--	--
21...	--	--	--	--	--	--	--	--	129	--	13
21...	--	--	95	52	0	19	.4	66	120	7.7	12
29...	--	--	--	--	--	--	--	--	132	--	16
SEPT.											
05...	--	--	--	--	--	--	--	--	138	--	11
11...	--	--	--	--	--	--	--	--	137	--	14
19...	--	--	--	--	--	--	--	--	142	--	10
28...	--	--	--	--	--	--	--	--	138	--	12

10-3435. SAGEHEN CREEK NEAR TRUCKEE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 20, 1968	0710	4	18	3	.15	--	--	--	--	--	--	--	--	--	--	--	
MAY 27.....	0940	9	14	5	.19	--	--	--	--	--	--	--	--	--	--	--	
JUN 3.....	0920	9	11	5	.15	--	--	--	--	--	--	--	--	--	--	--	
JUN 10.....	0835	9	10	3	.08	--	--	--	--	--	--	--	--	--	--	--	
JUN 17.....	0945	12	6.0	4	.06	--	--	--	--	--	--	--	--	--	--	--	
JUN 24.....	0920	10	4.6	2	.02	--	--	--	--	--	--	--	--	--	--	--	
JUL 1.....	1000	11	4.4	1	.01	--	--	--	--	--	--	--	--	--	--	--	
JUL 7.....	1000	13	3.9	3	.03	--	--	--	--	--	--	--	--	--	--	--	
JUL 16.....	0710	10	3.2	2	.02	--	--	--	--	--	--	--	--	--	--	--	
JUL 24.....	0745	8	2.7	1	.01	--	--	--	--	--	--	--	--	--	--	--	
JUL 29.....	1555	19	2.3	1	.01	--	--	--	--	--	--	--	--	--	--	--	
AUG 6.....	1520	19	2.3	10	.06	--	--	--	--	--	--	--	--	--	--	--	
AUG 12.....	1315	16	2.3	2	.01	--	--	--	--	--	--	--	--	--	--	--	
AUG 19.....	1355	11	6.7	26	.47	--	--	--	--	--	--	--	--	--	--	--	
AUG 26.....	1720	14	2.3	3	.02	--	--	--	--	--	--	--	--	--	--	--	
AUG 29.....	--	16	2.4	2	.01	--	--	--	--	--	--	--	--	--	--	--	
SEP 9.....	1440	14	2.3	4	.02	--	--	--	--	--	--	--	--	--	--	--	
SEP 16.....	1745	11	2.3	1	.01	--	--	--	--	--	--	--	--	--	--	--	
SEP 23.....	1600	11	2.3	1	.01	--	--	--	--	--	--	--	--	--	--	--	
SEP 30.....	1550	10	2.4	9	.06	--	--	--	--	--	--	--	--	--	--	--	

10-3459. 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).
RECORDS AVAILABLE.--Chemical analyses: January 1964 to September 1968.
Water temperatures: January 1964 to September 1968.
EXTREMES, 1967-68.--Dissolved solids: Maximum, 70 mg/l Nov. 1-30, Jan. 9-31; minimum, 47 mg/l Oct. 1-31.
Hardness: Maximum, 38 mg/l Dec. 7-13, Jan. 9 to Feb. 19; minimum, 26 mg/l May 1-31.
Specific conductance: Maximum daily, 123 micromhos Feb. 6; minimum daily, 60 micromhos May 28

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
01-31	652	8.0	2.4	3.9	1.5	42	0	3.0	.8	1.7	.00
NOV.											
01-30	486	9.6	3.0	5.0	1.8	55	0	3.0	1.2	2.1	.00
DEC.											
01-06	406	9.7	2.8	5.8	1.6	52	0	3.0	1.8	1.4	.00
07-13	420	10	3.0	6.5	1.7	56	0	3.0	1.8	1.6	.00
14-31	604	9.9	2.7	6.0	1.7	54	0	3.0	1.2	1.5	.00
JAN.											
01-08	495	8.7	2.1	3.9	1.1	42	0	2.0	1.4	1.4	.04
09-31	422	10	3.2	6.1	1.6	55	0	5.0	2.0	.9	.05
FEB.											
01-19	437	9.8	3.2	6.9	1.6	51	0	4.0	4.9	.1	.00
20-29	1470	7.3	2.4	3.7	1.2	36	0	3.0	2.7	.3	.04
MAR.											
01-11	968	7.8	2.5	4.3	1.3	38	0	3.0	2.7	.3	.04
12-31	634	8.9	2.9	5.2	1.4	46	0	.5	--	--	.05
APR.											
01-31	623	8.7	2.6	4.4	1.2	40	0	5.0	1.8	1.6	.00
MAY											
01-31	849	7.0	2.0	3.3	.9	34	0	3.0	1.5	1.4	.00
JUNE											
01-31	596	7.6	2.2	3.7	1.1	38	0	3.0	1.2	1.7	.04
JULY											
01-31	568	9.3	2.6	5.8	1.6	50	0	4.0	2.2	1.3	.04
AUG.											
01-31	535	8.8	2.7	5.6	1.6	50	0	4.0	2.0	1.1	.05
SEPT.											
01-30	513	8.4	2.7	5.2	1.5	46	0	4.0	1.8	1.1	.04
ANALYSES OF ADDITIONAL SAMPLES											
DEC.											
20...	554	9.6	2.7	5.7	1.9	52	0	3.0	1.2	1.8	.04
MAR.											
15...	559	9.7	3.1	5.5	1.5	50	0	4.0	4.4	1.1	.30
APR.											
15...	581	8.7	2.6	4.1	1.1	40	0	5.0	1.6	.1	.00
MAY											
15...	745	7.4	2.2	3.2	1.0	36	0	3.0	1.2	.8	.00
JUNE											
15...	534	7.5	2.2	3.6	1.1	38	0	3.0	1.2	1.3	.04
JULY											
15...	574	9.1	2.7	5.6	1.7	49	0	4.0	2.1	1.2	.04
AUG.											
15...	523	8.3	2.7	5.5	1.6	48	0	4.0	1.8	1.1	.03
SEPT.											
15...	524	8.2	2.6	4.8	1.5	45	0	3.0	2.0	.9	.04

10-3459. TRUCKEE RIVER AT FLORISTON, CALIF.--Continued

EXTREMES, 1967-68.--Continued
Water temperatures: Maximum, 18°C Aug. 12; minimum, freezing point on several days in December.
EXTREMES, 1964-68.--Dissolved solids: Maximum, 85 mg/l Dec. 1-21, 1964; minimum, 45 mg/l Dec. 22-31, 1964.
Hardness: Maximum, 43 mg/l Mar. 1-31, 1964; minimum, 18 mg/l Dec. 22-31, 1964.
Specific conductance (1964-66, 1967-68): Maximum daily, 141 micromhos Feb. 3, 1964; minimum daily, 39 micromhos Dec. 23, 1964.
Water temperatures: Maximum, 20°C July 24, 1964; minimum, freezing point on several days during winter months.
REMARKS.--Records of daily discharge given for station 10-3460. Truckee River at Farad, Calif.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C)	HARDNESS (CA,MG)	NONCARBONATE HARDNESS	DISSOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	ALKALINITY AS CACO3	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)
OCT.										
01-31	47	30	0	.08	21	.3	34	83	7.0	--
NOV.										
01-30	70	36	0	.10	22	.4	45	103	7.1	--
DEC.										
01-06	65	36	0	.09	25	.4	43	99	7.7	--
07-13	66	38	0	.09	26	.5	46	106	7.8	--
14-31	63	36	0	.09	26	.4	44	100	7.7	--
JAN.										
01-08	55	30	0	.08	21	.3	34	74	7.6	--
09-31	70	38	0	.10	25	.4	45	101	7.6	--
FEB.										
01-19	69	38	0	.09	28	.5	42	106	7.7	--
20-29	60	28	0	.08	21	.3	30	75	7.5	--
MAR.										
01-11	62	30	0	.08	23	.4	31	81	6.4	--
12-31	68	34	0	.09	24	.4	38	94	7.6	--
APR.										
01-31	62	32	0	.09	22	.3	33	83	7.7	--
MAY										
01-31	55	26	0	.07	21	.3	28	68	7.2	--
JUNE										
01-31	57	28	0	.08	21	.3	31	74	7.0	--
JULY										
01-31	68	34	0	.09	26	.4	41	94	7.2	--
AUG.										
01-31	64	33	0	.09	26	.4	41	92	7.8	--
SEPT.										
01-30	64	32	0	.09	25	.4	38	91	7.2	--
ANALYSES OF ADDITIONAL SAMPLES										
DEC.										
20...	66	35	0	.09	25	.4	43	99	7.1	--
MAR.										
15...	--	37	0	.11	24	.4	41	102	7.4	5
APR.										
15...	64	32	0	.09	21	.3	33	81	7.4	5
MAY										
15...	53	28	0	.07	19	.3	30	70	7.2	--
JUNE										
15...	50	28	0	.07	22	.3	31	73	7.1	--
JULY										
15...	72	34	0	.10	25	.4	40	92	7.2	16
AUG.										
15...	62	32	0	.08	26	.4	39	89	7.2	--
SEPT.										
15...	60	31	0	.08	24	.4	37	84	7.2	--

10-3459. TRUCKEE RIVER AT FLORISTON, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
1.....	73	94	93	--	104	77	82	69	72	98	93	90
2.....	81	93	98	--	103	81	83	69	63	94	95	90
3.....	83	93	103	--	106	81	87	69	61	93	92	90
4.....	81	105	98	--	109	81	87	70	64	93	92	90
5.....	82	106	96	--	114	81	86	70	64	93	93	86
6.....	82	105	98	--	123	81	88	70	74	94	94	85
7.....	73	104	126	--	103	81	88	66	72	93	95	85
8.....	73	100	103	--	107	82	87	70	73	94	94	85
9.....	73	102	104	--	115	83	87	66	75	92	94	87
10.....	75	97	103	--	116	83	84	65	74	93	97	89
11.....	76	99	103	--	113	82	80	65	74	92	94	86
12.....	73	97	104	--	109	101	79	70	70	93	95	86
13.....	73	98	106	--	113	91	82	70	73	95	94	86
14.....	73	99	98	--	112	92	83	74	74	93	92	87
15.....	73	99	98	--	116	101	80	70	73	93	91	88
16.....	73	98	97	--	113	95	78	70	74	93	91	86
17.....	74	97	98	--	115	93	82	70	74	93	96	86
18.....	74	97	99	--	109	95	85	63	73	94	91	86
19.....	74	97	98	--	109	95	85	63	74	94	93	85
20.....	75	97	100	--	72	95	84	65	75	93	93	85
21.....	74	106	101	--	77	97	82	63	77	95	91	85
22.....	74	100	100	--	78	98	87	66	76	121	91	85
23.....	74	98	100	--	77	98	88	69	77	93	92	85
24.....	75	87	101	--	77	96	83	64	78	95	94	85
25.....	73	93	98	--	77	97	84	64	80	102	93	85
26.....	76	93	99	--	77	97	85	64	84	102	94	86
27.....	81	93	99	--	77	96	82	65	74	--	92	85
28.....	92	92	101	--	77	96	82	60	83	--	89	86
29.....	93	92	101	--	77	94	76	61	84	--	93	85
30.....	93	92	100	--	--	92	71	63	84	--	90	85
31.....	93	--	100	--	--	86	--	64	--	--	90	--
AVERAGE	77	97	100	--	99	90	83	66	74	95	92	86

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER..	10	12	12	10	11	11	11	9	9	11	13	11	12	13	10	10	10	10	10	10	11	11	10	10	11	9	8	10	9	11	10	10
NOVEMBER.	9	8	10	9	8	9	8	9	8	8	7	7	7	7	6	5	6	6	6	6	4	4	4	3	3	2	2	2	2	2	--	6
DECEMBER.	2	0	2	2	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3	3	2	3	2	1
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY.	1	4	2	2	1	2	3	3	2	2	3	3	2	1	2	2	4	3	2	3	4	2	3	3	2	4	4	2	2	--	--	2
MARCH....	3	6	6	6	3	3	3	4	4	3	2	6	2	2	6	2	2	4	2	2	4	5	5	7	5	5	6	7	8	7	5	4
APRIL....	6	6	6	6	5	8	6	6	6	7	7	6	5	6	6	4	3	4	7	6	5	5	6	6	6	6	4	6	6	7	--	6
MAY.....	7	8	8	8	8	8	8	8	8	8	7	7	6	6	8	8	9	8	6	9	10	11	5	11	10	10	8	9	9	9	9	8
JUNE.....	10	10	11	10	10	10	5	10	9	10	10	11	10	13	13	13	13	14	13	13	13	13	13	13	13	14	13	14	13	15	--	12
JULY.....	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15	16	17	11	14	14	15	16	--	--	--	--	--	15
AUGUST...	16	16	17	17	14	16	16	16	16	16	16	18	16	14	13	14	13	13	13	13	13	12	13	13	13	13	13	16	16	16	16	15
SEPTEMBER	14	17	14	14	14	14	14	14	14	14	13	13	13	15	15	15	15	15	12	12	12	12	12	12	12	12	12	12	14	14	--	14

10-3460. TRUCKEE RIVER AT FARAD, CALIF.

LOCATION.--Lat 39°25'41", long 120°01'59", in NE¼ sec.12, T.18 N., R.17 E., at gaging station on left bank, 0.5 mile upstream from Mystic Canyon, 0.7 mile downstream from Farad powerplant, 2.5 miles north of Floriston, 3.4 miles downstream from Bronco Creek, and 3.5 miles upstream from California-Nevada State line.
DRAINAGE AREA.--932 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1961, November 1967 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)	PHOS-PHATE (PO4)
NOV.												
14...	424	9.2	3.2	5.0	1.7	54	0	4.9	.7	.3	.00	.08
DEC.												
06...	390	9.2	3.2	5.4	1.8	49	0	4.8	2.4	.0	.12	--
JAN.												
02...	532	10	3.2	5.1	1.8	55	0	.5	2.2	1.4	.00	--
FEB.												
07...	451	10	3.4	5.0	1.2	54	0	2.3	3.4	.0	.06	--
MAR.												
05...	932	8.3	2.8	3.9	1.0	39	0	8.4	2.8	.5	.08	.01
APR.												
03...	914	8.4	4.9	3.6	1.0	45	0	2.3	1.8	.3	.06	--
MAY												
08...	944	7.2	2.2	4.2	1.1	36	0	1.3	2.3	.1	.04	--
JUNE												
12...	593	7.4	2.1	4.0	.9	39	0	3.8	1.7	.1	.09	.07
JULY												
10...	587	9.8	2.8	6.0	--	53	0	--	2.3	--	--	--
AUG.												
07...	523	9.0	3.0	6.3	1.4	52	0	2.6	2.0	.1	.04	--
SEPT.												
04...	548	9.0	2.8	4.8	1.3	49	0	1.6	1.5	.1	.04	--

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
NOV.											
14...	70	36	0	.10	22	.4	44	100	7.4	8	9.7
DEC.											
06...	79	36	0	.11	23	.4	40	100	7.5	0	12.0
JAN.											
02...	65	38	0	.09	22	.4	45	106	7.6	2	10.4
FEB.											
07...	78	39	0	.11	21	.3	44	108	7.9	3	10.7
MAR.											
05...	76	32	0	.10	20	.3	32	83	7.6	6	9.8
APR.											
03...	63	31	0	.09	16	.2	37	88	7.9	4	11.7
MAY											
08...	46	27	0	.06	24	.4	30	75	7.7	7	9.4
JUNE											
12...	50	27	0	.07	24	.3	32	75	7.8	11	8.9
JULY											
10...	--	36	0	--	27	.4	43	94	7.4	14	8.0
AUG.											
07...	74	35	0	.10	27	.5	43	97	7.9	16	9.1
SEPT.											
04...	49	34	0	.07	23	.4	40	90	7.7	16	8.9

MISCELLANEOUS ANALYSES OF STREAMS IN PYRAMID AND WINNEMUCCA LAKES BASIN

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

10-3370. LAKE TAHOE AT TAHOE CITY, CALIF. (LAT 39°10'04", LONG 120°08'23")

DATE	CALCIUM (CA)	MAGNESIUM (MG)	SODIUM (NA)	BICARBONATE (HCO3)	CARBONATE (CO3)	CHLORIDE (CL)	BORON (B)
NOV. 14...	--	--	6.4	51	0	2.4	.03
JAN. 02...	8.7	--	5.1	52	0	1.1	--
MAR. 05...	9.2	--	5.2	52	0	1.1	--
MAY 08...	9.5	1.6	5.4	52	0	2.3	--
JULY 16...	9.8	--	6.4	53	0	1.9	--
SEPT. 04...	10	--	6.3	44	0	1.8	--

DATE	HARDNESS (CA,MG)	NONCARBONATE HARDNESS	ALKALINITY AS CACO3	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	DISSOLVED OXYGEN
NOV. 14...	31	0	42	95	7.9	9	9.0
JAN. 02...	32	0	43	96	7.8	0	10.5
MAR. 05...	32	0	43	96	8.0	7	9.4
MAY 08...	30	0	43	97	8.0	7	9.3
JULY 16...	33	0	43	94	7.8	--	7.9
SEPT. 04...	34	0	36	122	7.7	16	8.4

10-3565. SUSAN RIVER AT SUSANVILLE, CALIF.

LOCATION.--Lat 40°25'05", 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.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
16...	10	--	--	6.0	--	104	0	--	1.6	--	.00
NOV.											
06...	11	--	--	5.8	--	107	0	--	2.0	--	.00
DEC.											
14...	9.5	--	--	7.3	--	111	0	--	2.2	--	.04
JAN.											
04...	10	--	--	5.2	--	105	0	--	.8	--	.01
FEB.											
08...	38	--	--	4.0	--	86	0	--	1.6	--	.01
MAR.											
08...	125	--	--	3.4	--	57	0	--	.0	--	.01
APR.											
03...	156	--	--	2.8	--	56	0	--	.0	--	.00
MAY											
07...	88	9.2	4.1	3.7	1.0	56	0	1.2	1.4	.1	.01
JUNE											
10...	99	--	--	2.3	--	42	0	--	.8	--	.00
JULY											
04...	79	--	--	1.8	--	42	0	--	.7	--	.00
AUG.											
08...	2.0	--	--	6.4	--	108	2	--	1.6	--	.00
SEPT.											
05...	2.3	17	10	6.9	2.5	119	0	.0	1.4	.0	.06

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
16...	--	72	0	--	15	.3	85	169	8.1	8	9.8
NOV.											
06...	--	75	0	--	14	.3	88	171	8.2	8	10.5
DEC.											
14...	--	77	0	--	17	.4	91	186	8.2	0	12.1
JAN.											
04...	--	74	0	--	13	.3	86	171	8.2	2	12.1
FEB.											
08...	--	63	0	--	12	.2	71	150	7.8	4	12.1
MAR.											
08...	--	41	0	--	15	.2	47	98	8.0	2	11.7
APR.											
03...	--	39	0	--	14	.2	46	94	7.9	4	11.5
MAY											
07...	68	40	0	.09	16	.3	46	94	8.0	12	9.2
JUNE											
10...	--	31	0	--	14	.2	34	76	7.8	13	9.2
JULY											
04...	--	30	0	--	12	.1	34	69	8.0	24	7.4
AUG.											
08...	--	80	0	--	15	.3	92	181	8.4	24	8.3
SEPT.											
05...	131	86	0	.18	15	.3	98	193	8.2	22	8.8

SANTA MARGARITA RIVER BASIN

11-0445. SANTA MARGARITA RIVER NEAR FALLBROOK, CALIF.

LOCATION.--Lat 33°23'54", long 117°15'44", in NE¼SE¼NE¼ sec.14, T.9 S., R.4 W., San Diego County, at gaging station 180 ft upstream from De Luz Road, 1.3 miles northwest of Fallbrook, and 1.9 miles downstream from Sandia Canyon.
DRAINAGE AREA.--644 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
NOV.												
01...	1.4	100	35	132	4.0	364	0	157	158	.5	.6	.20
JAN.												
25...	4.0	104	36	130	3.0	332	0	181	165	.5	.6	.14
MAR.												
07...	3.7	102	35	122	3.0	340	0	160	160	.5	.6	.13
MAY												
09...	1.8	101	36	121	3.0	348	0	154	154	--	40	.20
SEPT.												
07...	1.3	87	28	114	3.0	310	0	122	147	.6	.0	.16

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC CONDUCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
NOV.												
01...	805	765	394	95	1.09	42	2.9	299	1290	8.2	14	9.0
JAN.												
25...	824	783	408	136	1.12	41	2.8	272	1310	8.2	10	10.0
MAR.												
07...	816	749	399	120	1.11	40	2.7	279	1300	8.2	14	9.6
MAY												
09...	782	780	400	115	1.06	39	2.6	285	1330	8.2	17	8.2
SEPT.												
07...	675	653	332	78	.92	42	2.7	254	1120	8.0	20	6.6

11-0460. SANTA MARGARITA RIVER AT YSIDORA, CALIF.

LOCATION.--Lat 33°14'38", long 117°22'56", in NE¼SE¼SE¼ sec.3, T.11 S., R.5 W., at gaging station on right bank, 1 mile downstream from Ysidora, and about 2.5 miles upstream from mouth.
DRAINAGE AREA.--739 sq mi.
RECORDS AVAILABLE.--Sediment records: October 1967 to September 1968.
REMARKS.--No flow during entire water year.

11-0465. SAN JUAN CREEK NEAR SAN JUAN CAPISTRANO, CALIF.

LOCATION.--Lat 33°31'08", long 117°37'27", in NE¼NE¼SE¼ sec.32, T.7 S., R.7 W., Orange County, at gaging station on right pier of bridge on State Highway 74, and 2.5 miles northeast of San Juan Capistrano.
DRAINAGE AREA.--106 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1966 to September 1968 (discontinued).
Sediment records: October 1966 to September 1968 (discontinued).
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 2,350 mg/l Mar. 8; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 1,270 tons Mar. 8; minimum daily, 0 ton on many days.
EXTREMES, 1966-68.--Sediment concentrations: Maximum daily, 10,600 mg/l Dec. 6, 1966; minimum daily, no flow on many days each year.
Sediment loads: Maximum daily, 110,000 tons Dec. 6, 1966; minimum daily, 0 ton on many days each year.
REMARKS.--No flow May 30 to Sept 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	16	16	13	14	13	--	18	--	17	--	15	--	--
DECEMBER.	9	9	11	--	--	--	11	--	--	--	--	--	--	--	7	--	--	12	12	7	6	--	--	16	--	--	--	--	--	--	14	--
JANUARY..	--	14	--	--	--	--	--	6	--	--	--	--	--	--	8	--	--	--	--	--	--	7	--	--	--	--	--	--	14	--	--	--
FEBRUARY.	19	--	--	--	9	--	--	--	--	--	--	12	--	--	--	--	--	--	12	--	--	--	--	--	21	--	--	--	--	--	--	--
MARCH....	--	--	--	19	--	--	--	17	12	11	8	--	11	--	--	--	--	9	--	--	--	--	--	25	--	--	--	22	--	--	18	--
APRIL....	--	13	11	12	--	--	--	--	--	25	10	--	--	--	--	--	--	14	--	--	--	--	--	--	13	--	--	--	--	22	--	--
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-0465. SAN JUAN CREEK NEAR SAN JUAN CAPISTRANO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(Where no concentrations are reported, loads are estimated)

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.7		.01	1.2	--	0	15	239	S 7.5
2	1.5		0	1.3	--	0	9.0	16	.39
3	1.4		0	1.4	--	0	7.6	7	.14
4	1.5		0	1.8	--	.01	6.5	7	.12
5	1.4		0	2.2	--	.01	5.8	6	.09
6	1.4		0	2.4	--	.01	5.8	5	.08
7	1.3		0	2.8	--	.02	6.2	--	.12
8	1.4		0	3.0	--	.02	6.7	--	.13
9	1.4		0	3.0	--	.02	5.6	--	.11
10	1.1		0	3.1	--	.02	5.6	--	.11
11	1.2		0	3.1	--	.02	5.4	--	.10
12	1.1		0	3.2	--	.02	5.3	--	.10
13	1.1		0	3.0	--	.02	5.5	--	.10
14	1.1		0	2.9	--	.02	5.2	--	.10
15	1.1		0	2.7	--	.02	5.0	7	.09
16	.97		0	2.5	--	.01	5.3	--	.10
17	.89		0	2.4	--	.01	5.8	--	.09
18	.83		0	2.4	--	.01	17	835	S 77
19	.78		0	33	2200	S 227	32	711	S 86
20	.85		0	48	854	S 152	26	35	2.4
21	.91		0	38	1880	S 361	15	14	.57
22	.96		0	29	300	S 35	9.9	8	.21
23	.99		0	12	30	.97	8.1	6	.13
24	1.1		0	8.2	16	.35	7.7	4	.08
25	1.1		0	7.1	10	.19	6.8	--	.07
26	1.2		0	7.0	9	.17	6.4	--	.05
27	1.3		0	6.4	8	.14	5.9	--	.05
28	1.3		0	6.8	8	.15	5.9	--	.05
29	1.4		0	6.9	7	.13	5.9	--	.05
30	1.3		0	10	88	S 3.0	6.4	--	.03
31	1.2		0	--	--	--	6.4	2	.03
TOTAL	36.78	--	0.01	256.8	--	780.34	270.7	--	176.19

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	6.4	--	.03	3.9	--	.03	2.6	--	.01
2	5.4	--	.03	4.1	3	.03	2.6	--	.01
3	5.7	--	.03	4.5	--	.04	2.9	--	.01
4	5.1	--	.03	4.4	--	.02	2.9	1	.01
5	5.2	--	.03	4.3	2	.02	2.6	--	.01
6	6.3	--	.03	4.2	--	.02	2.6	--	.01
7	6.6	--	.04	4.2	--	.02	2.9	--	.01
8	6.3	2	.03	3.9	--	.02	87	2350	S 1270
9	6.1	--	.03	3.6	--	.02	43	314	S 56
10	5.8	--	.03	3.7	--	.02	12	22	.71
11	5.4	--	.03	3.7	--	.02	7.6	7	.14
12	4.9	--	.01	3.4	2	.02	6.3	4	.07
13	5.1	--	.01	5.2	--	.03	6.5	3	.05
14	5.5	--	.02	4.8	--	.03	5.7	--	.05
15	5.2	1	.01	4.7	--	.02	4.8	--	.04
16	4.8	--	.01	4.8	--	.03	4.8	--	.04
17	4.9	--	.01	4.5	--	.02	5.5	--	.12
18	4.8	--	.01	4.7	--	.02	5.1	4	.06
19	4.7	--	.01	4.3	2	.02	4.0	--	.03
20	4.9	--	.03	3.4	--	.02	3.4	--	.03
21	5.2	--	.04	3.7	--	.03	2.9	--	.02
22	4.8	3	.04	3.7	--	.03	2.0	--	.01
23	4.2	--	.03	3.6	--	.03	2.1	--	.01
24	3.8	--	.03	3.4	--	.03	2.4	--	.01
25	2.4	--	.02	3.4	--	.03	2.5	--	.01
26	1.9	--	.01	3.3	3	.03	2.1	--	.01
27	2.8	--	.02	2.9	--	.02	2.0	--	.01
28	3.4	--	.02	2.9	--	.02	2.2	--	.01
29	2.0	2	.01	2.6	--	.01	2.2	--	.01
30	2.6	--	.01	--	--	--	2.7	--	.02
31	4.0	--	.03	--	--	--	3.2	--	.02
TOTAL	146.2	--	0.72	113.8	--	0.70	241.1	--	1327.55

S Computed by subdividing day.

11-0465. SAN JUAN CREEK NEAR SAN JUAN CAPISTRANO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	3.2	--	.02	.81					
2	7.0	50	.95	.79					
3	3.4	20	.17	.82					
4	2.7	20	.15	.81					
5	2.1	--	.10	.73					
6	1.9	--	.08	.68					
7	1.9	--	.07	.65					
8	2.2	--	.10	.61					
9	2.7	--	.13	.53					
10	1.4	--	.05	.49					
11	1.2	12	.04	.45					
12	1.3	--	.04	.47					
13	1.5	--	.05	.46					
14	1.9	--	.06	.42					
15	1.9	--	.06	.42					
16	1.9	--	.06	.36					
17	1.5	--	.05	.30					
18	1.1	12	.04	.28					
19	1.2	--	.04	.26					
20	1.5	--	.05	.22					
21	1.6	--	.05	.22					
22	1.2	--	.03	.19					
23	.93	--	.02	.18					
24	.84	--	.01	.18					
25	.81	2	0	.15					
26	.74	--	0	.10					
27	.83	--	0	.09					
28	.80	--	0	.06					
29	.79	--	0	.02					
30	.80	--	0	0					
31	--	--	--	0					
TOTAL	52.84	--	2.42	11.75	--	0	0	--	0

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
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									
TOTAL	0	--	0	0	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1129.97
TOTAL LOAD FOR YEAR (TONS) 2287.93

11-0465. SAN JUAN CREEK NEAR SAN JUAN CAPISTRANO, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 19, 1967	1030	17	23	2790	173	72	85	95	98	98	99	99	99	100	--	--	SPWC
NOV 20.....	0645	16	80	1810	391	55	77	89	93	94	95	95	96	98	99	100	SPWC
NOV 21.....	1055	17	14	112	4.2	--	--	--	--	--	41	42	48	88	100	--	S
NOV 21.....	1325	--	106	8000	2290	63	68	78	92	95	97	97	98	100	--	--	VPWC
NOV 21.....	1415	17	94	8130	2060	67	71	78	88	90	92	93	95	97	100	--	VPWC
DEC 18.....	1400	12	9.0	1810	44	35	44	58	70	83	98	100	--	--	--	--	VPWC
DEC 19.....	1050	12	29	392	31	49	57	64	66	67	70	70	75	96	100	--	SCBW
DEC 19.....	1345	13	27	258	19	68	80	85	88	89	92	94	95	98	100	--	SCBW
MAR 8, 1968	1215	--	20	1090	59	78	85	93	96	97	99	99	100	--	--	--	SCBW
MAR 8.....	1450	19	326	6940	6110	35	44	58	66	71	74	82	95	100	--	--	SPWC
APR 2.....	0615	13	9.9	286	7.6	43	59	71	77	82	91	94	98	100	--	--	SCBW

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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. 21, 1967	1105	17		15	--	--	1	15	61	92	98	100	--	--	--	S
NOV. 21.....	1330	--		106	--	--	1	10	51	83	92	97	100	--	--	S
DEC. 19.....	0945	11		26	--	--	1	23	70	94	99	100	--	--	--	S
DEC. 19.....	1045	--		25	--	--	--	18	67	92	98	100	--	--	--	S

11-0470. ARROYO TRABUCO NEAR SAN JUAN CAPISTRANO, CALIF.

LOCATION.--Lat 33°31'36", long 117°40'08", in NE¼NE¼NW¼ sec.36, T.7 S., R.8 W., Orange County, at gaging station on downstream side of right pier of county road bridge, and 1.8 miles north of San Juan Capistrano.
DRAINAGE AREA.--35.7 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1966 to September 1968 (discontinued).
Sediment records: October 1966 to September 1968 (discontinued).
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 7,710 mg/l Dec. 18; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 38 tons Nov. 21; minimum daily, 0 ton on many days.
EXTREMES, 1966-68.--Sediment concentrations: Maximum daily, 9,360 mg/l Dec. 7, 1966; minimum daily, no flow on many days each year.
Sediment loads: Maximum daily, 30,700 tons Dec. 7, 1966; minimum daily, 0 ton on many days each year.
REMARKS.--No flow Oct. 26 to Nov. 9, Nov. 15-18, Feb. 26, 27, Mar. 12-31, Apr. 3 to May 9, May 12, 14-17, 20-27, May 30 to June 4, June 6-25, 27, June 29 to July 2, July 7-10, 13-18, July 20 to Aug. 2, Aug. 9-16, Aug 20 to Sept. 8, Sept. 15-24, 28-30. Records of discharge furnished by Orange County Flood Control District.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	16	14	14	13	--	18	--	--	--	13	--	--
DECEMBER.	10	8	8	--	--	--	9	--	--	--	--	--	--	--	6	--	--	11	14	7	6	--	--	11	--	--	--	--	--	--	14	--
JANUARY..	--	--	--	--	--	--	--	6	--	--	--	--	--	--	8	--	--	--	--	--	--	8	--	--	--	--	--	--	13	--	--	--
FEBRUARY.	--	15	--	--	9	--	--	--	--	--	--	11	--	--	--	--	--	--	12	--	--	--	--	--	19	--	--	--	--	--	--	--
MARCH....	--	--	--	19	--	--	--	13	13	11	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL....	--	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-0470. ARROYO TRABUCO NEAR SAN JUAN CAPISTRANO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(Where no concentrations are reported, loads are estimated)

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.60		.01	0	--	0	4.2	62	0.70
2	.60		.01	0	--	0	2.0	51	.28
3	.60		.01	0	--	0	1.6	46	.20
4	.40		0	0	--	0	2.0	--	.23
5	.40		0	0	--	0	1.8	--	.19
6	.40		0	0	--	0	1.7	--	.18
7	.40		0	0	--	0	1.8	40	.19
8	.40		0	0	--	0	1.8	--	.19
9	.50		.01	0	--	0	.90	--	.10
10	.50		.01	.20	--	0	.90	--	.12
11	.60		.01	.30	--	0	1.6	--	.22
12	.60		.01	.20	--	0	1.6	--	.22
13	.60		.01	.20	--	0	1.4	--	.19
14	.60		.01	.10	--	0	1.7	--	.23
15	.70		.01	0	--	0	1.8	50	.24
16	.60		.01	0	--	0	1.8	--	.24
17	.60		.01	0	--	0	1.1	--	.15
18	.60		.01	0	--	0	4.6	7710	S 20
19	.60		.01	.10	280	S .30	3.8	680	S 8.8
20	.60		.01	4.4	1110	S 15	2.4	93	S .48
21	.60		.01	7.7	1140	S 38	2.2	47	.28
22	.60		.01	7.4	296	S 5.2	2.2	--	.19
23	.60		.01	3.3	47	.42	1.4	--	.11
24	.60		.01	3.2	13	.11	1.4	29	.11
25	.20		0	2.1	10	.06	1.4	--	.09
26	0		0	1.9	7	.04	1.8	--	.10
27	0		0	2.7	7	.05	1.8	--	.09
28	0		0	1.7	7	.03	1.8	--	.07
29	0		0	2.4	7	.04	1.8	--	.06
30	0		0	3.3	168	S 2.7	1.2	--	.03
31	0		0	--	--	--	1.2	8	.03
TOTAL	13.50	--	.19	41.20	--	61.95	58.70	--	34.31

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.2	--	.03	.40	--	.03	.30	--	0
2	1.6	--	.09	.40	28	.03	.30	--	0
3	1.8	--	.12	.40	--	.03	.20	--	0
4	1.7	--	.13	.40	--	.02	.20	4	0
5	1.7	--	.13	.40	18	.02	.30	4	0
6	1.8	--	.14	.40	--	.02	.40	4	0
7	1.2	--	.09	.40	--	.02	.50	50	S .11
8	1.7	--	.13	.40	--	.01	4.6	638	S 10
9	1.8	--	.14	.50	--	.01	4.0	145	S 2.0
10	1.8	--	.14	.40	--	.01	1.4	42	.16
11	1.8	--	.13	.40	--	.01	2.0	30	.16
12	1.8	--	.11	.50	10	.01	0	--	0
13	1.6	--	.09	.50	--	.01	0	--	0
14	1.1	--	.04	.50	--	.01	0	--	0
15	1.6	15	.06	.50	--	.01	0	--	0
16	1.1	--	.04	.50	--	.01	0	--	0
17	1.1	--	.04	.50	--	.01	0	--	0
18	1.1	--	.04	.50	--	.01	0	--	0
19	1.0	--	.04	.50	6	.01	0	--	0
20	1.0	--	.04	.60	--	.01	0	--	0
21	.90	--	.03	.60	--	.01	0	--	0
22	.80	--	.03	.70	--	.02	0	--	0
23	.70	--	.02	.70	--	.02	0	--	0
24	.60	--	.02	.70	--	.02	0	--	0
25	.50	--	.01	.30	10	.01	0	--	0
26	.40	--	.01	0	--	0	0	--	0
27	.40	--	.01	0	--	0	0	--	0
28	.40	--	.01	.20	4	0	0	--	0
29	.40	10	.01	.30	4	0	0	--	0
30	.40	--	.02	--	--	--	0	--	0
31	.40	--	.02	--	--	--	0	--	0
TOTAL	35.40	--	1.96	12.60	--	.38	14.20	--	12.43

S Computed by si

11-0470. ARROYO TRABUCO NEAR SAN JUAN CAPISTRANO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.10		.01	0		0	0		0
2	.10	50	.01	0		0	0		0
3	0		0	0		0	0		0
4	0		0	0		0	0		0
5	0		0	0		0	.40		.05
6	0		0	0		0	0		0
7	0		0	0		0	0		0
8	0		0	0		0	0		0
9	0		0	0		0	0		0
10	0		0	.30		.04	0		0
11	0		0	.30		.02	0		0
12	0		0	0		0	0		0
13	0		0	.30		.04	0		0
14	0		0	0		0	0		0
15	0		0	0		0	0		0
16	0		0	0		0	0		0
17	0		0	0		0	0		0
18	0		0	.40		.05	0		0
19	0		0	.40		.03	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	.30		.04
27	0		0	0		0	0		0
28	0		0	.20		.03	.20		.03
29	0		0	.10		.01	0		0
30	0		0	0		0	0		0
31	--		--	0		0	--		--
TOTAL	.20	--	.02	2.00	--	.22	.90	--	.12

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	0		0	0		0	0		0
2	0		0	0		0	0		0
3	.50		.07	.10		.01	0		0
4	.60		.05	.10		.01	0		0
5	.50		.01	.20		.01	0		0
6	.20		.01	.20		.01	0		0
7	0		0	.20		.01	0		0
8	0		0	.10		0	0		0
9	0		0	0		0	.10		.01
10	0		0	0		0	.20		.01
11	.40		.05	0		0	.20		.01
12	.40		.02	0		0	.30		.01
13	0		0	0		0	.30		.01
14	0		0	0		0	.20		.01
15	0		0	0		0	0		0
16	0		0	0		0	0		0
17	0		0	.10		.01	0		0
18	0		0	.10		0	0		0
19	.40		.05	.10		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	.20		.03
26	0		0	0		0	.40		.01
27	0		0	0		0	.20		.01
28	0		0	0		0	0		0
29	0		0	0		0	0		0
30	0		0	0		0	0		0
31	0		0	0		0	--		--
TOTAL	3.00	--	.26	1.20	--	.06	2.10	--	.11

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 185.00
TOTAL LOAD FOR YEAR (TONS) 112.01

11-0470. ARROYO TRABUCO NEAR SAN JUAN CAPISTRANO, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 21, 1967	1230	18	16	4670	202	59	61	71	84	92	97	100	--	--	--	--	VPWC
DEC 18.....	1415	11	9.6	2270	59	67	79	91	96	98	100	--	--	--	--	--	SPWC
DEC 19.....	1225	14	4.2	841	9.5	84	87	95	96	98	100	--	--	--	--	--	SPWC
DEC 19.....	1400	14	3.3	236	2.1	91	100	--	--	--	--	--	--	--	--	--	SCBW
MAR 8, 1968	1750	17	8.2	852	19	70	76	81	86	93	98	100	--	--	--	--	SPWC
APR 2.....	0630	12	.34	391	.36	70	80	84	89	92	98	99	100	--	--	--	SCBW

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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. 21, 1967	1600	18		7.4	1	2	6	10	18	25	34	84	92	100	--	S
JAN. 19, 1968				1.0	--	--	--	--	--	--	0	7	36	69	100	O

11-0593. 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, 0.8 mile downstream from San Timoteo Creek, 1 mile upstream from Warm Creek, and 3 miles south of San Bernardino.
DRAINAGE AREA.--528 sq mi.
RECORDS AVAILABLE.--Specific conductance: October 1967 to September 1968.
Water temperatures: October 1967 to September 1968.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
1.....	--	--	1050	1000	--	--	690	670	--	--	--	--
2.....	--	--	1070	1000	--	--	--	--	--	--	--	--
3.....	--	--	1000	920	--	--	700	670	--	--	--	--
4.....	--	--	960	900	--	--	700	670	--	--	--	--
5.....	--	--	940	780	--	--	770	660	--	--	--	--
6.....	--	--	940	780	--	--	--	--	--	--	--	--
7.....	--	--	920	740	--	--	--	--	--	--	--	--
8.....	--	--	900	710	--	--	--	--	--	--	--	--
9.....	--	--	890	700	850	830	--	--	--	--	--	--
10.....	--	--	880	670	870	850	--	--	--	--	--	--
11.....	--	--	860	680	890	870	--	--	--	--	--	--
12.....	--	--	--	--	910	900	--	--	--	--	--	--
13.....	--	--	--	--	920	910	--	--	--	--	--	--
14.....	--	--	--	--	930	900	--	--	--	--	--	--
15.....	--	--	--	--	900	840	--	--	--	--	--	--
16.....	--	--	--	--	840	780	--	--	--	--	--	--
17.....	--	--	--	--	810	760	--	--	--	--	--	--
18.....	--	--	--	--	760	240	--	--	--	--	--	--
19.....	--	--	--	--	270	250	--	--	--	--	--	--
20.....	1000	970	--	--	690	660	--	--	--	--	--	--
21.....	970	770	--	--	680	660	--	--	--	--	--	--
22.....	910	490	--	--	690	670	--	--	--	--	--	--
23.....	860	680	--	--	730	660	--	--	--	--	--	--
24.....	1040	920	--	--	720	670	--	--	--	--	--	--
25.....	1050	1010	--	--	690	660	--	--	--	--	--	--
26.....	1080	1030	--	--	680	640	--	--	--	--	--	--
27.....	1080	1030	--	--	670	650	--	--	--	--	--	--
28.....	1060	980	--	--	680	650	--	--	--	--	--	--
29.....	1040	970	--	--	680	660	--	--	--	--	--	--
30.....	1060	940	--	--	690	670	--	--	--	--	--	--
31.....	1070	1020	--	--	690	670	--	--	--	--	--	--
AVERAGE	--	--	--	--	--	--	--	--	--	--	--	--

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1.....	--	--	--	--	--	--	--	--	--	--	1070	940
2.....	--	--	--	--	--	--	--	--	--	--	1120	880
3.....	--	--	--	--	--	--	--	--	--	--	1240	1010
4.....	--	--	--	--	--	--	--	--	--	--	1280	1090
5.....	--	--	--	--	--	--	--	--	--	--	1220	1060
6.....	--	--	--	--	--	--	--	--	1060	970	1110	1000
7.....	--	--	--	--	--	--	--	--	1100	890	1180	980
8.....	--	--	--	--	--	--	--	--	1100	800	1140	1020
9.....	--	--	--	--	--	--	--	--	1060	710	1160	1000
10.....	--	--	--	--	--	--	--	--	1130	760	1080	920
11.....	--	--	--	--	--	--	--	--	1090	940	1150	1010
12.....	--	--	--	--	--	--	--	--	1120	950	1100	1020
13.....	--	--	--	--	--	--	--	--	1110	1010	1130	1050
14.....	--	--	--	--	--	--	--	--	1080	1030	1110	1040
15.....	--	--	--	--	--	--	--	--	--	--	1100	1050
16.....	--	--	--	--	--	--	--	--	--	--	1150	1070
17.....	--	--	--	--	--	--	--	--	--	--	1130	1020
18.....	--	--	--	--	--	--	--	--	--	--	1160	990
19.....	--	--	--	--	--	--	--	--	--	--	1080	930
20.....	--	--	--	--	--	--	--	--	--	--	1160	1030
21.....	--	--	--	--	--	--	--	--	--	--	1140	1030
22.....	--	--	--	--	--	--	--	--	--	--	1070	930
23.....	--	--	--	--	--	--	--	--	--	--	1080	930
24.....	--	--	--	--	--	--	--	--	--	--	1130	1010
25.....	--	--	--	--	--	--	--	--	--	--	1130	1010
26.....	--	--	--	--	--	--	--	--	--	--	1080	970
27.....	--	--	--	--	--	--	--	--	--	--	1090	970
28.....	--	--	--	--	--	--	--	--	--	--	1120	1010
29.....	--	--	--	--	--	--	--	--	1140	990	1100	1040
30.....	--	--	--	--	--	--	--	--	1120	990	1090	1010
31.....	--	--	--	--	--	--	--	--	1150	970	--	--
AVERAGE	--	--	--	--	--	--	--	--	--	--	1130	1000

11-0593. SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25	25	26	27	26	26	27	25	23	24	24	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	16	11	16	19	20	19	18	16	15	17	--
NOVEMBER																																
MAXIMUM	24	23	23	24	21	22	23	22	22	22	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	18	15	13	15	16	15	14	13	14	13	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	17	17	17	18	17	18	18	18	18	17	--	19	20	19	19	20	20	20	22	21	20	20	20	--
MINIMUM	--	--	--	--	--	--	--	--	16	16	16	17	17	17	11	12	12	10	--	8	5	11	6	9	11	10	9	8	13	8	8	--
JANUARY																																
MAXIMUM	20	--	20	20	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	7	--	10	7	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	--	--	--	30	30	31	31	30	31	30	30	28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	31	30	30	--
MINIMUM	--	--	--	--	--	27	25	23	21	22	26	26	27	27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	28	25	26	--
SEPTEMBER																																
MAXIMUM	30	30	29	30	30	30	30	30	30	30	30	30	30	29	29	30	30	30	29	29	29	28	28	29	30	29	29	29	29	29	--	29
MINIMUM	27	27	27	26	25	25	26	26	26	26	28	26	26	26	27	26	25	24	23	24	25	23	24	24	24	24	24	25	26	25	--	25

11-0660.5. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
OCT.												
05...	2.0	59	14	100	12	215	0	71	112	.9	60	.46
NOV.												
09...	30	47	20	108	13	229	0	72	106	1.3	64	.48
DEC.												
14...	60	43	23	122	13	220	0	83	139	1.3	52	.44
JAN.												
09...	40	35	28	119	14	304	0	82	129	1.2	11	.52
FEB.												
08...	15	50	27	166	14	223	0	89	211	1.3	63	.46
MAR.												
13...	15	54	23	112	13	253	0	80	120	1.1	56	.33
APR.												
03...	4.0	49	21	125	13	149	0	68	158	1.3	84	.45
MAY												
02...	15	46	25	130	13	199	0	76	159	.9	32	.60
JUNE												
17...	20	45	23	93	12	231	0	66	101	1.2	55	.26
JULY												
25...	15	32	31	121	13	233	0	80	136	1.4	35	.61
AUG.												
15...	25	39	27	121	10	264	0	76	124	1.2	24	.48
SEPT.												
17...	30	33	29	110	17	295	0	82	115	1.2	16	.58

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.												
05...	590	534	205	29	.80	50	3.0	176	936	7.4	27	8.2
NOV.												
09...	600	543	200	12	.82	52	3.3	188	948	7.5	21	7.3
DEC.												
14...	648	583	202	22	.88	55	3.7	180	1060	7.3	15	10.0
JAN.												
09...	602	567	203	0	.82	54	3.6	249	1080	7.2	17	9.3
FEB.												
08...	815	729	236	53	1.11	59	4.7	183	1370	7.6	15	10.1
MAR.												
13...	634	582	229	21	.86	50	3.2	208	1060	7.6	17	9.3
APR.												
03...	656	591	209	87	.89	55	3.8	122	1080	7.1	13	9.6
MAY												
02...	696	579	218	55	.95	55	3.8	163	1200	7.6	21	8.1
JUNE												
17...	586	508	207	18	.80	48	2.8	189	935	7.4	29	8.3
JULY												
25...	630	563	207	16	.86	54	3.7	191	1060	7.1	28	10.1
AUG.												
15...	571	551	208	0	.78	54	3.6	217	1020	7.3	30	8.7
SEPT.												
17...	584	547	202	0	.79	52	3.4	242	1020	7.3	30	8.7

11-0665. SANTA ANA RIVER AT RIVERSIDE NARROWS, NEAR ARLINGTON, CALIF.

LOCATION.--Lat 33°57'53", long 117°27'55", in SW¼NE¼SW¼ sec.25, T.2 S., R.6 W., Riverside County, at gaging station at downstream side of bridge on Pedley Road, 1.8 miles downstream from Union Pacific Railroad bridge, 3.3 miles northwest of Arlington, and 12 miles upstream from Temescal Creek.
DRAINAGE AREA.--850 sq mi.
RECORDS AVAILABLE.--Specific conductance: November 1967 to September 1968.
Water temperatures: November 1967 to September 1968.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
MAR., 1968												
08...	465	15	.01	75	13	33	5.7	256	0	61	32	.7

DATE	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)
MAR., 1968												
08...	2.6	.10	378	364	240	30	22	.9	210	596	7.5	17

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), NOVEMBER 1967 TO SEPTEMBER 1968

DAY	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
1.....	--	--	--	--	--	--	--	--	--	--	--	--
2.....	--	--	--	--	840	--	--	--	--	--	--	--
3.....	--	--	--	--	770	--	--	--	--	--	1100	--
4.....	--	--	--	--	760	--	--	--	--	--	1100	--
5.....	--	--	--	--	840	--	--	--	--	--	1000	--
6.....	--	--	--	--	830	--	--	--	--	--	1000	--
7.....	--	1200	--	--	890	--	--	--	--	--	990	--
8.....	--	1100	--	--	860	--	--	--	--	--	980	--
9.....	--	1100	--	--	--	--	--	--	--	--	1000	--
10.....	--	1100	--	--	--	--	--	--	--	--	1100	--
11.....	--	--	--	--	--	--	--	--	--	--	1000	--
12.....	--	--	--	--	--	--	--	--	--	--	1000	1200
13.....	--	--	--	--	--	--	--	--	--	--	1000	1200
14.....	--	--	--	--	--	--	--	--	--	--	1100	1100
15.....	--	--	--	--	--	--	--	--	--	--	1100	1100
16.....	--	--	--	--	--	--	--	--	--	--	1000	1100
17.....	--	--	--	--	--	--	--	--	--	--	1000	1100
18.....	--	--	--	--	--	--	--	--	--	--	1000	1100
19.....	--	--	--	--	--	--	--	--	--	--	--	--
20.....	--	--	--	--	--	--	--	--	--	--	--	--
21.....	--	--	--	--	--	--	--	--	--	--	--	--
22.....	--	--	--	--	--	--	--	--	--	--	--	--
23.....	--	--	--	--	--	--	--	--	--	--	--	--
24.....	--	1100	--	--	--	--	--	--	--	--	--	--
25.....	--	1100	--	--	--	--	--	--	--	--	--	--
26.....	--	1100	--	--	--	--	--	--	--	--	--	--
27.....	--	1200	--	--	--	--	--	--	--	--	--	--
28.....	--	1200	--	--	--	--	--	--	--	--	--	--
29.....	--	1200	--	--	--	--	--	--	--	--	--	--
30.....	--	1200	--	--	--	--	--	--	--	--	--	--
31.....	--	--	--	--	--	--	--	--	--	--	--	--
AVERAGE	--	--	--	--	--	--	--	--	--	--	--	--

11-0665. SANTA ANA RIVER AT RIVERSIDE NARROWS, NEAR ARLINGTON, CALIF.--Continued

TEMPERATURE (°C) OF WATER, NOVEMBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	26	26	26	26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	24	22	24	21	22	20	--	--
MINIMUM	--	--	--	--	--	--	17	18	17	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	16	17	17	11	12	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	31	31	30	31	32	32	32	31	31	31	30	30	31	29	30	29	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	18	19	18	18	20	20	20	21	21	21	21	23	20	21	21	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	30	29	29	27	29	29	28	27	29	28	26	27	31	28	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	16	17	20	19	18	15	18	19	16	14	13	17	14	14	--	--	--	--	--	--	--

11-0680. SANTA ANA RIVER AT AUBURNDALE BRIDGE, NEAR CORONA, CALIF.

LOCATION.--Lat 33°55'25", long 117°35'50", in La Sierra (Yorba) Grant, Riverside County, at gaging station at Auburndale bridge on River Road, 1.7 miles upstream from Temescal Creek, and 3.8 miles northwest of Corona.
DRAINAGE AREA.--1,003 sq mi.
RECORDS AVAILABLE.--Specific conductance: October 1967 to September 1968.
Water temperatures: October 1967 to September 1968.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
1.....	--	--	1210	1170	--	--	1160	1140	1080	1070	--	--
2.....	--	--	1220	1150	--	--	--	--	--	--	--	--
3.....	1210	1180	1180	1150	--	--	--	--	--	--	--	--
4.....	1190	1140	1160	1120	--	--	--	--	--	--	--	--
5.....	1200	1050	1140	1100	--	--	--	--	--	--	--	--
6.....	--	--	1150	1110	--	--	--	--	--	--	--	--
7.....	--	--	1160	1120	--	--	--	--	--	--	--	--
8.....	--	--	--	--	--	--	--	--	--	--	--	--
9.....	--	--	--	--	--	--	--	--	--	--	--	--
10.....	--	--	--	--	--	--	--	--	--	--	--	--
11.....	--	--	--	--	--	--	--	--	--	--	--	--
12.....	--	--	--	--	--	--	--	--	--	--	--	--
13.....	1180	1140	--	--	--	--	--	--	--	--	--	--
14.....	1160	1120	--	--	1230	1220	--	--	--	--	--	--
15.....	1130	1100	--	--	1240	1210	--	--	--	--	--	--
16.....	1140	1090	--	--	1280	1220	--	--	--	--	--	--
17.....	1150	1100	--	--	1230	1220	--	--	1090	1000	--	--
18.....	1130	1090	--	--	1240	920	--	--	1040	950	--	--
19.....	1100	1090	--	--	940	850	1080	1060	1040	980	--	--
20.....	1100	1080	--	--	900	860	1080	1060	--	--	--	--
21.....	1120	1090	--	--	1060	900	1080	1060	1200	1040	--	--
22.....	1140	1100	--	--	1090	1060	1080	1060	--	--	--	--
23.....	1180	1130	--	--	1130	1080	1070	1060	--	--	--	--
24.....	1190	1170	--	--	1140	1110	1080	1060	--	--	--	--
25.....	--	--	--	--	1140	1110	1080	1060	--	--	--	--
26.....	--	--	--	--	1150	1130	1080	1070	--	--	--	--
27.....	--	--	--	--	1160	1130	1070	1070	--	--	--	--
28.....	1200	1160	--	--	1170	1160	1080	1070	--	--	--	--
29.....	1200	1170	--	--	1170	1140	1080	1070	--	--	--	--
30.....	1200	1160	--	--	1160	1140	1080	1070	--	--	--	--
31.....	1210	1180	--	--	1160	1140	1070	1070	--	--	--	--
AVERAGE	--	--	--	--	--	--	--	--	--	--	--	--

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1.....	--	--	--	--	--	--	--	--	--	--	--	--
2.....	--	--	--	--	--	--	--	--	--	--	--	--
3.....	--	--	--	--	--	--	--	--	--	--	--	--
4.....	--	--	--	--	--	--	--	--	--	--	--	--
5.....	--	--	--	--	--	--	--	--	--	--	--	--
6.....	--	--	--	--	--	--	--	--	--	--	1250	880
7.....	--	--	--	--	--	--	--	--	--	--	1220	940
8.....	--	--	--	--	--	--	--	--	--	--	1210	930
9.....	--	--	--	--	--	--	--	--	1370	1000	1090	870
10.....	--	--	--	--	--	--	--	--	1370	980	1050	--
11.....	--	--	--	--	--	--	--	--	1270	970	1280	960
12.....	--	--	--	--	--	--	--	--	1290	970	1210	970
13.....	--	--	--	--	--	--	--	--	1260	1000	1220	950
14.....	--	--	1220	1190	--	--	--	--	1320	960	1230	950
15.....	--	--	1220	1100	--	--	--	--	1230	910	1050	940
16.....	--	--	--	--	--	--	--	--	1100	920	1050	950
17.....	1150	1050	1200	1150	--	--	--	--	--	--	1080	890
18.....	--	--	--	--	--	--	1400	1060	--	--	--	--
19.....	--	--	--	--	--	--	1300	970	1100	910	1080	950
20.....	--	--	--	--	--	--	1200	960	1060	900	1100	960
21.....	--	--	--	--	--	--	1070	960	1150	890	1060	890
22.....	--	--	--	--	--	--	1080	970	1020	880	1030	860
23.....	--	--	--	--	--	--	1410	950	--	--	1050	830
24.....	--	--	--	--	--	--	1280	990	--	--	1080	850
25.....	--	--	--	--	--	--	1240	990	--	--	1160	990
26.....	--	--	--	--	--	--	1200	920	--	--	1300	1050
27.....	--	--	--	--	--	--	1050	950	--	--	1280	1050
28.....	--	--	--	--	--	--	980	720	--	--	1170	1070
29.....	--	--	--	--	--	--	920	710	--	--	1140	980
30.....	--	--	--	--	--	--	--	--	--	--	1120	1020
31.....	--	--	--	--	--	--	--	--	--	--	--	--
AVERAGE	--	--	--	--	--	--	--	--	--	--	1150	--

11-0680. SANTA ANA RIVER AT AUBURNDALE BRIDGE, NEAR CORONA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	28	30	32	--	--	--	--	--	--	--	28	28	25	26	29	28	27	26	25	25	26	27	26	25	25	23	20	22	26	--
MINIMUM	--	--	20	18	15	--	--	--	--	--	--	--	17	14	13	11	10	11	12	12	14	14	13	16	13	12	14	17	10	9	11	--
NOVEMBER																																
MAXIMUM	25	25	25	25	21	24	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	11	11	15	16	15	14	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	3	6	8	8	8	6	--	6	6	7	8	12	11	12	11	10	9	10	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	1	2	5	6	6	4	--	4	4	5	6	6	7	8	8	8	6	6	--
JANUARY																																
MAXIMUM	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	25	24	18	17	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15	15	14	16	15	--	--	--	--	--	--	--	--	--	--	--
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	34	35	--	32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	25	21	--	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	30	29	25	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	16	17	18	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	35	33	30	29	30	34	33	31	30	28	28	30	33	33	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	24	20	21	22	22	21	21	21	21	22	23	24	23	21	--
AUGUST																																
MAXIMUM	--	--	--	--	--	--	--	--	33	33	33	32	30	32	31	28	31	31	31	29	30	23	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	19	18	19	19	19	18	17	20	20	18	19	19	19	15	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	29	28	26	28	28	28	27	26	24	25	27	27	27	27	26	24	23	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	20	20	19	18	19	19	18	16	15	15	14	16	17	17	19	19	18	--	--

11-0740. 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.--1,485 sq mi, not including 768 sq mi above Elsinore Lake.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Chemical analyses for this station are performed by California Department of Water Resources and by the Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
OCT.												
05...	32	--	--	103	27	120	7.0	310	0	134	152	1.0
NOV.												
09...	50	--	--	103	27	118	8.0	312	0	142	141	1.3
DEC.												
02...	70	14	.02	75	17	64	26	198	0	101	88	.6
14...	53	--	--	109	30	118	9.0	320	0	151	153	1.0
JAN.												
09...	67	--	--	107	31	117	9.0	342	0	142	156	.8
FEB.												
08...	58	--	--	105	30	118	8.0	323	0	143	145	.8
13...	68	25	.01	105	26	117	8.0	305	0	136	141	.9
MAR.												
08...	680	--	.01	44	7.3	18	13	114	0	54	21	.5
09...	942	8.3	.03	42	8.4	33	10	117	0	51	38	.5
11...	846	12	.03	64	15	62	23	173	0	93	87	.6
13...	106	--	--	121	34	130	17	354	0	184	157	1.1
APR.												
03...	101	--	--	98	27	108	12	295	0	137	132	.8
MAY												
02...	53	--	--	104	30	117	7.0	308	8	134	147	.7
JULY												
25...	21	--	--	113	29	121	5.0	340	0	145	149	.9
AUG.												
15...	22	--	--	106	30	127	6.0	328	0	144	160	.9
SEPT.												
17...	25	--	--	103	29	106	7.0	319	0	137	146	.9

DATE	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC CONDUCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.												
05...	35	.46	800	730	368	114	2.7	254	1220	7.5	22	7.7
NOV.												
09...	32	.65	770	724	368	112	2.7	256	1220	7.5	20	8.3
DEC.												
02...	24	.10	548	508	257	95	1.7	162	850	7.1	7	--
14...	39	.36	820	766	396	133	2.6	262	1330	7.2	8	10.0
JAN.												
09...	8.1	.52	774	738	395	114	2.6	281	1300	7.1	12	8.8
FEB.												
08...	36	.46	818	744	386	121	2.6	265	1270	7.2	12	9.0
13...	38	.38	772	747	369	119	2.6	250	1220	7.3	17	--
MAR.												
08...	14	.02	248	234	140	47	.7	93	388	7.3	12	--
09...	17	.07	282	266	140	44	1.2	96	454	7.0	14	--
11...	17	.28	496	459	221	79	1.8	142	768	7.2	14	--
13...	32	.42	905	849	442	152	2.7	290	1430	7.3	11	8.8
APR.												
03...	27	.30	740	686	356	114	2.5	242	1180	7.6	17	8.3
MAY												
02...	35	.40	780	733	383	117	2.6	266	1300	8.4	20	7.8
JULY												
25...	24	.50	788	753	401	122	2.6	279	1290	8.2	26	8.2
AUG.												
15...	26	.45	747	760	388	119	2.8	269	1240	7.7	30	8.0
SEPT.												
17...	24	.59	765	711	376	114	2.4	262	1220	7.7	25	7.1

11-0740. SANTA ANA RIVER BELOW PRADO DAM, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
1.....	--	--	--	--	--	1300	1200	1200	--	1200	1300	1300
2.....	--	--	--	--	1300	1300	1000	1200	--	1200	1200	1300
3.....	--	--	--	--	1400	1300	1100	1200	--	1200	1300	1300
4.....	--	--	--	--	1400	1200	1200	1200	--	--	1300	1300
5.....	--	--	--	--	1300	1200	1200	1100	--	1300	1200	1300
6.....	--	--	--	--	1400	1100	1300	1100	--	1200	1200	1300
7.....	--	--	--	--	1300	1100	1300	1100	--	1200	1200	1300
8.....	--	--	--	--	1300	320	1400	1300	--	1100	1300	1300
9.....	--	--	--	--	1300	440	1400	1300	--	1100	1300	1300
10.....	--	--	--	--	1200	570	1300	1300	--	1300	1200	1300
11.....	--	--	--	--	1200	750	1300	1300	--	1300	1200	1300
12.....	--	--	--	--	1200	930	--	1200	--	1200	1300	1300
13.....	--	--	--	--	1200	1100	--	1200	--	1200	1300	1400
14.....	--	--	--	--	1000	1100	--	1200	--	1200	1300	1400
15.....	--	--	--	--	1200	1100	--	--	--	1200	1300	--
16.....	--	--	--	--	1200	1100	--	--	--	1200	1300	--
17.....	--	--	--	--	1200	1200	1300	--	1300	1200	1300	--
18.....	--	--	--	--	1200	1200	1300	--	1300	1200	1300	1200
19.....	--	--	--	--	1300	1200	1300	--	1300	1100	1200	1300
20.....	--	--	--	--	1200	1300	1200	--	1300	1100	1200	1300
21.....	--	--	--	--	1300	1200	1200	--	1300	1300	1300	1300
22.....	--	--	--	--	1300	1300	1200	--	1300	1200	1200	1200
23.....	--	--	--	--	1200	1400	1200	1300	1300	--	1300	1200
24.....	--	--	--	--	1300	1100	1200	1300	1300	--	1300	1300
25.....	--	--	--	--	1300	1200	1200	1300	1300	--	1300	1300
26.....	--	--	--	--	1300	1200	1200	--	1200	--	1300	1300
27.....	--	--	--	--	1300	1200	1300	--	1200	--	--	1300
28.....	--	--	--	--	1300	1300	1200	--	1100	--	1300	1300
29.....	--	--	--	--	1300	1300	1200	--	1200	--	1300	1200
30.....	--	--	--	--	--	1300	1200	--	1200	--	1300	1200
31.....	--	--	--	--	--	1200	--	--	--	--	1300	--
AVERAGE	--	--	--	--	1260	1110	1240	--	--	--	1270	1290

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	19	19	19	18	19	18	17	14	19	15	17	16	16	21	20	20	24	23	18	20	23	24	25	25	23	18	23	24	--	--	20
MINIMUM	--	12	10	10	9	10	9	10	13	13	10	11	13	12	12	13	15	15	14	16	16	15	14	14	14	15	16	14	11	--	--	13
MARCH																																
MAXIMUM	22	24	24	25	23	19	17	--	14	14	14	14	17	21	19	22	21	--	21	21	24	22	23	25	25	25	--	--	--	25	23	21
MINIMUM	11	14	12	12	12	14	12	--	14	14	13	13	11	10	10	12	13	--	9	9	9	11	9	10	13	11	--	--	--	15	15	12
APRIL																																
MAXIMUM	19	16	20	25	25	25	26	28	24	29	27	25	--	--	--	--	--	22	25	25	23	26	27	26	27	27	25	26	27	27	--	25
MINIMUM	14	12	11	12	13	14	12	13	13	11	13	16	--	--	--	--	--	9	9	13	12	10	9	10	11	13	16	14	12	14	--	12
MAY																																
MAXIMUM	25	25	22	25	23	26	24	23	26	26	24	23	24	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	13	15	15	14	14	13	11	13	14	15	15	15	14	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	28	27	28	29	29	27	28	28	27	28	27	29	27	--	28	29	29	29	30	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	15	16	15	15	15	15	16	16	17	17	18	18	19	--	19	20	20	19	18	--	--
JULY																																
MAXIMUM	29	30	28	--	28	25	30	28	31	30	29	30	33	33	33	34	33	32	32	33	32	32	--	--	--	--	--	--	--	--	--	--
MINIMUM	17	18	16	--	19	20	20	19	21	21	21	20	21	23	22	21	21	22	21	22	22	23	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	31	33	--	--	--	29	33	30	31	--	--	34	31	29	29	24	30	28	34	29	33	31	--	--	22	22	--	24	25	27	24	--
MINIMUM	20	20	--	--	--	18	17	17	20	--	--	21	16	16	18	18	16	17	19	20	18	13	--	--	15	15	--	16	16	17	17	--
SEPTEMBER																																
MAXIMUM	24	24	24	24	--	--	--	--	--	--	27	28	26	--	--	--	--	--	27	25	26	26	29	--	--	--	--	--	--	--	--	--
MINIMUM	17	18	18	16	--	--	--	--	--	--	17	19	20	--	--	--	--	--	21	20	18	18	18	--	--	--	--	--	--	--	--	--

11-0780. 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.--1,685 sq mi (not including 768 sq mi above Elsinore Lake).
RECORDS AVAILABLE.--Water temperatures: October 1967 to September 1968.
Sediment records: October 1967 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 7,640 mg/l Mar. 8; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 17,900 tons Mar. 8; minimum daily, 0 ton on many days.
REMARKS.--No flow Oct. 1-31, Dec. 2-7, 9-17, 24, 26-30, Jan. 2-26, 28-30, Feb. 1-8, 10-12, Feb. 15 to Mar. 6, Mar. 18-28, May 24 to Aug. 4, Aug. 7 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--	--	--	--	13	--	--
DECEMBER.	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12	8	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY..	--	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH....	--	--	--	--	--	--	13	19	--	18	19	14	18	17	--	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23	--	--	--	--	--	--	23	--	--	--	--
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-0780. SANTA ANA RIVER AT SANTA ANA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(Where no concentrations are reported, loads are estimated)

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1				.10	--	0	.10	--	.05
2				.10	--	0	0	--	0
3				.10	--	0	0	--	0
4				.10	--	0	0	--	0
5				.10	--	0	0	--	0
6				.10	--	0	0	--	0
7				.10	--	0	0	--	0
8				.20	--	0	.10	--	0
9				.20	--	0	0	--	0
10				.10	--	0	0	--	0
11				.10	--	0	0	--	0
12				.10	--	0	0	--	0
13				.10	--	0	0	--	0
14				.10	--	0	0	--	0
15				.10	--	0	0	--	0
16				.10	--	0	0	--	0
17				.10	--	0	0	--	0
18				.10	--	0	73	1960	1510
19				315	4460	5310	89	3140	949
20				22	--	30	123	--	842
21				240	--	5700	82	1790	950
22				40	--	108	.20	--	0
23				58	--	467	.20	--	0
24				2.9	--	16	0	--	0
25				.70	--	.19	.30	--	0
26				.50	--	.14	0	--	0
27				.50	--	.06	0	--	0
28				.70	--	.09	0	--	0
29				.40	--	.05	0	--	0
30				29	900	70	0	--	0
31				--	--	--	--	--	--
TOTAL	0	--	0	711.70	--	11701.53	368.00	--	4251.05

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.10		0	0		0	0	--	0
2	0		0	0		0	0	--	0
3	0		0	0		0	0	--	0
4	0		0	0		0	0	--	0
5	0		0	0		0	0	--	0
6	0		0	0		0	0	--	0
7	0		0	0		0	8.0	--	3.0
8	0		0	0		0	805	7640	17900
9	0		0	.10		0	464	--	6500
10	0		0	0		0	426	4800	5510
11	0		0	0		0	237	1810	2640
12	0		0	0		0	333	--	2600
13	0		0	1.1		1.1	193	2520	1580
14	0		0	14		42	23	400	25
15	0		0	0		0	.30	--	.08
16	0		0	0		0	.20	--	0
17	0		0	0		0	.10	--	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	50		135	0		0	0	--	0
28	0		0	0		0	0	--	0
29	0		0	0		0	.50	--	0
30	0		0	--		--	.10	--	0
31	.50		0	--		--	.30	--	0
TOTAL	50.60	--	135	15.20	--	43.1	2490.50	--	36758.08

11-0780. SANTA ANA RIVER AT SANTA ANA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	39	--	327	.10	--				
2	8.1	--	30	.10	--				
3	.10	--	0	.10	--				
4	.10	--	0	.10	--				
5	.10	--	0	.10	--				
6	.10	--	0	.10	--				
7	.10	--	0	.10	--				
8	.10	--	0	.10	--				
9	.10	--	0	.10	--				
10	.10	--	0	.10	--				
11	.10	--	0	.10	--				
12	.10	--	0	.10	--				
13	.10	--	0	.10	--				
14	.10	--	0	.10	--				
15	.10	--	0	.10	--				
16	.10	--	0	.10	--				
17	.10	--	0	.10	--				
18	.10	--	0	.10	--				
19	.10	--	0	.10	--				
20	.10	--	0	.10	--				
21	.10	--	0	.10	--				
22	.10	--	0	.10	--				
23	.10	--	0	.10	--				
24	.10	--	0	0	--				
25	.10	--	0	0	--				
26	.10	--	0	0	--				
27	.10	--	0	0	--				
28	.10	--	0	0	--				
29	.10	--	0	0	--				
30	.10	--	0	0	--				
31	--	--	--	0	--				
TOTAL	49.90	--	357	2.30	--	0	0	--	0

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

OTAL DISCHARGE FOR YEAR (CFS-DAYS)	3688.40
OTAL LOAD FOR YEAR (TONS)	53245.76

11-0780. SANTA ANA RIVER AT SANTA ANA, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 19, 1967	1050	18	478	4130	5330	21	24	30	37	42	52	69	93	100	--	--	VPWC
NOV 19.....	1610	--	50	2030	274	35	42	46	55	59	65	73	85	93	100	--	VPWC
DEC 18.....	1330	12	576	13800	21500	9	11	13	17	22	28	37	49	67	94	99	SPWC
DEC 18.....	1530	--	225	4610	2800	34	34	43	52	61	71	83	97	100	--	--	VPWC
DEC 21.....	0800	--	165	2340	1040	35	42	48	53	60	70	83	97	100	--	--	VPWC
MAR 8, 1968	0145	13	1000	9780	26400	15	17	22	28	33	38	46	74	91	100	--	VPWC
MAR 8.....	1005	19	1210	7850	25600	28	36	43	50	58	65	79	97	100	--	--	VPWC
MAR 8.....	1915	--	306	20900	17300	32	47	60	71	76	79	84	94	99	100	--	VPWC
MAR 10.....	1550	18	457	4370	5390	30	35	43	49	55	60	76	96	100	--	--	VPWC
MAR 12.....	1555	14	195	2190	1150	18	24	27	30	33	36	41	54	72	99	100	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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. 19, 1967	1015	18		447	1	4	24	60	84	90	92	95	96	100	--	S
NOV. 19.....	1100	18		354	--	1	13	57	94	98	99	100	--	--	--	S
NOV. 19.....	1625	--		182	--	2	22	64	91	97	98	99	100	--	--	S
DEC. 18.....	1400	12		576	2	7	30	64	88	96	98	100	--	--	--	S
MAR. 10, 1968	1615	--		461	--	1	13	55	84	95	98	99	100	--	--	S

MISCELLANEOUS ANALYSES OF STREAMS IN SANTA ANA RIVER BASIN

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
11-0722. TEMESCAL CREEK AT CORONA, CALIF. (LAT 33°53'46", LONG 117°34'50")												
JULY, 1968												
18...	3.0	31	.03	99	29	226	16	374	0	222	255	2.6

DATE	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH
JULY, 1968												
18...	.8	1.4	1130	1070	366	59	1.54	56	5.1	307	1780	7.5

11-0828. SAN GABRIEL RIVER AT AZUSA POWERHOUSE, AT AZUSA, CALIF.

LOCATION.--Lat 34°09'18" (revised), 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.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
OCT.												
06...	80	35	18	9.0	4.0	185	0	22	6.0	.4	2.0	.04
NOV.												
08...	50	45	15	10	3.0	205	0	18	5.0	.4	.5	.06
DEC.												
15...	100	40	13	10	3.0	183	0	24	4.0	.5	2.3	.07
JAN.												
08...	80	44	14	10	4.0	194	0	24	4.0	.4	2.0	.07
FEB.												
07...	80	48	12	9.0	4.0	193	0	24	5.0	.4	2.3	.03
MAR.												
12...	90	45	11	8.0	3.0	180	0	22	4.0	.4	2.3	.00
MAY												
02...	70	41	10	9.0	3.0	163	4	--	5.0	.3	1.6	.00
JULY												
26...	70	41	13	8.0	2.0	148	13	25	8.0	.5	1.5	.07
AUG.												
15...	70	42	13	10	3.0	183	0	24	8.0	.4	.0	.04
SEPT.												
16...	70	41	13	9.0	5.0	181	0	27	8.0	.4	.0	.04

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.												
06...	210	187	161	9	.29	11	.3	152	320	7.9	21	7.6
NOV.												
08...	210	197	174	6	.29	11	.3	168	362	8.0	16	11.1
DEC.												
15...	223	186	153	3	.30	12	.4	150	342	7.9	10	11.9
JAN.												
08...	210	198	167	8	.29	11	.3	159	358	7.9	7	12.0
FEB.												
07...	228	199	169	11	.31	10	.3	158	367	8.2	10	12.1
MAR.												
12...	203	184	158	10	.28	10	.3	148	345	8.1	12	11.1
MAY												
02...	176	--	143	3	.24	12	.3	140	356	8.4	15	10.6
JULY												
26...	153	184	156	13	.21	10	.3	143	333	8.2	24	--
AUG.												
15...	146	190	158	8	.20	12	.3	150	341	8.1	23	8.2
SEPT.												
16...	197	192	156	8	.27	11	.3	148	341	8.1	22	8.1

11-0870.4. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
OCT.												
06...	6.0	84	26	103	11	232	0	161	108	.6	54	.56
NOV.												
08...	9.0	74	32	110	19	234	0	165	119	.8	36	.52
DEC.												
15...	16	71	25	78	8.0	215	0	133	79	.9	37	.30
JAN.												
10...	11	90	27	97	14	235	0	178	102	.7	42	.39
FEB.												
07...	9.0	88	27	94	10	232	0	171	98	.6	47	.30
APR.												
03...	16	83	22	74	8.0	194	0	153	83	.6	40	.27
JULY												
26...	84	64	22	59	5.0	196	0	139	55	.6	5.3	.16
AUG.												
15...	87	70	27	82	5.0	188	0	189	74	.6	7.0	.16
SEPT.												
16...	87	75	30	90	7.0	168	0	243	88	.6	7.0	.14

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC CONDU-CTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.												
06...	710	661	317	127	.97	40	2.5	190	1020	7.4	16	8.2
NOV.												
08...	730	670	316	124	.99	41	2.7	192	1150	7.4	17	12.7
DEC.												
15...	607	537	280	104	.83	37	2.0	176	936	7.5	9	11.2
JAN.												
10...	696	666	336	143	.95	37	2.3	193	1100	7.3	11	11.5
FEB.												
07...	703	649	331	141	.96	37	2.2	190	1070	7.2	17	8.3
APR.												
03...	582	558	298	139	.79	34	1.9	159	953	7.5	22	7.3
JULY												
26...	502	446	250	89	.68	33	1.6	161	738	7.9	24	7.6
AUG.												
15...	607	547	286	132	.83	38	2.1	154	870	7.6	21	8.1
SEPT.												
16...	670	623	311	173	.91	38	2.2	138	1100	7.5	22	9.4

11-0975. LOS ANGELES RIVER AT LOS ANGELES, CALIF.

LOCATION.--Lat 34°04'52", long 118°13'36", (unsurveyed), Los Angeles County, at gaging station near Figueroa Street, Los Angeles, and 800 ft upstream from Arroyo Seco.
DRAINAGE AREA.--514 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
OCT.												
04...	6.2	94	26	152	--	217	0	221	118	--	18	--
NOV.												
01...	5.8	90	29	160	--	202	0	256	123	--	16	--
DEC.												
06...	21	82	23	94	--	173	0	172	77	--	36	--
JAN.												
03...	15	86	24	108	--	194	0	210	93	--	10	--
FEB.												
07...	12	98	26	124	--	192	0	244	104	--	18	--
MAR.												
06...	44	90	29	138	--	206	0	245	118	--	19	--
APR.												
03...	15	78	15	82	--	137	0	168	75	--	12	--
MAY												
01...	7.7	85	27	150	--	159	0	269	120	--	18	--
JUNE												
05...	10	84	29	137	--	172	0	242	115	--	22	--
JULY												
03...	8.7	84	29	156	--	146	0	307	122	--	6.9	--
AUG.												
15...	7.7	79	27	148	--	46	0	278	199	--	17	--
SEPT.												
03...	6.2	82	31	160	--	177	0	292	139	--	14	--
12...	6.7	80	28	144	7.0	194	0	280	120	1.0	19	.65

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
04...	827	342	164	1.12	49	3.6	178	--	8.2	22	14.0
NOV.											
01...	877	344	178	1.19	50	3.8	166	--	8.2	16	11.0
DEC.											
06...	660	299	157	.90	41	2.4	142	--	8.2	13	9.1
JAN.											
03...	725	313	154	.99	43	2.7	159	--	8.1	10	16.0
FEB.											
07...	814	352	194	1.11	43	2.9	157	--	8.0	14	13.0
MAR.											
06...	829	344	175	1.13	47	3.2	169	--	8.1	15	16.0
APR.											
03...	575	256	144	.78	41	2.2	112	--	7.6	21	9.4
MAY											
01...	860	323	193	1.17	50	3.6	130	--	7.6	--	9.1
JUNE											
05...	835	329	188	1.14	48	3.3	141	--	8.2	18	11.0
JULY											
03...	865	329	209	1.18	51	3.7	120	--	7.8	24	18.0
AUG.											
15...	910	308	270	1.24	51	3.7	38	--	7.4	22	14.0
SEPT.											
03...	930	332	187	1.26	51	3.8	145	--	7.7	20	16.0
12...	815	315	156	1.11	49	3.5	159	1230	7.3	19	5.2

11-1022.5. MISSION CREEK BELOW WHITTIER NARROWS DAM, CALIF.

LOCATION.--Lat 34°01'15", long 118°04'15", (unsurveyed), Los Angeles County, at gaging station near north boundary of Paso de Bartolo Grant, approximately 500 ft downstream from axis of Whittier Narrows Dam, and 1.4 miles north of Pico.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	TEMP-ERATURE (DEG C)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
OCT.											
06...	1.6	17	128	31	29	5.0	276	0	209	42	.4
NOV.											
08...	1.8	17	128	32	24	3.0	300	0	210	28	.6
DEC.											
15...	.30	20	101	38	24	3.0	258	0	202	26	.6
JAN.											
10...	.50	14	120	33	22	4.0	283	0	199	25	.5
FEB.											
07...	.10	15	126	31	23	3.0	281	0	196	29	.5
MAR.											
12...	.30	16	112	25	20	4.0	251	0	170	27	.5
APR.											
03...	.05	18	92	28	22	4.0	187	0	178	28	.5
MAY											
02...	.05	18	119	25	25	3.0	263	0	186	29	.3
JUNE											
17...	.05	21	110	28	24	2.0	271	0	172	27	.9
JULY											
26...	2.3	21	99	29	23	2.0	235	0	173	35	.5
AUG.											
15...	1.9	18	101	26	23	2.0	252	0	159	31	.5
SEPT.											
16...	1.5	19	107	29	22	4.0	279	0	163	29	.5

DATE	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG)	SODIUM AD-SORP-TION RATIO	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	DISS-OLVED OXYGEN
OCT.											
06...	15	.08	665	595	.90	2.87	447	.6	876	7.9	7.2
NOV.											
08...	8.8	.10	661	581	.90	3.21	451	.5	909	8.1	10.0
DEC.											
15...	9.0	.12	--	530	.72	.43	408	.5	854	7.5	7.2
JAN.											
10...	11	.10	594	553	.81	.80	435	.5	869	7.5	9.3
FEB.											
07...	13	.08	615	559	.84	.17	442	.5	887	7.9	6.5
MAR.											
12...	12	.06	551	493	.75	.45	382	.4	798	7.7	6.0
APR.											
03...	12	.11	607	456	.83	.08	345	.5	841	7.8	7.1
MAY											
02...	10	.10	526	526	.72	.07	400	.5	860	8.1	8.1
JUNE											
17...	9.9	.09	592	506	.81	.08	390	.5	821	7.5	9.4
JULY											
26...	4.5	.10	494	481	.67	3.07	366	.5	762	8.1	8.2
AUG.											
15...	6.0	.10	482	472	.66	2.47	359	.5	731	7.8	7.1
SEPT.											
16...	8.0	.09	534	499	.73	2.16	386	.5	776	7.6	6.9

11-1115. SESPE CREEK NEAR WHEELER SPRINGS, CALIF.

LOCATION.--Lat 34°34'40", long 119°15'25", in SW¼SW¼ 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.
RECORDS AVAILABLE.--Water temperatures: February 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 28°C July 20-23, Aug. 1; minimum, 2°C Jan. 7, 13-15.
EXTREMES, 1962-68.--Water temperatures: Maximum, 29°C Aug. 11, 1964; minimum (1962-64, 1965-66, 1967-68), 2°C Mar. 16, 1963, Jan. 7, 13-15, 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	19	18	17	16	14	14	14	14	14	16	16	17	17	17	16	13	13	13	14	14	14	16	17	14	15	16	16	17	16	15	16	15
MINIMUM	14	14	13	13	12	11	11	11	12	12	13	13	13	14	12	10	11	11	11	11	11	13	14	13	13	13	13	14	14	12	13	12
NOVEMBER																																
MAXIMUM	15	15	14	13	12	12	12	12	12	12	12	13	13	13	14	14	14	14	13	12	12	12	11	10	10	10	10	9	8	10	--	12
MINIMUM	14	12	11	10	11	11	10	10	9	11	10	11	11	12	12	13	13	13	12	11	10	9	9	8	8	8	8	7	6	8	--	10
DECEMBER																																
MAXIMUM	8	7	7	8	8	8	7	7	6	7	7	7	5	3	4	5	5	5	5	4	4	4	6	6	7	7	6	6	6	6	5	6
MINIMUM	7	6	6	6	6	6	6	6	5	6	6	5	4	3	3	4	4	4	4	4	3	3	4	5	6	6	6	6	6	4	3	4
JANUARY																																
MAXIMUM	6	6	6	4	4	4	4	5	6	6	5	4	3	4	6	6	6	6	6	6	7	7	8	7	7	7	7	5	6	6	6	5
MINIMUM	3	6	4	3	3	3	2	3	4	3	3	3	2	2	2	4	4	4	4	4	4	4	6	7	6	6	5	5	4	3	3	6	3
FEBRUARY																																
MAXIMUM	7	8	9	8	8	8	8	9	10	10	9	8	9	9	11	11	11	12	13	13	13	13	14	14	15	13	14	14	13	--	--	10
MINIMUM	5	7	7	7	7	6	6	7	9	7	7	7	8	8	8	9	9	9	9	11	11	10	12	11	11	11	11	11	9	--	--	8
MARCH																																
MAXIMUM	12	13	14	16	14	14	12	12	13	12	13	12	13	14	14	13	13	13	14	15	14	16	17	16	18	18	14	14	14	16	16	14
MINIMUM	9	11	10	9	10	11	9	10	10	8	8	10	10	9	9	11	9	9	9	9	9	11	11	12	14	13	12	8	9	11	12	10
APRIL																																
MAXIMUM	13	10	14	14	14	14	14	15	15	16	16	16	15	15	15	13	13	14	13	13	13	13	14	14	13	16	17	16	16	16	--	14
MINIMUM	9	8	8	8	11	9	9	9	9	11	11	11	10	12	11	11	9	7	7	9	8	8	8	8	11	12	12	12	11	11	--	9
MAY																																
MAXIMUM	17	17	17	17	16	15	14	16	15	16	16	14	12	14	15	17	17	18	18	19	18	17	17	18	18	18	18	18	18	18	18	16
MINIMUM	13	14	12	13	13	11	11	11	11	12	12	12	11	9	11	11	13	14	15	16	14	12	12	13	14	14	14	14	14	14	13	12
JUNE																																
MAXIMUM	18	19	19	19	16	17	14	16	17	18	18	19	21	21	21	21	21	22	22	22	23	23	23	22	22	23	23	23	22	21	--	20
MINIMUM	13	15	15	16	14	12	12	12	12	13	13	14	14	14	16	16	16	17	17	16	17	17	18	18	17	17	17	17	15	14	--	15
JULY																																
MAXIMUM	21	21	22	24	24	22	19	20	24	25	26	26	26	25	24	26	26	26	26	28	28	28	28	26	26	27	27	22	25	24	27	24
MINIMUM	14	14	15	17	16	17	17	18	17	18	18	19	19	18	18	18	18	15	18	19	19	19	18	17	17	17	17	18	19	18	17	17
AUGUST																																
MAXIMUM	28	27	27	27	27	27	27	27	27	27	27	27	25	26	26	26	23	26	27	26	24	22	21	20	19	20	23	23	24	24	24	24
MINIMUM	17	16	15	16	15	14	18	16	16	16	16	15	14	14	15	15	15	13	14	15	13	13	13	13	11	16	16	16	17	17	18	15
SEPTEMBER																																
MAXIMUM	26	26	24	24	24	24	24	24	24	24	23	24	23	23	22	23	22	21	21	19	18	19	19	20	21	21	21	21	19	18	--	22
MINIMUM	19	18	17	17	16	17	17	18	17	17	16	17	16	16	16	16	15	15	14	14	12	12	12	12	13	14	14	15	14	14	--	15

11-1130. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
Water temperatures: October 1966 to September 1968.
Sediment records: October 1966 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 2,650 mg/l Nov. 20; minimum daily, 0 mg/l on many days.
Sediment loads: Maximum daily, 8,170 tons Nov. 21; minimum daily, 0 ton on many days.
EXTREMES, 1966-68.--Sediment concentrations: Maximum daily, 12,300 mg/l Dec. 6, 1966; minimum daily, 0 mg/l on many days.
Sediment loads: Maximum daily, 385,000 tons Dec. 6 1966; minimum daily, 0 ton on many days.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
OCT.												
04...	5.5	93	29	80	3.0	144	0	288	56	.5	1.3	1.5
NOV.												
06...	5.0	98	27	82	3.0	193	0	279	62	.0	1.4	.80
DEC.												
12...	41	103	32	58	2.0	217	0	289	30	.0	1.2	.86
JAN.												
11...	35	108	32	61	3.0	217	0	295	32	.0	1.3	.94
FEB.												
13...	67	63	17	34	2.0	129	0	163	17	.5	.7	.42
MAR.												
14...	125	106	27	42	2.0	204	0	260	17	.0	.8	.46
APR.												
05...	35	94	30	51	2.0	171	0	283	22	.0	1.0	.66
MAY												
03...	14	79	28	68	3.0	140	0	276	36	.5	1.2	1.2
JUNE												
11...	.90	68	31	78	3.0	76	7	308	57	.0	1.4	1.2
JULY												
22...	.20	119	35	94	4.0	110	5	445	55	.0	1.4	1.1

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.												
04...	660	611	326	208	.90	35	1.9	118	883	7.7	22	8.7
NOV.												
06...	698	646	356	198	.95	33	1.9	158	1020	8.2	16	18.0
DEC.												
12...	665	621	389	211	.90	24	1.3	178	964	8.0	12	12.2
JAN.												
11...	700	638	401	223	.95	25	1.3	178	989	7.9	11	11.9
FEB.												
13...	391	360	227	121	.53	24	1.0	106	591	7.9	11	12.1
MAR.												
14...	584	554	376	209	.79	19	.9	167	854	8.1	9	11.3
APR.												
05...	616	566	358	218	.84	24	1.2	140	895	8.1	17	8.1
MAY												
03...	576	560	312	197	.78	32	1.7	115	895	8.2	20	8.5
JUNE												
11...	615	588	297	223	.84	36	2.0	74	933	8.6	26	8.1
JULY												
22...	914	814	441	342	1.24	31	1.9	98	1190	8.4	28	19.0

11-1130. SESPE CREEK NEAR FILLMORE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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	AVER-AGE
OCTOBER..	--	20	--	--	--	--	--	--	17	--	--	--	21	--	--	--	21	--	--	--	--	--	--	16	--	--	--	--	--	14	15	--
NOVEMBER.	--	--	--	--	--	--	14	--	--	--	--	--	16	--	--	--	--	--	16	13	13	13	11	--	11	--	11	--	--	11	--	--
DECEMBER.	8	--	--	7	--	--	--	--	8	--	11	--	--	--	--	--	--	7	7	6	--	--	--	--	--	12	11	16	--	--	--	--
JANUARY..	--	--	--	--	--	--	--	9	--	--	--	--	--	--	--	--	--	9	--	--	--	--	--	--	10	9	--	--	6	--	--	--
FEBRUARY.	--	--	--	--	11	--	--	--	12	--	--	10	11	11	10	12	--	--	--	--	15	--	--	--	--	13	--	--	13	--	--	--
MARCH....	--	--	--	--	--	--	13	12	10	10	10	13	11	--	10	--	--	--	--	11	--	--	--	--	--	--	10	13	--	--	--	--
APRIL....	14	12	--	--	13	--	--	--	--	--	--	16	--	--	--	--	--	--	--	--	--	--	--	17	--	--	18	--	--	--	--	--
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22	--	--	--	--	--
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	25	--	--	--	--	--	--	--	--	--	--	23	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--

11-1130. SESPE CREEK NEAR FILLMORE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(Where no concentrations are reported, loads are estimated)

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	6.4	--	.09	5.0	--	.07	129	--	42
2	6.1	5	.08	5.0	--	.07	81	--	8.7
3	5.5	--	.07	5.0	--	.05	66	--	6.2
4	5.5	--	.07	5.0	--	.05	58	30	4.7
5	5.5	--	.07	5.0	--	.05	54	--	3.6
6	5.5	--	.07	5.0	--	.04	51	--	2.8
7	5.5	--	.07	5.0	3	.04	49	--	2.0
8	5.5	--	.09	5.0	--	.04	48	--	1.3
9	5.8	6	.09	5.0	--	.04	46	10	1.2
10	5.5	--	.09	5.0	--	.04	44	--	1.2
11	4.8	--	.09	4.8	--	.04	41	10	1.1
12	4.8	--	.09	5.2	--	.14	41	--	1.1
13	4.8	8	.10	6.1	8	.13	40	--	1.1
14	4.8	--	.10	6.1	--	.12	39	--	1.1
15	4.8	--	.13	5.5	--	.10	40	--	1.1
16	4.5	--	.13	5.5	--	.09	40	--	1.1
17	4.5	12	.15	5.0	--	.08	41	--	1.1
18	4.8	--	.16	6.1	195	S 11	67	650	S 130
19	4.8	--	.16	97	2120	S 593	62	62	9.6
20	4.8	--	.16	401	2650	S 4090	53	21	3.0
21	4.5	--	.15	966	2440	S 8170	46	--	1.5
22	4.5	--	.13	345	544	S 592	44	--	1.2
23	4.5	--	.13	116	210	66	43	--	1.2
24	4.5	11	.13	74	--	22	42	--	1.1
25	4.5	--	.13	59	69	11	41	--	1.1
26	4.5	--	.12	50	--	6.1	41	--	1.0
27	4.8	--	.12	43	28	3.3	39	9	.95
28	4.8	--	.10	43	--	3.3	39	--	.95
29	5.0	--	.09	42	--	3.2	39	--	.95
30	5.3	--	.09	338	1720	S 2880	37	--	.90
31	5.0	5	.07	--	--	--	37	--	.80
TOTAL	156.1	--	3.32	2668.3	--	16452.09	1538	--	235.65

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	37	--	.80	36	--	1.2	36	--	.62
2	37	--	.80	36	--	.78	36	--	.49
3	37	--	.70	36	--	.49	35	--	.47
4	35	--	.66	35	--	.28	34	--	.37
5	35	--	.57	34	1	.09	34	--	.28
6	35	--	.47	34	--	.09	34	--	.28
7	35	--	.38	34	--	.09	103	1740	S 1200
8	35	3	.28	34	--	.09	530	1130	S 2160
9	35	--	.28	36	198	S 20	191	--	S 104
10	35	--	.38	36	35	S 3.4	127	75	26
11	35	--	.47	35	--	.28	110	40	12
12	35	--	.57	36	1	.10	106	29	8.3
13	35	--	.66	67	250	S 49	133	127	S 47
14	35	--	.76	54	122	S 19	125	--	20
15	34	--	.83	44	30	3.6	112	25	7.6
16	32	--	.86	42	--	1.7	104	--	6.7
17	32	--	.95	66	114	S 22	96	--	6.2
18	30	11	.89	66	--	6.2	88	--	5.7
19	30	--	.97	58	--	2.3	79	--	5.1
20	30	--	.97	51	--	1.4	71	24	4.6
21	30	--	1.1	48	9	1.2	63	--	4.1
22	30	--	1.1	47	--	1.1	55	--	3.6
23	30	--	1.1	46	--	1.1	50	--	3.2
24	30	--	1.1	43	--	1.0	46	--	2.9
25	30	16	1.3	42	--	.91	41	--	2.5
26	30	--	1.3	42	--	.91	37	--	2.3
27	36	--	12	41	--	.77	37	--	2.3
28	40	--	11	40	--	.76	36	23	2.2
29	38	68	7.0	38	--	.62	36	--	2.2
30	36	--	3.1	--	--	--	36	--	2.1
31	36	--	1.6	--	--	--	35	--	2.1
TOTAL	1050	--	54.95	1257	--	140.46	2656	--	3645.21

S Computed by subdividing day.

11-1130. SESPE CREEK NEAR FILLMORE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	53	153	S 32	14	3	.11	2.2		.01
2	49	109	S 15	14		.11	1.8		0
3	40	--	3.3	14		.11	2.3		.01
4	35	--	2.7	14		.11	1.2		0
5	35	27	2.6	14		.11	1.2		0
6	34	--	2.3	14		.11	.90		0
7	33	--	2.0	12		.10	.90		0
8	32	--	1.8	12		.10	.90		0
9	31	--	1.6	12		.10	.90		0
10	28	--	1.3	12		.10	1.0		0
11	28	--	1.1	12		.10	.90		0
12	28	13	1.0	12		.10	.80		0
13	28	--	.83	12		.10	.80		0
14	27	--	.66	12		.10	.80		0
15	26	--	.56	12		.10	.80		0
16	26	--	.48	11		.06	.80		0
17	26	--	.42	11		.06	.60		0
18	26	--	.35	9.8		.05	.50		0
19	26	--	.28	9.4		.05	.50		0
20	26	--	.21	9.4		.05	.40		0
21	26	--	.21	8.2		.02	.40		0
22	23	--	.19	8.2		.02	.40		0
23	21	--	.17	8.2		.02	.40		0
24	20	--	.16	6.8		.02	.40		0
25	18	--	.15	6.4		.02	.40		0
26	18	--	.15	6.4		.02	.40		0
27	17	3	.14	5.8		.02	.40		0
28	16	--	.13	5.0		.01	.40		0
29	15	--	.12	4.8		.01	.40		0
30	14	--	.11	4.8		.01	.40		0
31	--	--	--	5.0		.01	--		--
TOTAL	825	--	72.02	312.2	--	2.01	24.20	--	.02

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.40			.10			.10		
2	.40			.10			.10		
3	.40			.10			.10		
4	.40			.10			.10		
5	.30			.10			.10		
6	.30			.10			.10		
7	.30			.10			.10		
8	.30			.10			.10		
9	.20			.10			.10		
10	.20			.10			.10		
11	.20			.10			.10		
12	.20			.10			.10		
13	.20			.10			.10		
14	.20			.10			.10		
15	.20			.10			.10		
16	.20			.10			.10		
17	.20			.10			.10		
18	.20			.10			.10		
19	.20			.10			.10		
20	.20			.10			.10		
21	.20			.10			.10		
22	.20			.10			.10		
23	.20			.10			.10		
24	.20			.10			.10		
25	.20			.10			.10		
26	.20			.10			.10		
27	.20			.10			.10		
28	.20			.10			.10		
29	.20			.10			.10		
30	.20			.10			.10		
31	.20			.10			--		
TOTAL	7.40	--	0	3.10	--	0	3.00	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 10500.30
TOTAL LOAD FOR YEAR (TONS) 20605.73

S Computed by subdividing day.

11-1133. SANTA CLARA RIVER NEAR SANTA PAULA, CALIF.

LOCATION.--Lat 34°21'14" (revised), 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.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Water discharge given is difference between stations 11-1135. Santa Paula Creek near Santa Paula, and 11-1139.1. Saticoy Diversion near Saticoy (unpublished).

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)
OCT.											
04...	54	166	57	112	5.0	276	0	562	53	1.1	13
NOV.											
06...	25	161	64	125	5.0	256	0	608	58	.9	9.0
DEC.											
12...	109	167	60	114	5.0	301	0	568	55	1.2	12
JAN.											
11...	98	123	45	92	4.0	239	0	407	42	.8	7.5
MAR.											
14...	158	147	52	96	4.0	261	0	480	43	.8	11
APR.											
05...	89	147	57	108	4.0	231	0	541	51	1.0	10
MAY											
03...	52	162	53	107	6.0	170	0	612	58	.8	13
JUNE											
11...	21	174	75	146	6.0	270	0	709	69	1.0	12
JULY											
22...	10	178	72	142	6.0	281	0	677	64	1.0	12

DATE	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
04...	.92	1200	1100	1.63	27	1.9	226	1460	7.7	23	8.3
NOV.											
06...	.92	1280	1160	1.74	29	2.1	210	1640	7.6	18	7.3
DEC.											
12...	.88	1220	1130	1.66	27	1.9	247	1600	7.9	15	10.6
JAN.											
11...	.64	923	838	1.26	29	1.8	196	1250	8.0	16	10.1
MAR.											
14...	.70	1050	961	1.43	26	1.7	214	1380	8.1	11	10.2
APR.											
05...	.84	1170	1030	1.59	28	1.9	189	1530	8.1	21	9.1
MAY											
03...	.90	1280	1100	1.74	27	1.9	139	1700	8.2	20	9.4
JUNE											
11...	.90	1470	1320	2.00	30	2.3	221	1830	8.0	25	9.1
JULY											
22...	.92	1470	1290	2.00	29	2.3	230	1750	8.2	25	16.1

11-1135. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
OCT.												
04...	9.3	75	26	60	2.0	181	0	225	32	.5	1.0	.30
NOV.												
06...	6.0	83	27	59	2.0	207	0	228	33	.5	.0	.28
DEC.												
12...	10	98	27	54	2.0	249	0	218	29	.5	1.4	.23
JAN.												
11...	9.4	87	26	54	2.0	215	0	213	29	.5	.9	.25
FEB.												
13...	16	87	26	54	2.0	228	0	200	29	.5	1.0	.23
MAR.												
14...	37	83	20	39	1.0	205	0	169	20	.4	.9	.12
APR.												
05...	13	74	22	44	1.0	176	0	188	22	.5	.0	.19
MAY												
03...	10	86	21	58	2.0	212	5	196	30	.4	.0	.30
JUNE												
11...	4.7	74	24	61	2.0	195	0	201	34	.5	.5	.33
JULY												
22...	2.3	64	27	89	2.0	168	5	235	52	.6	1.3	.46

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.												
04...	560	510	294	146	.76	31	1.5	148	756	7.8	22	11.9
NOV.												
06...	581	534	318	148	.79	29	1.4	170	841	8.1	16	13.0
DEC.												
12...	583	552	356	152	.79	25	1.2	204	867	8.1	11	12.2
JAN.												
11...	559	518	324	148	.76	26	1.3	176	832	8.0	14	12.1
FEB.												
13...	559	511	324	137	.76	26	1.3	187	814	8.2	13	12.3
MAR.												
14...	454	434	289	121	.62	23	1.0	168	706	8.1	10	11.9
APR.												
05...	485	438	275	131	.66	26	1.2	144	720	8.2	20	9.6
MAY												
03...	534	502	301	119	.73	29	1.5	182	837	8.4	17	10.6
JUNE												
11...	517	492	283	123	.70	32	1.6	160	807	8.1	26	9.7
JULY												
22...	620	558	271	125	.84	41	2.4	146	886	8.4	28	13.8

11-1139.2. SANTA CLARA RIVER AT SATICOY, CALIF.

LOCATION.--Lat 34°16'29", long 119°08'11", in Santa Clara Del Norte Grant, at gaging station on third pier from left levee of bridge on State Highway 118, and 0.9 mile southeast of Saticoy, Ventura County.
DRAINAGE AREA.--1,595 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1967 to September 1968.
Sediment records: October 1967 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, not determined; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 34,300 tons Mar. 8; minimum daily, 0 ton on many days.
REMARKS.--No flow Oct. 1 to Nov. 18, Mar. 18 to Apr. 1, Apr. 3-9, 29, 30, May 4-7, 27, May 31 to June 4, June 10, 13, 14, 16-21, 24-26, July 5 to Sept. 30. Water discharges and sediment concentrations are estimated for the period Nov. 19 to Jan. 23.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	--	--	--	--	--	--
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	12	9	--	--	--	--	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--
MARCH....	--	--	--	--	--	--	--	14	--	--	12	--	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL....	--	--	--	--	--	--	--	--	19	--	--	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--	--	--	--
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	24	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-1139.2. SANTA CLARA RIVER AT SATICOY, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(Where no concentrations are reported, loads are estimated)

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1				0		0	3.0		1.6
2				0		0	3.0		1.6
3				0		0	3.0		1.6
4				0		0	3.0		1.6
5				0		0	3.0		1.6
6				0		0	3.0		1.6
7				0		0	3.0		1.6
8				0		0	3.0		1.6
9				0		0	3.0		1.6
10				0		0	3.0		1.6
11				0		0	3.0		1.6
12				0		0	3.0		1.6
13				0		0	3.0		1.6
14				0		0	3.0		1.6
15				0		0	3.0		1.6
16				0		0	3.0		1.6
17				0		0	3.0		1.6
18				0		0	3.0		1.6
19				200		1080	3.0		1.6
20				400		3240	3.0		1.6
21				1500		32400	3.0		1.6
22				500		2700	3.0		1.6
23				150		324	3.0		1.6
24				10		14	3.0		1.6
25				5.0		4.0	3.0		1.6
26				4.0		2.1	3.0		1.6
27				3.0		1.6	3.0		1.6
28				3.0		1.6	3.0		1.6
29				3.0		1.6	3.0		1.6
30				5.0		2.7	3.0		1.6
31				--		--	3.0		1.6
TOTAL	0	--	0	2783.0	--	39771.6	93.0	--	49.6

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	3.0	--	.81	4.9	100	1.3	.60	100	.16
2	3.0	--	.81	5.2	100	1.4	.60	100	.16
3	3.0	--	.81	2.4	90	.58	.40	100	.11
4	3.0	--	.81	2.1	90	.51	.30	100	.08
5	3.0	--	.81	1.9	86	.41	.30	100	.08
6	3.0	--	.81	1.6	80	.35	.30	100	.08
7	3.0	--	.81	2.1	70	.40	141	1360	286
8	3.0	--	.81	2.1	70	.40	1390	7510	34300
9	3.0	--	.81	2.1	60	.34	168	1050	863
10	3.0	--	.81	1.9	60	.31	3.9	100	1.1
11	3.0	--	.81	2.2	60	.36	1.6	100	.43
12	3.0	--	.81	2.2	64	.38	2.0	150	.81
13	3.0	--	.81	99	1000	267	3.4	200	1.8
14	3.0	--	.81	20	500	27	1.0	150	.40
15	3.0	--	.81	.80	350	.76	.60	100	.16
16	3.0	--	.81	.70	200	.38	.40	100	.11
17	3.0	--	.81	4.6	500	6.2	.20	100	.05
18	3.0	--	.81	2.1	200	1.1	0	--	0
19	3.0	--	.81	1.2	200	.65	0	--	0
20	3.0	--	.81	.70	175	.33	0	--	0
21	3.0	--	.81	.60	175	.28	0	--	0
22	3.0	--	.81	.40	150	.16	0	--	0
23	3.0	--	.81	.40	150	.16	0	--	0
24	3.1	100	.84	.40	125	.14	0	--	0
25	2.6	100	.70	.40	125	.14	0	--	0
26	3.1	100	.84	.40	100	.11	0	--	0
27	4.2	100	1.1	.50	100	.14	0	--	0
28	4.9	100	1.3	.60	100	.16	0	--	0
29	3.4	100	.92	.60	100	.16	0	--	0
30	2.8	100	.76	--	--	--	0	--	0
31	3.4	100	.92	--	--	--	0	--	0
TOTAL	96.5	--	26.01	164.10	--	311.61	1714.60	--	35454.53

11-1139.2. SANTA CLARA RIVER AT SATICOY, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	0	--	0	.40	100	.11	0	--	0
2	60	500	81	.10	100	.03	0	--	0
3	0	--	0	.10	100	.03	0	--	0
4	0	--	0	0	--	0	0	--	0
5	0	--	0	0	--	0	.50	30	.04
6	0	--	0	0	--	0	.40	30	.03
7	0	--	0	0	--	0	.20	30	.02
8	0	--	0	.80	100	.22	.20	30	.02
9	0	--	0	.40	90	.10	.40	30	.03
10	.10	160	.04	.30	90	.07	0	--	0
11	.10	100	.03	.20	80	.04	.20	30	.02
12	.10	100	.03	.20	70	.04	.50	30	.04
13	.10	150	.04	.60	70	.11	0	--	0
14	.10	150	.04	1.0	60	.16	0	--	0
15	.10	100	.03	.60	50	.08	.10	30	.01
16	.10	140	.04	1.3	50	.18	0	--	0
17	.10	100	.03	.80	40	.09	0	--	0
18	.10	130	.04	.60	40	.06	0	--	0
19	.10	100	.03	.30	30	.02	0	--	0
20	.10	100	.03	.10	30	.01	0	--	0
21	.10	120	.03	.60	30	.05	0	--	0
22	.10	120	.03	.70	30	.06	.20	30	.02
23	.10	110	.03	.60	30	.05	.20	30	.02
24	.20	110	.06	.70	30	.06	0	--	0
25	.10	110	.03	.40	30	.03	0	--	0
26	.10	110	.03	.40	30	.03	0	--	0
27	.30	100	.08	0	--	0	.40	30	.03
28	.20	100	.05	.20	30	.02	.10	30	.01
29	0	--	0	.60	30	.05	.50	30	.04
30	0	--	0	.50	30	.04	.10	30	.01
31	--	--	--	0	--	0	--	--	--
TOTAL	62.30	--	81.72	12.50	--	1.74	4.00	--	.34

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.10	30	.01						
2	.70	30	.06						
3	.50	30	.04						
4	.60	30	.05						
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	0	--	0						
26	0	--	0						
27	0	--	0						
28	0	--	0						
29	0	--	0						
30	0	--	0						
31	0	--	0						
TOTAL	1.90	--	.16	0	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 4931.90
TOTAL LOAD FOR YEAR (TONS) 75697.31

11-1145. MATILIJA CREEK ABOVE RESERVOIR, NEAR MATILIJA HOT SPRINGS, CALIF.

LOCATION.--Lat 34°29'39", long 119°19'46", in SW¼SE¼SW¼ sec.19, T.5 N., R.23 W., Ventura County, at gaging station 1.6 miles upstream from Matilija Dam, and 1.7 miles northwest of Matilija Hot Springs.
DRAINAGE AREA.--50.7 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
OCT.												
04...	8.2	103	34	54	2.0	200	0	298	30	.8	.0	1.1
NOV.												
06...	6.5	112	32	59	3.0	242	0	278	37	1.0	.0	1.2
DEC.												
12...	10	116	35	50	2.0	237	0	299	27	.8	.0	.75
JAN.												
11...	10	119	33	49	2.0	249	0	278	28	.8	.0	.82
FEB.												
14...	10	112	32	49	2.0	230	0	276	28	.8	.0	.82
APR.												
05...	14	102	34	45	2.0	207	0	277	22	.8	.0	.72
MAY												
03...	8.1	103	29	47	3.0	122	0	281	34	.7	6.0	1.1
JUNE												
11...	4.2	106	32	59	3.0	220	0	270	42	1.0	.0	1.1
JULY												
23...	2.5	105	30	72	3.0	214	0	260	68	1.4	.0	2.1

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.												
04...	700	619	397	233	.95	23	1.2	164	879	7.7	21	9.1
NOV.												
06...	695	640	411	212	.95	24	1.3	198	983	8.2	20	9.4
DEC.												
12...	706	646	434	240	.96	20	1.0	194	998	8.0	11	10.5
JAN.												
11...	679	631	433	229	.92	20	1.0	204	965	8.2	12	10.7
FEB.												
14...	688	612	411	222	.94	20	1.1	189	950	7.8	13	11.4
APR.												
05...	660	584	394	224	.90	20	1.0	170	927	8.1	20	9.5
MAY												
03...	672	563	376	276	.91	21	1.1	100	976	8.2	19	9.8
JUNE												
11...	652	620	396	216	.89	24	1.3	180	978	8.0	25	9.1
JULY												
23...	744	643	386	210	1.01	29	1.6	176	1010	8.2	26	12.2

11-1185. VENTURA RIVER NEAR VENTURA, CALIF.

LOCATION.--Lat 34°21'05", long 119°18'23", in southeast corner of Santa Ana Grant, Ventura County, at gaging station 500 ft downstream from county highway bridge at Foster Memorial Park, 0.2 mile downstream from Coyote Creek, and 5 miles north of Ventura.
DRAINAGE AREA.--188 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
OCT.												
04...	6.0	130	37	68	2.0	290	0	294	52	.6	12	.60
NOV.												
06...	5.6	127	36	64	2.0	295	0	277	48	.6	11	.53
DEC.												
12...	7.1	123	36	58	2.0	289	0	266	44	.6	9.3	.44
JAN.												
11...	8.4	124	36	61	3.0	273	0	274	51	.6	11	.48
FEB.												
14...	7.6	117	35	58	2.0	259	0	263	48	.6	12	.41
MAR.												
15...	20	133	38	61	2.0	299	0	280	52	.6	12	.42
APR.												
05...	16	125	36	59	2.0	270	0	275	48	.6	10	.47
MAY												
03...	11	132	35	68	2.0	284	11	285	52	.5	10	.50
JUNE												
11...	3.0	132	40	64	3.0	311	0	288	52	.7	7.4	.51
JULY												
22...	.50	131	34	65	3.0	293	0	279	49	.7	1.5	.48

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.												
04...	800	738	477	239	1.09	24	1.4	238	1060	7.9	20	10.7
NOV.												
06...	778	710	465	223	1.06	23	1.3	242	1100	8.1	16	--
DEC.												
12...	727	680	455	218	.99	22	1.2	237	1060	7.7	12	11.0
JAN.												
11...	754	694	458	234	1.03	22	1.2	224	1090	8.0	14	11.3
FEB.												
14...	794	662	436	224	1.08	22	1.2	212	1060	8.1	14	11.1
MAR.												
15...	781	725	488	243	1.06	21	1.2	245	1130	8.0	16	10.0
APR.												
05...	739	688	460	239	1.01	22	1.2	221	1090	7.8	18	9.7
MAY												
03...	787	735	474	223	1.07	24	1.4	251	1160	8.5	17	10.8
JUNE												
11...	818	739	494	239	1.11	22	1.3	255	1150	7.7	20	7.9
JULY												
22...	809	707	467	227	1.10	23	1.3	240	1070	7.8	22	9.9

MISCELLANEOUS ANALYSES OF STREAMS IN SANTA YNEZ RIVER BASIN

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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
11-1305. SANTA YNEZ RIVER NEAR BUELTON, CALIF. (LAT 34°36'50", LONG 120°14'30")																	
NOV 22, 1967	1340	17	7.1	82	1.6	--	--	--	--	--	--	--	--	--	--	--	
NOV 30.....	1325	15	8.3	36	.81	--	--	--	--	--	--	--	--	--	--	--	
DEC 13.....	1000	10	8.0	3	.06	--	--	--	--	--	--	--	--	--	--	--	
JAN 9, 1968	1330	12	11	21	.62	--	--	--	--	--	--	--	--	--	--	--	
JAN 31.....	--	13	19	35	1.8	--	--	--	--	--	--	--	--	--	--	--	
MAR 1.....	1300	16	18	35	1.7	--	--	--	--	--	--	--	--	--	--	--	
APR 1.....	1120	13	45	105	13	--	--	--	--	--	--	--	--	--	--	--	
APR 29.....	0940	18	7.1	9	.17	--	--	--	--	--	--	--	--	--	--	--	
11-1325. SALSIPUEDES CREEK NEAR LOMPOC, CALIF. (LAT 34°35'20", LONG 120°24'27")																	
NOV 28, 1967	0935	10	1.2	84	.27	--	--	--	--	--	--	--	--	--	--	--	
JAN 2, 1968	1320	8	1.5	160	.65	--	--	--	--	--	--	--	--	--	--	--	
JAN 29.....	0930	2	2.0	73	.39	--	--	--	--	--	--	--	--	--	--	--	
FEB 28.....	0940	14	1.7	86	.39	--	--	--	--	--	--	--	--	--	--	--	
MAR 13.....	1125	13	53	6250	894	64	76	86	90	92	100	--	--	--	--	--	SPWC
MAR 28.....	1000	12	1.6	76	.33	--	--	--	--	--	--	--	--	--	--	--	
APR 26.....	0950	14	1.1	98	.29	--	--	--	--	--	--	--	--	--	--	--	
MAY 28.....	0940	18	.34	98	.09	--	--	--	--	--	--	--	--	--	--	--	

11-1381. CUYAMA RIVER BELOW TWITCHELL DAM, CALIF.

LOCATION.--Lat 34°56'40", long 120°17'30", T.10 N., R.32 W., Santa Barbara County, at gaging station in Suey Grant, 3.5 miles upstream from mouth, 4 miles northeast of Garey, and 4.4 miles downstream from Twitchell Dam.
DRAINAGE AREA.--1,133 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	BORON (B)
OCT.												
04...	82	87	33	53	4.0	229	0	226	33	.6	6.5	.22
NOV.												
07...	163	81	31	48	5.0	205	0	220	33	.6	2.5	.22
DEC.												
11...	127	89	34	50	5.0	222	0	239	34	.6	1.5	.20
JAN.												
11...	125	95	36	50	5.0	234	0	241	34	.6	2.5	.19
MAR.												
15...	2.7	128	62	88	4.0	278	0	438	59	.7	.5	.12
APR.												
05...	14	143	68	99	5.0	295	0	490	64	.7	.6	.27
MAY												
03...	1.9	149	74	122	6.0	290	10	571	77	.6	.4	.30

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.												
04...	600	555	353	165	.82	24	1.2	188	803	8.0	17	10.0
NOV.												
07...	600	521	330	162	.82	24	1.2	168	824	8.1	17	10.1
DEC.												
11...	600	562	362	180	.82	23	1.1	182	886	7.8	13	10.5
JAN.												
11...	629	579	385	193	.86	22	1.1	192	914	8.0	8	11.8
MAR.												
15...	1010	916	575	347	1.37	25	1.6	228	1360	8.0	15	15.7
APR.												
05...	1100	1020	637	395	1.50	25	1.7	242	1520	8.2	21	8.6
MAY												
03...	1230	1150	676	421	1.67	28	2.0	254	1680	8.5	14	8.9

11-1411.5. 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.--13.4 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1967 to September 1968.
Sediment records: October 1967 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 1,070 mg/l Feb. 17; minimum daily, 1 mg/l on several days.
Sediment loads: Maximum daily, 22 tons Feb. 17; minimum daily, 0 ton on many days.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	19	--	--	--	13	--	--	--	--	14	--	19	--	--	--	--	17	--	--	--	--	17	--	--	--	17	--	16	--	--
NOVEMBER.	--	16	--	14	--	--	--	12	16	--	--	--	16	--	--	--	16	--	15	13	13	13	9	--	--	--	13	12	12	13	--	--
DECEMBER.	11	12	--	12	12	12	10	--	--	--	--	--	--	7	8	--	--	10	9	--	--	--	--	--	--	--	--	--	10	7	--	--
JANUARY..	--	--	10	--	9	--	--	--	11	11	12	--	--	--	--	--	10	--	--	8	--	--	--	8	7	--	8	--	--	--	12	--
FEBRUARY.	--	--	9	--	--	--	--	12	--	9	--	--	--	15	--	14	--	--	--	19	18	--	--	13	--	--	--	--	18	--	--	--
MARCH....	--	10	--	--	--	14	13	13	--	--	--	15	12	--	--	--	--	11	--	--	--	16	--	--	--	--	19	--	--	--	--	--
APRIL....	12	14	--	--	--	11	--	--	20	--	--	13	--	--	--	17	--	--	--	11	--	--	12	19	--	--	14	--	--	--	--	--
MAY.....	21	--	--	13	--	--	--	19	--	19	--	--	15	--	--	--	--	14	--	--	20	16	--	--	--	21	--	--	--	--	--	--
JUNE.....	24	--	--	19	--	--	--	--	--	--	--	20	--	--	21	--	--	21	--	--	18	--	--	--	21	--	--	--	20	--	--	--
JULY.....	--	21	--	--	--	19	--	--	--	22	--	16	--	--	--	--	15	--	--	22	--	--	--	--	15	--	21	--	--	--	21	--
AUGUST...	--	--	21	--	--	--	21	--	--	--	--	--	19	--	--	--	--	20	--	--	19	--	--	19	--	--	--	--	--	21	20	--
SEPTEMBER	--	--	--	18	--	--	19	--	--	--	--	21	--	19	--	--	--	--	--	17	17	--	--	--	--	19	--	17	--	--	--	--

11-1411.5. ARROYO GRANDE ABOVE PHOENIX CREEK, NEAR ARROYO GRANDE, CALIF.--Continued

TOTAL SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)
1	1.2	3	.01	1.0	8	.02	2.1	12	.07
2	1.2	3	.01	1.2	12	.04	2.0	4	.02
3	1.2	3	.01	1.3	8	.03	2.0	6	.03
4	1.2	2	.01	1.3	4	.01	2.0	8	.04
5	1.2	2	.01	1.4	3	.01	3.0	58	.55
6	1.2	1	0	1.4	2	.01	2.4	5	.03
7	1.2	1	0	1.4	2	.01	2.5	10	.07
8	1.1	2	.01	1.5	1	0	2.2	8	.05
9	1.1	5	.01	1.5	3	.01	1.8	8	.04
10	1.1	7	.02	1.4	3	.01	1.8	8	.04
11	1.1	9	.03	1.5	3	.01	1.8	8	.04
12	1.1	12	.04	1.5	2	.01	1.8	15	.07
13	1.1	5	.01	1.5	2	.01	1.8	20	.10
14	1.1	1	0	1.6	4	.02	1.7	30	.14
15	1.1	2	.01	1.6	6	.03	1.8	35	.17
16	1.1	2	.01	1.8	8	.04	1.8	35	.17
17	1.2	4	.01	1.8	9	.04	1.8	30	.15
18	1.1	6	.02	2.0	10	.05	3.3	242	2.3
19	1.2	8	.03	2.3	13	.08	3.7	237	2.7
20	1.2	6	.02	2.0	7	.04	2.1	50	.28
21	1.3	6	.02	2.2	12	.07	2.0	50	.27
22	1.2	4	.01	2.0	7	.04	1.8	50	.24
23	1.1	3	.01	1.8	10	.05	1.8	50	.24
24	1.1	3	.01	1.8	8	.04	1.8	50	.24
25	1.1	3	.01	1.8	6	.03	1.8	50	.24
26	1.1	3	.01	1.8	4	.02	1.8	50	.24
27	1.1	3	.01	1.8	4	.02	1.8	50	.24
28	1.1	3	.01	1.9	5	.03	1.8	60	.29
29	.99	3	.01	2.0	2	.01	1.8	100	.49
30	1.0	2	.01	3.2	74	.83	1.8	235	1.1
31	1.0	4	.01	--	--	--	1.8	130	.63
TOTAL	35.09	--	.39	51.3	--	1.62	63.4	--	11.28

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)
1	1.7	80	.37	1.9	30	.15	1.7	90	.41
2	1.7	60	.28	2.0	30	.16	1.5	76	.31
3	1.6	48	.21	2.0	27	.15	1.4	80	.30
4	1.7	40	.18	2.0	25	.14	1.4	80	.30
5	1.6	38	.16	2.0	25	.14	1.4	80	.30
6	1.7	40	.18	1.9	25	.13	1.3	80	.28
7	1.7	50	.23	2.2	25	.15	3.1	666	11
8	1.7	60	.28	2.2	24	.14	4.5	675	15
9	1.7	69	.32	2.2	35	.21	1.8	45	.22
10	3.6	711	11	2.1	49	.28	1.8	40	.19
11	2.6	55	.39	2.0	40	.22	1.8	40	.19
12	1.9	25	.13	2.1	30	.17	2.0	37	.20
13	1.8	25	.12	2.7	20	.15	5.5	318	7.5
14	1.8	25	.12	2.4	13	.08	2.4	45	.29
15	2.6	25	.18	2.2	60	.36	2.2	45	.27
16	1.8	25	.12	2.3	99	.61	2.4	60	.39
17	1.8	28	.14	5.6	1070	22	2.2	50	.30
18	1.8	25	.12	2.8	300	2.3	1.8	48	.23
19	1.8	25	.12	2.3	80	.50	1.8	45	.22
20	1.8	26	.13	2.1	48	.27	1.8	40	.19
21	1.8	25	.12	2.1	117	.66	1.7	40	.18
22	1.8	25	.12	2.0	120	.65	1.7	38	.17
23	1.8	25	.12	1.8	100	.49	1.7	40	.18
24	1.8	30	.15	1.8	88	.43	1.7	50	.23
25	1.8	52	.25	1.8	80	.39	1.7	55	.25
26	1.8	45	.22	1.8	80	.39	1.6	60	.26
27	2.3	27	.17	1.7	80	.37	1.6	63	.27
28	2.0	30	.16	1.7	80	.37	1.6	60	.26
29	1.8	30	.15	1.7	105	.48	1.4	60	.23
30	1.9	30	.15	--	--	--	1.4	60	.23
31	2.4	30	.19	--	--	--	1.5	60	.24
TOTAL	59.6	--	16.58	63.4	--	32.54	61.4	--	40.59

11-1411.5. ARROYO GRANDE ABOVE PHOENIX CREEK, NEAR ARROYO GRANDE, CALIF.--Continued

TOTAL SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)
1	3.3	740	11	1.2	10	.03	.77	3	.01
2	2.7	47	.48	1.3	20	.07	.77	3	.01
3	1.6	24	.10	1.4	30	.11	.76	3	.01
4	1.5	24	.10	1.3	33	.12	.82	3	.01
5	1.5	24	.10	1.4	30	.11	.88	3	.01
6	1.5	24	.10	1.2	25	.08	.80	3	.01
7	1.5	22	.09	1.2	25	.08	.81	3	.01
8	1.4	20	.08	1.2	23	.07	.85	3	.01
9	1.3	17	.06	1.2	25	.08	.91	3	.01
10	1.3	20	.07	1.2	26	.08	.83	3	.01
11	1.3	25	.09	1.2	20	.06	.82	3	.01
12	1.4	29	.11	1.3	10	.04	.82	3	.01
13	1.4	25	.09	1.3	8	.03	.77	3	.01
14	1.4	25	.09	1.3	10	.04	.75	3	.01
15	1.4	25	.09	1.1	15	.04	.73	3	.01
16	1.4	21	.08	1.1	25	.07	.63	3	.01
17	1.4	25	.09	1.0	30	.08	.68	2	0
18	1.3	25	.09	1.0	36	.10	.69	2	0
19	1.3	25	.09	1.0	25	.07	.66	2	0
20	1.2	32	.10	.99	15	.04	.62	3	.01
21	1.2	25	.08	1.0	7	.02	.65	3	.01
22	1.2	25	.08	.98	9	.02	.69	3	.01
23	1.2	22	.07	.97	10	.03	.67	2	0
24	1.2	53	.17	.93	10	.03	.74	2	0
25	1.2	50	.16	.92	10	.02	.82	2	0
26	1.2	45	.15	.88	15	.04	.83	2	0
27	1.3	42	.15	.77	10	.02	.83	2	0
28	1.3	35	.12	.76	10	.02	.88	2	0
29	1.2	25	.08	.77	5	.01	.85	2	0
30	1.2	15	.05	.80	5	.01	.83	2	0
31	--	--	--	.80	5	.01	--	--	--
TOTAL	43.3	--	14.21	33.47	--	1.63	23.16	--	.19

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)
1	.84	3	.01	.60	9	.01	.71	4	.01
2	.79	3	.01	.61	11	.02	.74	5	.01
3	.70	5	.01	.61	12	.02	.82	5	.01
4	.68	5	.01	.62	10	.02	.84	5	.01
5	.61	5	.01	.62	8	.01	.89	6	.01
6	.52	7	.01	.62	6	.01	.86	7	.02
7	.43	5	.01	.61	5	.01	.87	8	.02
8	.61	3	0	.62	5	.01	.88	8	.02
9	.64	2	0	.62	5	.01	.75	9	.02
10	.57	1	0	.64	5	.01	.77	10	.02
11	.55	1	0	.66	5	.01	.80	11	.02
12	.54	2	0	.69	5	.01	.80	12	.03
13	.58	2	0	.71	5	.01	.81	12	.03
14	.61	2	0	.70	5	.01	.81	11	.02
15	.62	3	.01	.69	5	.01	.71	11	.02
16	.59	3	0	.70	4	.01	.71	11	.02
17	.56	5	.01	.71	4	.01	.73	11	.02
18	.56	10	.02	.70	4	.01	.75	10	.02
19	.56	11	.02	.72	5	.01	.80	10	.02
20	.56	11	.02	.74	5	.01	.80	10	.02
21	.57	10	.02	.71	6	.01	.68	6	.01
22	.57	9	.01	.66	6	.01	.63	8	.01
23	.57	8	.01	.66	5	.01	.65	10	.02
24	.57	8	.01	.67	5	.01	.66	12	.02
25	.58	7	.01	.67	5	.01	.65	14	.02
26	.58	6	.01	.67	5	.01	.68	15	.03
27	.58	6	.01	.67	4	.01	.65	11	.02
28	.60	6	.01	.66	4	.01	.70	7	.01
29	.61	6	.01	.66	4	.01	.78	7	.01
30	.60	7	.01	.69	4	.01	.80	7	.02
31	.60	7	.01	.71	4	.01	--	--	--
TOTAL	18.55	--	.27	20.62	--	.34	22.73	--	.54

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 496.02
TOTAL LOAD FOR YEAR (TONS) 120.18

11-1411.5. ARROYO GRANDE ABOVE PHOENIX CREEK, NEAR ARROYO GRANDE, CALIF.--Continued

TOTAL SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 30, 1967	0645	11	3.6	182	1.8	27	31	36	38	40	44	54	83	95	99	100	SBWC
DEC 18.....	1500	10	4.5	663	8.1	16	19	21	22	23	35	41	72	92	100	--	VBWC
FEB 20, 1968	1310	19	2.2	34	.20	38	40	50	57	58	72	85	97	99	99	100	VBWC
MAR 7.....	1725	13	5.0	505	6.8	30	39	45	47	49	72	83	98	99	100	--	VBWC
MAR 12.....	1500	15	1.8	37	.18	9	11	18	23	27	38	50	81	90	100	--	VBWC
MAR 13.....	0620	12	9.7	595	16	6	10	15	19	22	29	41	91	99	100	--	VBWC
MAR 13.....	0745	12	15	963	39	20	27	33	36	39	50	63	92	98	100	--	VBWC

11-1412.8. 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.--21.4. sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1967 to September 1968.
Sediment records: October 1967 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 200 mg/l Mar. 8; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 15 tons Mar. 8; minimum daily, 0 ton Sept. 16-20.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	19	--	--	18	--	--	18	--	--	17	20	--	--	--	18	--	--	18	--	--	--	18	--	--	18	--	--	--	--	--
NOVEMBER.	18	--	--	16	--	--	16	--	--	16	--	--	--	17	--	--	16	17	15	16	14	16	--	--	14	--	--	11	--	12	--	--
DECEMBER.	10	--	--	--	14	--	12	--	--	--	--	--	10	--	--	10	--	11	10	--	--	11	--	--	--	13	--	--	12	--	--	--
JANUARY..	--	11	--	--	10	--	--	--	9	12	8	--	--	--	12	--	10	--	--	11	--	--	12	14	--	10	11	--	--	11	11	--
FEBRUARY.	--	--	13	--	--	13	--	--	12	--	--	--	13	--	--	13	13	--	--	16	--	--	17	--	--	--	14	--	--	--	--	--
MARCH....	12	--	--	--	14	--	13	14	--	--	--	14	13	13	--	--	--	13	--	--	--	16	--	--	--	14	--	--	18	--	--	--
APRIL....	12	13	--	--	16	--	--	--	16	--	--	14	--	--	--	16	--	--	12	--	--	--	18	14	--	16	--	--	--	12	--	--
MAY.....	--	--	15	--	--	--	18	--	--	13	--	--	12	--	--	--	21	--	--	--	19	21	--	17	--	--	--	19	--	--	23	--
JUNE.....	--	--	--	22	--	--	20	--	--	--	18	--	--	16	--	--	--	16	--	25	--	16	--	--	--	16	--	18	--	--	--	--
JULY.....	--	--	--	15	--	--	16	--	16	--	--	--	--	18	--	--	21	--	22	--	--	--	19	--	--	21	--	--	--	--	22	--
AUGUST...	--	22	--	--	--	21	--	--	22	--	--	--	21	--	--	21	--	--	--	19	--	--	18	--	--	--	17	--	--	21	--	--
SEPTEMBER	--	--	22	20	--	--	--	--	--	21	--	--	19	--	--	--	16	--	--	19	--	--	--	16	--	--	20	--	--	--	--	--

11-1412.8. LOPEZ CREEK NEAR ARROYO GRANDE, CALIF.--Continued

TOTAL SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)
1	4.7	1	.01	3.9	5	.05	6.4	2	.03
2	4.7	1	.01	4.1	4	.04	5.8	2	.03
3	4.8	1	.01	4.2	3	.03	5.5	2	.03
4	4.7	1	.01	4.2	3	.03	5.5	2	.03
5	4.3	1	.01	4.4	3	.04	6.7	11	.21
6	4.2	1	.01	4.5	2	.02	6.1	3	.05
7	4.1	1	.01	4.5	2	.02	6.1	2	.03
8	4.2	2	.02	4.5	2	.02	6.1	2	.03
9	4.1	2	.02	4.5	2	.02	5.8	2	.03
10	4.0	2	.02	4.7	2	.03	5.2	2	.03
11	4.0	1	.01	4.5	2	.02	5.2	1	.01
12	4.1	1	.01	4.7	2	.03	5.1	1	.01
13	3.9	2	.02	4.7	3	.04	5.0	1	.01
14	3.8	2	.02	4.5	3	.04	5.0	2	.03
15	3.8	3	.03	4.7	2	.03	5.0	2	.03
16	3.9	4	.04	4.7	1	.01	4.8	3	.04
17	3.9	4	.04	4.7	1	.01	4.8	3	.04
18	3.8	3	.03	5.4	31	.56	6.4	6	.12
19	3.8	2	.02	6.4	10	.17	6.6	3	.05
20	3.9	2	.02	5.7	3	.05	6.0	3	.05
21	4.0	2	.02	5.7	3	.05	5.6	2	.03
22	4.1	2	.02	5.3	1	.01	5.3	2	.03
23	3.7	2	.02	5.1	1	.01	5.2	2	.03
24	3.7	2	.02	5.0	1	.01	5.1	2	.03
25	3.8	2	.02	5.0	1	.01	5.0	2	.03
26	3.7	1	.01	5.0	1	.01	5.0	2	.03
27	3.7	1	.01	5.3	2	.03	4.9	3	.04
28	3.7	1	.01	5.3	2	.03	4.8	4	.05
29	3.8	2	.02	5.3	2	.03	4.8	6	.08
30	3.8	3	.03	8.0	13	.35	4.8	5	.06
31	3.8	4	.04	--	--	--	4.8	4	.05
TOTAL	124.5	--	.59	148.5	--	1.80	168.4	--	1.35

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)
1	4.8	3	.04	6.0	11	.18	5.0	4	.05
2	4.7	3	.04	5.6	10	.15	4.9	4	.05
3	4.5	4	.05	5.5	10	.15	4.7	4	.05
4	4.5	6	.07	5.4	9	.13	4.7	3	.04
5	4.5	6	.07	5.3	8	.11	4.5	3	.04
6	4.5	6	.07	5.3	7	.10	4.5	3	.04
7	4.5	5	.06	5.0	6	.08	5.9	18	.36
8	4.5	4	.05	5.0	6	.08	25	200	15
9	4.5	4	.05	5.0	5	.07	14	10	.38
10	5.9	9	.15	5.0	5	.07	9.8	8	.21
11	6.3	3	.05	5.0	6	.08	8.5	6	.14
12	5.6	2	.03	5.0	7	.09	7.6	5	.10
13	5.2	2	.03	5.2	7	.10	19	58	3.4
14	5.1	3	.04	5.3	7	.10	14	10	.38
15	5.0	3	.04	5.1	7	.10	11	8	.24
16	4.9	3	.04	5.1	7	.10	10	6	.16
17	4.8	3	.04	7.8	22	.47	10	4	.11
18	4.8	3	.04	8.4	8	.18	9.0	3	.07
19	4.7	3	.04	6.9	6	.11	8.3	4	.09
20	4.6	3	.04	6.1	4	.07	7.9	5	.11
21	4.5	3	.04	5.8	4	.06	7.8	6	.13
22	4.5	4	.05	5.5	4	.06	7.3	8	.16
23	4.5	4	.05	5.3	4	.06	7.2	7	.14
24	4.5	5	.06	5.3	4	.06	6.9	5	.09
25	4.5	6	.07	5.1	4	.06	6.8	4	.07
26	4.5	8	.10	5.0	3	.04	6.9	3	.06
27	5.1	9	.12	4.7	3	.04	6.6	3	.05
28	5.1	8	.11	4.7	3	.04	6.5	2	.04
29	4.9	6	.08	5.0	4	.05	6.3	2	.03
30	4.9	6	.08	--	--	--	6.1	2	.03
31	6.5	17	.30	--	--	--	6.1	2	.03
TOTAL	151.4	--	2.10	159.4	--	2.99	262.8	--	21.85

11-1412.8. LOPEZ CREEK NEAR ARROYO GRANDE, CALIF.--Continued

TOTAL SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)
1	9.7	44	1.6	4.4	3	.04	3.3	9	.08
2	12	40	1.3	4.2	4	.05	3.2	8	.07
3	8.3	25	.56	4.3	4	.05	3.2	7	.06
4	7.2	5	.10	4.3	4	.05	3.2	7	.06
5	6.8	3	.06	4.3	4	.05	3.3	7	.06
6	6.6	4	.07	4.4	5	.06	3.2	6	.05
7	6.6	5	.09	4.3	5	.06	3.1	5	.04
8	6.3	6	.10	4.3	4	.05	3.1	8	.07
9	6.4	7	.12	4.1	4	.04	3.1	11	.09
10	6.3	5	.09	4.0	3	.03	3.0	14	.11
11	5.9	4	.06	4.0	3	.03	3.0	17	.14
12	5.8	3	.05	4.1	3	.03	2.9	14	.11
13	5.9	3	.05	4.2	3	.03	2.8	10	.08
14	5.7	4	.06	4.3	3	.03	2.6	7	.05
15	5.5	4	.06	4.0	4	.04	2.6	9	.06
16	5.5	4	.06	3.9	4	.04	2.6	11	.08
17	5.3	3	.04	3.8	5	.05	2.6	13	.09
18	5.1	3	.04	3.9	5	.05	2.6	16	.11
19	5.4	2	.03	3.9	4	.04	2.5	20	.14
20	5.4	2	.03	3.9	3	.03	2.3	24	.15
21	5.6	2	.03	3.8	3	.03	2.1	15	.09
22	5.4	3	.04	3.8	7	.07	2.0	6	.03
23	5.4	3	.04	3.9	8	.08	1.9	6	.03
24	5.0	3	.04	3.9	9	.09	2.0	7	.04
25	4.8	2	.03	3.8	9	.09	2.2	8	.05
26	4.7	1	.01	3.7	8	.08	2.2	8	.05
27	4.8	1	.01	3.5	8	.08	2.3	6	.04
28	4.7	2	.03	3.4	7	.06	2.3	3	.02
29	4.6	2	.02	3.4	7	.06	2.2	4	.02
30	4.4	3	.04	3.4	8	.07	2.2	5	.03
31	--	--	--	3.4	9	.08	--	--	--
TOTAL	181.1	--	4.86	122.6	--	1.64	79.6	--	2.10

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	TOTAL SEDIMENT (TONS/DAY)
1	2.4	6	.04	2.0	4	.02	1.6	14	.06
2	2.5	7	.05	2.0	5	.03	1.7	17	.08
3	2.3	8	.05	2.0	4	.02	1.6	20	.09
4	2.2	9	.05	2.1	3	.02	1.7	5	.02
5	2.1	7	.04	2.0	2	.01	1.8	4	.02
6	2.1	5	.03	2.0	2	.01	1.7	3	.01
7	2.3	3	.02	2.0	3	.02	1.6	2	.01
8	2.5	2	.01	2.0	3	.02	1.6	2	.01
9	2.3	1	.01	2.0	4	.02	1.5	2	.01
10	2.2	1	.01	2.0	4	.02	1.3	2	.01
11	2.1	2	.01	2.0	5	.03	1.5	2	.01
12	2.0	2	.01	2.0	6	.03	1.5	2	.01
13	2.2	3	.02	2.0	7	.04	1.5	2	.01
14	2.3	4	.02	2.0	5	.03	1.5	2	.01
15	2.3	4	.02	2.2	3	.02	1.3	2	.01
16	2.2	4	.02	2.1	2	.01	1.3	1	0
17	2.2	4	.02	2.0	5	.03	1.3	1	0
18	2.0	6	.03	2.0	8	.04	1.3	1	0
19	1.8	7	.03	2.0	10	.05	1.3	1	0
20	1.8	6	.03	2.0	13	.07	1.3	1	0
21	2.0	5	.03	2.0	10	.05	1.3	2	.01
22	2.0	4	.02	1.8	6	.03	1.3	3	.01
23	2.0	2	.01	1.8	3	.01	1.3	4	.01
24	2.0	2	.01	1.7	7	.03	1.2	5	.02
25	2.0	2	.01	1.9	11	.06	1.2	5	.02
26	2.0	2	.01	1.8	15	.07	1.2	5	.02
27	2.0	2	.01	1.8	19	.09	1.2	5	.02
28	2.0	3	.02	1.6	15	.06	1.3	4	.01
29	2.0	3	.02	1.5	12	.05	1.5	4	.02
30	2.0	4	.02	1.7	8	.04	1.5	3	.01
31	2.0	4	.02	1.6	11	.05	--	--	--
TOTAL	65.8	--	.70	59.6	--	1.08	42.9	--	.52

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1566.6
TOTAL LOAD FOR YEAR (TONS) 41.58

11-1412.8. LOPEZ CREEK NEAR ARROYO GRANDE, CALIF.--Continued

TOTAL SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 18, 1967	0700	14	7.0	206	3.9	29	47	61	70	74	91	100	--	--	--	--	VBWC
MAR 8, 1968	0620	13	28	291	22	43	57	69	79	83	95	97	99	100	--	--	SBWC
MAR 8.....	1240	14	30	648	52	46	63	76	82	84	99	100	--	--	--	--	SBWC
MAR 8.....	1245	14	30	720	58	34	49	62	73	81	84	90	100	--	--	--	VPWC
MAR 8.....	1320	14	29	445	35	48	60	75	89	95	98	99	100	--	--	--	SPWC
MAR 8.....	1445	13	27	97	7.1	31	36	59	69	77	94	96	98	100	--	--	SBWC

11-1430. 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 Big Sur.
DRAINAGE AREA.--46.5 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, 5°C Dec. 15.
EXTREMES, 1965-68.--Water temperatures: Maximum (1965-67), 20°C Aug. 1, 5, 17, 1966; minimum (1965-66, 1967-68), 5°C Dec. 15, 1967.
REMARKS.--No records available July 16 to Aug. 17; chart lost.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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	AVER-AGE
OCTOBER																																
MAXIMUM	17	17	17	17	16	16	15	15	15	16	16	16	16	16	15	14	14	14	15	14	14	15	14	14	14	14	14	14	14	13	13	14
MINIMUM	16	16	17	16	16	14	14	14	14	15	15	16	16	15	14	14	14	14	14	14	14	14	14	13	13	13	13	13	13	12	12	14
NOVEMBER																																
MAXIMUM	13	13	13	13	14	14	14	14	14	13	13	13	14	14	14	14	14	13	13	14	13	13	12	12	11	11	11	11	11	11	--	12
MINIMUM	12	12	12	13	13	13	13	13	13	13	13	13	13	14	13	13	13	12	13	13	13	12	12	11	11	10	10	10	9	9	--	12
DECEMBER																																
MAXIMUM	10	9	11	12	10	12	12	11	11	10	9	8	8	6	6	7	8	8	8	8	7	8	8	9	9	9	9	9	9	9	9	9
MINIMUM	9	8	9	11	10	11	11	11	9	9	8	8	6	6	5	6	7	8	8	7	7	7	8	8	9	9	9	9	9	9	8	8
JANUARY																																
MAXIMUM	8	8	8	7	7	7	7	8	9	10	9	9	10	11	12	12	11	10	9	9	10	10	9	9	9	9	9	8	9	10	10	9
MINIMUM	8	8	7	7	6	6	6	7	8	9	8	9	9	10	11	11	10	8	8	8	9	9	9	9	9	9	8	8	8	9	9	8
FEBRUARY																																
MAXIMUM	10	11	11	11	12	12	12	12	11	11	11	11	11	11	11	12	13	13	13	14	14	14	15	15	14	14	14	13	13	--	--	12
MINIMUM	9	10	10	10	11	12	12	11	11	11	10	11	11	10	11	11	12	12	12	13	14	13	14	14	14	13	13	12	12	--	--	11
MARCH																																
MAXIMUM	13	13	14	14	13	14	14	14	13	13	14	14	14	14	14	14	13	13	14	14	15	15	15	15	16	16	16	16	17	17	17	14
MINIMUM	13	12	13	13	12	13	13	14	12	12	13	13	13	13	13	13	13	12	12	12	14	14	14	14	14	15	14	15	15	16	16	13
APRIL																																
MAXIMUM	16	16	16	17	17	17	17	18	18	19	19	18	18	18	18	17	17	17	17	17	17	17	18	17	14	15	15	15	16	15	--	16
MINIMUM	16	16	14	16	16	16	16	16	16	17	17	17	16	16	17	16	15	15	15	16	15	15	16	12	12	13	14	14	13	14	--	15
MAY																																
MAXIMUM	15	14	14	14	14	14	14	13	14	14	14	13	13	13	14	15	16	17	17	16	16	16	16	16	17	17	18	18	18	18	18	15
MINIMUM	13	13	13	13	13	12	13	13	13	13	12	13	13	12	12	13	14	14	15	16	15	14	14	14	14	15	16	17	17	16	16	13
JUNE																																
MAXIMUM	18	19	19	19	18	17	17	17	16	17	17	18	17	18	19	19	19	18	18	18	18	19	19	19	18	17	17	18	17	17	--	17
MINIMUM	16	17	18	17	17	16	15	15	15	15	16	16	15	16	17	18	17	17	17	17	16	17	18	17	17	17	17	16	16	16	--	16
JULY																																
MAXIMUM	17	17	18	18	18	18	18	18	19	19	19	20	20	19	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	16	16	16	17	17	17	17	17	18	18	18	18	18	18	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	18	18	18	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	16	17	17	--
SEPTEMBER																																
MAXIMUM	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	16	17	16	16	16	15	14	14	14	15	16	16	15	14	15	15	16
MINIMUM	17	17	17	17	16	16	17	16	16	16	16	16	16	16	16	16	16	16	16	15	14	14	14	13	14	14	15	15	14	14	14	15

11-1470.4. 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.
RECORDS AVAILABLE.--Water temperatures: October 1967 to September 1968.
Sediment records: October 1967 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 416 mg/l Mar. 13; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 65 tons Mar 13; minimum daily, 0 ton on many days.
REMARKS.--No flow Oct. 1 to Jan. 9, Jan. 13-29, May 22 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY..	--	--	--	--	--	--	--	--	--	--	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	13	--	15	--	--	--	--	--	--	--	--	--	--	--	--
MARCH....	--	--	--	--	--	--	--	13	--	--	--	--	11	10	--	--	8	--	--	--	--	--	--	--	--	14	--	--	--	--	12	--
APRIL....	10	9	13	--	--	--	--	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	24	--	--	--	--	--	--	--
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-1470.4. SANTA RITA CREEK TRIBUTARY NEAR TEMPLETON, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
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									
TOTAL	0	--	0	0	--	0	0	--	0

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	0	--	0	.35	10	.01	.27	1	0
2	0	--	0	.22	6	0	.27	1	0
3	0	--	0	.16	4	0	.22	1	0
4	0	--	0	.13	3	0	.21	1	0
5	0	--	0	.11	3	0	.21	1	0
6	0	--	0	.10	3	0	.21	1	0
7	0	--	0	.08	2	0	3.1	24	1.1
8	0	--	0	.08	2	0	10	103	4.0
9	0	--	0	.06	1	0	2.2	20	.12
10	4.9	86	2.9	.05	1	0	1.3	15	.05
11	1.4	40	.15	.05	1	0	.97	15	.04
12	.18	15	.01	.05	1	0	.88	20	.05
13	0	--	0	.14	2	0	31	416	65
14	0	--	0	.12	2	0	5.7	15	.23
15	0	--	0	.07	1	0	3.5	10	.09
16	0	--	0	.09	1	0	7.9	62	3.4
17	0	--	0	29	352	54	4.4	5	.06
18	0	--	0	6.4	35	.60	3.0	5	.04
19	0	--	0	2.5	10	.07	2.2	5	.03
20	0	--	0	1.5	6	.02	1.7	5	.02
21	0	--	0	1.2	5	.02	1.4	5	.02
22	0	--	0	.87	3	.01	1.2	5	.02
23	0	--	0	.67	3	.01	.98	5	.01
24	0	--	0	.53	3	0	.86	5	.01
25	0	--	0	.45	3	0	.75	5	.01
26	0	--	0	.37	2	0	.67	6	.01
27	0	--	0	.33	2	0	.60	5	.01
28	0	--	0	.30	2	0	.55	4	.01
29	0	--	0	.30	2	0	.43	3	0
30	1.4	53	1.8	--	--	--	.42	2	0
31	2.8	41	1.1	--	--	--	.42	1	0
TOTAL	10.68	--	5.96	46.28	--	54.74	87.52	--	74.33

11-1470.4. SANTA RITA CREEK TRIBUTARY NEAR TEMPLETON, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	3.1	45	.57	.07	1	0			
2	2.0	22	.12	.07	1	0			
3	.79	3	.01	.07	1	0			
4	.61	3	0	.08	1	0			
5	.55	3	0	.09	1	0			
6	.47	3	0	.08	1	0			
7	.42	3	0	.07	1	0			
8	.37	2	0	.06	1	0			
9	.32	2	0	.06	1	0			
10	.30	2	0	.06	1	0			
11	.30	2	0	.05	1	0			
12	.30	2	0	.05	1	0			
13	.26	2	0	.05	1	0			
14	.23	2	0	.08	1	0			
15	.24	2	0	.05	1	0			
16	.26	2	0	.03	1	0			
17	.25	2	0	.03	1	0			
18	.19	1	0	.02	1	0			
19	.18	1	0	.02	1	0			
20	.18	1	0	.02	1	0			
21	.18	1	0	.01	1	0			
22	.15	1	0	0	0	0			
23	.12	1	0	0	0	0			
24	.12	1	0	0	0	0			
25	.12	1	0	0	0	0			
26	.10	1	0	0	0	0			
27	.09	1	0	0	0	0			
28	.08	1	0	0	0	0			
29	.08	1	0	0	0	0			
30	.08	1	0	0	0	0			
31	--	--	--	0	0	0			
TOTAL	12.44	--	.70	1.12	--	0	0	--	0

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

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 158.04
TOTAL LOAD FOR YEAR (TONS) 135.73

11-1470.4. SANTA RITA CREEK TRIBUTARY NEAR TEMPLETON, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 17, 1968	1200	11	53	772	110	61	74	88	93	96	98	99	99	100	--	--	SPWC
FEB 17.....	1645	12	66	1250	223	49	63	77	88	93	95	96	98	100	--	--	SPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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
MAR 26, 1968	1215		5	.65	2	4	13	22	27	31	36	43	49	67	100	S

11-1470.7. 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 Paso Robles Creek, and 4 miles west of Templeton.
DRAINAGE AREA.--18.2 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1967 to September 1968.
Sediment records: October 1967 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 245 mg/l Feb. 17; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 61 tons Mar. 13; minimum daily, 0 ton on many days.
REMARKS.--No flow Oct. 1-6, Oct. 15 to Nov. 23, June 13 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	--	--	--	11	--	7	--
FEBRUARY.	8	8	8	8	12	12	12	12	12	12	12	--	10	--	10	--	10	13	10	16	16	16	--	--	--	--	--	--	--	--	--	--
MARCH....	--	--	--	--	--	--	--	14	--	--	--	12	14	14	14	14	14	14	16	16	--	16	16	--	--	16	--	--	--	--	--	--
APRIL....	11	9	--	--	11	--	--	--	--	12	--	--	--	--	--	11	--	--	--	--	--	--	--	20	--	--	--	--	--	12	--	--
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-1470.7. SANTA RITA CREEK NEAR TEMPLETON, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	0	--	0	0	--	0	.35	2	0
2	0	--	0	0	--	0	.22	2	0
3	0	--	0	0	--	0	.19	2	0
4	0	--	0	0	--	0	.19	2	0
5	0	--	0	0	--	0	1.9	5	.03
6	0	--	0	0	--	0	.41	2	0
7	.26	6	0	0	--	0	.54	3	0
8	.16	4	0	0	--	0	.35	2	0
9	.05	3	0	0	--	0	.26	2	0
10	.04	3	0	0	--	0	.20	2	0
11	.04	2	0	0	--	0	.17	2	0
12	.03	1	0	0	--	0	.16	2	0
13	.02	1	0	0	--	0	.16	2	0
14	.01	1	0	0	--	0	.16	2	0
15	0	--	0	0	--	0	.16	2	0
16	0	--	0	0	--	0	.16	2	0
17	0	--	0	0	--	0	.19	2	0
18	0	--	0	0	--	0	2.3	6	.04
19	0	--	0	0	--	0	2.3	6	.04
20	0	--	0	0	--	0	1.3	5	.02
21	0	--	0	0	--	0	1.0	5	.01
22	0	--	0	0	--	0	.60	4	.01
23	0	--	0	0	--	0	.47	4	.01
24	0	--	0	.05	1	0	.47	4	.01
25	0	--	0	.04	1	0	.30	4	0
26	0	--	0	.05	1	0	.22	4	0
27	0	--	0	.05	1	0	.16	3	0
28	0	--	0	.08	1	0	.16	3	0
29	0	--	0	.09	1	0	.16	3	0
30	0	--	0	1.7	4	.02	.13	3	0
31	0	--	0	--	--	--	.13	3	0
TOTAL	.61	--	0	2.06	--	.02	15.47	--	.17

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.13	3	0	2.6	53	.37	2.3	3	.02
2	.11	3	0	1.5	18	.07	2.3	3	.02
3	.11	3	0	1.2	1	0	2.1	2	.01
4	.09	3	0	1.0	2	.01	2.1	2	.01
5	.09	3	0	.80	1	0	2.1	2	.01
6	.09	3	0	.80	1	0	2.0	2	.01
7	.09	3	0	.80	2	0	3.1	5	.04
8	.09	3	0	.80	3	.01	23	56	4.1
9	.09	3	0	1.0	4	.01	6.6	20	.36
10	5.5	86	3.4	1.0	5	.01	3.6	5	.05
11	5.1	86	1.7	1.0	9	.02	2.7	4	.03
12	1.2	9	.03	1.0	8	.02	2.3	2	.01
13	.60	3	0	1.7	6	.03	55	230	61
14	.30	6	0	1.9	20	.10	19	10	.51
15	.22	6	0	1.7	16	.07	11	4	.12
16	.22	6	0	1.7	15	.07	17	48	4.1
17	.22	6	0	36	245	44	16	7	.30
18	.19	5	0	18	115	7.7	9.8	3	.08
19	.19	5	0	5.2	10	.14	7.6	7	.14
20	.19	5	0	3.2	2	.02	6.9	6	.11
21	.19	5	0	2.6	2	.01	5.7	4	.06
22	.19	5	0	2.2	3	.02	5.0	3	.04
23	.19	5	0	2.1	2	.01	4.0	2	.02
24	.19	5	0	2.1	2	.01	3.6	2	.02
25	.19	5	0	2.1	2	.01	3.3	2	.02
26	.19	5	0	2.1	2	.01	3.0	3	.02
27	.35	3	0	2.1	2	.01	2.9	3	.02
28	.47	1	0	2.2	3	.02	2.8	3	.02
29	.47	1	0	2.3	3	.02	2.6	3	.02
30	.47	1	0	--	--	--	2.3	2	.01
31	9.8	128	4.3	--	--	--	2.3	2	.01
TOTAL	27.52	--	9.43	102.70	--	52.77	234.0	--	71.29

11-1470.7. SANTA RITA CREEK NEAR TEMPLETON, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	8.5	19	.85	.70	3	.01	.09	1	0
2	11	24	.85	.70	3	.01	.09	1	0
3	5.3	8	.11	.61	3	0	.08	1	0
4	3.6	6	.06	.60	3	0	.08	1	0
5	3.1	5	.04	.60	3	0	.06	1	0
6	2.7	5	.04	.58	3	0	.06	1	0
7	2.3	5	.03	.51	3	0	.05	1	0
8	2.2	5	.03	.47	3	0	.05	1	0
9	2.1	5	.03	.42	3	0	.04	1	0
10	2.0	5	.03	.41	3	0	.04	1	0
11	1.9	4	.02	.41	3	0	.03	1	0
12	1.9	4	.02	.43	3	0	.02	1	0
13	1.9	4	.02	.52	3	0	0	--	0
14	1.9	4	.02	.65	3	.01	0	--	0
15	1.8	4	.02	.50	2	0	0	--	0
16	1.7	1	0	.40	2	0	0	--	0
17	1.6	3	.01	.33	2	0	0	--	0
18	1.3	3	.01	.29	2	0	0	--	0
19	1.3	3	.01	.26	2	0	0	--	0
20	1.3	3	.01	.26	2	0	0	--	0
21	1.3	3	.01	.24	2	0	0	--	0
22	1.3	3	.01	.23	2	0	0	--	0
23	1.2	3	.01	.27	2	0	0	--	0
24	1.2	3	.01	.26	2	0	0	--	0
25	1.2	3	.01	.22	5	0	0	--	0
26	1.2	3	.01	.19	3	0	0	--	0
27	.91	3	.01	.16	2	0	0	--	0
28	.86	3	.01	.13	1	0	0	--	0
29	.76	3	.01	.11	1	0	0	--	0
30	.70	3	.01	.11	1	0	0	--	0
31	--	--	--	.09	1	0	--	--	--
TOTAL	70.03	--	2.31	11.66	--	.03	.69	--	0

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
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									
TOTAL	0	--	0	0	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 464.74
TOTAL LOAD FOR YEAR (TONS) 136.02

11-1470.7. SANTA RITA CREEK NEAR TEMPLETON, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 31, 1968	1000	7	13	181	6.4	88	98	98	100	--	--	--	--	--	--	--	SBWC
MAR 8.....	0700	14	33	66	5.9	81	89	96	96	96	98	99	100	--	--	--	SBWC
MAR 13.....	0855	13	118	630	201	58	73	82	85	86	94	94	97	100	--	--	SBWC
MAR 13.....	1010	13	93	451	113	61	76	86	90	90	95	96	98	100	--	--	SBWC

11-1488. 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.
RECORDS AVAILABLE.--Water temperatures: March 1958 to September 1959, October 1960 to September 1964, March 1965 to September 1968.
Sediment records: March 1958 to September 1959, October 1960 to September 1964, March 1965 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 135 mg/l Mar. 13; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 310 tons Feb. 17; minimum daily, 0 ton on many days.
EXTREMES, 1958-59, 1960-64, 1965-68.--Sediment concentrations: Maximum daily, 6,860 mg/l Nov. 13, 1960; minimum daily, no flow on many days each year.
Sediment loads: Maximum daily, 172,000 tons Jan. 24, 1967; minimum daily, 0 ton on many days each year.
REMARKS.--No flow Oct. 1 to Nov. 29, June 19 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	--	--	--	--	--	--	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	--	--	--	--
JANUARY..	--	7	--	--	--	--	3	--	--	--	7	--	--	--	9	--	--	12	--	13	--	--	--	8	--	--	7	--	--	8	--	--
FEBRUARY.	--	8	--	--	9	--	9	--	--	--	--	9	12	--	--	12	--	12	--	13	--	--	--	17	--	--	--	14	--	--	--	--
MARCH....	--	--	14	--	--	--	14	12	--	13	--	--	--	11	--	--	--	10	--	--	14	--	13	--	--	14	--	--	17	--	--	--
APRIL....	--	13	--	--	--	14	--	--	--	15	--	--	11	--	--	19	--	--	--	16	--	--	--	16	24	--	--	23	--	--	--	--
MAY.....	--	--	22	--	--	18	--	--	--	--	--	--	--	--	16	--	--	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-1488. NACIMIENTO RIVER NEAR BRYSON, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1				0		0	2.4	5	.03
2				0		0	1.0	4	.01
3				0		0	.72	3	.01
4				0		0	2.6	5	.04
5				0		0	49	19	4.2
6				0		0	28	21	1.6
7				0		0	25	16	1.1
8				0		0	41	15	1.7
9				0		0	20	12	.65
10				0		0	15	9	.36
11				0		0	13	6	.21
12				0		0	11	5	.15
13				0		0	9.4	4	.10
14				0		0	8.1	3	.07
15				0		0	7.8	3	.06
16				0		0	8.0	3	.06
17				0		0	8.4	3	.07
18				0		0	82	19	6.8
19				0		0	90	23	5.6
20				0		0	57	21	3.2
21				0		0	40	19	2.1
22				0		0	31	17	1.4
23				0		0	26	15	1.1
24				0		0	22	14	.83
25				0		0	20	14	.76
26				0		0	19	14	.72
27				0		0	18	14	.68
28				0		0	17	14	.64
29				0		0	15	14	.57
30				2.8	5	.04	14	14	.53
31				--		--	13	14	.49
TOTAL	0	--	0	2.8	--	.04	714.42	--	35.84

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	13	14	.49	123	3	1.0	37	2	.20
2	13	14	.49	81	1	.22	34	1	.09
3	12	13	.42	61	1	.16	31	1	.08
4	11	11	.33	51	1	.14	29	1	.08
5	11	9	.27	44	1	.12	27	1	.07
6	11	7	.21	38	1	.10	26	1	.07
7	11	5	.15	34	1	.09	33	6	.53
8	11	4	.12	31	1	.08	201	56	33
9	11	4	.12	29	1	.08	135	8	2.9
10	151	20	21	27	1	.07	91	3	.74
11	153	11	4.5	25	1	.07	72	2	.39
12	71	5	.96	24	1	.06	63	2	.34
13	49	5	.66	27	1	.07	545	135	243
14	38	5	.51	27	1	.07	269	13	9.4
15	34	4	.37	23	1	.06	180	2	.97
16	31	4	.33	79	14	8.0	200	8	5.7
17	28	2	.15	812	119	310	210	2	1.1
18	24	1	.06	412	8	8.9	162	1	.44
19	22	1	.06	206	2	1.1	133	1	.36
20	21	1	.06	147	1	.40	111	1	.30
21	20	1	.05	119	1	.32	94	2	.51
22	19	1	.05	99	1	.27	81	2	.44
23	18	2	.10	80	1	.22	71	1	.19
24	17	2	.09	69	1	.19	65	1	.18
25	17	2	.09	60	1	.16	58	1	.16
26	15	1	.04	54	1	.15	53	1	.14
27	16	1	.04	49	2	.26	48	1	.13
28	18	1	.05	45	2	.24	44	1	.12
29	18	1	.05	41	2	.22	40	1	.11
30	27	1	.07	--	--	--	39	1	.11
31	309	22	23	--	--	--	36	1	.10
TOTAL	1220	--	54.89	2917	--	332.82	3218	--	301.95

11-1488. NACIMIENTO RIVER NEAR BRYSON, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	86	11	6.0	14	1	.04	3.2	1	.01
2	155	10	4.9	13	1	.04	2.8	1	.01
3	90	2	.49	12	1	.03	2.3	1	.01
4	71	2	.38	12	1	.03	2.3	1	.01
5	63	2	.34	12	2	.06	2.0	1	.01
6	56	2	.30	12	2	.06	2.0	1	.01
7	50	2	.27	11	2	.06	2.0	1	.01
8	46	2	.25	11	2	.06	2.0	1	.01
9	42	1	.11	11	2	.06	1.7	1	0
10	38	1	.10	11	2	.06	1.7	1	0
11	36	1	.10	10	1	.03	1.3	1	0
12	34	1	.09	9.8	1	.03	1.1	1	0
13	32	1	.09	12	1	.03	.88	1	0
14	31	2	.17	20	1	.05	.72	1	0
15	29	4	.31	20	1	.05	.53	1	0
16	27	5	.36	15	1	.04	.35	1	0
17	26	4	.28	12	1	.03	.16	1	0
18	24	3	.19	11	1	.03	.03	1	0
19	23	2	.12	10	1	.03	0	--	0
20	23	1	.06	9.3	1	.03	0	--	0
21	22	1	.06	8.4	1	.02	0	--	0
22	21	1	.06	8.4	1	.02	0	--	0
23	21	2	.11	8.4	1	.02	0	--	0
24	20	2	.11	7.8	1	.02	0	--	0
25	20	1	.05	7.8	1	.02	0	--	0
26	18	1	.05	7.1	1	.02	0	--	0
27	17	2	.09	5.9	1	.02	0	--	0
28	17	2	.09	5.4	1	.01	0	--	0
29	16	2	.09	4.4	1	.01	0	--	0
30	15	2	.08	4.0	1	.01	0	--	0
31	--	--	--	3.6	1	.01	--	--	--
TOTAL	1169	--	15.70	319.3	--	1.03	27.07	--	.08

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

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 9587.59
TOTAL LOAD FOR YEAR (TONS) 742.35

11-1488. NACIMIENTO RIVER NEAR BRYSON, CALIF.--Continued

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 11, 1967	1400		7	0	1	4	21	35	41	48	54	64	77	88	100	S

11-1499. 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.
RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1968.
Sediment records: October 1965 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 257 mg/l Feb. 17; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 264 tons Feb. 17; minimum daily, 0 ton on many days.
EXTREMES, 1965-68.--Sediment concentrations: Maximum daily, 7,420 mg/l Dec. 6, 1966; minimum daily, no flow on many days each year.
Sediment loads: Maximum daily, 161,000 tons Dec. 6, 1966; minimum daily, 0 ton on many days each year.
REMARKS.--No flow Oct. 1 to Dec. 18, June 7 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	6	--	7	--	9	--	10	--	--	--	8	--	--	--
MARCH....	--	--	--	7	--	--	--	--	--	--	18	--	8	4	--	4	3	3	3	--	4	--	4	--	--	4	--	16	--	--	--	--
APRIL....	10	5	4	--	--	17	--	--	18	--	--	--	14	--	--	--	14	--	--	--	16	--	--	--	24	--	--	--	--	--	--	--
MAY.....	--	--	--	--	--	--	--	--	--	19	--	--	--	--	--	--	--	--	--	--	--	26	--	21	--	--	--	--	27	--	--	--
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-1499. SAN ANTONIO RIVER NEAR LOCKWOOD, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (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							3.2	3	.03
20							16	3	.13
21							20	4	.22
22							20	4	.22
23							18	4	.19
24							18	4	.19
25							16	3	.13
26							16	3	.13
27							15	3	.12
28							15	3	.12
29							15	3	.12
30							14	3	.11
31							12	2	.06
TOTAL	0	--	0	0	--	0	198.2	--	1.77

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	11	2	.06	89	30	7.2	30	12	.97
2	12	2	.06	63	20	3.4	32	11	.95
3	12	2	.06	48	10	1.3	27	11	.80
4	11	2	.06	43	10	1.2	30	12	.97
5	12	2	.06	34	8	.73	23	13	.81
6	11	2	.06	30	7	.57	21	14	.79
7	11	2	.06	25	6	.40	25	15	1.0
8	11	2	.06	23	6	.37	96	30	10
9	12	2	.06	21	5	.28	107	37	11
10	15	3	.12	21	5	.28	73	31	6.1
11	63	20	3.4	18	4	.19	55	27	4.0
12	46	10	1.2	16	4	.17	48	26	3.4
13	32	7	.60	18	4	.19	136	186	95
14	27	6	.44	16	4	.17	127	120	41
15	25	6	.40	15	4	.16	92	100	25
16	18	4	.19	21	5	.28	82	125	28
17	16	3	.13	261	257	264	118	65	21
18	14	3	.11	278	157	126	89	76	18
19	14	3	.11	158	62	26	83	82	18
20	14	3	.11	100	40	11	69	54	10
21	14	3	.11	78	28	5.9	58	28	4.4
22	14	3	.11	69	24	4.5	52	18	2.5
23	14	3	.11	61	24	4.0	46	16	2.0
24	12	2	.06	54	28	4.1	41	16	1.8
25	14	3	.11	48	33	4.3	37	16	1.6
26	14	12	.45	45	28	3.4	31	17	1.4
27	12	2	.06	41	22	2.4	32	20	1.7
28	10	2	.05	39	17	1.8	34	30	2.8
29	14	3	.11	36	14	1.4	33	25	2.2
30	18	4	.19	--	--	--	32	20	1.7
31	154	60	25	--	--	--	26	15	1.1
TOTAL	677	--	33.71	1769	--	475.69	1785	--	319.99

11-1499. SAN ANTONIO RIVER NEAR LOCKWOOD, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	29	14	1.1	12	1	.03	3.1	2	.02
2	59	112	19	12	1	.03	2.6	2	.01
3	42	30	3.4	11	1	.03	1.8	2	.01
4	35	20	1.9	11	1	.03	.89	2	0
5	33	15	1.3	10	1	.03	.15	2	0
6	32	11	.95	10	2	.05	.04	2	0
7	31	15	1.3	10	2	.05	0	--	0
8	30	20	1.6	10	2	.05	0	--	0
9	28	25	1.9	9.6	2	.05	0	--	0
10	27	20	1.5	9.2	2	.05	0	--	0
11	26	15	1.1	9.0	2	.05	0	--	0
12	25	10	.68	9.0	2	.05	0	--	0
13	24	10	.65	10	2	.05	0	--	0
14	22	10	.59	11	2	.06	0	--	0
15	22	5	.30	12	2	.06	0	--	0
16	21	2	.11	10	1	.03	0	--	0
17	20	2	.11	9.3	1	.03	0	--	0
18	19	2	.10	8.5	1	.02	0	--	0
19	18	5	.24	7.7	1	.02	0	--	0
20	18	10	.49	7.1	1	.02	0	--	0
21	17	12	.55	6.8	1	.02	0	--	0
22	17	10	.46	6.6	1	.02	0	--	0
23	16	5	.22	6.2	2	.03	0	--	0
24	15	2	.08	5.8	3	.05	0	--	0
25	15	2	.08	5.6	3	.05	0	--	0
26	15	2	.08	6.5	3	.05	0	--	0
27	14	2	.08	6.1	2	.03	0	--	0
28	14	2	.08	5.2	2	.03	0	--	0
29	13	1	.04	4.1	2	.02	0	--	0
30	13	1	.04	3.4	2	.02	0	--	0
31	--	--	--	3.0	2	.02	--	--	--
TOTAL	710	--	40.03	257.7	--	1.13	8.58	--	.04

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
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									
TOTAL	0	--	0	0	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 5405.48
TOTAL LOAD FOR YEAR (TONS) 872.36

11-1499. SAN ANTONIO RIVER NEAR LOCKWOOD, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 19, 1968	1315	6	167	62	28	6	8	14	17	18	25	30	74	99	100	--	VBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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. 31, 1967	1700		7	0	--	1	6	26	49	69	80	88	96	100	--	S
FEB. 19, 1968	1315		5	167	--	--	3	28	51	72	86	94	100	--	--	S
MAR. 11.....	1425		5	63	--	--	2	23	53	76	88	95	98	100	--	S

11-1518.7. 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.
RECORDS AVAILABLE.--Water temperatures: October 1962 to September 1968.
Sediment records: October 1962 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 30 mg/l Jan. 30; minimum daily, no flow Aug. 17.
Sediment loads: Maximum daily, 77 tons Jan. 30; minimum daily, 0 ton on many days during July to September.
EXTREMES, 1962-68.--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 ton on many days in 1966 and 1968.
REMARKS.--No flow Aug. 17.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	13	--	--	--	13	--	--	--	13	--	--	--	--	13	--	14	--	--	--	--	12	--	--	--	--	9	--	9	--	--
DECEMBER.	8	--	--	--	13	--	12	11	12	--	11	5	--	2	2	--	--	3	4	--	--	4	5	--	--	6	6	6	6	6	6	--
JANUARY..	--	--	3	6	--	3	3	--	4	7	6	7	--	--	--	9	--	--	--	6	--	--	7	7	--	7	7	--	6	6	5	--
FEBRUARY.	--	9	--	--	8	9	9	--	10	9	--	--	9	9	9	--	--	10	--	13	--	--	--	--	12	12	12	12	12	--	--	--
MARCH....	--	--	--	12	--	9	7	--	8	--	--	--	--	--	--	8	--	8	10	8	--	--	--	--	8	--	--	12	12	--	--	--
APRIL....	10	12	--	--	12	--	9	--	--	--	12	13	--	--	--	--	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY.....	--	--	18	--	--	--	--	19	--	--	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--	--	--	21	--	--	--	--	--	--	--	--	--	--	--

11-1518.7. ARROYO SECO NEAR GREENFIELD, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	10	1	.03	9.1	1	.02	37	6	.60
2	11	1	.03	9.1	5	.12	26	3	.21
3	14	1	.04	9.1	12	.29	24	2	.13
4	16	1	.04	9.3	5	.13	24	2	.13
5	15	1	.04	9.9	3	.08	87	15	5.1
6	14	1	.04	11	2	.06	46	5	.62
7	14	1	.04	11	2	.06	50	14	2.4
8	12	1	.03	11	2	.06	49	8	1.3
9	11	1	.03	12	1	.03	32	1	.09
10	11	1	.03	13	1	.04	28	2	.15
11	10	1	.03	14	1	.04	26	2	.14
12	10	1	.03	13	1	.04	24	1	.06
13	9.8	1	.03	13	1	.04	22	2	.12
14	9.5	1	.03	15	2	.08	22	2	.12
15	8.9	1	.02	16	2	.09	22	1	.06
16	8.9	1	.02	16	2	.09	22	1	.06
17	9.3	1	.03	16	1	.04	22	1	.06
18	9.0	1	.02	17	1	.05	81	6	1.6
19	9.1	1	.02	19	1	.05	70	3	.57
20	8.9	1	.02	20	1	.05	67	3	.54
21	9.0	1	.02	19	1	.05	39	3	.32
22	8.7	1	.02	19	1	.05	34	3	.28
23	8.8	1	.02	19	1	.05	33	3	.27
24	8.6	1	.02	18	1	.05	32	2	.17
25	8.3	1	.02	18	1	.05	32	1	.09
26	8.4	1	.02	18	2	.10	31	1	.08
27	8.1	1	.02	17	2	.09	30	1	.08
28	8.3	1	.02	17	3	.14	29	1	.08
29	8.7	1	.02	19	4	.21	27	1	.07
30	9.4	1	.03	40	11	1.2	26	2	.14
31	9.0	1	.02	--	--	--	26	1	.07
TOTAL	316.7	--	.83	467.5	--	3.45	1120	--	15.71

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	26	1	.07	177	4	1.9	51	1	.14
2	25	1	.07	119	4	1.3	49	1	.13
3	24	1	.06	97	3	.79	45	1	.12
4	24	1	.06	78	2	.42	43	1	.12
5	24	1	.06	70	1	.19	41	1	.11
6	24	1	.06	63	1	.17	40	1	.11
7	24	1	.06	58	1	.16	51	2	.28
8	24	1	.06	54	1	.15	183	16	9.5
9	24	1	.06	50	1	.14	97	2	.52
10	119	19	12	48	1	.13	76	1	.21
11	90	18	4.8	45	1	.12	68	1	.18
12	53	6	.86	43	1	.12	65	1	.18
13	40	2	.22	42	1	.11	351	22	25
14	36	1	.10	39	1	.11	166	5	2.2
15	46	6	.75	38	1	.10	134	2	.72
16	45	6	.73	174	9	8.3	189	11	7.9
17	39	6	.63	558	27	42	183	6	3.0
18	37	5	.50	305	6	5.0	152	1	.41
19	34	2	.18	189	1	.51	131	3	1.1
20	32	1	.09	143	1	.39	114	2	.62
21	31	1	.08	120	1	.32	104	1	.28
22	30	1	.08	101	1	.27	94	1	.25
23	29	2	.16	89	1	.24	83	1	.22
24	27	2	.15	78	1	.21	77	1	.21
25	27	1	.07	72	1	.19	73	1	.20
26	26	1	.07	68	1	.18	69	1	.19
27	27	1	.07	63	1	.17	64	1	.17
28	28	1	.08	59	1	.16	60	2	.32
29	41	4	.57	55	1	.15	57	3	.46
30	450	30	77	--	--	--	54	3	.44
31	530	26	55	--	--	--	51	2	.28
TOTAL	2036	--	154.75	3095	--	64.00	3015	--	55.57

11-1518.7. ARROYO SECO NEAR GREENFIELD, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	71	5	1.4	23	2	.12	11	1	.03
2	85	6	1.6	22	2	.12	10	1	.03
3	61	3	.49	23	2	.12	9.9	1	.03
4	55	2	.30	23	2	.12	9.5	1	.03
5	51	2	.28	24	2	.13	9.3	1	.03
6	49	3	.40	22	3	.18	9.7	1	.03
7	47	5	.63	22	3	.18	11	1	.03
8	46	5	.62	22	4	.24	11	1	.03
9	45	4	.49	21	4	.23	11	1	.03
10	44	3	.36	21	4	.23	11	1	.03
11	42	3	.34	20	4	.22	11	1	.03
12	40	3	.32	21	4	.23	10	1	.03
13	39	3	.32	23	4	.25	9.6	1	.03
14	38	3	.31	32	4	.35	8.8	1	.02
15	36	3	.29	25	4	.27	7.7	1	.02
16	35	3	.28	23	4	.25	7.3	1	.02
17	34	3	.28	21	4	.23	7.5	1	.02
18	33	3	.27	20	4	.22	6.9	1	.02
19	32	3	.26	19	4	.21	6.1	1	.02
20	32	3	.26	19	4	.21	5.7	1	.02
21	31	3	.25	19	13	.67	5.1	1	.01
22	30	3	.24	19	10	.51	4.5	1	.01
23	29	2	.16	19	5	.26	4.6	1	.01
24	28	2	.15	19	2	.10	4.4	1	.01
25	27	2	.15	18	1	.05	4.3	1	.01
26	26	2	.14	17	1	.05	3.9	1	.01
27	25	2	.14	16	1	.04	3.5	1	.01
28	26	2	.14	15	1	.04	3.3	1	.01
29	25	2	.14	14	1	.04	3.0	1	.01
30	23	2	.12	13	1	.04	2.6	1	.01
31	--	--	--	12	1	.03	--	--	--
TOTAL	1185	--	11.13	627	--	5.94	223.2	--	.63

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	2.5	1	.01	.04	1	0	.35	1	0
2	2.6	1	.01	.04	1	0	.29	1	0
3	2.6	1	.01	.03	1	0	.29	1	0
4	2.5	1	.01	.04	1	0	.29	1	0
5	2.2	1	.01	.03	1	0	.29	1	0
6	1.9	1	.01	.03	1	0	.26	1	0
7	1.6	1	0	.03	1	0	.23	1	0
8	1.2	1	0	.02	1	0	.23	1	0
9	1.2	1	0	.02	1	0	.23	1	0
10	.89	1	0	.02	1	0	.23	1	0
11	.61	1	0	.02	1	0	.20	2	0
12	.47	1	0	.01	1	0	.18	2	0
13	.36	1	0	.01	1	0	.18	2	0
14	.33	1	0	.01	1	0	.17	2	0
15	.30	1	0	.01	1	0	.17	2	0
16	.27	1	0	.01	1	0	.17	2	0
17	.27	1	0	0	--	0	.20	2	0
18	.22	1	0	.01	1	0	.20	3	0
19	.19	1	0	.01	1	0	.23	4	0
20	.17	1	0	.01	1	0	.26	6	0
21	.15	1	0	.02	1	0	.26	8	.01
22	.12	1	0	.41	1	0	.26	5	0
23	.09	1	0	.50	1	0	.38	3	0
24	.06	1	0	.41	1	0	.44	3	0
25	.06	1	0	.47	1	0	.55	3	0
26	.06	1	0	.41	1	0	.70	3	.01
27	.06	1	0	.35	1	0	.70	3	.01
28	.04	1	0	.32	1	0	.50	3	0
29	.04	1	0	.32	1	0	.44	3	0
30	.04	1	0	.41	1	0	.50	3	0
31	.04	1	0	.35	1	0	--	--	--
TOTAL	23.14	--	.06	4.37	--	0	9.38	--	.03

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 12122.29
TOTAL LOAD FOR YEAR (TONS) 312.10

11-1523. SALINAS RIVER NEAR CHUALAR, CALIF.

LOCATION.--Lat 36°33'14", long 121°32'50", in Guadalupe y Llanitos de Los Correos Grant, Monterey County, at county bridge on Chualar-River Road, 2 miles southwest of Chualar, and approximately 14 miles upstream from gaging station near Spreckels.

RECORDS AVAILABLE.--Water temperatures: December 1966 to September 1968.
Sediment records: December 1966 to September 1968.

EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 210 mg/l July 9; minimum daily, no flow on several days during February and March at sampling point.
Sediment loads: Maximum daily, 36 tons Dec. 10; minimum daily, 0 ton on several days during February and March.

EXTREMES, 1966-68.--Sediment concentrations: Maximum daily, 7,670 mg/l Dec. 8, 1966; minimum daily, no flow on several days in February and March 1968.
Sediment loads: Maximum daily, 362,000 tons Dec. 9, 1966; minimum daily, 0 ton on several days during February and March 1968.

REMARKS.--Chemical-quality data published for this station in the 1967 water year are now reported as 11-1525. Salinas River near Spreckels. Records of discharge are given for 11-1525. Salinas River near Spreckels. No appreciable inflow between sampling point and gaging station except during periods of heavy local flow. No flow at sampling point during period Feb. 17 to Mar. 1.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	23	--	22	--	21	--	--	16	--	21	22	21	--	--	21	--	16	--	15	--	--	18	--	18	--	16	--	--	13	--	--
NOVEMBER.	15	--	16	--	--	13	--	13	--	14	--	--	14	--	14	--	16	--	--	12	--	8	--	8	--	--	9	--	7	--	--	--
DECEMBER.	11	--	--	7	--	7	--	6	--	--	7	--	2	--	2	--	--	4	7	7	--	--	4	--	7	--	7	--	4	--	13	--
JANUARY..	10	4	4	--	2	--	--	4	--	4	--	4	--	--	4	--	2	--	4	4	--	13	12	--	--	--	--	--	--	--	--	--
FEBRUARY.	10	--	--	--	16	--	--	--	13	--	--	16	--	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	16	--	18	--	18	--	18	--	--	--	--	17	--	21	--	--	--
APRIL....	16	--	21	--	--	--	--	--	--	--	--	--	--	--	18	--	21	--	18	--	--	16	--	--	--	--	--	--	--	--	--	--
MAY.....	--	--	--	--	22	--	--	18	--	22	--	--	16	--	16	--	18	--	--	18	--	--	--	--	--	--	23	--	18	--	16	--
JUNE.....	--	--	16	--	18	--	18	--	20	--	16	--	--	21	--	--	--	--	21	--	--	--	--	--	--	--	16	--	--	--	--	--
JULY.....	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--	21	--	21	23	--
AUGUST...	--	--	--	--	--	--	19	--	--	--	22	--	--	--	24	--	21	--	--	--	--	--	--	--	--	--	21	--	--	--	21	--
SEPTEMBER	--	--	21	--	24	--	--	--	21	--	22	--	--	--	21	--	18	--	21	--	24	--	--	--	--	21	--	--	--	--	--	--

11-1523. SALINAS RIVER NEAR CHUALAR, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(Where no concentrations are reported, loads are estimated)

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	46	15	1.9	68	58	11	68	48	8.8
2	45	13	1.6	75	57	12	74	46	9.2
3	34	10	.92	81	53	12	79	54	12
4	26	8	.56	86	54	13	85	68	16
5	22	7	.42	90	57	14	89	68	16
6	17	7	.32	95	60	15	92	65	16
7	13	8	.28	100	63	17	97	100	26
8	11	10	.30	104	68	19	80	98	21
9	9.5	11	.28	108	70	20	68	86	16
10	9.2	10	.25	110	67	20	121	110	36
11	8.5	7	.16	113	62	19	102	78	21
12	9.1	10	.25	116	63	20	81	51	11
13	10	10	.27	122	72	24	66	35	6.2
14	11	11	.33	124	78	26	56	37	5.6
15	12	12	.39	122	75	25	49	41	5.4
16	12	13	.42	112	58	18	44	30	3.6
17	13	22	.77	84	42	9.5	39	23	2.4
18	14	31	1.2	64	28	4.8	40	28	3.0
19	15	35	1.4	54	22	3.2	41	25	2.8
20	16	33	1.4	45	17	2.1	34	26	2.4
21	17	32	1.5	38	13	1.3	28	33	2.5
22	19	28	1.4	32	13	1.1	24	39	2.5
23	20	22	1.2	26	12	.84	20	42	2.3
24	23	17	1.1	21	11	.62	19	37	1.9
25	24	27	1.7	16	11	.48	17	30	1.4
26	26	46	3.2	13	9	.32	16	25	1.1
27	28	47	3.6	12	10	.32	15	28	1.1
28	31	36	3.0	23	27	1.7	14	28	1.1
29	35	33	3.1	37	42	4.2	13	20	.70
30	47	38	4.8	55	49	7.3	12	12	.39
31	59	52	8.3	--	--	--	11	10	.30
TOTAL	682.3	--	46.32	2146	--	322.78	1594	--	255.69

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	10	10	.27	3.9	22	.23	2.8	--	0
2	9.7	14	.37	3.5	22	.21	3.2	20	.17
3	9.2	12	.30	3.4	22	.20	3.5	25	.24
4	8.5	12	.28	3.2	21	.18	3.5	20	.19
5	8.1	15	.33	3.2	21	.18	3.2	20	.17
6	7.8	15	.32	3.2	24	.21	2.6	15	.11
7	7.1	17	.33	3.2	30	.26	2.7	15	.11
8	6.7	18	.33	3.3	37	.33	3.1	20	.17
9	6.4	19	.33	3.3	41	.37	2.3	15	.09
10	5.9	16	.25	3.3	36	.32	2.1	15	.09
11	5.5	15	.22	3.2	29	.25	2.2	15	.09
12	5.1	25	.34	3.2	23	.20	3.6	25	.24
13	4.8	31	.40	3.1	23	.19	3.8	30	.31
14	4.6	25	.31	3.0	28	.23	2.5	25	.17
15	4.4	18	.21	3.0	36	.29	2.2	20	.12
16	4.1	13	.14	3.3	43	.38	4.0	78	.84
17	3.9	9	.09	3.5	--	0	3.5	93	.88
18	3.7	7	.07	3.1	--	0	4.5	78	.95
19	3.5	9	.09	3.2	--	0	29	78	6.1
20	3.3	14	.12	3.2	--	0	61	100	16
21	3.1	18	.15	3.6	--	0	76	85	17
22	3.0	14	.11	3.1	--	0	81	97	21
23	2.9	8	.06	3.0	--	0	59	82	13
24	2.7	10	.07	3.2	--	0	44	65	7.7
25	2.6	12	.08	3.1	--	0	34	50	4.6
26	2.5	13	.09	3.1	--	0	27	40	2.9
27	2.5	14	.09	2.7	--	0	21	33	1.9
28	2.5	16	.11	2.7	--	0	14	28	1.1
29	2.7	18	.13	2.7	--	0	9.4	28	.71
30	3.1	20	.17	--	--	--	5.4	28	.41
31	5.6	21	.32	--	--	--	3.3	24	.21
TOTAL	155.5	--	6.48	92.5	--	4.03	519.4	--	97.57

11-1523. SALINAS RIVER NEAR CHUALAR, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	3.4	20	.18	2.5	35	.24	2.2	146	.87
2	2.7	19	.14	2.6	35	.25	2.6	140	.98
3	2.2	17	.10	2.3	40	.25	2.8	131	.99
4	2.2	13	.08	2.2	40	.24	2.8	120	.91
5	2.2	13	.08	2.2	44	.26	3.1	104	.87
6	2.2	13	.08	2.0	50	.27	3.1	105	.88
7	2.1	13	.07	1.8	50	.24	3.0	105	.85
8	2.2	13	.08	1.7	53	.24	3.3	85	.76
9	2.2	13	.08	1.5	78	.32	3.3	65	.58
10	2.2	13	.08	1.3	102	.36	3.4	70	.64
11	2.2	13	.08	1.4	90	.34	3.6	80	.78
12	2.2	13	.08	1.3	80	.28	2.6	85	.60
13	2.1	13	.07	1.1	68	.20	2.6	90	.63
14	2.1	16	.09	1.1	60	.18	2.6	101	.71
15	2.1	18	.10	.98	48	.13	3.1	100	.84
16	2.1	22	.12	.86	49	.11	3.9	100	1.1
17	2.1	24	.14	.88	50	.12	4.5	95	1.2
18	2.1	22	.12	.87	49	.12	5.1	95	1.3
19	2.2	18	.11	.92	48	.12	3.0	94	.76
20	2.4	18	.12	1.1	48	.14	4.1	80	.89
21	2.3	17	.11	1.1	45	.13	4.1	68	.75
22	2.5	17	.11	.99	40	.11	4.6	78	.97
23	2.6	16	.11	1.0	40	.11	4.7	88	1.1
24	2.7	16	.12	.95	40	.10	4.4	70	.83
25	2.6	20	.14	1.0	40	.11	5.2	50	.70
26	2.5	20	.14	1.2	40	.13	6.0	60	.97
27	2.4	25	.16	1.3	78	.27	5.9	72	1.1
28	2.4	25	.16	1.5	86	.35	6.4	90	1.6
29	2.6	30	.21	1.5	94	.38	6.2	130	2.2
30	2.7	30	.22	1.3	90	.32	6.0	170	2.8
31	--	--	--	1.2	86	.28	--	--	--
TOTAL	70.5	--	3.48	43.65	--	6.70	118.2	--	30.16

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	6.9	201	3.7	2.6	197	1.4	.59	67	.11
2	6.8	190	3.5	2.7	170	1.2	.59	72	.11
3	6.5	179	3.1	2.9	142	1.1	.68	76	.14
4	6.4	190	3.3	2.7	145	1.1	.68	74	.14
5	6.7	200	3.6	2.5	145	.98	.86	71	.16
6	6.2	190	3.2	3.3	120	1.1	.95	85	.22
7	6.3	177	3.0	3.6	98	.95	.95	100	.26
8	6.5	190	3.3	3.6	110	1.1	1.1	110	.33
9	7.0	210	4.0	3.6	132	1.3	1.4	116	.44
10	7.6	130	2.7	2.7	150	1.1	1.8	87	.42
11	7.1	54	1.0	2.5	166	1.1	2.0	79	.43
12	7.0	60	1.1	2.7	150	1.1	2.2	65	.39
13	6.4	66	1.1	2.5	130	.88	2.2	51	.30
14	5.9	60	.96	2.5	110	.74	2.3	64	.40
15	5.8	56	.88	1.8	97	.47	2.3	78	.48
16	5.6	63	.95	1.3	98	.34	2.3	94	.58
17	5.5	70	1.0	1.3	98	.34	2.3	111	.69
18	4.7	66	.84	1.3	97	.34	2.3	90	.56
19	5.2	62	.87	2.0	96	.52	2.3	69	.43
20	4.6	80	.99	2.4	87	.56	2.3	100	.62
21	3.0	100	.81	2.5	78	.53	2.2	142	.84
22	4.1	118	1.3	2.5	77	.52	2.2	130	.77
23	3.1	97	.81	2.7	76	.55	2.2	100	.59
24	3.0	76	.62	2.4	88	.57	2.2	80	.48
25	3.0	87	.70	2.2	100	.59	2.2	55	.33
26	3.1	98	.82	2.4	84	.54	2.2	42	.25
27	1.0	100	.27	1.1	67	.20	2.2	38	.23
28	1.8	111	.54	.50	66	.09	2.2	30	.18
29	2.9	110	.86	.59	66	.11	2.2	25	.15
30	3.1	109	.91	.59	69	.11	2.2	68	.40
31	2.4	188	1.2	.59	72	.11	--	--	--
TOTAL	155.2	--	51.93	68.57	--	21.64	54.10	--	11.43

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 5699.92
TOTAL LOAD FOR YEAR (TONS) 858.21

11-1523. SALINAS RIVER NEAR CHUALAR, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(METHODS OF ANALYSIS: B, BOTTOM WITHDRAWAL TURE; 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 5, 1968	1430	22	2.2	44	.26	1	2	10	36	45	75	83	96	100	--	--	SBWC
MAY 27.....	1430	23	1.4	40	.15	1	1	4	48	55	78	82	90	100	--	--	SBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 12, 1967	1400		7	D 9.1	5	6	20	71	96	99	99	100	--	--	--	S
JUN 19, 1968	1600		6	D 3.0	--	1	16	72	95	99	99	100	--	--	--	S

D Daily mean discharge.

11-1525. SALINAS RIVER NEAR SPRECKELS, CALIF.

LOCATION.--Lat 36°37'50", long 121°40'40", in El Toro Grant, Monterey County, at gaging station at bridge on Salinas-Monterey highway, 0.5 mile upstream from El Toro Creek, 2 miles west of Spreckels, and 4 miles north of Salinas.
DRAINAGE AREA.--4,157 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1968.
REMARKS.--The 1967 water year chemical-quality data for this station were reported incorrectly as 11-1523. Salinas River near Chualar, Calif. Chemical-quality data furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)	PHOS-PHATE (PO4)
NOV.												
15...	122	--	--	30	--	173	0	--	26	3.8	.05	1.1
JAN.												
17...	3.9	--	--	114	--	600	0	--	134	19	.29	14
MAR.												
20...	61	--	--	26	--	171	0	--	22	1.7	.05	1.5
MAY												
09...	1.5	60	39	133	23	345	0	86	144	11	.28	39
JULY												
09...	7.0	--	--	138	--	241	0	--	116	--	.58	--
SEPT.												
04...	.68	36	48	143	2.3	224	0	179	119	83	.06	--

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
NOV.											
15...	--	189	47	--	26	.9	142	521	8.2	14	8.2
JAN.											
17...	--	464	0	--	35	2.3	492	1490	8.2	10	7.1
MAR.											
20...	--	191	51	--	23	.8	140	517	8.1	13	10.1
MAY											
09...	760	311	28	1.03	46	3.3	283	1300	8.1	18	2.8
JULY											
09...	--	273	75	--	52	3.6	198	1230	7.7	23	4.3
SEPT.											
04...	742	287	103	1.01	52	3.7	184	1230	8.1	23	8.6

11-1539. 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.
RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1968.
Sediment records: October 1965 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 1,030 mg/l Jan. 30; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 3,960 tons Jan. 30; minimum daily, 0 ton on many days.
EXTREMES, 1965-68.--Sediment concentrations: Maximum daily, 2,400 mg/l Jan. 21, 1967; minimum daily, 1 mg/l on many days each year.
Sediment loads: Maximum daily, 22,200 tons Jan. 21, 1967; minimum daily, 0 ton on many days each year.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	18	--	--	--	--	--	--	--	--	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	--	--	--	10	--	--	9	8	--	--	8	--	3	--	2	--	--	4	--	4	--	3	--	--	4	--	7	--	9	--	--	--
JANUARY..	6	7	4	--	5	--	--	4	--	7	--	7	--	--	7	--	8	--	8	--	--	9	--	8	--	9	--	--	7	--	--	--
FEBRUARY.	--	9	--	--	--	--	--	9	--	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	14	--	--	--	--	--	--
MARCH....	--	--	--	--	--	--	12	--	13	--	11	--	12	--	9	--	--	11	--	12	--	12	--	--	13	--	11	--	15	--	--	--
APRIL....	12	--	--	--	14	--	--	10	--	16	--	16	--	--	15	--	12	--	14	--	16	15	--	15	--	--	--	--	18	--	--	--
MAY.....	17	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	--	--	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	27	--	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--

11-1539. UVAS CREEK ABOVE UVAS RESERVOIR, NEAR MORGAN HILL, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.2	4	.01	.19	3	0	2.9	3	.02
2	1.5	4	.02	.35	3	0	2.3	3	.02
3	1.8	4	.02	.80	3	.01	2.1	3	.02
4	1.5	4	.02	.93	3	.01	4.4	12	.16
5	1.7	4	.02	1.2	3	.01	18	407	42
6	1.4	4	.02	1.2	3	.01	4.5	3	.04
7	.83	4	.01	.98	3	.01	9.8	168	6.1
8	1.4	3	.01	1.1	3	.01	5.7	4	.06
9	.81	3	.01	1.3	3	.01	3.9	3	.03
10	.98	3	.01	1.2	3	.01	3.4	2	.02
11	1.0	3	.01	.77	3	.01	3.2	1	.01
12	.80	3	.01	.76	3	.01	2.9	4	.03
13	1.0	3	.01	1.1	12	.04	3.5	16	.15
14	.85	3	.01	2.0	9	.05	4.0	8	.09
15	1.1	3	.01	1.6	7	.03	4.5	4	.05
16	1.1	3	.01	1.1	7	.02	4.6	4	.05
17	.69	3	.01	.89	6	.01	5.0	8	.11
18	1.0	3	.01	.88	6	.01	16	253	12
19	.92	3	.01	1.3	4	.01	8.6	40	.93
20	.60	3	0	1.3	3	.01	5.9	15	.24
21	.79	3	.01	1.1	4	.01	4.8	8	.10
22	.29	3	0	1.4	4	.02	4.0	1	.01
23	.57	3	0	1.4	4	.02	3.8	2	.02
24	.33	3	0	1.2	4	.01	3.6	3	.03
25	.21	3	0	1.3	3	.01	3.5	3	.03
26	.50	3	0	1.4	3	.01	3.4	3	.03
27	.77	3	.01	1.3	3	.01	3.3	4	.04
28	.63	3	.01	1.4	3	.01	3.2	4	.03
29	1.2	3	.01	2.6	11	.12	3.0	3	.02
30	.91	3	.01	4.7	6	.08	3.0	3	.02
31	.55	3	0	--	--	--	3.0	3	.02
TOTAL	28.93	--	.29	38.75	--	.58	153.8	--	62.48

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	2.9	3	.02	45	40	4.9	13	3	.11
2	3.0	6	.05	32	13	1.1	11	4	.12
3	2.9	1	.01	28	10	.76	10	4	.11
4	2.9	3	.02	24	8	.52	10	4	.11
5	2.9	4	.03	20	6	.32	9.6	4	.10
6	2.9	4	.03	18	6	.29	9.3	4	.10
7	2.9	4	.03	15	4	.16	11	6	.22
8	2.8	4	.03	12	3	.10	28	15	1.2
9	2.8	4	.03	12	3	.10	16	2	.09
10	14	250	9.5	11	3	.09	13	2	.07
11	3.9	50	.53	10	3	.08	12	1	.03
12	3.5	24	.23	9.3	3	.08	19	9	1.4
13	3.2	8	.07	9.2	3	.07	54	41	6.5
14	3.0	4	.03	8.9	3	.07	94	309	121
15	5.0	6	.08	8.4	3	.07	53	17	2.4
16	4.0	4	.04	35	40	8.0	82	324	104
17	3.2	3	.03	56	55	8.5	54	22	3.2
18	2.8	4	.03	37	20	2.0	43	5	.58
19	2.7	6	.04	24	5	.32	35	6	.57
20	2.6	7	.05	38	11	1.1	28	8	.60
21	2.6	8	.06	33	5	.45	25	5	.34
22	2.5	10	.07	27	4	.29	23	2	.12
23	2.4	6	.04	24	4	.26	21	2	.11
24	2.3	3	.02	22	4	.24	19	3	.15
25	2.2	3	.02	20	4	.22	18	3	.15
26	2.2	3	.02	19	3	.15	17	3	.14
27	2.3	4	.02	18	3	.15	16	3	.13
28	2.5	5	.03	17	3	.14	14	3	.11
29	10	30	.81	15	3	.12	14	3	.11
30	960	1030	3960	--	--	--	10	3	.08
31	170	180	83	--	--	--	10	3	.08
TOTAL	1232.9	--	4054.97	647.8	--	30.65	791.9	--	244.03

11-1539. UVAS CREEK ABOVE UVAS RESERVOIR, NEAR MORGAN HILL, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	15	22	1.1	4.6	7	.09	2.4	6	.04
2	12	10	.32	4.4	6	.07	2.3	6	.04
3	10	2	.05	4.4	6	.07	2.0	6	.03
4	9.1	4	.10	4.4	6	.07	2.1	6	.03
5	11	6	.18	4.1	6	.07	2.2	6	.04
6	10	6	.16	3.7	6	.06	2.3	6	.04
7	9.8	7	.19	3.6	6	.06	2.2	6	.04
8	9.3	7	.18	4.0	6	.06	2.1	6	.03
9	8.6	4	.09	3.8	6	.06	1.8	6	.03
10	8.2	2	.04	3.7	6	.06	1.6	6	.03
11	7.9	3	.06	3.9	6	.06	1.7	6	.03
12	7.5	4	.08	4.1	6	.07	1.6	6	.03
13	7.5	4	.08	4.3	6	.07	1.9	6	.03
14	7.0	4	.08	4.3	6	.07	1.6	7	.03
15	6.4	14	.24	3.6	6	.06	1.8	7	.03
16	6.6	8	.14	3.5	6	.06	1.6	7	.03
17	6.4	5	.09	3.3	6	.05	1.3	7	.02
18	5.7	5	.08	3.4	6	.06	1.2	7	.02
19	5.9	5	.08	3.4	6	.06	1.0	7	.02
20	5.9	5	.08	3.3	6	.05	.65	7	.01
21	5.7	5	.08	3.2	6	.05	.98	7	.02
22	5.3	6	.09	3.3	6	.05	.95	7	.02
23	5.1	6	.08	3.2	6	.05	1.1	7	.02
24	5.3	5	.07	3.1	6	.05	1.1	7	.02
25	5.1	5	.07	2.9	6	.05	.98	7	.02
26	5.0	5	.07	2.9	6	.05	.92	7	.02
27	4.6	5	.06	2.3	6	.04	.97	7	.02
28	4.6	5	.06	2.1	6	.03	1.1	7	.02
29	4.5	5	.06	2.3	6	.04	.53	7	.01
30	4.6	6	.07	2.4	6	.04	.45	7	.01
31	--	--	--	2.3	6	.04	--	--	--
TOTAL	219.6	--	4.13	107.8	--	1.77	44.43	--	.78

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.53	7	.01	.37	6	.01	.34	2	0
2	.58	7	.01	.36	6	.01	.40	2	0
3	.74	15	.03	.28	6	0	.29	1	0
4	.53	6	.01	.42	6	.01	.28	1	0
5	.47	6	.01	.55	6	.01	.26	1	0
6	.38	6	.01	.42	6	.01	.25	1	0
7	.59	6	.01	.44	6	.01	.31	1	0
8	.75	6	.01	.21	6	0	.33	1	0
9	.87	6	.01	.23	6	0	.32	1	0
10	.51	6	.01	.25	6	0	.36	1	0
11	.67	6	.01	.28	5	0	.43	1	0
12	.75	6	.01	.38	5	.01	.33	1	0
13	.48	6	.01	.46	5	.01	.27	1	0
14	.49	6	.01	.62	5	.01	.28	1	0
15	.52	6	.01	.59	5	.01	.31	1	0
16	.85	6	.01	.62	4	.01	.37	1	0
17	.66	6	.01	.34	4	0	.32	1	0
18	.45	6	.01	.36	4	0	.31	1	0
19	.69	6	.01	.42	4	0	.27	1	0
20	.38	6	.01	.93	4	.01	.26	9	.01
21	.50	6	.01	.82	4	.01	.24	8	.01
22	.38	6	.01	.64	4	.01	.23	8	0
23	.65	6	.01	.74	4	.01	.19	8	0
24	.32	6	.01	.56	4	.01	.19	8	0
25	.46	6	.01	.62	4	.01	.24	8	.01
26	.49	6	.01	.45	3	0	.24	8	.01
27	.39	6	.01	.40	3	0	.16	8	0
28	.56	6	.01	.52	3	0	.12	8	0
29	.30	6	0	.38	3	0	.20	8	0
30	.48	6	.01	.36	2	0	.25	8	.01
31	.43	6	.01	.36	2	0	--	--	--
TOTAL	16.85	--	.32	14.38	--	.17	8.35	--	.05

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 3305.49
TOTAL LOAD FOR YEAR (TONS) 4400.22

11-1539. UVAS CREEK ABOVE UVAS RESERVOIR, NEAR MORGAN HILL, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 5, 1967	0725		20	396	21	66	81	91	94	96	99	100	--	--	--	--	SBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 21, 1967	1220	14	6	1.4	1	1	3	8	16	26	38	53	73	97	100	S

11-1590. PAJARO RIVER AT CHITTENDEN, CALIF.

LOCATION.--Lat 36°54'01", long 121°35'48", in Salsipuedes Grant, Santa Cruz County, at gaging station on State highway bridge, 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	NITRATE (NO3)	PHOS-PHATE (PO4)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)
NOV. 15...	15	--	--	70	--	367	21	--	23	.30	--
JAN. 17...	27	--	--	95	--	380	12	--	29	.38	--
MAR. 20...	73	--	--	69	--	262	5	--	11	.40	--
MAY 09...	19	89	78	110	3.1	400	29	232	31	.42	894
JULY 09...	3.1	--	--	105	--	423	24	--	--	--	--
SEPT. 04...	4.1	73	80	234	7.2	501	0	360	5.1	--	1100

DATE	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
NOV. 15...	509	173	--	23	1.4	335	1240	8.5	14	8.0
JAN. 17...	532	200	--	28	1.8	331	1320	8.5	12	8.9
MAR. 20...	354	131	--	30	1.6	223	967	8.4	13	9.8
MAY 09...	542	165	1.22	30	2.1	376	1410	8.6	18	8.3
JULY 09...	505	118	--	31	2.0	386	1360	8.7	19	8.3
SEPT. 04...	510	99	1.50	49	4.5	411	1810	8.2	23	8.3

11-1600. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1966.
Water temperatures: January 1966 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 31°C Aug. 29.
REMARKS.--Recorder stopped Oct. 10 to Nov. 6, Dec. 19 to Feb. 5.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	19	18	18	18	19	18	18	18	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	14	15	14	13	14	13	13	13	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	13	14	13	13	13	13	13	16	15	14	14	14	14	13	13	12	11	10	10	9	9	9	9	10	--	12
MINIMUM	--	--	--	--	--	--	12	12	11	11	11	12	13	13	12	12	12	12	13	11	11	9	9	8	8	7	7	7	8	8	--	10
DECEMBER																																
MAXIMUM	9	9	9	12	12	10	11	10	9	10	9	8	6	6	7	6	7	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	6	6	7	9	8	7	8	7	6	6	6	5	3	2	3	3	3	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	13	13	12	12	12	12	13	14	13	15	11	12	13	13	14	14	14	16	16	17	16	13	16	17	--	--	14
MINIMUM	--	--	--	--	--	10	9	7	8	7	7	8	8	8	8	10	11	11	11	12	12	12	13	12	12	12	12	12	11	--	--	10
MARCH																																
MAXIMUM	13	16	17	16	15	14	13	13	15	15	13	12	13	12	11	12	12	12	12	12	13	13	14	14	13	14	14	15	16	14	13	13
MINIMUM	11	9	10	10	11	9	11	10	8	8	8	8	10	10	8	9	9	9	9	9	9	11	11	11	11	10	10	11	12	12	12	10
APRIL																																
MAXIMUM	12	14	16	15	17	16	17	17	18	19	17	15	17	18	16	15	14	15	14	16	16	16	16	17	17	18	17	17	17	18	--	16
MINIMUM	11	12	12	13	13	12	12	12	13	14	14	13	13	13	13	13	12	13	13	13	12	12	13	13	13	13	14	14	14	13	--	13
MAY																																
MAXIMUM	18	16	18	17	22	21	19	21	21	22	16	17	16	21	22	22	22	24	19	24	22	22	23	22	25	25	26	24	25	24	24	21
MINIMUM	13	13	13	13	13	11	12	13	14	14	12	12	12	11	12	12	13	14	15	16	14	13	13	12	16	14	16	15	14	15	15	13
JUNE																																
MAXIMUM	24	27	25	24	22	22	23	20	23	24	25	23	24	25	25	25	23	23	23	25	26	26	26	24	24	19	19	25	26	25	--	24
MINIMUM	15	16	17	16	16	15	14	15	15	15	16	14	12	14	14	15	16	17	16	16	15	15	17	16	17	17	16	16	13	13	--	15
JULY																																
MAXIMUM	23	26	26	25	25	25	26	24	27	28	27	29	28	28	28	28	28	28	28	27	26	25	26	25	26	25	25	20	24	27	26	26
MINIMUM	14	16	14	16	16	17	17	17	18	16	17	17	18	18	16	16	16	17	17	17	17	17	17	17	17	17	17	17	18	18	18	17
AUGUST																																
MAXIMUM	27	28	27	24	27	27	26	27	27	27	27	24	21	26	27	27	26	28	24	26	26	27	29	27	24	27	28	28	31	22	26	26
MINIMUM	18	18	18	18	16	16	17	18	16	18	17	18	18	18	18	17	16	17	18	17	17	16	17	17	19	16	17	17	18	19	19	17
SEPTEMBER																																
MAXIMUM	26	27	23	24	26	25	26	25	25	27	26	26	25	26	26	27	23	23	24	23	23	24	25	26	26	23	22	18	19	22	--	24
MINIMUM	19	19	19	19	17	18	19	19	17	17	17	17	18	19	16	16	16	17	16	14	13	13	14	14	14	14	14	14	16	16	--	16

11-1605. SAN LORENZO RIVER AT BIG TREES, CALIF.

LOCATION (revised).--Lat 37°01'40", long 122°03'30", 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.
Water temperatures: May 1966 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, 2°C Dec. 13-16.
EXTREMES, 1966-68.--Water temperatures: Maximum (1966-67), 21°C on several days in July 1966; minimum, 2°C Dec. 13-16, 1967.
REMARKS.--Recorder malfunction Feb. 2 to Mar. 3, Apr. 2, Sept. 6, 10-30; bulb out of water June 28 to July 10, July 20-24.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	16	14	16	14	15	14	14	14	14	17	16	16	16	14	14	14	14	13	13	13	13	15	14	14	14	14	13	14	13	12	12	14
MINIMUM	13	12	13	12	12	11	11	11	11	13	13	13	12	11	11	11	11	11	11	11	12	12	12	11	11	11	11	11	10	9	9	11
NOVEMBER																																
MAXIMUM	12	13	12	13	13	14	13	13	13	12	12	12	12	14	13	12	12	13	13	12	12	11	10	9	9	8	8	9	9	9	--	11
MINIMUM	9	9	9	11	12	12	11	12	11	10	10	11	12	12	12	11	11	11	11	11	10	9	8	7	7	7	6	8	8	8	--	9
DECEMBER																																
MAXIMUM	8	8	9	11	11	8	8	8	7	7	7	6	4	3	4	4	6	6	6	6	6	6	7	7	8	9	9	9	8	7	7	7
MINIMUM	7	7	7	9	9	8	8	7	6	7	6	4	2	2	2	2	3	4	4	4	4	4	4	6	6	7	8	7	7	6	5	5
JANUARY																																
MAXIMUM	7	7	6	5	5	5	6	6	8	8	6	7	10	8	9	9	7	7	7	7	8	9	9	9	9	9	8	7	7	8	8	7
MINIMUM	6	5	4	3	3	3	3	4	6	6	5	4	6	6	8	7	6	5	5	6	6	7	6	6	6	7	6	6	6	7	7	5
FEBRUARY																																
MAXIMUM	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH																																
MAXIMUM	--	--	--	12	12	12	11	11	11	11	10	9	10	10	9	9	9	9	9	9	10	11	12	12	12	11	12	12	13	14	13	11
MINIMUM	--	--	--	11	10	9	10	9	8	8	8	8	8	9	8	9	8	7	7	7	7	8	9	9	9	8	8	9	10	11	11	8
APRIL																																
MAXIMUM	11	--	12	12	13	13	13	13	14	15	14	14	14	14	13	13	12	12	12	13	13	13	13	14	15	16	16	17	17	17	--	13
MINIMUM	10	--	10	9	9	9	8	9	9	11	11	11	10	9	9	9	7	7	8	8	8	8	8	9	9	10	11	12	11	12	--	9
MAY																																
MAXIMUM	16	14	14	13	16	15	13	15	15	16	12	11	10	13	14	15	15	17	14	18	14	16	14	16	18	18	19	19	19	18	18	15
MINIMUM	11	11	11	11	11	9	9	10	10	11	11	10	9	8	8	8	10	11	12	12	11	10	10	10	12	11	13	13	12	12	12	11
JUNE																																
MAXIMUM	19	21	21	19	16	17	18	17	18	19	19	19	18	19	21	20	20	20	19	21	21	21	21	20	21	20	19	--	--	--	--	19
MINIMUM	12	13	14	13	12	12	12	13	13	12	12	11	10	12	13	13	14	14	14	14	14	14	15	14	14	15	15	--	--	--	--	13
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	21	22	21	22	21	20	20	21	21	--	--	--	--	--	19	19	19	16	17	20	20	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	14	14	15	16	14	13	13	14	14	--	--	--	--	--	14	14	13	14	14	14	14	--
AUGUST																																
MAXIMUM	21	21	20	20	20	21	19	21	21	21	21	19	16	18	20	19	19	19	18	18	17	18	18	19	18	19	19	19	20	19	19	19
MINIMUM	14	14	14	14	13	13	14	14	13	14	13	14	14	14	14	13	12	13	13	13	13	12	12	13	14	12	13	13	14	14	15	13
SEPTEMBER																																
MAXIMUM	19	20	19	21	21	--	16	20	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	15	15	14	17	16	--	12	11	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-1625. PESCADERO CREEK NEAR PESCADERO, CALIF.

LOCATION.--Lat 37°15'40", 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.
RECORDS AVAILABLE.--Water temperatures: April 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C July 12; minimum, 3°C Jan. 7.
EXTREMES, 1965-68.--Water temperatures: Maximum, 22°C Aug. 9, 1965, July 22-24, 31, 1966, July 12, 1968; minimum (1965-66, 1967-68), 2°C Dec. 19, 1965.
REMARKS.--Recorder malfunction Dec. 18-20, 23-25, 31, Jan. 1, 2, 12; clock stopped Jan. 18 to Feb. 6.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	17	17	16	15	16	15	15	14	16	17	16	16	16	14	14	14	14	13	14	14	14	16	15	14	14	13	14	14	13	13	12	14
MINIMUM	15	15	14	13	13	13	13	12	12	14	13	13	12	12	12	12	12	12	12	12	12	14	13	13	12	12	12	13	11	10	10	12
NOVEMBER																																
MAXIMUM	13	13	13	13	14	14	14	14	14	13	13	13	13	14	14	13	14	14	14	13	13	12	11	10	9	9	9	9	9	9	--	12
MINIMUM	10	11	11	12	13	12	12	13	13	12	12	12	13	13	13	12	12	13	13	12	11	10	9	8	8	8	7	8	8	8	--	11
DECEMBER																																
MAXIMUM	8	8	9	11	11	11	10	9	8	8	8	8	7	5	5	6	6	--	--	--	6	6	--	--	--	9	10	9	9	8	--	--
MINIMUM	8	7	7	9	11	9	9	8	7	7	7	6	5	4	4	4	4	--	--	--	6	5	--	--	--	7	8	8	8	6	--	--
JANUARY																																
MAXIMUM	--	--	6	6	6	6	6	6	6	9	9	--	8	9	11	11	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	4	4	4	4	3	4	6	7	6	--	7	8	9	9	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	11	10	10	10	9	10	9	9	10	11	11	12	12	12	12	13	13	12	12	12	12	12	11	--	--	11
MINIMUM	--	--	--	--	--	--	10	10	9	9	9	9	9	8	9	10	10	11	12	12	12	12	12	12	11	12	11	11	10	--	--	10
MARCH																																
MAXIMUM	11	12	11	12	12	12	12	12	11	11	11	11	11	12	11	12	12	11	11	11	12	12	13	13	13	12	12	13	13	14	14	12
MINIMUM	9	11	10	11	11	11	11	11	10	10	9	9	10	11	10	11	11	9	9	9	10	11	12	11	12	11	10	10	11	12	13	10
APRIL																																
MAXIMUM	14	12	12	13	13	12	12	12	13	14	14	14	13	13	12	12	12	12	12	11	12	12	13	14	14	14	16	16	16	16	--	13
MINIMUM	11	11	11	12	11	11	10	10	11	12	13	13	11	11	12	11	9	8	11	9	9	9	9	11	11	11	12	13	13	13	--	11
MAY																																
MAXIMUM	16	16	14	13	15	15	15	16	14	13	12	12	13	14	14	16	16	17	16	16	17	17	17	17	18	19	19	21	19	18	18	16
MINIMUM	13	13	13	13	12	11	11	12	13	12	12	11	11	11	11	12	13	13	14	14	14	14	15	14	16	14	16	16	14	14	14	13
JUNE																																
MAXIMUM	19	20	21	16	14	14	17	16	18	18	17	16	17	18	18	19	20	20	19	21	20	20	18	20	21	19	20	20	19	19	--	18
MINIMUM	14	16	17	14	13	13	13	14	14	14	14	12	12	12	13	14	16	16	16	16	15	14	16	15	16	17	16	16	13	14	--	14
JULY																																
MAXIMUM	19	19	20	20	21	20	21	20	21	21	21	22	19	18	20	21	21	21	21	21	21	20	19	17	19	19	19	17	19	20	20	19
MINIMUM	14	16	16	16	15	16	16	16	17	16	16	16	17	17	16	16	15	14	16	16	17	16	16	16	16	16	16	16	16	16	17	16
AUGUST																																
MAXIMUM	19	19	18	20	21	20	19	20	20	21	20	17	17	18	19	18	19	18	18	18	18	18	18	19	19	18	19	20	21	20	19	19
MINIMUM	17	17	16	16	16	14	15	16	16	17	17	16	16	16	16	16	14	16	16	14	15	14	13	14	15	14	16	17	16	16	17	16
SEPTEMBER																																
MAXIMUM	19	20	19	18	19	19	19	19	17	18	18	19	18	18	18	18	18	18	17	16	16	15	16	16	16	15	15	15	14	14	--	17
MINIMUM	17	17	17	16	16	17	17	16	15	14	16	17	17	17	15	14	14	15	14	13	12	11	11	12	12	12	12	12	13	13	--	14

11-1627.2. 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.--10.9 sq mi.
RECORDS AVAILABLE.--Sediment records: October 1965 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 7,950 mg/l Jan. 30; minimum daily, 12 mg/l on many days during October and November.
Sediment loads: Maximum daily, 7,890 tons Jan. 30; minimum daily, 0 ton Nov. 11-13.
EXTREMES, 1965-68.--Sediment concentrations: Maximum daily, 19,400 mg/l Jan. 21, 1967; minimum daily, 5 mg/l on many days in 1965-66.
Sediment loads: Maximum daily, 26,900 tons Jan. 21, 1967; minimum daily, 0 ton Nov. 11-13, 1967.

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.73	20	.04	.32	12	.01	.92	80	.20
2	22	1390	507	.32	12	.01	.92	60	.15
3	1.1	100	.30	.30	12	.01	62	3970	1850
4	1.0	40	.11	.28	12	.01	47	3130	1440
5	2.3	984	12	.26	12	.01	9.8	1590	116
6	.92	50	.12	.24	12	.01	1.4	140	.53
7	.92	30	.07	.22	12	.01	32	2390	1040
8	.73	20	.04	.20	12	.01	1.2	120	.39
9	.73	15	.03	.18	12	.01	1.2	100	.32
10	.57	13	.02	.16	12	.01	1.2	80	.26
11	.55	12	.02	.14	12	0	1.2	70	.23
12	.53	12	.02	.12	12	0	.92	65	.16
13	.51	12	.02	.10	12	0	.73	65	.13
14	.50	12	.02	17	2000	270	.92	65	.16
15	.50	12	.02	.15	23	.01	.92	64	.16
16	.48	12	.02	.14	20	.01	1.2	64	.21
17	.48	12	.02	.13	18	.01	30	1550	1090
18	.46	12	.01	.12	16	.01	18	2760	172
19	.44	12	.01	.24	30	.02	3.3	811	12
20	.44	12	.01	.33	25	.02	4.8	487	27
21	.33	12	.01	.33	20	.02	1.4	100	.38
22	.33	12	.01	.33	18	.02	1.4	80	.30
23	.44	12	.01	.33	16	.01	1.4	60	.23
24	.43	12	.01	.44	16	.02	1.4	60	.23
25	.42	12	.01	.44	14	.02	1.2	60	.19
26	.41	12	.01	.44	14	.02	1.2	60	.19
27	.40	12	.01	1.9	333	9.2	.92	40	.10
28	.40	20	.02	.44	30	.04	.92	40	.10
29	.38	15	.02	26	2770	542	.92	40	.10
30	.36	12	.01	19	2930	246	.92	40	.10
31	.34	12	.01	--	--	--	.92	40	.10
TOTAL	40.13	--	520.03	70.60	--	1067.53	232.23	--	5751.92

11-1627.2. COLMA CREEK AT SOUTH SAN FRANCISCO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.2	30	.10	9.5	618	34	2.5	30	.20
2	.92	30	.07	13	1040	116	2.5	30	.20
3	1.2	30	.10	4.0	80	.86	2.5	30	.20
4	1.4	30	.11	3.0	60	.49	2.5	30	.20
5	1.4	30	.11	2.1	40	.23	7.0	635	46
6	2.1	30	.17	1.8	40	.19	9.7	760	68
7	2.1	30	.17	1.8	40	.19	46	2590	958
8	1.8	30	.15	1.8	40	.19	7.5	1380	59
9	1.8	30	.15	1.8	40	.19	2.1	50	.28
10	87	5060	2980	1.8	40	.19	2.1	40	.23
11	1.8	200	.97	1.8	30	.15	1.8	40	.19
12	1.8	60	.29	1.8	30	.15	126	5430	4170
13	3.4	451	11	1.8	30	.15	20	2620	239
14	60	3190	1700	2.1	30	.17	12	1150	84
15	23	2450	347	2.1	30	.17	4.0	100	1.1
16	2.5	150	1.0	38	2590	525	71	4490	1970
17	2.1	80	.45	23	1560	195	9.7	1170	57
18	2.5	80	.54	3.0	40	.32	4.6	50	.62
19	2.1	60	.34	45	2230	1180	3.4	40	.37
20	2.1	60	.34	21	1730	247	3.0	30	.24
21	2.5	60	.41	34	1990	541	3.0	30	.24
22	2.5	60	.41	12	809	60	6.6	556	38
23	1.8	40	.19	7.3	212	5.3	3.4	80	.73
24	1.8	40	.19	4.0	60	.65	3.0	60	.49
25	1.8	40	.19	3.4	40	.37	7.0	531	42
26	2.5	100	.68	4.0	40	.43	2.1	50	.28
27	14	1120	146	3.4	40	.37	2.1	30	.17
28	5.3	641	20	3.0	40	.32	2.1	30	.17
29	94	4840	2900	3.0	40	.32	1.8	30	.15
30	198	7950	7890	--	--	--	2.1	30	.17
31	21	2000	185	--	--	--	2.1	30	.17
TOTAL	547.42	--	16186.13	254.3	--	2909.40	375.2	--	7737.40

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	43	2190	1280	1.4	13	.05	.92	34	.08
2	2.9	908	11	1.4	13	.05	1.2	34	.11
3	2.1	50	.28	1.4	13	.05	.92	34	.08
4	2.1	40	.23	1.4	13	.05	1.8	34	.17
5	2.1	30	.17	2.1	15	.09	2.1	34	.19
6	2.1	30	.17	2.1	15	.09	2.1	34	.19
7	2.1	30	.17	1.8	15	.07	2.1	34	.19
8	2.1	30	.17	2.1	15	.09	1.8	34	.17
9	2.1	30	.17	2.1	15	.09	1.4	34	.13
10	2.1	30	.17	2.1	15	.09	.92	25	.06
11	2.1	20	.11	2.1	15	.09	1.2	25	.08
12	2.5	20	.14	2.5	20	.14	1.2	25	.08
13	2.5	20	.14	15	1440	261	1.2	25	.08
14	2.1	20	.11	1.8	60	.29	1.8	25	.12
15	1.4	20	.08	1.8	50	.24	2.1	25	.14
16	2.1	20	.11	1.4	40	.15	2.1	25	.14
17	1.8	20	.10	1.8	40	.19	1.2	20	.06
18	1.3	15	.05	1.8	40	.19	1.8	20	.10
19	1.1	15	.04	2.1	40	.23	1.2	20	.06
20	1.1	15	.04	1.8	35	.17	1.2	20	.06
21	1.2	15	.05	1.8	35	.17	1.8	20	.10
22	1.0	15	.04	1.2	35	.11	2.1	20	.11
23	1.0	15	.04	.92	35	.09	.92	15	.04
24	1.0	15	.04	1.4	35	.13	1.8	15	.07
25	1.2	15	.05	1.8	35	.17	1.8	15	.07
26	1.2	15	.05	.92	35	.09	1.8	15	.07
27	1.5	15	.06	.57	35	.05	3.0	15	.12
28	1.2	13	.04	.57	35	.05	4.0	15	.16
29	1.1	13	.04	.57	35	.05	4.6	15	.19
30	1.4	13	.05	.92	35	.09	4.6	15	.19
31	--	--	--	.92	35	.09	--	--	--
TOTAL	92.5	--	1293.91	61.59	--	264.50	56.68	--	3.41

11-1627.2. COLMA CREEK AT SOUTH SAN FRANCISCO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.8	15	.07	2.5	13	.09	1.4	13	.05
2	.92	15	.04	4.0	13	.14	1.8	13	.06
3	1.2	15	.05	5.3	13	.19	1.4	13	.05
4	1.2	15	.05	4.6	13	.16	1.4	13	.05
5	1.4	15	.06	2.5	13	.09	.73	13	.03
6	1.2	15	.05	2.1	13	.07	.92	13	.03
7	1.8	15	.07	4.0	13	.14	2.1	15	.09
8	.92	15	.04	4.0	13	.14	2.5	15	.10
9	.92	15	.04	1.8	13	.06	1.8	15	.07
10	.92	15	.04	1.8	13	.06	1.8	15	.07
11	1.4	15	.06	2.1	13	.07	1.8	15	.07
12	2.5	15	.10	1.8	13	.06	2.5	20	.14
13	1.8	15	.07	3.0	13	.11	1.8	20	.10
14	1.8	15	.07	4.0	13	.14	3.0	20	.16
15	1.8	15	.07	5.3	13	.19	1.4	20	.08
16	2.1	15	.09	4.0	13	.14	1.2	20	.06
17	2.5	15	.10	5.3	13	.19	1.4	20	.08
18	2.5	15	.10	4.0	13	.14	2.1	20	.11
19	2.5	15	.10	2.5	13	.09	1.8	20	.10
20	2.5	15	.10	1.8	13	.06	.57	20	.03
21	2.5	15	.10	1.8	13	.06	.73	30	.06
22	1.4	14	.05	1.4	13	.05	.73	30	.06
23	1.2	14	.05	1.8	13	.06	.73	30	.06
24	1.4	14	.05	1.8	13	.06	.92	30	.07
25	2.5	14	.09	1.8	13	.06	.73	30	.06
26	4.0	14	.15	1.4	13	.05	.73	30	.06
27	2.5	14	.09	1.8	13	.06	.73	30	.06
28	2.1	13	.07	1.4	13	.05	.92	40	.10
29	2.1	13	.07	1.8	13	.06	.73	40	.08
30	4.0	13	.14	1.8	13	.06	.73	40	.08
31	3.4	13	.12	1.8	13	.06	--	--	--
TOTAL	60.78	--	2.35	85.0	--	2.96	41.10	--	2.22

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1917.53
TOTAL LOAD FOR YEAR (TONS) 35741.76

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 5, 1967	0940	12	1.4	2090	7.9	71	82	90	93	96	100	--	--	--	--	--	SBWC
JAN 30, 1968	0945	9	27	2630	192	51	63	74	80	83	92	96	100	--	--	--	SBWC
JAN 30.....	1045	9	362	12600	12300	14	17	23	29	38	47	91	100	--	--	--	VPWC
JAN 30.....	1100	9	191	10600	5470	15	19	24	31	40	52	85	98	100	--	--	VPWC
FEB 20.....	1035	18	11	381	11	52	64	75	80	82	94	97	100	--	--	--	SBWC
MAR 8.....	0945	13	4.0	666	7.2	92	95	98	100	--	--	--	--	--	--	--	SPWC
MAR 13.....	1015	13	11	1290	38	54	62	73	82	90	97	99	100	--	--	--	SPWC
APR 2.....	1250	20	2.5	2110	14	51	68	87	96	97	98	98	99	100	--	--	SPWC

11-1627.22. SPRUCE BRANCH AT SOUTH SAN FRANCISCO, CALIF.

LOCATION.--Lat 37°38'46", long 122°25'15", in Buri Buri Grant, San Mateo County, at gaging station 0.5 mile upstream from mouth, and 1.0 mile southwest of South San Francisco Post Office.
DRAINAGE AREA.--1.68 sq mi.
RECORDS AVAILABLE.--Sediment records: October 1965 to September 1968.
EXTREMES, 1965-67.--Sediment concentrations: Maximum daily, 6,350 mg/l Jan. 21, 1967; minimum daily, no flow on many days in 1965-67.
Sediment loads: Maximum daily, 2,320 tons Jan. 21, 1967; minimum daily, 0 ton on many days in 1965-67.
REMARKS.--Drainage area for this station is published incorrectly as 0.79 sq mi in Part 1 of this report.

MONTHLY AND ANNUAL SUMMARY OF SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DISCHARGE (CFS)	SUSPENDED-SEDIMENT (TONS)
OCTOBER 1967.....	8.80	233
NOVEMBER.....	19.84	391
DECEMBER.....	46.53	6510
JANUARY 1968.....	133.13	25270
FEBRUARY.....	35.54	508
MARCH.....	74.59	5660
APRIL.....	10.29	598
MAY.....	6.91	82
JUNE.....	9.72	1.1
JULY.....	8.80	10
AUGUST.....	5.30	.24
SEPTEMBER.....	4.59	.21
TOTAL FOR YEAR.....	364.04	39263.55

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 30, 1967	1300	12	.82	4090	9.1	64	74	91	98	98	100	--	--	--	--	--	SPWC
JAN 30, 1968	1115	9	14	4410	167	22	23	28	38	47	64	96	100	--	--	--	VPWC
JAN 30.....	1345	8	34	13800	1270	17	18	22	32	41	61	97	100	--	--	--	VPWC

11-1698. 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.
RECORDS AVAILABLE.--Water temperatures: December 1964 to September 1968.
Sediment records: December 1964 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 55 mg/l Jan. 30; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 84 tons Jan. 30; minimum daily, 0 ton on many days.
EXTREMES, 1965-68.--Sediment concentrations: Maximum daily, 2,060 mg/l Mar. 16, 1967; minimum daily, no flow on many days each year.
Sediment loads: Maximum daily, 16,700 tons Mar. 16, 1967; minimum daily, 0 ton on many days each year.
REMARKS.--No flow Oct. 1 to Dec. 20, Aug. 9 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY..	--	--	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	--
FEBRUARY.	6	11	11	--	7	--	11	--	13	--	--	13	--	13	--	11	--	--	12	--	15	--	--	--	--	16	--	--	--	--	--	--
MARCH....	--	--	--	--	--	--	--	--	13	--	--	--	12	--	15	--	--	12	--	--	--	13	--	--	13	--	--	--	--	--	--	--
APRIL....	11	--	17	17	17	--	--	19	--	--	--	--	--	--	18	--	16	--	16	--	--	--	--	18	--	--	--	--	--	--	--	--
MAY.....	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-1698. COYOTE CREEK NEAR GILROY, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (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							.56	1	0
22							1.6	1	0
23							1.6	1	0
24							1.6	1	0
25							1.6	1	0
26							1.6	1	0
27							1.6	1	0
28							1.6	1	0
29							1.4	1	0
30							1.4	1	0
31							1.4	1	0
TOTAL	0	--	0	0	--	0	15.96	--	0

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.4	1	0	42	4	.45	5.1	2	.03
2	1.4	1	0	27	3	.22	4.5	2	.02
3	1.2	1	0	18	1	.05	3.9	2	.02
4	1.2	1	0	12	1	.03	3.6	2	.02
5	1.2	1	0	9.0	1	.02	3.4	2	.02
6	1.2	1	0	6.9	1	.02	3.1	2	.02
7	1.2	1	0	5.8	2	.03	3.6	2	.02
8	1.2	1	0	4.8	2	.03	21	5	.30
9	1.2	1	0	4.2	2	.02	18	2	.10
10	3.6	4	.04	3.6	1	.01	11	2	.06
11	7.3	6	.12	3.4	1	.01	7.7	2	.04
12	4.8	3	.04	2.8	1	.01	7.3	2	.04
13	3.4	2	.02	2.8	1	.01	33	6	.63
14	3.1	2	.02	2.8	1	.01	73	12	2.8
15	5.8	4	.06	2.6	1	.01	65	7	1.2
16	8.1	6	.13	3.9	2	.02	63	8	2.0
17	5.8	3	.05	26	6	.42	92	10	2.5
18	4.2	2	.02	32	3	.26	48	3	.39
19	3.6	2	.02	21	2	.11	31	3	.25
20	3.1	2	.07	53	8	1.2	20	3	.16
21	2.8	2	.02	50	2	.27	15	3	.12
22	2.6	2	.01	37	2	.20	11	8	.24
23	2.4	2	.01	26	2	.14	9.0	8	.19
24	2.2	2	.01	18	2	.10	7.7	7	.15
25	2.2	2	.01	14	2	.08	6.9	6	.11
26	2.2	2	.01	9.9	2	.05	6.5	6	.11
27	2.2	2	.01	8.1	2	.04	5.8	6	.09
28	2.4	2	.01	6.9	2	.04	5.4	4	.06
29	2.6	2	.01	5.8	2	.03	5.1	4	.06
30	146	55	84	--	--	--	5.1	2	.03
31	206	44	38	--	--	--	5.1	2	.03
TOTAL	437.6	--	122.64	459.3	--	3.89	599.8	--	11.81

11-1698. COYOTE CREEK NEAR GILROY, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	8.1	2	.04	1.4	9	.03	.42	12	.01
2	15	3	.12	1.2	9	.03	.42	12	.01
3	10	4	.11	1.2	9	.03	.42	13	.01
4	8.1	2	.04	1.2	9	.03	.38	13	.01
5	6.5	5	.09	1.1	9	.03	.38	12	.01
6	5.4	5	.07	1.1	9	.03	.38	12	.01
7	4.8	6	.08	.98	9	.02	.38	8	.01
8	4.5	6	.07	.90	9	.02	.38	8	.01
9	4.5	6	.07	.90	9	.02	.35	8	.01
10	3.9	6	.06	.82	9	.02	.35	8	.01
11	3.9	6	.06	.82	9	.02	.35	8	.01
12	3.6	6	.06	.74	9	.02	.31	8	.01
13	3.4	9	.08	.67	9	.02	.31	8	.01
14	3.1	9	.08	.61	9	.01	.28	8	.01
15	2.8	9	.07	.56	9	.01	.25	8	.01
16	2.6	6	.04	.61	9	.01	.25	8	.01
17	2.6	6	.04	.61	9	.01	.22	7	0
18	2.2	5	.03	.61	9	.01	.20	7	0
19	2.2	5	.03	.56	9	.01	.17	7	0
20	2.2	5	.03	.56	9	.01	.15	7	0
21	2.0	3	.02	.51	9	.01	.13	7	0
22	2.0	3	.02	.46	9	.01	.13	7	0
23	2.0	3	.02	.51	9	.01	.13	7	0
24	2.2	3	.02	.56	9	.01	.13	6	0
25	2.2	3	.02	.51	9	.01	.12	6	0
26	2.0	3	.02	.51	9	.01	.12	6	0
27	2.0	4	.02	.51	9	.01	.10	6	0
28	1.7	4	.02	.51	9	.01	.10	6	0
29	1.6	4	.02	.46	10	.01	.10	6	0
30	1.4	6	.02	.46	10	.01	.08	6	0
31	--	--	--	.46	10	.01	--	--	--
TOTAL	118.5	--	1.47	22.61	--	.50	7.49	--	.16

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.08	6	0	.03	6	0			
2	.10	6	0	.02	7	0			
3	.11	6	0	.02	7	0			
4	.11	6	0	.02	7	0			
5	.11	6	0	.02	7	0			
6	.10	6	0	.01	7	0			
7	.10	6	0	.01	7	0			
8	.10	6	0	.01	7	0			
9	.10	6	0	0	--	0			
10	.10	6	0	0	--	0			
11	.10	6	0	0	--	0			
12	.10	6	0	0	--	0			
13	.10	6	0	0	--	0			
14	.10	6	0	0	--	0			
15	.10	6	0	0	--	0			
16	.10	6	0	0	--	0			
17	.10	6	0	0	--	0			
18	.10	6	0	0	--	0			
19	.10	6	0	0	--	0			
20	.10	6	0	0	--	0			
21	.09	6	0	0	--	0			
22	.10	6	0	0	--	0			
23	.09	6	0	0	--	0			
24	.08	6	0	0	--	0			
25	.06	6	0	0	--	0			
26	.04	6	0	0	--	0			
27	.04	6	0	0	--	0			
28	.03	6	0	0	--	0			
29	.03	6	0	0	--	0			
30	.03	6	0	0	--	0			
31	.03	6	0	0	--	0			
TOTAL	2.63	--	0	.14	--	0	0	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1664.03
TOTAL LOAD FOR YEAR (TONS) 140.47

11-1698. COYOTE CREEK NEAR GILROY, CALIF.--Continued

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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
DEC 11, 1967	1400		5	0	--	--	1	2	5	8	12	19	33	71	100	S

11-1765. ARROYO VALLE NEAR LIVERMORE, CALIF.

LOCATION (revised).--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.
RECORDS AVAILABLE.--Chemical analyses: December 1958 to July 1966.
Water temperatures: October 1959 to September 1961, October 1962 to September 1968.
Sediment records: October 1962 to September 1967.
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C May 27; minimum, 4°C Dec. 13-15.
EXTREMES, 1963-68.--Water temperatures: Maximum, 31°C June 14, 1966; minimum, 4°C Jan. 2, Dec. 28, 1966, Dec. 13-15, 1967.
REMARKS.--No flow Oct. 12, Oct. 14 to Nov. 28, Dec. 3, June 2 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	19	19	18	18	18	18	18	19	19	21	21	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	17	17	16	16	17	16	16	16	17	18	18	--	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	11	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	11	--	--
DECEMBER																																
MAXIMUM	11	10	--	12	12	12	11	11	9	9	9	9	8	5	7	7	7	8	9	8	9	8	9	11	11	12	12	12	12	11	10	9
MINIMUM	9	9	--	12	12	9	10	8	8	8	7	7	4	4	4	5	5	6	7	7	7	7	7	8	8	9	11	10	9	8	8	8
JANUARY																																
MAXIMUM	9	10	9	8	8	7	7	7	8	9	8	8	10	10	11	11	10	10	10	10	10	11	12	12	11	10	9	10	11	9	8	9
MINIMUM	7	8	6	6	6	5	6	6	7	8	7	6	7	8	10	9	8	9	8	7	9	8	9	9	9	8	8	7	8	8	6	7
FEBRUARY																																
MAXIMUM	8	9	11	11	11	11	11	11	11	11	11	12	11	11	11	11	12	14	14	14	14	15	17	17	17	17	16	16	17	--	--	12
MINIMUM	7	7	9	9	10	10	11	11	11	11	9	9	11	10	9	10	11	12	13	13	14	14	15	15	15	14	14	14	13	--	--	11
MARCH																																
MAXIMUM	15	17	17	18	16	16	14	14	13	14	13	14	13	13	13	13	12	13	13	13	13	14	16	17	14	16	17	19	20	21	21	15
MINIMUM	14	13	13	13	14	12	12	12	11	12	12	11	12	13	13	12	11	10	10	11	12	13	13	13	13	11	12	13	14	16	15	12
APRIL																																
MAXIMUM	16	15	17	17	18	18	18	19	21	22	21	20	20	21	17	17	17	18	18	18	19	19	19	21	22	22	23	23	24	22	--	19
MINIMUM	14	13	12	13	13	12	13	13	14	15	15	15	13	13	13	11	11	11	12	12	11	11	12	13	13	14	15	15	16	16	--	13
MAY																																
MAXIMUM	22	22	21	21	20	21	22	20	20	20	17	17	16	20	21	22	21	22	20	20	18	20	20	19	23	23	26	25	24	23	23	21
MINIMUM	14	13	14	15	14	13	13	14	14	14	13	13	13	13	13	14	15	15	16	17	16	15	14	14	16	15	17	18	17	16	16	14
JUNE																																
MAXIMUM	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-1790. 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.
RECORDS AVAILABLE.--Chemical analyses: February 1952 to September 1967.
Water temperatures: July 1956 to September 1968.
Sediment records: January 1957 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 25°C on several days during August and September; minimum, 4°C Dec. 4.
Sediment concentrations: Maximum daily, 1,390 mg/l Jan. 30; minimum daily, 5 mg/l Sept. 22, 30.
Sediment loads: Maximum daily, 4,120 tons Jan. 30; minimum daily, 0.11 ton Oct. 15.
EXTREMES, 1956-68.--Water temperatures: Maximum (1956-62, 1964-68), 31°C June 1, 1960; minimum, 3°C Jan. 5, 1961, Jan. 14, 1963.
Sediment concentrations (1957-68): Maximum daily, 5,340 mg/l Apr. 3, 1958; minimum daily, no flow on many days in 1957, 1959-61.
Sediment loads (1957-68): Maximum daily, 285,000 tons Apr. 3, 1958; minimum daily, 0 ton on many days in 1957, 1959-61.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	18	--	17	--	18	--	21	--	18	--	20	--	18	--	22	--	17	--	18	--	18	--	18	--	18	--	18	--	18	--	20	--
NOVEMBER.	--	18	16	18	--	16	--	16	--	16	--	16	16	16	16	16	16	18	18	18	16	16	13	12	16	13	10	11	12	10	--	15
DECEMBER.	9	7	7	4	--	7	7	9	10	10	7	7	8	7	7	7	7	7	7	7	7	8	7	7	7	7	7	7	7	7	7	7
JANUARY..	7	7	7	7	7	7	7	7	7	8	8	7	7	7	9	7	7	7	7	9	9	7	9	9	--	9	7	7	8	8	8	8
FEBRUARY.	7	6	9	9	9	9	9	9	9	9	9	8	10	10	10	10	10	10	10	10	10	10	13	12	13	13	13	18	14	--	--	10
MARCH....	14	10	13	13	14	13	10	10	10	10	10	10	12	10	13	10	10	10	10	13	13	13	13	14	14	14	14	16	16	16	16	12
APRIL....	14	14	16	14	16	16	16	16	16	16	16	14	16	16	16	14	14	14	14	14	14	16	16	16	16	16	16	18	16	18	--	16
MAY.....	19	19	18	18	18	16	18	18	18	18	18	15	15	16	17	18	18	18	16	18	18	18	18	18	18	18	18	18	18	18	18	18
JUNE.....	18	18	18	18	18	17	19	19	18	18	18	15	18	20	22	20	22	19	20	22	24	20	23	23	20	20	23	20	23	23	--	20
JULY.....	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
AUGUST...	23	19	23	22	23	23	23	23	20	22	21	23	18	19	21	20	20	20	19	20	20	20	19	22	20	23	23	25	25	24	25	22
SEPTEMBER	25	25	23	21	23	23	23	23	21	23	23	23	23	23	25	25	23	23	23	23	23	20	19	20	20	20	20	20	22	20	--	22

11-1790. ALAMEDA CREEK NEAR NILES, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	21	20	1.1	66	31	5.5	30	69	5.6
2	21	14	.79	53	23	3.3	12	69	2.2
3	22	10	.59	53	26	3.7	9.1	65	1.6
4	21	10	.57	54	29	4.2	16	57	2.4
5	20	13	.70	54	27	3.9	53	22	2.9
6	20	14	.76	54	23	3.4	42	32	4.7
7	20	12	.65	54	22	3.2	78	69	15
8	20	12	.65	53	26	3.7	107	66	19
9	19	14	.72	45	22	2.7	100	49	13
10	20	14	.76	24	13	.84	100	37	10
11	18	14	.68	23	13	.81	100	23	6.2
12	18	15	.73	22	15	.89	100	32	8.6
13	17	17	.78	23	13	.81	98	38	10
14	5.2	16	.22	40	31	3.3	100	36	9.7
15	2.9	14	.11	40	33	3.6	98	32	8.5
16	3.5	16	.15	39	20	2.1	80	23	5.0
17	19	17	.87	42	16	1.8	68	24	4.4
18	21	13	.74	41	22	2.4	78	60	12
19	70	60	13	41	13	1.4	28	143	11
20	78	72	15	42	11	1.2	18	133	6.5
21	80	70	15	64	37	6.7	40	58	6.3
22	80	62	13	53	9	1.3	53	30	4.3
23	76	53	11	68	10	1.8	53	19	2.7
24	55	50	7.4	47	28	3.3	53	18	2.6
25	64	53	9.2	9.9	18	.43	53	19	2.7
26	84	52	12	47	15	2.4	53	19	2.7
27	78	48	10	70	28	5.3	34	22	2.1
28	80	43	9.3	71	30	5.8	47	26	3.4
29	80	38	8.2	75	34	6.9	53	15	2.1
30	80	37	8.0	63	51	9.7	54	14	2.0
31	80	38	8.2	--	--	--	54	14	2.0
TOTAL	1293.6	--	150.87	1430.9	--	96.38	1862.1	--	191.2

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	54	16	2.3	224	460	305	57	24	3.8
2	58	23	3.6	109	189	61	86	56	13
3	66	23	4.1	73	110	22	78	23	4.8
4	66	21	3.7	61	81	13	70	29	5.5
5	80	33	7.1	50	64	8.6	60	34	5.5
6	84	30	6.8	33	42	3.7	55	28	4.2
7	80	23	5.0	26	30	2.1	51	30	4.1
8	80	24	5.2	25	42	2.8	94	359	103
9	76	21	4.3	23	28	1.7	36	230	22
10	88	412	136	20	19	1.0	27	90	6.6
11	39	544	63	24	26	1.7	43	60	7.0
12	15	210	8.5	23	36	2.2	73	40	7.9
13	20	134	8.8	19	24	1.2	187	445	228
14	70	90	17	17	24	1.1	82	175	39
15	94	317	89	47	27	3.4	54	65	9.5
16	36	270	26	60	39	7.0	102	191	79
17	20	150	8.1	78	46	9.7	154	230	96
18	19	60	3.1	37	36	3.6	116	120	38
19	12	25	.85	70	39	7.4	88	62	15
20	68	35	6.4	61	42	6.9	68	36	6.6
21	68	30	5.5	63	46	7.8	53	26	3.7
22	68	25	4.6	123	57	19	45	28	3.4
23	70	28	5.3	53	34	4.9	43	34	3.9
24	68	25	4.6	82	31	6.9	42	38	4.3
25	68	29	5.3	82	27	6.0	48	36	4.7
26	55	24	3.8	84	19	4.3	43	20	2.3
27	12	8	.26	45	12	1.5	37	19	1.9
28	13	9	.32	34	11	1.0	32	17	1.5
29	11	23	.68	63	23	3.9	20	14	.76
30	748	1390	4120	--	--	--	34	48	6.7
31	604	1140	1960	--	--	--	66	72	13
TOTAL	2910	--	6519.21	1709	--	520.4	2044	--	744.66

11-1790. ALAMEDA CREEK NEAR NILES, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	84	95	22	49	38	5.0	36	30	2.9
2	53	115	16	52	25	3.5	37	21	2.1
3	32	94	8.1	52	28	3.9	36	34	3.3
4	55	78	12	51	29	4.0	37	28	2.8
5	63	67	11	53	27	3.9	37	25	2.5
6	76	65	13	53	25	3.6	36	24	2.3
7	78	63	13	52	26	3.7	43	44	5.1
8	75	66	13	39	21	2.2	63	48	8.2
9	70	56	11	39	22	2.3	63	56	9.5
10	68	67	12	40	23	2.5	63	35	6.0
11	73	90	18	39	23	2.4	62	39	6.5
12	90	110	27	42	26	2.9	62	42	7.0
13	71	82	16	42	27	3.1	58	37	5.8
14	68	71	13	43	27	3.1	57	39	6.0
15	64	76	13	41	27	3.0	46	31	3.9
16	55	75	11	54	46	6.7	46	25	3.1
17	54	70	10	53	36	5.2	44	25	3.0
18	53	66	9.4	53	41	5.9	51	29	4.0
19	54	62	9.0	53	37	5.3	52	27	3.8
20	61	72	12	53	37	5.3	52	28	3.9
21	80	81	17	52	37	5.2	51	25	3.4
22	88	80	19	52	37	5.2	52	24	3.4
23	70	64	12	52	38	5.3	52	23	3.2
24	68	76	14	51	38	5.2	52	25	3.5
25	66	42	7.5	54	36	5.2	51	25	3.4
26	66	37	6.6	40	34	3.7	53	26	3.7
27	68	45	8.3	14	32	1.2	55	32	4.8
28	68	45	8.3	11	24	.71	63	31	5.3
29	68	34	6.2	7.8	50	1.1	63	33	5.6
30	61	43	7.1	19	36	1.8	62	33	5.5
31	--	--	--	25	35	2.4	--	--	--
TOTAL	2000	--	375.5	1330.8	--	114.51	1535	--	133.5

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	60	39	6.3	57	26	4.0	61	24	4.0
2	60	38	6.2	57	27	4.2	59	23	3.7
3	58	29	4.5	58	25	3.9	57	31	4.8
4	58	26	4.1	57	37	5.7	57	36	5.5
5	56	32	4.8	59	44	7.0	60	19	3.1
6	56	22	3.3	57	31	4.8	64	17	2.9
7	58	29	4.5	54	31	4.5	66	17	3.0
8	57	33	5.1	53	11	1.6	67	25	4.5
9	56	23	3.5	54	25	3.6	66	27	4.8
10	56	36	5.4	55	26	3.9	65	16	2.8
11	57	36	5.5	59	13	2.1	63	14	2.4
12	55	22	3.3	57	12	1.8	58	10	1.6
13	57	44	6.8	57	21	3.2	54	11	1.6
14	58	52	8.1	58	27	4.2	26	14	.98
15	57	37	5.7	59	17	2.7	25	11	.74
16	56	47	7.1	58	28	4.4	27	12	.87
17	56	36	5.4	58	41	6.4	35	10	.95
18	56	50	7.6	59	25	4.0	35	10	.95
19	57	58	8.9	58	19	3.0	34	10	.92
20	58	34	5.3	58	40	6.3	34	8	.73
21	59	20	3.2	60	37	6.0	34	6	.55
22	58	26	4.1	59	42	6.7	34	5	.46
23	57	39	6.0	58	24	3.8	33	8	.71
24	57	27	4.2	58	35	5.5	21	6	.34
25	58	44	6.9	58	38	6.0	17	7	.32
26	59	25	4.0	57	40	6.2	20	8	.43
27	60	15	2.4	58	40	6.3	20	10	.54
28	58	21	3.3	56	43	6.5	23	6	.37
29	57	13	2.0	57	21	3.2	23	6	.37
30	56	36	5.4	58	22	3.4	18	5	.24
31	56	19	2.9	61	31	5.1	--	--	--
TOTAL	1777	--	155.8	1782	--	140.0	1256	--	55.17

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 20930.4
TOTAL LOAD FOR YEAR (TONS) 9197.20

11-1790. ALAMEDA CREEK NEAR NILES, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 11, 1968	1430	8	27	476	35	63	75	85	91	94	99	100	--	--	--	--	SBWC
JAN 15.....	1115	9	152	426	175	34	55	71	83	89	100	--	--	--	--	--	SBWC
JAN 30.....	1430	8	724	1720	3360	61	71	82	90	93	100	--	--	--	--	--	SBWC
JAN 31.....	1130	7	542	1050	1540	62	73	86	95	99	100	--	--	--	--	--	SPWC
MAR 1.....	1015	14	55	23	3.4	44	59	72	81	85	99	100	--	--	--	--	SBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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
DEC 7, 1967	1115	7	5	68	6	12	24	39	51	62	74	85	94	100	--	S

11-1853.5. KERN RIVER NEAR QUAKING ASPEN CAMP, CALIF.

LOCATION.--Lat 36°08'05", long 118°25'45", in SW¼SW¼ sec.32, T.20 S., R.33 E., Tulare County, 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.
RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 21°C July 21; minimum, 1°C Dec. 22, 31, Jan. 3.
EXTREMES, 1965-68.--Water temperatures: Maximum, 21°C July 26, 28, 1966, July 21, 1968; minimum, freezing point on several days during January and February 1966.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	12	12	12	11	11	10	10	11	11	11	11	11	12	12	11	9	9	9	9	9	9	9	11	9	9	9	9	9	8	8	8	10
MINIMUM	11	11	10	10	9	8	8	9	9	9	9	9	10	10	9	8	8	8	8	8	8	8	8	7	7	8	7	7	7	6	7	8
NOVEMBER																																
MAXIMUM	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	8	8	8	8	7	6	6	6	6	6	5	4	5	4	3	--	7
MINIMUM	7	7	7	7	7	7	7	7	7	6	6	6	7	8	8	8	8	7	6	6	6	6	6	5	5	4	4	3	3	3	--	6
DECEMBER																																
MAXIMUM	3	3	3	3	3	3	3	4	4	4	4	4	3	2	2	2	3	4	2	2	2	2	2	3	3	4	4	3	3	3	2	3
MINIMUM	3	2	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	1	2	2	3	3	3	3	3	2	1	2
JANUARY																																
MAXIMUM	2	2	2	2	3	2	2	3	4	4	3	4	4	4	6	6	5	4	4	5	5	6	5	5	5	5	4	3	2	2	3	4
MINIMUM	2	2	1	2	2	2	2	2	3	3	3	3	4	4	4	5	3	3	3	4	4	4	4	4	4	4	3	2	2	2	2	3
FEBRUARY																																
MAXIMUM	3	5	5	6	5	7	6	6	6	6	6	6	5	6	5	6	6	7	7	8	8	8	8	8	8	7	8	8	8	--	--	6
MINIMUM	2	3	3	4	4	4	4	6	6	6	4	4	4	4	4	4	6	6	6	7	7	6	7	7	6	6	6	7	6	--	--	5
MARCH																																
MAXIMUM	7	8	8	8	8	8	7	6	7	7	7	7	7	8	7	7	7	7	7	8	8	8	9	9	10	10	10	11	11	11	11	8
MINIMUM	6	6	6	6	7	7	4	3	4	5	5	6	5	5	6	5	4	4	4	4	4	6	6	7	7	7	7	8	8	8	9	6
APRIL																																
MAXIMUM	10	8	9	10	10	9	10	10	11	11	11	10	10	9	10	9	8	7	8	9	8	8	9	9	11	11	11	10	10	10	--	10
MINIMUM	7	6	7	7	8	7	7	8	8	8	8	8	8	8	8	8	6	4	5	6	6	5	6	7	8	8	8	8	8	8	--	7
MAY																																
MAXIMUM	10	10	9	11	11	11	10	10	11	11	11	10	9	10	11	12	12	12	12	12	12	11	10	11	12	13	13	12	12	12	12	11
MINIMUM	9	9	9	9	10	8	9	9	9	9	9	9	8	7	8	9	10	11	11	10	10	9	8	9	9	11	12	12	12	11	12	10
JUNE																																
MAXIMUM	13	13	13	13	13	12	12	11	12	13	14	14	14	15	16	16	16	16	17	16	17	17	18	18	18	18	19	18	17	17	--	15
MINIMUM	12	12	13	13	12	9	10	10	10	11	11	12	12	12	13	14	14	14	14	14	14	14	15	16	16	16	16	17	14	14	--	13
JULY																																
MAXIMUM	18	18	18	18	17	17	18	17	19	19	19	19	19	19	20	20	19	20	20	20	21	20	20	20	20	20	18	18	18	19	18	19
MINIMUM	14	15	14	14	14	15	16	17	17	16	16	16	16	16	16	17	16	16	16	17	17	17	16	16	16	17	17	17	17	17	17	16
AUGUST																																
MAXIMUM	19	19	19	19	19	19	18	19	20	19	19	18	18	17	18	18	18	18	18	18	17	16	16	17	17	16	17	18	18	18	18	18
MINIMUM	16	16	17	16	16	14	17	17	17	16	16	14	14	13	13	13	13	13	13	14	12	12	12	11	12	11	12	13	14	14	14	14
SEPTEMBER																																
MAXIMUM	18	18	18	18	18	18	18	18	18	18	17	16	16	16	17	17	16	16	16	15	13	12	12	13	14	14	14	14	13	12	--	16
MINIMUM	14	14	13	13	13	14	14	14	14	14	13	12	12	12	13	13	12	12	12	11	9	9	9	9	10	11	11	11	11	11	--	12

11-1855. KERN RIVER CANAL NO. 3 NEAR KERNVILLE, CALIF.

LOCATION.--Lat 35°54'20", long 118°28'00", in NE¼ sec.25, T.23 S., R.32 E., Kern County, temperature recorder at gaging station on left bank, 4 miles downstream from intake, and 12 miles north of Kernville.
RECORDS AVAILABLE.--Water temperatures: October 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C July 22-25; minimum, freezing point on several days during December and January.
EXTREMES, 1962-68.--Water temperatures: Maximum, 22°C on several days in 1964, 1965, and 1968; minimum (1962-66, 1967-68), freezing point on several days during December and January of most years.
REMARKS.--No flow Sept. 11-30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	14	14	15	14	13	12	12	12	12	12	12	13	13	13	13	12	11	11	11	12	11	11	11	11	11	11	11	11	11	11	11	12
MINIMUM	13	13	13	12	11	10	10	10	11	11	11	11	12	12	11	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	10
NOVEMBER																																
MAXIMUM	11	11	10	10	11	11	11	11	11	10	10	9	9	11	11	11	10	10	9	8	8	8	8	8	7	7	7	7	7	5	--	9
MINIMUM	8	8	8	8	8	9	8	8	8	8	8	7	7	9	9	9	9	8	7	7	7	7	6	6	5	5	4	4	4	4	--	7
DECEMBER																																
MAXIMUM	5	2	3	4	3	4	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	0	1	1	1	2	2	2	2	2	2	2
MINIMUM	2	2	2	2	2	2	1	2	3	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	1	1	1	1
JANUARY																																
MAXIMUM	2	2	2	2	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	2	1	2
MINIMUM	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	2	2	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1
FEBRUARY																																
MAXIMUM	2	2	2	2	2	3	3	4	4	4	4	5	5	5	5	4	5	6	7	8	8	8	8	9	9	9	9	9	9	--	--	5
MINIMUM	1	1	2	2	2	2	3	3	4	4	4	4	4	4	4	4	4	5	6	7	8	8	8	8	8	8	8	9	8	--	--	5
MARCH																																
MAXIMUM	9	8	8	8	8	8	8	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	8	8	9	9	9	10	11	11	7
MINIMUM	8	8	7	7	7	7	4	4	4	4	4	5	5	5	5	6	4	4	4	4	4	6	6	7	7	8	8	8	9	9	10	6
APRIL																																
MAXIMUM	11	9	9	9	9	9	9	9	10	10	11	11	11	11	11	11	9	7	7	8	9	9	9	9	11	11	12	12	12	12	--	9
MINIMUM	9	7	7	7	8	8	7	8	8	9	9	9	9	9	9	9	6	4	6	7	7	6	6	7	8	9	11	11	9	10	--	8
MAY																																
MAXIMUM	12	12	12	11	10	11	10	11	11	11	11	11	9	9	10	11	12	12	12	12	12	11	11	11	12	13	13	13	14	13	14	11
MINIMUM	10	10	9	9	9	8	8	8	9	8	9	9	8	8	8	9	10	11	12	11	11	10	9	9	10	12	12	13	13	12	13	9
JUNE																																
MAXIMUM	14	15	15	16	16	13	13	13	13	13	14	14	15	16	16	17	17	17	18	18	18	19	19	20	19	20	21	21	21	21	--	16
MINIMUM	13	14	14	14	13	12	12	11	11	11	12	12	13	13	14	14	16	16	16	16	16	17	17	18	18	18	18	19	18	19	--	14
JULY																																
MAXIMUM	20	20	20	20	20	19	20	20	20	20	20	21	20	20	20	20	21	21	21	21	21	22	22	22	22	21	21	20	20	19	19	20
MINIMUM	18	18	18	18	19	18	19	18	18	19	19	19	19	19	18	18	19	18	19	19	20	19	19	19	19	19	19	19	18	17	17	18
AUGUST																																
MAXIMUM	21	21	21	21	20	20	20	20	20	20	21	20	20	19	19	19	19	19	19	19	18	17	16	16	17	17	17	18	19	20	20	19
MINIMUM	18	18	18	18	18	17	18	18	18	18	18	18	18	17	17	17	17	17	16	17	15	13	14	14	14	15	15	15	17	17	18	17
SEPTEMBER																																
MAXIMUM	20	20	20	20	20	20	20	20	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	18	18	18	17	17	17	17	17	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-1870. KERN RIVER AT KERNVILLE, CALIF.

LOCATION.--Lat 35°45'35", long 118°25'10", 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.
RECORDS AVAILABLE.--Water temperatures: June 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C July 21, 26; minimum, 4°C on several days during December to February.
EXTREMES, 1962-68.--Water temperatures: Maximum (1962-63, 1964-68), 27°C Aug. 5, 6, 8, 1966; minimum, 1°C Jan. 13, 14, 1963, Jan. 1, 1965, and on several days during January 1966.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	14	14	13	13	13	13	12	12	12	13	13	13	13	13	13	12	11	11	11	11	11	12	12	12	12	12	12	11	11	11	11	12
MINIMUM	13	13	13	13	12	12	11	12	12	12	12	12	13	13	12	11	11	11	11	11	11	11	11	12	11	11	11	11	11	10	10	12
NOVEMBER																																
MAXIMUM	11	11	11	11	11	11	11	11	11	11	10	10	11	12	12	11	11	11	11	11	10	10	10	9	9	9	10	9	8	8	--	10
MINIMUM	11	10	10	10	10	11	11	10	10	10	9	9	10	11	11	11	11	11	10	10	10	9	9	9	8	8	9	8	7	7	--	10
DECEMBER																																
MAXIMUM	7	7	7	7	7	7	7	8	8	8	8	7	7	6	5	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	6	7
MINIMUM	7	6	6	6	7	6	6	7	7	7	7	7	5	4	4	4	5	4	5	4	4	4	5	5	6	6	6	6	6	6	6	6
JANUARY																																
MAXIMUM	6	7	6	6	6	6	6	5	6	7	7	7	7	7	8	8	7	7	7	8	8	8	8	8	7	7	7	6	6	5	6	7
MINIMUM	5	6	6	4	4	4	4	4	5	6	6	6	6	6	7	7	7	6	6	7	7	7	7	7	7	7	6	5	4	4	4	6
FEBRUARY																																
MAXIMUM	6	7	8	8	7	8	8	8	8	9	8	8	8	8	8	8	8	9	9	11	10	10	10	10	10	9	10	11	9	--	--	9
MINIMUM	4	6	6	7	7	7	7	8	8	8	7	7	7	7	7	7	8	8	8	9	9	9	9	9	9	9	9	9	9	--	--	8
MARCH																																
MAXIMUM	9	9	9	9	9	9	8	8	8	8	8	8	8	9	8	9	8	8	8	9	9	9	10	10	11	11	11	11	11	11	11	9
MINIMUM	8	8	8	8	9	8	7	7	7	7	7	8	8	8	8	8	7	7	7	7	7	8	8	9	9	9	9	9	9	9	10	8
APRIL																																
MAXIMUM	10	9	9	9	9	9	9	10	10	10	10	10	9	9	9	9	9	7	8	9	9	9	9	10	11	11	11	12	11	11	--	10
MINIMUM	8	8	7	8	9	8	8	9	9	9	9	9	9	8	8	7	6	7	7	8	7	8	8	9	10	11	11	11	11	--		9
MAY																																
MAXIMUM	11	11	11	11	12	12	11	11	12	12	12	12	12	12	12	12	13	14	13	13	13	13	12	12	13	14	15	15	15	14	14	13
MINIMUM	10	10	10	10	11	11	11	11	11	11	11	12	11	10	11	11	11	12	13	13	13	12	11	11	12	13	14	14	14	13	13	12
JUNE																																
MAXIMUM	16	16	16	16	16	14	14	14	14	16	16	17	17	17	18	18	18	18	18	18	19	19	19	19	19	19	20	20	19	18	--	17
MINIMUM	14	15	16	16	14	13	13	14	14	14	15	16	16	16	16	17	17	17	17	17	17	18	18	18	18	18	19	19	17	17	--	16
JULY																																
MAXIMUM	19	19	19	19	20	19	20	19	20	20	20	21	21	21	21	21	21	21	21	21	22	21	20	21	21	22	21	20	20	20	19	20
MINIMUM	17	18	17	18	18	18	19	19	18	19	19	19	19	19	19	19	19	19	19	19	20	19	19	19	19	19	19	19	19	19	19	19
AUGUST																																
MAXIMUM	20	19	20	20	19	19	19	20	20	19	19	19	18	18	18	18	18	18	18	18	18	18	18	18	18	17	18	19	20	20	21	19
MINIMUM	19	18	19	18	18	17	18	18	18	18	18	18	17	17	17	16	16	16	16	17	16	16	16	16	16	16	16	17	18	18	19	17
SEPTEMBER																																
MAXIMUM	21	20	19	20	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	19	19	19	19	19	19	19	19	19	18	18	--	20
MINIMUM	19	19	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	17	18	16	16	15	14	15	16	16	16	16	15	15	--	17

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 25, 1967	1440	11	381	3	3.1	--	--	--	--	--	--	--	--	--	--	--	
NOV 21.....	1220	10	514	16	22	--	--	--	--	--	--	--	--	--	--	--	
JAN 23, 1968	1400	8	412	3	3.3	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	1245	9	631	12	20	--	--	--	--	--	--	--	--	--	--	--	
APR 18.....	1200	6	807	13	28	--	--	--	--	--	--	--	--	--	--	--	
JUN 18.....	1628	19	899	6	15	--	--	--	--	--	--	--	--	--	--	--	
JUL 22.....	1200	20	331	4	3.6	--	--	--	--	--	--	--	--	--	--	--	
SEP 19.....	1300	18	152	4	1.6	--	--	--	--	--	--	--	--	--	--	--	

11-1875. BOREL CANAL BELOW ISABELLA DAM, CALIF.

LOCATION.--Lat 35°38'30", long 118°28'10", 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.
RECORDS AVAILABLE.--Water temperatures: October 1958 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C Aug. 8; minimum, 6°C on many days during December to February.
EXTREMES, 1958-68.--Water temperatures: Maximum, 27°C July 31 to Aug. 1, 1959; minimum, 1°C Jan. 17, 18, 1960.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	20	20	20	20	20	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	18	19	19	18	18	18	17	18	18	18	19
MINIMUM	20	19	20	19	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	18	17	17	16	15	15	15	16	15	14	14	18
NOVEMBER																																
MAXIMUM	18	18	18	18	18	18	17	17	16	16	16	16	16	16	16	16	16	16	16	14	14	14	14	14	14	14	13	13	13	13	--	15
MINIMUM	14	15	15	15	16	15	15	14	16	16	16	16	16	16	15	16	15	16	14	14	14	14	14	14	14	13	13	13	13	12	--	15
DECEMBER																																
MAXIMUM	12	12	12	12	11	11	11	11	10	10	10	9	9	8	8	8	7	7	7	7	7	6	6	6	7	7	7	7	7	7	7	8
MINIMUM	12	12	12	11	11	11	11	10	9	9	9	9	8	8	8	7	7	7	7	7	6	6	6	6	6	7	7	7	7	7	6	8
JANUARY																																
MAXIMUM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	6	6
MINIMUM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	6	6	6
FEBRUARY																																
MAXIMUM	6	7	7	7	7	7	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	10	11	11	11	12	12	--	--	9
MINIMUM	6	6	7	7	7	7	7	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	10	9	11	11	11	--	--	8
MARCH																																
MAXIMUM	12	12	12	12	12	10	10	10	10	10	11	11	11	11	11	11	11	11	11	12	12	11	11	11	11	11	12	12	12	12	12	11
MINIMUM	12	11	11	11	10	10	10	10	10	10	10	11	11	11	10	11	11	10	10	10	11	11	11	11	11	11	10	11	12	12	12	10
APRIL																																
MAXIMUM	12	12	12	13	13	12	13	14	14	15	15	13	13	14	14	13	13	13	13	13	13	13	13	13	14	14	16	17	18	17	--	14
MINIMUM	12	12	12	12	12	12	12	12	13	13	13	13	12	12	13	13	13	13	13	13	13	13	13	13	13	13	14	16	17	14	--	13
MAY																																
MAXIMUM	17	17	16	15	14	14	16	15	14	14	14	13	13	13	14	14	14	14	14	14	14	14	14	14	15	15	16	17	16	16	17	15
MINIMUM	15	14	14	14	14	13	13	14	14	14	13	13	13	13	13	14	14	14	14	14	14	14	14	14	14	15	15	16	16	16	16	14
JUNE																																
MAXIMUM	17	17	17	17	17	17	17	17	18	18	18	18	18	18	19	20	20	21	21	20	21	21	20	22	23	23	23	21	21	23	--	19
MINIMUM	16	16	17	17	17	17	17	17	17	18	18	18	18	18	18	19	19	19	20	19	19	19	19	19	21	22	21	21	21	21	--	19
JULY																																
MAXIMUM	23	22	23	23	23	22	22	22	23	23	22	22	22	21	22	21	21	23	23	22	22	23	23	23	23	24	24	23	25	23	23	23
MINIMUM	22	21	21	21	22	22	21	21	22	22	22	22	21	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	23	23	23	22
AUGUST																																
MAXIMUM	24	24	24	24	24	24	25	26	24	24	24	23	23	23	22	22	22	22	22	22	21	21	21	22	22	21	21	22	23	24	23	23
MINIMUM	23	23	23	23	23	23	23	24	24	23	23	23	23	22	22	22	22	21	21	21	21	21	20	21	21	21	21	21	21	22	21	22
SEPTEMBER																																
MAXIMUM	22	21	21	22	24	23	23	23	23	23	23	22	23	22	21	24	23	23	22	21	22	21	21	22	22	22	22	21	21	20	--	22
MINIMUM	21	21	20	20	21	21	21	22	21	21	21	21	21	21	21	21	21	21	21	20	20	19	19	20	20	19	20	20	19	19	--	20

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)
11-1860. KERN RIVER NEAR KERNVILLE, CALIF. (LAT 35°56'43", LONG 118°28'36")										
JAN.										
12...	47	11	2.8	10	1.4	59	0	5.9	4.8	.1
MAY										
24...	566	5.0	1.1	5.2	.6	27	0	1.8	1.5	.1
JULY										
08...	118	--	--	7.0	--	44	0	--	2.1	--
SEPT.										
03...	70	14	3.2	14	2.4	70	0	8.9	7.6	.0

DATE	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH
JAN.										
12...	.11	84	39	0	.11	35	.7	48	128	8.1
MAY										
24...	.03	40	17	0	.05	39	.5	22	61	7.5
JULY										
08...	.02	--	27	0	--	36	.6	36	98	7.6
SEPT.										
03...	.16	88	48	0	.12	37	.9	57	171	7.8

11-2049. TULE RIVER BELOW SUCCESS DAM, CALIF.

LOCATION.--Lat 36°03'23", long 118°55'22", in SW¼ sec.35, T.21 S., R.26 E., Tulare County, at gaging station 1,000 ft downstream from Success Dam, and 5 miles east of Porterville.
DRAINAGE AREA.--393 sq mi.
RECORDS AVAILABLE.--Chemical analyses: December 1961 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)
OCT. 03...	251	--	--	9.5	--	114	0	--	3.9	--
NOV. 09...	7.2	--	--	14	--	141	4	--	5.2	--
DEC. 05...	131	--	--	15	--	167	0	--	6.7	--
JAN. 08...	105	39	6.0	14	4.1	170	0	2.8	8.4	1.0
FEB. 05...	65	--	--	15	--	162	0	--	8.8	--
MAR. 07...	94	--	--	14	--	161	0	--	7.5	--
APR. 08...	7.6	--	--	14	--	145	3	--	7.3	--
MAY 06...	27	32	5.5	14	2.6	146	0	6.2	6.6	.5
JUNE 03...	46	--	--	13	--	137	0	--	6.0	--
AUG. 12...	347	--	--	15	--	148	0	--	6.3	--
SEPT. 03...	14	33	6.9	14	4.4	160	0	3.4	6.9	1.8

DATE	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH
OCT. 03...	.05	--	81	0	--	20	.5	94	207	7.9
NOV. 09...	.06	--	109	0	--	22	.6	122	261	8.5
DEC. 05...	.08	--	129	0	--	20	.6	137	296	8.2
JAN. 08...	.12	175	122	0	.24	19	.6	139	307	8.2
FEB. 05...	.00	--	116	0	--	22	.6	133	297	8.1
MAR. 07...	.01	--	119	0	--	20	.6	132	294	7.9
APR. 08...	.00	--	108	0	--	22	.6	124	279	8.5
MAY 06...	.08	141	103	0	.19	22	.6	120	263	8.2
JUNE 03...	.06	--	98	0	--	22	.6	112	250	8.1
AUG. 12...	.05	--	110	0	--	23	.6	121	273	8.3
SEPT. 03...	.09	121	111	0	.16	21	.6	131	290	8.2

11-2080. MARBLE FORK KAWEAH RIVER AT POTWISHA CAMP, CALIF.

LOCATION.--Lat 36°31'10", long 118°48'10", 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.
RECORDS AVAILABLE.--Water temperatures: January 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 23°C Aug. 3, 4, Sept. 1, 2; minimum, 1°C Dec. 14-16, 20, 21.
EXTREMES, 1962-68.--Water temperatures: Maximum, 23°C on several days during 1964, 1966, and 1968; minimum (1963-68), 1°C on several days during 1965 and 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	19	18	18	18	16	14	14	14	14	14	14	15	16	15	14	14	14	14	13	13	13	13	13	14	13	13	13	13	13	13	13	14
MINIMUM	18	17	16	16	14	13	13	13	13	13	13	14	14	14	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11	13
NOVEMBER																																
MAXIMUM	13	13	13	12	12	12	13	13	12	12	12	11	12	13	13	12	12	12	12	10	10	9	9	9	8	8	8	8	7	7	--	11
MINIMUM	11	11	11	11	12	11	12	12	11	11	11	11	11	12	12	12	11	11	10	9	9	9	9	8	8	7	7	7	6	6	--	9
DECEMBER																																
MAXIMUM	6	6	6	5	6	6	4	5	5	5	5	5	4	2	2	2	2	2	2	2	2	2	3	4	5	6	6	5	5	4	4	4
MINIMUM	5	4	4	4	5	4	4	4	4	4	4	4	2	1	1	1	2	2	2	1	1	2	2	3	4	5	5	5	4	4	3	3
JANUARY																																
MAXIMUM	4	4	3	3	3	3	3	3	4	4	4	5	5	5	7	6	6	5	6	6	7	7	7	7	7	6	6	3	4	3	6	4
MINIMUM	3	3	3	2	2	2	2	2	3	4	4	4	4	4	5	5	4	3	4	4	5	6	6	6	5	5	3	2	2	3	3	3
FEBRUARY																																
MAXIMUM	7	7	7	7	7	7	7	7	7	7	7	7	6	8	7	7	7	8	8	8	8	8	9	9	9	9	9	9	9	--	--	7
MINIMUM	4	6	6	6	6	6	6	6	7	6	5	5	6	6	6	6	7	6	7	8	7	7	7	7	7	7	7	8	8	--	--	6
MARCH																																
MAXIMUM	8	9	9	9	8	8	7	7	6	7	7	7	8	6	7	7	6	6	6	8	7	8	9	8	8	9	9	11	11	10	10	8
MINIMUM	7	7	7	7	7	7	6	6	4	4	5	6	6	5	5	6	5	4	4	4	4	6	6	7	7	7	6	8	8	7	8	6
APRIL																																
MAXIMUM	10	6	7	9	8	7	9	10	10	10	10	9	9	9	9	9	6	6	7	7	8	8	9	9	9	10	11	11	11	11	--	8
MINIMUM	6	6	5	6	7	6	7	7	8	8	8	8	7	7	8	6	4	3	4	6	5	4	6	6	7	8	8	8	8	8	--	6
MAY																																
MAXIMUM	11	11	11	11	11	10	9	9	10	11	11	10	7	7	10	11	12	13	13	13	12	9	9	11	12	14	15	15	14	13	14	11
MINIMUM	8	8	8	8	9	7	8	8	9	9	9	7	7	6	7	9	9	9	11	11	9	8	8	8	9	11	12	12	12	11	12	9
JUNE																																
MAXIMUM	15	16	16	16	14	11	10	11	12	14	14	15	15	15	17	17	17	18	18	18	19	19	20	21	21	21	21	20	18	18	--	16
MINIMUM	12	14	14	14	11	10	10	9	9	11	12	12	13	13	13	14	15	15	16	16	15	16	17	17	18	18	17	17	14	14	--	13
JULY																																
MAXIMUM	19	19	19	21	20	19	20	19	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22	22	22	22	21	21	21	22	22	21
MINIMUM	15	16	16	17	17	18	17	18	18	17	18	18	18	17	18	18	18	18	18	19	19	19	18	18	18	18	19	20	19	20	20	18
AUGUST																																
MAXIMUM	22	22	23	23	22	22	21	21	22	21	21	21	21	20	20	20	20	19	21	19	17	18	18	19	20	18	19	20	21	22	22	21
MINIMUM	19	19	19	19	19	19	19	19	19	19	19	19	19	17	17	18	17	17	18	17	16	16	16	17	17	16	17	17	18	19	20	18
SEPTEMBER																																
MAXIMUM	23	23	22	22	22	22	22	22	21	21	21	21	21	20	21	20	20	19	19	18	17	16	16	16	17	17	17	17	17	17	--	19
MINIMUM	21	20	19	19	19	19	19	19	19	19	18	18	18	18	18	18	18	17	17	16	14	14	14	14	14	16	16	16	16	15	--	17

11-2099. 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 0.25 mile downstream from North Fork Kaweah River.
DRAINAGE AREA.--418 sq mi.
RECORDS AVAILABLE.--Chemical analyses: November 1963 to July 1966.
Water temperatures (revised).--October 1965 to December 1966, January to September 1968.
EXTREMES, January to September 1968.--Water temperatures: Maximum, 27°C sometime during period July 9 to Aug. 25 and on Sept. 7, 8.
EXTREMES, 1965-66, January to September 1968.--Water temperatures: Maximum, 28°C Aug. 18, 1966; minimum (1965-66), 4°C on several days during winter months.
REMARKS.--Thermograph destroyed by flood of Dec. 6, 1966; replaced in January 1968. Recorder malfunctioned Jan. 15 to Feb. 1, Feb. 4-29, Mar. 11-31, Sept. 3, 4, 30. Clock stopped June 20 to July 1, July 9 to Aug. 26; temperature ranges, 18°C to 23°C, and 21°C to 27°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	6	6	6	6	6	6	5	7	7	8	8	8	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	5	4	2	2	3	3	3	3	6	5	4	5	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	7	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	4	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH																																
MAXIMUM	14	14	14	14	13	12	12	10	10	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	10	9	9	9	9	10	7	7	7	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL																																
MAXIMUM	13	11	13	15	12	14	16	17	17	17	17	17	16	16	17	13	12	13	14	15	15	15	16	16	17	17	17	17	17	16	--	15
MINIMUM	10	9	8	9	10	9	10	10	11	12	12	12	11	11	11	8	7	6	7	8	8	7	8	9	10	11	12	12	12	12	--	10
MAY																																
MAXIMUM	17	16	17	17	16	15	14	14	16	16	16	12	10	12	15	17	17	17	16	18	15	14	15	16	17	17	18	18	18	17	18	16
MINIMUM	12	12	12	12	12	11	11	11	10	11	12	9	9	8	8	11	12	12	13	13	11	10	10	10	11	12	13	14	14	13	13	11
JUNE																																
MAXIMUM	18	19	19	19	17	15	14	16	18	19	20	20	19	20	21	22	21	22	22	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	14	15	16	15	13	11	11	11	12	13	14	14	14	14	15	16	17	17	17	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	23	23	24	24	23	24	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	19	18	19	21	21	21	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23	23	24	26	26	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	18	18	19	20	--
SEPTEMBER																																
MAXIMUM	26	25	--	--	26	26	27	27	26	26	26	26	24	23	23	24	24	24	23	21	20	20	20	21	22	23	23	23	24	--	--	24
MINIMUM	21	19	--	--	21	21	21	21	21	21	19	19	19	18	18	18	18	17	18	17	15	14	14	14	15	16	16	16	16	--	--	18

11-2109.5. KAWEAH RIVER BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'51", long 119°00'42", in SE¼SE¼ sec.26, T.17 S., R.27 E., Tulare County, at gaging station 0.6 mile downstream from Terminus Dam, and 2.2 miles northeast of Lemoncove.
DRAINAGE AREA.--561 sq mi.
RECORDS AVAILABLE.--Chemical analyses: December 1961 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)
OCT.										
03...	631	--	--	2.7	--	35	0	--	1.4	--
NOV.										
06...	66	--	--	4.7	--	9	0	--	2.9	--
DEC.										
04...	239	--	--	5.7	--	70	0	--	3.5	--
JAN.										
09...	139	16	3.6	5.9	1.7	84	0	1.0	3.5	.4
FEB.										
06...	243	--	--	4.7	--	62	0	--	2.9	--
MAR.										
14...	319	--	--	3.6	--	47	0	--	2.2	--
APR.										
10...	107	--	--	3.2	--	43	0	--	1.9	--
MAY										
07...	216	7.7	1.0	3.2	1.0	32	0	6.1	.5	.5
JUNE										
06...	945	--	--	2.3	--	26	0	--	1.1	--
JULY										
08...	547	--	--	2.1	--	28	0	--	1.1	--
AUG.										
06...	317	--	--	3.6	--	36	2	--	2.0	--
SEPT.										
10...	37	12	1.9	3.2	2.1	48	0	1.6	3.5	1.4

DATE	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC CONC-UCTANCE (MICRO-MHOS)	PH
OCT.										
03...	.00	--	26	0	--	18	.2	29	72	6.8
NOV.										
06...	.00	--	7	0	--	59	.8	7	20	6.7
DEC.										
04...	.00	--	68	11	--	15	.3	57	133	8.1
JAN.										
09...	.05	80	55	0	.11	18	.3	69	130	8.0
FEB.										
06...	.02	--	46	0	--	18	.3	51	125	7.7
MAR.										
14...	.00	--	36	0	--	18	.3	39	95	7.5
APR.										
10...	.00	--	33	0	--	17	.2	35	85	7.5
MAY										
07...	.03	43	23	0	.06	22	.3	26	66	7.6
JUNE										
06...	.00	--	19	0	--	21	.2	21	54	7.1
JULY										
08...	.00	--	22	0	--	17	.2	23	58	7.3
AUG.										
06...	.00	--	30	0	--	21	.3	33	78	8.8
SEPT.										
10...	.04	50	38	0	.07	15	.2	39	103	7.3

11-2135. KINGS RIVER ABOVE NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°51'45", long 119°07'25", 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.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1955.
Water temperatures: December 1965 to September 1968.

EXTREMES, 1967-68.--Water temperatures: Maximum, 23°C on several days during July and August; minimum, freezing point Dec. 14, 15.

EXTREMES, 1966-68.--Water temperatures: Maximum (1967-68), 23°C on several days during July and August 1968; minimum, freezing point Dec. 14, 15, 1967.

REMARKS.--Clock stopped Oct. 1 to Nov. 12, Aug. 3 to Sept. 30; temperature ranges, 11°C to 16°C, and 17°C to 22°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	13	14	13	13	13	13	12	12	12	11	11	9	9	9	8	9	8	7	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	12	12	12	12	12	12	11	11	11	10	9	8	8	8	7	8	6	7	--	--
DECEMBER																																
MAXIMUM	7	5	5	6	6	6	6	6	6	6	5	6	4	2	2	2	3	3	2	2	2	2	3	4	4	5	6	6	5	4	4	4
MINIMUM	4	3	3	4	5	4	4	6	4	4	4	4	1	0	0	1	2	2	1	1	1	1	2	2	3	3	4	4	4	3	2	3
JANUARY																																
MAXIMUM	4	3	4	3	3	3	3	3	4	5	6	4	5	5	7	7	4	5	5	6	6	6	6	6	7	6	6	4	3	3	6	5
MINIMUM	2	3	2	1	1	2	1	2	3	4	4	3	4	3	5	6	6	3	3	4	4	5	5	5	5	5	4	2	2	2	3	3
FEBRUARY																																
MAXIMUM	5	7	7	7	7	8	8	8	8	9	8	8	7	8	8	8	8	9	9	11	11	11	11	11	11	11	12	11	11	--	--	9
MINIMUM	3	4	4	5	6	6	7	7	8	8	7	6	6	6	6	7	7	8	8	9	9	9	9	9	9	8	8	9	8	--	--	7
MARCH																																
MAXIMUM	11	11	11	11	11	10	9	8	8	9	9	8	10	9	9	8	8	9	9	9	9	9	11	11	12	13	12	13	13	13	13	10
MINIMUM	8	8	8	8	8	9	8	8	6	6	6	7	7	7	7	7	6	6	6	6	7	7	7	8	8	10	9	9	11	11	11	8
APRIL																																
MAXIMUM	12	9	11	13	12	12	12	13	13	13	13	12	12	12	12	11	9	9	11	11	12	11	12	12	13	13	12	12	12	12	--	12
MINIMUM	9	8	8	9	10	9	9	10	11	11	11	11	10	10	10	9	7	7	7	8	8	7	7	8	9	11	11	11	10	10	--	9
MAY																																
MAXIMUM	12	12	12	12	12	11	11	11	12	12	12	11	10	11	12	14	13	13	13	14	14	12	12	12	14	14	14	15	15	14	14	13
MINIMUM	10	10	10	10	10	9	9	9	10	10	10	10	9	8	9	11	12	12	12	12	11	11	10	10	11	13	12	13	13	12	12	11
JUNE																																
MAXIMUM	15	16	16	16	16	13	14	14	16	17	17	17	17	17	18	18	18	19	20	20	20	21	21	21	21	21	21	21	19	19	--	18
MINIMUM	13	14	14	15	12	11	12	13	13	14	14	15	15	15	16	16	17	17	18	18	17	18	18	19	18	18	18	19	17	16	--	16
JULY																																
MAXIMUM	20	21	21	22	22	22	22	21	22	21	22	22	22	22	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	22	23	22
MINIMUM	17	17	17	18	18	19	18	19	19	18	18	19	19	18	19	19	19	19	19	19	19	19	19	19	18	19	20	21	19	19	19	19
AUGUST																																
MAXIMUM	22	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	19	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-2165. NORTH FORK KINGS RIVER ABOVE DINKEY CREEK, AT BALCH CAMP, CALIF.

LOCATION.--Lat 36°54'10", long 119°07'15", in NW¼ 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.
RECORDS AVAILABLE.--Water temperatures: September 1967 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C June 22, 23, 25-27; minimum, freezing point Dec. 14-16, 21.
REMARKS.--Recorder stopped Oct. 19-22, Nov. 6-8, 18-22, Jan. 25 to Feb. 26, Mar. 1-28; temperature ranges, 10°C to 16°C, 12°C to 16°C, 9°C to 12°C, 2°C to 13°C, and 6°C to 15°C, respectively.

TEMPERATURE (°C) OF WATER, SEPTEMBER 1967

MONTH	DAY 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
SEPTEMBER																																
MAXIMUM	16	17	16	14	16	16	16	16	15	15	16	17	17	16	17	17	16	14	17	17	16	17	17	17	17	18	17	16	18	17	--	16
MINIMUM	12	14	12	11	12	12	12	12	11	12	11	12	11	12	12	12	12	13	12	13	13	14	13	13	13	14	13	14	14	13	--	12

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	17	16	17	16	16	15	15	15	15	15	16	16	16	16	15	14	14	14	--	--	--	--	16	16	16	16	16	15	15	15	14	15
MINIMUM	13	13	13	12	13	11	11	11	11	12	12	12	12	12	12	11	11	--	--	--	--	--	13	13	13	13	13	12	12	12	12	12
NOVEMBER																																
MAXIMUM	14	14	14	14	14	--	--	--	12	12	12	11	12	13	11	12	12	--	--	--	--	--	10	9	9	9	9	9	8	7	--	--
MINIMUM	12	12	12	12	13	--	--	--	9	9	9	9	9	11	10	10	10	--	--	--	--	--	8	7	7	8	7	8	7	7	--	--
DECEMBER																																
MAXIMUM	7	7	7	7	7	7	7	7	7	7	6	6	4	2	2	2	2	3	3	3	3	3	3	4	4	6	6	6	6	4	4	4
MINIMUM	5	4	4	5	6	5	5	6	5	4	3	4	2	0	0	0	1	2	2	1	0	1	1	2	2	2	3	3	3	2	2	2
JANUARY																																
MAXIMUM	4	3	4	3	3	3	3	3	4	4	6	6	6	6	7	8	7	6	6	7	6	7	8	8	--	--	--	--	--	--	--	--
MINIMUM	2	2	1	1	1	1	1	1	2	3	3	3	3	2	4	6	4	3	3	3	3	3	3	4	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	13	13	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	8	8	--	--	--
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	18	18	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	11	12	--
APRIL																																
MAXIMUM	14	12	14	16	14	16	17	18	18	19	19	18	18	19	19	15	13	16	16	17	16	17	17	17	19	19	20	20	21	21	--	17
MINIMUM	11	10	9	10	11	10	10	11	12	12	12	12	12	12	13	11	9	8	9	10	9	9	9	11	11	12	12	13	13	13	--	10
MAY																																
MAXIMUM	20	21	21	21	21	19	18	18	19	20	19	14	12	15	16	17	21	20	19	22	17	17	19	19	21	22	23	24	24	23	23	19
MINIMUM	14	14	14	14	14	13	13	13	13	13	13	12	11	9	11	10	13	14	14	14	13	12	12	12	14	14	16	17	17	17	16	13
JUNE																																
MAXIMUM	21	22	21	23	20	18	16	19	22	23	24	24	23	23	24	25	23	24	25	25	25	26	26	25	26	26	26	25	23	23	--	23
MINIMUM	15	16	16	17	17	14	14	14	15	16	17	17	17	16	17	18	18	18	18	18	18	18	19	19	19	19	19	19	17	17	--	17
JULY																																
MAXIMUM	24	23	24	24	24	24	23	21	23	24	25	25	24	24	24	24	24	25	25	25	25	25	25	24	24	25	24	23	23	21	22	23
MINIMUM	17	17	17	18	18	19	19	19	18	18	19	19	19	18	18	18	18	18	19	19	19	19	19	18	18	18	19	19	18	18	18	18
AUGUST																																
MAXIMUM	23	23	23	22	22	22	22	22	22	21	22	22	21	21	21	21	21	20	19	18	19	19	19	21	21	20	21	22	22	23	23	21
MINIMUM	17	17	18	17	17	16	17	17	17	17	16	17	17	15	15	16	16	15	16	16	14	13	14	14	15	14	15	16	17	17	18	16
SEPTEMBER																																
MAXIMUM	23	23	23	22	21	22	22	22	21	21	21	21	20	19	20	20	20	19	19	17	17	17	17	18	18	18	18	18	18	17	--	19
MINIMUM	18	18	17	17	16	17	17	17	17	16	16	16	16	16	16	16	15	15	14	14	12	12	12	12	13	13	13	13	14	13	--	15

11-2185. 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).
RECORDS AVAILABLE.--Chemical analyses: October 1955 to July 1963, October 1967 to September 1968. Water temperatures: October 1966 to September 1968.
EXTREMES, 1966-67.--Water temperatures: Maximum, 20°C Oct. 9, 1966; minimum, freezing point on several days in December 1966 and January 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. The thermograph is affected by air temperatures whenever the powerplant operation is discontinued. For this reason, no extremes are given for this water year. Clock stopped Apr. 3-24; temperature range, 9°C to 16°C.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)
OCT.										
10...	1300	--	--	3.0	--	18	0	--	1.1	--
NOV.										
06...	1120	--	--	3.4	--	55	0	--	1.6	--
DEC.										
10...	450	--	--	3.4	--	27	0	--	1.6	--
JAN.										
08...	413	6.1	1.0	3.8	.6	26	0	1.5	1.7	.1
FEB.										
12...	710	--	--	3.1	--	24	0	--	.1	--
MAR.										
11...	896	--	--	2.4	--	21	0	--	.0	--
APR.										
08...	1410	--	--	2.1	--	18	0	--	.0	--
MAY										
13...	2390	2.4	.0	1.5	.5	10	0	2.1	.5	.0
JUNE										
11...	1570	--	--	1.5	--	10	0	--	.6	--
JULY										
09...	1430	--	--	1.6	--	14	0	--	.0	--
AUG.										
12...	714	--	--	3.4	--	19	0	--	2.1	--
SEPT.										
09...	669	6.2	1.1	2.8	1.3	25	0	3.6	3.2	.0

DATE	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC CONC-UCTANCE (MICRO-MHOS)	PH
OCT.										
10...	.10	--	14	0	--	32	.3	15	46	6.7
NOV.										
06...	--	--	36	0	--	17	.2	45	123	7.5
DEC.										
10...	.00	--	25	3	--	23	.3	22	54	7.6
JAN.										
08...	.04	46	19	0	.06	29	.4	21	58	7.6
FEB.										
12...	.03	--	18	0	--	27	.3	20	57	7.5
MAR.										
11...	.00	--	15	0	--	26	.3	17	49	7.5
APR.										
08...	.00	--	12	0	--	28	.3	15	37	7.4
MAY										
13...	.04	10	6	0	.01	33	.3	8	24	7.3
JUNE										
11...	.02	--	8	0	--	29	.2	8	28	6.9
JULY										
09...	.00	--	11	0	--	24	.2	11	33	7.5
AUG.										
12...	.00	--	15	0	--	33	.4	16	47	7.2
SEPT.										
09...	.00	31	20	0	.04	22	.3	21	58	7.4

11-2185. KINGS RIVER BELOW NORTH FORK, NEAR TRIMMER, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	12	12	12	11	11	10	12	13	11	11	12	--	11	12	11	--	--	--	--	--	--	--	--	6	--	--
MINIMUM	--	--	--	--	--	--	9	9	9	9	9	9	9	9	7	6	8	--	9	9	7	--	--	--	--	--	--	--	--	4	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	6	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	4	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	4	4	--	--	--	--	7	--	--	--	--	--	--	--	--	--	--	7	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	3	2	--	--	--	--	4	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	7	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	4	--	--	--
MARCH																																
MAXIMUM	7	9	10	10	9	9	7	7	8	8	8	7	7	10	9	8	8	8	8	11	11	10	12	13	13	14	14	14	14	16	15	10
MINIMUM	4	4	4	6	6	6	5	5	5	5	6	4	5	6	6	6	6	6	6	6	7	7	7	8	9	9	9	9	10	11	11	6
APRIL																																
MAXIMUM	12	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	12	13	13	13	13	--	--
MINIMUM	9	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	8	10	10	10	9	--	--
MAY																																
MAXIMUM	13	13	13	13	--	--	12	13	13	13	9	8	11	12	13	15	15	14	15	12	13	13	13	16	16	16	16	16	16	14	16	13
MINIMUM	9	9	9	9	--	--	8	8	9	9	8	7	7	8	9	11	12	12	12	10	9	9	9	11	12	13	13	13	13	12	12	10
JUNE																																
MAXIMUM	16	17	17	17	14	12	13	15	16	17	17	17	17	17	18	19	18	18	19	18	17	17	18	16	16	16	15	14	14	19	--	16
MINIMUM	13	14	14	14	12	9	11	12	11	12	13	13	13	13	14	14	16	15	16	15	12	12	12	13	12	12	12	11	11	13	--	13
JULY																																
MAXIMUM	16	16	14	15	17	17	--	18	16	15	15	19	20	22	21	--	--	--	--	22	--	18	18	18	--	17	--	--	17	17	17	--
MINIMUM	12	12	12	12	12	12	--	14	12	12	13	14	17	17	16	--	--	--	--	16	--	14	14	14	--	14	--	--	13	12	12	--
AUGUST																																
MAXIMUM	15	13	13	13	13	14	13	13	13	13	19	16	16	13	13	13	13	14	15	12	14	14	13	14	15	13	14	14	23	24	24	15
MINIMUM	11	11	10	10	10	10	10	10	10	10	12	11	10	9	9	10	10	11	11	10	10	9	9	9	10	10	11	11	14	19	18	11
SEPTEMBER																																
MAXIMUM	18	15	14	15	22	--	--	17	19	16	14	15	16	17	21	17	15	14	14	14	18	18	14	14	14	14	14	20	19	14	--	16
MINIMUM	12	12	12	12	12	--	--	16	13	12	12	11	12	11	14	12	12	11	11	11	11	12	11	11	11	11	11	12	14	11	--	12

11-2227. KINGS RIVER AT PEOPLES WEIR, NEAR KINGSBURG, CALIF.

LOCATION.--Lat 36°29'06", long 119°32'22", in NW¼ sec.1, T.17 S., R.22 E., Fresno County, approximately 0.2 mile downstream from gaging station located on diversion weir, 2 miles south of Kingsburg, and approximately 12 miles northeast of Hanford.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)
JAN.										
12...	670	--	--	2.9	--	24	0	--	1.4	--
MAY										
06...	150	12	5.4	9.5	2.0	71	0	5.6	4.0	1.6
JULY										
01...	1500	--	--	2.4	--	27	0	--	1.9	--
SEPT.										
09...	1230	4.8	1.0	2.1	1.2	21	0	1.0	2.5	.8

DATE	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH
JAN.										
12...	.13	--	20	0	--	24	.3	20	54	7.5
MAY										
06...	.01	85	52	0	.12	27	.6	58	150	7.5
JULY										
01...	.00	--	19	0	--	22	.2	22	69	7.6
SEPT.										
09...	.00	23	16	0	.03	21	.2	17	46	7.0

11-2370. BIG CREEK BELOW HUNTINGTON LAKE, CALIF.

LOCATION.--Lat 37°13'10", long 119°12'50", in NW¼ sec.23, T.8 S., R.25 E., Fresno County, 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.
RECORDS AVAILABLE.--Water temperatures: July 1961 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 16°C on several days during August and September; minimum, freezing point Dec. 18-21.
EXTREMES, 1961-68.--Water temperatures: Maximum, 17°C Aug. 10, 11, 1967; minimum (1961-63, 1965-68), freezing point on several days during winter months.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	13	13	13	13	13	12	13	13	13	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	12
MINIMUM	12	11	12	11	12	11	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	10	10	10	10	10	10	10	9	9	9	10
NOVEMBER																																
MAXIMUM	11	11	10	11	10	10	9	9	9	9	9	9	9	10	9	9	9	8	7	8	7	7	6	6	6	6	6	7	6	4	--	8
MINIMUM	9	9	9	9	9	9	8	8	8	8	8	8	9	9	8	7	8	7	7	7	7	6	6	6	6	5	5	5	4	2	--	7
DECEMBER																																
MAXIMUM	4	4	4	5	5	4	4	4	4	4	4	4	3	2	2	2	2	1	0	0	1	1	1	2	2	2	2	2	2	2	2	2
MINIMUM	2	4	4	4	2	3	3	3	3	3	3	3	2	1	2	2	1	0	0	0	0	1	1	1	2	2	2	1	1	1	2	2
JANUARY																																
MAXIMUM	2	2	1	1	1	1	1	2	2	2	1	1	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	1	1	1	1	1
MINIMUM	2	1	1	1	1	1	1	1	2	1	1	1	1	1	2	2	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1
FEBRUARY																																
MAXIMUM	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2	3	3	3	3	3	3	4	4	--	--	2
MINIMUM	1	1	1	1	1	2	2	2	1	1	1	1	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	--	--	1
MARCH																																
MAXIMUM	4	4	4	4	4	4	3	2	2	3	3	3	3	3	3	3	2	2	2	3	3	3	4	4	4	4	4	4	5	6	6	3
MINIMUM	3	2	2	3	3	3	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2	2	2	3	3	3	3	3	3	3	4	2
APRIL																																
MAXIMUM	6	3	4	6	6	5	6	6	7	7	7	7	7	7	8	6	5	7	7	6	7	7	8	8	8	9	9	9	9	9	--	7
MINIMUM	2	2	3	3	3	3	3	3	4	4	4	4	4	4	4	4	3	3	4	4	3	3	4	4	4	5	5	6	6	6	--	4
MAY																																
MAXIMUM	9	10	11	11	10	9	9	9	10	11	9	8	7	7	10	11	11	10	10	11	9	9	10	10	11	12	12	13	12	12	12	10
MINIMUM	6	6	6	6	6	5	6	6	6	6	6	6	5	4	6	6	7	7	7	8	7	7	6	6	7	7	8	8	8	8	8	6
JUNE																																
MAXIMUM	12	13	12	12	9	9	8	9	11	12	12	12	12	12	12	13	12	13	13	13	12	13	13	13	13	13	13	13	12	12	--	12
MINIMUM	8	8	9	9	8	7	8	7	7	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	10	10	9	9	9	--	8
JULY																																
MAXIMUM	13	13	13	13	13	13	13	12	13	13	13	13	13	13	13	13	13	14	14	14	14	14	14	14	14	14	13	13	14	13	13	13
MINIMUM	9	9	9	10	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	12	11	11	12	11	12	12	11	12	12	11
AUGUST																																
MAXIMUM	14	14	14	14	14	14	13	14	15	14	14	14	13	14	14	14	14	14	13	13	13	14	14	14	14	14	15	16	16	16	16	14
MINIMUM	11	11	12	12	11	11	12	12	12	12	12	12	13	11	12	12	12	12	13	12	12	11	12	12	12	12	12	12	13	13	13	12
SEPTEMBER																																
MAXIMUM	16	16	16	16	16	16	16	16	16	16	15	15	15	15	14	15	15	15	14	13	13	13	14	14	14	14	14	14	13	13	--	14
MINIMUM	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12	13	13	13	13	12	11	11	11	12	12	12	12	12	12	12	--	12

11-2465. WILLOW CREEK AT MOUTH, NEAR AUBERRY, CALIF.

LOCATION.--Lat 37°09'10", long 119°27'30", in NE¼ sec.16, T.9 S., R.23 E., Fresno County, 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.
RECORDS AVAILABLE.--Water temperatures: October 1960 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 31°C July 29, Aug. 3; minimum, 2°C on several days during December and January.
EXTREMES, 1960-68.--Water temperatures: Maximum (1960-63, 1964-68), 33°C Aug. 5, 1966; minimum, 2°C on several days in 1961, 1965-68.
REMARKS.--No flow Aug. 4-20, Aug. 26 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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

11-2470. SAN JOAQUIN RIVER BELOW KERCKHOFF POWERHOUSE, CALIF.

LOCATION.--Lat 37°04'45", long 119°33'35", 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 downstream from Big Sandy Creek, and 3.8 miles southeast of Prather.
DRAINAGE AREA.--1,481 sq mi.
RECORDS AVAILABLE.--Water temperatures: November 1960 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 29°C Sept. 1, 2; minimum, 2°C Jan. 29.
EXTREMES, 1960-68.--Water temperatures: Maximum (1960-66, 1967-68), 29°F Sept. 1, 2, 1968; minimum, 2°C Jan. 29, 1968.
REMARKS.--No record Oct. 1-24; station destroyed by high water of May 21, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	16	16	16	15	15	15	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	16	16	15	15	15	15	--
NOVEMBER																																
MAXIMUM	15	15	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	13	13	13	13	12	12	14	12	12	12	--	13
MINIMUM	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	13	13	13	13	12	12	12	12	12	12	12	--	13
DECEMBER																																
MAXIMUM	12	12	11	11	11	11	11	11	10	10	9	9	9	8	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	6	6	8
MINIMUM	12	11	11	11	11	11	11	10	10	9	9	9	8	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	8
JANUARY																																
MAXIMUM	6	6	6	6	6	6	6	6	5	5	6	6	5	5	5	5	6	6	5	5	5	5	5	5	6	6	6	6	6	5	5	5
MINIMUM	6	6	6	6	6	6	5	5	5	5	5	5	4	4	5	5	5	4	4	4	4	4	4	5	5	6	6	4	2	5	5	4
FEBRUARY																																
MAXIMUM	5	5	5	5	7	6	5	6	6	6	6	6	6	5	6	6	6	6	6	5	6	7	6	6	6	7	7	7	7	--	--	6
MINIMUM	5	4	5	5	6	5	5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	7	6	6	--	--	5
MARCH																																
MAXIMUM	7	7	7	9	9	8	8	8	8	8	8	8	8	8	8	9	8	8	8	11	9	11	8	9	13	11	9	9	13	8	9	8
MINIMUM	7	6	7	7	8	8	8	8	8	8	8	8	7	7	8	8	8	7	4	4	5	7	7	7	8	8	7	8	8	8	8	7
APRIL																																
MAXIMUM	12	11	9	9	9	9	9	9	12	10	10	10	10	10	10	10	10	10	11	10	10	10	11	11	11	10	10	10	11	11	--	10
MINIMUM	8	9	9	9	9	9	8	9	9	9	9	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	10	10	--	9
MAY																																
MAXIMUM	11	11	11	11	11	11	11	11	11	11	11	11	13	13	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	12	12	12
MINIMUM	10	11	11	11	11	10	11	10	11	11	11	11	10	11	11	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	11
JUNE																																
MAXIMUM	12	12	12	12	13	13	12	12	12	12	12	13	13	13	15	13	17	15	14	14	14	14	17	17	14	14	14	14	14	15	--	13
MINIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	14	14	14	14	14	14	14	14	14	14	--	13
JULY																																
MAXIMUM	15	15	15	15	15	15	15	15	15	16	16	16	16	16	16	16	21	18	17	17	18	18	18	18	18	18	18	18	19	19	19	17
MINIMUM	14	15	15	15	15	15	15	15	14	15	15	16	16	16	16	16	16	16	17	17	17	17	17	17	17	16	18	18	18	18	18	16
AUGUST																																
MAXIMUM	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	20	19	19	19	22	24	19	19	19	19	26	24	19
MINIMUM	18	18	18	18	18	18	19	18	19	19	19	19	19	18	19	19	19	19	19	19	14	14	16	15	17	16	17	16	19	18	19	18
SEPTEMBER																																
MAXIMUM	29	29	22	20	23	23	21	23	20	21	21	20	20	20	20	19	19	19	19	19	19	19	18	18	18	18	18	18	18	17	--	20
MINIMUM	19	19	17	19	20	20	20	19	17	19	19	19	19	19	16	19	18	19	16	12	13	13	14	15	16	16	16	15	14	12	--	17

11-2645. 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, 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.
RECORDS AVAILABLE.--Chemical analyses: March to September 1968.
Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 17°C June 23, 24, 26, 27; minimum, freezing point Nov. 30, Mar. 14, 18, 19.
EXTREMES, 1965-68.--Water temperatures: Maximum (1966-68), 17°C on several days during August 1967 and June 1968; minimum, freezing point on many days during winter months.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
MAR.												
12...	105	8.0	.01	2.2	.2	2.0	.3	8	0	1.0	2.2	
APR.												
02...	298	--	--	--	--	--	--	--	--	--	--	--
MAY												
14...	416	--	--	--	--	--	--	--	--	--	--	--
JUNE												
11...	342	3.8	.00	1.0	.1	.9	.2	6	0	1.0	.4	.1
JULY												
09...	120	3.4	--	1.3	.1	1.1	.2	5	0	2.0	1.0	.0
AUG.												
13...	28	3.7	--	2.0	.1	1.5	.4	6	0	.0	2.2	.0
SEPT.												
17...	5.4	7.2	--	3.0	.1	2.4	.6	9	0	1.0	3.8	.0

DATE	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	DISS-OLVED OXYGEN
MAR.												
12...	--	.00	20	.03	6	0	44	.4	7	26	6.9	12.0
APR.												
02...	--	--	--	--	--	--	--	--	--	--	--	12.0
MAY												
14...	--	--	--	--	--	--	--	--	--	--	--	11.0
JUNE												
11...	.1	.00	11	.01	3	0	36	.2	5	10	6.5	10.0
JULY												
09...	.0	.00	11	.01	4	0	38	.3	4	14	6.4	9.0
AUG.												
13...	3.0	.00	13	.02	6	1	37	.3	5	22	6.4	10.0
SEPT.												
17...	.0	.00	22	.03	8	1	36	.4	7	34	6.5	9.0

DATE	PHOS-PHATE (PO4)	ORTHO PHOS-PHATE (PO4)	AMMONIA (NH4)	ORGANIC NITRO-GEN (N)	COLI-FORM (COL-ONIES PER 100 ML)	TEMP-ERATURE (DEG C)
MAR.						
12...	--	--	--	--	9	3
APR.						
02...	--	--	--	--	1	3
MAY						
14...	--	--	--	--	3	5
JUNE						
11...	.07	--	.10	.08	2	12
JULY						
09...	.02	.02	.05	.03	12	15
AUG.						
13...	.41	.32	.05	.31	--	15
SEPT.						
17...	.00	.03	.00	2.4	--	13

11-2645. MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	12	11	11	11	10	8	9	9	9	9	9	9	10	10	9	8	8	8	8	8	8	8	8	8	8	8	7	8	8	8	7	9
MINIMUM	10	9	10	8	8	7	8	8	8	8	9	9	9	9	7	7	8	7	7	7	7	7	8	8	7	7	7	7	7	7	6	8
NOVEMBER																																
MAXIMUM	7	7	7	7	7	8	7	7	7	6	6	7	7	8	7	7	7	7	7	6	6	5	4	4	4	4	3	3	2	2	--	6
MINIMUM	6	6	7	6	7	7	7	7	6	6	6	6	7	7	7	7	7	7	6	6	5	4	4	3	4	3	3	2	1	0	--	5
DECEMBER																																
MAXIMUM	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1
MINIMUM	1	1	1	1	2	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1
JANUARY																																
MAXIMUM	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	1	1	1	2	2	2	3	3	3	3	2	2	1	1	1	1	1
MINIMUM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1
FEBRUARY																																
MAXIMUM	1	2	2	2	3	3	3	3	3	3	2	2	2	3	3	2	3	4	4	5	5	6	7	6	6	6	6	5	5	--	--	4
MINIMUM	1	1	1	2	2	3	3	3	3	1	1	1	2	2	1	2	2	3	4	3	4	4	6	4	4	4	3	2	2	--	--	3
MARCH																																
MAXIMUM	4	4	4	4	4	3	3	3	3	3	3	4	2	2	3	3	1	2	1	2	4	4	5	6	6	6	7	7	7	7	7	4
MINIMUM	3	2	2	3	3	2	2	2	1	1	1	3	1	0	1	1	1	0	0	1	1	2	2	3	3	2	3	4	4	3	3	2
APRIL																																
MAXIMUM	5	4	6	7	7	6	7	8	8	8	8	7	7	8	6	5	3	5	6	6	4	6	7	8	9	9	9	9	9	8	--	7
MINIMUM	3	2	2	4	4	2	3	4	4	4	4	4	3	3	4	3	2	2	3	3	2	1	3	4	4	6	5	6	6	6	--	4
MAY																																
MAXIMUM	9	8	9	9	8	8	8	9	8	9	8	8	7	7	9	10	10	11	11	11	9	8	8	9	11	12	12	12	12	11	12	9
MINIMUM	6	6	6	6	5	4	5	6	6	6	6	4	4	3	4	6	7	7	8	8	8	6	5	4	7	8	8	9	9	8	9	6
JUNE																																
MAXIMUM	13	13	13	13	11	10	10	11	12	12	13	13	13	13	14	14	15	15	15	15	15	16	17	17	16	17	17	16	15	14	--	14
MINIMUM	9	11	11	11	8	7	8	7	8	9	9	9	9	10	11	12	13	13	13	13	12	14	14	14	14	15	15	13	12	12	--	11
JULY																																
MAXIMUM	14	14	15	16	16	16	16	16	16	16	16	16	16	16	16	16	15	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15
MINIMUM	12	13	13	14	14	15	15	15	14	13	13	14	13	14	15	14	13	14	14	14	14	14	14	14	14	14	15	16	16	16	16	14
AUGUST																																
MAXIMUM	16	16	16	16	16	15	14	16	16	16	15	15	15	14	13	13	13	13	13	13	11	12	12	13	12	12	13	13	14	14	14	14
MINIMUM	16	16	14	14	14	13	14	14	16	14	13	14	14	11	12	13	12	12	12	11	10	9	10	11	11	10	11	11	12	12	13	12
SEPTEMBER																																
MAXIMUM	14	14	14	14	14	14	14	15	14	14	14	13	13	13	13	13	13	13	13	13	12	12	12	12	12	12	13	13	11	13	--	13
MINIMUM	13	13	12	13	13	13	13	13	13	12	12	11	11	11	11	11	11	12	11	10	9	9	9	9	9	9	10	15	9	9	--	11

11-2831. LILY CREEK NEAR PINECREST, CALIF.

LOCATION.--Lat 38°08'40", long 119°54'05", in T.3 N., R.14 E., Tuolumne County, 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.
RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 23°C July 27; minimum, freezing point on many days during winter months.
EXTREMES, 1964-68.--Water temperatures: Maximum, 25°C Aug. 17, 1966; minimum, freezing point on many days during winter months.
REMARKS.--Recorder malfunction Oct. 26 to Apr. 5. Stream frozen during most of winter.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	12	11	11	10	9	8	9	9	10	9	9	10	10	9	9	9	9	8	8	8	7	8	7	7	8	--	--	--	--	--	--	9
MINIMUM	11	11	10	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	6	--	--	--	--	--	--	8
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL																																
MAXIMUM	--	--	--	--	--	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	--	4
MINIMUM	--	--	--	--	--	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	--	3
MAY																																
MAXIMUM	4	6	5	6	6	6	6	6	6	6	6	6	5	5	6	7	7	8	8	8	7	6	6	9	10	11	12	12	11	12	12	7
MINIMUM	4	4	4	4	4	4	4	4	5	4	4	5	4	4	4	4	5	6	6	6	6	6	6	6	6	7	8	8	8	9	9	5
JUNE																																
MAXIMUM	13	14	12	12	10	10	10	10	11	12	13	14	14	16	16	18	18	20	20	19	19	20	20	19	20	20	21	20	20	20	--	16
MINIMUM	10	10	10	10	10	8	8	8	8	8	10	10	10	10	12	14	14	16	16	16	16	16	18	18	18	19	20	19	16	16	--	13
JULY																																
MAXIMUM	20	20	20	20	22	22	22	21	21	21	21	21	21	21	21	20	20	21	22	22	21	21	21	22	22	22	23	22	22	22	20	21
MINIMUM	16	16	16	17	18	20	19	20	20	19	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	20	20	20	20	19	18
AUGUST																																
MAXIMUM	20	21	22	21	22	22	20	21	22	22	22	21	20	20	19	19	18	18	16	14	12	12	14	16	16	16	16	18	20	20	20	19
MINIMUM	18	19	19	19	19	19	19	19	19	20	19	19	19	17	16	17	16	16	14	12	10	9	10	12	14	13	14	15	16	18	18	16
SEPTEMBER																																
MAXIMUM	21	20	20	20	21	21	21	21	20	20	20	20	20	20	18	19	18	19	18	16	15	14	15	16	16	18	19	19	16	16	--	19
MINIMUM	18	18	18	18	18	18	18	18	18	18	18	17	16	16	16	14	15	15	16	14	12	11	11	12	12	13	14	14	14	14	--	15

11-2900. TUOLUMNE RIVER AT MODESTO, CALIF.

LOCATION.--Lat 37°37'38", long 120°59'20", in SW¼ sec.33, T.3 S., R.19 E., Stanislaus County, temperature recorder at gaging station on left bank, at bridge on U.S. Highway 99 in Modesto, and 0.2 mile downstream from Dry Creek.
DRAINAGE AREA.--1,884 sq mi.
RECORDS AVAILABLE.--Water temperatures: July 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, 9°C on many days during winter months.
EXTREMES, 1965-68.--Water temperatures: Maximum (1965-67), 29°C Aug. 7, 1966, Aug. 15, 1967; minimum, 8°C on several days during January to March 1966.
REMARKS.--Recorder malfunctioned July 22 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	22	22	21	22	21	21	21	21	21	21	21	21	21	19	19	19	19	19	18	18	18	18	18	18	18	17	17	17	16	16	16	19
MINIMUM	21	21	20	20	20	19	19	19	19	19	19	19	19	18	18	18	18	18	18	17	17	17	17	17	17	17	16	16	16	16	16	18
NOVEMBER																																
MAXIMUM	16	16	16	16	16	16	16	16	16	16	16	15	15	16	16	16	16	16	16	16	16	15	15	15	15	14	14	14	14	14	--	15
MINIMUM	16	16	16	16	16	16	16	16	16	16	15	15	15	15	15	15	16	16	16	15	15	15	15	15	14	14	14	14	13	13	--	15
DECEMBER																																
MAXIMUM	13	13	13	14	14	14	13	13	13	13	13	13	11	10	11	11	11	10	11	11	11	11	11	11	11	11	11	11	11	11	11	12
MINIMUM	13	13	13	13	14	13	13	13	12	12	12	11	9	9	9	11	10	9	9	11	10	10	10	10	10	11	11	11	10	10	10	11
JANUARY																																
MAXIMUM	11	11	11	10	9	9	10	10	9	9	10	10	10	11	11	12	11	11	11	11	11	12	12	12	11	11	11	11	10	9	9	10
MINIMUM	10	10	10	9	9	9	9	9	9	9	9	9	9	10	11	11	11	10	10	10	10	11	11	11	11	11	11	10	9	9	9	10
FEBRUARY																																
MAXIMUM	11	11	12	13	14	14	14	15	15	14	14	14	14	13	12	12	13	14	14	16	16	14	13	12	12	12	12	12	12	--	--	13
MINIMUM	9	11	11	12	13	13	14	14	14	13	13	13	13	12	11	12	12	13	13	15	14	13	11	11	11	11	11	11	12	--	--	12
MARCH																																
MAXIMUM	12	12	13	13	13	12	12	12	12	13	13	12	12	12	12	12	12	13	13	13	13	13	14	15	15	15	15	16	17	18	19	13
MINIMUM	12	11	12	13	12	12	12	12	12	12	12	12	11	11	12	9	11	12	12	11	12	12	13	13	14	14	14	14	15	16	17	12
APRIL																																
MAXIMUM	18	17	19	18	18	18	19	19	21	21	22	21	21	21	21	19	19	19	20	19	18	19	19	21	21	22	22	23	24	23	--	20
MINIMUM	16	16	16	17	17	16	16	17	17	18	19	19	18	18	19	18	16	16	17	17	16	15	17	17	18	19	19	20	21	21	--	17
MAY																																
MAXIMUM	24	24	24	23	23	22	23	23	23	22	21	22	20	21	22	23	23	24	24	24	24	23	23	23	25	25	26	27	26	25	26	23
MINIMUM	20	20	21	20	20	19	19	20	19	19	19	19	18	18	19	19	21	21	22	22	22	21	21	21	22	22	23	23	23	23	23	21
JUNE																																
MAXIMUM	26	26	27	26	24	25	24	25	28	26	26	25	26	26	28	28	28	28	28	28	28	28	28	28	28	28	27	27	24	26	--	27
MINIMUM	23	24	24	23	22	22	22	22	22	23	23	22	21	22	24	25	24	24	24	25	25	26	26	25	26	24	24	24	22	22	--	23
JULY																																
MAXIMUM	26	26	27	28	28	28	27	27	28	27	27	27	26	27	27	26	27	28	28	28	28	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	22	22	22	23	25	25	24	24	24	24	24	24	23	23	23	23	23	24	25	25	24	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-2927. MIDDLE FORK STANISLAUS RIVER AT HELLS HALF ACRE BRIDGE, NEAR PINECREST, CALIF.

LOCATION.--Lat 38°14'40", 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.
RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C sometime during period June 7-26 and on June 27; minimum, freezing point on several days during December and January.
EXTREMES, 1965-68.--Water temperatures: Maximum (1966-68), 22°C sometime during period June 7-26, and on June 27, 1968; minimum, freezing point on several days during December and January of each year.
REMARKS.--Clock stopped Apr. 17-30, May 18 to June 3, June 7-26, Aug. 21-30, Sept. 7-12; temperature ranges, 2°C to 11°C, 9°C to 17°C, 10°C to 22°C, 11°C to 19°C, and 14°C to 18°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	15	14	13	14	14	13	13	14	14	14	14	14	14	13	13	13	13	12	12	12	12	12	12	12	12	12	11	12	11	11	11	13
MINIMUM	13	13	12	12	12	11	11	11	11	11	12	12	12	12	11	10	11	10	10	10	10	10	10	10	10	9	9	9	9	9	9	11
NOVEMBER																																
MAXIMUM	11	11	11	11	11	11	11	11	10	10	10	9	10	11	11	11	11	11	10	10	9	8	8	7	7	7	7	6	5	4	--	9
MINIMUM	9	9	9	9	10	9	9	9	8	8	8	8	9	9	10	9	9	9	9	8	8	6	6	6	6	5	5	5	4	2	--	8
DECEMBER																																
MAXIMUM	3	3	3	5	6	4	4	4	3	4	4	3	1	0	0	0	0	0	0	1	1	1	2	2	2	3	4	4	4	3	3	2
MINIMUM	2	2	2	3	4	3	3	3	2	2	2	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	3	2	2	2	2	1
JANUARY																																
MAXIMUM	3	2	2	2	2	2	2	2	3	3	3	3	3	3	4	4	3	4	4	5	6	7	6	6	6	4	3	2	2	1	2	3
MINIMUM	1	1	1	0	0	0	1	1	2	2	2	1	2	2	3	3	2	2	3	3	4	5	4	4	4	3	1	0	1	1	1	2
FEBRUARY																																
MAXIMUM	2	2	4	4	4	4	6	6	5	6	6	6	5	5	5	4	6	7	6	7	7	7	8	8	8	8	8	8	8	--	--	6
MINIMUM	1	1	2	2	3	3	4	4	4	4	4	4	3	3	3	4	4	4	6	4	6	6	6	5	6	6	6	5	5	--	--	4
MARCH																																
MAXIMUM	8	8	8	8	8	7	6	6	6	6	6	5	5	6	6	5	4	5	6	7	7	7	8	8	7	8	8	9	10	9	9	7
MINIMUM	6	5	5	6	6	4	5	4	4	3	3	4	3	3	3	2	2	2	3	3	4	4	4	5	6	4	4	6	7	7	6	4
APRIL																																
MAXIMUM	8	6	8	8	8	8	8	9	9	10	9	9	9	9	9	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	6	4	4	5	6	4	4	5	6	6	6	6	5	6	6	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY																																
MAXIMUM	12	13	13	13	12	11	12	13	13	14	13	10	9	12	14	14	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	6	9	9	10	9	8	8	10	10	10	9	8	4	6	10	12	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE																																
MAXIMUM	--	--	--	15	12	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22	21	19	19	--	--
MINIMUM	--	--	--	11	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	16	15	15	--	--
JULY																																
MAXIMUM	20	19	20	21	21	21	21	21	21	21	20	21	21	21	21	20	20	21	21	21	21	20	21	20	20	21	21	19	21	19	19	20
MINIMUM	17	16	16	16	16	17	17	17	17	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	17	17	17	18	17	16
AUGUST																																
MAXIMUM	21	21	21	20	19	19	18	19	19	19	19	18	18	18	18	18	18	15	14	14	--	--	--	--	--	--	--	--	--	--	19	--
MINIMUM	16	17	17	16	16	14	15	16	16	16	15	15	15	14	13	14	14	14	13	12	--	--	--	--	--	--	--	--	--	--	16	--
SEPTEMBER																																
MAXIMUM	19	19	19	18	18	18	--	--	--	--	--	--	17	17	17	17	17	17	17	15	14	14	14	15	16	16	16	16	14	14	--	16
MINIMUM	16	16	15	14	14	15	--	--	--	--	--	--	14	14	14	13	14	14	14	13	11	11	11	12	12	13	13	13	13	12	--	13

11-3020. STANISLAUS RIVER BELOW GOODWIN DAM, NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°51'01", long 120°38'13", in N½ sec.15, T.1 S., R.12 E., Stanislaus County, temperature recorder at gaging station on right bank, 0.1 mile upstream from Owl Creek, 1.0 mile downstream from Goodwin Dam, near Knights Ferry.
DRAINAGE AREA.--986 sq mi.
RECORDS AVAILABLE.--Water temperatures: February 1966 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 27°C June 25; minimum, 6°C sometime during period Jan. 13-31.
EXTREMES, 1966-68.--Water temperatures: Maximum, 27°C June 25, 1968; minimum, 6°C sometime during period Jan. 13-31, 1968.
REMARKS.--Clock stopped Dec. 6 to Jan. 4, Jan. 13-31; temperature ranges, 8°C to 14°C and 6°C to 8°C, respectively. Recorder malfunctioned Feb. 1-25.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	22	21	21	21	21	21	21	20	20	20	20	20	20	20	19	19	19	19	18	18	18	18	18	18	18	18	17	17	17	17	17	19
MINIMUM	21	20	20	20	20	20	19	19	19	19	19	19	19	19	18	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	18
NOVEMBER																																
MAXIMUM	17	17	17	17	17	17	17	17	17	17	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15	15	15	15	15	15	--	16
MINIMUM	17	17	17	17	17	17	17	16	17	16	16	16	16	16	16	16	15	15	16	15	15	15	15	15	15	15	15	15	15	14	--	16
DECEMBER																																
MAXIMUM	14	14	14	14	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	14	14	14	14	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	8	8	8	8	8	8	8	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	7	8	8	8	8	8	7	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	11	11	11	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	11	11	11	--	--	--
MARCH																																
MAXIMUM	10	11	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	12	11	12	10	10	10	10	10	10	10	9	9	10	11
MINIMUM	10	10	11	11	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	10	9	9	9	9	9	9	9	9	9	9	11
APRIL																																
MAXIMUM	10	9	9	9	9	10	10	10	11	11	12	12	14	15	15	14	14	13	13	13	13	14	14	15	16	17	17	17	18	17	--	13
MINIMUM	9	8	9	9	9	9	9	9	10	11	11	11	12	13	14	14	13	12	13	13	13	13	13	14	14	14	15	16	16	16	--	12
MAY																																
MAXIMUM	17	18	18	18	18	17	18	18	18	18	17	17	17	17	17	18	18	19	19	20	20	19	18	18	19	19	21	21	21	21	21	19
MINIMUM	16	17	17	17	17	17	16	16	17	17	17	17	16	16	16	16	17	18	18	19	19	18	18	17	18	18	19	19	19	19	19	17
JUNE																																
MAXIMUM	21	21	22	21	21	20	20	20	20	21	21	21	21	22	23	24	23	23	24	24	24	24	24	26	27	26	26	26	25	25	--	23
MINIMUM	20	20	21	21	20	19	19	19	19	20	20	20	20	21	21	22	22	22	23	23	23	23	24	24	24	25	25	24	24	23	--	22
JULY																																
MAXIMUM	24	24	24	26	26	26	26	26	26	26	25	25	25	24	24	24	24	25	25	25	24	24	24	24	24	24	24	23	24	24	24	25
MINIMUM	23	23	23	24	24	25	25	25	25	24	24	24	24	24	24	24	23	24	24	24	24	24	24	24	24	23	23	23	23	23	24	24
AUGUST																																
MAXIMUM	24	24	24	24	24	24	24	24	24	24	24	24	24	23	23	23	23	23	23	23	22	22	23	23	23	23	23	23	24	24	24	24
MINIMUM	24	23	23	23	23	23	23	23	23	24	24	23	23	23	23	23	23	23	22	22	22	22	22	21	22	22	22	23	23	23	24	23
SEPTEMBER																																
MAXIMUM	24	24	24	25	24	25	25	24	24	24	24	24	24	23	23	23	24	23	22	22	22	21	22	21	21	21	21	20	20	19	--	23
MINIMUM	24	23	24	24	24	24	24	24	23	23	23	23	23	23	23	23	22	22	22	21	21	21	21	20	20	20	20	19	19	19	--	22

11-3035. 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.
RECORDS AVAILABLE.--Chemical analyses: March 1951 to September 1968.
Water temperatures: March 1951 to September 1968.
Sediment records: November 1956 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 27°C Aug. 7, 9, 11; minimum, 9°C Dec. 12, 15-18.
Sediment concentrations: Maximum daily, 173 mg/l July 12; minimum daily, 18 mg/l Dec. 23.
Sediment loads: Maximum daily, 1,210 tons Feb. 23; minimum daily, 68 tons Sept. 8.
EXTREMES, 1951-68.--Water temperatures: Maximum, 29°C June 14, Aug. 9, Sept. 2, 1966; minimum, 3°C Jan. 24, 1962.
Sediment concentrations (1956-68): Maximum daily, 1,590 mg/l Dec. 25, 1964; minimum daily, 9 mg/l Jan. 4, 1960, Nov. 18, 1961.
Sediment loads (1956-68): Maximum daily, 54,100 tons Dec. 25, 1964; minimum daily, 2 tons Aug. 10, 1961.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	LITHIUM (LI)	STRON-TIUM (SR)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)
OCT.												
04...	2530	20	.02	31	12	53	3.2	.01	.30	123	0	39
NOV.												
08...	3320	13	.05	19	9.7	41	1.7	.01	.14	72	0	34
DEC.												
06...	3790	12	.02	19	9.4	40	1.9	.01	.22	77	0	37
JAN.												
10...	3500	12	.02	22	11	53	1.9	.00	.30	83	0	51
FEB.												
08...	2110	17	.03	35	17	89	3.1	.01	.35	120	0	89
MAR.												
06...	3020	13	.01	24	12	60	1.9	.01	.26	83	0	67
APR.												
03...	3060	15	.03	24	12	53	2.4	.01	.30	84	0	55
MAY												
08...	911	20	.01	49	25	118	4.3	.02	.64	173	0	103
JULY												
03...	477	20	.01	60	30	140	5.1	.01	.65	200	0	103
AUG.												
07...	646	22	.04	52	26	124	5.5	.01	.56	186	0	86
SEPT.												
04...	834	26	.00	53	26	126	5.2	.01	.50	194	0	91

DATE	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	PHOS-PHATE (PO4)	BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3
OCT.												
04...	75	.2	5.1	.79	.10	300	127	26	.41	47	2.0	101
NOV.												
08...	56	.1	2.6	.14	.10	212	88	29	.29	50	1.9	59
DEC.												
06...	50	.1	2.3	.50	.20	210	86	23	.29	50	1.9	63
JAN.												
10...	64	.2	4.4	.07	.20	261	100	32	.35	53	2.3	68
FEB.												
08...	108	.0	6.4	.76	.40	424	158	60	.58	55	3.1	98
MAR.												
06...	71	.1	3.0	.54	.30	294	110	42	.40	54	2.5	68
APR.												
03...	64	.1	4.7	.41	.43	272	110	41	.38	51	2.2	69
MAY												
08...	164	.2	5.4	.84	.40	575	226	84	.78	53	3.4	142
JULY												
03...	214	.3	4.6	1.2	.31	677	273	109	.92	52	3.7	164
AUG.												
07...	188	.2	4.0	1.3	.38	600	237	84	.82	53	3.5	153
SEPT.												
04...	179	.2	6.2	--	.36	609	239	80	.83	53	3.5	159

11-3035. SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	TURBIDITY	DISSOLVED OXYGEN
OCT.					
04...	529	7.5	--	24	--
NOV.					
08...	378	7.5	17	12	7.4
DEC.					
06...	368	7.6	--	153	--
JAN.					
10...	464	7.5	--	5.0	--
FEB.					
08...	752	7.4	13	28	9.1
MAR.					
06...	522	7.4	17	14	11.7
APR.					
03...	471	7.8	--	30	--
MAY					
08...	1010	7.4	20	60	11.4
JULY					
03...	1190	7.3	--	40	--
AUG.					
07...	1070	7.6	21	60	7.3
SEPT.					
04...	1040	8.2	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	23	21	18	24	21	20	19	19	19	20	21	20	21	18	18	16	17	18	17	17	18	18	19	17	17	18	17	18	17	18	17	19
NOVEMBER.	18	17	18	18	19	17	17	16	17	17	14	17	14	17	16	18	18	16	17	14	16	14	16	14	14	13	13	13	--	--	--	16
DECEMBER.	12	--	--	13	14	11	12	11	11	14	11	9	10	11	9	9	9	9	--	--	11	14	--	--	11	21	--	22	21	21	22	--
JANUARY..	21	19	21	21	20	20	21	--	19	--	19	19	14	19	18	19	19	19	19	18	21	19	19	22	21	21	21	21	21	18	21	20
FEBRUARY.	20	20	20	19	20	21	--	21	21	21	22	23	19	21	20	21	21	20	20	21	22	23	21	20	21	19	21	21	19	--	--	21
MARCH....	20	21	22	23	21	21	19	21	21	21	19	20	20	20	21	21	21	22	22	21	22	22	22	23	22	15	18	13	15	17	20	20
APRIL....	14	17	16	13	13	14	14	14	16	16	17	19	19	16	17	16	16	14	14	14	13	13	13	15	17	18	20	18	19	--	--	16
MAY.....	19	17	19	18	17	16	17	18	17	16	16	17	16	15	16	16	18	17	20	18	17	17	17	16	18	19	21	20	21	21	18	18
JUNE.....	20	22	22	19	20	18	18	19	19	19	21	18	18	20	20	23	23	23	23	23	23	24	24	24	24	23	23	22	20	21	--	21
JULY.....	21	21	20	21	24	24	23	23	22	21	23	22	20	20	21	20	20	22	24	23	21	22	21	22	20	21	22	23	23	24	23	22
AUGUST...	22	23	21	22	20	22	27	23	27	21	27	20	23	19	24	20	24	20	24	18	23	18	18	20	18	19	20	21	22	23	23	22
SEPTEMBER	23	25	25	21	20	21	19	21	21	19	19	21	20	21	18	18	20	20	18	18	17	19	15	17	17	18	19	18	18	17	--	19

11-3035. SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	2460	65	432	3740	61	616	3930	51	541
2	2470	62	413	3660	58	573	3970	51	547
3	2500	68	459	3500	54	510	3860	46	479
4	2530	75	512	3430	44	407	3710	38	381
5	2570	66	458	3350	44	398	3620	44	430
6	2600	71	498	3270	49	433	3790	45	460
7	2660	71	510	3190	44	379	3820	40	413
8	2700	74	539	3320	53	475	3890	42	441
9	2720	79	580	3360	50	454	3890	67	704
10	2450	61	404	3430	45	417	3870	62	648
11	2260	58	354	3500	55	520	3710	56	561
12	2180	61	359	3530	39	372	3640	58	570
13	2190	57	337	3460	38	355	3740	44	444
14	2180	54	318	3350	41	371	3640	32	314
15	2200	52	309	3440	39	362	3740	32	323
16	2380	54	347	3470	43	403	3930	33	350
17	2350	51	324	3420	41	379	3880	48	503
18	2360	48	306	3350	46	416	3770	32	326
19	2420	56	366	3450	49	456	3720	26	261
20	2570	60	416	3470	42	393	3720	32	321
21	2760	56	417	3490	40	377	3570	28	270
22	2990	51	412	3700	45	450	3570	19	183
23	3070	47	390	3620	48	469	3580	18	174
24	2940	53	421	3470	43	403	3450	20	186
25	3030	61	499	3350	48	434	3330	33	297
26	3320	63	565	3510	45	426	3260	48	422
27	3590	69	669	3420	44	406	3230	37	323
28	3660	63	623	3430	45	417	3250	34	298
29	3420	62	573	3730	50	504	3230	34	297
30	3300	61	544	3780	50	510	3210	35	303
31	3660	64	632	--	--	--	3160	36	307
TOTAL	84490	--	13986	104190	--	13085	112680	--	12077

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	3120	28	236	2560	61	422	3420	55	508
2	3130	26	220	2510	59	400	3300	51	454
3	3170	26	223	2420	60	392	2910	64	503
4	3280	27	239	2200	63	374	2620	67	474
5	3400	26	239	2140	68	393	2840	68	521
6	3500	28	265	2100	61	346	3020	55	448
7	3540	28	268	2170	50	293	3020	52	424
8	3330	23	207	2110	60	342	3190	72	620
9	3300	24	214	2150	65	377	3250	59	518
10	3500	29	274	2410	78	508	3370	71	646
11	3570	36	347	2540	82	562	2980	59	475
12	3480	50	470	2480	66	442	2840	71	544
13	3400	45	413	2290	56	346	3000	51	413
14	3190	62	534	2210	54	322	3040	60	492
15	3010	53	431	2240	44	266	3000	62	502
16	2910	50	393	2130	41	236	3090	68	567
17	2840	56	429	2020	43	235	3140	71	602
18	2820	49	373	1950	42	221	3360	72	653
19	2800	51	386	1910	53	273	3310	71	635
20	2740	59	436	1900	53	272	3680	70	696
21	2700	60	437	2110	75	427	3750	74	749
22	2560	48	332	2880	103	801	3770	72	733
23	2320	42	263	3360	133	1210	3620	77	753
24	2470	43	287	4100	95	1050	3350	75	678
25	2530	41	280	4120	71	790	3160	78	665
26	2540	41	281	3980	68	731	3000	60	486
27	2500	50	338	3830	62	641	2920	63	497
28	2400	32	207	3590	60	582	2690	64	465
29	2300	46	286	3470	63	590	2260	57	348
30	2290	42	260	--	--	--	2370	78	499
31	2510	75	508	--	--	--	2620	89	630
TOTAL	91150	--	10076	75880	--	13844	95890	--	17198

11-3035. SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	2620	83	587	798	136	293	549	100	148
2	2930	85	672	780	147	310	601	96	156
3	3060	87	719	816	154	339	650	92	161
4	2750	81	601	826	144	321	593	89	142
5	2570	69	479	920	159	395	589	105	167
6	2440	72	474	975	142	374	646	129	225
7	2130	68	391	930	154	387	654	116	205
8	1900	83	426	911	160	394	632	141	241
9	1680	71	322	870	152	357	704	131	249
10	1440	68	264	848	145	332	749	106	214
11	1240	86	288	893	127	306	690	141	263
12	1120	76	230	970	129	338	623	127	214
13	1100	84	249	1040	130	365	593	68	109
14	1100	94	279	1140	107	329	628	75	127
15	1160	90	282	1120	107	324	610	79	130
16	1000	102	275	1040	110	309	581	109	171
17	906	103	252	995	116	312	641	123	213
18	930	88	221	960	114	295	589	91	145
19	844	102	232	950	100	257	577	81	126
20	830	129	289	995	103	277	493	96	128
21	862	118	275	902	93	226	553	115	172
22	945	110	281	875	99	234	529	94	134
23	940	117	297	844	84	191	585	98	155
24	945	131	334	893	106	256	641	104	180
25	980	146	386	884	93	222	549	129	191
26	925	145	362	844	108	246	489	132	174
27	880	148	352	875	106	250	501	104	141
28	955	149	384	794	100	214	533	86	124
29	980	145	384	700	100	189	485	125	164
30	902	140	341	654	93	164	489	98	129
31	--	--	--	581	106	166	--	--	--
TOTAL	43064	--	10928	27623	--	8972	17746	--	5098

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	517	67	94	549	109	162	898	53	129
2	469	91	115	577	148	231	898	60	145
3	477	136	175	581	144	226	857	83	192
4	485	136	178	646	100	174	834	95	214
5	485	106	139	708	118	226	803	59	128
6	485	79	103	682	109	201	857	50	116
7	469	93	118	646	47	82	893	37	89
8	469	133	168	618	105	175	965	26	68
9	465	153	192	589	84	134	980	46	122
10	469	145	184	610	113	186	893	49	118
11	469	122	154	677	119	218	852	69	159
12	469	173	219	677	93	170	916	62	153
13	489	142	190	641	87	151	935	48	121
14	525	85	120	636	95	163	945	50	128
15	585	117	185	618	89	149	1000	56	151
16	569	148	227	623	96	161	1030	47	131
17	549	134	199	610	77	127	960	80	207
18	501	112	152	754	105	214	935	62	157
19	457	113	139	812	98	215	884	62	148
20	453	88	108	834	74	167	875	67	158
21	469	128	162	893	78	188	893	57	137
22	561	144	218	985	80	213	925	49	122
23	553	108	161	1020	85	234	975	71	187
24	513	113	157	950	62	159	980	61	161
25	481	92	119	950	75	192	980	62	164
26	497	114	153	1040	95	267	1010	57	155
27	521	111	156	1040	92	258	1070	52	150
28	533	151	217	980	85	225	1020	57	157
29	573	150	232	1030	49	136	1030	60	167
30	529	131	187	960	68	176	1050	60	170
31	505	108	147	880	36	86	--	--	--
TOTAL	15591	--	5068	23816	--	5666	28143	--	4404

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 720263
TOTAL LOAD FOR YEAR (TONS) 120402

11-3035. SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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, 1968	1220	11	2910	49	385	6	37	37	52	59	92	97	100	--	--	--	VCBW
MAR 12.....	1650	15	2830	94	718	6	22	37	47	54	80	84	93	100	--	--	SCBW
APR 8.....	1620	16	1910	66	340	7	20	45	57	64	94	96	98	100	--	--	SCBW
MAY 7.....	1035	19	852	130	299	30	45	62	75	84	94	96	99	100	--	--	SCBW
JUN 7.....	1400	22	668	104	188	34	46	62	73	78	93	96	99	100	--	--	SCBW

11-3111.5. 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.
RECORDS AVAILABLE.--Chemical analyses: February to September 1968.
REMARKS.--Records furnished by U.S. Bureau of Reclamation and reviewed by Geological Survey.

CHEMICAL ANALYSES, IN MILLIGRAMS PER LITER, FEBRUARY TO SEPTEMBER 1968

DATE	CALCIUM (CA)	MAGNESIUM (MG)	SODIUM (NA)	POTASSIUM (K)	BICARBONATE (HCO3)	CARBONATE (CO3)	SULFATE (SO4)	CHLORIDE (CL)	PHOSPHATE (PO4)
FEB.									
02...	28	17	68	5.0	110	0	68	112	--
MAR.									
22...	28	12	42	3.4	80	0	48	51	.28
APR.									
19...	--	--	--	--	--	--	--	--	--
MAY									
16...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
JUNE									
17...	--	--	--	--	--	--	--	--	.04
JULY									
16...	--	--	--	--	--	--	--	--	--
AUG.									
14...	--	--	--	--	--	--	--	--	--
SEPT.									
11...	--	--	--	--	--	--	--	--	--

DATE	HARDNESS (CA,MG)	NON-CARBONATE HARDNESS	PERCENT SODIUM	SODIUM ADSORPTION RATIO	ALKALINITY AS CACO3	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	DISSOLVED OXYGEN
FEB.									
02...	142	52	50	2.5	90	650	7.1	9	10.0
MAR.									
22...	119	53	43	1.7	66	395	7.4	14	9.0
APR.									
19...	--	--	--	--	--	470	8.2	17	11.0
MAY									
16...	--	--	--	--	--	395	7.9	18	9.0
17...	--	--	--	--	--	--	7.9	18	10.1
JUNE									
17...	--	--	--	--	--	365	7.8	24	7.5
JULY									
16...	--	--	--	--	--	250	7.8	25	--
AUG.									
14...	--	--	--	--	--	380	7.4	24	6.1
SEPT.									
11...	--	--	--	--	--	500	7.3	23	4.8

11-3129.9. DELTA-MENDOTA CANAL ABOVE TRACY PUMPING PLANT, NEAR TRACY, CALIF.

LOCATION.--Lat 37°48'45", long 121°34'40", in sec.30, T.1 S., R.4 E., Contra Costa County, at Byron Road bridge, 1.1 miles upstream from Tracy Pumping Plant, and 9.2 miles northwest of Tracy.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Records of discharge are given for 11-3130, Delta-Mendota Canal at Tracy Pumping Plant, near Tracy. No appreciable inflow between sampling point and gaging station.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)	PHOS-PHATE (PO4)
OCT. 17...	1170	--	--	--	--	--	--	--	--	--	--	--
JAN. 10...	.10	26	18	76	2.9	95	0	74	108	2.9	.47	.59
FEB. 07...	1500	39	18	88	4.2	111	0	98	122	8.5	.50	.28
APR. 02...	3450	25	12	38	2.2	77	0	54	51	3.6	.31	--
MAY 08...	4420	16	8.5	21	1.5	76	0	22	24	2.1	.16	--
JUNE 07...	3850	20	11	33	2.3	93	0	34	43	3.0	.18	--
JULY 02...	4700	16	12	46	2.4	85	0	31	61	4.0	.06	--
AUG. 07...	4300	16	14	70	3.4	79	0	34	112	2.1	.08	--
SEPT. 11...	4530	20	11	46	2.3	97	1	26	62	1.5	.10	--

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT. 17...	--	--	--	--	--	--	--	753	--	19	9.7
JAN. 10...	370	138	60	.50	54	2.8	78	673	8.0	6	3.3
FEB. 07...	439	171	80	.60	52	2.9	91	819	8.0	--	--
APR. 02...	268	110	47	.36	42	1.6	63	443	7.9	--	--
MAY 08...	140	75	13	.19	37	1.1	62	256	8.0	--	--
JUNE 07...	169	97	21	.23	42	1.5	76	391	8.0	--	--
JULY 02...	207	88	18	.28	52	2.1	70	420	8.1	--	--
AUG. 07...	300	97	32	.41	60	3.1	65	604	7.7	--	--
SEPT. 11...	238	95	14	.32	50	2.1	81	434	8.4	--	--

11-3130.5. DELTA-MENDOTA CANAL NEAR MENDOTA, CALIF.

LOCATION (revised).--Lat 36°47'11", long 120°23'04", in sec.19, T.13 S., R.15 E., Fresno County, approximately 1 mile upstream from control gates into Mendota Pool, and 2 miles north of Mendota.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
REMARKS.--No discharge records available. Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	CALCIUM (CA)	MAGNESIUM (MG)	SODIUM (NA)	POTASSIUM (K)	BICARBONATE (HCO3)	CARBONATE (CO3)	SULFATE (SO4)	CHLORIDE (CL)	NITRATE (NO3)	PHOSPHATE (PO4)
JAN.										
10...	27	14	67	2.7	75	7	87	72	2.0	.07
FEB.										
07...	39	20	97	3.4	115	0	111	130	5.5	.33
13...	--	--	--	--	--	--	--	--	6.3	.52
APR.										
02...	26	13	44	2.4	76	0	65	59	5.0	--
MAY										
08...	16	8.5	21	1.6	74	0	20	23	3.4	--
JUNE										
07...	16	10	27	2.2	85	0	28	31	3.6	.97
JULY										
02...	18	11	38	2.5	84	0	29	48	20	--
AUG.										
07...	16	14	74	3.8	80	0	38	117	1.5	--
SEPT.										
11...	20	13	52	2.6	98	0	34	69	2.1	--

DATE	BORON (B)	DISSOLVED SOLIDS (RESIDUE AT 180 C)	HARDNESS (CA,MG)	NONCARBONATE HARDNESS	DISSOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	ALKALINITY AS CACO3	SPECIFIC CONDUCTANCE (MICROMHOS)	PH
JAN.										
10...	.39	328	125	52	.45	53	2.6	73	592	8.9
FEB.										
07...	.56	494	177	83	.67	53	3.1	94	859	8.2
13...	--	--	--	--	--	--	--	--	--	--
APR.										
02...	.35	297	120	58	.40	44	1.8	62	497	7.8
MAY										
08...	.16	144	75	14	.20	37	1.1	61	254	7.9
JUNE										
07...	.16	146	82	12	.20	41	1.3	70	310	8.1
JULY										
02...	.04	224	90	21	.30	47	1.7	69	392	7.9
AUG.										
07...	.04	314	100	34	.43	61	3.3	66	621	7.9
SEPT.										
11...	.12	265	104	24	.36	51	2.2	80	478	8.2

11-3195. 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.
RECORDS AVAILABLE.--Water temperatures: February 1961 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C July 7; minimum, 1°C Jan. 31, Feb. 1.
EXTREMES, 1961-68.--Water temperatures: Maximum, 24°C Aug. 5, 1967; minimum (1961-65, 1966-68), 1°C Jan. 31, Feb. 1, 1968.
REMARKS.--Recorder malfunctioned Dec. 1-24, Mar. 1 to Apr. 1, May 1-7; temperature ranges, 2°C to 9°C, 3°C to 10°C, and 9°C to 14°C, respectively. No record June 18-20.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	13	13	13	13	13	13	13	13	14	13	13	14	14	13	13	13	13	13	13	13	13	14	14	13	13	13	13	13	12	12	12	13
MINIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	12	12	12	12	12	11	11	11	11	11	12
NOVEMBER																																
MAXIMUM	12	12	12	13	13	12	13	13	13	13	12	12	12	12	12	13	14	13	13	13	13	13	12	12	12	12	11	11	11	10	--	12
MINIMUM	11	12	11	11	12	11	12	12	11	11	11	11	11	11	12	12	12	12	12	12	12	12	11	10	11	11	10	10	10	9	--	11
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	4	4	4	5	5	5	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	3	3	3	4	4	4	--
JANUARY																																
MAXIMUM	4	4	4	3	4	3	3	3	3	4	3	3	3	3	4	4	4	3	3	3	4	4	4	4	4	4	3	3	2	2	2	3
MINIMUM	4	3	2	2	2	2	2	2	2	3	3	2	2	3	3	3	2	2	2	2	3	3	3	3	3	3	2	2	2	2	1	2
FEBRUARY																																
MAXIMUM	2	3	4	4	3	4	5	4	5	6	6	4	5	6	6	6	7	7	7	8	8	7	8	8	8	8	8	8	8	--	--	6
MINIMUM	1	2	2	2	3	3	3	3	4	4	3	3	4	4	4	4	5	6	6	7	7	7	8	8	7	7	7	7	7	--	--	5
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL																																
MAXIMUM	--	8	8	8	8	8	11	8	9	9	11	11	12	10	11	9	9	8	8	9	9	8	9	9	12	9	10	11	12	13	--	10
MINIMUM	--	7	7	6	7	7	7	7	8	8	8	8	7	8	8	8	7	7	6	7	7	7	7	7	8	8	8	9	9	10	--	8
MAY																																
MAXIMUM	--	--	--	--	--	--	--	11	12	12	12	11	11	11	11	12	13	15	16	16	15	16	16	14	17	19	18	16	15	14	13	--
MINIMUM	--	--	--	--	--	--	--	9	9	10	10	10	9	9	9	10	11	12	12	13	14	13	13	12	13	13	15	15	14	13	12	--
JUNE																																
MAXIMUM	14	14	14	14	13	13	14	14	14	14	14	14	14	13	14	14	14	--	--	--	18	16	17	16	16	17	20	16	16	15	--	15
MINIMUM	13	13	13	13	12	12	12	12	12	12	12	12	12	12	13	13	13	--	--	--	14	14	14	14	14	14	15	14	13	13	--	13
JULY																																
MAXIMUM	16	16	15	18	17	19	22	19	18	17	16	16	19	18	16	17	16	16	17	16	16	16	16	16	16	16	16	16	17	16	17	17
MINIMUM	13	13	13	14	15	15	15	16	16	15	14	14	14	14	15	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
AUGUST																																
MAXIMUM	17	17	18	19	17	17	16	16	16	16	19	19	16	17	16	16	17	17	15	15	16	17	14	14	17	14	14	15	16	16	17	16
MINIMUM	14	14	14	15	14	14	15	15	15	14	15	15	15	14	14	14	14	15	14	14	14	13	14	14	14	13	13	13	14	14	15	14
SEPTEMBER																																
MAXIMUM	17	16	16	16	16	17	17	18	17	17	16	17	16	19	16	16	15	15	16	15	15	14	14	14	14	14	15	14	14	14	--	16
MINIMUM	14	14	15	15	15	15	16	16	16	16	14	14	14	14	14	14	14	14	14	14	14	14	13	13	13	14	13	14	13	13	--	14

11-3235. MOKELUMNE RIVER BELOW CAMANCHE DAM, CALIF.

LOCATION.--Lat 38°13'15", long 121°02'20", 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, and 3.4 miles northeast of Clements.
DRAINAGE AREA.--627 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1961 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 17°C on several days during November and July; minimum, 9°C on many days in January and February.
EXTREMES, 1961-63, 1964-68.--Water temperatures: Maximum (1961-63, 1964-65, 1966-68), 10°C Oct. 14-16, 1961; minimum (1961-63, 1965-68), 7°C Jan. 22-26, 1962.
REMARKS.--Recorder malfunctioned Oct. 1-31.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	17	17	17	17	17	17	17	17	17	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15	15	15	15	14	--	16
MINIMUM	17	17	17	17	17	16	16	17	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15	15	15	15	14	14	--	16
DECEMBER																																
MAXIMUM	14	14	14	14	15	15	15	15	15	15	15	15	15	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	13	12	12	14
MINIMUM	14	14	14	14	14	15	15	15	15	15	15	15	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	13	12	12	11	14
JANUARY																																
MAXIMUM	11	10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
MINIMUM	10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
FEBRUARY																																
MAXIMUM	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	10	10	10	--	--	9
MINIMUM	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	10	10	--	--	9
MARCH																																
MAXIMUM	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10
MINIMUM	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10
APRIL																																
MAXIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	11	11	11	12	12	12	12	11	11	11	--	11
MINIMUM	11	11	11	11	11	11	11	11	10	10	10	11	11	11	11	11	12	12	11	11	11	11	11	12	12	11	11	11	11	11	--	11
MAY																																
MAXIMUM	11	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	13	13	13	14	14	14	14	12
MINIMUM	11	11	12	12	12	12	11	11	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	13	13	13	14	14	14	12
JUNE																																
MAXIMUM	14	14	14	14	14	15	15	15	15	15	15	15	15	15	15	15	15	15	16	16	16	16	16	16	16	16	16	16	16	16	--	15
MINIMUM	14	14	14	14	14	14	15	15	15	15	15	15	15	15	15	15	15	15	15	16	16	16	16	16	16	16	16	16	16	16	--	15
JULY																																
MAXIMUM	16	16	16	16	16	16	16	16	16	16	16	17	16	17	17	17	16	16	17	17	17	17	16	17	17	17	16	16	16	16	16	16
MINIMUM	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	17	17	16	16	16	17	16	16	16	16	16	16	16
AUGUST																																
MAXIMUM	16	16	15	15	14	14	15	14	15	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	15
MINIMUM	16	15	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
SEPTEMBER																																
MAXIMUM	14	14	14	14	14	14	14	14	15	15	14	14	14	14	14	14	14	14	14	14	15	15	15	15	14	14	14	15	15	15	--	15
MINIMUM	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	--	14

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 1, 1967	1450	16	1540	3	12	--	--	--	--	--	--	--	--	--	--	--	
DEC 1.....	0900	13	119	4	1.3	--	--	--	--	--	--	--	--	--	--	--	
JAN 3, 1968	1230	3	195	2	1.1	--	--	--	--	--	--	--	--	--	--	--	
FEB 1.....	1015	8	201	4	2.2	--	--	--	--	--	--	--	--	--	--	--	
APR 1.....	1230	10	369	2	2.0	--	--	--	--	--	--	--	--	--	--	--	
MAY 1.....	1230	16	464	3	3.8	--	--	--	--	--	--	--	--	--	--	--	
JUN 3.....	1050	15	454	2	2.5	--	--	--	--	--	--	--	--	--	--	--	
JUL 2.....	1320	17	500	2	2.7	--	--	--	--	--	--	--	--	--	--	--	
AUG 1.....	1230	13	520	11	15	--	--	--	--	--	--	--	--	--	--	--	
SEP 4.....	1110	--	365	5	4.9	--	--	--	--	--	--	--	--	--	--	--	

11-3255. MOKELUMNE RIVER AT WOODBRIDGE, CALIF.

LOCATION (revised).--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, 0.3 mile downstream from county highway bridge, and 0.4 mile downstream from dam and canal intake at Woodbridge Irrigation District.
DRAINAGE AREA.--661 sq mi.
RECORDS AVAILABLE.--Chemical analyses: March 1951 to September 1963, April to September 1968.
Water temperatures: March 1951 to September 1958, November 1960 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 23°C June 24, 25, July 7, 8; minimum, 6°C on several days in December.
EXTREMES, 1951-58, 1960-68.--Water temperatures: Maximum (1951-54, 1956-58, 1960-68), 28°C July 9, 1951; minimum (1951-55, 1956-58, 1961-68), 2°C Jan. 29, 30, 1954.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Prior to July 25, gaging station was located on left bank 125 ft downstream. Temperature recorder malfunction Apr. 17 to May 10.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	CHLO-RIDE (CL)	HARD-NESS (CA,MG)
APR.								
04...	108	4.8	1.2	1.9	21	0	2.2	17
MAY								
15...	37	4.6	1.6	2.2	21	0	1.9	18
JUNE								
07...	36	4.6	1.3	1.9	22	0	1.0	17
JULY								
11...	37	5.7	--	2.4	22	0	1.8	18
AUG.								
06...	42	6.0	--	2.5	23	0	2.0	19

DATE	NON-CAR-BONATE HARD-NESS	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
APR.								
04...	0	20	.2	17	48	7.3	13	11.4
MAY								
15...	1	21	.2	17	51	7.1	14	--
JUNE								
07...	0	20	.2	18	51	7.6	19	9.6
JULY								
11...	0	27	.3	18	57	7.3	22	9.1
AUG.								
06...	0	27	.3	19	62	7.6	19	9.1

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
MINIMUM	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
NOVEMBER																																
MAXIMUM	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	14	13	13	12	12	12	11	11	11	--	15
MINIMUM	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15	14	13	13	12	12	12	11	11	11	10	--	14
DECEMBER																																
MAXIMUM	10	9	9	10	11	11	11	10	9	9	9	9	8	7	6	6	6	6	6	6	6	6	7	7	7	8	8	8	8	8	8	8
MINIMUM	9	9	9	9	10	11	10	9	9	9	9	8	7	6	6	6	6	6	6	6	6	6	7	7	7	8	8	8	8	8	8	8
JANUARY																																
MAXIMUM	8	8	8	7	7	7	7	7	7	7	7	7	8	8	9	9	9	8	8	8	8	8	8	8	8	8	8	8	7	7	7	8
MINIMUM	8	8	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7
FEBRUARY																																
MAXIMUM	7	8	8	8	8	9	10	10	10	9	9	9	9	9	9	9	10	11	11	12	12	12	11	11	11	11	11	11	11	--	--	10
MINIMUM	7	7	7	8	8	8	9	10	9	9	9	9	9	9	9	9	9	10	11	11	12	11	11	11	11	11	11	11	11	--	--	10
MARCH																																
MAXIMUM	11	11	11	11	11	11	11	11	11	11	11	11	10	10	11	11	11	11	12	12	12	13	13	14	14	14	14	13	14	16	17	12
MINIMUM	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	11	11	11	11	12	12	12	13	13	14	14	13	13	13	14	16	12
APRIL																																
MAXIMUM	17	16	14	--	14	14	14	14	16	17	17	17	17	16	16	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	16	14	14	--	14	14	14	14	14	16	17	17	16	16	16	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	17	17	16	15	14	16	17	18	18	18	18	18	18	18	18	18	19	20	21	20	21	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	17	16	15	14	14	14	16	17	18	18	18	18	18	17	17	18	18	19	20	20	20	--
JUNE																																
MAXIMUM	20	21	21	21	20	19	19	19	19	20	20	19	19	19	20	21	21	21	21	21	21	22	22	23	23	22	22	22	22	21	--	21
MINIMUM	20	20	21	20	19	19	19	19	19	19	19	19	18	18	19	19	21	21	21	21	21	21	21	22	22	22	22	22	21	21	--	20
JULY																																
MAXIMUM	21	21	21	21	22	22	23	23	21	21	22	22	22	22	22	22	21	22	22	22	22	22	22	21	21	21	21	21	21	21	21	21
MINIMUM	21	21	21	21	21	21	22	22	21	21	21	21	21	21	21	21	21	21	22	22	21	21	20	21	19	21	21	21	21	21	21	21
AUGUST																																
MAXIMUM	21	21	20	19	19	19	18	19	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	20	20	19
MINIMUM	21	20	19	19	19	18	18	18	18	18	18	18	18	18	17	18	18	18	18	17	17	17	18	18	18	18	18	18	19	19	19	18
SEPTEMBER																																
MAXIMUM	20	19	19	19	19	19	19	19	19	19	18	18	18	19	18	18	18	18	18	18	18	17	17	16	17	17	18	18	17	17	--	18
MINIMUM	19	19	19	19	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	17	16	16	16	16	16	17	17	17	17	--	18

11-3350. COSUMNES RIVER AT MICHIGAN BAR, CALIF.

LOCATION.--Lat 38°30'00", long 121°02'45", in SE¼ 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1963, January to September 1968.
Water temperatures: October 1962 to September 1968.
Sediment records: October 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 28°C June 23, 25, July 6; minimum, 2°C on several days during December and January.
Sediment concentrations: Maximum daily, 148 mg/l Feb. 20; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 1,230 tons Feb. 20; minimum daily, 0.02 ton on several days in September.
EXTREMES, 1962-68.--Water temperatures: Maximum (1965-68), 30°C Aug. 26, 27, 1967; minimum (1963-68), 2°C on several days during December in 1965 and 1967, and January 1968.
Sediment concentrations: Maximum daily, 3,070 mg/l Feb. 1, 1963; minimum, 1 mg/l on many days during 1962-68.
Sediment loads: Maximum daily, 245,000 tons Feb. 1, 1963; minimum daily, 0.01 ton (revised) on several days during 1962-67.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, JANUARY TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	CHLO-RIDE (CL)	HARD-NESS (CA,MG)
JAN.								
09...	86	12	--	3.8	54	0	3.3	48
MAR.								
11...	508	9.0	--	3.4	50	0	2.5	40
APR.								
04...	669	6.6	2.6	2.2	34	0	1.5	27
MAY								
14...	294	6.2	2.6	2.8	36	0	.9	26
JUNE								
07...	95	6.5	2.7	3.0	38	0	1.1	27
JULY								
11...	50	7.2	--	3.9	38	0	1.8	27
AUG.								
06...	44	6.4	--	3.3	32	0	1.4	22
SEPT.								
05...	12	7.3	--	4.4	41	0	1.7	32

DATE	NON-CAR-BONATE HARD-NESS	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
JAN.								
09...	4	22	.3	44	117	7.9	6	10.9
MAR.								
11...	0	25	.3	41	99	7.6	8	10.8
APR.								
04...	0	15	.2	28	66	7.7	12	11.9
MAY								
14...	0	19	.2	30	71	7.6	14	10.4
JUNE								
07...	0	19	.2	31	76	8.0	23	9.6
JULY								
11...	0	32	.4	31	79	7.6	27	--
AUG.								
06...	0	31	.4	26	60	7.9	--	8.7
SEPT.								
05...	0	34	.4	34	96	7.6	--	--

11-3350. COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	23	20	21	19	19	18	18	18	19	19	20	21	20	20	18	18	18	18	17	17	17	18	18	17	17	17	16	17	17	16	16	18
MINIMUM	20	18	18	18	18	17	17	17	18	18	18	18	18	17	16	16	16	16	15	14	14	15	15	15	15	14	14	15	14	13	13	16
NOVEMBER																																
MAXIMUM	16	15	15	16	16	16	15	16	16	15	14	13	13	14	14	14	14	14	14	13	13	12	11	11	10	9	8	8	8	8	--	13
MINIMUM	13	13	13	14	14	14	13	13	14	13	12	12	13	13	13	13	13	14	13	12	12	11	10	9	8	8	7	7	8	7	--	12
DECEMBER																																
MAXIMUM	7	7	7	8	9	9	8	8	7	6	6	6	4	3	3	2	2	3	4	4	4	3	4	4	4	4	5	5	4	4	4	5
MINIMUM	7	6	6	7	8	7	8	7	6	6	6	4	3	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	3	3	3	4
JANUARY																																
MAXIMUM	4	4	4	3	3	3	3	3	3	5	5	4	4	6	8	8	7	6	6	6	6	6	7	7	7	6	6	5	4	6	6	5
MINIMUM	3	3	3	3	2	2	3	3	3	3	3	3	4	4	6	7	5	4	4	4	5	6	6	6	6	6	5	4	4	4	4	4
FEBRUARY																																
MAXIMUM	6	7	8	8	8	8	10	10	9	9	9	9	9	9	9	9	11	11	12	12	11	12	13	13	13	13	13	13	13	--	--	10
MINIMUM	4	5	7	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	10	11	11	11	12	11	11	11	11	12	11	--	--	9
MARCH																																
MAXIMUM	12	12	12	12	12	11	11	11	10	10	9	10	10	11	10	10	11	11	11	11	12	13	12	13	13	13	13	14	16	16	16	12
MINIMUM	11	11	10	10	11	10	9	9	9	8	8	8	9	9	8	9	9	9	8	9	11	11	11	11	12	11	11	12	11	14	14	10
APRIL																																
MAXIMUM	16	13	13	13	14	14	14	15	16	17	17	16	16	16	16	14	14	14	14	14	15	14	15	16	17	18	18	19	19	19	--	16
MINIMUM	12	12	11	12	13	13	13	13	13	14	15	15	14	14	14	13	12	12	12	13	13	12	13	14	14	16	16	17	17	18	--	14
MAY																																
MAXIMUM	19	19	20	19	19	19	18	19	19	19	19	18	17	16	17	19	20	21	21	22	21	21	21	20	21	22	23	24	24	24	24	20
MINIMUM	18	17	18	18	18	17	17	17	17	18	18	17	15	14	15	16	18	19	21	20	20	19	18	19	19	19	21	22	22	22	21	18
JUNE																																
MAXIMUM	24	25	25	24	22	21	22	23	23	23	23	22	22	23	24	26	26	27	27	27	27	27	28	27	28	27	27	27	26	25	--	25
MINIMUM	21	22	23	22	20	19	19	19	20	19	20	19	19	19	21	22	23	23	23	22	22	23	24	24	24	24	23	23	22	20	--	22
JULY																																
MAXIMUM	26	26	26	26	27	28	27	27	27	27	27	26	26	26	26	26	26	26	26	26	26	26	26	26	25	25	26	26	26	27	27	26
MINIMUM	21	21	21	22	24	24	23	23	23	23	23	23	23	23	23	22	22	23	23	23	22	22	22	22	22	22	22	23	23	24	23	23
AUGUST																																
MAXIMUM	27	27	27	27	26	26	26	26	26	26	26	26	23	23	24	25	24	23	22	22	22	22	23	24	24	24	25	26	26	27	27	25
MINIMUM	23	23	23	23	22	22	22	22	21	22	21	22	21	20	21	21	20	21	20	19	19	19	19	19	20	19	19	21	22	22	22	21
SEPTEMBER																																
MAXIMUM	27	27	27	27	27	26	26	26	24	25	26	25	24	24	23	24	24	24	23	22	21	21	21	21	21	21	21	22	--	--	--	24
MINIMUM	23	22	22	22	22	21	21	21	21	19	20	20	20	21	19	18	19	19	18	17	16	14	16	16	17	17	17	17	--	--	--	19

11-3350. COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	29	2	.16	36	2	.19	136	4	1.5
2	32	3	.26	35	2	.19	97	6	1.6
3	76	10	3.5	35	7	.66	82	6	1.3
4	155	14	6.2	36	3	.29	116	9	2.8
5	90	26	6.3	38	3	.31	385	63	85
6	71	40	7.7	36	2	.19	340	75	76
7	62	26	4.4	36	2	.19	204	18	9.9
8	57	14	2.2	34	2	.18	240	5	3.2
9	53	7	1.0	35	2	.19	171	3	1.4
10	49	4	.53	35	2	.19	136	3	1.1
11	46	3	.37	34	2	.18	120	2	.65
12	42	3	.34	35	3	.28	105	1	.28
13	40	3	.32	36	2	.19	90	1	.24
14	40	3	.32	41	2	.22	66	1	.18
15	40	3	.32	61	3	.49	53	1	.14
16	39	3	.32	71	3	.58	66	1	.18
17	38	3	.31	54	4	.58	86	1	.23
18	36	3	.29	50	2	.27	98	1	.26
19	36	3	.29	145	20	12	113	2	.61
20	36	3	.29	206	39	22	113	2	.61
21	36	3	.29	110	37	11	100	1	.27
22	38	3	.31	75	15	3.0	93	1	.25
23	36	2	.19	62	11	1.8	88	1	.24
24	38	2	.21	59	5	.80	93	1	.25
25	38	2	.21	56	3	.45	93	1	.25
26	36	3	.29	53	2	.29	100	1	.27
27	36	3	.29	53	3	.43	113	1	.31
28	36	3	.29	56	3	.45	113	1	.31
29	35	2	.19	62	4	.67	113	2	.61
30	35	2	.19	90	4	.97	107	2	.58
31	36	2	.19	--	--	--	100	1	.27
TOTAL	1467	--	38.07	1765	--	59.23	3930	--	190.79

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	95	1	.26	620	24	40	613	5	8.3
2	93	2	.50	472	14	18	557	4	6.0
3	88	2	.48	557	22	33	526	4	5.7
4	79	3	.64	460	9	11	502	3	4.1
5	75	2	.41	390	7	7.4	472	3	3.8
6	77	1	.21	360	6	5.8	448	2	2.4
7	79	2	.43	340	8	7.3	442	2	2.4
8	84	2	.45	322	5	4.3	897	20	50
9	86	1	.23	318	4	3.4	797	19	41
10	133	2	.97	390	6	6.3	606	10	16
11	350	17	15	345	5	4.7	508	4	5.5
12	208	19	11	306	3	2.5	466	3	3.8
13	155	12	5.0	286	1	.77	585	4	7.9
14	139	10	3.8	274	2	1.5	950	22	56
15	743	43	102	262	3	2.1	770	8	17
16	788	65	138	258	1	.70	887	17	49
17	448	18	22	556	13	27	1330	30	115
18	306	7	5.8	928	36	90	932	6	15
19	243	4	2.6	804	57	199	746	5	10
20	212	5	2.9	3290	148	1230	648	5	8.7
21	194	3	1.6	3150	80	702	606	4	6.5
22	177	2	.96	2120	29	166	606	4	6.5
23	171	2	.92	1660	15	67	592	3	4.8
24	168	1	.45	1510	11	45	585	3	4.7
25	161	1	.43	1140	9	28	592	4	6.4
26	155	2	.84	970	7	18	634	4	6.8
27	174	1	.47	833	5	11	627	4	6.8
28	184	1	.50	738	4	8.0	606	4	6.5
29	161	1	.43	676	5	9.1	627	4	6.8
30	1200	52	377	--	--	--	676	5	9.1
31	1470	48	227	--	--	--	690	4	7.5
TOTAL	8696	--	923.28	24335	--	2748.87	20523	--	500.0

11-3350. COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	738	5	10	282	1	.76	102	1	.28
2	860	6	14	278	1	.75	100	1	.27
3	738	4	8.0	270	1	.73	95	1	.26
4	669	2	3.6	262	2	1.4	90	1	.24
5	634	2	3.4	258	1	.70	88	1	.24
6	599	2	3.2	243	1	.66	86	1	.23
7	564	2	3.0	229	1	.62	95	1	.26
8	538	2	2.9	215	1	.58	97	1	.26
9	526	2	2.8	208	1	.56	95	1	.26
10	514	3	4.2	198	1	.53	77	1	.21
11	520	3	4.2	190	1	.51	73	1	.20
12	514	3	4.2	187	1	.50	66	1	.18
13	502	3	4.1	201	1	.54	66	1	.18
14	478	2	2.6	294	3	2.4	62	1	.17
15	472	2	2.5	240	2	1.3	54	1	.15
16	448	2	2.4	215	2	1.2	51	1	.14
17	420	3	3.4	194	1	.52	51	1	.14
18	390	2	2.1	177	1	.48	51	1	.14
19	360	2	1.9	168	1	.45	46	1	.12
20	350	3	2.8	168	1	.45	42	2	.23
21	335	2	1.8	164	1	.44	42	3	.34
22	318	2	1.7	164	1	.44	41	3	.33
23	302	1	.82	155	1	.42	39	2	.21
24	294	1	.79	146	1	.39	70	1	.19
25	294	2	1.6	144	1	.39	68	1	.18
26	286	2	1.5	141	1	.38	59	2	.32
27	286	2	1.5	133	1	.36	44	2	.24
28	282	2	1.5	126	1	.34	46	1	.12
29	286	1	.77	118	1	.32	39	1	.11
30	290	1	.78	113	1	.31	38	2	.21
31	--	--	--	107	1	.29	--	--	--
TOTAL	13807	--	98.06	5988	--	19.72	1973	--	6.41

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	39	2	.21	49	2	.26	14	2	.08
2	39	2	.21	50	2	.27	12	2	.06
3	40	1	.11	51	2	.28	12	2	.06
4	43	1	.12	47	2	.25	12	2	.06
5	44	1	.12	46	1	.12	12	2	.06
6	43	1	.12	44	1	.12	11	1	.03
7	42	1	.11	43	1	.12	10	1	.03
8	42	1	.11	40	1	.11	9.7	1	.03
9	46	1	.12	38	1	.10	10	1	.03
10	44	1	.12	39	1	.11	10	1	.03
11	50	2	.27	38	1	.10	9.4	1	.03
12	53	3	.43	42	2	.23	10	1	.03
13	51	3	.41	46	2	.25	11	1	.03
14	62	3	.50	46	1	.12	10	1	.03
15	77	2	.42	41	1	.11	10	1	.03
16	77	2	.42	40	1	.11	10	1	.03
17	77	3	.62	42	1	.11	9.7	1	.03
18	70	2	.38	44	1	.12	8.8	1	.02
19	54	1	.15	40	1	.11	9.1	1	.02
20	53	1	.14	54	2	.29	9.1	1	.02
21	51	1	.14	66	2	.36	8.5	1	.02
22	50	1	.14	44	1	.12	8.5	1	.02
23	51	1	.14	32	1	.09	7.0	1	.02
24	53	1	.14	27	1	.07	8.2	1	.02
25	53	1	.14	22	2	.12	7.9	1	.02
26	54	1	.15	19	2	.10	7.9	1	.02
27	54	1	.15	17	2	.09	8.2	1	.02
28	54	1	.15	16	1	.04	8.2	1	.02
29	53	1	.14	16	1	.04	7.6	1	.02
30	53	1	.14	16	2	.09	7.0	1	.02
31	53	1	.14	14	2	.08	--	--	--
TOTAL	1625	--	6.66	1169	--	4.49	288.8	--	.94

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 85566.8
TOTAL LOAD FOR YEAR (TONS) 4596.52

11-3350. COSUMNES RIVER AT MICHIGAN BAR, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 6, 1967	0900	7	370	71	71	68	83	94	97	98	99	99	100	--	--	--	SCBW
JAN 31, 1968	1135	4	1280	25	86	11	22	43	56	65	89	94	97	99	100	--	SCBW
FEB 20.....	1115	10	4200	254	2880	33	42	53	70	86	94	97	99	100	--	--	VPWC
FEB 21.....	0600	12	3580	144	1390	10	28	40	47	52	80	86	98	100	--	--	VCBW
FEB 21.....	1640	12	3200	73	631	13	31	42	49	54	79	86	99	100	--	--	VCBW
MAR 8.....	0635	11	970	30	79	31	44	62	69	73	84	97	99	100	--	--	SCBW
MAR 8.....	1720	11	1030	17	47	32	47	62	75	82	93	97	98	100	--	--	SCBW

11-3372. SAN JOAQUIN RIVER AT ANTIOCH, CALIF.

LOCATION.--Lat 38°01'04", long 121°48'06", in NW¼SW¼ sec.18, T.2 N., R.2 E., Contra Costa County, at tidal gaging station at Antioch, and 4.5 miles from mouth.
RECORDS AVAILABLE.--Chemical analyses: October 1962 to September 1968.
REMARKS.--No discharge records available. Chemical quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	CALCIUM (CA)	MAGNESIUM (MG)	SODIUM (NA)	BICARBONATE (HCO3)	CARBONATE (CO3)	CHLORIDE (CL)	HARDNESS (CA,MG)
JAN.							
09...	16	--	32	68	0	43	75
APR.							
04...	16	10	17	81	0	21	81
MAY							
15...	23	18	215	79	0	374	182
JUNE							
07...	23	27	165	87	0	309	168
JULY							
11...	56	--	930	88	0	1620	594
AUG.							
15...	37	--	522	83	0	915	361
SEPT.							
12...	27	--	317	94	0	551	258

DATE	NON-CARBONATE HARDNESS	ALKALINITY AS CACO3	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	DISSOLVED OXYGEN
JAN.						
09...	19	56	324	8.0	11	9.1
APR.						
04...	15	66	240	7.8	16	9.3
MAY						
15...	117	65	1520	7.7	18	8.8
JUNE						
07...	97	71	1300	7.7	21	6.1
JULY						
11...	522	72	5490	7.8	21	7.5
AUG.						
15...	293	68	3100	8.0	21	7.5
SEPT.						
12...	181	77	2090	8.0	22	7.4

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
11-2995. STANISLAUS RIVER BELOW MELONES POWERHOUSE, NEAR SONORA, CALIF. (LAT 37°56'50", LONG 120°31'45")												
FEB., 1968												
19...	--	11	--	9.1	2.6	3.0	.9	40	0	6.0	1.2	--
MAR.												
20...	--	--	--	7.3	2.1	2.8	.9	32	0	4.0	.8	--
JUNE												
25...	550	12	.03	5.0	1.3	2.4	.8	24	0	3.0	1.3	.0

DATE	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)
FEB., 1968												
19...	1.2	.00	62	55	33	0	16	.2	33	82	7.8	--
MAR.												
20...	--	.01	24	--	26	0	18	.2	26	68	7.5	6
JUNE												
25...	.1	.00	39	38	18	0	21	.2	20	52	6.9	17

11-3414. SACRAMENTO RIVER NEAR MOUNT SHASTA, CALIF.

LOCATION.--Lat 41°15'56", long 122°18'32", in SE¼SE¼ sec.33, T.4 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 Mount Shasta.
DRAINAGE AREA.--134 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 17°C on many days during July and August; minimum, 2° on several days during January.
EXTREMES, 1965-68.--Water temperatures: Maximum (1966-68), 17°C on many days during July and August 1968; minimum (1965-66, 1967-68), 2°C on several days during January 1968.
REMARKS.--Clock stopped Oct. 18 to Nov. 3, Jan. 31 to Feb. 2, Feb. 3-27; temperature ranges, 8°C to 10°C, 3°C to 4°C, and 3°C to 5°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	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
OCTOBER																																
MAXIMUM	11	10	11	10	11	11	11	11	11	11	11	11	10	10	10	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	10	9	9	9	10	9	9	9	9	9	10	9	9	9	8	8	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	9	10	10	9	9	9	9	9	9	9	9	8	8	8	8	8	8	7	7	7	7	6	6	6	6	6	5	--	8
MINIMUM	--	--	--	9	9	9	8	9	9	9	8	8	9	8	7	7	7	7	7	7	6	6	6	6	6	6	5	5	4	4	--	7
DECEMBER																																
MAXIMUM	5	5	5	5	6	5	6	5	4	4	4	4	4	4	4	4	4	4	4	5	4	6	5	5	5	5	5	5	4	4	4	5
MINIMUM	4	4	4	4	4	3	3	4	3	3	3	3	4	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
JANUARY																																
MAXIMUM	4	4	4	4	4	4	4	4	5	4	4	4	3	3	3	4	3	4	4	4	5	4	4	4	4	4	3	2	2	3	--	4
MINIMUM	3	3	3	3	3	3	3	4	4	4	3	3	3	2	2	3	3	3	3	3	4	4	3	4	3	3	2	2	2	2	--	3
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	6	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	4	--	--	--
MARCH																																
MAXIMUM	5	6	6	6	6	6	6	6	6	6	6	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	8	8	8	8	6
MINIMUM	4	4	4	5	4	4	5	4	5	4	5	3	4	5	5	4	5	5	5	5	5	5	6	6	6	5	5	6	6	6	6	5
APRIL																																
MAXIMUM	7	7	7	7	8	7	8	8	8	8	8	7	7	8	8	7	8	8	8	8	8	8	8	8	9	9	9	9	9	9	--	8
MINIMUM	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	7	6	7	7	7	7	7	7	--	6
MAY																																
MAXIMUM	9	9	9	9	8	8	9	10	10	10	10	9	8	8	10	10	9	11	9	9	10	10	11	10	11	11	12	12	12	11	12	10
MINIMUM	7	7	7	7	7	6	7	8	8	8	8	8	8	8	7	8	8	9	9	8	8	9	9	9	9	9	9	10	10	9	9	8
JUNE																																
MAXIMUM	13	11	12	12	11	12	12	12	12	13	13	13	12	12	13	14	14	14	14	15	14	15	16	16	16	16	16	15	14	16	--	14
MINIMUM	10	11	10	11	11	10	9	9	10	11	11	11	10	11	11	11	12	12	12	12	12	12	13	13	13	13	13	12	12	12	--	11
JULY																																
MAXIMUM	16	16	16	17	17	17	17	17	17	17	16	16	17	17	17	17	17	17	17	16	16	17	16	16	16	17	16	17	16	17	16	16
MINIMUM	12	13	13	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	13	14	14	14	14	15	14	14	14
AUGUST																																
MAXIMUM	17	17	17	16	16	16	16	16	16	16	16	16	15	16	15	15	15	14	14	14	14	15	16	15	14	14	15	15	16	16	16	15
MINIMUM	15	14	14	14	14	13	14	14	14	14	14	13	13	14	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	14
SEPTEMBER																																
MAXIMUM	16	16	15	15	15	14	15	14	14	14	14	14	14	14	13	13	14	14	13	13	13	13	13	14	14	14	13	13	13	13	--	14
MINIMUM	13	14	13	13	13	13	13	13	13	13	13	13	12	13	12	12	12	12	12	11	11	11	11	12	12	12	12	12	12	12	--	12

11-3420. SACRAMENTO RIVER AT DELTA, CALIF.

LOCATION.--Lat 40°56'20", long 122°24'55", in NW¼ sec.35, T.36 N., R.5 W., Shasta County, at gaging station 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.
RECORDS AVAILABLE.--Chemical analyses: December 1953 to September 1968.
Water temperatures: June to September 1951, October 1953 to September 1957, October 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 28°C July 6; minimum, freezing point Jan. 11, 28-30.
EXTREMES, 1951, 1953-57, 1962-68.--Water temperatures: Maximum (1951, 1953-57, 1963-68), 28°C July 6, 1968; minimum, freezing point Dec. 18, 19, 1964, Jan. 20, 1967, Jan. 11, 28-30, 1968.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Thermograph clock stopped Jan. 1-4, Sept. 3-13; temperature ranges, 3°C to 6°C, and 16°C to 23°C, respectively.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)
OCT.										
09...	257	--	--	10	--	76	0	--	6.5	--
NOV.										
08...	270	--	--	10	--	75	0	--	6.7	--
DEC.										
12...	351	--	--	9.8	--	70	0	--	7.6	--
JAN.										
03...	371	--	--	6.8	--	71	0	--	1.2	--
FEB.										
13...	1280	--	--	2.8	--	54	0	--	1.3	--
MAR.										
06...	1630	--	--	2.5	--	47	0	--	2.2	--
APR.										
01...	1670	--	--	2.2	--	50	0	--	1.0	--
MAY										
06...	968	4.1	6.8	3.4	.3	49	0	.0	2.2	.0
JUNE										
11...	452	--	--	6.1	--	66	0	--	4.1	--
JULY										
03...	257	--	--	6.8	--	76	0	--	5.8	--
AUG.										
06...	195	--	--	12	--	80	0	--	7.6	--
SEPT.										
04...	188	9.0	8.1	9.8	1.3	82	0	1.5	1.8	.0

DATE	BORON (B)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.										
09...	.07	51	0	30	.6	62	150	7.8	12	10.1
NOV.										
08...	.14	54	0	29	.6	62	148	7.9	11	11.1
DEC.										
12...	.12	48	0	31	.6	57	146	8.0	3	13.2
JAN.										
03...	.14	54	0	22	.4	58	137	8.1	2	13.3
FEB.										
13...	.06	42	0	13	.2	44	101	7.7	5	12.6
MAR.										
06...	.02	36	0	13	.2	39	84	7.9	6	12.1
APR.										
01...	.02	38	0	11	.2	41	85	7.8	8	11.4
MAY										
06...	.06	38	0	16	.2	40	88	7.8	8	11.6
JUNE										
11...	.18	55	1	19	.4	54	120	8.2	18	10.0
JULY										
03...	.05	53	0	22	.4	62	145	8.2	18	9.6
AUG.										
06...	.15	57	0	31	.7	66	158	8.0	19	10.0
SEPT.										
04...	.18	56	0	27	.6	67	164	8.2	17	9.8

11-3420. SACRAMENTO RIVER AT DELTA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	19	16	14	14	14	16	17	17	18	18	17	18	17	16	16	16	16	16	17	16	13	16	16	15	17	16	14	16	14	15	16	16
MINIMUM	16	11	11	12	12	11	11	12	13	13	14	13	12	12	12	11	11	11	12	12	12	12	12	12	12	12	12	13	11	11	12	12
NOVEMBER																																
MAXIMUM	16	16	14	13	14	16	14	14	14	16	14	14	13	14	14	15	14	13	13	13	12	11	11	11	11	10	7	8	7	5	--	13
MINIMUM	12	12	12	11	12	12	12	13	12	13	12	12	13	13	12	12	12	12	11	11	9	8	7	8	8	7	6	6	5	4	--	10
DECEMBER																																
MAXIMUM	6	6	4	6	8	6	6	7	8	8	7	6	4	3	3	4	4	3	4	4	4	7	8	8	8	8	9	9	8	8	6	6
MINIMUM	5	4	2	3	6	4	4	5	5	6	5	4	2	1	1	2	2	2	2	2	3	4	6	6	6	6	7	7	7	6	4	4
JANUARY																																
MAXIMUM	--	--	--	--	--	6	5	5	5	2	2	3	4	4	7	8	7	7	7	8	10	9	9	9	9	7	5	3	0	2	3	6
MINIMUM	--	--	--	--	--	3	3	4	1	1	0	1	3	4	4	6	4	5	4	5	7	7	7	6	7	4	3	0	0	0	2	3
FEBRUARY																																
MAXIMUM	6	4	7	7	7	8	9	9	8	9	9	9	8	7	7	7	7	8	8	8	9	9	9	10	12	12	12	12	11	--	--	9
MINIMUM	3	3	3	4	6	6	6	6	7	7	7	7	6	6	7	6	6	7	7	7	8	8	8	8	7	8	6	7	7	--	--	6
MARCH																																
MAXIMUM	9	11	10	10	11	9	8	10	10	9	9	9	6	7	7	7	8	9	9	9	9	9	9	11	11	10	11	13	13	13	13	10
MINIMUM	8	7	7	7	9	6	7	6	7	5	7	4	3	6	6	7	6	4	4	5	6	6	7	7	9	5	6	8	9	9	9	6
APRIL																																
MAXIMUM	12	11	11	10	11	11	12	13	14	14	14	13	11	12	12	11	9	11	12	11	10	11	11	12	13	14	14	14	14	14	--	12
MINIMUM	8	8	6	8	8	7	7	8	9	10	9	7	6	7	8	7	5	6	8	6	6	6	8	6	9	9	10	9	9	11	--	8
MAY																																
MAXIMUM	14	14	14	14	13	12	12	14	14	14	14	13	12	11	13	16	14	16	16	13	12	13	13	12	14	17	18	19	19	18	18	14
MINIMUM	9	9	10	11	9	7	8	9	10	10	10	10	8	7	7	11	11	12	12	11	10	10	11	10	11	12	13	15	16	14	13	10
JUNE																																
MAXIMUM	21	19	19	19	17	17	17	18	18	19	19	19	17	19	22	23	23	24	24	24	25	24	25	25	25	26	26	22	20	21	--	21
MINIMUM	16	15	14	16	12	12	13	13	14	15	16	15	14	13	16	17	18	19	19	19	19	19	20	19	18	19	19	18	16	14	--	16
JULY																																
MAXIMUM	22	22	24	27	27	28	27	26	26	26	24	23	24	24	24	24	25	26	26	26	26	25	26	24	24	25	26	26	25	27	24	25
MINIMUM	16	17	18	20	21	21	22	21	21	20	19	19	19	19	19	19	19	19	19	19	19	19	19	18	18	18	19	19	21	21	21	19
AUGUST																																
MAXIMUM	25	26	26	24	24	24	24	23	24	24	24	23	21	18	19	19	19	18	18	17	16	19	20	21	20	18	20	22	23	24	24	21
MINIMUM	20	20	21	20	19	18	18	19	19	18	19	19	18	17	13	16	14	16	16	13	12	13	14	16	16	14	14	16	17	17	18	17
SEPTEMBER																																
MAXIMUM	24	24	--	--	--	--	--	--	--	--	--	--	--	19	19	19	21	21	17	15	14	16	17	19	19	19	19	18	18	17	--	--
MINIMUM	18	18	--	--	--	--	--	--	--	--	--	--	--	16	14	14	15	16	14	12	9	9	11	12	13	14	13	14	13	13	--	--

11-3455. SOUTH FORK PIT RIVER NEAR LIKELY, CALIF.

LOCATION.--Lat 41°13'51", long 120°26'10", in NE¼SE¼ sec.11, T.39 N., R.13 E., Modoc County, at gaging station 100 ft downstream from highway bridge, 1.4 miles downstream from West Valley Creek, and 3.5 miles east of Likely.
DRAINAGE AREA.--248 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
10...	24	--	--	5.6	--	61	0	--	1.1	--	.05
NOV.											
06...	27	--	--	5.7	--	64	0	--	1.1	--	.00
DEC.											
13...	20	--	--	6.2	--	64	0	--	1.4	--	.04
JAN.											
04...	22	--	--	5.4	--	69	0	--	--	--	.00
FEB.											
08...	53	--	--	4.7	--	78	0	--	--	--	.05
MAR.											
07...	15	--	--	5.4	--	61	0	--	1.0	--	.04
APR.											
03...	29	--	--	4.6	--	60	0	--	--	--	.00
MAY											
07...	122	9.9	4.2	6.6	2.6	64	0	.0	1.6	.7	.04
JUNE											
10...	88	--	--	6.1	--	71	0	--	1.3	--	.16
JULY											
04...	83	--	--	7.8	--	83	0	--	2.7	--	.00
AUG.											
08...	119	--	--	11	--	92	0	--	2.3	--	.02
SEPT.											
05...	34	13	5.7	10	4.3	88	0	2.1	2.3	.3	.02

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
10...	--	40	0	--	23	.4	50	108	7.7	11	9.9
NOV.											
06...	--	40	0	--	24	.4	52	107	8.0	9	9.9
DEC.											
13...	--	40	0	--	25	.4	52	115	7.5	0	12.2
JAN.											
04...	--	46	0	--	20	.3	57	118	8.0	0	12.7
FEB.											
08...	--	56	0	--	15	.3	64	143	7.5	3	11.2
MAR.											
07...	--	40	0	--	23	.4	50	104	8.1	8	10.1
APR.											
03...	--	40	0	--	20	.3	49	107	7.8	3	11.7
MAY											
07...	75	42	0	.10	24	.4	52	112	7.9	13	9.8
JUNE											
10...	--	47	0	--	22	.4	58	119	8.1	14	9.1
JULY											
04...	--	60	0	--	22	.4	68	149	8.2	19	9.2
AUG.											
08...	--	58	0	--	29	.6	75	175	8.0	19	8.2
SEPT.											
05...	139	56	0	.19	26	.6	72	160	8.2	21	8.7

11-3485. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1968.
Water temperatures: March 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 28°C on several days during June and July; minimum, freezing point Nov. 26, 27, 30.
EXTREMES, 1965-68.--Water temperatures: Maximum, 28°C on several days during June and July 1968; minimum (1965-66, 1967-68), freezing point on several days during February 1966, Nov. 26, 27, 30, 1967.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Thermograph clock stopped Dec. 29 to Jan. 16, Sept. 1-11; temperature ranges, 1°C to 1°C, and 14°C to 23°C, respectively.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
10...	79	--	--	28	--	168	0	--	6.1	--	.07
NOV.											
07...	56	--	--	38	--	185	0	--	10	--	.21
DEC.											
13...	66	--	--	38	--	183	0	--	13	--	.33
JAN.											
05...	41	--	--	31	--	166	0	--	5.8	--	.11
FEB.											
09...	409	--	--	27	--	114	0	--	5.8	--	.14
MAR.											
07...	206	--	--	17	--	116	0	--	5.7	--	.13
APR.											
02...	100	--	--	25	--	131	0	--	9.6	--	.10
MAY											
07...	104	21	9.8	30	6.4	157	0	17	10	1.8	.22
JUNE											
10...	241	--	--	29	--	174	2	--	5.0	--	.40
JULY											
04...	60	--	--	31	--	173	8	--	7.8	--	.12
AUG.											
07...	92	--	--	26	--	159	0	--	6.5	--	.12
SEPT.											
05...	26	23	10	36	7.9	189	0	13	8.6	.6	.22

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
10...	--	93	0	--	40	1.3	138	306	8.0	12	9.3
NOV.											
07...	--	97	0	--	46	1.7	152	366	8.2	8	10.1
DEC.											
13...	--	105	0	--	44	1.6	150	379	8.0	0	12.2
JAN.											
05...	--	95	0	--	42	1.4	136	314	7.9	0	11.1
FEB.											
09...	--	68	0	--	46	1.4	94	253	7.5	0	9.8
MAR.											
07...	--	73	0	--	34	.9	95	243	8.2	8	7.8
APR.											
02...	--	79	0	--	41	1.2	107	266	8.1	11	10.6
MAY											
07...	204	93	0	.28	39	1.4	129	319	8.0	14	9.1
JUNE											
10...	--	103	0	--	38	1.2	146	320	8.4	19	8.3
JULY											
04...	--	103	0	--	40	1.3	155	340	8.7	23	7.4
AUG.											
07...	--	92	0	--	38	1.2	130	289	7.9	22	7.7
SEPT.											
05...	234	101	0	.32	42	1.6	155	368	8.2	19	8.0

11-3485. PIT RIVER NEAR CANBY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	15	13	10	10	11	10	11	12	12	12	14	14	13	12	12	12	11	11	12	12	9	11	12	11	11	9	9	9	8	8	9	11
MINIMUM	13	8	7	8	9	8	8	10	10	10	11	11	10	9	8	8	8	8	8	8	8	8	8	8	7	7	7	7	6	4	5	8
NOVEMBER																																
MAXIMUM	9	8	7	7	7	8	8	8	8	7	7	7	7	8	7	8	7	6	6	5	4	3	4	4	3	3	3	3	2	3	--	6
MINIMUM	5	6	5	5	6	6	6	7	6	6	6	6	6	6	6	6	4	4	3	2	2	1	1	1	1	0	0	1	1	0	--	4
DECEMBER																																
MAXIMUM	2	1	3	4	3	1	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	--	--	--	1
MINIMUM	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	--	--	--	1
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	--
FEBRUARY																																
MAXIMUM	1	1	1	1	1	1	1	1	1	1	1	3	3	2	3	3	3	4	4	4	6	7	9	9	10	11	9	9	9	--	--	4
MINIMUM	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	3	3	3	3	5	7	7	7	7	8	7	7	--	--	3
MARCH																																
MAXIMUM	9	10	10	11	9	9	8	8	9	9	8	6	7	7	10	8	7	7	9	11	11	9	10	12	9	12	13	15	16	17	16	10
MINIMUM	8	7	7	7	6	6	6	6	4	4	4	3	3	4	4	4	3	3	3	4	5	7	6	6	7	5	6	8	9	10	11	6
APRIL																																
MAXIMUM	13	12	12	11	10	11	13	15	17	18	17	14	14	15	13	10	10	12	16	12	11	11	11	13	13	14	16	16	17	17	--	13
MINIMUM	11	8	6	8	8	5	6	7	9	11	11	10	7	8	9	8	5	6	10	7	7	5	8	6	9	9	9	9	12	13	--	8
MAY																																
MAXIMUM	17	18	17	17	16	15	17	18	18	18	16	17	13	12	16	18	17	18	16	16	15	13	12	13	13	16	19	20	21	21	22	17
MINIMUM	11	12	12	13	11	9	10	12	13	13	12	11	9	8	10	12	14	14	15	13	12	11	9	9	11	13	15	17	16	14	13	12
JUNE																																
MAXIMUM	21	18	20	21	16	16	17	19	20	20	20	19	19	21	24	26	27	28	26	26	26	27	28	28	28	28	28	26	24	23	--	23
MINIMUM	15	14	15	15	13	13	13	15	16	17	16	16	16	18	20	19	19	19	20	21	21	21	21	19	20	20	21	18	16	17	--	17
JULY																																
MAXIMUM	25	23	25	27	26	27	28	27	27	26	24	24	25	25	25	24	24	26	24	26	25	26	25	24	24	26	26	27	25	27	24	25
MINIMUM	18	19	18	20	24	22	22	21	20	19	18	18	17	19	18	17	17	17	17	16	15	16	16	14	17	16	18	18	20	19	19	18
AUGUST																																
MAXIMUM	25	27	26	24	23	23	22	22	22	24	24	23	20	19	19	17	18	17	15	14	14	16	17	18	17	17	17	19	20	21	23	20
MINIMUM	19	18	18	18	16	16	18	19	20	18	17	16	16	16	14	14	13	14	13	13	12	13	14	15	16	14	15	16	17	17	18	16
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	21	19	18	18	18	20	18	15	14	14	14	17	16	16	16	16	16	16	16	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	14	14	13	12	11	12	13	11	10	8	8	9	11	12	12	12	12	10	11	--	--

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 8, 1967	1315	7	56	35	5.3	--	--	--	--	--	--	--	--	--	--	--	
JAN 16, 1968	1500	1	310	127	106	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	1720	4	1430	223	861	47	56	67	75	79	91	93	96	100	--	--	SCBW
FEB 22.....	1650	7	2180	118	695	43	56	74	80	84	93	94	96	100	--	--	SCBW
APR 2.....	--	11	95	30	7.7	--	--	--	--	--	--	--	--	--	--	--	
MAY 14.....	1300	11	238	84	54	--	20	55	63	70	95	98	99	100	--	--	SCBW
MAY 22.....	1300	11	98	89	24	--	--	--	--	--	--	--	--	--	--	--	
JUL 16.....	1015	17	28	38	2.9	--	--	--	--	--	--	--	--	--	--	--	
SEP 11.....	1015	15	24	51	3.3	--	--	--	--	--	--	--	--	--	--	--	

11-3650. PIT RIVER NEAR MONTGOMERY CREEK, CALIF.

LOCATION.--Lat 40°50'36", long 122°00'58", in SE¼ sec.31, T.35 N., R.1 W., Shasta County, at gaging station on right bank, 0.5 mile upstream from Potem Creek, 1.9 miles downstream from Pit No. 7 dam and powerhouse, and 5.0 miles west of town of Montgomery Creek.
DRAINAGE AREA.--4,951 sq mi, approximately, excluding Goose Lake basin.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1968.
Water temperatures: June to September 1951, October 1953 to September 1957, October 1958 to August 1959.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT. 10...	5050	--	--	9.7	--	77	0	--	3.4	--	.02
NOV. 07...	3370	--	--	9.5	--	79	0	--	6.7	--	.02
DEC. 13...	3600	--	--	9.9	--	80	0	--	3.0	--	.06
JAN. 05...	4240	--	--	8.6	--	80	0	--	--	--	.04
FEB. 09...	5300	--	--	7.2	--	76	0	--	2.3	--	.07
MAR. 07...	6730	--	--	6.0	--	62	0	--	2.0	--	.04
APR. 02...	7340	--	--	6.6	--	72	0	--	1.5	--	.01
MAY 07...	5360	10	5.1	8.7	1.8	73	0	.0	2.7	.3	.08
JUNE 10...	4290	--	--	9.2	--	77	0	--	2.5	--	.11
JULY 05...	4380	--	--	8.7	--	83	0	--	3.0	--	.02
AUG. 07...	3070	--	--	10	--	80	0	--	3.0	--	.02
SEPT. 06...	4720	10	5.6	10	2.2	80	0	4.6	3.2	.0	.09

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT. 10...	--	48	0	--	31	.6	63	141	7.9	14	9.8
NOV. 07...	--	49	0	--	30	.6	65	139	8.0	11	11.3
DEC. 13...	--	51	0	--	30	.6	66	148	8.0	5	12.4
JAN. 05...	--	50	0	--	27	.5	66	143	8.1	5	12.4
FEB. 09...	--	50	0	--	24	.4	62	140	7.7	5	12.4
MAR. 07...	--	42	0	--	24	.4	51	116	8.0	9	10.8
APR. 02...	--	46	0	--	24	.4	59	130	7.9	11	11.0
MAY 07...	88	46	0	.12	28	.6	60	130	8.0	13	10.7
JUNE 10...	--	51	0	--	28	.6	63	138	8.2	16	10.4
JULY 05...	--	54	0	--	26	.5	68	154	8.2	18	8.6
AUG. 07...	--	49	0	--	31	.6	66	142	8.2	19	9.4
SEPT. 06...	108	48	0	.15	30	.6	66	145	8.0	16	10.3

11-3680. MCCLOUD RIVER ABOVE SHASTA LAKE, CALIF.

LOCATION.--Lat 40°57'30", long 122°13'05", 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.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1968.
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 IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
09...	317	--	--	5.7	--	60	0	--	1.7	--	.03
NOV.											
08...	305	--	--	5.0	--	62	0	--	1.5	--	.00
DEC.											
12...	334	--	--	5.2	--	59	0	--	1.6	--	.05
JAN.											
03...	297	--	--	4.0	--	36	0	--	--	--	.00
FEB.											
13...	778	--	--	2.5	--	54	0	--	--	--	.03
MAR.											
06...	764	--	--	3.1	--	58	0	--	.5	--	.00
APR.											
01...	727	--	--	2.6	--	59	0	--	--	--	.00
MAY											
06...	348	16	2.9	4.2	.5	65	0	1.8	1.7	.0	.06
JUNE											
10...	334	--	--	4.4	--	62	0	--	1.3	--	.05
JULY											
03...	289	--	--	3.4	--	64	0	--	1.7	--	.00
AUG.											
06...	265	--	--	5.4	--	62	0	--	1.5	--	.00
SEPT.											
04...	273	12	3.6	5.6	1.1	62	0	2.0	1.4	.0	.00

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC CONDUCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
09...	--	43	0	--	22	.4	49	112	7.6	10	10.5
NOV.											
08...	--	43	0	--	20	.3	51	109	8.1	9	11.1
DEC.											
12...	--	44	0	--	20	.3	48	115	7.9	14	12.5
JAN.											
03...	--	46	16	--	16	.3	30	113	8.0	2	12.7
FEB.											
13...	--	43	0	--	11	.2	44	101	7.7	6	12.2
MAR.											
06...	--	48	0	--	12	.2	48	107	8.0	7	11.0
APR.											
01...	--	45	0	--	11	.2	48	108	7.9	9	9.5
MAY											
06...	76	52	0	.10	15	.3	53	118	8.0	10	10.2
JUNE											
10...	--	48	0	--	17	.3	51	110	8.2	16	10.1
JULY											
03...	--	47	0	--	14	.2	52	113	8.2	16	9.9
AUG.											
06...	--	48	0	--	20	.3	51	111	8.2	16	9.5
SEPT.											
04...	88	45	0	.12	21	.4	51	112	8.0	14	10.1

11-3705. SACRAMENTO RIVER AT KESWICK DAM, NEAR KESWICK, CALIF.
(Formerly reported as Sacramento River at Keswick, Calif.)

LOCATION.--Lat 40°36'05", long 122°26'35", 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.
RECORDS AVAILABLE.--Chemical analyses: December 1953 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
09...	9600	8.8	4.4	4.9	--	54	0	3.4	1.7	--	.00
NOV.											
02...	8180	--	--	4.9	--	57	0	4.3	1.7	--	.00
DEC.											
11...	8290	--	--	7.6	--	66	0	2.5	3.7	--	.04
JAN.											
17...	6650	--	--	5.8	--	66	0	4.6	1.6	--	.08
FEB.											
05...	6680	--	--	6.4	--	66	0	3.8	1.4	--	.00
MAR.											
07...	12100	--	--	5.5	--	61	0	5.8	1.6	--	.02
APR.											
05...	6040	--	--	5.4	--	62	0	4.6	1.6	--	.00
MAY											
01...	10000	8.5	5.4	5.4	.5	56	0	2.6	2.1	.1	.01
JUNE											
12...	10500	--	--	5.0	--	57	0	3.3	1.8	--	.00
JULY											
05...	13900	--	--	3.8	--	58	0	--	1.7	--	.03
AUG.											
01...	14200	--	--	5.5	--	57	0	2.3	1.9	--	.00
SEPT.											
06...	9790	9.2	4.9	5.8	1.1	60	0	3.3	2.0	.0	.00

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
09...	--	40	0	--	21	.3	44	102	7.9	11	10.1
NOV.											
02...	--	41	0	--	21	.3	47	106	7.9	11	8.8
DEC.											
11...	--	48	0	--	26	.5	54	138	8.0	10	10.5
JAN.											
17...	--	48	0	--	21	.4	54	122	7.9	8	11.1
FEB.											
05...	--	46	0	--	23	.4	54	125	7.5	8	11.6
MAR.											
07...	--	47	0	--	20	.3	50	123	7.9	7	11.1
APR.											
05...	--	44	0	--	21	.4	51	118	7.7	8	12.1
MAY											
01...	67	43	0	.09	21	.4	46	107	7.6	9	11.0
JUNE											
12...	--	42	0	--	21	.3	47	110	8.0	9	10.7
JULY											
05...	--	43	0	--	16	.3	48	110	8.2	10	10.3
AUG.											
01...	--	45	0	--	21	.4	47	109	8.0	12	10.0
SEPT.											
06...	85	43	0	.12	22	.4	49	113	7.7	12	10.4

11-3720. CLEAR CREEK NEAR IGO, CALIF.

LOCATION.--Lat 40°30'50", long 122°31'20", 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.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1966.
Water temperatures: March 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 19°C Aug. 2; minimum, 2°C sometime during period Jan. 3 to Feb. 1.
EXTREMES, 1965-68.--Water temperatures: Maximum, 21°C July 1, 1967; minimum, 2°C sometime during period Jan. 3 to Feb. 1, 1968.
REMARKS.--Recorder malfunctioned Jan. 3 to Feb. 1, Aug. 24 to Sept. 3; temperature ranges, 2°C to 7°C and 14°C to 18°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	14	13	13	13	13	13	13	13	13	13	13	13	13	13	12	12	13	13	13	13	13	13	13	12	13	13	12	12	12	12	12	13
MINIMUM	12	11	11	11	12	11	11	11	11	11	11	11	10	10	9	9	9	10	11	10	11	11	11	11	11	10	10	11	9	9	9	10
NOVEMBER																																
MAXIMUM	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	11	10	10	10	10	9	9	9	9	9	--	11
MINIMUM	10	10	10	10	11	11	11	11	11	11	11	11	10	11	10	10	10	10	10	9	9	8	8	9	8	8	8	8	8	8	--	10
DECEMBER																																
MAXIMUM	8	8	8	9	9	9	8	8	9	8	8	8	7	6	7	7	7	7	7	7	7	8	8	8	8	8	6	8	8	7	7	8
MINIMUM	8	7	7	8	8	7	7	7	7	7	7	7	6	5	6	6	4	4	6	6	7	7	7	7	7	7	7	7	7	6	6	7
JANUARY																																
MAXIMUM	7	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	6	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	7	8	8	8	9	8	8	9	9	9	9	9	8	8	9	11	11	11	11	12	12	12	12	12	12	12	11	11	--	--	10
MINIMUM	--	6	7	6	7	7	7	7	8	8	8	8	8	7	8	8	9	10	10	11	11	11	12	11	10	9	9	9	8	--	--	8
MARCH																																
MAXIMUM	11	11	11	11	11	10	10	11	11	11	10	10	8	11	10	10	10	11	11	11	11	11	11	12	12	11	12	13	13	13	13	11
MINIMUM	9	9	9	9	9	8	9	8	9	7	8	8	8	8	9	9	8	7	7	7	7	8	9	8	9	8	8	8	9	9	9	8
APRIL																																
MAXIMUM	13	11	11	11	11	12	12	13	13	14	14	14	12	13	13	12	12	13	13	12	12	13	13	13	13	14	14	14	15	15	--	13
MINIMUM	9	8	8	8	9	8	8	9	9	9	11	9	8	8	9	9	8	8	9	9	8	8	9	9	10	11	11	10	11	11	--	9
MAY																																
MAXIMUM	14	16	16	16	16	14	14	16	16	16	16	16	15	13	16	16	16	16	16	15	15	16	16	15	16	16	17	17	17	16	16	15
MINIMUM	11	11	12	12	11	11	11	11	12	11	12	12	10	11	11	11	12	12	13	13	12	12	12	11	12	12	12	13	12	12	12	11
JUNE																																
MAXIMUM	16	16	14	15	15	14	14	14	15	15	15	15	15	16	16	16	17	17	17	17	17	17	18	17	17	18	17	17	16	16	--	16
MINIMUM	12	12	12	11	11	11	10	11	12	13	12	11	11	13	13	14	14	14	15	15	15	14	16	14	14	16	16	15	13	14	--	13
JULY																																
MAXIMUM	16	16	17	17	18	18	18	18	18	17	17	17	18	17	17	18	18	18	18	18	18	17	18	17	17	17	17	17	17	18	17	17
MINIMUM	14	14	14	16	16	16	16	16	16	15	15	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15	15	15	16	15	14	15
AUGUST																																
MAXIMUM	18	19	18	18	17	17	17	17	17	17	17	17	17	17	17	17	16	16	16	16	16	16	17	--	--	--	--	--	--	--	--	--
MINIMUM	15	17	17	16	16	16	16	17	16	16	16	15	15	16	14	14	14	14	14	14	13	14	14	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	16	17	17	16	16	16	16	16	15	16	16	15	15	16	16	15	14	13	13	14	14	14	14	14	14	14	14	--	15
MINIMUM	--	--	--	14	15	15	15	14	15	14	14	14	14	14	13	13	14	14	14	12	12	12	13	13	12	12	12	12	12	13	--	13

11-3722. SOUTH COW CREEK NEAR MILLVILLE, CALIF.

LOCATION.--Lat 40°32'55", long 122°05'30", 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.
RECORDS AVAILABLE.--Water temperatures: December 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 29°C July 5, 6, 19, Aug. 2; minimum, 3°C on several days during December and January.
EXTREMES, 1965-68.--Water temperatures: Maximum, 31°C Aug. 6, 7, 1966; minimum (1965-68), 1°C Dec. 17, 19, 20, 1965.
REMARKS.--Clock stopped Oct. 23-31, Nov. 6 to Dec. 5, June 5 to July 3, Sept. 16-30; temperature ranges, 9°C to 16°C, 7°C to 14°C, 14°C to 26°C, and 13°C to 22°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	20	17	16	16	17	16	17	17	17	17	18	17	17	16	15	16	16	16	16	16	14	16	--	--	--	--	--	--	--	--	--	--
MINIMUM	17	14	13	13	14	12	12	13	13	13	14	14	12	12	11	11	11	11	11	11	12	12	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	16	15	14	14	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	11	12	12	13	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	9	9	8	8	8	8	7	6	3	4	3	6	7	7	7	8	8	9	9	9	11	11	10	9	8	7	8
MINIMUM	--	--	--	--	--	8	8	7	7	6	6	6	4	3	3	6	4	5	6	6	6	7	7	7	7	7	8	8	7	5	6	6
JANUARY																																
MAXIMUM	7	7	6	6	6	6	6	6	6	6	5	6	8	8	8	8	8	8	8	9	9	8	8	7	6	6	5	5	6	7		7
MINIMUM	5	4	4	4	3	3	4	5	3	3	3	4	6	7	8	8	6	6	6	6	8	7	7	6	6	4	4	4	4	4	6	5
FEBRUARY																																
MAXIMUM	7	6	8	8	8	9	9	9	9	9	10	10	9	8	8	9	10	10	11	11	11	11	12	11	11	11	10	10	9	--	--	9
MINIMUM	5	5	6	6	7	7	7	7	9	9	9	9	7	7	8	8	9	9	10	10	10	10	10	9	8	8	8	7	8	--	--	8
MARCH																																
MAXIMUM	9	10	10	10	11	10	9	11	11	9	11	9	9	9	9	9	10	10	10	10	10	11	12	12	13	11	11	12	13	14	15	11
MINIMUM	9	8	8	8	10	9	9	8	8	7	8	8	7	8	8	8	8	7	7	7	8	9	9	9	11	8	8	9	11	11	12	8
APRIL																																
MAXIMUM	13	13	12	12	13	12	13	13	14	16	16	14	13	14	13	12	12	12	13	13	12	13	12	14	15	17	17	17	18	18	--	14
MINIMUM	11	10	9	10	10	9	9	10	11	12	13	12	9	9	11	9	7	7	9	8	8	7	9	9	10	11	12	11	12	13	--	10
MAY																																
MAXIMUM	17	18	19	19	18	17	17	18	18	19	18	19	14	15	18	19	18	20	17	17	18	18	18	17	19	21	22	21	23	22	23	19
MINIMUM	13	12	13	14	12	11	11	12	13	13	14	13	11	11	11	12	14	15	16	14	14	14	13	13	14	13	14	16	16	16	16	13
JUNE																																
MAXIMUM	24	20	22	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	17	17	17	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	--	--	28	29	29	28	28	28	27	27	27	27	27	27	28	28	28	29	28	28	28	28	26	28	27	28	27	26	28	26	28
MINIMUM	--	--	--	21	22	23	23	22	22	22	20	20	21	21	21	22	21	21	22	22	22	21	22	22	22	21	21	22	23	22	23	22
AUGUST																																
MAXIMUM	28	29	28	27	27	27	26	26	27	27	26	26	24	24	24	23	24	23	21	18	19	21	23	23	21	22	23	22	24	26	26	24
MINIMUM	22	23	23	22	21	20	20	22	21	21	21	22	21	21	20	20	18	20	18	16	16	16	17	17	18	19	18	18	18	19	20	20
SEPTEMBER																																
MAXIMUM	26	26	24	25	26	25	25	24	24	23	23	23	22	22	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	21	21	20	20	20	20	19	19	19	19	19	19	19	17	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-3740. COW CREEK NEAR MILLVILLE, CALIF.

LOCATION.--Lat 40°30'20", long 122°13'55", in NE¼NW¼ sec.32, T.31 N., R.3 W., Shasta County, temperature recorder at gaging station on right bank, 4.2 miles southwest of Millville, and 4.3 miles downstream from Little Cow Creek.
DRAINAGE AREA.--425 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1966.
Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, freezing point Dec. 14, 15, Jan. 10, 11.
EXTREMES, 1965-68.--Water temperatures: Maximum (1966-67), 32°C Aug. 3, 4, 7, 1966; minimum, freezing point Dec. 14, 15, 1967, Jan. 10, 11, 1968.
REMARKS.--Clock stopped June 4 to July 3; temperature range, 21°C to 32°C. Recorder malfunctioned July 11-30, Aug. 3-8, Aug. 15 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	24	23	20	19	20	20	19	20	20	21	21	21	20	19	18	18	18	18	18	18	17	18	18	18	18	18	17	17	16	15	16	19
MINIMUM	23	20	18	18	19	18	18	18	19	19	19	19	18	17	16	16	16	16	16	16	17	16	17	17	17	16	16	16	14	13	13	17
NOVEMBER																																
MAXIMUM	17	17	16	16	16	16	16	16	16	17	17	16	14	15	15	14	14	14	14	13	13	11	11	11	11	9	9	9	9	9	--	14
MINIMUM	14	15	15	15	15	16	15	16	16	16	16	14	14	14	14	13	14	13	13	12	11	10	9	10	9	8	8	8	9	8	--	13
DECEMBER																																
MAXIMUM	8	8	8	9	9	8	8	7	7	6	6	5	3	2	2	3	3	4	4	4	4	6	6	7	7	8	9	8	7	6	4	6
MINIMUM	7	8	7	7	7	6	6	4	4	4	4	3	1	0	0	2	2	3	3	4	3	4	4	4	5	6	7	6	6	3	3	4
JANUARY																																
MAXIMUM	4	4	4	4	4	3	3	3	3	3	3	4	6	6	6	7	6	7	7	7	7	9	8	8	7	6	5	4	4	5	6	5
MINIMUM	3	2	2	3	2	2	3	3	2	0	0	1	4	6	6	6	3	4	4	4	5	6	6	5	5	4	4	3	3	3	5	3
FEBRUARY																																
MAXIMUM	6	5	8	8	7	9	9	9	10	10	10	11	11	9	9	9	10	11	11	11	12	12	12	12	13	13	13	13	13	--	--	10
MINIMUM	4	4	5	4	6	6	6	6	8	9	8	8	8	8	8	8	9	10	10	10	11	11	11	11	11	10	11	11	11	--	--	8
MARCH																																
MAXIMUM	13	13	13	13	13	13	12	12	13	13	13	13	12	12	12	13	13	13	13	13	13	13	14	14	16	16	16	15	16	16	16	13
MINIMUM	12	11	11	11	12	11	11	11	11	11	11	12	11	11	11	12	11	11	11	11	11	12	12	12	13	13	13	12	13	13	14	12
APRIL																																
MAXIMUM	17	16	16	16	16	16	16	16	16	17	17	17	17	17	17	16	16	16	16	16	16	16	16	16	16	17	17	17	18	18	--	16
MINIMUM	16	14	14	14	14	14	14	14	13	14	14	16	14	13	14	14	13	13	13	14	13	13	13	13	14	14	14	14	14	15	--	14
MAY																																
MAXIMUM	18	18	18	19	19	19	18	19	18	19	19	21	20	18	18	20	20	21	21	21	21	21	22	22	21	22	23	24	24	25	25	20
MINIMUM	16	16	16	17	17	16	16	16	17	17	17	18	18	16	16	17	18	18	20	19	19	19	19	21	19	19	20	21	22	23	23	18
JUNE																																
MAXIMUM	26	26	26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	23	24	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	--	--	25	26	26	26	25	24	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	32	--
MINIMUM	--	--	--	21	22	22	22	22	21	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--
AUGUST																																
MAXIMUM	32	33	--	--	--	--	--	--	32	32	32	31	30	29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	28	29	--	--	--	--	--	--	28	28	28	28	27	27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-3744. MIDDLE FORK COTTONWOOD CREEK NEAR ONO, CALIF.

LOCATION.--Lat 40°23'25", long 122°31'15", in SE¼SE¼ sec.3, T.29 N., R.6 W., Shasta County, temperature recorder at gaging station on left bank, 0.4 mile upstream from North Fork, and 7.8 miles southeast of Ono.
DRAINAGE AREA.--249 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1963 to September 1965, July to September 1968.
Sediment records: October 1963 to September 1968.
REMARKS.--Sediment analyses for the 1967 water year were reported as miscellaneous analyses.

TEMPERATURE (°C) OF WATER, JULY TO SEPTEMBER 1968

MONTH	DAY 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
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	30	30	31	29	28	30	27	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23	23	22	23	23	25	24	25	--
AUGUST																																
MAXIMUM	31	31	30	29	29	29	29	29	29	29	28	27	27	26	26	26	26	26	24	22	22	25	26	27	23	26	27	27	27	28	28	27
MINIMUM	25	24	24	24	23	23	23	24	23	22	22	22	22	22	20	21	20	21	21	19	19	19	20	21	22	22	21	21	21	21	22	22
SEPTEMBER																																
MAXIMUM	28	28	27	27	27	27	27	26	26	26	26	26	24	24	23	23	24	24	22	22	21	20	22	22	22	22	22	21	21	21	--	24
MINIMUM	22	22	22	21	22	21	21	21	22	21	21	21	19	20	18	18	18	19	18	17	16	15	16	16	17	17	17	17	16	17	--	19

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 12, 1967	1200	19	18	2	.10	--	--	--	--	--	--	--	--	--	--	--	
NOV 2.....	1330	17	15	3	.12	--	--	--	--	--	--	--	--	--	--	--	
DEC 4.....	1100	7	139	21	7.9	--	--	--	--	--	--	--	--	--	--	--	
JAN 9, 1968	1030	2	65	1	.18	--	--	--	--	--	--	--	--	--	--	--	
JAN 15.....	1120	6	2370	937	6000	22	30	42	53	61	67	79	91	100	--	--	VPWC
JAN 16.....	1110	6	1190	484	1560	22	31	40	45	48	67	79	93	100	--	--	VCBW
JAN 30.....	1317	3	374	175	177	26	36	45	50	51	67	75	91	100	--	--	VCBW
FEB 17.....	1630	11	1570	633	2680	24	35	44	54	67	73	78	88	99	100	--	VPWC
FEB 20.....	1450	9	3760	2150	21800	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	1455	9	3660	1790	17700	18	28	35	49	60	66	79	94	99	100	--	VPWC
MAR 1.....	1050	7	770	128	266	25	36	47	55	59	69	72	84	96	100	--	SCBW
MAR 19.....	1100	7	332	14	13	--	--	--	--	--	--	--	--	--	--	--	
APR 1.....	1220	12	276	11	8.2	--	--	--	--	--	--	--	--	--	--	--	
APR 11.....	0955	13	183	4	2.0	--	--	--	--	--	--	--	--	--	--	--	
MAY 9.....	0930	14	87	1	.23	--	--	--	--	--	--	--	--	--	--	--	
JUN 4.....	0945	17	59	2	.32	--	--	--	--	--	--	--	--	--	--	--	
JUL 1.....	1300	26	20	1	.05	--	--	--	--	--	--	--	--	--	--	--	
JUL 29.....	1045	25	7.0	2	.04	--	--	--	--	--	--	--	--	--	--	--	
AUG 13.....	1320	24	5.5	5	.07	--	--	--	--	--	--	--	--	--	--	--	
AUG 27.....	1300	23	18	3	.15	--	--	--	--	--	--	--	--	--	--	--	
SEP 16.....	1100	18	8.0	2	.04	--	--	--	--	--	--	--	--	--	--	--	

11-3760. COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'10", long 122°14'15", 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.--922 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
Water temperatures: October 1962 to September 1967.
Sediment records: October 1962 to September 1967.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
09...	108	--	--	8.6	--	114	0	--	8.1	--	.01
NOV.											
02...	84	--	--	9.1	--	129	0	--	9.0	--	.00
DEC.											
11...	296	--	--	17	--	135	0	--	24	--	.07
JAN.											
16...	4060	--	--	6.2	--	87	0	--	3.7	--	.00
FEB.											
06...	1440	--	--	8.3	--	113	0	--	4.7	--	.03
MAR.											
07...	1160	--	--	7.8	--	129	0	--	5.6	--	.01
APR.											
05...	605	--	--	7.6	--	124	0	--	5.2	--	.00
MAY											
01...	332	26	13	9.9	.5	137	0	13	7.7	.5	.03
JUNE											
13...	217	--	--	9.2	--	128	2	--	7.8	--	.00
JULY											
02...	86	--	--	6.8	--	113	3	--	7.2	--	.07
AUG.											
01...	48	--	--	8.5	--	97	9	--	3.7	--	.00
SEPT.											
06...	63	18	11	8.8	--	113	0	6.1	4.9	.0	.00

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
09...	--	96	2	--	16	.4	94	229	7.9	23	9.0
NOV.											
02...	--	108	2	--	16	.4	106	248	8.2	16	9.9
DEC.											
11...	--	153	42	--	19	.6	111	374	8.1	6	12.0
JAN.											
16...	--	81	10	--	14	.3	71	185	8.1	7	11.8
FEB.											
06...	--	102	9	--	15	.4	93	241	8.0	10	11.4
MAR.											
07...	--	125	19	--	12	.3	106	264	8.2	10	10.8
APR.											
05...	--	107	5	--	13	.3	102	250	8.1	13	10.2
MAY											
01...	150	118	6	.20	15	.4	112	267	8.2	18	9.8
JUNE											
13...	--	111	3	--	15	.4	108	258	8.4	18	8.0
JULY											
02...	--	99	1	--	13	.3	98	229	8.6	24	10.5
AUG.											
01...	--	91	0	--	17	.4	94	206	8.7	27	13.5
SEPT.											
06...	127	91	0	.17	18	.4	93	212	8.2	24	11.9

11-3765.5. BATTLE CREEK BELOW COLEMAN FISH HATCHERY, NEAR COTTONWOOD, CALIF.

LOCATION (revised).--Lat 40°23'55", long 122°08'45", in SW¼NE¼ sec.1, T.29 N., R.3 W., temperature recorder at C 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.--358 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1961 to September 1966.
Water temperatures: December 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 21°C on several days in June; minimum, 3°C Jan. 10.
EXTREMES, 1965-68.--Water temperatures: Maximum, 21°C July 31, Aug. 1, 1967 and on several days in June 1968; minimum, 3°C Jan. 10, 1968.
REMARKS.--Clock stopped Dec. 4 to Jan. 9; temperature range, 6°C to 11°C. Temperature records prior to June 3 are from site at gaging station 300 ft downstream.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	16	16	14	14	14	14	14	14	14	14	15	15	14	13	13	13	13	13	13	13	13	13	14	13	13	13	13	13	13	12	13	14
MINIMUM	15	14	14	13	13	13	13	14	14	14	14	14	13	13	12	13	13	13	13	13	13	13	13	13	13	13	13	13	12	12	12	13
NOVEMBER																																
MAXIMUM	13	13	13	13	13	13	13	13	13	13	13	12	13	13	13	12	12	12	12	12	12	11	11	11	11	11	10	10	10	10	--	12
MINIMUM	12	13	12	12	13	12	12	13	13	13	12	12	12	13	12	12	12	12	12	11	11	11	11	11	11	9	10	9	9	9	--	12
DECEMBER																																
MAXIMUM	10	10	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	9	9	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	6	6	7	8	8	7	7	7	7	8	8	9	9	9	9	8	9	7	7	7	7	8	--
MINIMUM	--	--	--	--	--	--	--	--	--	3	4	5	7	7	7	7	6	6	7	7	8	8	8	8	8	7	7	7	6	6	7	--
FEBRUARY																																
MAXIMUM	8	8	9	9	9	10	11	11	11	11	11	11	11	10	10	10	11	11	12	12	11	11	12	12	11	11	11	11	11	--	--	11
MINIMUM	7	7	8	8	9	9	10	9	11	11	11	11	10	9	10	10	10	10	11	10	11	10	11	10	10	10	10	10	10	--	--	10
MARCH																																
MAXIMUM	11	12	12	12	12	11	11	11	11	11	11	11	10	11	11	11	10	10	11	11	11	11	12	12	12	12	12	13	13	14	13	11
MINIMUM	11	10	10	11	11	10	10	10	10	10	10	9	9	9	10	9	8	9	9	9	10	11	11	11	11	9	10	11	12	12	12	10
APRIL																																
MAXIMUM	13	12	12	12	13	13	12	13	14	14	15	15	13	14	14	13	12	13	13	13	12	13	13	13	14	14	14	15	16	16	--	13
MINIMUM	11	11	10	11	11	11	11	11	12	12	13	13	11	12	12	12	11	11	12	11	11	11	12	11	12	13	13	13	13	14	--	12
MAY																																
MAXIMUM	16	16	16	16	16	14	14	15	15	16	15	16	15	13	14	16	16	16	16	15	14	15	15	15	16	16	17	17	17	17	17	15
MINIMUM	14	13	14	14	14	12	12	13	13	14	14	13	13	12	12	13	14	14	14	14	13	13	13	13	13	14	14	16	15	15	15	14
JUNE																																
MAXIMUM	17	17	17	18	17	16	17	17	17	17	17	17	16	18	19	19	21	21	20	19	20	19	20	21	21	21	21	21	19	17	--	19
MINIMUM	16	16	14	15	14	13	13	14	14	14	15	14	14	14	15	16	17	17	17	17	17	17	17	17	17	18	18	17	14	14	--	16
JULY																																
MAXIMUM	19	19	19	18	18	18	18	19	19	19	18	18	18	18	18	18	19	19	19	19	19	18	18	18	18	18	19	18	17	19	19	19
MINIMUM	15	17	17	17	16	17	17	16	17	17	16	16	17	17	16	16	16	16	17	17	16	16	16	16	16	16	16	17	17	16	17	16
AUGUST																																
MAXIMUM	19	19	19	19	18	18	18	18	18	18	18	18	17	17	17	17	16	16	16	14	16	16	16	17	16	16	17	17	18	18	18	17
MINIMUM	16	17	17	17	16	16	16	17	16	16	16	16	15	15	15	14	13	14	14	13	12	12	13	14	14	14	14	14	15	16	16	15
SEPTEMBER																																
MAXIMUM	18	18	17	17	18	17	17	17	16	17	17	17	16	16	16	16	17	16	16	14	13	13	14	15	15	16	16	15	14	14	--	16
MINIMUM	16	16	16	15	16	16	15	15	15	14	14	14	14	14	14	13	14	14	13	12	11	11	12	13	13	13	13	13	13	12	--	14

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 2, 1967	1700	13	244	6	4.0	--	--	--	--	--	--	--	--	--	--	--	
DEC 4.....	1000	9	440	8	9.5	--	--	--	--	--	--	--	--	--	--	--	
JAN 9, 1968	1430	7	280	4	3.0	--	--	--	--	--	--	--	--	--	--	--	
FEB 12.....	1555	11	464	11	14	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	1135	10	2440	147	968	16	26	35	39	41	65	72	81	98	100	--	VCBW
MAR 19.....	1500	9	608	4	6.6	--	--	--	--	--	--	--	--	--	--	--	
MAY 3.....	1115	14	410	8	8.9	--	--	--	--	--	--	--	--	--	--	--	
JUN 4.....	1050	16	350	7	6.6	--	--	--	--	--	--	--	--	--	--	--	
JUL 31.....	1030	17	220	8	4.8	--	--	--	--	--	--	--	--	--	--	--	
SEP 5.....	1430	16	234	14	8.8	--	--	--	--	--	--	--	--	--	--	--	

11-3772. SACRAMENTO RIVER AT BEND, CALIF.

LOCATION (revised).--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, approximately 7.9 miles upstream from gaging station near Red Bluff, 0.3 mile upstream from Spring Creek, and approximately 9 miles north of Red Bluff.
DRAINAGE AREA.--9,022 sq mi, excluding Goose Lake basin (at gaging station).
RECORDS AVAILABLE.--Chemical analyses: May 1955 to September 1968.
Water temperatures: May 1955 to September 1968.
Sediment records: October 1957 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, 4°C Jan. 26.
Sediment concentrations: Maximum daily, 957 mg/l Jan. 15; minimum daily, 2 mg/l on several days.
Sediment loads: Maximum daily, 106,000 tons Jan. 15; minimum daily, 42 tons Nov. 21, 22.
EXTREMES, 1955-68.--Water temperatures: Maximum (1955-66), 19°C June 1, 1960; minimum, 3°C Jan. 22, 1962.
Sediment concentrations (1957-68): Maximum daily, 2,920 mg/l Dec. 24, 1964; minimum daily, 1 mg/l on many days in 1964, July 12, 1967.
Sediment loads (1957-68): Maximum daily, 876,000 tons Dec. 22, 1964; minimum daily, 12 tons Dec. 8-10, 15, 1964.
REMARKS.--Records of daily discharge data given for station 11-3780. Sacramento River near Red Bluff. No appreciable inflow between sampling point and gaging station except during periods of heavy local runoff.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	PHOS-PHATE (PO4)
OCT.											
09...	9750	--	--	5.0	--	57	0	--	2.5	.7	.09
NOV.											
01...	10000	--	--	5.3	--	58	0	--	2.4	.5	.03
DEC.											
11...	9430	--	--	6.3	--	64	0	--	2.0	.7	.05
JAN.											
16...	20100	--	--	5.8	--	57	0	--	2.0	2.1	.45
FEB.											
06...	10800	--	--	6.8	--	70	0	--	2.7	1.1	.04
MAR.											
07...	16000	--	--	6.0	--	66	0	--	2.2	.1	.06
APR.											
05...	8370	--	--	6.2	--	71	0	--	2.2	.3	.00
MAY											
01...	10500	9.5	5.7	6.3	.6	62	0	4.3	2.8	.2	.34
JUNE											
13...	10500	--	--	5.4	--	60	0	--	2.1	.3	.06
JULY											
02...	13500	--	--	5.9	--	48	6	--	2.1	1.0	.07
AUG.											
01...	14500	--	--	5.6	--	58	0	--	2.0	.1	.02
SEPT.											
03...	10500	9.4	4.7	5.1	1.0	61	0	3.4	2.8	.1	.09

DATE	BORON (B)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.										
09...	.04	44	0	20	.3	47	114	8.0	11	9.2
NOV.										
01...	.05	45	0	20	.3	48	110	7.9	12	10.9
DEC.										
11...	.05	49	0	22	.4	52	120	7.7	12	9.5
JAN.										
16...	.11	46	0	22	.4	47	120	7.8	8	11.4
FEB.										
06...	.04	55	0	21	.4	57	145	7.7	8	11.4
MAR.										
07...	.00	61	7	18	.3	54	134	7.8	8	11.0
APR.										
05...	.00	51	0	21	.4	58	137	7.8	11	11.4
MAY										
01...	.11	47	0	22	.4	51	122	7.9	11	10.7
JUNE										
13...	.00	45	0	21	.4	49	115	8.0	12	10.9
JULY										
02...	.04	45	0	22	.4	49	146	9.1	12	11.3
AUG.										
01...	.02	46	0	21	.4	48	127	8.2	12	11.0
SEPT.										
03...	.00	43	0	20	.3	50	113	7.9	13	11.1

11-3772. SACRAMENTO RIVER AT BEND, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	15	--	15	--	15	--	--	15	--	15	--	15	--	--	13	--	13	--	13	--	--	13	--	13	--	13	--	--	13	--
NOVEMBER.	13	--	13	--	13	13	--	13	13	13	13	13	12	13	13	13	13	13	12	13	9	9	9	9	10	11	11	10	11	11	--	12
DECEMBER.	11	11	10	10	10	11	11	11	11	11	11	11	--	11	--	--	--	--	--	--	11	9	8	--	8	9	9	9	9	10	11	--
JANUARY..	11	11	10	8	9	9	8	9	9	9	9	9	10	11	9	10	8	9	7	--	7	8	6	7	7	4	7	9	9	9	10	9
FEBRUARY.	9	9	9	9	10	9	10	11	9	12	9	11	9	10	7	9	10	9	9	8	9	9	9	9	10	10	11	11	--	--	--	9
MARCH....	12	9	9	8	11	10	10	12	11	9	10	9	--	8	9	12	13	11	--	10	12	13	11	13	11	13	13	12	12	9	8	11
APRIL....	8	10	11	12	9	9	10	11	11	12	9	9	9	9	10	9	10	8	9	9	9	10	9	9	11	11	10	9	10	9	--	10
MAY.....	11	11	11	10	11	10	14	13	12	11	10	10	11	13	13	13	13	16	13	14	15	14	13	12	14	14	14	14	11	11	10	12
JUNE.....	9	9	--	--	14	11	--	14	--	12	--	11	--	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	--	14	--	10	--	--
AUGUST...	12	--	19	--	17	--	16	--	16	--	16	--	16	--	18	--	17	--	16	--	17	--	16	--	15	--	16	--	16	--	16	--
SEPTEMBER	--	--	--	16	--	13	--	16	--	16	--	16	--	16	--	16	--	17	--	16	--	15	--	16	--	15	--	12	--	--	--	--

11-3772. SACRAMENTO RIVER AT BEND, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	9550	22	567	10000	5	135	8210	11	244
2	9660	24	626	8870	6	144	8100	14	306
3	10100	20	545	8560	6	139	10900	20	589
4	9840	5	133	8590	4	93	11100	117	3510
5	9810	4	106	7920	4	86	13600	150	5510
6	9780	4	106	7560	4	82	9840	37	983
7	9750	4	105	7640	4	83	12700	7	240
8	9720	4	105	7670	7	145	11000	6	178
9	9750	4	105	7670	6	124	9890	5	134
10	9720	5	131	7700	4	83	9490	5	128
11	9720	4	105	7700	4	83	9430	4	102
12	9720	4	105	7730	4	83	9420	5	127
13	9660	5	130	7750	3	63	9230	20	498
14	9580	4	103	8080	10	218	9090	33	810
15	9580	3	78	8130	4	88	9090	13	319
16	9580	4	103	7830	4	85	9150	4	99
17	9550	4	103	7810	4	84	9150	4	99
18	9550	4	103	7780	10	210	9180	4	99
19	9600	4	104	7810	4	84	9210	5	124
20	9600	5	130	7940	4	86	9120	4	98
21	9660	4	104	7780	2	42	9090	3	74
22	9720	4	105	7780	2	42	9040	5	122
23	9750	5	132	7780	4	84	9070	3	73
24	9780	5	132	7780	3	63	9070	3	73
25	9810	4	106	7780	3	63	9090	3	74
26	9840	5	133	7810	4	84	9180	4	99
27	9840	4	106	7860	3	64	9290	5	125
28	9860	4	106	7860	3	64	9350	5	126
29	9840	3	80	8080	4	87	9320	5	126
30	9860	4	106	8270	5	112	9260	11	275
31	9980	4	108	--	--	--	9230	6	150
TOTAL	301760	--	4811	239520	--	2903	297890	--	15514

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	8810	6	143	11200	43	1300	29900	38	3070
2	8480	7	160	17200	47	2180	25200	16	1090
3	8460	7	160	18800	42	2130	20000	11	594
4	8370	9	203	13300	30	1080	16800	17	771
5	8180	12	265	11600	52	1630	16500	12	535
6	7640	10	206	10800	47	1370	16300	9	396
7	7380	7	139	10500	28	794	16000	10	432
8	7430	20	401	10100	11	300	15900	13	558
9	7740	263	5570	9840	10	266	15600	18	758
10	20500	246	13500	9720	10	262	14800	20	799
11	11900	54	1950	9630	10	260	14200	22	843
12	9090	11	270	9320	10	252	13600	22	808
13	9010	22	535	9350	9	227	16300	23	1010
14	22200	474	36800	9210	13	323	16300	19	836
15	41000	957	106000	9070	35	857	15200	28	1150
16	20100	209	11300	9480	42	1080	17300	25	1170
17	13900	66	2480	24600	40	2660	16300	13	572
18	10800	43	1250	18500	43	2150	12300	18	598
19	9690	33	863	17100	281	14400	11000	25	743
20	9150	22	544	42100	484	55000	10200	27	744
21	8840	26	621	32500	412	36200	9630	15	390
22	8760	30	710	32800	358	31700	9400	16	406
23	8620	21	489	41400	126	14100	9120	8	197
24	8460	15	343	54800	43	6360	9010	4	97
25	8320	15	337	61900	37	6180	8930	4	96
26	8290	56	1250	58800	45	7140	9210	4	99
27	8180	60	1330	56800	33	5060	8900	4	96
28	8080	67	1460	46200	26	3240	8760	4	95
29	15300	72	2970	36200	35	3420	8650	4	93
30	23900	65	4190	--	--	--	8650	4	93
31	13500	53	1930	--	--	--	8650	5	117
TOTAL	370080	--	198369	702820	--	201921	428610	--	19256

11-3772. SACRAMENTO RIVER AT BEND, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	8790	6	142	10500	8	227	9440	10	255
2	8930	6	145	10500	8	227	9450	10	255
3	8590	10	232	10500	8	227	9690	10	262
4	8430	13	296	10500	8	227	10000	9	243
5	8370	11	249	10600	8	229	10400	8	225
6	8290	12	269	10500	9	255	10700	7	202
7	8050	9	196	10500	9	255	10900	7	206
8	8020	7	152	10500	9	255	11000	7	208
9	8400	6	136	10400	9	253	10900	7	206
10	8840	7	167	10400	9	253	10900	7	206
11	8840	13	310	10400	9	253	10700	6	173
12	8810	12	285	10400	9	253	10600	5	143
13	8760	11	260	10500	9	255	10500	5	142
14	8700	11	258	10500	9	255	10400	5	140
15	8730	6	141	9810	9	238	10700	5	144
16	9120	11	271	9320	9	226	10800	4	117
17	9370	11	278	9180	9	223	10800	4	117
18	9630	9	234	9150	9	222	10400	4	112
19	10300	9	250	9180	9	223	11900	5	161
20	11000	8	238	9350	9	227	11900	5	161
21	11200	8	242	9490	10	256	12000	5	162
22	11100	8	240	9430	10	255	11900	5	161
23	11200	7	212	9430	10	255	11900	6	193
24	11500	7	217	9290	10	251	11900	6	193
25	11100	7	210	9210	10	249	12400	7	234
26	10900	7	206	9180	10	248	13100	8	283
27	10800	8	233	8980	10	242	13300	8	287
28	10800	8	233	8870	10	239	13300	3	108
29	10800	8	233	8810	10	238	13300	4	144
30	10800	8	233	8650	10	234	13400	4	145
31	--	--	--	8620	10	233	--	--	--
TOTAL	288170	--	6768	302650	--	7483	338580	--	5588

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	13300	4	144	14500	4	157	10500	2	57
2	13500	4	146	14500	4	157	10600	2	57
3	13700	4	148	14500	4	157	10500	3	85
4	13600	4	147	14500	4	157	10500	3	85
5	14000	14	529	14500	4	157	10500	3	85
6	14200	4	153	14400	4	156	10500	3	85
7	14000	4	151	14400	5	194	10600	3	86
8	14000	4	151	14500	5	196	10600	3	86
9	13900	4	150	14400	5	194	10600	3	86
10	14000	4	151	14400	5	194	10600	3	86
11	14000	4	151	14500	4	157	10600	3	86
12	14200	5	192	14500	4	157	10600	3	86
13	14500	5	196	14500	4	157	10600	4	114
14	14500	6	235	14100	4	152	10600	6	172
15	14500	6	235	13800	4	149	10700	5	144
16	14500	5	196	13400	3	109	10600	4	114
17	14400	4	156	12900	2	70	10600	5	143
18	14400	4	156	12700	3	103	10500	7	198
19	14400	4	156	12800	4	138	10600	6	172
20	14400	3	117	12300	4	133	10600	4	114
21	14400	2	78	11800	3	96	10600	4	114
22	14400	2	78	11200	3	91	10600	3	86
23	14400	2	78	11000	4	119	10400	3	84
24	14400	3	117	10900	4	118	10200	2	55
25	14400	4	156	10900	4	118	10200	2	55
26	14400	6	233	10900	3	88	10200	2	55
27	14400	7	272	10900	2	59	10200	4	110
28	14400	7	272	10800	3	87	10200	4	110
29	14400	6	233	10600	3	86	10300	3	83
30	14400	5	194	10600	3	86	10300	3	83
31	14400	4	156	10600	3	86	--	--	--
TOTAL	440400	--	5527	400300	--	4078	314700	--	2976

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 4425480
TOTAL LOAD FOR YEAR (TONS) 475194

11-3772. SACRAMENTO RIVER AT BEND, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 15, 1968	1027	6	44600	910	110000	24	38	50	61	73	81	90	96	100	--	--	VPWC
FEB 21.....	1605	10	35200	412	39200	24	48	58	67	76	98	100	--	--	--	--	SCBW

11-3780. SACRAMENTO RIVER NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°13'55", long 122°10'50", in SE¼ sec.34, T.28 N., R.3 W., Tehama County, temperature recorder at gaging station on left bank at lower end of Iron Canyon, 0.5 mile downstream from Sevenmile Creek, and 4.6 miles northeast of Red Bluff.
DRAINAGE AREA.--9,022 sq mi.
RECORDS AVAILABLE.--Water temperatures: November 1960 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 14°C on several days during May, August, and September; minimum, 6°C Jan. 10-13.
EXTREMES, 1960-68.--Water temperatures: Maximum (1961-63, 1964-68), 16°C Oct. 3-7, 1961; minimum, 4°C Jan. 22, 23, 1962.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	11	11	11	11	11	12	12	12	12	12	11	12	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
MINIMUM	11	11	11	11	11	11	11	12	12	11	11	11	12	12	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
NOVEMBER																																
MAXIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	9	9	--	11
MINIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	9	9	9	--	11
DECEMBER																																
MAXIMUM	9	10	10	9	9	9	9	9	9	9	9	9	9	9	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
MINIMUM	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
JANUARY																																
MAXIMUM	9	9	9	8	8	8	8	8	8	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7
MINIMUM	9	8	8	8	8	8	8	8	7	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7
FEBRUARY																																
MAXIMUM	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	8	8	8	9	--	--	8
MINIMUM	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	8	8	8	8	8	--	--	8
MARCH																																
MAXIMUM	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	11	11	11	11	11	11	11	11	9
MINIMUM	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	11	11	11	11	11	11	11	9
APRIL																																
MAXIMUM	11	11	11	11	11	11	11	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	12	12	12	12	--	11
MINIMUM	11	10	11	11	11	11	11	11	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	10	11	11	11	12	12	12	--	11
MAY																																
MAXIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	13	13	13	13	13	13	13	14	13	13
MINIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	12	12	12	13	13	13	13	13	13	13	13	13	12
JUNE																																
MAXIMUM	13	13	13	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	--	13
MINIMUM	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	12	12	12	12	12	12	--	12
JULY																																
MAXIMUM	12	12	12	12	13	13	13	13	13	13	13	13	13	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
MINIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
AUGUST																																
MAXIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	14	14	14	12
MINIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	14	13	12
SEPTEMBER																																
MAXIMUM	14	14	14	13	13	13	13	13	13	13	13	13	13	14	14	14	14	13	13	13	13	13	13	13	13	13	13	13	13	13	--	13
MINIMUM	13	13	13	13	13	13	13	13	13	13	13	13	13	13	14	14	13	13	13	13	13	13	13	13	13	13	13	13	13	13	--	13

11-3816.2. MILL CREEK AT MOUTH, NEAR LOS MOLINOS, CALIF.

LOCATION.--Lat 40°02'34" (revised), long 122°05'57", T.25 N., R.2 W, in Rio de Los Molinos land grant, Tehama County, at bridge on U.S. Highway 99, 0.8 mile upstream from confluence with Sacramento River, and 4.7 miles downstream from gaging station near Los Molinos.
DRAINAGE AREA.--131 sq mi (upstream from gaging station).
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Records of discharge given for 11-3815. Mill Creek near Los Molinos.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
09...	130	--	--	17	--	52	0	--	20	--	.44
NOV.											
01...	117	--	--	16	--	58	0	--	18	--	.58
DEC.											
11...	146	--	--	18	--	57	0	--	20	--	.51
JAN.											
16...	928	--	--	5.2	--	32	0	--	5.4	--	.20
FEB.											
05...	434	--	--	7.0	--	46	0	--	6.5	--	.21
MAR.											
06...	363	--	--	8.1	--	38	0	--	8.6	--	.20
APR.											
08...	290	--	--	9.2	--	44	0	--	9.0	--	.26
30...	333	8.7	3.5	9.6	1.3	36	0	15	8.2	.1	.33
JUNE											
03...	240	--	--	9.0	--	33	0	--	7.6	--	.21
JULY											
02...	161	--	--	12	--	50	0	--	14	--	.47
AUG.											
01...	110	--	--	17	--	92	0	--	17	--	.43
SEPT.											
03...	101	14	7.5	16	2.7	72	0	18	19	.0	.38

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
09...	--	52	9	--	42	1.0	43	200	7.7	22	10.8
NOV.											
01...	--	52	4	--	40	1.0	48	194	7.9	16	11.2
DEC.											
11...	--	65	18	--	38	1.0	47	210	7.8	8	12.2
JAN.											
16...	--	30	4	--	27	.4	26	94	7.7	7	12.1
FEB.											
05...	--	37	0	--	29	.5	38	118	7.8	7	11.3
MAR.											
06...	--	40	9	--	31	.6	31	119	7.9	9	11.8
APR.											
08...	--	37	1	--	35	.7	36	132	7.8	14	10.0
30...	101	36	6	.14	36	.7	30	126	7.6	14	10.1
JUNE											
03...	--	36	9	--	35	.7	27	131	7.7	18	9.4
JULY											
02...	--	50	9	--	34	.7	41	177	8.2	21	9.8
AUG.											
01...	--	84	9	--	31	.8	75	233	7.9	22	8.9
SEPT.											
03...	154	66	7	.21	33	.9	59	225	7.7	22	9.9

11-3820. 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, 0.25 mile upstream from Digger Creek, and 0.3 mile upstream from highway bridge at Paskenta.
DRAINAGE AREA.--194 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1968.
Water temperatures: October 1961 to September 1968.
Sediment records: October 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 30°C Aug. 31, Sept. 1; minimum, freezing point on several days during December and January.
Sediment concentrations: Maximum daily, 10,700 mg/l Jan. 14; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 149,000 tons Jan. 14; minimum daily, 0.01 ton on several days.
EXTREMES, 1961-68.--Water temperatures: Maximum, 34°C Aug. 18, 23, 1967; minimum, freezing point on several days during December and January of most years.
Sediment concentrations (1962-68): Maximum daily, 60,200 mg/l Dec. 22, 1964; minimum daily, no flow Oct. 4, 1964.
Sediment loads (1962-68): Maximum daily, 5,070,000 tons Dec. 22, 1964; minimum daily, 0 ton Oct. 4, 1964.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Where no maximum or minimum is shown, temperature is once-daily reading.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)	PHOS-PHATE (PO4)
OCT.												
09...	23	--	--	11	--	151	0	--	17	.4	.08	.02
NOV.												
01...	19	--	--	13	--	173	0	--	18	.3	.12	.03
DEC.												
11...	110	--	--	9.9	--	125	0	--	9.0	.6	.13	.02
JAN.												
16...	164	--	--	2.5	--	64	0	--	.4	.6	.04	2.8
FEB.												
05...	545	--	--	3.4	--	86	0	--	1.2	.3	.03	.01
MAR.												
06...	495	--	--	3.1	--	78	0	--	.5	.1	.00	.27
APR.												
08...	324	--	--	3.1	--	84	0	--	1.6	.0	.00	.03
30...	214	24	4.9	4.2	.4	84	0	14	3.0	.2	.04	.19
JUNE												
03...	77	--	--	5.0	--	98	0	--	3.6	.0	.03	.06
JULY												
02...	19	--	--	9.0	--	125	6	--	9.2	.0	.08	.01
AUG.												
01...	7.2	--	--	12	--	125	0	--	16	.2	.07	.02
SEPT.												
03...	9.0	44	14	13	1.4	121	0	68	21	.1	.00	.02

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
09...	--	193	69	--	11	.3	124	442	8.2	23	9.2
NOV.											
01...	--	214	72	--	12	.4	142	483	8.2	18	10.0
DEC.											
11...	--	113	10	--	16	.4	103	320	8.0	9	11.0
JAN.											
16...	--	61	8	--	8	.1	52	132	8.2	6	12.3
FEB.											
05...	--	82	11	--	8	.2	71	181	7.9	6	12.0
MAR.											
06...	--	78	14	--	8	.2	64	163	8.2	10	11.0
APR.											
08...	--	78	9	--	8	.2	69	175	8.2	16	10.1
30...	102	80	11	.14	10	.2	69	176	8.2	16	9.7
JUNE											
03...	--	98	18	--	10	.2	80	217	8.2	21	8.9
JULY											
02...	--	153	40	--	11	.3	112	335	8.5	23	9.2
AUG.											
01...	--	170	67	--	13	.4	103	399	8.2	24	7.3
SEPT.											
03...	223	167	68	.30	14	.4	99	408	8.1	24	9.9

11-3820. THOMES CREEK AT PASKENTA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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	AVER-AGE
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	25	18	21	20	22	22	24	23	24	24	25	24	24	20	22	23	22	22	22	22	18	21	21	21	21	21	20	19	18	20	21	22
MINIMUM	17	14	13	13	14	13	13	14	15	15	16	15	14	13	12	13	13	13	14	13	13	12	13	13	14	13	13	13	11	11	12	13
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	21	19	20	17	19	19	19	18	17	18	16	15	14	15	14	17	17	14	13	16	13	14	13	14	13	13	8	11	9	9	--	15
MINIMUM	13	13	12	13	14	12	13	13	12	11	11	12	13	12	11	10	11	12	10	9	9	8	7	8	7	7	6	6	7	6	--	10
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	9	7	7	7	8	6	8	8	9	9	9	7	4	2	7	6	4	6	6	6	6	8	11	11	11	11	10	9	8	8	7	8
MINIMUM	4	5	6	5	4	3	4	3	3	3	3	3	0	0	0	0	0	2	1	0	1	3	3	4	6	6	6	5	4	3	3	3
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	6	4	4	4	5	7	7	7	6	7	4	3	3	2	2	6	--
MAXIMUM	7	7	7	6	7	6	4	3	3	6	6	4	5	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	3	2	1	1	0	0	1	1	2	2	1	1	3	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY.	6	3	4	5	--	6	6	7	6	7	8	7	7	7	7	7	7	8	8	7	8	8	9	8	10	9	9	8	8	--	--	7
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH....	8	9	9	9	10	7	8	8	8	8	9	7	8	9	7	7	8	6	8	6	7	7	10	9	10	8	10	9	--	11	12	8
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL....	9	10	12	12	9	13	11	12	13	13	11	14	12	11	12	12	11	9	11	11	11	11	13	11	12	13	10	13	13	12	--	11
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY.....	13	14	16	16	13	13	16	19	20	13	12	15	12	14	--	22	19	22	17	13	12	17	13	14	17	20	19	16	21	18	19	16
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	21	--	19	--	18	--	16	--	--	--	26	--	26	--	--	27	--	--	27	--	24	--	--	21	28	27	--	24	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	22	--	26	--	--	26	--	26	--	23	--	--	23	--	29	--	29	--	--	23	--	27	--	21	--	26	--	24	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	27	--	--	--	22	--	26	--	27	--	--	22	--	21	--	20	--	--	19	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	27	22	25	27	27	27	29	30	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	16	17	17	17	17	17	19	--
SEPTEMBER	--	--	--	--	--	28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	30	29	28	29	29	28	29	28	27	27	28	28	27	27	23	23	26	27	22	19	19	19	24	26	26	26	26	22	23	23	--	26
MINIMUM	19	19	19	18	18	19	19	19	19	19	19	18	17	17	15	14	16	17	14	12	12	11	12	15	16	17	17	17	16	16	--	17

11-3820. THOMES CREEK AT PASKENTA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	7.0	4	.08	17	8	.37	44	1	.12
2	11	5	.15	16	10	.43	41	1	.11
3	79	80	20	16	4	.17	142	171	75
4	46	12	1.5	16	2	.09	202	125	68
5	34	2	.18	17	2	.09	302	257	243
6	31	2	.17	17	2	.09	140	19	7.2
7	27	2	.15	17	9	.41	176	100	48
8	24	2	.13	17	6	.28	116	12	3.8
9	23	2	.12	18	4	.19	81	4	.87
10	21	3	.17	19	8	.41	96	6	1.6
11	21	4	.23	19	3	.15	110	4	1.2
12	20	3	.16	19	2	.10	110	5	1.5
13	20	3	.16	22	4	.24	90	4	.97
14	20	3	.16	115	214	93	75	7	1.4
15	19	3	.15	80	35	7.6	51	7	.96
16	18	4	.19	53	2	.29	59	4	.64
17	18	2	.10	44	1	.12	51	2	.28
18	18	1	.05	42	1	.11	81	9	2.0
19	18	1	.05	42	1	.11	51	3	.41
20	17	14	.64	42	2	.23	40	2	.22
21	18	10	.49	40	1	.11	42	1	.11
22	19	7	.36	38	1	.10	40	1	.11
23	20	7	.38	37	2	.20	42	2	.23
24	20	9	.49	35	2	.19	87	5	1.2
25	20	11	.59	34	1	.09	160	62	27
26	20	8	.43	34	1	.09	240	90	58
27	19	4	.21	33	1	.09	331	175	156
28	19	4	.21	34	1	.09	325	73	64
29	18	4	.19	42	2	.23	304	58	48
30	18	6	.29	55	7	1.0	255	44	30
31	18	7	.34	--	--	--	238	19	12
TOTAL	701.0	--	28.52	1030	--	106.67	4122	--	853.93

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	220	17	10	535	145	209	726	506	992
2	205	5	2.8	1000	511	1710	618	403	672
3	188	2	1.0	790	1110	2370	580	412	645
4	182	2	.98	535	525	758	562	359	545
5	174	3	1.4	545	415	611	568	320	491
6	164	3	1.3	580	420	658	495	268	358
7	144	3	1.2	586	480	759	441	215	256
8	137	3	1.1	535	570	823	414	187	209
9	154	30	12	520	575	807	381	173	178
10	444	569	739	540	510	744	344	141	131
11	280	42	32	495	410	548	324	117	102
12	245	9	6.0	475	340	436	354	140	134
13	562	1050	2720	475	350	449	362	161	157
14	4510	10700	149000	455	360	442	351	102	97
15	4080	8490	99400	418	320	361	348	108	101
16	1530	3390	14700	545	880	1290	423	243	278
17	890	1450	3480	1070	2600	7510	410	179	198
18	790	810	1730	946	1750	4470	369	99	99
19	790	535	1140	3580	6840	107000	354	130	124
20	820	380	841	4360	8340	104000	340	99	91
21	1040	550	1540	3680	6470	64700	348	90	85
22	1110	510	1530	2790	4310	32500	344	76	71
23	1090	410	1210	3190	4820	41500	337	62	56
24	1040	310	870	1950	3300	17400	351	83	79
25	946	285	728	1170	1890	5970	441	310	369
26	790	220	469	979	1200	3170	455	239	294
27	626	155	262	935	960	2420	405	180	197
28	510	195	269	880	860	2040	432	163	190
29	830	693	1820	790	652	1390	510	162	223
30	717	300	581	--	--	--	535	159	230
31	550	135	200	--	--	--	495	132	176
TOTAL	25758	--	283298.78	35349	--	407045	13417	--	7828

11-3820. THOMES CREEK AT PASKENTA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	495	127	170	212	13	7.4	80	2	.43
2	441	109	130	210	14	7.9	79	2	.43
3	414	94	105	208	15	8.4	77	1	.21
4	381	78	80	214	16	9.2	74	1	.20
5	358	75	72	216	14	8.2	76	1	.21
6	351	62	59	190	10	5.1	74	2	.40
7	334	49	44	168	9	4.1	69	10	1.9
8	324	49	43	158	6	2.6	58	3	.47
9	327	65	57	158	6	2.6	52	2	.28
10	348	81	76	154	7	2.9	51	2	.28
11	369	116	116	152	6	2.5	49	1	.13
12	358	108	104	144	5	1.9	46	2	.25
13	309	77	64	158	7	3.0	42	2	.23
14	294	62	49	156	9	3.8	39	2	.21
15	306	48	40	132	8	2.9	37	2	.20
16	297	37	30	120	8	2.6	35	2	.19
17	268	28	20	120	9	2.9	34	2	.18
18	248	22	15	122	7	2.3	32	3	.26
19	240	20	13	134	4	1.4	31	4	.33
20	225	17	10	224	136	93	30	4	.32
21	216	14	8.2	166	16	7.2	28	5	.38
22	196	11	5.8	142	8	3.1	25	4	.27
23	192	8	4.1	124	5	1.7	23	4	.25
24	190	8	4.1	112	3	.91	28	3	.23
25	190	8	4.1	110	4	1.2	25	3	.20
26	196	8	4.2	106	4	1.1	24	3	.19
27	204	11	6.1	102	3	.83	23	3	.19
28	194	9	4.7	100	3	.81	21	3	.17
29	194	11	5.8	98	2	.53	20	4	.22
30	214	13	7.5	91	2	.49	20	4	.22
31	--	--	--	86	2	.46	--	--	--
TOTAL	8673	--	1351.6	4587	--	193.03	1302	--	9.43

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	19	5	.26	7.2	3	.06	11	1	.03
2	19	7	.36	6.7	3	.05	9.6	1	.03
3	20	9	.49	6.2	4	.07	9.0	1	.02
4	25	7	.47	6.2	5	.08	8.3	2	.04
5	23	5	.31	5.6	6	.09	8.3	2	.04
6	23	5	.31	5.6	5	.08	8.3	2	.04
7	22	4	.24	5.6	4	.06	8.3	2	.04
8	21	4	.23	5.6	3	.05	8.3	1	.02
9	20	5	.27	5.0	11	.15	7.7	1	.02
10	19	6	.31	4.3	2	.02	7.7	1	.02
11	18	5	.24	4.3	2	.02	7.7	1	.02
12	18	4	.19	4.4	4	.05	7.7	1	.02
13	18	4	.19	4.4	5	.06	7.7	1	.02
14	18	5	.24	4.6	6	.07	7.1	1	.02
15	17	6	.28	4.6	7	.09	7.1	1	.02
16	17	5	.23	4.6	8	.10	5.9	1	.02
17	16	5	.22	4.6	8	.10	5.2	1	.01
18	13	4	.14	4.6	7	.09	5.2	1	.01
19	12	2	.06	5.2	6	.08	5.2	1	.01
20	12	1	.03	8.3	6	.13	4.6	1	.01
21	12	2	.06	21	8	.45	4.6	1	.01
22	10	2	.05	24	4	.26	4.0	1	.01
23	8.9	2	.05	21	3	.17	4.0	2	.02
24	8.9	3	.07	18	3	.15	4.0	1	.01
25	8.4	3	.07	16	2	.09	4.0	1	.01
26	7.2	5	.10	18	2	.10	4.0	1	.01
27	6.7	3	.05	18	3	.15	4.0	1	.01
28	6.7	3	.05	16	3	.13	4.0	1	.01
29	7.2	3	.06	14	2	.08	4.0	1	.01
30	6.7	4	.07	12	1	.03	3.5	1	.01
31	7.2	3	.06	11	1	.03	--	--	--
TOTAL	459.9	--	5.76	296.6	--	3.14	190.0	--	.57

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 95885.5
TOTAL LOAD FOR YEAR (TONS) 700724.43

11-3820. THOMES CREEK AT PASKENTA, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 10, 1968	0730	3	564	1030	1570	--	45	--	67	--	84	88	96	100	--	--	VPWC
JAN 13.....	1735	6	880	2540	6040	15	22	34	45	58	67	81	94	99	100	--	VPWC
JAN 14.....	0740	4	4100	12000	133000	21	24	33	43	55	61	83	94	99	100	--	VPWC
JAN 14.....	2255	6	6750	12900	235000	16	20	31	40	51	59	80	93	99	100	--	VPWC
JAN 15.....	0740	7	5060	9420	129000	17	19	32	41	53	60	77	90	96	100	--	VPWC
FEB 15.....	1530	8	414	222	248	15	24	37	44	47	60	67	74	96	100	--	VCBW
FEB 17.....	1130	8	1010	2170	5920	15	21	30	41	54	60	74	90	98	99	100	VPWC
FEB 19.....	1400	8	3340	8270	74600	12	18	25	35	47	55	72	86	94	98	100	SPWC
FEB 20.....	0740	7	4960	8000	107000	15	22	30	41	53	58	72	90	98	100	--	VPWC
FEB 21.....	1540	9	3930	6160	65400	14	20	28	37	49	55	67	85	95	100	--	VPWC
MAY 20.....	0815	13	273	318	234	15	24	37	46	50	80	89	96	100	--	--	SCBW

11-3838. SACRAMENTO RIVER NEAR HAMILTON CITY, CALIF.

LOCATION.--Lat 39°45'06", long 121°59'40", in NE¼NE¼ sec.20, R.1 W., T.22 N., Butte County, at gaging station on State Highway 32 bridge, 1.3 miles northeast of Hamilton City, and 2.4 miles upstream from Pine Creek.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
10...	9530	--	--	6.1	--	59	0	--	2.7	--	.01
NOV.											
14...	7760	--	--	6.6	--	64	0	--	3.0	--	.06
DEC.											
07...	12200	--	--	8.0	--	66	0	--	5.0	--	.06
JAN.											
04...	8890	--	--	6.8	--	73	0	--	3.9	--	.05
FEB.											
06...	14100	--	--	6.0	--	70	0	--	2.6	--	.04
MAR.											
05...	18100	--	--	5.4	--	66	0	--	3.2	--	.00
APR.											
03...	9210	--	--	6.8	--	73	0	--	2.8	--	.02
MAY											
07...	8570	8.6	6.7	5.8	.9	65	0	2.6	3.8	.2	.00
JUNE											
05...	8160	--	--	6.1	--	62	0	--	2.8	--	.00
JULY											
09...	10400	--	--	4.4	--	62	0	--	2.2	--	.01
AUG.											
06...	11600	--	--	5.8	--	59	0	--	2.1	--	.02
SEPT.											
04...	8100	9.8	5.7	6.9	1.4	60	0	5.9	3.0	.2	.07

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
10...	--	45	0	--	23	.4	48	120	7.7	13	10.5
NOV.											
14...	--	48	0	--	23	.4	52	127	7.9	12	10.5
DEC.											
07...	--	55	1	--	24	.5	54	148	7.7	9	11.1
JAN.											
04...	--	54	0	--	22	.4	60	143	8.1	7	12.0
FEB.											
06...	--	56	0	--	19	.3	57	148	7.7	8	11.8
MAR.											
05...	--	55	1	--	18	.3	54	143	7.8	11	11.1
APR.											
03...	--	56	0	--	21	.4	60	148	8.0	12	10.9
MAY											
07...	81	49	0	.11	20	.4	53	127	8.2	13	10.8
JUNE											
05...	--	47	0	--	22	.4	51	125	7.8	14	9.7
JULY											
09...	--	47	0	--	17	.3	51	116	8.2	14	10.4
AUG.											
06...	--	47	0	--	21	.4	48	118	8.2	14	10.5
SEPT.											
04...	87	48	0	.12	23	.4	49	124	7.7	16	10.1

11-3840. BIG CHICO CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°46'35", long 121°45'10", (unsurveyed), Butte County, at gaging station 1.8 miles upstream from golf clubhouse in Bidwell Park, 2.6 miles upstream from Lindo Channel, and 7 miles northeast of Chico.
DRAINAGE AREA.--72.2 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
10...	26	--	--	14	--	102	0	--	10	--	.06
NOV.											
14...	44	--	--	15	--	105	0	--	13	--	.10
DEC.											
07...	142	--	--	8.3	--	69	0	--	6.0	--	.12
JAN.											
04...	40	--	--	11	--	91	0	--	8.8	--	.14
FEB.											
06...	296	--	--	3.8	--	49	0	--	1.0	--	.01
MAR.											
05...	129	--	--	4.8	--	62	0	--	9.7	--	.00
APR.											
03...	118	--	--	5.2	--	66	0	--	2.8	--	.01
MAY											
07...	39	15	7.4	12	1.0	88	2	3.4	7.8	.0	.07
JUNE											
05...	31	--	--	13	--	100	0	--	8.3	--	.12
JULY											
09...	24	--	--	13	--	101	3	--	10	--	.14
AUG.											
06...	22	--	--	16	--	110	0	--	11	--	.22
SEPT.											
04...	22	16	8.8	16	1.2	110	0	9.7	11	.2	.20

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
10...	--	73	0	--	29	.7	84	205	8.2	15	10.5
NOV.											
14...	--	79	0	--	29	.7	86	230	8.2	13	11.0
DEC.											
07...	--	54	0	--	25	.5	57	147	8.0	7	12.6
JAN.											
04...	--	67	0	--	26	.6	75	184	8.2	2	14.5
FEB.											
06...	--	36	0	--	19	.3	40	94	7.7	7	12.8
MAR.											
05...	--	50	0	--	17	.3	51	119	8.0	11	11.4
APR.											
03...	--	47	0	--	19	.3	54	123	8.0	11	11.8
MAY											
07...	128	68	0	.17	27	.6	75	182	8.4	15	10.4
JUNE											
05...	--	72	0	--	28	.7	82	199	8.1	18	9.4
JULY											
09...	--	75	0	--	27	.7	88	213	8.5	24	8.5
AUG.											
06...	--	80	0	--	30	.8	90	218	8.2	22	8.8
SEPT.											
04...	153	76	0	.21	31	.8	90	221	8.2	22	9.0

11-3846. 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.
RECORDS AVAILABLE.--Water temperatures: May 1967 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 29°C on many days during July and August; minimum, 1°C on several days during December and January.
EXTREMES, May 1967 to September 1968.--Water temperatures: Maximum, 29°C on many days during July and August 1968; minimum, 1°C on several days during December 1967 and January 1968.
REMARKS.--Clock stopped July 24-31, Aug. 11 to Sept. 3, Sept. 27-30; temperature ranges, 22°C to 29°C, 16°C to 28°C, and 16°C to 23°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	20	19	18	18	18	18	18	19	19	19	20	19	19	18	17	17	17	18	18	18	17	18	17	17	17	17	17	18	16	16	16	18
MINIMUM	17	14	13	13	13	13	13	13	14	14	16	15	14	13	12	12	12	13	13	13	13	13	13	13	13	12	12	13	12	11	12	13
NOVEMBER																																
MAXIMUM	16	16	15	14	17	16	16	17	14	14	14	13	14	14	14	14	15	13	12	13	12	11	9	10	9	8	8	8	8	8	--	13
MINIMUM	12	12	11	12	13	12	12	13	12	11	11	12	13	13	12	11	11	12	11	10	9	8	7	7	7	5	5	5	6	6	--	10
DECEMBER																																
MAXIMUM	6	7	9	9	8	7	8	6	7	6	6	5	3	2	1	1	2	4	3	3	3	4	6	7	8	8	9	8	7	6	5	5
MINIMUM	4	4	7	7	6	4	6	4	4	4	3	3	1	1	1	1	1	2	1	1	1	3	3	4	7	6	8	7	6	4	3	4
JANUARY																																
MAXIMUM	5	4	3	3	2	2	2	3	6	7	4	4	7	8	9	8	7	7	7	7	8	9	8	8	8	7	5	8	10	7	8	6
MINIMUM	3	2	1	1	1	1	1	1	3	4	2	1	4	7	8	7	6	6	6	6	7	8	7	6	7	5	4	3	3	5	6	4
FEBRUARY																																
MAXIMUM	7	8	8	8	8	9	9	8	9	9	9	9	9	8	9	9	11	10	10	12	11	12	12	12	12	12	11	11	12	--	--	10
MINIMUM	6	6	6	6	7	8	8	7	7	7	7	7	7	7	7	8	8	8	9	9	10	10	11	9	9	9	9	9	8	--	--	8
MARCH																																
MAXIMUM	11	12	12	12	12	10	9	12	12	11	11	8	9	11	10	9	9	10	11	11	11	10	12	13	12	12	12	14	14	15	14	11
MINIMUM	8	8	8	8	8	7	7	8	7	6	7	7	7	7	7	7	7	7	7	6	6	8	8	8	9	7	7	8	10	10	9	8
APRIL																																
MAXIMUM	11	13	13	13	13	13	13	14	15	16	16	14	14	15	14	14	14	14	15	14	14	15	15	16	17	18	18	18	19	19	--	15
MINIMUM	9	8	8	9	9	8	8	9	9	10	11	10	8	9	10	9	8	8	10	8	8	8	9	9	11	12	13	12	13	14	--	10
MAY																																
MAXIMUM	19	19	20	20	19	18	19	19	20	20	18	18	17	15	18	20	19	21	18	19	20	18	19	17	20	21	22	23	23	23	23	19
MINIMUM	13	14	14	14	12	12	12	13	14	14	13	13	13	12	11	13	14	14	16	15	13	13	13	13	13	15	15	17	17	17	16	14
JUNE																																
MAXIMUM	24	22	21	23	19	21	22	22	23	23	23	22	23	24	25	26	26	27	26	27	27	27	27	27	28	28	28	27	26	26	--	25
MINIMUM	17	17	17	17	16	15	16	16	17	16	16	15	17	18	18	18	19	19	19	19	20	21	21	21	19	21	21	20	18	17	--	18
JULY																																
MAXIMUM	27	27	28	28	29	29	29	29	29	29	28	28	28	28	28	28	28	29	29	29	29	29	29	--	--	--	--	--	--	--	--	--
MINIMUM	18	21	21	22	23	23	22	22	23	22	22	22	22	22	22	22	22	22	22	22	22	22	22	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	29	29	29	29	28	28	28	28	28	28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	22	23	22	22	23	22	22	22	21	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	26	27	26	27	26	26	26	26	26	26	25	24	24	25	25	23	21	21	20	22	22	23	23	--	--	--	--	--	--
MINIMUM	--	--	--	20	21	21	21	21	20	20	20	20	20	19	18	18	19	19	18	16	15	15	16	16	16	17	--	--	--	--	--	--

11-3880. STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.

LOCATION.--Lat 39°49'00", long 122°19'25", in SW¼ sec.28, T.23 N., R.4 W., Glenn 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.
RECORDS AVAILABLE.--Chemical analyses: October 1957 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)	PHOS-PHATE (PO4)
OCT.												
10...	112	--	--	14	--	179	0	--	13	1.1	.23	.16
NOV.												
14...	53	--	--	16	--	202	3	--	15	1.3	.27	.19
DEC.												
07...	35	--	--	17	--	206	0	--	16	--	.18	--
JAN.												
04...	37	--	--	16	--	207	0	--	18	--	.24	--
FEB.												
06...	46	--	--	12	--	141	0	--	19	3.8	.17	.13
MAR.												
05...	255	--	--	11	--	118	0	--	14	.1	.08	.17
APR.												
03...	52	--	--	12	--	120	2	--	12	.5	.06	.00
MAY												
07...	515	29	12	13	1.0	122	5	15	14	.5	.09	.22
JUNE												
05...	154	--	--	13	--	138	2	--	13	.4	.13	.03
JULY												
09...	163	--	--	15	--	147	4	--	14	.1	.11	.04
AUG.												
06...	345	--	--	15	--	168	2	--	14	.1	.21	.05
SEPT.												
04...	152	32	19	14	1.2	178	0	15	16	.2	.12	.17

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
10...	--	153	6	--	17	.5	147	368	8.2	18	9.2
NOV.											
14...	--	177	6	--	16	.5	171	418	8.5	14	9.3
DEC.											
07...	--	168	0	--	18	.6	169	422	8.2	9	11.6
JAN.											
04...	--	190	20	--	15	.5	170	439	8.2	6	13.2
FEB.											
06...	--	136	20	--	16	.4	116	351	8.1	9	12.7
MAR.											
05...	--	110	13	--	18	.5	97	274	8.0	12	10.5
APR.											
03...	--	112	10	--	19	.5	102	275	8.4	12	12.9
MAY											
07...	162	120	12	.22	19	.5	108	291	8.6	16	11.1
JUNE											
05...	--	126	9	--	18	.5	116	304	8.4	18	10.0
JULY											
09...	--	138	11	--	19	.6	127	323	8.6	23	8.7
AUG.											
06...	--	154	13	--	17	.5	141	344	8.4	25	8.3
SEPT.											
04...	162	158	12	.22	16	.5	146	360	7.8	22	8.9

11-3900. 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 0.7 mile downstream from Little Butte Creek, and 7.5 miles east of Chico.
DRAINAGE AREA.--147 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
Water temperatures: November 1961 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 21°C July 7-9; minimum, 1°C Dec. 14, 15.
EXTREMES, 1961-68.--Water temperatures: Maximum (1961-64, 1965-68), 26°C July 21, 22, 1966; minimum, 1°C Dec. 14, 15, 1967.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
10...	138	--	--	3.9	--	64	0	--	1.4	--	.03
NOV.											
14...	172	--	--	4.8	--	70	0	--	1.6	--	.01
DEC.											
09...	201	--	--	3.6	--	56	0	--	1.4	--	.01
JAN.											
04...	161	--	--	3.0	--	65	0	--	.7	--	.02
FEB.											
06...	375	--	--	2.5	--	56	0	--	--	--	.00
MAR.											
05...	568	--	--	1.9	--	39	0	--	--	--	.00
APR.											
03...	544	--	--	2.1	--	42	0	--	--	--	.00
MAY											
07...	354	7.3	2.9	2.6	.5	43	0	.0	1.1	.0	.00
JUNE											
05...	255	--	--	2.9	--	50	0	--	.9	--	.00
JULY											
09...	142	--	--	3.1	--	64	0	--	1.0	--	.02
AUG.											
06...	121	--	--	4.1	--	63	0	--	1.3	--	.03
SEPT.											
04...	129	11	5.0	4.1	.8	64	0	2.5	1.2	.0	.05

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
10...	--	47	0	--	15	.2	52	110	7.9	12	11.3
NOV.											
14...	--	53	0	--	16	.3	57	121	8.1	12	11.0
DEC.											
09...	--	42	0	--	16	.2	46	107	7.6	7	12.5
JAN.											
04...	--	51	0	--	11	.2	53	110	8.1	3	14.4
FEB.											
06...	--	39	0	--	12	.2	46	101	7.7	8	12.4
MAR.											
05...	--	32	0	--	11	.1	32	70	7.8	11	11.7
APR.											
03...	--	30	0	--	13	.2	34	71	7.8	10	12.1
MAY											
07...	58	30	0	.08	16	.2	35	74	8.1	13	11.1
JUNE											
05...	--	36	0	--	15	.2	41	86	8.0	15	10.2
JULY											
09...	--	45	0	--	13	.2	52	109	8.3	22	9.3
AUG.											
06...	--	49	0	--	15	.3	52	110	8.1	21	9.6
SEPT.											
04...	78	48	0	.11	15	.3	52	111	8.0	20	9.8

11-3900. BUTTE CREEK NEAR CHICO, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	16	15	14	13	13	13	13	13	14	14	14	14	14	13	13	13	13	13	13	13	12	13	13	13	13	13	12	12	11	11	12	13
MINIMUM	15	14	13	12	13	12	11	12	12	12	12	13	12	11	11	11	11	11	11	11	12	12	12	12	12	12	11	11	10	9	9	12
NOVEMBER																																
MAXIMUM	12	12	12	12	12	12	11	11	11	11	11	10	10	12	12	12	11	11	11	11	11	9	9	8	8	8	7	7	7	6	--	10
MINIMUM	10	11	11	11	11	11	10	10	11	10	9	9	9	10	11	11	11	10	11	9	9	8	7	7	7	6	6	6	6	5	--	9
DECEMBER																																
MAXIMUM	6	5	6	7	7	7	7	6	6	6	6	5	4	3	3	3	3	3	3	3	4	4	5	5	5	5	6	6	6	5	4	5
MINIMUM	4	4	5	6	6	6	6	4	4	4	4	3	3	1	1	2	2	2	3	3	3	3	3	4	3	4	4	4	4	3	3	4
JANUARY																																
MAXIMUM	4	4	3	3	3	3	3	3	4	6	5	4	5	6	7	7	7	6	6	7	7	7	7	7	7	7	6	5	5	6	6	5
MINIMUM	3	3	2	2	2	2	3	3	3	4	4	3	4	5	6	6	6	5	6	6	6	6	6	6	6	6	5	4	4	4	6	4
FEBRUARY																																
MAXIMUM	6	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	8	8	9	8	8	8	8	8	8	--	--	8
MINIMUM	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	7	7	7	7	7	7	--	--	7
MARCH																																
MAXIMUM	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	9	9	9	8
MINIMUM	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	7	6	6	6	6	6	7	7	7	7	6	6	7	7	8	8	6
APRIL																																
MAXIMUM	9	8	8	8	9	9	8	9	9	10	11	11	10	9	9	10	9	8	9	9	9	9	9	9	10	11	11	11	12	12	--	10
MINIMUM	8	7	7	7	8	7	7	7	7	8	9	9	8	8	8	9	8	7	8	8	7	7	7	8	8	8	9	9	9	11	--	8
MAY																																
MAXIMUM	12	12	12	13	13	12	12	12	12	12	12	12	12	11	11	12	12	13	13	13	13	13	12	12	12	12	13	13	14	14	14	12
MINIMUM	11	10	11	11	11	10	10	10	11	11	11	11	11	9	9	9	11	12	12	12	12	11	11	11	11	11	12	12	13	13	13	11
JUNE																																
MAXIMUM	15	15	15	15	15	14	14	14	14	14	15	15	14	15	16	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	--	16
MINIMUM	13	13	14	14	14	13	13	12	12	13	13	13	13	13	13	14	16	16	16	16	16	16	16	16	16	16	16	17	16	17	--	14
JULY																																
MAXIMUM	18	19	19	19	19	19	21	21	21	20	20	19	19	20	20	19	19	19	19	19	18	18	18	18	18	18	19	19	19	19	18	19
MINIMUM	17	17	17	17	17	18	18	18	18	18	17	17	17	18	18	18	17	17	17	17	17	16	16	16	16	16	17	17	17	17	15	17
AUGUST																																
MAXIMUM	17	17	18	18	18	18	18	18	18	18	18	18	18	18	17	17	17	17	17	16	15	15	15	16	16	16	16	17	17	18	18	17
MINIMUM	14	16	16	16	17	16	16	16	16	16	17	17	16	16	16	16	16	16	16	15	14	13	13	13	14	14	14	14	15	16	16	15
SEPTEMBER																																
MAXIMUM	19	19	19	19	18	18	18	18	18	18	17	17	17	17	17	17	17	17	17	17	16	15	14	15	15	17	16	16	16	16	--	17
MINIMUM	17	17	17	17	17	17	17	16	16	16	16	16	16	16	16	15	15	15	16	15	13	13	12	13	13	14	14	14	14	14	--	15

11-3905. 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.--12,940 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1966 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 21°C on several days in June; minimum, 5°C Dec. 15-17, Jan. 13.
EXTREMES, 1966-68.--Water temperatures: Maximum, 21°C on several days in June 1968; minimum, 5°C Dec. 15-17, 1967, Jan. 13, 1968.
REMARKS.--Recorder malfunctioned Oct. 1, 2.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	--	--	16	15	15	15	15	16	16	16	14	14	14	14	14	13	14	14	14	14	14	14	14	14	14	14	14	14	14	13	13	14
MINIMUM	--	--	15	14	14	14	14	15	15	14	14	14	14	14	13	13	13	13	13	13	14	13	13	13	14	13	13	13	13	12	12	14
NOVEMBER																																
MAXIMUM	13	13	13	13	13	13	13	13	14	14	13	13	13	13	13	13	13	13	13	13	13	12	12	12	11	11	11	11	10	10	--	13
MINIMUM	12	13	13	13	13	13	13	13	14	13	13	13	13	13	13	13	13	13	13	13	12	12	11	11	11	11	11	10	10	9	--	12
DECEMBER																																
MAXIMUM	9	9	9	9	9	9	9	9	8	8	8	8	8	7	6	5	6	6	7	7	7	8	8	8	9	10	11	11	11	10	9	8
MINIMUM	9	9	9	9	9	9	9	8	8	8	8	8	7	6	5	5	5	6	6	7	7	7	8	8	8	9	10	10	10	9	9	8
JANUARY																																
MAXIMUM	9	8	8	8	7	7	7	7	7	7	6	7	6	8	8	9	8	8	8	8	9	9	10	10	10	10	10	9	8	8	7	8
MINIMUM	8	8	8	7	7	7	7	7	7	7	7	6	5	6	8	8	8	8	8	8	8	9	9	10	10	10	9	8	8	7	6	8
FEBRUARY																																
MAXIMUM	7	8	8	8	9	9	9	10	11	11	11	11	11	11	11	11	11	11	12	12	13	13	13	13	13	12	12	12	12	--	--	11
MINIMUM	6	7	8	8	8	8	8	9	10	11	11	11	11	11	11	11	11	11	12	12	12	13	13	12	11	11	11	11	--	--		10
MARCH																																
MAXIMUM	12	12	12	12	12	13	13	12	12	12	12	12	11	11	10	11	11	11	11	12	12	13	13	13	13	13	13	13	14	15	16	12
MINIMUM	11	11	11	12	12	12	12	11	11	12	12	11	11	10	10	10	11	11	11	11	12	12	12	13	13	13	13	13	13	14	15	12
APRIL																																
MAXIMUM	16	15	14	14	14	15	15	14	15	16	17	17	17	16	16	16	16	14	14	14	14	14	14	14	15	15	16	16	17	17	--	15
MINIMUM	15	14	14	14	14	14	14	14	14	15	16	17	16	15	15	16	14	14	14	14	14	14	14	14	14	14	15	16	16	17	--	15
MAY																																
MAXIMUM	18	18	18	18	18	18	17	17	18	17	17	17	17	16	16	16	17	18	18	18	17	17	17	17	17	18	18	19	19	20	19	18
MINIMUM	17	18	18	18	17	17	17	17	17	17	17	17	16	16	15	15	16	17	18	17	16	16	16	17	17	17	18	18	19	19	19	17
JUNE																																
MAXIMUM	19	20	20	19	18	18	18	18	18	19	19	19	19	19	19	20	20	21	21	21	21	21	21	21	21	21	21	21	20	18	--	20
MINIMUM	18	18	19	18	18	17	17	18	18	18	19	19	19	18	19	19	20	20	21	21	21	20	20	20	20	21	21	20	18	17	--	19
JULY																																
MAXIMUM	18	18	19	19	19	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	18	18	18	18	18	18	19
MINIMUM	17	18	18	18	18	19	19	19	19	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
AUGUST																																
MAXIMUM	18	18	18	19	19	19	18	18	18	18	18	18	18	18	17	18	18	18	19	19	18	16	18	18	18	18	18	18	19	19	19	18
MINIMUM	17	17	18	18	19	18	18	18	18	18	18	18	18	17	17	17	17	18	18	18	16	16	16	18	18	18	18	18	18	19	19	18
SEPTEMBER																																
MAXIMUM	20	20	20	20	20	20	20	19	19	19	19	19	19	19	19	18	18	18	18	18	17	17	16	16	17	17	17	17	17	17	--	18
MINIMUM	19	20	20	20	20	19	19	19	19	18	18	19	19	18	18	18	18	17	17	17	16	16	16	16	16	17	17	17	17	17	--	18

11-3906.5. 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.
RECORDS AVAILABLE.--Chemical analyses: July 1960 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT. 11...	10400	--	--	6.1	--	64	0	--	3.2	--	.02
NOV. 15...	8930	--	--	7.8	--	71	0	--	4.0	--	.06
DEC. 08...	13600	--	--	7.2	--	58	0	--	5.2	--	.08
JAN. 05...	9660	--	--	7.0	--	75	0	--	3.7	--	.08
FEB. 07...	19200	--	--	6.0	--	67	0	--	2.3	--	.08
MAR. 06...	22800	--	--	6.6	--	72	0	--	2.7	--	.00
APR. 04...	11500	--	--	6.6	--	78	0	--	2.8	--	.02
MAY 08...	8250	14	7.0	12	1.2	82	0	7.6	7.1	.2	.01
JUNE 06...	5960	--	--	11	--	81	0	--	5.6	--	.03
JULY 10...	8520	--	--	6.6	--	70	0	--	3.5	--	.04
AUG. 07...	10700	--	--	9.2	--	72	0	--	3.8	--	.06
SEPT. 05...	8950	12	8.1	12	1.2	86	0	6.1	5.4	.1	.00

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT. 11...	--	49	0	--	21	.4	52	127	8.0	16	10.0
NOV. 15...	--	53	0	--	24	.5	58	143	7.8	13	10.4
DEC. 08...	--	52	4	--	23	.4	48	136	7.8	9	11.0
JAN. 05...	--	58	0	--	21	.4	62	145	8.0	7	12.4
FEB. 07...	--	50	0	--	21	.4	55	144	7.6	9	11.3
MAR. 06...	--	62	3	--	19	.4	59	151	7.8	12	10.5
APR. 04...	--	60	0	--	19	.4	64	156	7.9	14	10.3
MAY 08...	119	64	0	.16	29	.7	67	186	8.2	18	9.6
JUNE 06...	--	62	0	--	28	.6	66	174	7.7	19	9.0
JULY 10...	--	53	0	--	21	.4	57	138	8.2	21	9.0
AUG. 07...	--	60	1	--	25	.5	59	147	8.2	19	9.1
SEPT. 05...	117	64	0	.16	29	.7	71	177	8.0	20	8.9

11-3907. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
11...	217	36	24	62	1.6	226	0	81	38	2.2	.34
NOV.											
15...	490	25	20	55	3.1	201	0	57	25	1.9	.19
DEC.											
09...	333	33	27	98	3.6	251	0	126	49	3.5	.24
JAN.											
05...	86	51	48	153	2.7	311	12	239	86	1.8	.32
FEB.											
07...	1000	40	21	99	3.6	198	0	158	56	6.1	.37
MAR.											
06...	306	50	41	138	1.3	332	0	197	88	2.7	.43
APR.											
04...	274	30	21	70	1.4	174	0	98	45	1.8	.29
MAY											
08...	1330	22	17	47	2.1	139	8	65	20	1.7	.19
JUNE											
06...	500	21	29	82	1.5	200	6	114	43	3.3	.34
JULY											
10...	473	28	24	71	1.1	231	0	82	31	1.6	.32
AUG.											
07...	857	25	21	53	1.2	220	0	58	23	.6	.21
SEPT.											
05...	1100	28	21	52	1.5	218	0	50	24	.6	.26

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
11...	347	189	4	.47	41	2.0	185	654	8.1	18	8.2
NOV.											
15...	304	145	0	.41	45	2.0	165	531	7.7	14	8.8
DEC.											
08...	450	195	0	.61	52	3.1	206	811	8.2	8	11.1
JAN.											
05...	748	324	49	1.02	50	3.7	275	1150	8.5	4	13.0
FEB.											
07...	508	188	26	.69	53	3.2	162	848	8.2	12	9.3
MAR.											
06...	628	295	23	.85	50	3.5	272	1170	8.0	15	9.2
APR.											
04...	383	162	19	.52	48	2.4	143	649	8.0	16	9.5
MAY											
08...	279	124	0	.38	44	1.8	127	469	8.6	21	7.5
JUNE											
06...	407	173	0	.55	51	2.7	174	725	8.5	20	7.7
JULY											
10...	320	170	0	.44	48	2.4	189	623	7.8	24	7.1
AUG.											
07...	278	150	0	.38	43	1.9	180	546	8.0	23	7.1
SEPT.											
05...	284	156	0	.39	42	1.8	179	528	8.2	22	7.5

11-3925. MIDDLE FORK FEATHER RIVER NEAR CLIO, CALIF.

LOCATION.--Lat 39°45'10", long 120°35'40", in SE¼ sec.23, T.22 N., R.12 E., Plumas County, temperature recorder at gaging station 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.
RECORDS AVAILABLE.--Water temperatures: October 1963 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 23°C June 27, July 8, 9, 18.
EXTREMES, 1963-68.--Water temperatures: Maximum, 26°C Aug. 3, 1966; minimum (1963-66), freezing point on several days in December 1963.
REMARKS.--Recorder malfunctioned Nov. 24 to Feb. 23.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	15	14	13	13	12	12	12	12	12	12	13	14	13	12	12	12	12	11	11	11	11	12	11	11	11	10	10	11	10	9	9	12
MINIMUM	12	11	10	11	11	9	9	10	10	10	11	11	11	9	8	8	8	8	8	8	8	9	10	8	9	8	8	9	8	7	7	9
NOVEMBER																																
MAXIMUM	9	9	8	8	9	9	8	8	8	7	7	7	7	9	8	8	7	7	6	7	7	6	4	--	--	--	--	--	--	--	--	--
MINIMUM	7	7	7	7	8	7	7	7	7	6	6	7	7	7	7	6	6	6	6	6	6	4	3	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	5	6	6	6	6	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	4	5	6	6	6	--	--	--
MARCH																																
MAXIMUM	6	6	7	7	7	7	6	6	5	5	5	5	5	5	5	5	5	5	6	6	6	6	7	7	7	7	7	8	8	9	9	6
MINIMUM	6	6	6	7	7	6	6	5	5	4	5	5	4	4	5	5	4	4	5	5	6	6	6	7	7	7	7	7	8	8	8	6
APRIL																																
MAXIMUM	8	8	8	8	8	8	8	9	9	10	10	10	9	9	9	9	9	9	9	9	9	9	9	10	10	11	12	12	13	13	--	9
MINIMUM	8	8	7	8	8	7	7	7	8	8	9	9	8	8	8	9	8	7	8	8	8	8	8	9	9	9	11	9	11	11	--	8
MAY																																
MAXIMUM	13	13	14	14	13	12	13	13	14	14	14	13	13	12	13	14	15	16	16	14	14	13	13	12	14	16	17	17	17	17	18	14
MINIMUM	11	11	11	12	11	10	11	11	11	11	11	11	11	10	11	12	13	12	14	14	13	12	12	12	12	13	13	15	15	15	14	12
JUNE																																
MAXIMUM	18	19	19	17	17	16	15	16	16	17	17	17	17	18	20	21	21	21	21	20	20	21	21	21	21	22	23	22	21	19	--	19
MINIMUM	15	17	17	16	16	14	14	14	14	15	15	15	15	16	17	18	19	19	18	18	18	19	19	18	18	19	19	19	18	14	--	17
JULY																																
MAXIMUM	20	20	21	22	22	22	22	23	23	22	22	22	22	22	22	22	22	23	22	22	22	21	21	21	21	22	22	22	22	21	20	22
MINIMUM	17	18	17	19	19	19	20	20	20	18	17	18	17	18	17	17	17	17	17	17	16	15	15	15	15	16	17	18	19	19	19	17
AUGUST																																
MAXIMUM	22	22	22	21	18	19	21	21	21	21	21	21	20	18	19	17	16	16	16	16	14	14	16	16	16	17	18	19	19	20	21	19
MINIMUM	18	18	17	17	16	14	16	17	19	17	17	17	17	17	14	15	14	14	14	13	13	12	13	13	15	15	13	14	15	15	16	15
SEPTEMBER																																
MAXIMUM	21	21	20	19	19	19	19	18	18	17	18	17	17	18	17	16	17	17	16	14	13	11	12	13	14	14	14	14	13	12	--	16
MINIMUM	17	16	16	15	16	16	15	15	16	13	14	14	13	14	14	13	13	14	13	11	9	9	9	10	11	11	11	11	10	10	--	13

11-3945. 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, 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.
RECORDS AVAILABLE.--Chemical analyses: July 1963 to June 1966.
Water temperatures: October 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C on several days during July and August; minimum, 1°C on several days during December to February.
EXTREMES, 1962-68.--Water temperatures: Maximum (1964-68), 24°C Aug. 3, 1966; minimum (1962-64, 1965-68), 1°C Jan. 26, 27, 1966 and on several days during December 1967 to February 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	16	15	13	13	13	12	13	13	13	13	13	13	13	13	12	12	12	12	12	12	11	12	12	12	12	12	11	11	11	10	10	12
MINIMUM	15	13	12	12	12	12	12	12	13	13	13	13	13	12	11	11	11	11	11	11	11	11	12	12	12	11	11	11	10	9	9	12
NOVEMBER																																
MAXIMUM	10	10	10	10	11	11	11	11	11	11	10	10	10	11	11	11	11	11	11	10	9	8	8	7	7	7	6	6	6	4	--	9
MINIMUM	9	9	9	9	10	11	10	11	11	10	9	9	10	10	11	11	11	11	10	9	8	8	7	7	7	6	6	6	5	3	--	9
DECEMBER																																
MAXIMUM	3	4	4	4	5	5	5	4	4	4	3	3	2	1	1	1	1	1	1	2	2	3	3	3	4	4	4	4	4	3	3	3
MINIMUM	3	3	4	4	4	4	4	4	3	3	3	2	1	1	1	1	1	1	1	1	2	2	3	3	3	3	4	3	3	3	2	3
JANUARY																																
MAXIMUM	3	2	2	2	2	2	2	2	3	4	3	2	3	4	4	4	4	4	4	4	5	6	6	5	4	4	3	2	2	1	1	3
MINIMUM	2	2	2	2	1	2	2	2	2	3	2	2	2	3	3	3	4	4	4	4	4	5	6	4	4	3	2	2	1	1	1	3
FEBRUARY																																
MAXIMUM	2	2	2	3	4	5	5	5	6	6	6	6	6	6	6	5	5	6	6	6	6	6	7	8	8	8	8	8	7	--	--	6
MINIMUM	1	2	2	2	3	4	4	5	5	5	6	6	6	6	5	5	5	5	6	6	6	6	6	7	7	8	8	7	7	--	--	5
MARCH																																
MAXIMUM	8	8	8	8	8	8	7	7	7	7	7	6	5	6	7	7	6	6	6	7	7	8	8	8	8	8	8	9	9	9	9	7
MINIMUM	7	7	7	7	8	7	7	7	6	6	6	5	4	5	5	6	6	6	6	6	7	7	8	8	8	7	7	8	9	9	8	7
APRIL																																
MAXIMUM	9	8	8	9	9	8	8	8	9	10	10	9	9	9	9	8	8	7	8	8	8	8	8	9	9	10	10	10	11	11	--	9
MINIMUM	8	7	7	8	8	8	8	8	8	9	9	9	7	7	8	8	6	6	7	7	7	6	7	8	8	9	9	8	9	10	--	8
MAY																																
MAXIMUM	10	11	11	11	11	10	10	11	11	11	11	11	10	9	10	12	12	12	13	12	12	11	11	11	12	13	14	14	14	14	14	11
MINIMUM	9	9	10	10	10	9	9	9	10	11	10	10	9	8	8	10	11	11	12	12	11	11	10	9	10	11	12	13	13	13	13	10
JUNE																																
MAXIMUM	14	15	15	15	15	14	14	14	14	15	16	16	15	16	17	18	18	18	19	19	19	19	20	20	20	20	21	21	20	18	--	17
MINIMUM	13	14	15	14	13	13	13	14	14	14	15	14	14	14	15	17	17	18	18	17	18	18	19	19	19	19	19	19	18	16	--	16
JULY																																
MAXIMUM	18	18	19	21	21	22	22	22	22	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	20	20	20	20	21
MINIMUM	17	17	18	19	19	21	21	21	21	20	19	19	19	19	19	19	19	19	19	19	19	19	19	18	18	18	18	19	19	19	19	19
AUGUST																																
MAXIMUM	21	22	22	21	21	21	19	20	20	21	21	20	20	19	19	18	18	17	17	16	15	15	17	17	17	17	17	18	18	20	21	19
MINIMUM	19	20	20	20	19	18	18	19	19	19	19	19	18	18	18	18	17	17	16	15	14	14	15	16	16	16	16	17	17	18	19	17
SEPTEMBER																																
MAXIMUM	21	21	21	21	21	21	21	20	19	19	19	19	19	19	19	18	18	18	18	17	16	15	15	16	16	16	17	16	16	16	--	18
MINIMUM	20	20	20	19	20	20	19	19	19	19	18	18	18	18	18	18	17	17	17	16	14	14	14	14	15	16	16	15	14	14	--	17

11-4011.8. LITTLE GRIZZLY CREEK NEAR GENESEE, CALIF.

LOCATION.--Lat 40°00'55", long 120°45'10", in NE¼SW¼ sec.21, T.25 N., R.11 E., Plumas County, 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.
RECORDS AVAILABLE.--Water temperatures: August 1964 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 18°C June 27, July 6-9; minimum, freezing point on many days during winter months.
EXTREMES, 1964-68.--Water temperatures: Maximum, 19°C Aug. 2, 3, 1966; minimum, freezing point on many days during December to February of most years.
REMARKS.--Clock stopped Nov. 6 to Dec. 7, Jan. 23-25, Aug. 22-29; temperature ranges, 0°C to 8°C, 1°C to 2°C, and 7°C to 14°C, respectively.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1969

MONTH	DAY 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
OCTOBER																																
MAXIMUM	12	11	9	10	10	9	9	10	10	10	11	11	9	9	8	8	8	7	8	8	9	9	9	8	8	8	8	9	8	6	7	9
MINIMUM	11	9	8	8	8	7	8	8	8	8	8	9	8	7	6	6	6	6	6	6	7	8	8	7	7	6	6	8	6	4	6	7
NOVEMBER																																
MAXIMUM	7	7	7	8	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	6	6	6	6	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	--
MINIMUM	--	--	--	--	--	--	--	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	--
JANUARY																																
MAXIMUM	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	2	2	1	1	2	2	2	--	--	--	1	1	1	0	0	0	1
MINIMUM	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	2	1	--	--	--	1	0	0	0	0	0	0
FEBRUARY																																
MAXIMUM	1	1	1	2	3	3	3	3	3	3	4	4	3	3	4	3	4	4	4	4	4	4	4	5	4	4	4	4	4	--	--	3
MINIMUM	0	1	1	1	2	2	3	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	3	3	3	2	2	--	--	3
MARCH																																
MAXIMUM	4	4	4	4	4	4	4	4	4	3	3	3	2	3	4	3	3	3	3	3	4	5	6	5	4	4	5	6	6	6	6	4
MINIMUM	2	2	2	2	3	2	3	3	3	2	2	1	1	1	2	0	0	2	1	1	2	3	3	3	3	2	3	3	4	4	3	2
APRIL																																
MAXIMUM	5	5	6	7	6	6	6	7	7	8	7	7	6	7	6	4	4	6	7	6	6	7	7	7	8	8	8	9	9	9	--	7
MINIMUM	4	3	3	4	4	3	3	3	4	4	4	4	2	3	3	3	1	2	4	3	2	2	3	4	4	4	4	4	6	5	--	3
MAY																																
MAXIMUM	9	9	11	9	8	8	9	10	10	11	8	9	8	9	9	11	10	12	11	12	9	9	9	11	12	13	13	13	13	13	13	10
MINIMUM	5	6	6	6	5	4	5	6	6	6	6	7	6	4	4	6	6	8	9	8	8	7	7	7	8	8	9	9	9	9	9	7
JUNE																																
MAXIMUM	14	14	13	13	12	11	11	12	14	13	14	12	14	14	16	16	16	17	16	16	17	17	17	17	17	17	18	17	16	14	--	15
MINIMUM	10	11	11	11	9	9	9	8	8	10	10	9	8	10	11	12	12	12	12	12	12	13	13	13	12	13	13	13	11	9	--	11
JULY																																
MAXIMUM	16	16	17	17	17	18	18	18	18	17	16	17	17	17	16	16	16	17	17	16	16	16	15	15	15	16	16	16	17	16	16	16
MINIMUM	11	12	13	13	14	14	14	14	15	13	12	13	13	13	13	13	12	13	13	13	12	12	12	11	11	12	13	13	14	15	15	13
AUGUST																																
MAXIMUM	17	17	16	16	15	15	15	16	16	16	16	16	15	13	14	14	12	12	12	10	11	--	--	--	--	--	--	--	--	14	14	--
MINIMUM	14	14	13	12	12	11	12	13	13	13	12	13	12	12	11	12	9	11	10	8	9	--	--	--	--	--	--	--	--	11	12	--
SEPTEMBER																																
MAXIMUM	14	14	14	14	14	14	14	14	13	13	13	13	12	13	13	12	12	13	12	10	9	8	9	10	11	11	11	9	9	9	--	12
MINIMUM	12	12	12	11	11	11	11	11	12	11	11	11	10	12	11	9	9	11	10	5	7	6	6	7	6	8	8	8	7	7	--	9

11-4015. INDIAN CREEK NEAR CRESCENT MILLS, CALIF.

LOCATION.--Lat 40°04'20", long 120°55'35", 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.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1963.
Water temperatures: October 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 27°C July 4, 27, 30, Aug. 1, 2; minimum, freezing point on several days during December to February.
EXTREMES, 1962-65, 1966-68.--Water temperatures: Maximum, 28°C July 26-28, 1963; minimum (1962-64, 1966-68), freezing point on several days during December to February of most years.
REMARKS.--Clock stopped Nov. 26-30; temperature range, 2°C to 6°C. Recorder malfunctioned Dec. 1-12, 21-25, Dec. 30 to Jan. 1, Jan. 6-8, 10-12, 21-25.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	15	13	14	13	14	15	16	16	16	16	16	17	16	14	14	14	14	14	14	13	13	15	14	14	14	13	13	14	12	12	12	14
MINIMUM	13	10	9	11	12	11	12	12	12	12	12	13	12	11	9	10	10	10	10	10	10	12	12	11	11	10	10	12	8	8	8	11
NOVEMBER																																
MAXIMUM	11	11	11	10	11	11	11	11	11	10	9	9	9	9	9	10	9	9	8	8	8	7	7	7	7	--	--	--	--	--	--	9
MINIMUM	8	8	8	8	9	8	8	8	9	8	7	7	8	8	9	8	8	8	6	6	6	4	4	4	4	--	--	--	--	--	--	7
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	3	0	0	0	1	1	1	1	--	--	--	--	--	4	4	3	3	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	1	1	--	--	--	--	--	1	1	1	1	--	--	--
JANUARY																																
MAXIMUM	--	2	1	1	1	--	--	--	4	--	--	--	3	2	2	3	3	4	4	4	--	--	--	--	--	2	3	2	1	1	1	--
MINIMUM	--	0	0	0	1	--	--	--	2	--	--	--	1	1	1	1	2	2	2	2	--	--	--	--	--	1	1	1	0	1	0	--
FEBRUARY																																
MAXIMUM	1	2	3	4	3	4	5	4	4	4	4	5	4	4	5	5	4	5	5	4	4	5	6	6	7	7	7	7	7	--	--	5
MINIMUM	0	1	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	2	4	4	4	4	4	4	4	4	--	--	3
MARCH																																
MAXIMUM	6	7	7	7	7	7	6	6	8	7	6	4	6	7	8	6	7	7	8	8	8	8	9	9	8	8	9	10	11	11	11	8
MINIMUM	4	4	4	4	6	4	4	4	4	3	3	2	2	3	4	3	2	3	3	3	4	4	6	5	6	4	4	6	7	7	7	4
APRIL																																
MAXIMUM	8	9	9	9	9	9	10	11	11	12	12	11	11	11	10	9	8	10	10	11	10	11	11	13	13	14	14	14	16	15	--	11
MINIMUM	7	6	6	7	7	6	6	7	7	8	9	8	7	7	8	6	5	5	8	7	7	6	8	8	10	10	11	10	12	12	--	8
MAY																																
MAXIMUM	14	15	16	16	14	14	15	17	17	17	16	17	14	16	17	18	17	18	17	17	17	17	15	17	18	20	21	20	20	21	21	17
MINIMUM	11	12	12	13	12	10	11	12	13	13	12	13	11	10	11	12	13	13	14	13	13	13	13	12	13	14	15	16	16	16	16	13
JUNE																																
MAXIMUM	21	21	20	20	19	18	19	19	20	20	19	18	19	21	22	23	23	23	23	23	25	26	26	25	26	26	25	24	22	23	--	22
MINIMUM	16	17	17	16	16	14	14	15	14	16	16	14	14	15	16	17	17	18	18	17	18	18	18	18	18	19	19	18	16	15	--	16
JULY																																
MAXIMUM	24	22	25	27	26	26	26	26	26	25	25	24	24	24	24	24	25	26	25	24	24	25	26	25	26	26	27	26	26	27	24	25
MINIMUM	17	18	17	19	21	19	20	19	20	18	19	19	19	19	19	18	19	19	18	18	18	19	18	18	19	20	21	22	22	22	19	19
AUGUST																																
MAXIMUM	27	27	26	26	25	26	25	26	26	26	24	24	24	23	24	22	23	21	20	19	21	23	23	23	22	23	23	25	22	24	24	24
MINIMUM	21	22	20	19	18	16	18	20	20	19	19	19	18	18	18	19	18	19	17	16	17	17	18	18	19	19	19	19	19	15	15	18
SEPTEMBER																																
MAXIMUM	22	23	24	23	22	22	22	21	19	21	21	20	19	19	22	19	20	18	16	17	16	16	18	18	18	18	18	17	16	16	--	19
MINIMUM	16	15	15	14	14	14	13	14	14	13	13	13	12	13	13	11	12	12	12	9	9	8	9	10	11	11	11	11	9	9	--	12

11-4045. NORTH FORK FEATHER RIVER AT PULGA, CALIF.

LOCATION.--Lat 39°47'40", long 121°27'00", in NE¼ sec.6, T.22 N., R.5 E., Butte County, 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.
RECORDS AVAILABLE.--Chemical analyses: July 1963 to June 1966.
Water temperatures: October 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 24°C Aug. 1-4; minimum, 2°C on several days during December and January.
EXTREMES, 1963-68.--Water temperatures: Maximum (1963-64, 1965-66, 1967-68), 24°C Aug. 1-4, 1968; minimum (1963-65, 1966-68), 1°C Jan. 12, 13, 1963.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	13	12	13	--	--	--	--	--	--	--	12	12	12	11	11	--	--	11	10	10	10	9	9	8	8	8	8	--	--
MINIMUM	--	--	--	11	12	12	--	--	--	--	--	--	--	11	11	11	11	11	--	--	10	8	9	9	8	7	7	8	7	7	--	--
DECEMBER																																
MAXIMUM	8	7	8	9	8	7	8	7	6	6	6	5	3	2	3	3	3	5	4	5	4	4	5	6	6	5	6	6	5	5	4	5
MINIMUM	7	6	7	7	7	7	7	5	5	5	4	3	2	2	2	3	2	2	4	4	4	4	4	5	4	4	4	4	4	4	4	4
JANUARY																																
MAXIMUM	4	4	3	3	3	3	3	3	5	6	5	4	5	7	7	6	7	7	7	7	7	8	8	7	7	6	5	6	7	6	6	6
MINIMUM	3	3	3	3	2	2	2	3	3	5	4	3	4	5	4	5	6	6	6	6	6	7	7	6	6	5	4	4	5	5	6	4
FEBRUARY																																
MAXIMUM	6	6	7	7	7	7	7	7	7	7	8	8	8	8	8	7	8	8	9	7	8	8	8	8	8	8	8	8	7	--	--	7
MINIMUM	5	6	6	6	6	6	6	6	6	7	7	7	7	7	6	6	7	7	7	7	7	7	7	7	7	8	8	7	7	--	--	6
MARCH																																
MAXIMUM	8	9	9	10	10	9	9	9	9	8	8	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	8	11	12	12	12	9
MINIMUM	7	8	8	8	9	8	8	8	7	7	7	6	6	6	6	7	7	7	7	6	7	7	8	8	8	7	7	8	9	9	9	7
APRIL																																
MAXIMUM	11	10	11	11	11	11	11	12	12	13	13	13	12	12	12	11	11	11	11	11	11	11	11	12	12	13	13	14	14	12	--	12
MINIMUM	9	9	8	9	9	8	8	8	9	9	10	11	9	9	9	9	8	8	8	8	8	8	9	9	9	9	10	10	11	11	--	9
MAY																																
MAXIMUM	14	15	15	16	15	14	14	14	15	16	15	15	13	13	14	15	16	16	16	16	16	15	16	16	16	17	17	18	18	18	18	15
MINIMUM	11	11	12	12	12	11	11	11	12	12	12	13	12	12	11	12	13	13	14	14	14	13	13	13	13	13	14	14	14	14	14	12
JUNE																																
MAXIMUM	18	18	18	19	16	17	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	14	15	16	16	15	15	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	21	21	22	22	23	23	23	23	--	--	22	22	22	22	22	22	22	22	23	22	23	23	22	22	22	23	23	22	23	22	22
MINIMUM	--	17	18	18	19	19	19	19	19	--	--	19	19	19	18	18	18	18	19	19	18	19	19	18	18	19	19	19	20	20	21	18
AUGUST																																
MAXIMUM	24	24	24	24	23	23	23	22	22	23	23	22	22	21	21	20	21	20	18	18	18	19	19	19	18	19	19	20	20	21	21	21
MINIMUM	20	21	21	21	20	20	19	19	19	19	19	19	19	19	18	18	17	18	17	16	16	16	16	16	16	17	16	17	17	17	18	18
SEPTEMBER																																
MAXIMUM	21	22	21	21	21	21	21	20	19	20	20	19	19	19	19	19	19	19	18	18	17	17	17	17	18	18	18	17	18	17	--	19
MINIMUM	18	18	18	18	18	18	18	18	18	17	17	17	17	18	17	16	16	17	17	16	15	14	14	14	15	16	16	15	15	15	--	16

11-4053. WEST BRANCH FEATHER RIVER NEAR PARADISE, CALIF.

LOCATION.--Lat 39°47'15", long 121°33'40", in SE¼SE¼ sec.6, T.22 N., R.4 E., Butte County, temperature recorder at gaging station on left bank, 0.6 mile upstream from Griffin Gulch, and 4.0 miles northeast of Paradise.
DRAINAGE AREA (revised).--110 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 30°C July 6, 7; minimum, 2°C on several days during December and January.
EXTREMES, 1962-68.--Water temperatures: Maximum (1962-63, 1964-68), 31°C Aug. 18, 1967; minimum, 2°C Jan. 12-14, 1963, and on several days during December 1967 and January 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	19	18	12	14	14	15	16	17	17	16	17	17	16	16	16	15	16	15	15	16	15	16	16	16	16	15	14	14	13	13	13	15
MINIMUM	18	16	11	12	14	13	13	14	14	14	14	15	14	14	14	13	14	14	14	14	13	14	14	14	14	13	13	13	12	12	12	14
NOVEMBER																																
MAXIMUM	12	12	12	12	12	12	12	12	12	12	12	11	12	12	12	12	12	12	11	11	10	9	9	8	8	8	7	7	7	6	--	10
MINIMUM	12	11	11	11	12	12	12	12	12	11	11	11	11	12	12	12	12	11	11	10	9	8	8	8	7	7	7	7	6	6	--	10
DECEMBER																																
MAXIMUM	6	6	6	6	6	5	4	4	4	5	5	5	4	3	2	3	3	3	3	4	4	4	5	6	6	5	5	5	4	4	4	4
MINIMUM	6	6	6	6	5	4	4	4	4	5	5	4	3	2	2	2	2	2	3	3	4	4	4	5	5	4	4	4	4	3	4	4
JANUARY																																
MAXIMUM	4	4	3	2	2	2	2	2	3	4	4	3	4	5	6	5	5	4	4	5	6	6	6	6	6	6	6	4	3	4	4	4
MINIMUM	4	3	3	2	2	2	2	2	2	4	3	3	4	4	5	5	4	5	4	4	5	6	6	6	6	6	4	4	2	2	4	4
FEBRUARY																																
MAXIMUM	4	4	4	4	4	5	5	6	6	6	6	7	7	7	7	7	7	6	6	6	7	6	6	7	7	7	7	7	7	--	--	6
MINIMUM	3	3	4	4	4	4	5	5	6	6	6	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	--	--	6
MARCH																																
MAXIMUM	7	7	7	7	7	7	7	7	6	6	7	6	6	6	7	7	6	6	7	7	7	7	8	8	8	8	8	9	9	9	9	7
MINIMUM	6	7	7	7	7	6	7	7	6	6	6	6	5	5	6	6	6	6	6	6	7	7	7	7	8	6	7	8	8	8	8	6
APRIL																																
MAXIMUM	9	7	8	8	8	8	8	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	9	9	11	11	11	11	11	--	9
MINIMUM	7	7	7	8	8	7	7	8	8	9	9	9	7	8	8	8	6	6	7	7	7	7	8	8	8	9	9	9	10	10	--	8
MAY																																
MAXIMUM	11	12	12	12	12	11	11	11	12	12	12	11	11	8	9	12	12	12	12	12	11	10	11	10	12	13	14	15	16	16	16	12
MINIMUM	10	10	11	11	11	9	9	10	11	11	10	10	8	7	7	9	11	11	12	11	10	9	9	9	9	11	12	13	14	14	13	10
JUNE																																
MAXIMUM	17	17	17	17	16	14	16	15	17	17	18	17	18	19	21	22	23	24	24	24	26	27	27	28	28	28	29	28	26	27	--	21
MINIMUM	14	16	16	16	14	13	13	13	13	14	15	16	15	16	17	19	21	21	21	21	21	22	22	23	22	23	24	23	21	21	--	18
JULY																																
MAXIMUM	27	26	27	28	29	30	30	29	29	28	28	27	28	28	28	27	28	28	28	28	28	28	28	27	28	28	29	27	26	28	26	28
MINIMUM	21	22	22	23	24	24	24	24	24	24	22	22	23	23	23	22	22	23	23	23	22	22	22	22	22	22	23	23	24	23	24	23
AUGUST																																
MAXIMUM	28	29	29	29	26	26	26	26	26	27	27	25	24	23	25	23	24	22	21	18	16	18	21	21	20	21	22	23	24	25	26	24
MINIMUM	23	24	24	23	21	21	22	22	22	22	22	22	21	21	21	21	19	21	18	16	15	14	16	17	18	18	18	19	20	20	21	20
SEPTEMBER																																
MAXIMUM	25	26	26	25	25	24	24	24	22	23	23	24	22	23	23	22	23	22	21	19	18	18	18	19	20	20	20	19	19	19	--	22
MINIMUM	21	21	21	21	21	21	21	20	21	19	20	20	19	20	19	18	19	19	19	17	16	16	16	16	17	17	17	17	17	17	--	19

11-4069.2. 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, on left bank of outlet channel, 955 ft downstream from centerline of Thermalito Afterbay Dam, and 5.7 miles southeast of Oroville.

RECORDS AVAILABLE.--Water temperatures: May to September 1968.

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 below the Oroville project.

TEMPERATURE (°C) OF WATER, MAY TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15	16	17	18	19	19	19	19	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	14	16	17	17	17	18	17	--
JUNE																																
MAXIMUM	21	21	19	19	18	19	21	22	23	22	21	21	23	24	25	25	27	26	24	24	26	24	26	24	25	24	27	25	24	22	--	23
MINIMUM	18	18	18	18	17	17	18	19	21	21	21	21	21	22	23	23	23	24	23	23	23	24	23	23	23	23	23	24	21	21	--	21
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	21	21	22	23	22	23	23	23	23	24	25	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19	19	20	21	21	21	21	21	22	22	23	23	--
SEPTEMBER																																
MAXIMUM	24	24	25	26	25	25	24	25	23	24	23	23	23	22	22	21	22	21	22	21	19	18	17	18	20	21	21	21	21	21	--	22
MINIMUM	23	23	23	23	23	23	23	23	23	22	22	22	22	22	21	20	19	21	21	19	18	17	17	17	18	19	19	20	20	19	--	21

11-4070. FEATHER RIVER AT OROVILLE, CALIF.

LOCATION.--Lat 39°31'13", long 121°32'48", in Fernandez Land Grant, Butte County, at gaging station 300 ft upstream from fish barrier dam on Feather River, and 0.6 mile northeast of Oroville.
DRAINAGE AREA.--3,624 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
Water temperatures: October 1953 to September 1954, November 1956 to September 1968.
Sediment records: November 1956 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 38 ppm Feb. 26; minimum daily, 1 ppm on many days during June and July.
Sediment loads: Maximum daily, 456 tons Oct. 3; minimum daily, 1.0 tons June 9, 10.
EXTREMES, 1953-54, 1956-68.--Water temperatures (1956-67): Maximum, 27°C Sept. 10, 12, 1959; minimum, 2°C Dec. 27, 1959, Jan. 23-25, 1962.
Sediment concentrations (1956-68): Maximum daily, 4,100 mg/l Feb. 1, 1963; minimum daily, 1 mg/l on many days in 1961-62, 1964, and 1968.
Sediment loads (1956-68): Maximum daily, 1,500,000 tons Feb. 1, 1963; minimum daily, 1.0 tons June 9, 10, 1968.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
OCT.												
03...	4970	11	.01	8.5	4.0	3.2	.9	50	0	3.0	1.8	.0
31...	2850	--	--	--	--	--	--	--	--	--	--	--
NOV.												
30...	956	--	--	--	--	--	--	--	--	--	--	--
DEC.												
27...	624	10	.00	9.3	3.7	3.8	1.0	48	0	3.0	1.6	.1
JAN.												
31...	392	13	.01	9.8	3.9	3.5	1.0	52	0	4.0	1.3	.1
MAR.												
09...	392	12	.06	9.6	4.1	3.8	.9	54	0	2.0	1.1	.0
APR.												
02...	382	12	.03	7.6	3.6	3.0	.8	45	0	4.0	1.0	.0
MAY												
03...	392	12	.00	8.5	3.8	3.3	.8	48	0	4.0	1.6	.0
JUNE												
06...	402	12	.00	8.5	3.8	3.2	.9	46	0	3.0	1.0	.1
JULY												
02...	412	13	.00	8.8	3.4	3.0	.8	46	0	3.0	1.0	.1
AUG.												
01...	412	12	.00	8.2	3.7	3.4	.9	48	0	2.0	.6	.0
SEPT.												
05...	402	12	.00	8.0	3.2	3.2	.8	42	0	4.0	.7	.0

DATE	NITRATE (NO3)	PHOS-PHATE (PO4)	BORON (B)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)
OCT.												
03...	.1	.11	.05	--	58	38	0	.08	15	.2	41	95
31...	.1	.06	--	--	--	--	--	--	--	--	--	--
NOV.												
30...	.0	.10	--	--	--	--	--	--	--	--	--	--
DEC.												
27...	.0	.06	.00	67	59	38	0	.09	18	.3	39	94
JAN.												
31...	.2	.07	.00	57	63	40	0	.09	15	.2	43	96
MAR.												
09...	.4	.09	.03	62	61	41	0	.08	17	.3	44	99
APR.												
02...	.1	.12	.02	--	55	34	0	.07	16	.2	37	84
MAY												
03...	.1	.13	.06	51	59	36	0	.08	16	.2	39	87
JUNE												
06...	.0	.08	.00	55	57	36	0	.07	15	.2	38	86
JULY												
02...	.0	.11	.00	62	58	36	0	.08	15	.2	38	85
AUG.												
01...	.0	.07	.04	56	55	36	0	.08	17	.3	39	86
SEPT.												
05...	.1	.02	.03	56	53	33	0	.08	17	.2	34	80

11-4070. FEATHER RIVER AT OROVILLE, CALIF.--Continued

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	PH	TEMPERATURE (DEG C)	COLOR	AMMONIA (NH4)	ORGANIC NITROGEN (N)	ORTHO PHOSPHATE (PO4)	TOTAL NITROGEN (N)
OCT.							
03...	7.1	16	--	.12	--	--	--
31...	--	12	--	.06	--	--	--
NOV.							
30...	--	8	--	.09	--	--	--
DEC.							
27...	7.6	8	--	--	--	--	--
JAN.							
31...	7.8	5	--	--	--	--	--
MAR.							
09...	7.8	7	--	--	--	--	--
APR.							
02...	7.8	8	5	.06	.00	--	.05
MAY							
03...	7.5	8	--	.12	.09	--	.18
JUNE							
06...	7.4	15	4	.21	.18	--	.34
JULY							
02...	7.7	22	2	.08	.04	--	.10
AUG.							
01...	7.7	17	--	.06	.00	.02	--
SEPT.							
05...	7.9	17	0	.00	--	.04	--

DATE	ALDRIN	DDD	DDT	DI-ELDRIN	ENDRIN	HEPTA-CHLOR	HEPTA-CHLOR EPOXIDE	LINDANE	2,4-D	SILVEX	2,4,5-T
JAN.											
31...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR.											
09...	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
APR.											
02...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAY											
03...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUNE											
06...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
JULY											
02...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AUG.											
01...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEPT.											
05...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	18	16	17	--	17	--	17	--	--	18	--	18	--	17	--	17	--	--	16	--	16	--	17	--	--	16	--	17	--	14	--
NOVEMBER.	--	16	--	14	--	15	--	15	--	14	--	13	--	14	--	14	--	13	13	--	13	--	12	--	12	--	11	--	9	9	--	--
DECEMBER.	9	9	--	9	--	9	--	--	9	--	9	--	7	--	--	6	--	7	--	6	--	7	--	8	--	9	11	7	--	7	7	--
JANUARY..	--	5	--	6	--	2	--	4	--	6	--	5	--	6	--	7	--	8	--	--	--	9	--	9	--	7	--	6	--	6	5	--
FEBRUARY.	--	7	--	7	--	8	--	8	--	7	--	8	--	9	--	--	8	--	--	9	--	9	--	9	--	--	--	9	--	--	--	--
MARCH....	9	--	10	--	9	--	8	--	8	--	9	--	9	--	9	8	--	11	--	11	--	9	--	11	--	--	--	11	--	11	12	--
APRIL....	--	8	--	9	--	--	12	--	14	14	--	13	--	12	--	11	--	12	--	12	--	12	--	13	--	13	--	13	--	13	--	--
MAY.....	--	--	8	12	--	11	--	12	--	13	--	12	--	12	--	14	--	13	--	12	--	14	--	14	--	17	--	17	--	17	--	--
JUNE.....	--	17	--	16	--	16	--	--	19	19	--	--	20	--	22	--	23	--	--	20	21	--	20	--	20	--	21	--	20	22	--	--
JULY.....	--	22	--	21	--	22	--	21	--	22	--	19	--	22	--	19	--	22	--	19	--	18	--	18	--	20	--	19	--	21	19	--
AUGUST...	18	23	--	22	--	21	--	20	--	20	--	19	--	21	--	21	--	18	--	16	--	21	--	19	--	20	--	23	--	22	--	--
SEPTEMBER	22	--	19	--	17	--	21	--	19	--	20	--	20	--	18	--	22	--	18	--	17	--	19	--	21	--	21	--	19	--	--	--

11-4070. FEATHER RIVER AT OROVILLE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1180	7	22	2910	12	94	948	11	28
2	3560	11	127	3250	10	88	948	11	28
3	4970	34	456	3100	9	75	935	16	40
4	3980	31	333	2570	9	62	935	24	61
5	3560	20	192	1940	8	42	922	18	45
6	3470	14	131	2510	6	41	909	12	29
7	3620	11	108	2890	7	55	909	11	27
8	3230	10	87	1570	8	34	909	11	27
9	3070	10	83	1190	9	29	909	10	25
10	3140	10	85	1190	10	32	909	10	25
11	2490	11	74	1180	9	29	896	9	22
12	2100	11	62	1750	8	38	896	10	24
13	2160	10	58	2380	7	45	896	12	29
14	2950	9	72	1480	5	20	890	12	29
15	2910	7	55	1140	4	12	896	11	27
16	2630	7	50	970	4	10	909	11	27
17	2950	11	88	942	3	7.6	909	10	25
18	2730	11	81	956	3	7.7	922	8	20
19	2710	9	66	970	4	10	909	8	20
20	2630	8	57	970	11	29	909	9	22
21	2140	7	40	956	23	59	909	9	22
22	2120	6	34	956	28	72	834	7	16
23	2290	7	43	970	25	65	810	6	13
24	2630	7	50	1050	20	57	810	6	13
25	2650	7	50	1430	14	54	810	6	13
26	2870	6	46	1430	9	35	692	7	13
27	2450	5	33	1430	6	23	624	6	10
28	1690	5	23	1370	6	22	547	4	5.9
29	1620	5	22	970	7	18	420	2	2.3
30	1890	5	26	956	10	26	401	2	2.2
31	2850	10	77	--	--	--	401	3	3.2
TOTAL	85240	--	2731	47376	--	1191.3	25523	--	693.6

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	401	5	5.4	392	13	14	750	8	16
2	401	6	6.5	401	12	13	810	24	52
3	401	6	6.5	401	11	12	810	20	44
4	410	5	5.5	401	11	12	822	16	36
5	420	5	5.7	401	12	13	786	14	30
6	420	4	4.5	401	13	14	580	12	19
7	420	4	4.5	401	16	17	420	9	10
8	430	3	3.5	392	21	22	392	7	7.4
9	401	4	4.3	392	25	26	392	7	7.4
10	420	5	5.7	401	27	29	401	7	7.6
11	410	4	4.4	410	25	28	420	6	6.8
12	410	4	4.4	420	20	23	410	7	7.7
13	420	5	5.7	430	17	20	410	11	12
14	401	6	6.5	494	16	21	382	10	10
15	401	7	7.6	774	16	33	401	8	8.7
16	401	8	8.7	810	14	31	420	16	18
17	410	8	8.9	786	14	30	392	11	12
18	401	7	7.6	810	13	28	401	10	11
19	392	7	7.4	822	13	29	372	10	10
20	392	9	9.5	822	12	27	420	12	14
21	410	10	11	834	13	29	401	11	12
22	410	10	11	822	17	38	382	10	10
23	410	11	12	822	22	49	472	12	15
24	392	13	14	810	30	66	738	14	28
25	392	12	13	798	35	75	410	17	19
26	392	10	11	810	38	83	410	15	17
27	401	11	12	822	34	75	410	14	15
28	401	12	13	822	31	69	420	14	16
29	420	12	14	834	28	63	410	13	14
30	420	17	19	--	--	--	410	10	11
31	392	15	16	--	--	--	410	10	11
TOTAL	12602	--	268.8	17935	--	989	15064	--	507.6

11-4070. FEATHER RIVER AT OROVILLE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	410	10	11	410	4	4.4	410	3	3.3
2	382	9	9.3	420	4	4.5	410	3	3.3
3	420	9	10	392	4	4.2	410	3	3.3
4	430	9	10	392	5	5.3	392	3	3.2
5	441	8	9.5	392	5	5.3	387	2	2.1
6	420	7	7.9	392	4	4.2	402	2	2.2
7	401	6	6.5	401	4	4.3	402	2	2.2
8	401	5	5.4	382	5	5.2	393	1	1.1
9	401	4	4.3	392	5	5.3	384	1	1.0
10	401	4	4.3	392	5	5.3	384	1	1.0
11	401	4	4.3	401	5	5.4	393	2	2.1
12	410	3	3.3	410	5	5.5	393	2	2.1
13	410	3	3.3	483	5	6.5	384	3	3.1
14	401	3	3.2	401	3	3.2	412	3	3.3
15	401	3	3.2	392	3	3.2	402	3	3.3
16	392	4	4.2	392	3	3.2	402	2	2.2
17	363	4	3.9	401	3	3.2	412	2	2.2
18	354	5	4.8	401	2	2.2	412	2	2.2
19	382	5	5.2	392	2	2.1	402	2	2.2
20	401	4	4.3	392	2	2.1	393	3	3.2
21	410	4	4.4	392	2	2.1	410	3	3.3
22	401	4	4.3	401	3	3.2	412	2	2.2
23	401	4	4.3	410	2	2.2	412	1	1.1
24	401	4	4.3	420	2	2.3	412	1	1.1
25	401	4	4.3	420	2	2.3	412	2	2.2
26	401	4	4.3	420	3	3.4	402	2	2.2
27	401	4	4.3	420	3	3.4	412	2	2.2
28	401	4	4.3	410	2	2.2	412	2	2.2
29	401	4	4.3	410	2	2.2	402	3	3.3
30	410	4	4.4	410	2	2.2	393	1	1.1
31	--	--	--	410	2	2.2	--	--	--
TOTAL	12050	--	161.1	12553	--	112.3	12058	--	69.5

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	402	2	2.2	412	2	2.2	412	2	2.2
2	412	2	2.2	412	3	3.3	412	2	2.2
3	412	2	2.2	421	4	4.5	422	3	3.4
4	402	2	2.2	421	5	5.7	431	3	3.5
5	412	2	2.2	412	5	5.6	402	2	2.2
6	402	1	1.1	412	6	6.7	402	3	3.3
7	412	1	1.1	412	5	5.6	402	3	3.3
8	422	1	1.1	412	3	3.3	402	3	3.3
9	412	1	1.1	412	3	3.3	393	2	2.1
10	412	1	1.1	412	3	3.3	402	2	2.2
11	412	1	1.1	412	3	3.3	402	3	3.3
12	407	2	2.2	402	3	3.3	412	2	2.2
13	412	2	2.2	402	4	4.3	422	2	2.3
14	412	1	1.1	402	4	4.3	431	3	3.5
15	412	1	1.1	392	3	3.2	431	4	4.7
16	412	1	1.1	392	2	2.1	422	4	4.6
17	412	1	1.1	412	2	2.2	431	3	3.5
18	412	1	1.1	412	3	3.3	431	3	3.5
19	412	1	1.1	412	3	3.3	431	2	2.3
20	412	1	1.1	412	4	4.4	431	2	2.3
21	412	1	1.1	397	3	3.2	422	2	2.3
22	412	1	1.1	402	2	2.2	412	2	2.2
23	412	1	1.1	402	2	2.2	402	2	2.2
24	412	1	1.1	402	2	2.2	402	3	3.3
25	402	1	1.1	412	2	2.2	393	4	4.2
26	402	1	1.1	412	2	2.2	393	3	3.2
27	402	2	2.2	412	2	2.2	402	2	2.2
28	402	2	2.2	422	3	3.4	402	2	2.2
29	402	2	2.2	422	2	2.3	402	2	2.2
30	408	2	2.2	412	2	2.2	393	2	2.1
31	408	3	3.3	412	2	2.2	--	--	--
TOTAL	12689	--	48.4	12695	--	103.7	12347	--	86.0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 278132
TOTAL LOAD FOR YEAR (TONS) 6962.3

11-4070. FEATHER RIVER AT OROVILLE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 17, 1968	1215	9	746	21	42	42	68	78	83	88	94	--	--	--	--	--	SCBW
MAR 16.....	1230	8	390	18	19	56	76	88	90	91	95	--	--	--	--	--	SCBW

11-4071.5. 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.
RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1968.
Sediment records: October 1964 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, 4°C Jan. 3, 5-8.
Sediment concentrations: Maximum daily, 54 mg/l Feb. 13; minimum daily, 2 mg/l Dec. 24.
Sediment loads: Maximum daily, 554 tons Feb. 13; minimum daily, 3.0 tons July 25, 27, 30.
EXTREMES, 1964-68.--Water temperatures: Minimum, 4°C on several days during December and January of most years.
Sediment concentrations: Maximum daily, 1,340 mg/l Dec. 25, 1964; minimum daily, 2 mg/l Dec. 24, 1967.
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 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	17	--	16	--	16	--	18	--	17	--	17	--	16	--	16	--	16	--	17	--	16	--	16	--	16	--	15	--	14	--	--
NOVEMBER.	14	--	--	--	13	--	14	--	13	--	13	--	12	--	13	--	13	--	12	14	--	12	11	12	11	11	9	9	8	8	--	--
DECEMBER.	8	9	10	10	9	8	9	9	9	9	8	7	5	5	7	6	5	6	6	5	6	6	7	8	8	9	9	9	9	7	6	8
JANUARY..	6	6	4	5	4	4	4	4	6	6	6	6	7	8	8	8	8	8	9	9	9	9	9	9	9	7	7	7	6	6	7	7
FEBRUARY.	6	8	8	9	9	9	10	10	8	10	11	11	11	11	11	9	11	11	9	12	12	12	13	13	13	13	13	13	13	--	--	11
MARCH....	12	13	13	--	--	--	11	11	12	13	12	11	11	11	--	--	--	--	--	14	13	14	--	13	14	14	15	16	17	17	16	--
APRIL....	14	13	15	15	15	10	14	16	17	18	18	17	18	17	17	16	16	16	15	15	15	14	14	14	16	16	17	17	12	17	--	15
MAY.....	17	--	16	14	14	13	14	14	14	14	14	14	13	15	17	17	17	17	16	16	16	16	16	16	16	16	18	20	20	20	21	16
JUNE.....	19	20	20	20	17	18	19	21	22	21	21	21	22	22	24	26	26	25	25	26	26	25	26	26	26	22	26	26	22	20	--	23
JULY.....	22	24	25	27	27	27	27	27	26	26	26	26	25	23	24	25	27	27	26	23	26	26	24	24	24	24	24	24	26	26	25	25
AUGUST...	26	20	26	19	25	26	--	24	--	22	--	21	--	21	--	21	--	19	--	19	--	20	--	20	--	21	--	23	--	22	--	--
SEPTEMBER	23	--	24	--	24	--	23	--	22	--	21	--	21	--	20	--	20	--	18	--	19	--	20	--	21	--	21	--	19	--	--	--

11-4071.5. FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	697	22	41	2690	8	58	964	7	18
2	1910	24	124	3120	20	168	953	8	21
3	3880	20	210	3000	20	162	953	6	15
4	3290	13	115	2730	20	147	931	6	15
5	2700	13	95	1980	19	102	920	9	22
6	2690	12	87	1990	13	70	920	10	25
7	2780	10	75	2840	10	77	920	8	20
8	2470	7	47	2170	9	53	920	6	15
9	2440	7	46	1210	8	26	920	6	15
10	2200	7	42	1260	6	20	920	6	15
11	1980	9	48	1230	5	17	920	10	25
12	1600	11	48	1470	6	24	920	6	15
13	1190	10	32	2190	7	41	920	7	17
14	2290	9	56	1930	6	31	920	7	17
15	2200	7	42	1190	4	13	920	9	22
16	2170	5	29	1070	4	12	931	7	18
17	2240	4	24	994	4	11	931	8	20
18	2090	4	23	975	4	11	942	7	18
19	2020	6	33	991	3	8.0	942	12	31
20	1950	9	47	985	5	13	942	12	31
21	1850	8	40	959	12	31	903	5	12
22	1380	6	22	964	20	52	905	5	12
23	1670	6	27	964	14	36	868	9	21
24	1810	5	24	1160	20	63	860	2	4.6
25	2140	5	29	1470	25	99	860	3	7.0
26	2110	5	28	1470	18	71	893	5	12
27	2300	5	31	1480	13	52	863	5	12
28	1880	5	25	1420	8	31	909	5	12
29	1610	5	22	987	8	21	906	6	15
30	1450	5	20	984	8	21	887	5	12
31	2500	6	41	--	--	--	888	3	7.2
TOTAL	65487	--	1573	47873	--	1541.0	28351	--	521.8

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	892	3	7.2	1040	18	51	867	33	77
2	897	3	7.3	1090	18	53	857	29	67
3	893	3	7.2	1070	14	40	880	31	74
4	889	4	9.6	1050	12	34	863	31	72
5	911	3	7.4	1030	12	33	868	29	68
6	923	4	10	988	11	29	864	25	58
7	925	3	7.5	1010	13	35	877	20	47
8	931	3	7.5	996	16	43	855	20	46
9	937	6	15	966	14	37	822	20	44
10	990	5	13	964	15	39	817	22	49
11	930	6	15	953	18	46	821	20	44
12	931	6	15	953	22	57	820	10	22
13	931	6	15	3220	54	554	868	8	19
14	955	6	15	1990	30	191	839	9	20
15	998	8	22	1050	21	60	841	10	23
16	965	7	18	1020	20	55	888	10	24
17	942	7	18	1010	22	60	866	11	26
18	906	7	17	966	21	55	846	12	27
19	873	6	14	989	22	59	840	13	29
20	779	7	15	1080	23	67	858	14	32
21	875	7	17	1090	19	56	868	14	33
22	899	9	22	1060	22	63	860	13	30
23	930	11	28	1010	20	55	853	13	30
24	972	11	29	974	25	66	823	13	29
25	1070	13	38	943	25	64	884	11	26
26	1020	12	33	929	32	80	797	13	28
27	992	9	24	921	43	107	848	12	27
28	1010	9	25	909	39	96	843	10	23
29	1080	14	41	909	37	91	835	11	25
30	1110	12	36	--	--	--	845	10	23
31	1050	18	51	--	--	--	847	9	21
TOTAL	29406	--	599.7	32180	--	2276	26360	--	1163

11-4071.5. FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	843	9	20	2050	9	50	2490	7	47
2	828	10	22	2180	10	59	2360	5	32
3	838	10	23	3260	10	88	2290	5	31
4	850	24	55	3720	13	131	2140	6	35
5	847	15	34	3750	12	122	1930	5	26
6	824	11	24	3490	8	75	1480	3	12
7	807	10	22	2530	9	61	962	4	10
8	816	11	24	2320	9	56	942	5	13
9	824	9	20	1760	9	43	925	4	10
10	816	9	20	980	8	21	911	4	9.8
11	814	13	29	975	8	21	917	4	9.9
12	814	6	13	1000	9	24	908	5	12
13	802	13	28	1380	7	26	865	5	12
14	808	11	24	3060	7	58	870	5	12
15	802	12	26	1050	12	34	1070	5	14
16	622	10	17	2010	14	76	1280	5	17
17	756	12	24	2590	12	84	1280	6	21
18	768	11	23	2970	10	80	1290	5	17
19	771	13	27	2910	12	94	1350	4	15
20	768	11	23	2500	17	115	1610	6	26
21	786	10	21	1280	8	28	1610	6	26
22	893	12	29	2650	10	72	1960	6	32
23	1210	9	29	2890	11	86	2020	6	33
24	1190	11	35	3140	7	59	1910	6	31
25	1180	10	32	3210	8	69	1440	7	27
26	1180	10	32	3240	8	70	1020	5	14
27	1210	11	36	3290	6	53	831	5	11
28	1260	11	37	3300	5	45	814	5	11
29	1370	9	33	3060	6	50	762	5	10
30	1780	11	53	2820	5	38	795	5	11
31	--	--	--	2680	8	58	--	--	--
TOTAL	28077	--	835	78045	--	1946	41032	--	587.7

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	574	5	7.7	426	3	3.5	824	4	8.9
2	509	4	5.5	410	4	4.4	819	6	13
3	457	4	4.9	404	3	3.3	830	7	16
4	428	3	3.5	408	5	5.5	831	6	13
5	419	4	4.5	408	5	5.5	854	5	12
6	422	4	4.6	400	5	5.4	851	4	9.2
7	415	3	3.4	389	4	4.2	850	4	9.2
8	420	4	4.5	389	4	4.2	844	4	9.1
9	419	4	4.5	389	4	4.2	848	4	9.2
10	410	5	5.5	395	3	3.2	837	4	9.0
11	406	5	5.5	396	4	4.3	852	4	9.2
12	403	8	8.7	390	5	5.3	862	5	12
13	407	5	5.5	388	4	4.2	866	6	14
14	404	16	17	393	4	4.2	860	5	12
15	396	4	4.3	393	4	4.2	854	4	9.2
16	396	5	5.3	394	4	4.3	1030	4	11
17	391	5	5.3	404	5	5.5	913	3	7.4
18	381	4	4.1	404	4	4.4	880	4	9.5
19	379	5	5.1	503	3	4.1	872	5	12
20	377	6	6.1	558	4	6.0	860	4	9.3
21	378	4	4.1	555	5	7.5	856	4	9.2
22	381	4	4.1	559	4	6.0	847	4	9.1
23	381	4	4.1	584	4	6.3	859	3	7.0
24	381	3	3.1	591	4	6.4	858	4	9.3
25	374	3	3.0	598	4	6.5	856	5	12
26	366	4	4.0	745	5	10	852	4	9.2
27	370	3	3.0	793	6	13	864	4	9.3
28	379	4	4.1	788	6	13	868	5	12
29	374	5	5.0	784	6	13	875	5	12
30	373	3	3.0	795	6	13	881	5	12
31	392	3	3.2	819	5	11	--	--	--
TOTAL	12562	--	156.2	15852	--	195.6	25853	--	315.3

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 431078
TOTAL LOAD FOR YEAR (TONS) 11710.3

11-4071.5. FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 13, 1968	1730	11	4650	73	917	25	33	44	50	52	83	91	97	100	--	--	SCBW
FEB 14.....	1730	11	1380	21	78	8	19	42	58	68	88	94	97	100	--	--	SCBW
FEB 21.....	1155	12	1100	25	74	53	61	72	78	82	93	95	97	98	100	--	SCBW
MAR 20.....	1035	12	835	18	41	28	49	65	73	77	87	94	99	100	--	--	SCBW
MAY 3.....	1830	16	3740	30	303	1	12	33	43	51	82	96	99	100	--	--	SCBW
MAY 9.....	1320	15	2170	12	70	20	30	48	59	65	88	94	96	100	--	--	SCBW

11-4077. FEATHER RIVER AT YUBA CITY, CALIF.

LOCATION (revised).--Lat 39°08'20", long 121°36'17", in NE¼ sec.23, T.15 N., R.3 E., Sutter 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.
RECORDS AVAILABLE.--Water temperatures: July 1964 to September 1968.
Sediment records: October 1964 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 400 mg/l Jan. 31; minimum daily, 8 mg/l on several days during December and January.
Sediment loads: Maximum daily, 4,860 tons Jan. 31; minimum daily, 19 tons on several days during July and August.
EXTREMES, 1964-68.--Water temperatures (1964-67): Maximum, 32°C July 29, 1964; minimum (1964-65), 3°C on several days in January 1965.
Sediment concentrations: Maximum daily, 786 mg/l Dec. 24, 1964; minimum daily, 8 mg/l on several days during 1967-68.
Sediment loads: Maximum daily, 334,000 tons Dec. 24, 1964; minimum daily, 12 tons Oct. 27, 1966.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER..	18	17	16	18	--	--	--	--	16	17	18	19	17	--	--	--	--	18	18	18	--	--	18	--	17	--	14	--	--	12	--	--
NOVEMBER.	13	--	--	14	--	13	--	13	--	12	12	--	13	13	13	13	13	14	--	12	12	11	11	10	9	--	9	9	--	--	--	--
DECEMBER.	8	9	9	9	9	8	9	7	7	--	7	7	4	4	4	5	--	5	5	4	4	5	6	--	--	7	9	9	9	8	--	7
JANUARY..	--	6	4	5	5	4	--	4	4	6	5	4	7	--	8	8	7	7	6	9	--	8	8	8	8	8	7	--	6	6	6	6
FEBRUARY.	6	7	9	--	9	8	9	9	10	12	--	10	11	11	11	12	11	--	12	13	13	14	14	13	--	13	13	13	13	--	--	11
MARCH....	13	14	--	13	13	12	12	11	12	--	12	12	11	11	11	12	--	11	11	13	12	12	13	--	13	12	12	14	15	17	--	12
APRIL....	15	14	13	14	14	14	--	14	15	17	17	17	16	--	16	14	14	13	14	14	--	13	14	14	14	15	--	--	11	12	--	14
MAY.....	16	16	18	14	14	13	13	14	14	16	16	--	15	13	14	16	17	17	--	16	15	16	16	15	16	--	18	18	19	--	18	16
JUNE.....	--	--	19	--	17	--	--	20	--	20	--	19	--	22	--	--	21	--	21	--	--	24	--	23	--	23	--	23	--	--	--	--
JULY.....	--	--	26	--	--	--	--	--	23	--	23	--	22	--	22	--	23	--	25	--	--	23	--	21	--	26	--	--	23	--	23	--
AUGUST...	--	23	--	--	--	22	--	22	--	25	--	21	--	19	--	21	--	--	20	--	19	--	23	--	--	23	--	20	--	26	--	--
SEPTEMBER	--	--	26	--	25	--	23	--	23	--	23	--	--	21	--	21	--	20	--	19	--	--	16	--	18	--	19	--	--	20	--	--

11-4077. FEATHER RIVER AT YUBA CITY, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1550	16	67	2860	36	278	1340	14	51
2	2000	30	162	3200	45	389	1260	15	51
3	3900	122	1280	3470	51	478	1270	19	65
4	4140	110	1230	3270	45	397	1420	22	84
5	3650	75	739	2480	26	174	1540	22	91
6	3430	54	500	2090	21	119	1420	20	77
7	3240	43	376	2940	28	222	1400	16	60
8	3180	35	301	2770	28	209	1390	16	60
9	2990	29	234	1530	20	83	1270	12	41
10	2550	27	186	1360	19	70	1220	8	26
11	2600	28	197	1320	15	53	1190	9	29
12	2030	30	164	1420	19	73	1140	9	28
13	1610	25	109	1920	35	181	1130	14	43
14	2300	25	155	2310	32	200	1120	23	70
15	2610	29	204	1450	16	63	1120	18	54
16	2590	36	252	1280	15	52	1150	16	50
17	2440	42	277	1140	15	46	1160	16	50
18	2540	40	274	1080	17	50	1210	12	39
19	2240	31	187	1150	20	62	1170	9	28
20	2390	32	206	1200	18	58	1150	13	40
21	2360	40	255	1150	15	47	1130	14	43
22	1790	56	271	1140	15	46	1130	14	43
23	1930	70	365	1130	14	43	1070	12	35
24	2000	56	302	1120	20	60	1040	10	28
25	2430	34	223	1400	34	129	1030	10	28
26	2360	30	191	1460	36	142	1040	12	34
27	2660	25	180	1480	27	108	1060	15	43
28	2520	15	102	1510	20	82	1030	13	36
29	1910	12	62	1510	18	73	1040	12	34
30	1730	16	75	1380	17	63	1040	11	31
31	2310	29	181	--	--	--	1020	8	22
TOTAL	77980	--	9307	53520	--	4050	36700	--	1414

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1030	8	22	2960	92	735	1520	34	140
2	1030	8	22	1700	65	298	1480	30	120
3	1030	8	22	1500	122	494	1470	24	95
4	1020	9	25	1350	73	266	1460	27	106
5	1020	9	25	1250	31	105	1420	29	111
6	1070	8	23	1220	29	96	1360	28	103
7	1130	8	24	1210	30	98	1310	21	74
8	1160	9	28	1200	29	94	1310	22	78
9	1230	10	33	1180	32	102	1340	29	105
10	1440	15	58	1170	28	88	1300	22	77
11	1660	20	90	1170	17	54	1100	19	56
12	1390	20	75	1200	16	52	1080	14	41
13	1220	16	53	2780	51	383	1300	57	200
14	1240	13	44	4370	150	1770	2300	68	422
15	1970	66	351	2430	27	177	2000	41	221
16	2090	97	547	1680	23	104	1820	35	172
17	1740	32	150	1500	19	77	2500	46	311
18	1580	16	68	1350	31	113	3050	37	305
19	1390	14	53	2000	41	221	2500	28	189
20	1290	13	45	4100	84	930	1900	26	133
21	1210	12	39	5400	85	1240	1600	25	108
22	1180	12	38	5200	58	814	1500	24	97
23	1150	12	37	4500	40	486	1390	23	86
24	1110	12	36	3700	21	210	1300	21	74
25	1090	13	38	3000	27	219	1250	21	71
26	1080	13	38	2350	34	216	1190	19	61
27	1100	11	33	1890	30	153	1140	18	55
28	1130	10	31	1650	31	138	1100	19	56
29	1380	9	34	1590	34	146	1080	18	52
30	2300	93	578	--	--	--	1070	19	55
31	4500	400	4860	--	--	--	1050	17	48
TOTAL	43960	--	7520	66600	--	9879	47190	--	3822

11-4077. FEATHER RIVER AT YUBA CITY, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1050	15	43	2180	40	235	2920	29	229
2	1070	14	40	2410	41	267	2750	28	208
3	1150	16	50	3510	78	739	2700	27	197
4	1210	17	56	4470	102	1230	2540	25	171
5	1190	17	55	4560	72	886	2260	23	140
6	1180	18	57	4550	61	749	1900	21	108
7	1170	20	63	3690	37	369	1310	19	67
8	1160	19	60	3210	29	251	1090	18	53
9	1150	18	56	3000	30	243	1070	17	49
10	1150	21	65	2060	19	106	1060	16	46
11	1130	21	64	1300	20	70	1050	16	45
12	1110	21	63	1240	23	77	1040	16	45
13	1090	22	65	1800	22	107	990	16	43
14	1070	18	52	3430	62	574	995	17	46
15	1030	18	50	2480	26	174	1250	18	61
16	990	18	48	1750	50	236	1520	18	74
17	1010	18	49	2470	40	267	1530	18	74
18	1040	21	59	3370	69	628	1480	17	68
19	1040	20	56	3390	51	467	1460	16	63
20	1040	20	56	3240	35	306	1630	20	88
21	1050	18	51	2000	24	130	1730	22	103
22	1100	20	59	2300	30	186	1830	22	109
23	1380	23	86	3220	35	304	2080	28	157
24	1490	27	109	3520	42	399	2060	33	184
25	1480	31	124	3650	49	483	1840	23	114
26	1450	26	102	3720	53	532	1410	18	69
27	1470	22	87	3800	45	462	1130	17	52
28	1520	23	94	3750	39	395	1030	16	44
29	1590	25	107	3650	36	355	982	16	42
30	1800	31	151	3240	32	280	1030	16	44
31	--	--	--	3120	31	261	--	--	--
TOTAL	36360	--	2077	94080	--	11768	47667	--	2793

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	961	17	44	412	20	22	945	17	43
2	637	16	28	420	21	24	951	17	44
3	585	15	24	415	21	24	952	15	39
4	529	14	20	410	22	24	951	16	41
5	563	15	23	412	22	24	966	16	42
6	507	15	21	413	22	25	986	20	53
7	471	15	19	410	21	23	1020	21	58
8	477	15	19	410	20	22	1040	21	59
9	448	18	22	410	17	19	1080	20	58
10	440	21	25	410	17	19	1090	18	53
11	452	22	27	410	21	23	1080	17	50
12	456	22	27	410	21	23	1130	15	46
13	457	22	27	410	20	22	1170	14	44
14	484	22	29	410	20	22	1140	15	46
15	545	22	32	410	20	22	1130	17	52
16	473	20	26	410	20	22	1110	16	48
17	438	19	22	410	20	22	1260	18	61
18	431	19	22	410	20	22	1100	18	53
19	433	20	23	501	19	26	1060	13	37
20	440	21	25	706	17	32	1080	13	38
21	440	22	26	741	17	34	1100	14	42
22	437	21	25	743	18	36	1100	16	48
23	429	18	21	769	19	39	1090	15	44
24	420	17	19	772	20	42	1070	12	35
25	420	18	20	751	20	41	1070	10	29
26	420	20	23	773	19	40	1090	12	35
27	420	20	23	955	18	46	1090	15	44
28	415	20	22	966	18	47	1100	15	45
29	410	19	21	958	17	44	1090	15	44
30	410	18	20	940	17	43	1100	13	39
31	410	17	19	935	17	43	--	--	--
TOTAL	14858	--	744	17912	--	917	32141	--	1370

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 568968
TOTAL LOAD FOR YEAR (TONS) 55661

11-4077. FEATHER RIVER AT YUBA CITY, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 30, 1968	1645	6	2300	73	453	25	34	44	55	60	87	92	96	100	--	--	SCBW
FEB 14.....	1745	12	4370	48	566	21	36	55	64	66	92	95	99	100	--	--	SCBW
FEB 20.....	1800	13	4100	155	1720	44	59	77	88	91	99	99	100	--	--	--	SCBW
MAR 20.....	1343	13	1900	24	123	22	40	58	72	80	98	99	100	--	--	--	SCBW
MAY 4.....	0920	14	4470	114	1380	7	14	23	32	36	89	95	98	100	--	--	SCBW
MAY 9.....	1110	15	3000	31	251	10	19	35	45	51	91	97	99	100	--	--	SCBW

11-4090. MIDDLE YUBA RIVER ABOVE OREGON CREEK, NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°23'35", long 121°04'50", in SE¼ sec.28, T.18 N., R.8 E., Nevada County, temperature recorder at gaging station on left bank, 1,000 ft upstream from Oregon Creek, and 2 miles northeast of North San Juan.
DRAINAGE AREA.--162 sq mi.
RECORDS AVAILABLE.--Water temperatures: February 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 27°C on several days during June to August; minimum, freezing point on several days during December to February.
EXTREMES, 1965-68.--Water temperatures: Maximum, 27°C on several days during June to August 1968; minimum, freezing point on several days during December to February of most years.
REMARKS.--Clock stopped Feb. 20 to Mar. 16; temperature range, 3°C to 8°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	17	16	14	15	15	14	14	15	14	14	14	15	14	13	12	13	13	12	12	12	11	13	12	12	12	12	11	11	11	10	9	13
MINIMUM	16	14	13	13	14	13	13	13	13	13	13	13	13	12	11	11	11	11	11	11	10	11	11	11	11	10	9	10	9	8	8	12
NOVEMBER																																
MAXIMUM	9	10	10	10	11	11	11	11	11	9	9	9	11	11	11	11	11	11	10	11	10	8	7	7	7	6	6	6	6	6	--	9
MINIMUM	8	8	9	9	10	9	9	9	9	9	8	8	9	10	10	10	9	10	9	10	8	7	7	6	6	5	4	6	6	4	--	8
DECEMBER																																
MAXIMUM	4	4	4	6	6	6	6	5	4	4	3	3	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	2	3
MINIMUM	4	3	3	4	6	4	5	4	3	3	3	1	0	0	0	0	0	1	1	1	1	2	2	2	2	2	3	3	3	2	1	2
JANUARY																																
MAXIMUM	2	2	2	1	1	1	1	1	3	4	3	2	4	6	6	6	4	3	4	4	5	6	6	4	4	4	3	2	2	0	0	21
MINIMUM	2	2	1	1	1	1	1	1	1	3	2	1	2	3	5	4	3	3	3	3	4	4	4	4	4	3	2	2	0	0	0	20
FEBRUARY																																
MAXIMUM	2	2	3	4	5	6	6	6	7	6	7	7	6	6	6	6	7	7	7	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	0	2	2	3	4	4	5	4	6	5	6	6	6	6	5	6	6	6	7	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	8	8	9	9	9	10	10	9	9	10	11	12	12	12	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	6	6	6	7	8	8	8	8	7	8	8	9	10	10	--
APRIL																																
MAXIMUM	11	9	11	11	11	11	12	12	13	13	13	12	13	13	12	11	11	11	13	12	12	12	12	13	14	15	16	16	16	16	--	13
MINIMUM	9	8	8	9	10	9	9	9	11	11	12	11	10	10	10	9	8	8	9	9	8	8	9	9	11	11	12	11	12	13	--	10
MAY																																
MAXIMUM	16	16	16	16	16	14	14	16	16	17	16	13	12	13	15	17	17	18	17	16	16	14	16	16	17	19	20	21	21	21	21	16
MINIMUM	12	12	13	13	12	11	11	12	12	13	13	12	10	9	11	12	13	13	15	14	13	12	12	12	13	14	16	16	16	17	16	13
JUNE																																
MAXIMUM	21	22	20	21	19	18	19	20	21	21	21	19	21	22	23	24	24	25	25	24	26	26	26	26	26	27	27	26	24	24	--	23
MINIMUM	17	18	18	17	16	15	16	16	16	17	17	17	16	17	18	19	20	20	20	20	21	21	21	21	22	22	23	22	21	19	--	19
JULY																																
MAXIMUM	24	23	25	26	27	27	27	27	27	26	25	26	26	26	26	26	26	26	26	26	26	26	26	25	26	26	26	26	26	25	24	26
MINIMUM	19	21	21	22	22	23	23	23	23	22	22	22	22	22	22	21	21	21	22	22	21	21	21	20	21	21	21	22	22	22	22	22
AUGUST																																
MAXIMUM	26	27	26	26	24	25	24	25	24	25	25	24	23	22	23	22	22	21	19	18	19	20	21	21	21	21	21	22	23	23	23	23
MINIMUM	22	22	22	21	21	20	21	21	21	21	21	21	21	20	19	20	19	19	18	16	16	16	17	18	18	18	18	19	19	20	21	19
SEPTEMBER																																
MAXIMUM	24	23	23	23	23	23	23	22	22	22	22	21	21	21	21	20	21	21	20	19	17	17	17	18	18	18	18	18	18	17	--	20
MINIMUM	21	21	21	21	21	21	20	20	20	19	19	19	18	19	19	18	18	18	18	16	14	14	14	15	16	16	16	16	16	15	--	18

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 27, 1967	0910	9	46	7	.87	--	--	--	--	--	--	--	--	--	--	--	
DEC 13.....	1330	1	50	2	.27	--	--	--	--	--	--	--	--	--	--	--	
FEB 8, 1968	1730	7	367	17	17	--	--	--	--	--	--	--	--	--	--	--	
FEB 16.....	1600	6	312	28	24	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	1515	7	2560	147	1020	5	12	18	24	28	47	59	73	90	99	100	SCBW
MAR 14.....	1600	7	416	7	7.9	--	--	--	--	--	--	--	--	--	--	--	
APR 10.....	1510	13	360	3	2.9	--	--	--	--	--	--	--	--	--	--	--	
MAY 8.....	1540	14	287	5	3.9	--	--	--	--	--	--	--	--	--	--	--	
JUN 17.....	1515	23	88	2	.48	--	--	--	--	--	--	--	--	--	--	--	
SEP 25.....	1400	16	31	1	.08	--	--	--	--	--	--	--	--	--	--	--	

11-4095. OREGON CREEK NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°24'10", long 121°04'35", in NW¼NW¼ sec.27, T.18 N., R.8 E., Nevada County, temperature recorder at gaging station on right bank, 0.7 mile upstream from mouth, and 2.7 miles northeast of North San Juan.
DRAINAGE AREA.--34.4 sq mi.
RECORDS AVAILABLE.--Water temperatures: February 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 25°C July 6-8, Aug. 3; minimum, freezing point Jan. 30, 31.
EXTREMES, 1965-68.--Water temperatures: Maximum, 27°C Aug. 17, 18, 1966; minimum, freezing point Jan. 30, 31, 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	16	15	15	15	15	15	16	16	16	16	16	17	16	14	14	14	15	14	14	14	12	15	14	14	14	13	13	13	12	13	13	15
MINIMUM	13	13	12	12	12	11	11	12	12	12	12	12	12	11	9	10	11	9	9	9	9	12	11	9	11	10	9	11	9	8	9	11
NOVEMBER																																
MAXIMUM	13	13	13	13	13	13	13	13	12	12	12	11	12	13	13	13	12	12	11	11	10	9	9	9	8	8	8	8	7	6	--	11
MINIMUM	9	9	9	10	11	9	10	10	10	9	8	9	11	11	11	10	11	11	11	9	8	8	7	6	6	6	6	7	6	4	--	9
DECEMBER																																
MAXIMUM	7	6	6	7	6	6	6	6	6	6	6	6	3	3	4	4	4	3	5	4	5	6	6	6	6	6	6	6	6	6	4	5
MINIMUM	5	4	4	6	5	4	5	4	4	4	3	3	2	1	2	2	1	2	3	3	3	4	4	4	4	4	4	4	4	3	3	3
JANUARY																																
MAXIMUM	6	5	4	8	4	4	4	4	6	6	4	4	6	7	7	7	6	6	6	7	8	8	8	7	7	6	4	4	3	2	3	5
MINIMUM	3	3	2	2	2	2	2	3	4	3	3	2	4	6	6	6	4	4	4	5	6	7	7	6	6	4	3	3	2	0	0	4
FEBRUARY																																
MAXIMUM	3	3	5	6	7	7	7	7	8	7	8	8	7	7	7	7	8	8	8	9	9	9	10	9	10	10	10	9	9	--	--	8
MINIMUM	1	2	2	4	6	6	6	6	7	6	7	7	6	6	6	6	7	7	8	7	8	8	9	8	8	8	7	7	7	--	--	6
MARCH																																
MAXIMUM	9	9	9	9	10	9	8	8	8	8	8	8	6	7	8	8	7	8	8	9	9	9	9	10	10	9	10	11	11	11	11	9
MINIMUM	7	7	7	7	8	7	8	7	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	8	6	7	8	9	9	9	7
APRIL																																
MAXIMUM	10	9	10	10	11	11	11	12	13	13	13	12	12	13	12	11	10	11	13	12	12	12	12	14	14	16	16	16	17	17	--	12
MINIMUM	8	7	7	8	9	7	9	8	9	10	11	10	9	9	9	7	6	6	8	8	7	7	8	8	9	10	11	10	11	12	--	9
MAY																																
MAXIMUM	17	17	17	18	17	16	16	17	17	17	17	14	12	13	15	17	17	18	17	17	17	16	17	16	18	19	20	21	21	20	20	17
MINIMUM	11	11	12	12	12	9	9	10	11	11	11	11	9	8	9	11	12	12	14	14	14	12	11	11	13	12	13	14	14	15	14	12
JUNE																																
MAXIMUM	21	22	19	21	17	18	18	19	20	20	20	18	19	21	22	23	23	23	23	23	23	24	23	24	24	24	24	23	21	21	--	21
MINIMUM	14	16	16	16	14	14	14	13	13	13	14	13	12	13	14	16	16	16	16	16	16	17	17	17	17	17	18	17	16	14	--	15
JULY																																
MAXIMUM	22	21	23	24	24	25	25	25	24	24	23	24	24	24	24	23	23	24	24	24	24	24	24	23	23	23	24	23	23	23	21	24
MINIMUM	15	16	16	17	18	18	19	19	19	18	17	18	18	18	17	17	17	17	18	17	17	17	18	17	17	17	18	19	19	19	19	17
AUGUST																																
MAXIMUM	24	24	25	23	23	23	22	23	23	23	23	23	21	20	21	21	21	19	17	16	18	19	20	20	19	21	21	22	22	22	22	21
MINIMUM	19	19	18	18	17	17	17	18	18	18	18	18	17	17	16	17	16	16	16	14	14	13	14	15	16	16	16	16	17	17	17	17
SEPTEMBER																																
MAXIMUM	23	22	22	22	22	21	21	21	20	21	20	20	19	20	20	19	19	19	18	17	16	16	17	17	18	18	18	18	18	17	--	19
MINIMUM	18	18	17	17	17	17	17	16	17	16	16	16	15	17	16	14	14	16	14	13	12	11	12	13	13	14	14	14	14	13	--	15

11-4135.2. NORTH YUBA RIVER BELOW NEW BULLARDS BAR DAM, NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°22'48", long 121°08'19", in SW¼NE¼ sec.36, T.18 N., R.7 E., Yuba County, temperature recorder at gaging station on right bank, 1.1 miles downstream from New Bullards Bar Dam, and 2 miles northwest of North San Juan.
DRAINAGE AREA.--490 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1966 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 25°C July 7, 9, 21; minimum, 2°C on many days during December to February.
EXTREMES, 1966-68.--Water temperatures: Maximum, 25°C July 7, 9, 21, 1968; minimum, 2°C on many days during December 1967 to February 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	18	17	18	18	17	18	17	18	17	18	17	18	17	17	16	16	16	16	16	16	14	16	16	16	16	16	14	15	14	14	14	16
MINIMUM	17	17	16	16	15	14	14	14	14	15	15	15	14	14	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12	12	11	14
NOVEMBER																																
MAXIMUM	14	14	14	13	14	14	14	14	13	13	12	12	12	13	13	13	12	12	12	12	12	11	10	11	10	9	9	9	8	8	--	12
MINIMUM	11	11	11	12	12	12	12	12	12	11	11	11	12	12	11	11	11	11	11	11	9	9	8	9	8	8	8	8	7	7	--	10
DECEMBER																																
MAXIMUM	8	8	7	8	8	7	7	7	7	8	7	7	5	4	5	5	4	4	4	4	5	6	6	5	5	5	4	4	4	3	3	6
MINIMUM	7	6	7	7	6	6	6	6	6	6	6	5	4	4	4	3	3	4	4	4	4	4	4	4	4	3	3	3	3	2	2	4
JANUARY																																
MAXIMUM	4	4	3	3	3	3	4	2	3	4	4	3	3	3	4	3	4	4	5	5	5	6	5	5	4	4	4	4	3	3	3	4
MINIMUM	2	2	2	2	2	2	2	2	2	3	2	2	2	3	2	3	3	3	3	4	4	4	4	4	4	4	3	3	3	3	3	3
FEBRUARY																																
MAXIMUM	3	2	3	3	3	3	4	4	4	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	8	8	8	8	8	--	--	5
MINIMUM	2	2	2	2	2	2	3	3	3	4	4	4	4	5	5	5	4	4	6	6	6	6	7	7	7	7	7	7	7	--	--	5
MARCH																																
MAXIMUM	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	6	7	7	7	8	8	8	8	8	8	9	9	9	9	10	10	8
MINIMUM	7	7	7	7	7	7	7	8	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	8	8	9	7
APRIL																																
MAXIMUM	9	9	9	9	9	10	10	10	10	11	11	11	11	11	10	9	10	10	10	10	10	11	11	11	11	12	13	13	13	13	--	10
MINIMUM	9	8	8	8	8	8	8	8	9	9	9	10	9	9	9	9	8	8	8	8	8	9	9	8	9	9	11	11	11	12	--	9
MAY																																
MAXIMUM	13	13	13	13	13	13	13	13	13	13	13	13	11	12	12	13	13	14	14	14	14	14	14	13	14	14	16	16	16	17	17	14
MINIMUM	12	12	12	12	12	11	11	11	12	12	12	11	11	11	10	11	11	12	12	13	13	12	12	12	12	12	13	14	14	14	15	12
JUNE																																
MAXIMUM	17	18	18	18	18	17	17	17	17	17	18	17	18	18	19	20	21	21	22	22	22	24	23	23	24	24	24	24	24	22	--	20
MINIMUM	15	16	16	16	16	16	16	15	15	15	15	15	15	16	16	17	17	18	18	18	19	20	19	19	21	21	21	21	21	21	--	17
JULY																																
MAXIMUM	23	24	24	23	24	24	25	24	25	24	24	24	24	24	23	23	23	24	24	24	25	24	23	22	22	22	23	22	23	21	21	23
MINIMUM	21	21	21	20	21	22	22	22	22	21	21	21	21	21	21	21	20	21	20	20	20	19	19	19	19	19	20	19	20	19	18	20
AUGUST																																
MAXIMUM	23	22	22	23	23	23	22	23	23	23	23	22	22	21	22	21	21	19	18	18	19	20	20	19	19	19	20	20	21	21	21	21
MINIMUM	21	19	20	19	19	18	21	20	21	21	21	21	21	20	19	19	18	18	17	17	17	16	17	17	17	17	17	17	18	18	18	18
SEPTEMBER																																
MAXIMUM	21	21	21	21	21	21	21	21	21	22	22	22	22	22	22	22	22	22	21	20	19	19	19	20	20	21	20	20	19	19	--	21
MINIMUM	18	18	18	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	18	18	17	16	17	17	18	18	18	17	17	17	--	18

11-4175. 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.
RECORDS AVAILABLE.--Water temperatures: February 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 27°C June 27, Aug. 5-7; minimum, freezing point on several days during December and January.
EXTREMES, 1965-68.--Water temperatures: Maximum, 27°C Aug. 2-4, 1966, June 27, Aug. 5-7, 1968; minimum, freezing point on several days during December and January of most years.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	18	17	16	14	16	14	15	16	16	16	16	16	16	14	13	13	14	13	13	13	12	14	14	14	14	13	12	13	12	11	11	14
MINIMUM	17	16	13	13	14	12	13	13	13	13	13	14	14	13	11	12	12	12	11	11	11	12	12	13	13	12	11	11	10	9	9	12
NOVEMBER																																
MAXIMUM	11	11	11	11	12	12	12	12	11	11	10	11	11	12	12	12	12	12	12	11	11	9	8	7	7	6	6	6	6	6	--	10
MINIMUM	9	9	9	10	11	11	11	11	11	9	9	9	11	11	11	11	11	11	11	10	9	7	7	6	6	4	4	6	6	4	--	9
DECEMBER																																
MAXIMUM	4	4	5	7	7	6	6	6	4	4	4	3	2	0	0	1	1	1	1	2	2	2	3	3	3	3	4	4	4	3	2	3
MINIMUM	4	3	3	5	6	5	6	4	3	3	3	2	0	0	0	0	0	0	1	1	1	2	2	2	2	2	3	3	3	2	2	2
JANUARY																																
MAXIMUM	3	2	2	2	2	2	2	3	3	4	4	5	7	8	7	7	6	6	6	7	7	7	7	6	5	4	3	3	2	2		4
MINIMUM	2	2	1	1	1	1	1	1	2	3	3	3	4	5	7	7	5	4	4	5	6	6	6	6	4	4	3	2	2	0	0	3
FEBRUARY																																
MAXIMUM	2	4	4	5	6	7	7	7	7	7	7	8	7	7	7	7	8	8	8	9	9	9	9	9	9	9	9	9	9	--	--	7
MINIMUM	1	2	3	3	4	6	6	5	6	6	6	6	6	6	6	6	7	7	8	7	8	8	9	8	8	8	8	8	8	--	--	6
MARCH																																
MAXIMUM	9	9	9	10	10	9	9	8	9	8	8	7	7	7	8	8	7	8	8	8	9	9	10	11	9	9	11	12	13	13	13	9
MINIMUM	8	8	7	8	9	8	8	8	7	7	7	7	7	6	6	7	6	6	6	6	7	8	8	8	9	7	8	9	10	11	11	7
APRIL																																
MAXIMUM	11	9	10	11	11	11	12	12	13	14	14	13	13	13	13	11	11	11	12	12	12	12	12	13	14	16	16	16	17	17	--	13
MINIMUM	9	8	7	9	9	9	9	9	10	11	12	11	10	10	11	9	8	7	9	9	8	8	9	9	10	11	12	12	13	13	--	10
MAY																																
MAXIMUM	17	17	17	16	17	16	16	16	18	18	17	16	14	13	15	17	18	19	18	18	17	16	16	16	18	19	21	21	21	21	21	17
MINIMUM	13	13	13	14	14	12	12	12	14	14	14	14	11	10	11	12	14	15	17	17	15	14	13	13	14	16	17	17	18	18	18	14
JUNE																																
MAXIMUM	22	22	21	21	20	19	20	19	20	21	21	19	20	21	23	24	24	25	25	24	24	26	26	26	26	26	27	26	24	23	--	23
MINIMUM	18	19	19	19	17	17	16	16	17	17	18	17	16	17	18	20	21	21	21	22	22	21	21	21	22	22	23	22	22	22	--	19
JULY																																
MAXIMUM	26	26	26	24	23	24	23	24	24	24	24	25	25	25	25	24	24	25	26	26	24	25	24	24	24	24	25	25	25	24	23	25
MINIMUM	21	22	22	21	20	19	20	21	21	20	21	21	21	21	21	22	22	21	22	22	23	20	21	20	20	20	21	21	22	21	24	21
AUGUST																																
MAXIMUM	24	23	24	26	27	27	27	26	26	26	24	23	22	22	22	22	21	19	18	17	18	19	20	21	19	21	21	22	23	23	23	22
MINIMUM	19	20	20	21	22	22	23	23	22	22	21	21	19	19	19	19	18	18	17	16	16	16	16	17	17	17	17	16	19	19	20	19
SEPTEMBER																																
MAXIMUM	24	23	23	23	23	23	23	22	22	22	22	21	21	21	21	20	20	21	19	18	17	16	17	17	18	18	18	18	17	17	--	20
MINIMUM	21	21	20	20	20	20	19	19	19	18	18	18	18	18	18	17	17	17	17	16	14	13	13	14	14	15	15	15	15	14	--	17

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 26, 1967	1450	12	53	5	.72	--	--	--	--	--	--	--	--	--	--	--	
DEC 11.....	1530	3	125	3	1.0	--	--	--	--	--	--	--	--	--	--	--	
JAN 25, 1968	1115	6	192	21	11	--	--	--	--	--	--	--	--	--	--	--	
FEB 16.....	1330	7	409	24	27	--	--	--	--	--	--	--	--	--	--	--	
FEB 29.....	1630	9	603	16	26	--	--	--	--	--	--	--	--	--	--	--	
APR 11.....	1700	14	320	4	3.5	--	--	--	--	--	--	--	--	--	--	--	
MAY 9.....	1730	17	153	3	1.2	--	--	--	--	--	--	--	--	--	--	--	
JUN 19.....	0920	21	71	2	.38	--	--	--	--	--	--	--	--	--	--	--	
SEP 25.....	1100	14	40	1	.11	--	--	--	--	--	--	--	--	--	--	--	

11-4215. YUBA RIVER AT MARYSVILLE, CALIF.

LOCATION.--Lat 39°08'40", long 121°34'35", 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 (revised).--1,339 sq mi (at gaging station).
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1963.
Water temperatures: October 1963 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, 5°C Jan. 3, 11, 12, 18, 19.
EXTREMES, 1963-68.--Water temperatures: Maximum (1963-67), 29°C July 24, 25, 1964, Aug. 3, 4, 6, 17, 1966; minimum, 4°C Feb. 17, 1966.
REMARKS.--Recorder malfunctioned June 23 to Sept. 30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	22	21	21	21	21	21	21	21	21	21	21	21	20	20	19	19	19	19	19	19	19	19	19	19	19	18	18	19	18	17	17	20
MINIMUM	20	18	18	18	18	17	17	18	18	18	18	18	18	17	16	17	18	18	18	18	17	18	18	17	18	17	17	16	16	15	16	17
NOVEMBER																																
MAXIMUM	17	17	17	17	17	17	17	17	17	16	16	16	16	17	17	17	17	17	16	16	16	15	14	14	14	13	13	13	12	12	--	16
MINIMUM	16	16	16	17	17	16	17	17	16	16	15	16	16	16	17	16	16	16	16	14	14	13	13	13	13	12	12	12	12	12	--	15
DECEMBER																																
MAXIMUM	12	12	12	12	12	11	11	11	11	11	11	11	8	7	8	7	8	7	8	8	8	8	8	8	8	9	9	9	9	9	8	9
MINIMUM	11	11	11	11	11	9	10	9	9	9	9	8	7	6	6	7	7	7	7	7	7	7	7	7	7	7	8	8	8	7	7	8
JANUARY																																
MAXIMUM	7	7	6	7	7	7	6	6	6	8	7	7	7	7	9	8	8	7	7	8	7	8	8	8	8	8	7	6	6	6	7	7
MINIMUM	7	6	5	6	6	6	6	6	6	6	5	5	7	7	7	7	6	5	5	7	6	6	6	6	6	6	6	6	6	6	6	6
FEBRUARY																																
MAXIMUM	7	7	8	8	7	8	9	8	8	8	8	8	8	8	9	8	9	8	9	9	9	9	10	10	10	10	11	11	11	--	--	9
MINIMUM	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	9	9	9	--	--	7
MARCH																																
MAXIMUM	11	11	12	12	12	12	11	11	12	12	12	11	11	11	11	11	10	10	11	11	11	11	12	12	12	12	12	12	13	13	13	11
MINIMUM	9	9	9	9	10	9	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	10	11	11	9
APRIL																																
MAXIMUM	12	12	12	12	13	13	13	14	14	14	15	14	14	15	14	14	14	14	15	14	14	15	14	16	16	17	16	17	17	17	--	14
MINIMUM	11	11	10	11	11	10	10	11	11	11	11	11	11	11	11	11	10	10	11	11	11	11	11	11	11	12	12	12	12	12	--	11
MAY																																
MAXIMUM	17	17	18	17	17	17	17	17	18	18	17	17	15	17	18	18	18	19	17	18	18	18	19	17	18	20	21	21	21	21	21	18
MINIMUM	12	13	13	13	13	13	13	13	13	13	13	13	12	12	12	13	13	14	14	14	13	13	14	14	14	14	15	16	16	16	16	13
JUNE																																
MAXIMUM	21	21	19	20	17	19	21	21	21	21	21	21	21	22	23	23	23	23	23	23	23	24	--	--	--	--	--	--	--	--	--	--
MINIMUM	16	16	17	16	15	15	16	16	16	16	16	17	17	18	18	19	20	21	21	20	21	23	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-4240. BEAR RIVER NEAR WHEATLAND, CALIF.

LOCATION.--Lat 39°00'00", long 121°24'20", in SE¼SW¼ sec.3, T.13 N., R.5 E., Yuba County, near gaging station at bridge on U.S. Highway 99E, 1 mile southeast of Wheatland, and 6.5 miles downstream from Rock Creek.
DRAINAGE AREA.--292 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	SODIUM (NA)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	CHLO-RIDE (CL)	BORON (B)
NOV.							
07...	18	--	4.3	51	0	5.4	.05
MAR.							
12...	834	8.2	2.5	34	0	2.8	--
APR.							
09...	582	7.5	2.6	34	0	2.7	--
JULY							
17...	13	18	6.0	79	0	6.6	--
AUG.							
08...	7.0	20	6.2	85	0	6.8	--
SEPT.							
06...	8.2	19	6.6	97	0	6.6	--

DATE	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
NOV.							
07...	47	5	42	116	7.8	16	10.4
MAR.							
12...	32	4	28	80	7.3	11	11.1
APR.							
09...	33	5	28	80	7.5	16	10.3
JULY							
17...	81	16	65	184	8.0	32	8.8
AUG.							
08...	84	14	70	190	8.2	24	8.3
SEPT.							
06...	92	21	71	192	7.9	29	9.5

11-4251. FEATHER RIVER NEAR NICOLAUS, CALIF.

(Formerly published as 11-4250. Feather River at 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.--5,921 sq mi (at gaging station).

RECORDS AVAILABLE.--Chemical analyses: March 1951 to June 1966.
Water temperatures: March 1951 to September 1958, November 1959 to September 1968.

EXTREMES, 1967-68.--Water temperatures: Maximum, 29°C July 5, 26, 27, 29; minimum, 3°C Dec. 14-18.

EXTREMES, 1951-58, 1959-68.--Water temperatures: Maximum, 34°C July 21, 1961; minimum (1951-58, 1959-66, 1967-68), 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. 1-3. Clock stopped May 25 to June 26; temperature range, 17°C to 28°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	19	18	18	18	18	19	19	19	19	19	18	17	17	17	17	17	17	16	16	17	17	17	16	16	16	15	14	14	17
MINIMUM	--	--	--	17	17	16	16	17	17	17	17	17	17	16	15	15	15	15	15	15	15	14	15	16	15	15	14	14	13	13	13	15
NOVEMBER																																
MAXIMUM	16	16	15	14	15	15	16	15	15	14	14	14	14	14	14	15	16	15	15	14	14	13	13	12	12	11	11	10	9	8	--	14
MINIMUM	14	14	13	13	14	13	14	14	14	13	13	13	13	13	13	13	14	14	14	13	13	12	12	11	11	11	10	9	8	8	--	13
DECEMBER																																
MAXIMUM	9	9	9	11	11	10	9	9	8	8	8	8	6	4	3	4	4	5	4	5	6	7	7	7	8	9	9	10	10	9	8	8
MINIMUM	8	8	8	9	10	9	9	8	8	7	7	6	4	3	3	3	3	3	4	4	4	6	6	6	7	7	8	8	8	8	7	6
JANUARY																																
MAXIMUM	7	7	6	6	6	6	5	5	5	7	7	7	7	7	9	9	9	9	8	8	8	9	9	9	9	9	8	7	6	6	7	7
MINIMUM	6	6	6	5	5	5	4	4	4	5	6	5	6	7	7	8	8	8	6	7	7	7	8	8	8	7	7	6	6	6	6	6
FEBRUARY																																
MAXIMUM	7	8	9	9	9	9	10	9	9	10	9	10	10	11	11	10	11	11	10	11	12	12	12	12	11	12	12	12	13	--	--	10
MINIMUM	6	7	8	8	8	8	8	9	8	9	8	8	9	9	9	9	9	9	9	10	11	11	12	11	11	11	11	12	12	--	--	9
MARCH																																
MAXIMUM	12	13	13	13	13	13	12	12	12	12	12	11	11	11	11	11	11	11	12	12	12	12	13	13	13	13	13	14	15	16	15	12
MINIMUM	12	12	12	12	12	12	11	11	10	10	10	10	9	9	10	11	10	10	10	10	11	11	11	12	12	11	11	11	12	13	13	11
APRIL																																
MAXIMUM	14	13	14	14	14	14	14	15	17	17	17	17	16	17	16	16	14	16	16	16	15	16	16	16	17	17	18	19	19	19	--	16
MINIMUM	12	12	12	12	12	12	12	13	13	14	14	14	13	13	14	13	12	11	12	13	12	12	13	13	14	14	14	15	16	16	--	13
MAY																																
MAXIMUM	19	19	19	18	17	16	17	18	18	18	18	18	17	17	18	20	20	21	20	19	18	19	19	18	--	--	--	--	--	--	--	--
MINIMUM	16	16	16	15	14	14	14	14	14	14	15	16	14	13	14	16	17	17	18	17	16	16	16	16	--	--	--	--	--	--	--	--
JUNE																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	27	26	25	25	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23	23	21	20	--	--
JULY																																
MAXIMUM	27	26	26	27	29	28	28	27	26	27	27	27	26	26	25	25	27	27	28	27	28	27	26	27	28	29	29	28	29	28	28	27
MINIMUM	22	22	22	23	25	24	22	21	21	21	22	21	21	21	21	21	22	23	23	23	22	22	21	21	21	22	24	24	24	23	23	22
AUGUST																																
MAXIMUM	28	28	28	27	27	28	27	28	28	28	28	25	24	24	25	24	25	24	22	21	21	23	24	24	23	24	25	25	26	27	26	25
MINIMUM	23	23	22	22	22	23	24	22	22	23	22	20	19	19	21	21	21	20	19	19	19	19	21	22	22	21	22	23	23	23	24	21
SEPTEMBER																																
MAXIMUM	26	26	26	25	26	26	26	25	24	24	24	24	24	24	23	23	23	23	23	22	20	19	19	21	22	22	23	22	22	21	--	23
MINIMUM	23	23	23	23	23	23	23	23	23	22	23	22	22	22	22	21	19	21	21	20	18	18	17	18	19	20	21	21	20	19	--	21

11-4270. NORTH FORK AMERICAN RIVER AT NORTH FORK DAM, CALIF.

LOCATION.--Lat 38°56'15", long 121°01'25", 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.
RECORDS AVAILABLE.--Water temperatures: November 1959 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C on many days during June and July; minimum, 6°C on many days during December and January.
EXTREMES, 1959-68.--Water temperatures: Maximum, 27°C on several days in July and August of most years; minimum, 4°C Jan. 21, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	22	22	22	21	21	21	21	20	20	20	19	19	19	19	19	18	18	18	18	18	18	18	18	17	17	17	17	17	17	17	17	19
MINIMUM	22	22	21	21	21	21	20	20	20	19	19	19	19	19	18	18	18	18	18	18	18	18	17	17	17	17	17	17	17	17	17	19
NOVEMBER																																
MAXIMUM	17	17	16	16	16	16	16	16	16	16	15	15	15	15	14	14	14	14	14	14	14	14	14	14	13	13	13	13	13	12	--	15
MINIMUM	17	16	16	16	16	16	16	16	16	15	15	15	15	14	14	14	14	14	14	14	14	14	14	13	13	13	13	13	12	12	--	15
DECEMBER																																
MAXIMUM	12	12	12	11	11	11	11	11	10	10	9	9	8	8	8	8	8	7	7	7	7	7	7	7	7	6	6	6	6	6	6	8
MINIMUM	12	12	11	11	11	11	11	10	10	9	9	8	8	8	8	8	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	8
JANUARY																																
MAXIMUM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6
MINIMUM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7	6
FEBRUARY																																
MAXIMUM	7	7	7	8	8	8	8	8	8	8	8	8	9	9	10	10	10	10	10	11	11	11	11	11	11	12	12	12	12	--	--	9
MINIMUM	7	7	7	7	8	8	8	8	8	8	8	8	8	9	9	10	10	10	10	10	11	11	11	11	11	11	12	12	12	--	--	9
MARCH																																
MAXIMUM	12	12	12	12	12	13	13	13	13	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	13	14	14	14	13
MINIMUM	12	12	12	12	12	12	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	13	14	14	13
APRIL																																
MAXIMUM	14	14	14	13	13	14	14	14	14	14	16	16	16	16	16	16	16	15	15	15	15	15	15	15	16	16	16	17	17	17	--	15
MINIMUM	14	14	13	13	13	13	14	14	14	14	15	16	16	16	16	16	15	14	14	15	15	15	15	15	15	16	16	16	17	17	--	15
MAY																																
MAXIMUM	17	17	17	17	17	17	16	16	16	17	17	17	17	17	16	16	17	17	18	18	18	17	17	17	17	17	18	19	19	20	20	17
MINIMUM	17	17	17	17	17	16	16	16	16	16	17	17	17	16	16	16	16	17	17	18	18	17	17	17	17	17	17	18	19	19	20	17
JUNE																																
MAXIMUM	20	20	21	21	20	20	20	20	20	21	21	21	21	21	22	22	23	23	24	24	24	24	25	25	25	26	26	26	26	26	--	22
MINIMUM	20	20	20	20	20	19	19	20	20	20	21	21	21	21	21	22	22	23	23	24	24	24	24	25	25	25	25	26	26	26	--	22
JULY																																
MAXIMUM	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	25	25	26	26	26	25	25
MINIMUM	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	25	25	25	25	25	25	25	25
AUGUST																																
MAXIMUM	25	25	25	25	25	25	25	24	24	24	24	24	24	24	24	23	23	23	22	22	22	22	21	21	21	20	21	21	21	21	22	23
MINIMUM	25	25	25	25	25	25	24	24	24	24	24	24	24	24	23	23	23	22	22	22	22	21	21	21	20	20	20	21	21	21	21	23
SEPTEMBER																																
MAXIMUM	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	22	23	22	22	22	22	22	22	22	21	--	22
MINIMUM	22	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	22	22	22	22	22	22	22	22	22	21	21	--	22

11-4334. 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, 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.
RECORDS AVAILABLE.--Water temperatures: July 1966 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C on several days during June and July; minimum, 1°C Dec. 17, 18.
EXTREMES, 1966-68.--Water temperatures: Maximum, 23°C July 22, 1966; minimum, 1°C Dec. 17, 18, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	16	15	14	14	14	13	13	13	13	13	13	13	13	12	12	12	12	12	11	11	11	11	11	11	11	11	10	10	9	9	9	12
MINIMUM	15	14	13	13	13	12	12	12	12	12	12	12	12	11	11	10	10	10	9	9	9	10	10	10	9	9	9	9	8	7	7	11
NOVEMBER																																
MAXIMUM	9	9	9	10	10	10	10	10	9	9	9	9	9	10	10	9	10	10	10	10	9	9	8	8	7	7	7	7	6	6	--	9
MINIMUM	8	8	8	9	9	9	9	9	8	8	8	8	9	9	9	9	9	9	9	9	8	7	7	7	7	6	6	7	6	6	--	8
DECEMBER																																
MAXIMUM	6	6	6	6	7	7	7	7	6	6	5	5	4	3	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	3	3	4
MINIMUM	6	5	4	6	6	7	7	6	6	4	4	4	3	2	2	2	1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	4
JANUARY																																
MAXIMUM	3	3	3	2	2	2	2	3	3	3	4	3	3	4	6	6	6	4	4	4	5	6	6	6	5	5	4	4	4	3	4	4
MINIMUM	3	2	2	2	2	2	2	2	3	3	3	3	3	3	4	6	4	4	4	4	4	4	5	4	4	4	4	4	3	2	3	3
FEBRUARY																																
MAXIMUM	4	4	4	5	6	6	6	6	6	6	6	6	6	6	6	6	7	7	8	9	9	9	10	9	9	9	9	9	9	--	--	7
MINIMUM	3	4	4	4	5	4	4	4	5	5	5	4	6	5	5	5	6	6	7	8	9	9	9	9	9	8	8	8	8	--	--	6
MARCH																																
MAXIMUM	9	9	9	10	11	10	10	9	10	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	11	11	12	12	10
MINIMUM	8	8	8	8	10	9	9	9	9	9	9	8	9	9	9	9	9	9	8	8	9	9	9	9	9	9	9	9	10	11	11	9
APRIL																																
MAXIMUM	12	11	11	11	12	11	11	12	12	12	12	12	12	12	12	12	11	11	12	12	12	12	13	13	13	14	14	14	15	15	--	12
MINIMUM	11	10	10	10	11	10	10	10	11	11	11	11	11	11	11	11	9	9	10	10	9	9	11	11	11	12	12	12	13	13	--	11
MAY																																
MAXIMUM	16	16	16	17	16	16	16	16	16	16	16	15	14	15	14	14	15	16	16	16	16	17	16	15	16	17	18	18	18	18	18	16
MINIMUM	13	13	14	14	14	13	13	13	13	13	13	13	12	12	12	12	13	14	14	15	15	14	13	13	14	14	15	16	16	16	15	14
JUNE																																
MAXIMUM	18	19	18	19	17	17	18	18	18	18	18	17	17	17	18	19	19	20	20	20	20	21	21	21	21	22	22	22	21	21	--	19
MINIMUM	16	16	17	16	16	16	16	15	15	15	16	15	14	15	16	16	17	17	17	17	17	17	17	18	18	18	18	18	17	17	--	16
JULY																																
MAXIMUM	21	21	21	21	21	21	22	21	21	21	21	21	21	21	21	21	21	22	22	22	21	21	21	21	21	21	22	22	22	21	--	21
MINIMUM	17	17	17	18	18	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	17	17	17	17	17	18	18	18	19	19	--	18
AUGUST																																
MAXIMUM	21	21	21	21	20	20	20	21	20	20	20	21	19	19	19	19	18	18	18	17	17	17	17	17	17	17	17	17	18	18	18	19
MINIMUM	19	19	19	18	18	18	18	18	18	18	18	18	18	17	17	17	17	17	17	16	16	15	16	16	16	16	16	16	16	17	17	17
SEPTEMBER																																
MAXIMUM	19	19	18	19	19	19	19	18	18	18	18	17	17	17	17	17	17	17	16	15	14	14	14	14	14	14	14	14	14	14	--	16
MINIMUM	17	17	17	17	17	17	17	17	17	17	17	16	16	16	16	15	15	15	14	14	13	12	12	12	12	12	12	12	13	12	--	15

11-4395. 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, 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.
RECORDS AVAILABLE.--Water temperatures: August 1966 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 24°C June 26, 27, July 4, 8; minimum, 3°C on many days during November to February.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	14	14	13	12	12	11	12	13	13	12	13	13	13	12	11	11	12	11	11	11	11	12	12	11	11	11	10	11	10	10	9	11
MINIMUM	13	13	12	11	11	9	10	11	11	11	11	11	11	11	9	9	10	9	9	9	9	10	11	10	10	9	8	9	9	8	7	10
NOVEMBER																																
MAXIMUM	9	9	9	9	11	10	10	10	9	9	9	9	10	11	11	11	11	11	11	9	9	8	7	7	7	7	7	6	5	4	--	8
MINIMUM	7	7	8	8	9	9	9	9	8	8	8	8	9	10	10	10	10	10	9	9	8	7	6	6	6	6	6	5	4	3	--	7
DECEMBER																																
MAXIMUM	3	3	4	6	6	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	3	3	3
MINIMUM	3	3	3	4	4	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
JANUARY																																
MAXIMUM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	5	6	6	5	5	5	4	3	3	3	3	3
MINIMUM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	5	4	4	4	4	3	3	3	3	3	3
FEBRUARY																																
MAXIMUM	3	3	3	3	4	4	4	5	5	5	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	--	--	5
MINIMUM	3	3	3	3	3	3	4	4	4	4	4	5	6	6	5	5	5	4	6	5	6	6	6	6	6	6	6	6	6	--	--	4
MARCH																																
MAXIMUM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	5	5	5	6	6	6	6	6	6	6	7	7	8	6
MINIMUM	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	7	7	6
APRIL																																
MAXIMUM	8	8	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	8	8	8	8	8	8	8	8	8	8	8	--	8
MINIMUM	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	8	8	8	8	8	8	8	8	8	8	--	7
MAY																																
MAXIMUM	8	8	8	8	9	9	9	9	9	9	9	9	9	8	8	8	8	9	9	9	10	10	10	10	9	10	10	11	11	11	12	9
MINIMUM	8	8	8	8	8	9	9	9	9	9	9	9	8	8	8	8	8	8	9	9	9	10	10	9	9	9	9	10	11	11	11	9
JUNE																																
MAXIMUM	12	12	13	13	13	13	13	13	13	13	13	13	13	13	14	14	14	15	15	16	22	23	23	23	23	24	24	22	22	21	--	17
MINIMUM	12	12	12	13	13	13	13	13	13	13	13	13	13	13	14	14	14	15	15	16	17	17	18	17	18	18	18	18	17	16	--	14
JULY																																
MAXIMUM	22	20	22	24	23	23	23	24	23	23	23	23	23	23	23	23	23	23	23	23	22	22	22	22	22	23	23	23	23	22	21	22
MINIMUM	16	17	16	17	18	18	19	19	19	18	18	18	18	18	18	18	17	17	18	18	17	17	17	17	17	18	18	19	19	20	20	18
AUGUST																																
MAXIMUM	23	23	22	21	21	21	21	22	21	21	21	21	20	18	19	18	18	17	16	16	15	16	17	18	17	17	17	18	19	19	20	19
MINIMUM	19	19	19	18	18	18	18	18	18	18	18	18	18	17	16	17	17	16	16	14	14	14	14	14	15	14	14	15	17	17	18	16
SEPTEMBER																																
MAXIMUM	20	19	19	19	19	19	19	19	18	18	18	18	18	17	17	17	17	17	17	16	15	13	13	13	14	14	14	14	14	13	--	16
MINIMUM	18	18	17	17	17	17	17	17	17	17	17	17	16	17	16	16	16	16	16	14	13	12	12	12	13	13	13	13	13	13	--	15

11-4455. SOUTH FORK AMERICAN RIVER NEAR LOTUS, CALIF.

LOCATION.--Lat 38°49'05", 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.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1963.
Water temperatures: December 1959 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 19°C on several days during June and July; minimum, 4°C on several days during January and February.
EXTREMES, 1959-68.--Water temperatures: Maximum, 29°C July 20, 1960; minimum, 1°C Jan. 2, 6, 1960, Dec. 28-31, 1962.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	17	17	17	17	18	17	17	17	17	17	17	18	18	17	16	15	15	15	14	14	14	14	14	13	13	13	12	12	12	12	12	15
MINIMUM	17	16	16	16	16	16	16	16	15	16	15	16	17	15	14	14	14	14	13	13	13	13	13	13	12	12	12	11	12	11	11	14
NOVEMBER																																
MAXIMUM	12	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	10	10	9	9	--	11
MINIMUM	11	11	11	11	11	11	11	11	11	10	11	11	11	11	11	11	11	11	11	10	10	10	10	10	10	10	10	9	9	9	--	10
DECEMBER																																
MAXIMUM	9	9	8	8	8	8	8	8	8	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7
MINIMUM	9	8	8	8	8	8	8	8	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
JANUARY																																
MAXIMUM	6	6	5	5	5	4	4	4	4	4	4	4	4	5	6	6	6	6	5	5	6	6	6	6	6	5	5	5	5	5	5	5
MINIMUM	5	5	5	4	4	4	4	4	4	4	4	4	4	4	5	6	6	4	4	5	5	6	5	5	5	5	5	5	5	5	5	5
FEBRUARY																																
MAXIMUM	5	5	6	7	7	7	8	8	8	8	8	8	8	8	9	8	7	8	8	8	9	9	9	9	9	9	9	9	9	--	--	8
MINIMUM	4	5	5	6	6	6	7	7	7	7	7	6	7	7	8	7	7	7	8	8	8	9	9	9	9	9	8	8	8	--	--	7
MARCH																																
MAXIMUM	9	9	9	9	9	9	9	8	9	9	8	8	9	8	8	8	8	9	9	9	9	9	9	9	9	10	10	11	11	12	12	9
MINIMUM	8	8	8	8	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	8	7	8	8	8	10	11	8
APRIL																																
MAXIMUM	12	10	11	10	10	11	11	11	12	12	12	12	12	12	12	11	12	12	12	12	12	12	12	13	13	14	14	15	15	15	--	12
MINIMUM	10	10	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	10	10	9	10	9	12	10	11	11	11	13	12	--	10
MAY																																
MAXIMUM	14	14	14	14	14	14	14	14	14	14	14	13	13	15	15	14	13	14	14	14	13	14	14	14	14	17	17	16	16	17	17	14
MINIMUM	11	11	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	12	12	12	12	13	12	13	13	13	13	14	12
JUNE																																
MAXIMUM	17	17	17	16	14	15	16	16	18	18	16	16	18	17	18	19	19	19	18	18	19	19	19	19	18	17	17	17	17	18	--	17
MINIMUM	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	15	15	15	15	15	15	15	16	16	16	15	14	14	15	--	14
JULY																																
MAXIMUM	18	16	17	18	18	17	18	18	17	17	16	17	17	18	18	17	19	16	16	17	17	17	17	17	16	16	16	18	18	17	16	17
MINIMUM	16	14	14	14	15	14	14	16	15	16	14	14	15	14	16	16	14	14	14	14	13	16	14	14	14	13	13	14	17	15	14	14
AUGUST																																
MAXIMUM	16	16	17	17	17	16	16	16	16	16	17	15	14	14	17	15	16	14	14	14	14	15	15	16	16	16	16	15	15	15	15	15
MINIMUM	14	14	14	14	15	14	14	14	14	13	13	14	13	13	13	14	14	14	14	13	13	13	13	13	14	14	13	13	13	13	13	14
SEPTEMBER																																
MAXIMUM	17	17	16	17	17	16	16	16	16	16	17	17	17	17	17	17	18	18	18	17	17	17	17	17	17	17	17	16	16	16	--	17
MINIMUM	14	16	15	15	14	14	14	14	16	14	14	14	14	15	14	16	15	16	16	16	15	15	15	14	14	14	14	14	14	14	--	15

11-4465. 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.
RECORDS AVAILABLE.--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 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 21°C on many days during July to September; minimum, 6°C Jan. 29-31.
EXTREMES, 1951-58, 1959-68.--Water temperatures: Maximum (1951-58, 1959-64, 1965-68), 27°C July 27, Aug. 3, 1954; minimum, freezing point Nov. 25, 26, 1957, Nov. 25-29, 1958.
REMARKS.--Recorder malfunctioned Mar. 6, 25.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	19	18	18	18	18	18	17	17	17	17	17	17	17	17	16	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
MINIMUM	18	18	18	18	18	17	17	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
NOVEMBER																																
MAXIMUM	17	17	17	17	17	17	17	17	17	17	17	16	16	17	16	16	16	16	16	16	16	16	16	16	15	15	15	14	14	14	--	16
MINIMUM	17	17	17	17	17	17	17	17	17	17	16	16	16	16	16	16	16	16	16	16	16	15	16	15	15	15	14	14	14	14	--	16
DECEMBER																																
MAXIMUM	14	13	13	13	13	13	12	12	12	12	12	12	11	11	11	11	11	10	9	9	9	9	9	9	9	9	9	9	9	9	8	11
MINIMUM	13	13	13	13	13	12	12	12	12	12	12	11	11	11	10	11	10	9	9	9	9	9	9	9	9	9	9	8	8	8	8	10
JANUARY																																
MAXIMUM	8	8	8	8	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	8	8	7	7	7	7	7	7	6	7	8
MINIMUM	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	6	6	6	7
FEBRUARY																																
MAXIMUM	7	7	8	8	8	8	8	8	8	8	7	7	7	7	7	8	8	8	8	9	9	9	8	8	9	9	9	9	9	--	--	8
MINIMUM	7	7	7	8	8	8	7	7	7	7	7	7	7	7	7	7	8	8	8	8	9	8	8	8	8	8	8	8	8	--	--	8
MARCH																																
MAXIMUM	9	8	9	9	9	--	9	9	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	10	--	11	11	11	11	12	12	10
MINIMUM	8	8	8	9	9	--	9	9	9	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	--	11	11	11	11	11	12	9
APRIL																																
MAXIMUM	12	12	12	12	13	13	13	13	13	13	13	13	13	13	13	13	13	13	14	14	13	13	13	14	14	14	14	14	14	14	--	13
MINIMUM	12	11	12	12	12	12	12	13	13	13	13	13	13	13	13	12	12	12	13	13	13	13	13	13	13	13	13	14	13	13	--	13
MAY																																
MAXIMUM	14	14	14	15	16	16	16	15	15	16	16	16	14	16	15	16	16	16	16	16	16	17	17	17	17	17	17	16	16	16	16	16
MINIMUM	13	14	13	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	15	15	15	16	16	15	15	15	15	14
JUNE																																
MAXIMUM	17	17	16	16	16	16	16	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17	17	17	--	16
MINIMUM	16	16	16	16	16	14	14	15	15	15	16	15	15	16	16	16	16	16	16	16	16	17	17	17	16	17	17	17	17	17	--	16
JULY																																
MAXIMUM	17	17	17	18	18	18	18	18	18	18	19	19	19	19	19	19	19	20	20	20	20	21	21	21	21	21	21	21	21	21	21	19
MINIMUM	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	20	19	19	20	20	20	19	20	19
AUGUST																																
MAXIMUM	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	20	20	20	19	20	20	20	20	20	21	21	21	20	21	20
MINIMUM	20	20	20	20	20	20	20	20	20	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
SEPTEMBER																																
MAXIMUM	21	21	21	21	21	21	21	21	21	21	20	21	20	21	21	21	20	20	20	20	19	19	19	19	19	19	19	19	19	19	--	20
MINIMUM	19	19	20	19	20	19	19	19	19	19	19	19	19	19	19	20	19	19	19	19	19	18	18	18	18	18	18	18	18	18	--	19

11-4475. SACRAMENTO RIVER AT SACRAMENTO, CALIF.
(International Hydrological Decade Station)

LOCATION.--Lat 38°35'20", long 121°30'15", 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.--23,530 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1952 to May 1960.
Water temperatures: May 1955 to September 1968.
Sediment records: October 1956 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 24°C June 1, 22-25; minimum, 6°C on several days during December and January.
Sediment concentrations: Maximum daily, 520 mg/l Feb. 22; minimum daily, 12 mg/l Jan. 1.
Sediment loads: Maximum daily, 83,800 tons Feb. 22; minimum daily, 480 tons Jan. 1.
EXTREMES, 1955-68.--Water temperatures: Maximum (1955-62, 1963-66, 1967-68), 27°C June 15, 16, 1961; minimum, 4°C Jan. 30, 31, Feb. 1, 1957.
Sediment concentrations (1956-68): Maximum daily, 1,960 mg/l Dec. 24, 1964; minimum daily 11 mg/l (estimated), Nov. 30, 1959.
Sediment loads (1956-68): 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, 11-4476.5. Sacramento River at Freeport, Calif., are considered as being part of this IHD station.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	17	--	16	17	--	16	17	--	20	18	--	17	18	--	17	17	16	17	--	16	17	17	17	17	16	16	17	16	16	16	14	17
NOVEMBER.	16	16	16	--	--	15	15	15	15	--	--	--	14	15	15	14	16	21	--	20	15	13	12	13	13	--	--	--	--	10	--	--
DECEMBER.	10	9	9	11	11	9	10	9	--	9	9	9	7	7	8	6	6	7	6	7	6	8	--	9	9	9	11	11	12	11	8	9
JANUARY..	8	8	7	7	7	6	6	6	6	8	7	7	7	8	9	9	9	9	9	--	9	9	9	9	9	10	8	--	7	--	--	8
FEBRUARY.	7	--	8	--	--	10	10	--	--	10	10	11	11	11	13	12	15	13	12	12	13	13	--	13	13	14	14	13	13	--	--	12
MARCH....	13	13	--	13	13	12	13	12	12	12	12	11	11	12	12	12	12	12	12	13	13	13	16	10	14	19	14	14	13	--	14	13
APRIL....	14	16	11	14	15	16	16	16	17	18	18	17	14	17	16	15	14	14	15	15	14	16	17	17	17	17	17	18	19	17	--	16
MAY.....	18	19	18	18	18	17	17	17	17	17	17	17	17	17	17	18	19	20	21	20	19	19	19	19	20	22	21	22	22	23	23	19
JUNE.....	24	23	23	22	20	21	21	20	21	21	20	21	21	22	--	23	23	23	23	23	23	24	24	24	24	23	23	22	20	21	--	22
JULY.....	21	21	21	21	24	--	--	21	21	21	22	22	21	22	21	21	22	22	22	22	22	22	21	21	22	22	22	22	22	21	21	22
AUGUST...	21	23	--	21	22	23	22	21	23	--	21	21	20	19	20	19	20	20	18	18	18	18	17	--	20	19	20	21	23	22	23	20
SEPTEMBER	22	23	22	22	21	22	--	21	22	21	21	21	21	--	21	21	--	22	19	19	--	19	17	17	18	21	20	20	18	--	--	20

11-4475. SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	15900	32	1370	15900	35	1500	14900	23	925
2	15200	30	1230	16900	35	1600	14900	22	885
3	15100	55	2240	17100	37	1710	15400	25	1040
4	17400	56	2630	16800	34	1540	15800	24	1020
5	17800	52	2500	16000	32	1380	18300	32	1580
6	17700	51	2440	15200	30	1230	19600	58	3070
7	17400	37	1740	14600	30	1180	21200	56	3210
8	17200	37	1720	14700	28	1110	20900	62	3500
9	16800	44	2000	14500	29	1140	21100	60	3420
10	17200	51	2370	13600	29	1060	20900	54	3050
11	16500	46	2050	13400	29	1050	19700	50	2660
12	16600	44	1970	13200	30	1070	18300	47	2320
13	15900	48	2060	13200	33	1180	17600	37	1760
14	15400	44	1830	13600	38	1400	17200	36	1670
15	15800	41	1750	14100	35	1330	16900	27	1230
16	16000	46	1990	13900	34	1280	16900	24	1100
17	16000	64	2760	14700	33	1310	16800	19	862
18	16000	68	2940	14900	22	885	16700	20	902
19	15900	63	2700	15100	23	938	16800	22	998
20	15800	55	2350	14900	29	1170	17000	19	872
21	15700	37	1570	14100	32	1220	17000	19	872
22	15600	25	1050	14100	32	1220	16600	16	717
23	15200	30	1230	14100	24	914	16100	15	652
24	15600	37	1560	14000	24	907	16000	14	605
25	15700	41	1740	14000	25	945	15700	15	636
26	15900	40	1720	14200	25	959	15600	18	758
27	16100	40	1740	14000	25	945	15800	21	896
28	16300	32	1410	14000	24	907	15900	22	944
29	16100	35	1520	14400	24	933	15800	26	1110
30	15600	37	1560	14600	23	907	15600	23	969
31	15400	33	1370	--	--	--	15500	19	795
TOTAL	500800	--	59110	437800	--	34920	532500	--	45028

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	14800	12	480	37500	260	26300	65800	140	24900
2	14500	18	705	36100	200	19500	64800	125	21900
3	14600	20	788	33400	130	11700	62900	120	20400
4	14300	17	656	34200	180	16600	60500	113	18500
5	14100	17	647	34900	210	19800	56700	106	16200
6	13800	18	671	32400	160	14000	55300	105	15700
7	13500	18	656	30400	105	8620	44800	108	13100
8	13200	16	570	28300	88	6720	40400	112	12200
9	13100	18	637	26900	76	5520	36900	116	11600
10	13700	21	777	24800	72	4820	34000	106	9730
11	15500	36	1510	24800	70	4690	32100	98	8490
12	24000	150	9720	24400	58	3820	30000	99	8020
13	23700	120	7680	23500	56	3550	29400	98	7780
14	20000	90	4860	23900	54	3480	31500	106	9020
15	19100	90	4640	23900	48	3100	34100	98	9020
16	28400	210	16100	22000	54	3210	34200	95	8770
17	33800	410	37400	21800	64	3770	34900	108	10200
18	34700	480	45000	25200	108	7350	36800	126	12500
19	33400	280	25300	34200	230	21200	36100	152	14800
20	29800	230	18500	40200	280	30400	33300	119	10700
21	26600	190	13600	51100	350	48300	29800	105	8450
22	25000	120	8100	59700	520	83800	27300	117	8620
23	23000	104	6460	63300	330	56400	25700	118	8190
24	19900	88	4730	65000	250	43900	24500	96	6350
25	18600	92	4620	66200	220	39300	23800	86	5530
26	17900	100	4830	66100	215	38400	23300	79	4970
27	17200	160	7430	66200	195	34900	22700	72	4410
28	16600	88	3940	66600	165	29700	22000	66	3920
29	16700	52	2340	66600	150	27000	21100	64	3650
30	19000	80	4100	--	--	--	20800	63	3540
31	32300	230	20100	--	--	--	21000	62	3520
TOTAL	634800	--	257547	1153600	--	619850	1116500	--	324680

11-4475. SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	21000	54	3060	10200	25	689	10300	42	1170
2	21100	52	2960	10500	26	737	10000	35	945
3	21600	50	2920	10900	31	912	9780	28	739
4	21200	51	2920	11700	43	1360	10500	28	794
5	20000	45	2430	12800	70	2420	10600	32	916
6	19200	47	2440	13800	78	2910	10500	38	1080
7	18500	54	2700	14100	88	3350	11900	31	996
8	18000	51	2480	13600	84	3080	12700	38	1300
9	16900	45	2050	13500	98	3570	13100	40	1410
10	15800	41	1750	13400	80	2890	13200	47	1680
11	15500	43	1800	13000	79	2770	12900	40	1390
12	15000	37	1500	13300	78	2800	12700	37	1270
13	15000	45	1820	13700	86	3180	11900	43	1380
14	14800	36	1440	14500	86	3370	11100	45	1350
15	14100	35	1330	15800	89	3800	11000	28	832
16	13200	30	1070	15500	86	3600	10900	25	736
17	12400	32	1070	14700	84	3330	11000	27	802
18	11600	29	908	14100	78	2970	11200	25	756
19	10900	25	736	14100	68	2590	10900	28	824
20	10300	34	946	14000	68	2570	10700	32	924
21	10200	38	1050	14100	65	2470	10900	34	1000
22	10400	30	842	13600	67	2460	11200	30	907
23	10600	35	1000	14100	67	2550	11600	18	564
24	10600	38	1090	14200	67	2570	11500	22	683
25	10500	40	1130	14200	67	2570	11200	29	877
26	10600	46	1320	13800	76	2830	11400	24	739
27	11300	54	1650	13600	72	2640	11100	23	689
28	11500	71	2200	13100	66	2330	11500	23	714
29	11000	47	1400	12500	66	2230	11400	32	985
30	10300	26	723	11500	56	1740	11900	31	996
31	--	--	--	10900	47	1380	--	--	--
TOTAL	433100	--	50735	412800	--	78668	340580	--	29448

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	12100	36	1180	12900	33	1150	11400	18	554
2	12300	34	1130	12900	29	1010	11300	25	763
3	12100	36	1180	12800	26	899	11000	18	535
4	12300	23	764	13200	24	855	11400	16	492
5	12600	26	885	13200	23	820	11400	19	585
6	12800	28	968	12800	21	726	11900	24	771
7	13400	32	1160	12800	21	726	12300	28	930
8	13100	34	1200	12900	26	906	12900	30	1040
9	12500	30	1010	12700	24	823	13300	34	1220
10	12500	31	1050	12800	25	864	13900	38	1430
11	12500	31	1050	12900	27	940	14300	44	1700
12	12500	27	911	13100	27	955	14600	47	1850
13	12500	29	979	12800	27	933	15000	39	1580
14	12800	36	1240	12900	20	697	14900	45	1810
15	13100	28	990	12700	23	789	15000	57	2310
16	12900	31	1080	13000	26	913	14600	62	2440
17	12500	38	1280	12900	28	975	14400	44	1710
18	12200	43	1420	13100	28	990	14200	38	1460
19	12000	42	1360	13100	19	672	13800	41	1530
20	12100	42	1370	12600	24	816	13300	40	1440
21	12100	31	1010	12800	24	829	13200	39	1390
22	12200	37	1220	13500	30	1090	13300	40	1440
23	12500	25	844	14800	68	2720	13300	44	1580
24	12500	17	574	14700	61	2420	13100	33	1170
25	12400	25	837	13900	54	2030	13000	24	842
26	12600	21	714	13400	49	1770	12700	30	1030
27	12900	17	592	13100	43	1520	12600	28	953
28	13200	19	677	12800	26	899	12500	22	743
29	13400	29	1050	12600	36	1220	12500	26	878
30	13000	18	632	11800	27	860	12500	34	1150
31	12800	31	1070	11600	17	532	--	--	--
TOTAL	390400	--	31427	403100	--	33349	393600	--	37326

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 6749580
TOTAL LOAD FOR YEAR (TONS) 1602088

11-4475. SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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, 1967	1100	14	15400	35	1460	19	28	44	57	65	93	99	100	--	--	--	SCBW
NOV 30.....	0930	10	14600	20	788	10	22	41	53	62	95	99	100	--	--	--	SCBW
JAN 11, 1968	0850	6	15500	22	921	12	24	38	48	54	86	98	100	--	--	--	SCBW
JAN 18.....	1000	8	34500	527	49100	35	48	62	72	81	88	98	100	--	--	--	VPCW
FEB 1.....	1230	6	37800	601	61300	26	38	52	63	69	90	96	100	--	--	--	VCBW
FEB 28.....	1310	13	66600	172	30900	39	48	59	64	68	71	86	99	100	--	--	VPCW
APR 17.....	0945	14	12400	26	870	7	28	50	60	68	100	--	--	--	--	--	SCBW
MAY 27.....	0930	20	13600	47	1730	36	42	61	73	89	96	99	100	--	--	--	SPCW

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 18, 1968	1000	8	1	34500	50	83	91	96	100	--	--	--	--	--	--	S
JAN 18.....	1005	8	2	34500	--	2	22	93	99	100	--	--	--	--	--	S
JAN 18.....	1010	8	3	34500	1	8	38	94	99	100	--	--	--	--	--	S
JAN 18.....	1015	8	4	34500	1	10	39	92	98	100	--	--	--	--	--	S
JAN 18.....	1020	8	5	34500	32	62	82	98	100	--	--	--	--	--	--	S
AUG 23.....	1025	18	1	D14800	76	93	99	100	--	--	--	--	--	--	--	S
AUG 23.....	1028	18	2	14800	70	97	100	--	--	--	--	--	--	--	--	S
AUG 23.....	1032	18	3	14800	48	81	96	100	--	--	--	--	--	--	--	S
AUG 23.....	1036	18	4	14800	2	7	48	93	99	100	--	--	--	--	--	S
AUG 23.....	1038	18	5	14800	71	92	99	100	--	--	--	--	--	--	--	S

11-4476.5. 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.
RECORDS AVAILABLE.--Chemical analyses: June 1960 to September 1968.
Water temperatures: June 1960 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C on many days during May to September; minimum, 6°C Dec. 19-23.
EXTREMES, 1960-68.--Water temperatures: Maximum, 24°C June 16, 17, 1961; minimum, 5°C Jan. 24-27, 1962.
REMARKS.--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 11-4475, Sacramento River at Sacramento. Data collected at this site are considered as being part of the International Hydrological Station 11-4475, Sacramento River at Sacramento, Calif.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	LITHIUM (LI)	STRON-TIUM (SR)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)
NOV.												
08...	14700	18	.03	11	5.9	7.5	1.2	.01	.02	66	0	7.0
DEC.												
04...	15800	17	.03	11	6.1	10	1.3	.01	.08	69	0	8.0
JAN.												
10...	13700	17	.02	12	5.8	7.8	1.5	.00	.10	67	0	7.0
FEB.												
14...	23900	19	.06	14	7.3	12	1.3	.00	.11	79	0	16
MAR.												
13...	29400	18	.02	11	5.4	6.4	1.1	.00	.09	62	0	7.0
APR.												
10...	15800	17	.02	12	6.4	9.1	1.2	.00	.10	72	0	10
MAY												
15...	15800	16	.02	14	9.0	16	1.5	.01	.13	92	0	19
JUNE												
05...	10600	16	.00	12	6.9	9.5	1.2	.00	.10	72	0	8.0
JULY												
17...	12500	17	.05	11	6.8	12	1.3	.00	.08	73	0	9.0
AUG.												
07...	12800	18	.01	13	8.6	14	1.1	.00	.11	89	0	11
SEPT.												
04...	11400	20	.00	15	10	18	1.6	.01	.12	108	0	14

DATE	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	PHOS-PHATE (PO4)	BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3
NOV.												
08...	5.0	.1	1.0	.42	.10	90	52	0	.12	24	.5	54
DEC.												
04...	6.7	.1	1.1	.34	.10	96	52	0	.13	29	.6	57
JAN.												
10...	3.8	.1	3.3	.07	.00	91	54	0	.12	23	.5	55
FEB.												
14...	6.0	.1	1.7	.41	.00	117	65	0	.16	28	.6	65
MAR.												
13...	3.3	.1	1.2	.33	.02	85	50	0	.12	22	.4	51
APR.												
10...	5.6	.1	2.3	.31	.03	99	56	0	.13	26	.5	59
MAY												
15...	11	.2	1.6	.41	.08	134	72	0	.18	32	.8	75
JUNE												
05...	7.0	.1	2.2	.40	.00	98	58	0	.13	25	.5	59
JULY												
17...	9.2	.1	1.2	.26	.00	104	56	0	.14	31	.7	60
AUG.												
07...	7.9	.1	1.0	.71	.01	119	68	0	.16	31	.7	73
SEPT.												
04...	11	.2	1.2	--	.07	144	78	0	.20	30	.5	89

11-4476.5. SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	TURBIDITY	DISSOLVED OXYGEN
NOV.					
08...	132	7.6	16	10	9.8
DEC.					
04...	147	7.6	--	27	--
JAN.					
10...	136	7.4	--	4.0	--
FEB.					
14...	177	7.4	--	30	--
MAR.					
13...	131	7.5	12	35	10.5
APR.					
10...	156	7.6	--	5.0	--
MAY					
15...	216	7.6	15	10	10.3
JUNE					
05...	157	7.3	21	5.0	8.1
JULY					
17...	164	7.5	20	5.0	8.8
AUG.					
07...	189	7.9	24	100	8.5
SEPT.					
04...	230	8.2	22	--	8.3

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	17	17	17	16	16	16	16	16	15	15	15	15	15	15	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	15
MINIMUM	17	17	16	16	16	16	16	16	15	15	15	15	15	15	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	15
NOVEMBER																																
MAXIMUM	14	14	14	14	14	14	14	14	14	14	14	14	13	13	13	13	13	13	13	13	13	12	12	12	12	11	11	11	11	10	--	13
MINIMUM	14	14	14	14	14	14	14	14	14	14	14	13	13	13	13	13	13	13	13	13	12	12	12	12	11	11	11	11	10	9	--	13
DECEMBER																																
MAXIMUM	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	7	7	7	7	6	6	6	7	7	7	7	7	8	8	8	8	8
MINIMUM	9	9	9	9	9	9	9	9	9	9	9	8	8	7	7	7	7	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8
JANUARY																																
MAXIMUM	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	9	9	9	8	8	9	9	8	8
MINIMUM	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	9	8	8	8	8	8	8	8
FEBRUARY																																
MAXIMUM	9	8	8	8	9	9	9	9	10	10	10	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	12	12	--	--	10
MINIMUM	8	8	8	8	8	9	9	9	9	10	10	10	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	12	--	--	10
MARCH																																
MAXIMUM	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	12	12	13	13	11
MINIMUM	12	12	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	12	12	13		11
APRIL																																
MAXIMUM	13	13	13	13	13	13	13	14	14	14	14	15	15	15	15	15	15	15	15	15	16	16	16	16	16	16	16	16	16	17	--	15
MINIMUM	13	13	13	13	13	13	13	13	14	14	14	14	15	15	15	15	15	15	15	15	16	16	16	16	16	16	16	16	16	16	--	15
MAY																																
MAXIMUM	17	17	17	17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	19	20	20	20	20	20	20	20	20	21	21	21	22	19
MINIMUM	17	17	17	17	17	17	17	17	17	18	18	18	18	18	18	18	18	18	19	19	20	20	20	20	20	20	20	20	21	21	21	18
JUNE																																
MAXIMUM	22	22	22	22	21	21	21	20	20	20	20	20	20	20	20	21	21	21	21	21	22	22	22	22	22	22	22	22	22	21	--	21
MINIMUM	22	22	22	21	21	21	20	20	20	20	20	20	20	20	20	20	21	21	21	21	21	22	22	22	22	22	22	22	21	21	--	21
JULY																																
MAXIMUM	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22	22	22	22	22	21	21	21	21	21
MINIMUM	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22	22	22	21	21	21	21	21		21
AUGUST																																
MAXIMUM	21	21	21	21	21	21	21	21	21	22	22	22	22	22	21	21	21	21	21	21	21	20	20	20	21	21	21	21	22	22	22	21
MINIMUM	21	21	21	21	21	21	21	21	21	21	22	22	22	21	21	21	21	21	21	21	20	20	20	20	20	21	21	21	21	22	22	21
SEPTEMBER																																
MAXIMUM	22	22	22	22	22	22	22	22	22	22	22	22	21	21	21	21	21	21	20	20	19	19	18	18	17	18	18	18	18	18	--	20
MINIMUM	22	22	22	22	22	22	22	22	22	22	22	21	21	21	21	21	21	20	20	19	19	18	18	17	17	17	18	18	18	18	--	20

11-4490.1. 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, 600 ft upstream from gaging station, and 4.0 miles southwest of Kelseyville.
DRAINAGE AREA.--14.2 sq mi.
RECORDS AVAILABLE.--Water temperatures: November 1966 to September 1968.
Sediment records: December 1965 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 127 mg/l Jan. 15; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 144 tons Jan. 30; minimum daily, 0 ton on many days.
EXTREMES, 1965-68.--Sediment concentrations: Maximum daily, 182 mg/l Jan. 5, 1966; minimum daily, no flow on many days in 1966-68.
Sediment loads: Maximum daily, 270 tons Jan. 5, 1966; minimum daily, 0 ton on many days in 1966-68.
REMARKS.--No flow Nov. 21 to Dec. 2, June 11-24, 27, 28, 30, July 3-10, 12-14, July 16 to Aug. 22, Sept. 25-30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	10	--	--	--	--	--	--	--	--	--	--	14	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	--	--	--	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	9	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY.	--	--	--	--	--	--	--	10	--	--	11	--	--	--	--	9	--	--	10	10	--	9	--	--	--	8	--	--	8	--	--	--
MARCH....	9	11	9	9	9	--	--	10	--	--	9	--	--	--	11	8	--	--	--	10	9	--	--	--	9	9	--	--	9	--	--	--
APRIL....	8	10	10	10	9	--	--	9	8	--	--	8	--	--	8	--	8	9	--	--	--	9	--	--	9	--	--	--	9	20	--	--
MAY.....	11	--	--	--	--	--	--	11	--	--	--	--	--	--	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	--	18	--	--	--	--	--	--	20	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--	20	--	--	--
JULY.....	--	16	--	--	--	21	--	--	--	--	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	19	14	--	--	--	--	--	--	15	--	--	--	--	--	--	21	--	--	--	--	--	--	18	--	--	--	--	--

11-4490.1. HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.4	29	.11	2.0	48	.26	0	--	0
2	1.3	29	.10	1.6	48	.21	0	--	0
3	2.3	29	.18	1.6	48	.21	11	17	.82
4	2.3	29	.18	1.0	45	.12	40	33	4.0
5	2.3	29	.18	1.0	43	.12	64	39	7.0
6	2.3	29	.18	1.0	40	.11	18	31	1.5
7	2.0	29	.16	1.0	40	.11	67	40	7.4
8	2.0	29	.16	1.0	40	.11	20	33	1.8
9	1.6	29	.13	1.3	40	.14	11	27	.80
10	1.6	29	.13	1.6	38	.16	8.4	25	.57
11	1.6	29	.13	1.6	38	.16	5.5	20	.30
12	2.0	29	.16	1.6	38	.16	4.7	20	.25
13	2.0	29	.16	.80	38	.08	4.0	20	.22
14	2.0	29	.16	.56	38	.06	3.3	20	.18
15	2.0	29	.16	.56	47	.07	3.3	20	.18
16	1.6	29	.13	.56	47	.07	3.3	20	.18
17	1.6	29	.13	.56	45	.07	5.2	21	.31
18	1.6	29	.13	.32	45	.04	43	34	4.1
19	2.0	29	.16	.80	45	.10	25	31	2.1
20	2.0	29	.16	.35	18	.04	13	22	.77
21	2.0	29	.16	0	--	0	10	20	.54
22	2.0	29	.16	0	--	0	7.3	15	.30
23	2.3	30	.19	0	--	0	5.8	12	.19
24	2.3	35	.22	0	--	0	5.5	10	.15
25	2.3	38	.24	0	--	0	5.1	10	.14
26	2.0	40	.22	0	--	0	4.7	10	.13
27	2.0	40	.22	0	--	0	4.3	10	.12
28	2.3	45	.28	0	--	0	4.0	10	.11
29	2.0	45	.24	0	--	0	3.6	10	.10
30	2.0	46	.25	0	--	0	3.6	10	.10
31	2.0	47	.25	--	--	--	3.3	10	.09
TOTAL	60.7	--	5.42	20.81	--	2.40	406.9	--	34.45

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	3.3	10	.09	53	35	5.0	18	13	.63
2	3.3	10	.09	121	51	16	17	12	.55
3	3.3	10	.09	67	35	6.3	15	12	.49
4	2.9	10	.08	47	30	3.8	15	10	.41
5	2.9	10	.08	35	25	2.4	15	10	.41
6	2.6	10	.07	30	22	1.8	14	10	.38
7	2.6	10	.07	25	20	1.4	14	10	.38
8	2.9	12	.09	22	18	1.1	15	15	.61
9	11	11	.40	20	16	.86	13	12	.42
10	269	65	41	19	14	.72	13	10	.35
11	39	36	3.9	18	13	.63	12	10	.32
12	20	25	1.4	16	12	.52	95	49	20
13	19	25	1.3	15	11	.45	65	21	3.7
14	259	94	102	15	11	.45	52	25	3.5
15	248	127	94	14	10	.38	56	25	4.4
16	74	44	8.9	23	32	2.5	209	55	34
17	39	20	2.1	61	111	18	85	20	4.6
18	27	17	1.2	38	70	7.2	53	15	2.1
19	21	14	.79	134	82	42	39	10	1.1
20	18	12	.58	200	47	28	32	7	.60
21	16	12	.52	151	51	22	28	4	.30
22	14	12	.45	80	25	5.4	24	4	.26
23	13	12	.42	54	23	3.4	23	3	.19
24	11	11	.33	40	21	2.3	20	2	.11
25	11	10	.30	31	20	1.7	18	2	.10
26	11	10	.30	27	20	1.5	16	2	.09
27	9.9	10	.27	24	20	1.3	15	2	.08
28	19	10	.51	21	20	1.1	15	2	.08
29	502	88	131	20	19	1.0	13	2	.07
30	562	95	144	--	--	--	12	2	.06
31	331	65	67	--	--	--	12	2	.06
TOTAL	2567.7	--	603.33	1421	--	179.21	1043	--	80.35

11-4490.1. HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	14	3	.11	2.3	3	.02	.53	2	0
2	16	7	.30	2.3	3	.02	.51	2	0
3	13	10	.35	2.0	5	.03	.49	2	0
4	12	5	.16	2.0	5	.03	.47	2	0
5	11	4	.12	1.6	5	.02	.45	2	0
6	11	2	.06	1.6	6	.03	1.3	2	.01
7	9.9	1	.03	1.6	7	.03	1.6	2	.01
8	9.5	1	.03	2.0	10	.05	1.6	2	.01
9	9.2	2	.05	1.0	5	.01	.80	3	.01
10	8.8	1	.02	1.3	5	.02	.12	3	0
11	8.4	1	.02	1.3	5	.02	0	--	0
12	8.4	1	.02	2.0	4	.02	0	--	0
13	8.4	1	.02	2.3	4	.02	0	--	0
14	8.0	2	.04	4.0	4	.04	0	--	0
15	8.0	2	.04	2.9	4	.03	0	--	0
16	7.7	1	.02	2.3	4	.02	0	--	0
17	7.7	1	.02	1.6	4	.02	0	--	0
18	7.3	1	.02	1.6	4	.02	0	--	0
19	7.7	1	.02	1.6	4	.02	0	--	0
20	7.3	1	.02	2.3	4	.02	0	--	0
21	6.9	1	.02	2.0	3	.02	0	--	0
22	6.6	1	.02	2.0	3	.02	0	--	0
23	6.2	1	.02	1.6	3	.01	0	--	0
24	5.5	1	.01	1.3	3	.01	0	--	0
25	5.5	1	.01	1.6	3	.01	.79	1	.01
26	5.1	1	.01	2.0	3	.02	.07	0	0
27	4.7	2	.03	2.0	3	.02	0	--	0
28	4.0	2	.02	1.6	2	.01	0	--	0
29	3.3	2	.02	1.0	2	.01	.12	1	0
30	2.6	5	.04	.56	2	0	0	--	0
31	--	--	--	.55	2	0	--	--	--
TOTAL	243.7	--	1.67	55.81	--	.62	8.85	--	.05

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.12	1	0	0	--	0	.56	5	.01
2	.15	3	0	0	--	0	.56	7	.01
3	0	--	0	0	--	0	.56	10	.02
4	0	--	0	0	--	0	.56	12	.02
5	0	--	0	0	--	0	.56	14	.02
6	0	--	0	0	--	0	.32	15	.01
7	0	--	0	0	--	0	.32	15	.01
8	0	--	0	0	--	0	.32	15	.01
9	0	--	0	0	--	0	.56	15	.02
10	0	--	0	0	--	0	.32	15	.01
11	1.3	1	.01	0	--	0	.56	15	.02
12	0	--	0	0	--	0	.32	15	.01
13	0	--	0	0	--	0	.56	18	.03
14	0	--	0	0	--	0	.56	18	.03
15	.03	0	0	0	--	0	.56	18	.03
16	0	--	0	0	--	0	.56	18	.03
17	0	--	0	0	--	0	.80	18	.04
18	0	--	0	0	--	0	.80	18	.04
19	0	--	0	0	--	0	.80	18	.04
20	0	--	0	0	--	0	1.0	20	.05
21	0	--	0	0	--	0	1.0	20	.05
22	0	--	0	0	--	0	1.0	20	.05
23	0	--	0	.12	1	0	.80	18	.04
24	0	--	0	.56	1	0	.42	9	.02
25	0	--	0	.80	1	0	0	--	0
26	0	--	0	.80	1	0	0	--	0
27	0	--	0	.56	1	0	0	--	0
28	0	--	0	.32	1	0	0	--	0
29	0	--	0	.32	1	0	0	--	0
30	0	--	0	.56	2	0	0	--	0
31	0	--	0	.56	4	.01	--	--	--
TOTAL	1.60	--	.01	4.60	--	.01	14.38	--	.62

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 5849.05
TOTAL LOAD FOR YEAR (TONS) 908.14

11-4490.1. HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 19, 1968	1630	10	194	77	40	19	41	--	46	47	65	76	89	97	100	--	SBN
FEB 20.....	0930	10	236	47	30	66	83	90	93	95	98	99	100	--	--	--	SBWC

11-4517.6. 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.
RECORDS AVAILABLE.--Water temperatures: January 1960 to September 1968.
Sediment records: January 1960 to September 1963, June 1965 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 4,760 mg/l Jan. 29; minimum daily, 3 mg/l on several days during March and April.
Sediment loads: Maximum daily, 133,000 tons Jan. 29; minimum daily, 0.18 ton Nov. 26-28.
EXTREMES, 1960-68.--Water temperatures: (1964-66): Minimum, 1°C Dec. 17, 1965.
Sediment concentrations (1960-63, 1965-68): Maximum daily, 9,160 mg/l Jan. 29, 1967; minimum daily, 1 mg/l on several days during 1960-62, Dec. 21, 1965.
Sediment loads (1960-63, 1965-68): Maximum daily, 363,000 tons Jan. 31, 1963; minimum daily, 0.01 ton on many days during 1960-61.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	27	--	--	--	--	--	--	--	--	--	--	19	19	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	12	--	--	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	--	--	--	--	--	7	11	4	6	9	7	4	3	2	1	--	--	2	--	3	--	--	--	--	--	--	10	--	--	7	--	--
JANUARY..	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	9	--	--	--	7	--	--	--	--	--	--	--	--	4	5	6	--
FEBRUARY.	7	6	--	--	8	11	--	11	--	9	--	11	--	--	--	10	10	12	13	11	--	--	--	--	--	--	12	--	--	--	--	--
MARCH....	--	--	--	--	14	--	--	11	--	--	13	--	--	--	12	11	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--
APRIL....	14	--	16	--	--	--	--	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY.....	--	--	18	--	--	--	--	--	--	--	--	--	--	--	--	19	--	--	--	--	--	--	--	--	--	--	--	--	--	21	--	--
JUNE.....	--	--	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	26	--	--	--	--	--
JULY.....	27	--	26	--	--	--	27	--	28	--	--	27	24	--	--	27	--	--	28	--	27	27	--	--	--	28	--	25	--	--	--	--
AUGUST...	--	25	--	--	27	--	--	24	--	--	26	--	24	--	--	20	--	22	22	19	--	--	26	--	22	--	24	--	27	--	26	--
SEPTEMBER	--	--	23	--	24	--	--	27	--	27	--	24	23	--	--	21	--	21	--	23	--	--	22	--	22	--	--	--	--	22	--	--

11-4517.6. CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	108	32	9.3	59	8	1.3	34	200	18
2	107	32	9.2	58	9	1.4	37	250	25
3	108	30	8.7	58	9	1.4	58	460	72
4	86	25	5.8	59	8	1.3	133	900	323
5	81	21	4.6	60	7	1.1	400	690	745
6	79	18	3.8	60	7	1.1	410	320	354
7	77	16	3.3	63	7	1.2	323	105	92
8	76	15	3.1	66	7	1.2	391	55	58
9	77	14	2.9	54	7	1.0	162	180	79
10	66	14	2.5	44	7	.83	109	70	21
11	60	14	2.3	39	6	.63	84	25	5.7
12	59	14	2.2	32	6	.52	73	17	3.4
13	58	13	2.0	32	6	.52	66	8	1.4
14	56	13	2.0	45	6	.73	60	7	1.1
15	57	12	1.8	47	5	.63	46	5	.62
16	57	12	1.8	42	5	.57	47	7	.89
17	57	11	1.7	41	5	.55	48	14	1.8
18	57	11	1.7	39	5	.53	67	88	16
19	58	10	1.6	38	5	.51	120	50	16
20	59	10	1.6	37	5	.50	95	20	5.1
21	59	9	1.4	33	5	.45	72	18	3.5
22	59	9	1.4	19	5	.26	62	15	2.5
23	59	8	1.3	15	5	.20	59	12	1.9
24	59	7	1.1	14	5	.19	56	10	1.5
25	60	7	1.1	14	5	.19	51	9	1.2
26	59	7	1.1	13	5	.18	55	10	1.5
27	59	7	1.1	13	5	.18	60	14	2.3
28	59	7	1.1	13	5	.18	58	10	1.6
29	60	7	1.1	19	55	2.8	55	7	1.0
30	59	8	1.3	27	140	10	52	4	.56
31	59	8	1.3	--	--	--	49	4	.53
TOTAL	2094	--	85.2	1153	--	32.15	3392	--	1857.10

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	49	4	.53	1780	1250	11400	596	18	29
2	49	4	.53	4840	3060	40200	1130	62	189
3	45	5	.61	4380	1020	12100	1100	50	149
4	40	6	.65	3500	500	4730	956	40	103
5	37	6	.60	1240	230	770	606	18	29
6	34	7	.64	1100	120	356	568	14	21
7	34	8	.73	999	88	237	349	9	8.5
8	34	8	.73	854	70	161	371	6	6.0
9	39	9	.95	734	53	105	326	6	5.3
10	1360	4000	14700	663	40	72	272	5	3.7
11	541	400	584	578	28	44	265	3	2.1
12	257	20	14	514	20	28	390	9	9.5
13	194	10	5.2	458	18	22	2080	304	1710
14	1220	1700	5600	421	17	19	2550	258	1780
15	3220	3100	27000	379	16	16	2440	225	1480
16	1120	350	1060	528	119	342	3560	442	4250
17	694	100	187	2370	1630	10200	2910	166	1300
18	470	40	51	1290	258	899	2680	184	1330
19	356	25	24	2040	460	2530	2820	230	1750
20	288	18	14	5030	2020	27400	3230	285	2490
21	245	14	9.3	5010	2670	36100	2970	202	1620
22	212	12	6.9	4280	1500	17300	2560	110	760
23	184	10	5.0	3990	856	9220	1500	92	373
24	166	9	4.0	3720	580	5830	1450	77	301
25	155	8	3.3	3500	470	4440	1430	73	282
26	145	7	2.7	3320	400	3590	1400	70	265
27	138	7	2.6	2450	260	1720	1310	65	230
28	135	7	2.6	648	18	31	374	37	37
29	8970	4760	133000	561	14	21	321	12	10
30	5740	2120	39700	--	--	--	298	8	6.4
31	1590	460	1970	--	--	--	280	7	5.3
TOTAL	27761	--	223951.57	61177	--	189883	43092	--	20534.8

11-4517.6. CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	291	4	3.1	559	34	51	558	47	71
2	333	7	6.3	553	34	51	514	45	62
3	274	3	2.2	522	34	48	511	35	48
4	250	3	2.0	511	35	48	548	25	37
5	237	3	1.9	489	36	48	564	21	32
6	225	3	1.8	484	36	47	558	21	32
7	211	3	1.7	507	36	49	549	21	31
8	200	4	2.2	567	36	55	524	21	30
9	191	4	2.1	544	38	56	493	21	28
10	183	4	2.0	512	38	53	481	21	27
11	176	4	1.9	508	36	49	494	21	28
12	224	7	4.2	500	31	42	490	21	28
13	297	11	8.8	470	31	39	482	21	27
14	294	15	12	459	28	35	456	21	26
15	290	18	14	379	23	24	470	21	27
16	318	19	16	423	21	24	475	21	27
17	317	20	17	455	22	27	491	22	29
18	385	24	25	487	25	33	519	25	35
19	428	28	32	472	28	36	579	50	78
20	422	27	31	465	28	35	577	56	87
21	387	26	27	433	27	32	571	56	86
22	385	27	28	457	27	33	558	56	84
23	451	28	34	513	30	42	518	56	78
24	490	29	38	521	35	49	483	56	73
25	483	30	39	488	37	49	485	56	73
26	486	31	41	469	35	44	494	56	75
27	549	32	47	507	38	52	467	56	71
28	551	33	49	589	46	73	498	54	73
29	527	33	47	604	50	82	506	50	68
30	544	33	48	583	50	79	497	43	58
31	--	--	--	568	50	77	--	--	--
TOTAL	10399	--	585.2	15598	--	1462	15410	--	1529

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	520	38	53	460	26	32	366	22	22
2	505	37	50	460	28	35	351	27	26
3	520	35	49	461	24	30	348	28	26
4	499	32	43	458	12	15	356	21	20
5	481	30	39	430	4	4.6	388	13	14
6	474	29	37	405	6	6.6	362	12	12
7	477	28	36	395	10	11	347	11	10
8	505	26	35	401	40	43	307	10	8.3
9	544	24	35	432	43	50	276	10	7.5
10	543	24	35	424	43	49	266	11	7.9
11	557	25	38	394	43	46	247	13	8.7
12	566	26	40	414	30	34	225	15	9.1
13	621	36	60	438	16	19	212	15	8.6
14	598	35	57	410	12	13	211	16	9.1
15	569	35	54	363	10	9.8	207	16	8.9
16	560	34	51	361	8	7.8	190	16	8.2
17	528	33	47	356	6	5.8	190	13	6.7
18	495	31	41	330	4	3.6	186	11	5.5
19	479	30	39	330	8	7.1	186	12	6.0
20	478	28	36	339	13	12	149	14	5.6
21	460	26	32	332	17	15	145	10	3.9
22	455	24	29	276	20	15	144	7	2.7
23	438	24	28	223	22	13	144	7	2.7
24	413	23	26	217	23	13	144	7	2.7
25	428	22	25	244	24	16	156	16	6.7
26	443	22	26	272	24	18	182	20	9.8
27	418	21	24	294	24	19	184	20	9.9
28	431	17	20	293	23	18	155	15	6.3
29	432	18	21	274	22	16	144	12	4.7
30	415	20	22	295	19	15	142	10	3.8
31	461	22	27	327	16	14	--	--	--
TOTAL	15313	--	1155	11108	--	606.3	6910	--	283.3

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 213407
TOTAL LOAD FOR YEAR (TONS) 441964.62

11-4517.6. CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 6, 1967	0930	7.0	251	102	69	44	57	73	82	87	98	100	--	--	--	--	VCBW
JAN 16, 1968	1420	9.0	972	209	548	36	48	58	65	68	81	87	100	--	--	--	VCBW
JAN 29.....	1005	4.5	6860	7070	131000	36	46	56	68	79	84	90	93	98	100	--	VPWC
JAN 30.....	0930	5.0	5100	2300	31700	33	42	51	63	74	81	90	95	99	100	--	VPWC
JAN 31.....	1405	6.0	1470	305	1210	47	59	72	83	90	96	98	100	--	--	--	VPCW
FEB 17.....	0935	10.0	2990	1490	12000	36	43	57	68	79	84	92	97	100	--	--	VPWC
FEB 27.....	1150	12.0	3390	359	3290	20	26	36	44	53	61	69	78	84	91	100	VPWC
MAR 16.....	0920	13.5	5230	3660	51700	23	29	35	42	50	56	68	88	98	100	--	VPWC
JUN 5.....	1335	20.0	560	19	29	25	41	54	61	63	82	90	94	98	100	--	SCBW

11-4520. CACHE CREEK NEAR CAPAY, CALIF.

LOCATION.--Lat 38°43'40", 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.
RECORDS AVAILABLE.--Chemical analyses: October 1952 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	CHLO-RIDE (CL)	BORON (B)
DEC. 01...	27	--	--	70	266	11	101	1.8
MAR. 04...	1020	27	--	21	191	0	18	--
APR. 05...	284	34	40	42	253	11	43	--
MAY 16...	402	26	23	28	208	0	24	--
JUNE 06...	535	24	19	17	178	0	14	--
JULY 17...	505	26	--	18	160	5	14	--
AUG. 14...	391	28	--	20	179	0	17	--
SEPT. 13...	186	27	--	22	181	3	19	--

DATE	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
DEC. 01...	257	20	236	800	8.6	8	11.2
MAR. 04...	158	1	157	409	8.2	15	9.4
APR. 05...	248	22	226	643	8.6	14	10.6
MAY 16...	161	0	171	449	8.2	21	9.1
JUNE 06...	140	0	146	372	8.1	21	9.1
JULY 17...	134	0	139	350	8.6	24	8.4
AUG. 14...	140	0	147	288	8.2	25	8.9
SEPT. 13...	151	0	153	410	8.4	24	8.9

11-4535. PUTAH CREEK NEAR GUENOC, CALIF.

LOCATION.--Lat 38°46'45", long 122°31'00", 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.
RECORDS AVAILABLE.--Water temperatures: March 1960 to September 1968.
Sediment records: October 1962 to September 1965.
EXTREMES, 1967-68.--Water temperatures: Maximum, 28°C July 5; minimum, 4°C Dec. 14.
EXTREMES, 1960-68.--Water temperatures: Maximum, 30°C July 20, 1960; minimum (1960-65, 1966-68), 4°C Dec. 14, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	21	20	21	19	20	21	21	21	21	21	22	21	21	19	19	19	19	19	19	19	18	19	19	19	19	18	18	18	17	18	18	19
MINIMUM	19	17	16	16	17	16	16	16	17	17	17	17	17	16	16	15	16	16	16	16	15	16	16	16	16	15	15	16	14	14	14	16
NOVEMBER																																
MAXIMUM	18	18	17	16	17	17	17	16	16	16	15	14	14	16	15	16	16	16	14	15	14	13	13	13	13	12	12	12	12	11	--	14
MINIMUM	14	14	14	14	15	14	14	15	13	13	13	14	14	14	14	13	13	14	14	13	13	12	12	12	12	11	11	11	11	9	--	13
DECEMBER																																
MAXIMUM	10	11	11	10	10	9	9	9	9	11	11	9	8	6	8	8	8	8	8	8	8	9	9	11	12	12	13	12	11	11	10	9
MINIMUM	8	9	9	9	9	8	8	8	8	9	9	7	6	4	6	7	7	7	6	7	7	7	7	8	10	10	11	10	9	9	8	8
JANUARY																																
MAXIMUM	9	9	9	8	8	8	8	8	9	8	8	8	8	9	10	10	9	8	9	9	10	11	11	12	11	9	8	7	7	8	9	9
MINIMUM	8	8	7	7	7	7	7	8	8	7	6	7	8	8	8	8	7	7	7	7	8	9	9	9	9	8	7	7	6	7	7	7
FEBRUARY																																
MAXIMUM	9	9	11	11	11	11	12	11	12	12	12	12	11	11	12	11	13	12	12	13	13	13	14	14	14	14	14	14	14	--	--	12
MINIMUM	7	8	9	8	9	10	10	9	11	9	9	9	9	9	10	10	10	10	11	11	11	12	12	12	12	11	11	12	11	--	--	10
MARCH																																
MAXIMUM	13	14	15	14	14	13	12	14	14	14	13	12	12	12	12	12	13	13	13	13	13	13	15	15	14	14	16	17	18	18	17	14
MINIMUM	12	11	12	12	12	11	11	11	11	11	12	11	9	9	10	10	9	9	9	9	10	11	11	12	12	11	11	12	13	14	13	11
APRIL																																
MAXIMUM	14	17	17	16	17	17	18	18	19	20	20	19	19	20	19	18	17	18	19	18	18	18	18	19	20	20	20	21	21	22	--	18
MINIMUM	12	12	13	13	13	13	13	13	14	15	15	14	14	14	14	13	13	13	13	13	13	13	13	14	14	15	15	15	16	16	--	13
MAY																																
MAXIMUM	22	23	22	22	21	21	22	22	22	22	20	21	17	19	22	23	23	23	21	22	21	20	21	19	23	23	24	25	24	24	24	22
MINIMUM	16	17	17	17	17	16	16	16	16	17	16	16	16	15	15	16	17	18	19	17	17	16	16	16	17	17	18	18	19	18	18	17
JUNE																																
MAXIMUM	26	24	23	23	21	23	23	23	23	24	23	22	23	24	24	25	25	25	25	24	25	25	25	26	26	26	26	25	23	23	--	24
MINIMUM	19	19	20	18	18	17	17	18	18	18	18	18	18	19	20	21	21	21	21	22	22	22	23	23	23	23	23	23	21	20	--	20
JULY																																
MAXIMUM	24	24	26	26	28	27	27	27	27	27	26	26	26	26	26	26	26	26	27	27	26	27	27	27	27	26	26	26	26	27	27	26
MINIMUM	21	22	23	23	25	25	24	24	24	24	24	24	24	24	24	23	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	24
AUGUST																																
MAXIMUM	27	27	26	26	26	26	26	26	26	26	26	25	24	24	24	24	24	23	23	22	21	22	22	23	22	22	23	23	24	25	25	24
MINIMUM	25	25	25	24	23	24	24	24	24	24	23	23	23	23	22	22	22	22	22	21	20	19	20	21	21	21	21	21	22	22	23	22
SEPTEMBER																																
MAXIMUM	25	25	26	25	25	25	24	24	24	24	24	24	24	23	23	23	23	23	23	22	21	20	21	21	22	22	22	22	22	21	--	23
MINIMUM	23	24	23	24	23	23	23	23	23	22	22	23	23	22	22	22	22	22	22	21	20	19	19	20	21	21	21	21	21	20	--	22

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 2, 1967	1210	17	2.1	1	.01	--	--	--	--	--	--	--	--	--	--	--	
DEC 18.....	1440	8	227	17	10	--	--	--	--	--	--	--	--	--	--	--	
JAN 2, 1968	1530	9	35	1	.09	--	--	--	--	--	--	--	--	--	--	--	
FEB 1.....	1430	8	631	18	31	26	40	55	66	71	92	95	98	100	--	--	SBWC
MAR 1.....	1130	12	227	37	23	--	--	--	--	--	--	--	--	--	--	--	
APR 1.....	1220	13	162	1	.44	--	--	--	--	--	--	--	--	--	--	--	
MAY 1.....	1445	21	32	2	.17	--	--	--	--	--	--	--	--	--	--	--	
JUN 3.....	1045	20	16	2	.09	--	--	--	--	--	--	--	--	--	--	--	
JUL 1.....	1315	24	6.0	1	.02	--	--	--	--	--	--	--	--	--	--	--	
AUG 1.....	1600	26	4.9	2	.03	--	--	--	--	--	--	--	--	--	--	--	
SEP 3.....	1400	24	1.9	2	.01	--	--	--	--	--	--	--	--	--	--	--	

11-4540. PUTAH CREEK NEAR WINTERS, CALIF.

LOCATION.--Lat 38°30'55", long 122°04'50", in NE¼NE¼ sec.28, T.8 N., R.2 W., Yolo County, temperature recorder at gaging station on left bank, 1.3 miles downstream from Monticello Dam, 6 miles west of Winters, and 8 miles downstream from Capell Creek.
DRAINAGE AREA.--574 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1952 to September 1966.
Water temperatures: November 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 16°C Apr. 11, 12; minimum, 7°C on several days during December and January.
EXTREMES, 1965-68.--Water temperatures: Maximum, 22°C May 21, 1967; minimum (1966-68), 7°C on several days during December 1967 and January 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
MINIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
NOVEMBER																																
MAXIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	13	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	10	--	12
MINIMUM	11	11	12	12	12	12	12	12	12	12	12	12	12	12	11	12	12	11	11	11	11	11	11	11	11	11	10	10	10	9	--	11
DECEMBER																																
MAXIMUM	9	9	9	11	11	10	11	10	10	10	11	10	9	9	10	10	10	10	9	9	8	8	8	8	9	9	9	9	9	8	8	9
MINIMUM	8	8	8	9	10	9	10	9	9	9	10	9	8	8	9	9	9	9	8	8	7	7	7	7	7	9	9	9	8	8	8	9
JANUARY																																
MAXIMUM	8	9	8	10	9	10	9	8	8	8	8	7	8	8	9	9	8	8	9	9	9	9	9	9	9	8	8	8	8	7	8	9
MINIMUM	8	8	8	8	8	8	8	8	7	8	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	8
FEBRUARY																																
MAXIMUM	8	9	9	9	9	9	9	9	9	9	9	8	8	8	8	9	10	11	10	10	11	12	12	11	9	9	9	10	9	--	--	9
MINIMUM	8	8	9	8	9	9	9	8	8	8	8	8	8	8	8	8	9	10	9	9	10	11	11	9	8	8	8	9	8	--	--	9
MARCH																																
MAXIMUM	9	11	11	11	12	12	11	12	12	12	12	11	12	12	12	11	12	11	11	11	11	11	12	12	12	12	12	12	13	13	13	12
MINIMUM	9	9	10	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	12	12	12	11	11	11	11	12	11
APRIL																																
MAXIMUM	13	13	13	13	13	13	14	14	14	15	16	16	15	13	13	13	12	12	11	11	11	11	10	10	11	11	10	10	10	11	--	12
MINIMUM	12	12	12	13	13	13	13	13	13	14	14	15	13	13	13	12	11	11	11	10	10	9	9	9	9	9	9	9	9	9	--	11
MAY																																
MAXIMUM	11	10	11	11	11	11	11	11	11	11	10	11	10	11	11	11	11	11	10	11	11	11	11	10	11	11	11	11	11	11	10	10
MINIMUM	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	9	9	9	9	9	10
JUNE																																
MAXIMUM	11	11	10	11	11	11	11	11	11	11	11	11	11	11	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	--	11
MINIMUM	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	10	11	11	11	11	10	11	--	10
JULY																																
MAXIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	12	11	11	11	11	11	12	11
MINIMUM	11	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	10	11	11	11	11	11	10
AUGUST																																
MAXIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
MINIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
SEPTEMBER																																
MAXIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	--	12
MINIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	--	11

11-4554. SACRAMENTO RIVER AT RIO VISTA, CALIF.
(Formerly reported as Sacramento River near Rio Vista, Calif.)

LOCATION (revised).--Lat 38°09'44", long 121°41'24", T.4 N., R.3 E., Sacramento County, at Highway 12 drawbridge, 1.1 mile upstream from tidal gaging station just south of Rio Vista, and approximately 2.1 miles downstream from Steamboat Slough.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
REMARKS.--Records furnished by U.S. Bureau of Reclamation and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	CALCIUM (CA)	MAGNESIUM (MG)	SODIUM (NA)	POTASSIUM (K)	BICARBONATE (HCO3)	CARBONATE (CO3)	SULFATE (SO4)	CHLORIDE (CL)	NITRATE (N)	PHOSPHATE (PO4)	HARDNESS (CA,MG)
JAN. 11...	--	--	--	--	--	--	--	--	.02	2.3	--
FEB. 26...	--	--	--	--	--	--	--	--	.40	.67	--
MAR. 28...	13	13	14	1.8	113	0	3.0	12	.37	.17	86
APR. 19...	--	--	--	--	--	--	--	--	.40	.12	--
MAY 21...	--	--	--	--	--	--	--	--	1.3	.20	--
JUNE 18...	15	6.9	18	1.6	90	0	25	14	.30	.02	65
JULY 18...	--	--	--	--	--	--	--	--	.30	.10	--
AUG. 15...	--	--	--	--	--	--	--	--	.40	.11	--
SEPT. 27...	13	11	17	1.5	105	0	11	13	.40	.12	76

DATE	NONCARBONATE HARDNESS	PERCENT SODIUM	SODIUM ADSORPTION RATIO	ALKALINITY AS CACO3	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TURBIDITY	TEMPERATURE (DEG C)	DISSOLVED OXYGEN	BIOCHEMICAL OXYGEN DEMAND
JAN. 11...	--	--	--	--	140	7.3	12	6	10.9	--
FEB. 26...	--	--	--	--	170	7.1	150	14	9.7	--
MAR. 28...	0	26	.7	93	240	7.9	30	14	9.8	--
APR. 19...	--	--	--	--	170	7.8	25	13	9.8	--
MAY 21...	--	--	--	--	220	7.8	20	18	8.6	1.1
JUNE 18...	0	37	1.0	74	270	7.8	20	21	8.7	4.6
JULY 18...	--	--	--	--	190	7.6	20	25	8.6	.3
AUG. 15...	--	--	--	--	185	7.8	25	21	8.5	.9
SEPT. 27...	0	32	.8	86	220	8.0	7.0	19	8.1	1.3

CHEMICAL ANALYSES IN PARTS PER MILLION, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)
11-4489. HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, CALIF. (LAT 38°55'45", LONG 122°55'10")										
FEB., 1968										
19...	179	13	9.5	3.9	.9	87	0	7.0	1.4	90
20...	121	13	8.7	4.3	.9	83	0	5.0	2.0	90

DATE	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)
FEB., 1968									
19...	72	1	.12	10	.2	71	160	7.7	10
20...	68	0	.12	12	.2	68	147	7.6	10

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
11-4491. SCOTTS CREEK NEAR LAKEPORT, CALIF. (LAT 39°03'45", LONG 122°56'50")												
JAN., 1968												
30...	671	11	.00	11	4.1	4.0	.7	54	0	3.0	2.2	.1
FEB.												
28...	89	14	.00	20	7.4	6.3	.7	98	0	8.0	2.6	.1
MAR.												
08...	77	12	.00	20	7.5	6.2	.7	98	0	8.0	2.8	.2
15...	252	14	.00	16	6.1	5.4	.6	80	0	6.0	2.2	.1
APR.												
04...	34	13	.00	23	8.4	7.1	.7	114	0	9.0	2.8	.1
29...	10	13	.00	24	9.1	7.6	.8	120	0	11	3.4	.2
MAY												
15...	6.0	13	.00	24	9.0	7.4	.8	117	0	11	3.6	.2

DATE	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)
JAN., 1968												
30...	1.6	.00	65	45	1	.09	16	.3	44	100	7.2	6
FEB.												
28...	1.0	.00	108	81	1	.15	14	.3	80	177	7.8	11
MAR.												
08...	1.0	.00	106	81	1	.14	14	.3	80	180	7.6	9
15...	.8	.00	90	65	0	.12	15	.3	66	146	7.4	11
APR.												
04...	1.7	.00	122	92	0	.17	14	.3	94	204	8.2	13
29...	2.9	.02	131	98	0	.18	14	.3	98	217	8.0	16
MAY												
15...	1.8	.00	129	97	1	.18	14	.3	96	215	7.7	18

MISCELLANEOUS ANALYSES OF STREAMS IN SACRAMENTO RIVER BASIN--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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
11-3758.2. SOUTH FORK COTTONWOOD CREEK NEAR COTTONWOOD, CALIF. (LAT 40°18'59", LONG 122°26'52")																	
NOV 16, 1967	1400	16	25	2	.14	--	--	--	--	--	--	--	--	--	--	--	
DEC 4.....	--	--	176	130	62	--	--	--	--	--	--	--	--	--	--	--	
DEC 4.....	1100	8	143	114	44	--	--	--	--	--	--	--	--	--	--	--	
JAN 14, 1968	1030	--	2450	7730	51100	17	24	31	42	54	64	79	91	97	100	--	VPCW
JAN 14.....	1535	--	2950	6230	49600	15	22	29	41	51	60	78	92	98	99	100	VPCW
JAN 14.....	2215	--	4410	7890	93900	15	22	28	37	48	59	80	94	98	100	--	VPCW
JAN 15.....	0450	--	4170	6520	73400	--	--	--	--	--	--	--	--	--	--	--	
JAN 15.....	1035	7	3510	3990	37800	--	--	--	--	--	--	--	--	--	--	--	
JAN 15.....	1205	--	3450	4000	37300	18	26	34	46	58	68	84	95	99	100	--	VPCW
JAN 15.....	1650	--	2940	3380	26800	--	--	--	--	--	--	--	--	--	--	--	
JAN 16.....	1315	--	1200	1200	3890	--	--	--	--	--	--	--	--	--	--	--	
JAN 30.....	0930	4	476	254	326	27	32	40	46	48	57	75	96	100	--	--	VCBW
JAN 30.....	0940	--	469	254	322	--	--	--	--	--	--	--	--	--	--	--	
FEB 1.....	1415	5	225	16	9.7	--	--	--	--	--	--	--	--	--	--	--	
FEB 15.....	0930	--	305	28	23	--	--	--	--	--	--	--	--	--	--	--	
FEB 15.....	0945	--	305	32	26	--	--	--	--	--	--	--	--	--	--	--	
FEB 18.....	1750	10	595	320	514	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	0930	--	546	260	383	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1230	9	610	348	573	13	23	34	40	43	63	65	77	97	100	--	SCBW
FEB 19.....	1510	--	782	818	1730	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	2045	--	2140	3790	21900	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	0940	--	3110	4500	37800	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	1525	--	2770	2750	20600	19	28	36	48	60	67	80	95	99	100	--	VPCW
FEB 21.....	0915	--	2570	3410	23700	--	--	--	--	--	--	--	--	--	--	--	
FEB 21.....	1520	--	2650	2770	19800	--	--	--	--	--	--	--	--	--	--	--	
FEB 22.....	0835	--	2050	1510	8360	18	26	36	42	44	69	78	93	99	100	--	VCBW
FEB 22.....	1355	--	1950	1490	7840	16	25	33	38	40	64	73	90	99	100	--	VCBW
FEB 22.....	1950	--	1960	1460	7730	--	--	--	--	--	--	--	--	--	--	--	
FEB 23.....	1315	--	2130	1960	11300	--	--	--	--	--	--	--	--	--	--	--	
FEB 23.....	1755	--	2160	2000	11700	--	--	--	--	--	--	--	--	--	--	--	
FEB 24.....	1610	11	1610	1140	4960	--	--	--	--	--	--	--	--	--	--	--	
FEB 25.....	1010	11	1160	782	2450	--	--	--	--	--	--	--	--	--	--	--	
MAY 3.....	1240	20	117	4	1.3	--	--	--	--	--	--	--	--	--	--	--	
JUN 11.....	1300	25	36	4	.39	--	--	--	--	--	--	--	--	--	--	--	
11-3788.6. RED BANK CREEK AT RAWSON ROAD BRIDGE, NEAR RED BLUFF, CALIF. (LAT 40°08'20", LONG 122°14'20")																	
JAN 15, 1968	0852	--	589	551	876	41	57	69	78	86	91	96	100	--	--	--	VPWC
JAN 15.....	0905	--	578	850	1330	--	--	--	--	--	--	--	--	--	--	--	
JAN 15.....	1630	9	329	495	440	18	28	36	40	43	57	62	68	74	80	100	SCBW
JAN 30.....	0820	6	490	713	943	28	38	47	50	51	78	86	94	99	100	--	VCBW
JAN 30.....	0825	6	490	745	986	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1515	12	188	114	58	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	1300	12	228	370	228	44	58	70	83	86	93	96	99	100	--	--	VPWC
11-3795. ELDER CREEK NEAR PASKENTA, CALIF. (LAT 40°01'30", LONG 122°30'35")																	
JAN 16, 1968	1600	8	251	90	61	--	--	--	--	--	--	--	--	--	--	--	
JAN 30.....	1140	4	212	41	23	--	--	--	--	--	--	--	--	--	--	--	
JAN 30.....	1145	4	212	52	30	--	--	--	--	--	--	--	--	--	--	--	
FEB 17.....	1635	11	502	133	180	32	48	59	66	69	85	87	89	95	100	--	SCBW
FEB 20.....	1700	10	740	359	717	27	39	51	65	76	82	85	90	98	100	--	VPWC
MAR 12.....	1550	10	106	10	2.9	--	--	--	--	--	--	--	--	--	--	--	
MAR 29.....	0910	11	78	3	.63	--	--	--	--	--	--	--	--	--	--	--	
MAY 7.....	1015	13	34	3	.28	--	--	--	--	--	--	--	--	--	--	--	
JUN 25.....	1030	21	6.4	1	.02	--	--	--	--	--	--	--	--	--	--	--	
AUG 7.....	0910	19	1.3	2	.01	--	--	--	--	--	--	--	--	--	--	--	
SEP 6.....	1030	24	1.9	3	.02	--	--	--	--	--	--	--	--	--	--	--	

MISCELLANEOUS ANALYSES OF STREAMS IN SACRAMENTO RIVER BASIN--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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
11-3865. GRINDSTONE CREEK NEAR ELK CREEK, CALIF. (LAT 39°40'46", LONG 122°31'43")																	
SEP 27, 1967	1210	27	7.0	4	.08	--	--	--	--	--	--	--	--	--	--	--	
NOV 1.....	1340	22	1.5	10	.04	--	--	--	--	--	--	--	--	--	--	--	
DEC 4.....	1310	8	61	55	9.1	30	45	67	77	83	95	95	97	99	100	--	SCBW
JAN 3, 1968	1400	7	28	8	.60	--	--	--	--	--	--	--	--	--	--	--	
JAN 31.....	1300	7	120	42	14	--	--	--	--	--	--	--	--	--	--	--	
JAN 31.....	1315	7	120	33	11	23	38	55	64	69	85	89	93	96	100	--	SCBW
FEB 19.....	1055	9	610	6760	11100	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1120	--	680	6640	12200	13	17	25	34	47	55	69	85	95	99	100	SCPW
FEB 19.....	1315	--	1760	12200	58000	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1330	--	1860	11700	58800	13	21	30	40	52	58	70	82	94	100	--	SCPW
FEB 19.....	1620	9	3130	15500	131000	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1640	--	3440	14600	136000	17	18	30	40	52	57	69	83	98	100	--	SCPW
FEB 20.....	0855	8	2240	10000	60500	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	0915	--	2240	9400	56900	20	26	37	49	61	66	79	91	98	99	100	SCPW
APR 1.....	1450	10	210	172	98	--	--	--	--	--	--	--	--	--	--	--	
APR 1.....	1455	10	210	166	94	3	25	28	34	38	52	57	62	68	100	--	VCBW
MAY 1.....	1335	21	72	15	2.9	--	--	--	--	--	--	--	--	--	--	--	
JUN 3.....	1600	27	24	1	.06	--	--	--	--	--	--	--	--	--	--	--	
JUL 1.....	1320	26	14	11	.42	--	--	--	--	--	--	--	--	--	--	--	
JUL 31.....	1352	26	1.0	13	.04	--	--	--	--	--	--	--	--	--	--	--	
11-3906.72. STONE CORRAL CREEK NEAR SITES, CALIF. (LAT 39°17'18", LONG 122°18'00")																	
FEB 1, 1968	1610	7	4.7	64	.81	--	--	--	--	--	--	--	--	--	--	--	
FEB 1.....	1625	7	4.7	55	.70	84	87	90	91	91	93	95	98	99	100	--	SCBW
FEB 21.....	1325	10	50	75	10	63	71	80	85	87	91	92	94	99	100	--	SCBW
APR 1.....	1020	15	.80	30	.06	--	--	--	--	--	--	--	--	--	--	--	
MAY 1.....	0925	17	1.7	14	.06	--	--	--	--	--	--	--	--	--	--	--	
JUN 3.....	0805	23	.30	10	.01	--	--	--	--	--	--	--	--	--	--	--	

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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
11-3865. GRINDSTONE CREEK NEAR ELK CREEK, CALIF. (LAT 39°40'46", LONG 122°31'43")																
FEB 19, 1968	1142	9	1	760	--	2	12	37	40	44	52	64	82	100	--	S
FEB 19.....	1145	9	2	800	--	--	3	8	10	15	25	40	64	85	100	S
FEB 19.....	1147	9	3	825	--	--	2	10	32	74	92	96	100	--	--	S
FEB 19.....	1149	9	4	850	--	--	1	3	9	17	27	38	48	57	100	S
FEB 19.....	1151	9	5	880	--	--	1	4	7	12	20	34	66	91	100	S
FEB 19.....	1355	9	1	1980	--	--	1	4	8	14	24	38	50	73	100	S
FEB 19.....	1358	9	2	2000	--	--	1	5	9	15	30	55	82	91	100	S
FEB 19.....	1402	9	3	2000	--	--	1	4	12	23	38	63	86	100	--	S
FEB 19.....	1404	9	4	2010	--	--	2	6	19	44	67	82	91	100	--	S
FEB 19.....	1405	9	5	2020	--	--	1	5	21	40	54	67	74	87	100	S
FEB 19.....	1658	8	1	3780	--	--	1	2	3	9	23	48	75	90	100	S
FEB 19.....	1700	8	2	3800	--	--	1	2	5	12	23	34	49	73	100	S
FEB 19.....	1703	8	3	3840	--	--	1	2	5	15	30	48	70	79	100	S
FEB 19.....	1705	8	4	3860	--	--	1	2	7	18	42	71	91	100	--	S
FEB 19.....	1706	8	5	3870	--	--	2	11	31	51	66	77	89	100	--	S
FEB 20.....	0935	8	1	2240	--	--	--	1	2	13	32	56	73	89	100	S
FEB 20.....	0937	8	2	2240	--	--	1	4	16	30	44	59	72	86	100	S
FEB 20.....	0940	8	3	2230	--	1	4	16	31	39	42	44	53	75	100	S
FEB 20.....	0943	8	4	2230	--	1	5	37	81	94	98	100	--	--	--	S
FEB 20.....	0946	8	5	2220	--	3	25	52	70	85	92	96	100	--	--	S

11-4560. NAPA RIVER NEAR ST. HELENA, CALIF.

LOCATION.--Lat 38°29'40", long 122°25'50", in SE¼ sec.32, T.8 N., R.5 W., 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1966.
Water temperatures: October 1957 to September 1968.
Sediment records: December 1956 to June 1962.
EXTREMES, 1967-68.--Water temperatures: Maximum, 33°C July 18; minimum, 3°C Dec. 14, 15.
EXTREMES, 1961-63, 1964-68.--Water temperatures: Maximum (1961-63, 1964-65, 1966-68), 33°C July 18, 1968; minimum (1961-63, 1965-68), 3°C Dec. 14, 15, 1967.
REMARKS.--No flow Sept. 28-30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	17	16	17	17	17	16	16	16	16	17	17	17	17	16	15	15	16	15	16	16	16	17	16	16	16	15	14	15	14	13	13	16
MINIMUM	16	15	15	16	16	14	14	14	14	16	16	16	15	15	15	14	14	14	14	14	15	16	15	15	14	14	13	14	13	13	13	14
NOVEMBER																																
MAXIMUM	13	14	14	14	15	15	15	16	15	14	14	14	14	14	15	14	14	14	14	14	12	11	11	11	10	9	9	8	9	10	--	13
MINIMUM	13	13	13	13	14	14	13	14	14	13	13	14	14	14	14	13	13	14	13	13	11	10	9	9	9	8	8	8	8	9	--	12
DECEMBER																																
MAXIMUM	10	10	10	10	10	9	9	8	7	7	8	7	7	4	4	4	4	5	5	4	4	4	5	6	7	7	8	8	8	8	8	7
MINIMUM	8	9	9	10	9	8	8	7	7	7	7	6	5	3	3	4	4	4	4	4	4	4	4	5	6	7	7	8	8	8	6	6
JANUARY																																
MAXIMUM	7	7	6	5	5	5	6	6	6	8	8	7	8	9	10	9	9	8	8	9	9	10	10	9	10	10	9	8	8	8	9	8
MINIMUM	7	6	4	4	4	5	5	6	6	6	6	6	7	8	9	9	8	7	8	8	8	8	9	8	9	9	8	8	8	8	8	7
FEBRUARY																																
MAXIMUM	11	10	11	11	11	12	12	12	12	12	12	12	12	11	12	12	13	14	13	13	13	13	14	14	14	15	14	15	15	--	--	12
MINIMUM	7	9	10	11	11	11	11	12	12	10	10	10	10	10	11	12	12	12	12	12	12	12	13	13	13	12	12	13	13	--	--	11
MARCH																																
MAXIMUM	13	14	14	14	14	13	12	14	13	14	13	12	12	12	12	11	12	12	13	13	13	13	15	15	14	15	16	17	18	18	17	13
MINIMUM	13	11	12	12	12	11	12	11	10	10	11	10	10	11	10	10	10	9	9	10	10	12	12	12	12	10	11	12	13	13	13	11
APRIL																																
MAXIMUM	14	16	16	15	16	16	16	18	19	19	19	17	18	19	18	17	16	17	18	18	17	18	18	19	20	21	21	21	21	22	--	18
MINIMUM	13	12	12	12	12	12	12	13	14	15	14	16	14	14	14	12	12	12	13	13	12	12	13	14	14	16	16	16	16	19	--	13
MAY																																
MAXIMUM	22	22	19	17	19	19	19	19	19	19	18	19	18	18	21	21	21	22	21	22	21	21	21	19	23	24	25	25	25	25	24	21
MINIMUM	17	16	17	16	16	14	14	15	16	15	15	16	16	14	15	16	17	17	18	18	18	17	17	17	18	19	20	21	20	20	19	17
JUNE																																
MAXIMUM	26	25	23	23	22	24	24	24	24	24	24	22	23	25	26	26	26	26	24	26	28	27	27	27	26	25	25	24	22	24	--	24
MINIMUM	20	21	22	19	19	18	18	19	19	18	19	18	17	18	19	21	21	21	20	20	19	21	21	21	21	20	19	18	18	20	--	19
JULY																																
MAXIMUM	24	24	24	24	26	24	25	24	27	30	28	28	29	29	30	30	31	33	32	28	26	27	26	27	27	28	28	23	28	27	25	27
MINIMUM	20	18	19	19	20	20	19	19	19	18	17	17	17	17	16	16	16	17	18	17	18	17	17	17	17	17	17	17	18	18	18	17
AUGUST																																
MAXIMUM	24	27	26	24	23	25	23	23	23	23	23	21	22	22	21	20	20	19	19	17	18	19	18	19	19	19	18	19	19	20	20	21
MINIMUM	18	17	17	17	16	17	17	17	17	17	15	16	16	17	18	18	17	18	18	17	17	16	17	17	17	17	17	17	17	17	18	17
SEPTEMBER																																
MAXIMUM	20	19	19	19	19	19	19	18	18	18	18	18	18	19	18	18	18	19	19	17	15	14	15	15	15	15	16	--	--	--	--	17
MINIMUM	18	18	18	18	18	18	18	17	17	17	17	17	18	18	17	17	18	18	17	14	14	12	12	12	13	13	13	--	--	--	--	16

11-4601.7. 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.
RECORDS AVAILABLE.--Water temperatures: May 1967 to September 1968.
Sediment records: June 1967 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, 4°C Dec. 14.
Sediment concentrations: Maximum daily, 320 mg/l Feb. 21; minimum daily, no flow Sept. 22.
Sediment loads: Maximum daily, 75 tons Feb. 21; minimum daily, 0 ton Sept. 22.
EXTREMES, May 1967 to September 1968.--Water temperatures: Minimum, 4°C Dec. 14, 1967.
Sediment concentrations (June 1967 to September 1968): Maximum daily, 320 mg/l Feb. 21, 1968; minimum daily, no flow Sept. 22, 1968.
Sediment loads (June 1967 to September 1968): Maximum daily, 75 tons Feb. 21, 1968; minimum daily, 0 ton on many days each year.
REMARKS.--No flow Sept. 22.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	15	--	15	--	--	--	16	--	--	16	--	--	--	--	16	--	15	--	--	--	15	--	--	14	--	--	--	14	--	--
NOVEMBER.	--	13	--	--	--	15	--	--	13	--	--	--	13	13	13	14	14	13	12	13	13	12	11	11	11	11	10	10	10	9	--	--
DECEMBER.	8	9	11	11	11	7	9	8	8	9	9	8	5	4	5	6	6	7	6	7	6	7	6	6	7	8	6	6	9	7	7	7
JANUARY..	7	7	7	7	6	6	6	6	8	8	6	7	9	9	9	10	8	9	8	7	8	9	9	9	9	8	6	7	9	9	9	8
FEBRUARY.	8	10	11	11	10	9	11	11	9	9	9	11	11	11	12	11	12	11	12	12	12	12	12	12	14	15	13	13	13	--	--	11
MARCH....	13	13	13	13	13	12	13	13	12	12	12	12	12	12	12	12	11	11	12	12	12	12	13	12	12	12	13	13	14	13	13	12
APRIL....	13	13	--	--	12	--	--	13	14	--	--	12	--	--	--	11	--	--	12	--	--	--	13	--	--	14	--	--	--	14	--	--
MAY.....	--	--	12	--	15	--	13	--	--	13	--	--	--	13	--	--	13	--	--	--	14	--	--	13	--	--	--	16	--	--	17	--
JUNE.....	--	--	--	13	--	--	15	--	--	--	15	--	--	16	--	--	--	15	--	--	15	--	--	--	15	--	--	16	--	--	--	--
JULY.....	--	14	--	--	14	--	--	--	15	--	--	17	--	--	--	16	--	--	17	--	--	--	14	--	14	14	--	--	--	15	--	--
AUGUST...	--	15	--	--	--	14	--	--	14	--	--	--	15	--	--	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	16	--	--	16	--	--	--	--	16	--	16	--	--	--	17	--	--	14	--	--	--	15	--	--	13	--	--	14	--	--

11-4601.7. PINE CREEK AT BOLINAS, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.1	1	0	.76	1	0	3.8	3	.03
2	1.1	2	.01	.84	2	0	2.5	2	.01
3	1.0	3	.01	.76	2	0	5.0	13	.18
4	1.0	2	.01	.76	2	0	10	25	.68
5	1.0	2	.01	1.1	3	.01	6.0	15	.24
6	1.0	2	.01	.80	3	.01	2.7	6	.04
7	1.0	2	.01	.60	2	0	7.0	22	.42
8	1.0	2	.01	.50	2	0	2.7	3	.02
9	.92	2	0	.42	2	0	2.2	3	.02
10	.92	2	0	.39	2	0	1.9	3	.02
11	.84	2	0	.60	2	0	1.6	6	.03
12	.76	5	.01	.84	2	0	1.5	6	.02
13	.76	5	.01	1.3	3	.01	1.5	4	.02
14	.68	4	.01	3.9	11	.12	1.8	10	.05
15	.60	2	0	1.2	2	.01	1.4	11	.04
16	.60	2	0	.90	1	0	1.5	9	.04
17	.68	2	0	.80	1	0	1.7	6	.03
18	.68	2	0	1.0	2	.01	4.4	16	.19
19	.68	1	0	1.5	1	0	2.8	6	.05
20	.42	1	0	1.1	1	0	2.2	6	.04
21	.84	2	0	.85	1	0	1.8	15	.07
22	1.1	3	.01	1.0	1	0	1.6	7	.03
23	1.2	3	.01	1.3	1	0	1.4	4	.02
24	1.1	2	.01	1.6	1	0	1.2	2	.01
25	1.0	1	0	1.8	1	0	1.1	3	.01
26	1.1	1	0	2.1	2	.01	1.1	1	0
27	1.1	1	0	2.4	2	.01	1.0	1	0
28	.92	1	0	3.0	8	.06	1.1	2	.01
29	1.0	1	0	4.2	12	.14	1.3	1	0
30	.84	1	0	6.2	16	.27	1.4	2	.01
31	.76	1	0	--	--	--	1.2	1	0
TOTAL	27.70	--	.13	44.52	--	.66	78.4	--	2.33

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.1	1	0	16	15	.65	14	13	.49
2	.98	1	0	22	36	2.6	13	11	.39
3	1.0	1	0	26	37	2.6	12	10	.32
4	1.1	4	.01	18	16	.78	11	8	.24
5	1.1	3	.01	14	10	.38	11	8	.24
6	.95	3	.01	11	10	.30	9.8	7	.19
7	.90	2	0	8.2	10	.22	12	8	.26
8	1.0	3	.01	7.0	10	.19	11	9	.27
9	3.5	1	.01	6.2	9	.15	9.5	9	.23
10	25	56	3.8	5.4	8	.12	8.8	7	.17
11	5.2	14	.20	4.7	8	.10	8.3	5	.11
12	3.8	7	.07	4.4	7	.08	40	133	26
13	3.4	3	.03	3.7	6	.06	42	152	17
14	6.9	3	.06	3.4	6	.06	24	98	6.4
15	21	48	2.7	3.1	6	.05	18	65	3.2
16	11	29	.86	6.9	26	.63	32	96	8.9
17	8.2	10	.22	64	308	55	23	48	3.0
18	7.8	4	.08	43	90	11	20	25	1.4
19	7.8	6	.13	56	145	22	16	20	.86
20	7.4	3	.06	45	230	28	14	15	.57
21	6.6	3	.05	87	320	75	13	14	.49
22	6.2	3	.05	56	205	31	12	14	.45
23	5.8	3	.05	45	125	15	12	13	.42
24	5.8	3	.05	37	81	8.1	11	12	.36
25	5.8	3	.05	32	48	4.1	11	10	.30
26	5.4	3	.04	24	32	2.1	9.8	7	.19
27	5.8	3	.05	20	23	1.2	9.0	6	.15
28	5.8	4	.06	17	15	.69	8.5	7	.16
29	24	147	15	15	15	.61	8.0	5	.11
30	48	113	17	--	--	--	7.6	3	.06
31	25	31	2.1	--	--	--	7.2	5	.10
TOTAL	263.33	--	42.76	701.0	--	262.77	458.5	--	73.03

11-4601.7. PINE CREEK AT BOLINAS, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	7.6	7	.14	2.7	2	.01	1.4	2	.01
2	6.8	6	.11	2.7	2	.01	1.4	2	.01
3	6.4	6	.10	2.8	2	.02	1.4	2	.01
4	6.4	5	.09	2.8	2	.02	1.4	1	0
5	6.2	5	.08	2.5	2	.01	1.4	1	0
6	6.0	5	.08	2.4	2	.01	1.4	2	.01
7	5.8	5	.08	2.3	3	.02	1.3	2	.01
8	5.8	3	.05	2.3	3	.02	1.3	2	.01
9	5.4	2	.03	2.3	2	.01	1.3	2	.01
10	5.4	2	.03	2.3	2	.01	1.3	1	0
11	5.2	2	.03	2.2	2	.01	1.3	1	0
12	5.0	2	.03	2.2	2	.01	1.2	1	0
13	4.8	2	.03	2.3	2	.01	1.2	1	0
14	4.8	2	.03	2.2	2	.01	1.1	1	0
15	4.8	2	.03	2.1	2	.01	1.1	1	0
16	4.6	2	.02	2.0	3	.02	1.1	1	0
17	4.0	2	.02	2.0	3	.02	1.1	1	0
18	4.0	2	.02	1.9	2	.01	1.1	1	0
19	4.0	2	.02	2.0	2	.01	1.2	1	0
20	3.9	2	.02	2.0	2	.01	.83	2	0
21	3.9	2	.02	2.0	2	.01	.65	4	.01
22	3.6	2	.02	1.9	2	.01	.98	4	.01
23	3.4	2	.02	1.8	2	.01	.75	4	.01
24	3.4	2	.02	1.8	2	.01	.83	4	.01
25	3.3	2	.02	2.5	2	.01	.98	4	.01
26	3.1	2	.02	1.6	2	.01	.90	3	.01
27	3.1	2	.02	1.5	1	0	.98	2	.01
28	3.0	2	.02	1.5	1	0	.98	2	.01
29	2.8	2	.02	1.4	1	0	.98	2	.01
30	2.8	2	.02	1.4	2	.01	.90	2	0
31	--	--	--	1.4	2	.01	--	--	--
TOTAL	139.3	--	1.24	64.8	--	.34	33.76	--	.16

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.40	2	0	.40	2	0	.16	1	0
2	.43	2	0	.21	3	0	.23	1	0
3	.50	2	0	.35	3	0	.18	1	0
4	.44	2	0	.21	3	0	.21	1	0
5	.50	2	0	.21	3	0	.21	2	0
6	.25	2	0	.35	3	0	.18	3	0
7	.60	2	0	.21	2	0	.07	1	0
8	.92	2	0	.35	4	0	.14	2	0
9	.54	2	0	.35	7	.01	.16	2	0
10	.25	2	0	.18	2	0	.10	3	0
11	.21	2	0	.25	2	0	.18	5	0
12	.19	2	0	.40	2	0	.10	3	0
13	.18	2	0	.40	2	0	.14	2	0
14	.16	3	0	.40	2	0	.21	2	0
15	.15	4	0	.23	2	0	.12	1	0
16	.15	6	0	.21	2	0	.10	1	0
17	.14	5	0	.30	2	0	.03	1	0
18	.14	4	0	.30	2	0	.07	2	0
19	.13	3	0	.83	2	0	.05	3	0
20	.13	2	0	.65	2	0	.05	3	0
21	.13	2	0	.50	2	0	.05	3	0
22	.12	2	0	.35	2	0	0	--	0
23	.15	2	0	.18	2	0	.05	4	0
24	.21	2	0	.21	2	0	.10	5	0
25	.25	2	0	.30	2	0	.07	5	0
26	.25	2	0	.14	1	0	.03	5	0
27	.30	2	0	.21	1	0	.05	5	0
28	.40	2	0	.10	1	0	.16	4	0
29	.40	2	0	.12	1	0	.23	4	0
30	.23	2	0	.12	1	0	.16	4	0
31	.30	2	0	.07	1	0	--	--	--
TOTAL	9.15	--	0	9.09	--	.01	3.59	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1833.14
TOTAL LOAD FOR YEAR (TONS) 383.43

11-4601.7. PINE CREEK AT BOLINAS, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 29, 1968	1300	9	40	290	31	26	37	48	54	56	73	77	86	100	--	--	SBWC
JAN 30.....	1200	9	44	77	9.1	44	48	60	70	76	81	91	99	100	--	--	VPWC
FEB 20.....	1700	12	45	188	23	6	24	40	50	57	81	87	93	100	--	--	SBWC

MISCELLANEOUS ANALYSES OF STREAMS IN BOLINAS LAGOON BASIN

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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
11-4601.6. MORSES CREEK AT BOLINAS, CALIF. (LAT 37°55'09", LONG 122°40'09")																	
JAN 15, 1968	1200	9	1.6	2	.01	--	--	--	--	--	--	--	--	--	--	--	
JAN 16.....	1200	11	1.3	1	0	--	--	--	--	--	--	--	--	--	--	--	
JAN 29.....	1215	9	1.2	13	.04	--	--	--	--	--	--	--	--	--	--	--	
JAN 30.....	1100	9	2.5	14	.09	--	--	--	--	--	--	--	--	--	--	--	
JAN 30.....	1340	7	2.5	15	.10	--	--	--	--	--	--	--	--	--	--	--	
JAN 31.....	1215	9	1.9	10	.05	--	--	--	--	--	--	--	--	--	--	--	
FEB 1.....	1045	8	1.5	41	.17	--	--	--	--	--	--	--	--	--	--	--	
FEB 2.....	0515	10	1.4	7	.03	--	--	--	--	--	--	--	--	--	--	--	
FEB 3.....	1300	11	1.8	9	.04	--	--	--	--	--	--	--	--	--	--	--	
FEB 4.....	1300	11	1.7	5	.02	--	--	--	--	--	--	--	--	--	--	--	
FEB 5.....	1445	10	1.4	3	.01	--	--	--	--	--	--	--	--	--	--	--	
FEB 17.....	1230	12	2.6	24	.17	--	--	--	--	--	--	--	--	--	--	--	
FEB 18.....	1215	11	2.6	11	.08	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1135	12	2.1	6	.03	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	1645	12	3.1	35	.29	--	--	--	--	--	--	--	--	--	--	--	
FEB 21.....	1430	12	4.1	56	.62	--	--	--	--	--	--	--	--	--	--	--	
FEB 22.....	1515	12	3.1	17	.14	--	--	--	--	--	--	--	--	--	--	--	
FEB 23.....	1230	12	1.7	8	.04	--	--	--	--	--	--	--	--	--	--	--	
FEB 24.....	1000	12	1.4	5	.02	--	--	--	--	--	--	--	--	--	--	--	
FEB 25.....	1500	14	1.0	5	.01	--	--	--	--	--	--	--	--	--	--	--	
FEB 26.....	1500	15	.78	3	.01	--	--	--	--	--	--	--	--	--	--	--	
FEB 27.....	1345	7	.65	10	.02	--	--	--	--	--	--	--	--	--	--	--	
FEB 28.....	1145	7	.53	3	0	--	--	--	--	--	--	--	--	--	--	--	
MAR 5.....	1510	13	.15	1	0	--	--	--	--	--	--	--	--	--	--	--	
MAR 12.....	1730	12	1.1	30	.09	--	--	--	--	--	--	--	--	--	--	--	
MAR 13.....	1515	12	1.2	14	.05	--	--	--	--	--	--	--	--	--	--	--	
APR 8.....	1210	16	.02	2	0	--	--	--	--	--	--	--	--	--	--	--	
MAY 7.....	1150	15	.02	1	0	--	--	--	--	--	--	--	--	--	--	--	
11-4601.65. AUDUBON CREEK NEAR BOLINAS, CALIF. (LAT 37°55'47", LONG 122°40'51")																	
NOV 6, 1967	1330	17	.07	1	0	--	--	--	--	--	--	--	--	--	--	--	
NOV 14.....	0930	13	.25	2	0	--	--	--	--	--	--	--	--	--	--	--	
NOV 18.....	0945	13	.09	2	0	--	--	--	--	--	--	--	--	--	--	--	
NOV 29.....	1500	12	.09	6	0	--	--	--	--	--	--	--	--	--	--	--	
DEC 3.....	1500	14	.09	1	0	--	--	--	--	--	--	--	--	--	--	--	
DEC 5.....	1230	12	.35	2	0	--	--	--	--	--	--	--	--	--	--	--	
DEC 7.....	1115	12	.17	1	0	--	--	--	--	--	--	--	--	--	--	--	
DEC 13.....	1230	3	.06	2	0	--	--	--	--	--	--	--	--	--	--	--	
DEC 18.....	0930	8	.17	12	.01	--	--	--	--	--	--	--	--	--	--	--	
JAN 10, 1968	1100	9	.75	19	.04	--	--	--	--	--	--	--	--	--	--	--	
JAN 12.....	1230	9	.09	3	0	--	--	--	--	--	--	--	--	--	--	--	
JAN 15.....	1215	10	1.4	15	.06	--	--	--	--	--	--	--	--	--	--	--	
JAN 16.....	1200	11	.05	5	0	--	--	--	--	--	--	--	--	--	--	--	
JAN 17.....	1230	11	.21	3	0	--	--	--	--	--	--	--	--	--	--	--	
JAN 29.....	1230	9	2.4	226	1.5	46	60	77	87	91	98	99	100	--	--	--	SBWC
JAN 30.....	1130	9	2.4	11	.07	--	--	--	--	--	--	--	--	--	--	--	
JAN 30.....	1440	9	1.8	15	.07	--	--	--	--	--	--	--	--	--	--	--	
JAN 31.....	1230	9	1.2	4	.01	--	--	--	--	--	--	--	--	--	--	--	
FEB 1.....	1100	8	.65	2	0	--	--	--	--	--	--	--	--	--	--	--	
FEB 2.....	0530	10	.55	6	.01	--	--	--	--	--	--	--	--	--	--	--	
FEB 3.....	1315	11	1.4	3	.01	--	--	--	--	--	--	--	--	--	--	--	
FEB 4.....	1313	11	.95	2	.01	--	--	--	--	--	--	--	--	--	--	--	
FEB 5.....	1500	10	.55	2	0	--	--	--	--	--	--	--	--	--	--	--	
FEB 20.....	0500	12	6.6	14	.25	--	--	--	--	--	--	--	--	--	--	--	
FEB 21.....	1445	12	11	33	.98	--	--	--	--	--	--	--	--	--	--	--	
FEB 22.....	1530	12	5.7	7	.11	--	--	--	--	--	--	--	--	--	--	--	
FEB 23.....	1245	12	4.5	6	.07	--	--	--	--	--	--	--	--	--	--	--	
FEB 24.....	1015	12	3.6	3	.03	--	--	--	--	--	--	--	--	--	--	--	
FEB 25.....	1515	14	2.2	5	.03	--	--	--	--	--	--	--	--	--	--	--	
FEB 26.....	1515	15	1.6	2	.01	--	--	--	--	--	--	--	--	--	--	--	
MAR 5.....	1432	14	.18	7	0	--	--	--	--	--	--	--	--	--	--	--	
MAR 12.....	0545	12	3.0	59	.48	--	--	--	--	--	--	--	--	--	--	--	
MAR 13.....	0530	12	2.7	4	.03	--	--	--	--	--	--	--	--	--	--	--	
APR 8.....	1120	11	.13	1	0	--	--	--	--	--	--	--	--	--	--	--	
MAY 7.....	1105	14	.08	2	0	--	--	--	--	--	--	--	--	--	--	--	
JUN 18.....	1130	11	.01	6	0	--	--	--	--	--	--	--	--	--	--	--	
JUL 25.....	1043	15	.01	18	0	--	--	--	--	--	--	--	--	--	--	--	
SEP 3.....	1255	19	.01	4	0	--	--	--	--	--	--	--	--	--	--	--	

11-4609.2. 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 unnamed tributary, and 0.4 mile northwest of Bodega.
DRAINAGE AREA.--15.7 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 19°C Aug. 29; minimum, freezing point on several days during December and January.
EXTREMES, 1964-68.--Water temperatures: Maximum, 23°C Apr. 26, 1965; minimum (1964-66, 1967-68), freezing point on many days during winter months.
REMARKS.--No flow June 14, July 19-30, Aug. 13-19, 30, Sept 1-3, 13, 15-30. Clock stopped Mar. 9-11.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	16	13	15	15	16	16	16	16	16	16	16	16	16	17	16	15	15	12	13	13	11	13	15	14	13	14	13	13	14	13	13	14
MINIMUM	12	11	10	10	12	11	10	10	10	11	11	11	10	8	7	7	7	7	8	7	8	10	11	10	9	9	9	10	8	6	6	9
NOVEMBER																																
MAXIMUM	13	12	9	9	11	14	12	12	13	12	13	12	12	15	14	15	13	14	14	14	13	13	11	10	11	9	7	8	8	7	--	11
MINIMUM	6	5	5	8	8	9	8	11	9	10	11	11	11	12	11	11	10	11	10	10	8	8	6	4	5	3	3	4	5	4	--	8
DECEMBER																																
MAXIMUM	7	7	11	11	11	8	10	8	8	7	9	7	4	2	2	3	3	6	4	3	4	6	7	7	8	10	10	10	10	9	7	7
MINIMUM	2	2	7	9	7	3	8	3	3	3	6	3	1	0	0	0	0	3	0	0	0	1	1	1	2	2	5	3	6	4	3	3
JANUARY																																
MAXIMUM	7	7	5	4	9	3	3	2	4	9	7	6	7	8	11	10	9	9	9	9	10	11	11	11	10	7	6	5	7	7	9	7
MINIMUM	4	3	0	0	0	1	1	2	2	5	2	2	5	7	8	6	3	3	4	3	5	4	4	4	6	4	3	2	5	6	4	3
FEBRUARY																																
MAXIMUM	7	9	12	13	11	14	12	10	11	12	11	11	11	11	12	10	12	14	12	13	13	13	15	17	17	18	14	16	16	--	--	12
MINIMUM	3	6	8	8	9	8	9	9	8	6	4	4	7	6	8	9	10	11	11	11	11	11	12	11	9	9	12	11	11	--	--	8
MARCH																																
MAXIMUM	12	15	16	14	15	12	10	12	--	--	--	8	12	13	12	10	11	11	13	13	13	11	13	14	14	13	15	17	18	17	14	13
MINIMUM	11	7	9	9	10	8	8	7	--	--	--	7	7	7	7	7	4	3	3	3	5	6	8	7	9	4	5	7	8	9	10	7
APRIL																																
MAXIMUM	14	13	14	12	14	14	15	17	19	18	16	16	14	16	13	12	12	12	13	12	13	13	12	16	17	19	18	13	15	16	--	14
MINIMUM	9	8	6	7	8	6	6	7	8	10	11	9	8	8	9	7	5	6	8	7	6	6	7	9	9	10	11	12	11	12	--	8
MAY																																
MAXIMUM	15	14	13	12	12	14	14	14	13	13	12	14	13	13	16	14	15	16	16	17	16	16	16	14	17	17	17	18	17	17	17	14
MINIMUM	9	10	11	10	9	7	8	11	11	8	10	9	10	8	8	9	11	11	13	13	13	13	11	10	13	12	13	13	13	12	12	11
JUNE																																
MAXIMUM	17	17	17	16	15	15	15	16	13	14	14	12	14	--	14	16	16	14	14	16	17	17	17	16	16	15	17	16	17	16	--	15
MINIMUM	12	13	15	13	12	12	11	11	10	11	11	9	8	--	10	11	12	12	12	12	12	12	14	12	13	13	13	11	10	10	--	11
JULY																																
MAXIMUM	14	14	15	16	16	15	14	14	15	15	15	16	16	16	16	15	16	17	--	--	--	--	--	--	--	--	--	--	--	--	13	--
MINIMUM	11	11	11	11	12	12	12	12	12	12	12	11	12	12	12	11	10	10	--	--	--	--	--	--	--	--	--	--	--	--	11	--
AUGUST																																
MAXIMUM	13	14	14	14	14	16	14	14	15	13	13	13	--	--	--	--	--	--	--	14	17	17	17	16	16	17	17	18	19	--	15	--
MINIMUM	11	11	11	10	9	9	9	11	12	11	11	11	--	--	--	--	--	--	--	12	13	12	11	12	13	13	14	13	12	--	13	--
SEPTEMBER																																
MAXIMUM	--	--	--	14	15	16	16	16	17	16	16	17	--	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	13	13	14	14	13	13	12	12	13	--	13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.

LOCATION.--Lat 39°12'07", long 123°11'55", in Yokayo Rancho Grant, Mendocino County, at gaging station 200 ft downstream from York Creek, 0.7 mile upstream from East Fork, and 3.6 miles north of Ukiah.
DRAINAGE AREA.--99.7 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1968 (discontinued).
Sediment records: January 1964 to September 1968 (discontinued).
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 1,170 mg/l Jan. 14; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 10,300 tons Jan. 14; minimum daily, 0 ton on many days.
EXTREMES, 1964-68.--Sediment concentrations: Maximum daily, 9,480 mg/l Dec. 22, 1964; minimum daily, no flow on many days in 1964.
Sediment loads: Maximum daily, 352,000 tons Dec. 22, 1964; minimum daily, 0 ton on many days in 1964, 1967-68.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	19	20	--	--	--	--	23	18	--	--	--	--	--	--	21	--	--	22	--	--	--	20	--	--	--	--	--	21	--
NOVEMBER.	20	--	19	--	--	17	--	--	--	16	--	--	14	17	16	16	--	--	--	11	--	12	--	12	--	--	9	--	10	8	--	--
DECEMBER.	7	8	9	10	9	6	8	6	7	9	10	8	6	7	--	--	--	5	4	6	6	6	--	10	11	--	12	--	6	--	--	--
JANUARY..	6	--	4	--	3	--	--	8	8	7	7	8	9	9	10	9	7	9	--	8	--	7	--	12	--	6	--	--	7	7	7	--
FEBRUARY.	7	9	9	8	11	--	13	--	12	--	--	11	--	12	--	15	16	14	12	12	14	14	14	12	11	16	12	13	11	--	--	12
MARCH....	12	--	--	16	15	12	--	12	--	--	14	10	12	13	11	10	11	8	8	8	13	12	11	14	15	--	16	--	11	--	--	--
APRIL....	12	--	11	--	11	--	--	11	14	13	--	12	--	--	17	--	17	--	20	--	--	17	--	21	--	16	--	--	17	--	--	--
MAY.....	--	15	--	--	--	--	--	13	--	--	--	--	--	--	17	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.32	1	0	2.8	2	.02	27	52	4.9
2	.51	1	0	2.8	1	.01	4.4	12	.14
3	.80	1	0	2.8	1	.01	266	206	192
4	1.3	3	.01	2.8	1	.01	245	167	193
5	1.3	6	.02	2.8	2	.02	451	183	245
6	2.1	6	.03	2.8	1	.01	113	24	9.0
7	1.3	7	.02	2.8	1	.01	408	185	244
8	1.3	8	.03	2.8	1	.01	126	23	8.7
9	1.3	7	.02	2.1	1	.01	64	10	1.7
10	1.3	8	.03	2.1	1	.01	47	6	.76
11	1.3	2	.01	2.1	1	.01	38	10	1.0
12	1.3	2	.01	2.1	1	.01	32	15	1.3
13	2.1	3	.02	2.1	1	.01	25	21	1.4
14	2.1	2	.01	6.8	17	.31	19	11	.56
15	2.1	1	.01	2.1	8	.05	16	6	.26
16	1.3	1	0	2.1	8	.05	16	4	.17
17	1.3	1	0	2.1	9	.05	18	2	.10
18	1.3	1	0	2.1	9	.05	323	317	365
19	2.1	2	.01	2.1	7	.04	134	40	16
20	2.1	2	.01	2.1	5	.03	65	76	13
21	2.1	2	.01	2.1	4	.02	48	66	8.6
22	1.3	2	.01	2.1	4	.02	40	108	12
23	1.3	1	0	2.1	3	.02	36	87	8.5
24	2.1	2	.01	2.1	1	.01	34	20	1.8
25	2.1	1	.01	2.1	2	.01	30	11	.89
26	.80	2	0	2.1	1	.01	26	14	.98
27	.80	2	0	2.1	2	.01	22	19	1.1
28	.80	1	0	1.3	2	.01	18	18	.87
29	1.3	2	.01	10	24	.65	16	7	.30
30	1.3	1	0	34	147	15	16	2	.09
31	2.1	1	.01	--	--	--	16	2	.09
TOTAL	44.53	--	.30	112.3	--	16.49	2739.4	--	1333.21

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	16	1	.04	433	65	80	137	19	7.0
2	17	2	.09	1110	160	501	121	19	6.2
3	17	2	.09	644	71	123	111	18	5.4
4	17	5	.23	398	35	38	101	17	4.6
5	17	9	.41	287	27	21	103	12	3.3
6	18	9	.44	224	20	12	96	10	2.6
7	18	9	.44	178	18	8.7	113	10	3.1
8	18	9	.44	151	18	7.3	108	10	2.9
9	58	35	27	131	17	6.0	92	10	2.5
10	1500	441	2270	118	16	5.1	83	10	2.2
11	310	83	77	103	15	4.2	78	9	1.9
12	187	24	12	87	14	3.3	338	214	388
13	190	52	27	83	11	2.5	366	149	162
14	2070	1170	10300	79	10	2.1	398	90	102
15	1870	1110	6000	74	10	2.0	262	34	24
16	903	436	1090	103	56	18	1120	575	1930
17	487	101	142	151	42	17	666	161	315
18	294	28	22	115	19	5.9	398	76	82
19	224	17	10	1470	1000	6460	280	49	37
20	184	13	6.5	1770	426	2330	214	28	16
21	151	11	4.5	1490	195	797	178	12	5.8
22	134	10	3.6	910	250	632	157	11	4.7
23	126	9	3.1	674	116	216	169	12	5.5
24	115	7	2.2	464	45	57	137	12	4.4
25	108	6	1.7	334	30	27	140	17	6.4
26	103	4	1.1	262	27	19	118	27	8.6
27	96	4	1.0	214	22	13	105	33	9.4
28	144	5	3.3	181	21	10	98	23	6.1
29	1570	936	5530	155	20	8.4	94	8	2.0
30	1530	577	2790	--	--	--	85	6	1.4
31	590	138	231	--	--	--	79	8	1.7
TOTAL	13082	--	28557.18	12393	--	11426.5	6545	--	3153.7

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	92	9	2.2	11	10	.30	8.0	7	.15
2	83	7	1.6	11	7	.21	9.0	7	.17
3	81	4	.87	11	6	.18	10	8	.22
4	72	4	.78	12	7	.23	7.2	7	.14
5	61	4	.66	14	8	.30	8.0	6	.13
6	57	4	.62	15	11	.45	8.8	7	.17
7	54	3	.44	16	13	.56	8.0	7	.15
8	52	3	.42	14	17	.64	7.2	6	.12
9	52	3	.42	13	16	.56	6.5	5	.09
10	50	4	.54	13	14	.49	5.8	6	.09
11	48	4	.52	12	12	.39	5.2	5	.07
12	46	4	.50	15	13	.53	4.1	5	.06
13	44	7	.83	25	14	.95	3.7	5	.05
14	41	10	1.1	20	11	.59	3.3	5	.04
15	39	13	1.4	17	8	.37	3.0	5	.04
16	38	12	1.2	15	8	.32	2.6	5	.04
17	33	12	1.1	13	7	.25	2.1	5	.03
18	30	12	.97	10	7	.19	1.9	5	.03
19	31	12	1.0	12	8	.26	1.7	5	.02
20	27	12	.87	18	12	.58	1.5	5	.02
21	25	11	.74	14	10	.38	1.3	5	.02
22	22	11	.65	12	9	.29	1.2	5	.02
23	21	12	.68	10	8	.22	1.1	5	.01
24	20	11	.59	11	8	.24	.98	5	.01
25	19	10	.51	15	9	.36	.82	5	.01
26	17	10	.46	14	9	.34	.73	5	.01
27	16	11	.48	12	9	.29	.66	5	.01
28	13	12	.42	11	9	.27	.60	5	.01
29	11	14	.42	10	8	.22	.51	5	.01
30	11	12	.36	9.4	8	.20	.45	5	.01
31	--	--	--	8.6	8	.19	--	--	--
TOTAL	1206	--	23.35	414.0	--	11.35	115.95	--	1.95

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	.41	5	.01	.02	5	0	.13	7	0
2	.37	5	0	.02	5	0	.12	8	0
3	.33	5	0	.02	5	0	.11	9	0
4	.30	5	0	.02	5	0	.10	8	0
5	.27	5	0	.02	5	0	.09	7	0
6	.25	5	0	.02	5	0	.08	5	0
7	.22	5	0	.02	5	0	.07	5	0
8	.20	5	0	.02	5	0	.06	5	0
9	.19	5	0	.02	5	0	.06	5	0
10	.18	5	0	.02	5	0	.06	5	0
11	.16	5	0	.02	5	0	.05	4	0
12	.14	5	0	.02	5	0	.05	4	0
13	.13	5	0	.02	5	0	.05	4	0
14	.11	5	0	.02	5	0	.05	4	0
15	.10	5	0	.02	5	0	.04	4	0
16	.09	5	0	.02	5	0	.04	3	0
17	.08	5	0	.02	5	0	.04	3	0
18	.08	5	0	.02	5	0	.04	3	0
19	.07	5	0	.02	5	0	.04	3	0
20	.06	5	0	.02	5	0	.04	3	0
21	.06	5	0	.03	5	0	.04	2	0
22	.05	5	0	3.6	15	.15	.04	2	0
23	.05	5	0	2.0	12	.06	.04	2	0
24	.04	5	0	1.2	9	.03	.03	2	0
25	.04	5	0	.70	8	.02	.03	2	0
26	.04	5	0	.40	8	.01	.03	2	0
27	.03	5	0	.26	7	0	.03	2	0
28	.03	5	0	.20	7	0	.03	2	0
29	.03	5	0	.18	6	0	.03	2	0
30	.03	5	0	.16	6	0	.03	1	0
31	.03	5	0	.14	6	0	--	--	--
TOTAL	4.17	--	.01	9.27	--	.27	1.65	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 36667.27
TOTAL LOAD FOR YEAR (TONS) 44524.31

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 3, 1967	0830	9	478	457	590	52	65	76	83	86	98	100	--	--	--	--	SBWC
DEC 18.....	0900	5	585	500	790	29	40	57	68	75	98	99	100	--	--	--	SBWC
DEC 18.....	1315	6	402	547	594	33	47	61	73	78	98	99	100	--	--	--	SBWC
JAN 10, 1968	1620	8	746	266	536	47	57	71	80	85	96	97	99	100	--	--	SBWC
JAN 14.....	0935	9	1090	331	974	29	42	56	64	68	97	98	99	100	--	--	SBWC
JAN 15.....	1315	11	1830	1040	5140	20	25	33	39	42	65	78	94	100	--	--	VBWC
JAN 16.....	1315	9	1020	471	1300	32	38	47	54	57	77	85	92	100	--	--	SBWC
JAN 30.....	1105	7	1590	477	2050	24	30	36	42	45	64	76	97	100	--	--	VBWC
FEB 19.....	1100	12	830	1240	2780	25	33	43	52	55	81	95	100	--	--	--	VBWC
MAR 12.....	1430	10	290	542	424	33	46	59	67	70	98	100	--	--	--	--	SBWC

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 4, 1967	3	2
OCT. 5	6	3
OCT. 10	8	2
OCT. 11	2	1
OCT. 18	1	1
OCT. 21	2	1
OCT. 25	1	1
OCT. 31	1	1
NOV. 1	2	1
NOV. 3	1	1
NOV. 6	1	1
NOV. 10	1	1
NOV. 13	1	1
NOV. 14	17	19
NOV. 15	8	11
NOV. 17	9	5
NOV. 20	5	1
NOV. 22	4	1
NOV. 24	1	1
NOV. 27	2	1
NOV. 29	47	43
NOV. 30	204	126
DEC. 1	17	19
DEC. 2	9	3
DEC. 3	457	206
DEC. 4	34	40
DEC. 5	204	144
DEC. 6	8	29
DEC. 7	176	150
DEC. 8	22	36
DEC. 9	12	13
DEC. 10	6	7
DEC. 11	11	11
DEC. 12	17	24
DEC. 13	25	34
DEC. 14	2	2
DEC. 18	500	130
DEC. 19	25	19
DEC. 20	87	53
DEC. 21	54	39
DEC. 22	119	87
DEC. 24	9	8
DEC. 25	11	7
DEC. 27	20	24
DEC. 29	2	2
JAN. 1, 1968	1	1
JAN. 3	2	1
JAN. 5	9	10
JAN. 8	9	10
JAN. 9	4	2
JAN. 10	266	290
JAN. 11	49	86
JAN. 12	31	45
JAN. 13	70	89
JAN. 14	331	275
JAN. 15	1040	480
JAN. 16	471	320
JAN. 17	90	84
JAN. 18	28	40
JAN. 20	13	17
JAN. 22	10	14
JAN. 24	7	6
JAN. 26	4	3
JAN. 29	509	350
JAN. 30	477	245
JAN. 31	135	87
FEB. 1	55	42
FEB. 2	145	135
FEB. 3	72	80
FEB. 4	36	44
FEB. 5	23	71
FEB. 9	17	14
FEB. 12	16	13
FEB. 14	9	5
FEB. 16	64	40
FEB. 17	60	44
FEB. 18	10	10
FEB. 19	1240	480
FEB. 20	251	125
FEB. 21	185	115
FEB. 22	258	87
FEB. 23	101	86
FEB. 24	35	37
FEB. 25	33	37
FEB. 26	24	29
FEB. 27	23	27
FEB. 28	23	20
MAR. 1	19	20
MAR. 6	10	5
MAR. 8	8	7
MAR. 11	8	3
MAR. 12	542	135
MAR. 13	26	37
MAR. 14	70	55
MAR. 16	667	335
MAR. 17	109	92
MAR. 18	80	42
MAR. 19	34	20
MAR. 20	32	25
MAR. 21	9	2
MAR. 22	11	10
MAR. 23	13	4
MAR. 24	11	8
MAR. 25	19	19
MAR. 27	34	22
MAR. 29	7	3
APR. 1	9	3
APR. 3	4	2
APR. 5	4	2
APR. 8	3	1
APR. 10	4	1
APR. 12	4	1
APR. 15	13	6
APR. 17	12	8
APR. 26	10	5
APR. 29	14	2
MAY 2	7	1
MAY 8	17	8
MAY 15	8	2
JUNE 12	5	1
JULY 10	5	1
AUG. 15	5	2
SEPT. 3	9	2

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.

LOCATION.--Lat 39°14'48", long 123°07'45", in NW¼ sec.18, T.16 N., R.11 W., Mendocino County, at gaging station, 0.1 mile downstream from Cold Creek, and 3.9 miles east of Calpella.
DRAINAGE AREA.--92.2 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1952 to September 1958.
Water temperatures: March 1964 to September 1968.
Sediment records: March to September 1964, October 1966 to September 1968 (discontinued).
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C June 16, 18, 19.
Sediment concentrations: Maximum daily, 604 mg/l Jan. 29; minimum daily, 3 mg/l Sept. 27-30.
Sediment loads: Maximum daily, 4,340 tons Jan. 14; minimum daily, 0.36 ton June 18.
EXTREMES, 1965-68.--Water temperatures: Maximum (1965-66, 1967-68), 26°C June 16, 18, 19, 1968; minimum (1965-67), 4°C Dec. 16-20, 1965.
Sediment concentrations (1966-68): Maximum daily, 1,490 mg/l Jan. 20, 1967; minimum daily, 3 mg/l Sept. 27-30, 1968.
Sediment loads (1966-68): Maximum daily, 16,900 tons Jan. 20, 1967; minimum daily, 0.36 ton June 18, 1968.
REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER..	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	16	--	17	--	--	16	--	--	--	16	--	--	15	15	15	--	14	--	--	14	--	11	--	11	--	--	9	--	9	9	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	8	8	9	7	8	9	8	7	6	8	8	6	5	--	7	--	--	5	5	4	--	--	--	7	7	--	7	--	7	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY..	7	--	4	--	5	--	--	6	7	6	--	7	7	9	9	9	8	8	--	8	--	8	--	8	--	6	--	--	7	7	7	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY.	7	8	8	8	8	--	9	--	10	--	--	9	--	11	--	11	12	12	12	12	--	13	14	11	11	13	13	13	10	--	--	11
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH....	11	--	--	12	10	10	--	11	--	--	13	9	11	11	11	10	9	9	9	9	11	11	10	10	13	--	11	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL....	12	--	11	--	11	11	--	--	13	13	--	13	--	--	14	--	11	--	17	--	--	15	--	16	--	17	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19	19	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	15	--	--
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	19	20	21	20	19	19	19	20	20	20	18	19	16	18	19	19	20	21	18	18	17	18	19	17	20	21	22	23	22	22	21	19
MINIMUM	15	15	16	16	15	14	15	15	15	16	14	14	14	13	13	14	16	16	17	17	16	14	14	14	16	15	17	18	18	17	17	15
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	21	21	21	18	21	21	22	22	22	22	22	22	23	24	26	25	26	26	25	24	24	24	24	24	23	23	22	21	21	--	23
MINIMUM	17	18	18	17	16	16	16	17	17	18	18	17	16	17	17	19	19	19	19	21	19	19	19	19	19	18	18	18	17	16	--	17
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	21	22	22	23	23	24	23	23	22	21	21	21	19	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	22	22	21
MINIMUM	17	17	17	18	18	19	19	18	18	17	17	17	17	17	17	16	16	16	17	17	17	17	17	17	17	17	17	17	18	17	18	17
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	22	22	22	21	21	21	22	22	22	22	21	21	21	25	19	20	19	18	16	17	19	20	21	19	19	21	22	22	22	22	21
MINIMUM	18	18	18	18	17	17	17	18	17	17	17	17	17	17	17	17	16	17	17	16	15	16	16	17	17	17	17	18	18	18	19	17
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	22	23	23	23	23	23	23	23	22	22	22	22	22	22	22	23	23	21	20	19	19	20	21	21	21	21	21	21	20	--	21
MINIMUM	19	19	19	21	21	21	21	21	20	19	19	20	20	19	19	19	19	20	18	17	17	17	17	18	18	18	18	18	18	18	--	19

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	328	11	9.7	302	10	8.2	160	77	33
2	203	10	5.5	302	10	8.2	171	33	15
3	182	10	4.9	279	10	7.5	454	303	433
4	182	9	4.4	216	10	5.8	351	167	184
5	184	22	11	218	9	5.3	455	231	283
6	182	18	8.8	216	9	5.2	287	87	72
7	181	15	7.3	216	9	5.2	483	209	294
8	178	12	5.8	216	9	5.2	341	90	83
9	178	10	4.8	182	6	2.9	288	100	78
10	199	9	4.4	170	5	2.3	299	115	93
11	295	4	3.2	168	5	2.3	297	110	88
12	302	4	3.3	170	4	1.8	281	100	76
13	304	5	4.1	173	4	1.9	302	100	82
14	304	5	4.1	191	23	12	302	100	82
15	304	6	4.9	184	43	21	302	99	81
16	302	6	4.9	171	37	17	304	97	80
17	297	7	5.6	166	23	10	309	91	76
18	302	8	6.5	164	18	8.0	451	162	205
19	297	9	7.2	167	16	7.2	364	78	77
20	295	10	8.0	166	13	5.8	320	65	56
21	302	12	9.8	166	10	4.5	315	68	58
22	302	12	9.8	159	9	3.9	318	65	56
23	306	10	8.3	164	8	3.5	313	68	57
24	309	10	8.3	162	8	3.5	311	70	59
25	302	10	8.2	163	8	3.5	309	70	58
26	147	8	3.4	166	7	3.1	309	63	53
27	288	10	7.6	162	6	2.6	306	58	48
28	306	9	7.4	118	6	1.9	299	58	47
29	304	9	7.4	177	14	7.6	292	57	45
30	304	8	6.6	189	60	30	302	57	46
31	299	8	6.5	--	--	--	304	55	45
TOTAL	8168	--	201.7	5663	--	206.9	9899	--	3043

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	304	53	44	584	157	257	410	52	58
2	304	53	44	1240	193	710	400	50	54
3	295	52	41	681	100	184	395	49	52
4	304	53	44	534	94	136	393	48	51
5	304	53	44	479	90	116	398	52	56
6	304	53	44	445	88	106	390	70	74
7	304	53	44	419	80	91	405	77	84
8	273	60	44	403	72	78	408	74	82
9	366	89	117	390	69	73	395	70	75
10	1300	397	1970	385	69	72	388	62	65
11	385	155	161	377	70	71	388	56	59
12	320	112	97	367	75	74	695	157	396
13	466	149	200	359	68	66	667	125	247
14	2520	537	4340	349	67	63	672	102	193
15	1370	382	1510	341	70	64	524	70	99
16	785	220	466	372	72	72	1480	325	1450
17	496	172	230	427	68	78	748	93	188
18	424	170	195	380	67	69	575	60	93
19	388	160	168	1890	469	2970	506	35	48
20	372	150	151	1170	206	719	468	34	43
21	364	152	149	1330	237	998	445	32	38
22	354	155	148	830	104	233	433	32	37
23	343	155	144	768	88	182	438	29	34
24	338	155	141	586	58	92	415	31	35
25	333	155	139	518	55	77	425	29	33
26	330	157	140	483	52	68	405	27	30
27	325	158	139	447	55	66	395	27	29
28	361	172	176	423	55	63	395	26	28
29	2110	604	4090	423	54	62	393	26	28
30	1230	485	1730	--	--	--	385	26	27
31	659	150	267	--	--	--	380	26	27
TOTAL	18331	--	17217	17400	--	7910	15214	--	3813

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	388	26	27	97	5	1.3	97	5	1.3
2	380	25	26	62	5	.84	93	5	1.3
3	375	23	23	53	5	.72	90	5	1.2
4	373	23	23	60	5	.81	85	5	1.1
5	347	24	22	75	5	1.0	81	5	1.1
6	370	23	23	84	4	.91	75	5	1.0
7	368	23	23	81	4	.87	69	5	.93
8	347	22	21	66	4	.71	63	5	.85
9	360	22	21	53	4	.57	62	5	.84
10	330	19	17	59	4	.64	70	5	.95
11	325	18	16	53	4	.57	58	5	.78
12	300	16	13	66	4	.71	37	4	.40
13	250	15	10	97	4	1.0	38	4	.41
14	250	14	9.5	110	4	1.2	35	4	.38
15	250	14	9.5	104	4	1.1	40	4	.43
16	244	13	8.6	97	4	1.0	40	4	.43
17	244	12	7.9	91	4	.98	36	4	.39
18	232	13	8.1	91	4	.98	33	4	.36
19	230	14	8.7	91	4	.98	34	4	.37
20	160	10	4.3	91	4	.98	94	7	1.8
21	114	9	2.8	88	4	.95	108	8	2.3
22	104	8	2.2	97	4	1.0	122	8	2.6
23	97	7	1.8	93	4	1.0	122	8	2.6
24	104	6	1.7	96	4	1.0	146	8	3.2
25	108	7	2.0	96	4	1.0	190	9	4.6
26	100	8	2.2	93	4	1.0	190	9	4.6
27	88	7	1.7	85	4	.92	194	9	4.7
28	91	6	1.5	81	4	.87	200	9	4.9
29	94	5	1.3	85	4	.92	200	9	4.9
30	85	5	1.1	102	5	1.4	200	9	4.9
31	--	--	--	99	5	1.3	--	--	--
TOTAL	7108	--	339.9	2596	--	29.23	2902	--	55.62

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	198	9	4.8	192	9	4.7	224	9	5.4
2	200	9	4.9	196	9	4.8	196	8	4.2
3	196	8	4.2	190	9	4.6	188	7	3.6
4	194	8	4.2	192	9	4.7	194	7	3.7
5	200	8	4.3	194	9	4.7	182	7	3.4
6	202	8	4.4	194	9	4.7	176	7	3.3
7	194	8	4.2	182	9	4.4	182	7	3.4
8	180	8	3.9	162	9	3.9	190	7	3.6
9	178	8	3.8	170	9	4.1	192	6	3.1
10	204	9	5.0	190	9	4.6	190	6	3.1
11	202	9	4.9	190	9	4.6	194	6	3.1
12	204	9	5.0	192	9	4.7	212	6	3.4
13	206	9	5.0	184	9	4.5	214	6	3.5
14	212	9	5.2	192	9	4.7	214	5	2.9
15	212	9	5.2	190	9	4.6	218	5	2.9
16	206	9	5.0	216	9	5.2	226	5	3.1
17	212	9	5.2	210	9	5.1	224	5	3.0
18	210	9	5.1	226	9	5.5	224	5	3.0
19	210	9	5.1	230	9	5.6	220	5	3.0
20	210	9	5.1	238	9	5.8	196	5	2.6
21	208	9	5.1	254	9	6.2	202	4	2.2
22	204	9	5.0	226	9	5.5	216	4	2.3
23	188	9	4.6	226	9	5.5	214	4	2.3
24	188	9	4.6	224	9	5.4	210	4	2.3
25	188	9	4.6	222	9	5.4	196	4	2.1
26	188	9	4.6	222	9	5.4	196	4	2.1
27	190	9	4.6	222	9	5.4	196	3	1.6
28	182	9	4.4	224	9	5.4	208	3	1.7
29	188	9	4.6	214	9	5.2	228	3	1.8
30	192	9	4.7	200	9	4.9	228	3	1.8
31	186	9	4.5	222	9	5.4	--	--	--
TOTAL	6132	--	145.8	6386	--	155.2	6150	--	87.5

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 105949
TOTAL LOAD FOR YEAR (TONS) 33204.85

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 3, 1967	1410	9	406	306	335	53	64	72	77	79	92	96	99	100	--	--	SBWC
DEC 5.....	0915	8	527	196	279	60	72	83	88	89	96	98	100	--	--	--	SBWC
JAN 10, 1968	1925	6	496	218	292	53	64	74	83	87	93	95	98	99	100	--	SBWC
JAN 14.....	1015	9	1270	337	1160	33	46	54	59	62	82	92	99	100	--	--	VBWC
JAN 30.....	1030	7	1210	480	1570	--	--	--	--	--	89	99	100	--	--	--	V
FEB 14.....	1630	11	351	67	63	74	81	88	91	93	97	99	99	100	--	--	SBWC
FEB 19.....	1205	12	2380	675	4340	31	43	53	60	62	91	99	100	--	--	--	VBWC
FEB 19.....	1710	12	2440	663	4370	29	40	53	59	62	92	99	100	--	--	--	VBWC
APR 29.....	1520	16	85	6	1.4	77	87	90	93	94	97	98	100	--	--	--	SBWC

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 4, 1967	9	8
OCT. 5	22	18
OCT. 10	8	7
OCT. 11	4	5
OCT. 18	8	5
OCT. 21	12	5
OCT. 25	10	11
OCT. 31	8	6
NOV. 1	10	3
NOV. 3	10	3
NOV. 6	9	3
NOV. 10	5	1
NOV. 13	4	1
NOV. 14	43	29
NOV. 15	44	37
NOV. 17	20	20
NOV. 20	13	8
NOV. 22	9	5
NOV. 24	8	7
NOV. 27	6	3
NOV. 29	6	1
NOV. 30	87	116
DEC. 1	84	115
DEC. 2	16	14
DEC. 3	306	214
DEC. 4	116	116
DEC. 5	196	176
DEC. 6	76	104
DEC. 7	189	204
DEC. 8	86	116
DEC. 9	94	140
DEC. 10	120	164
DEC. 11	103	164
DEC. 12	99	140
DEC. 13	88	154
DEC. 15	96	160
DEC. 18	157	150
DEC. 19	70	93
DEC. 20	68	105
DEC. 21	68	115
DEC. 22	63	110
DEC. 24	70	110
DEC. 25	69	110
DEC. 27	57	87
DEC. 29	57	83
JAN. 1, 1968	53	79
JAN. 3	52	83
JAN. 5	53	77
JAN. 8	60	79
JAN. 9	59	70
JAN. 10	218	240
JAN. 12	111	140
JAN. 13	196	245
JAN. 14	337	265
JAN. 15	386	275
JAN. 16	206	185
JAN. 17	171	200
JAN. 18	169	200
JAN. 20	149	200
JAN. 22	155	205
JAN. 24	152	215
JAN. 26	153	215
JAN. 29	701	360
JAN. 30	480	360
JAN. 31	127	115
FEB. 1	144	105
FEB. 2	90	89
FEB. 3	95	93
FEB. 4	96	93
FEB. 5	90	98
FEB. 7	75	94
FEB. 9	68	86
FEB. 12	78	58
FEB. 14	67	87
FEB. 16	73	78
FEB. 17	68	82
FEB. 18	66	80
FEB. 19	663	360
FEB. 20	142	115
FEB. 21	131	110
FEB. 22	87	91
FEB. 23	76	80
FEB. 24	59	77
FEB. 25	56	79
FEB. 26	53	76
FEB. 27	59	83
FEB. 28	54	79
FEB. 29	54	79
MAR. 1	52	77
MAR. 4	48	79
MAR. 5	54	87
MAR. 6	68	77
MAR. 8	72	91
MAR. 11	55	77
MAR. 12	349	255
MAR. 13	73	77
MAR. 14	76	42
MAR. 16	348	210
MAR. 17	67	75
MAR. 18	61	53
MAR. 19	33	24
MAR. 20	34	40
MAR. 21	31	40
MAR. 22	32	40
MAR. 23	29	37
MAR. 24	32	34
MAR. 25	28	35
MAR. 27	27	25
APR. 1	26	32
APR. 3	23	37
APR. 5	24	37
APR. 8	22	35
APR. 9	22	30
APR. 10	19	24
APR. 12	16	20
APR. 15	14	20
APR. 17	12	11
APR. 19	14	17
APR. 22	8	8
APR. 24	6	3
APR. 26	8	6
APR. 29	5	3
MAY	5	2
MAY 8	3	2
MAY 15	4	1
MAY 16	4	1
JUNE 7	5	1
AUG. 15	9	7
SEPT. 3	7	6

11-4618. LAKE MENDOCINO NEAR UKIAH, CALIF.

LOCATION.--Lat 39°11'53", long 123°10'50", in Yokayo Rancho Grant, Mendocino County, temperature recorder at gaging station, in intake tower 30 ft upstream from Coyote Dam on East Fork Russian River, and 3.6 miles northeast of Ukiah.
DRAINAGE AREA.--105 sq mi.
RECORDS AVAILABLE.--Water temperatures: December 1965 to September 1968 (discontinued).
Sediment records: February 1964 to September 1968 (discontinued)
EXTREMES, 1965-67.--Water temperatures: Maximum, 29°C July 1, 1967.
REMARKS.--Recorder malfunction Nov. 21 to Dec. 18, Feb. 22 to Mar. 18; recorder stopped June 23 to July 7.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	22	21	21	21	21	21	21	20	20	20	20	20	20	20	20	19	19	19	19	19	19	19	18	18	18	18	18	18	18	18	20
MINIMUM	22	21	21	21	21	20	20	20	20	20	20	20	20	19	19	19	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	19
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15	--	--	--
MAXIMUM	18	18	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	16	16	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	17	16	16	16	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	--	--	--	--	15	--	--	--	--	--	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	10	10	10	10	9	10	10	10	10	10	10	9	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	10	10	10	9	9	9	9	9	10	10	9	9	--
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
MINIMUM	9	9	9	9	9	9	9	9	9	9	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	--	--	--	--
MAXIMUM	9	9	9	9	9	8	8	8	9	9	10	10	10	9	8	8	9	11	11	11	11	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	9	9	9	9	8	8	8	8	9	9	9	9	9	9	7	8	8	9	10	11	9	--	--	--	--	--	--	--	--	--	--	--
MARCH....	--	--	--	--	--	13	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12	13	11	11	11	13	12	12	12	14	14	15	16	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	11	11	11	11	11	12	12	12	12	13	14	13	--
APRIL....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	13	13	13	14	14	14	14	16	16	17	17	17	17	17	17	16	16	15	14	14	15	15	15	16	15	17	18	19	19	18	--	16
MINIMUM	12	12	13	13	14	14	13	14	14	14	15	16	16	16	16	16	15	14	14	13	13	14	14	14	14	14	17	16	16	17	--	14
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	18	19	19	19	18	19	18	19	19	18	18	17	17	17	19	19	18	18	21	19	18	18	19	18	19	19	20	20	19	22	21	19
MINIMUM	18	18	18	17	18	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18	18	18	17	17	18	19	19	19	19	19	18
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	21	22	22	21	21	21	20	20	21	21	20	20	19	20	21	22	23	24	24	24	24	25	--	--	--	--	--	--	--	--	--	--
MINIMUM	20	21	21	21	21	19	19	19	19	19	19	19	19	19	21	20	21	22	23	23	23	23	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	27	24	25	24	24	24	24	23	23	23	24	23	25	25	25	24	25	24	24	24	25	25	26	26	--
MINIMUM	--	--	--	--	--	--	--	24	24	23	23	23	23	23	22	22	22	22	23	23	23	23	23	23	23	23	23	23	23	23	23	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	25	25	24	26	25	24	25	26	24	24	24	24	23	23	23	23	23	22	22	22	21	22	21	21	21	21	21	21	22	22	24	23
MINIMUM	23	23	23	23	23	23	24	23	23	23	23	23	23	22	22	22	22	22	22	21	21	21	20	20	20	20	21	21	21	21	22	22
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	23	24	23	23	22	22	22	22	22	22	22	22	21	21	22	22	21	21	21	21	21	21	21	--	--	--	--	--	--	--	--	--
MINIMUM	22	22	22	22	22	21	21	22	21	21	21	21	21	21	21	21	21	21	21	21	20	20	19	--	--	--	--	--	--	--	--	--

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 4, 1967.....	8	3
OCT. 11.....	11	4
OCT. 18.....	10	7
OCT. 19.....	1	1
OCT. 25.....	4	4
NOV. 1.....	9	5
NOV. 15.....	8	8
NOV. 20.....	2	3
NOV. 22.....	14	10
NOV. 24.....	11	11
DEC. 5.....	7	7
DEC. 8.....	8	7
DEC. 13.....	9	10
DEC. 19.....	10	14
DEC. 20.....	9	11
DEC. 27.....	24	48
JAN. 3, 1968.....	22	40
JAN. 11.....	8	8
JAN. 13.....	7	5
JAN. 16.....	7	2
JAN. 24.....	10	14
JAN. 31.....	39	78
FEB. 5.....	30	55
FEB. 7.....	22	44
FEB. 14.....	22	22
FEB. 21.....	33	43
FEB. 28.....	15	30
MAR. 6.....	24	39
MAR. 13.....	18	33
MAR. 19.....	9	20
MAR. 21.....	20	40
MAR. 27.....	23	32
APR. 3.....	10	25
APR. 11.....	9	30
APR. 17.....	11	22
APR. 18.....	4	2
APR. 24.....	12	20
MAY 1.....	8	14
MAY 8.....	4	10
MAY 15.....	4	7
MAY 23.....	5	4
JULY 8.....	1	1
AUG. 22.....	1	5
SEPT. 26.....	1	2

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.

LOCATION.--Lat 39°11'45", long 123°11'30", in Yokayo Rancho Grant, Mendocino County, at gaging station, 500 ft downstream from Coyote Dam, 1,300 ft upstream from mouth, and 3.2 miles northeast of Ukiah.
DRAINAGE AREA.--105 sq mi.
RECORDS AVAILABLE.--Chemical analyses: December 1952 to March 1955.
Water temperatures: December 1952 to March 1955, October 1964 to September 1968 (discontinued).
Sediment records: December 1952 to March 1955, January 1964 to September 1968 (discontinued).
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 220 mg/l Jan. 20; minimum daily, 1 mg/l Oct. 3, 4, 19.
Sediment loads: Maximum daily, 404 tons Jan. 16; minimum daily, 0.63 ton May 22.
EXTREMES, 1964-68.--Sediment concentrations: Maximum daily, 1,900 mg/l (estimated) Dec. 25, 1964; minimum daily, 1 mg/l on several days in 1965 and 1967.
Sediment loads: Maximum daily, 22,000 tons (estimated) Dec. 25, 1964; minimum daily, 0.4 ton Nov. 29, 1964, Jan. 5, 1966.
REVISIONS.--Revised figures for water temperatures for 1967 water year, superseding those previously published, are given herewith:

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

MONTH	DAY 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
OCTOBER..	--	--	16	20	18	20	18	--	--	18	--	18	--	18	--	--	18	--	18	--	18	--	--	17	--	17	--	17	--	--	17	--
NOVEMBER.	17	18	--	18	--	--	16	--	16	--	16	--	--	15	15	15	13	14	19	13	13	13	12	12	13	--	--	12	--	12	--	--
DECEMBER.	13	12	12	11	11	12	12	12	12	11	11	11	--	11	--	11	--	--	11	--	11	--	10	--	--	--	10	10	--	10	--	--
JANUARY..	--	--	--	7	--	8	--	--	8	--	7	--	8	--	--	9	--	9	--	9	7	9	8	8	8	8	9	9	13	11	9	--
FEBRUARY.	8	9	9	--	--	10	--	9	--	9	--	--	9	--	4	--	9	--	--	9	--	9	--	9	--	--	9	8	--	--	--	--
MARCH....	10	--	11	--	--	9	--	9	--	9	--	--	9	--	9	--	9	--	--	9	--	9	--	10	--	--	9	--	9	--	9	--
APRIL....	--	--	8	9	8	--	8	--	--	8	--	9	--	9	--	--	9	--	9	--	9	--	--	9	--	9	--	9	--	--	--	--
MAY.....	9	--	11	--	11	--	--	12	9	11	--	11	--	--	11	14	13	--	13	--	--	13	--	12	--	12	--	--	11	--	11	--
JUNE.....	--	11	--	--	11	--	11	--	--	--	--	--	--	12	--	--	--	--	--	--	12	--	--	--	--	--	--	13	--	--	--	--
JULY.....	--	--	--	--	13	--	--	--	--	--	12	13	--	--	--	--	--	--	13	--	--	--	--	--	--	--	14	--	--	--	--	--
AUGUST...	--	14	--	--	--	--	--	19	15	--	--	--	--	--	--	16	--	--	--	--	--	--	18	--	--	--	--	--	--	17	--	--
SEPTEMBER	--	--	--	--	--	17	--	--	--	--	--	17	18	--	--	--	--	--	--	--	18	--	--	--	--	--	--	21	--	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	16	19	--	--	--	19	--	19	--	--	--	--	--	--	19	--	--	18	--	--	--	19	--	--	--	--	--	19	--
NOVEMBER.	18	--	19	--	--	18	--	--	--	16	--	--	16	16	17	--	17	--	--	16	--	16	--	16	--	--	13	--	13	13	--	--
DECEMBER.	11	13	13	13	12	11	12	11	11	11	11	11	10	9	--	--	--	9	9	9	9	8	--	6	9	--	9	--	8	--	--	--
JANUARY..	8	--	8	--	7	--	--	7	7	7	8	8	8	8	8	8	8	6	--	9	--	9	--	9	--	7	--	--	8	7	7	--
FEBRUARY.	7	8	8	8	8	--	8	--	9	--	--	9	--	7	--	9	9	9	9	9	9	10	9	9	9	9	9	9	9	--	--	9
MARCH....	9	--	--	9	--	8	--	8	--	--	9	9	9	9	9	9	9	8	9	9	10	10	10	10	10	--	11	--	10	--	--	--
APRIL....	10	--	11	--	11	--	--	11	10	12	--	11	--	--	12	--	11	--	12	--	--	12	--	11	--	12	--	--	12	--	--	--
MAY.....	11	--	--	--	--	--	--	9	--	--	--	--	--	--	13	12	--	--	--	--	--	--	11	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	--	--	--	11	--	--	--	--	12	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	315	2	1.7	330	7	6.2	172	16	7.4
2	315	2	1.7	335	9	8.1	172	19	8.8
3	315	1	.85	336	10	9.1	172	20	9.3
4	315	1	.85	335	9	8.1	172	19	8.8
5	315	2	1.7	336	9	8.2	172	46	21
6	315	2	1.7	336	9	8.2	172	46	21
7	315	2	1.7	336	9	8.2	174	50	23
8	315	2	1.7	336	9	8.2	176	51	24
9	315	2	1.7	244	8	5.3	176	42	20
10	315	2	1.7	179	8	3.9	176	46	22
11	315	2	1.7	179	9	4.3	176	39	19
12	320	5	4.3	178	9	4.3	176	35	17
13	313	4	3.4	176	9	4.3	176	30	14
14	310	3	2.5	176	9	4.3	173	52	24
15	310	3	2.5	176	9	4.3	172	50	23
16	310	3	2.5	176	11	5.2	172	40	19
17	310	3	2.5	176	13	6.2	172	38	18
18	315	5	4.3	176	14	6.7	432	35	41
19	277	1	.75	174	14	6.6	684	25	46
20	315	4	3.4	172	14	6.5	684	28	52
21	315	6	5.1	172	13	6.0	444	34	41
22	312	4	3.4	172	13	6.0	228	33	20
23	316	4	3.4	172	13	6.0	133	32	11
24	316	4	3.4	172	13	6.0	133	32	11
25	316	4	3.4	172	13	6.0	133	31	11
26	318	4	3.4	172	14	6.5	224	29	18
27	317	4	3.4	172	14	6.5	305	26	21
28	320	4	3.5	172	14	6.5	224	25	15
29	325	4	3.5	172	12	5.6	162	24	10
30	325	4	3.5	172	12	5.6	162	24	10
31	328	4	3.5	--	--	--	162	23	10
TOTAL	9753	--	82.65	6582	--	186.9	7061	--	616.3

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	162	23	10	972	85	223	351	21	20
2	248	23	15	618	74	118	350	20	19
3	305	22	18	1160	63	197	350	20	19
4	305	23	19	1160	54	169	351	19	18
5	305	24	20	1790	46	222	353	19	18
6	305	23	19	2470	52	347	354	21	20
7	305	22	18	1250	68	222	354	20	19
8	305	22	18	21	75	4.3	354	17	16
9	305	20	16	20	82	4.4	354	15	14
10	1630	10	40	20	90	4.9	354	15	14
11	2240	42	163	20	93	5.0	354	14	13
12	534	122	175	20	96	5.2	354	15	14
13	300	116	94	20	83	4.5	452	16	20
14	104	136	23	20	64	3.5	684	20	37
15	894	153	293	20	69	3.7	612	19	31
16	2140	70	404	20	70	3.8	280	15	11
17	2270	50	306	20	65	3.5	285	15	12
18	2850	50	385	20	59	3.2	1190	17	55
19	1340	169	244	22	52	3.1	1860	19	95
20	19	220	11	336	39	32	936	21	53
21	19	198	10	1480	26	95	390	24	25
22	19	188	9.6	1420	25	88	378	24	24
23	13	164	5.8	546	23	33	378	26	27
24	9.5	140	3.6	18	36	1.7	378	23	23
25	15	105	4.3	18	36	1.7	384	22	23
26	15	75	3.0	732	27	48	384	23	24
27	15	65	2.6	1430	22	85	384	24	25
28	16	65	2.8	1310	23	81	384	24	25
29	17	65	3.0	684	23	42	232	24	15
30	16	72	3.1	--	--	--	141	25	9.5
31	1120	83	256	--	--	--	141	28	11
TOTAL	18140.5	--	2594.8	17637	--	2054.5	14106	--	749.5

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	141	30	11	76	10	2.1	159	18	7.7
2	144	24	9.3	76	10	2.1	158	16	6.8
3	144	14	5.4	77	10	2.1	160	12	5.2
4	92	13	3.2	76	10	2.1	160	8	3.5
5	56	15	2.3	76	10	2.1	159	6	2.6
6	57	15	2.3	76	10	2.1	162	5	2.2
7	58	15	2.3	75	9	1.8	161	5	2.2
8	59	15	2.4	74	9	1.8	159	5	2.1
9	63	14	2.4	76	9	1.8	159	5	2.1
10	65	15	2.6	76	9	1.8	159	5	2.1
11	66	14	2.5	76	9	1.8	162	4	1.7
12	77	12	2.5	76	8	1.6	162	3	1.3
13	100	13	3.5	76	8	1.6	162	6	2.6
14	100	13	3.5	78	7	1.5	182	8	3.9
15	100	13	3.5	78	7	1.5	193	10	5.2
16	100	13	3.5	77	8	1.7	193	10	5.2
17	102	13	3.6	74	8	1.6	213	11	6.3
18	102	13	3.6	72	7	1.4	224	12	7.3
19	103	13	3.6	70	6	1.1	244	12	7.9
20	104	12	3.4	69	6	1.1	256	13	9.0
21	104	11	3.1	66	5	.89	274	15	11
22	104	10	2.8	58	4	.63	285	16	12
23	106	11	3.1	61	4	.66	285	16	12
24	106	11	3.1	61	4	.66	285	16	12
25	89	12	2.9	63	4	.68	267	14	10
26	73	13	2.6	62	4	.67	252	13	8.8
27	72	12	2.3	61	4	.66	252	13	8.8
28	75	11	2.2	62	4	.67	252	13	8.8
29	76	10	2.1	99	13	3.5	252	13	8.8
30	76	10	2.1	123	15	5.0	252	13	8.8
31	--	--	--	145	16	6.3	--	--	--
TOTAL	2714	--	102.7	2365	--	55.02	6243	--	187.9

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	269	14	10	302	17	14	230	15	9.3
2	280	15	11	310	18	15	230	15	9.3
3	280	15	11	310	18	15	229	15	9.3
4	280	15	11	310	18	15	228	15	9.2
5	271	12	8.8	298	17	14	228	15	9.2
6	264	10	7.1	275	16	12	211	13	7.4
7	264	9	6.4	260	15	11	204	12	6.6
8	264	7	5.0	260.	15	11	204	12	6.6
9	264	5	3.6	260	15	11	157	7	3.0
10	264	3	2.1	260	15	11	133	8	2.9
11	264	3	2.1	260	15	11	133	8	2.9
12	264	3	2.1	260	15	11	133	8	2.9
13	264	3	2.1	260	15	11	133	8	2.9
14	264	3	2.1	260	15	11	135	8	2.9
15	274	8	5.9	260	15	11	133	8	2.9
16	280	14	11	260	15	11	133	8	2.9
17	279	14	11	260	15	11	151	9	3.7
18	288	15	12	260	15	11	180	9	4.4
19	285	14	11	237	15	9.6	190	10	5.1
20	270	14	10	224	14	8.5	193	11	5.7
21	268	14	10	207	12	6.7	193	11	5.7
22	284	14	11	183	11	5.4	193	11	5.7
23	295	16	13	180	11	5.3	193	11	5.7
24	304	17	14	179	11	5.3	120	14	4.5
25	310	18	15	176	10	4.8	220	14	8.3
26	310	18	15	176	10	4.8	220	14	8.3
27	310	18	15	193	11	5.7	224	14	8.5
28	310	18	15	204	12	6.6	224	12	7.3
29	297	17	14	222	14	8.4	224	9	5.4
30	290	16	13	234	15	9.5	202	6	3.3
31	290	16	13	230	15	9.3	--	--	--
TOTAL	8700	--	293.3	7570	--	306.9	5581	--	171.8

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 106452.5
TOTAL LOAD FOR YEAR (TONS) 7402.27

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 12, 1968	1700	8	300	126	102	56	72	80	84	87	99	99	99	100	--	--	SBWC
JAN 20.....	1125	9	19	215	11	79	90	94	95	97	99	99	100	--	--	--	SBWC
JAN 22.....	1705	9	19	186	9.5	48	67	83	88	92	100	--	--	--	--	--	SBWC
JAN 24.....	1655	9	16	136	5.9	83	90	94	98	99	99	100	--	--	--	--	SBWC
MAY 23.....	1715	11	61	6	.99	56	67	81	91	95	100	--	--	--	--	--	SBWC

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 4, 1967	1	2
OCT. 9	2	1
OCT. 18	5	7
OCT. 21	6	5
OCT. 25	4	4
OCT. 31	4	6
NOV. 3	10	7
NOV. 6	9	7
NOV. 10	8	10
NOV. 14	9	7
NOV. 15	9	10
NOV. 17	13	15
NOV. 20	14	14
NOV. 22	13	14
NOV. 24	13	13
NOV. 27	14	14
NOV. 29	12	14
NOV. 30	12	13
DEC. 1	16	15
DEC. 2	19	26
DEC. 3	21	24
DEC. 4	19	24
DEC. 5	46	71
DEC. 6	46	71
DEC. 7	50	83
DEC. 8	51	87
DEC. 9	42	66
DEC. 10	46	77
DEC. 11	39	60
DEC. 12	35	58
DEC. 13	30	43
DEC. 14	52	50
DEC. 18	36	47
DEC. 19	25	29
DEC. 20	28	30
DEC. 21	34	52
DEC. 22	33	49
DEC. 24	32	44
DEC. 25	31	44
DEC. 27	26	47
DEC. 29	24	44
JAN. 1, 1968	23	35
JAN. 3	22	34
JAN. 5	24	36
JAN. 8	22	37
JAN. 9	20	33
JAN. 10	9	13
JAN. 11	88	140
JAN. 12	126	205
JAN. 13	113	185
JAN. 14	53	52
JAN. 15	171	280
JAN. 16	72	135
JAN. 17	46	76
JAN. 18	51	105
JAN. 20	215	390
JAN. 22	186	345
JAN. 24	136	250
JAN. 26	64	140
JAN. 29	65	120
JAN. 30	69	150
JAN. 31	85	160
FEB. 1	82	175
FEB. 2	71	140
FEB. 3	64	130
FEB. 4	51	120
FEB. 5	42	100
FEB. 7	71	180
FEB. 9	88	195
FEB. 12	95	140
FEB. 14	62	84
FEB. 16	70	95
FEB. 17	68	105
FEB. 18	54	100
FEB. 19	55	105
FEB. 20	34	70
FEB. 21	26	44
FEB. 22	25	55
FEB. 23	23	53
FEB. 24	39	82
FEB. 25	37	82
FEB. 26	26	60
FEB. 27	22	53
FEB. 28	23	50
FEB. 29	23	47
MAR. 1	21	47
MAR. 4	19	50
MAR. 6	22	29
MAR. 8	16	38
MAR. 11	14	40
MAR. 12	15	37
MAR. 13	16	37
MAR. 14	19	30
MAR. 15	19	24
MAR. 16	14	32
MAR. 17	16	34
MAR. 18	19	24
MAR. 19	19	20
MAR. 20	20	35
MAR. 21	24	44
MAR. 22	24	30
MAR. 23	26	44
MAR. 24	23	40
MAR. 25	22	45
MAR. 27	24	36
MAR. 29	24	44
APR. 1	30	24
APR. 3	13	34
APR. 5	15	30
APR. 8	15	37
APR. 9	14	34
APR. 10	15	30
APR. 12	12	25
APR. 15	13	29
APR. 17	13	29
APR. 19	13	22
APR. 22	10	19
APR. 24	11	22
APR. 26	13	19
APR. 29	10	15
MAY 1	10	19
MAY 8	9	9
MAY 15	7	8
MAY 6	8	19
MAY 23	5	5
JUNE 12	3	3
JUNE 13	6	3
JULY 10	3	1
AUG. 15	15	9
SEPT. 3	15	4

11-4625. RUSSIAN RIVER NEAR HOPLAND, CALIF.

LOCATION.--Lat 39°01'35", long 123°07'45", 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, 4 miles north of Hopland, and 17 miles upstream from Sulphur Creek.
DRAINAGE AREA.--362 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1965.
Water temperatures: September 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, 7°C Jan. 6, 7.
EXTREMES, 1965-68.--Water temperatures: Maximum (1965-66), 22°C Aug. 20, Sept. 3, 4, 7, 8, 1966; minimum, 6°C Feb. 8, 9, 1966.
REMARKS.--Recorder malfunction Oct. 4, 6-12; probe out of water Feb. 23 to Mar. 4, Apr. 10 to Sept. 3.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	20	18	21	--	20	--	--	--	--	--	--	--	21	20	20	20	20	20	19	19	19	19	19	19	19	19	19	19	17	18	18	--
MINIMUM	18	17	18	--	18	--	--	--	--	--	--	--	18	17	17	17	17	18	17	17	17	18	17	17	17	17	17	17	16	16	16	--
NOVEMBER																																
MAXIMUM	17	17	17	17	17	18	17	18	17	17	17	17	16	17	16	17	17	16	16	16	16	16	15	14	14	14	13	13	13	12	--	16
MINIMUM	16	16	16	16	16	16	16	17	16	16	16	16	16	16	16	16	16	16	16	16	15	14	14	14	14	13	13	13	12	12	--	15
DECEMBER																																
MAXIMUM	12	12	12	12	11	11	11	11	11	12	11	11	10	10	10	10	9	9	9	9	9	9	10	10	10	10	10	9	10	10	9	10
MINIMUM	12	12	10	10	9	9	9	9	11	11	11	10	9	9	9	9	9	8	8	8	9	8	9	9	9	9	9	9	9	9	9	9
JANUARY																																
MAXIMUM	9	9	9	9	8	8	8	8	9	9	8	9	11	11	11	9	9	9	9	9	10	10	10	10	10	10	10	10	10	9	10	9
MINIMUM	8	8	8	8	9	7	7	8	8	8	8	8	10	10	9	9	9	8	9	9	9	9	9	9	9	9	10	10	8	9	9	8
FEBRUARY																																
MAXIMUM	10	10	10	10	10	10	11	11	11	11	11	11	13	13	13	13	13	13	13	14	14	14	--	--	--	--	--	--	--	--	--	12
MINIMUM	9	10	10	9	9	9	9	11	11	11	11	11	11	13	13	13	13	13	13	13	13	13	--	--	--	--	--	--	--	--	--	11
MARCH																																
MAXIMUM	--	--	--	--	13	11	11	10	10	10	10	9	9	9	10	10	10	9	10	10	10	10	10	10	11	11	11	11	11	11	11	10
MINIMUM	--	--	--	--	10	10	10	9	9	9	9	9	9	9	9	9	9	8	8	9	9	9	9	9	9	9	9	9	10	10	11	9
APRIL																																
MAXIMUM	12	12	12	12	12	12	12	12	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	11	12	12	12	11	11	11	11	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	21	22	21	21	21	22	21	22	22	24	25	24	24	26	21	21	21	21	20	20	19	19	19	19	19	19	19	--	21
MINIMUM	--	--	--	18	18	19	18	18	18	19	19	18	18	19	18	17	18	19	19	19	19	19	18	17	17	18	18	18	18	18	--	18

11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.

LOCATION.--Lat 38°52'55", long 123°03'15", in SW¼ sec.14, T.12 N., R.11 W., Sonoma County, at gaging station at Lambert Ranch, 400 ft downstream from Cummisky Creek, and 5 miles northwest of Cloverdale.
DRAINAGE AREA.--502 sq mi.
RECORDS AVAILABLE.--Water temperatures: November 1963 to September 1968.
Sediment records: November 1963 to September 1966, January 1967 to September 1968 (discontinued).
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C May 28; minimum, 4°C Jan. 3, 12.
Sediment concentrations: Maximum daily, 2,350 mg/l Jan. 29; minimum daily, 4 mg/l on several days during January, February, and May.
Sediment loads: Maximum daily, 56,800 tons Jan. 29; minimum daily, 1.0 ton May 29.
EXTREMES, 1964-68.--Water temperatures (1966-68): Maximum, 26°C May 28, 1968; minimum, 4°C Jan. 3, 12, 1968.
Sediment concentrations (1964-66, 1967-68): Maximum daily, 4,600 mg/l Dec. 23, 1964; minimum daily, 3 mg/l Oct. 20-22, 1964, Jan. 13-15, 1967.
Sediment loads (1964-66, 1967-68): Maximum daily, 495,000 tons Dec. 22, 1964; minimum daily, 0.9 ton Jan. 15, 1967.
REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	20	20	19	20	20	20	20	20	20	20	21	20	19	19	19	19	19	19	19	19	18	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	17	17	17	18	18	18	18	18	18	18	18	18	18	17	17	17	17	17	17	17	17	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9	--	--
MAXIMUM	--	18	18	18	17	18	18	18	17	18	17	17	16	18	17	16	17	17	16	16	16	14	14	14	14	13	13	12	13	--	--	16
MINIMUM	--	17	16	16	17	17	17	17	16	16	16	16	16	16	16	15	14	16	14	14	14	13	12	12	12	12	11	11	11	--	--	14
DECEMBER.	9	--	9	11	9	8	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	7	8	8	8	8	8	8	8	9	9	9	10	10	9	9	9	8	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	6	7	7	7	6	7	7	7	8	8	8	8	9	8	8	7	6	--	--
JANUARY..	9	--	4	--	--	6	--	7	--	7	6	4	--	8	10	8	--	7	--	--	--	--	--	--	--	7	--	--	6	7	7	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9	9	9	9	9	8	8	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	7	7	7	8	8	6	--	--	--	--	--	--	--
FEBRUARY.	6	7	--	--	8	9	8	--	11	--	--	9	10	11	--	11	8	--	12	12	13	11	14	--	13	--	10	--	11	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH....	--	9	--	11	--	10	--	--	--	8	10	9	10	--	11	10	--	9	--	--	--	--	--	--	12	--	14	--	10	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL....	13	--	16	--	--	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	18	17	17	17	16	16	16	16	17	16	16	17	16	18	18	19	19	20	21	21	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	14	14	13	13	13	12	12	12	13	13	12	13	13	14	14	15	16	17	17	17	--	--
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	21	21	20	20	20	20	20	20	21	22	20	20	17	19	21	22	23	23	22	21	21	21	22	20	23	24	25	26	25	24	24	21
MINIMUM	17	17	17	17	16	16	16	17	17	17	17	17	16	15	17	18	19	19	20	19	18	18	18	18	18	19	21	21	21	20	19	18
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	24	23	22	22	20	22	22	23	23	23	23	22	22	22	23	24	23	23	23	23	23	22	23	23	22	23	23	22	21	22	--	22
MINIMUM	19	21	20	18	18	17	18	19	19	19	19	18	18	18	19	20	20	19	19	19	19	19	20	19	19	19	19	19	17	18	--	19
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	21	22	22	23	23	23	23	23	23	22	23	22	22	22	22	21	21	22	22	22	22	22	22	21	21	21	21	21	22	22	21	22
MINIMUM	18	19	18	19	20	20	19	19	19	19	19	19	19	18	18	18	18	18	18	19	19	19	19	18	18	19	19	19	19	19	19	18
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	22	22	21	21	22	22	22	22	22	22	21	19	21	21	21	21	20	19	18	19	21	22	22	21	22	23	23	23	23	23	21
MINIMUM	19	19	19	19	18	19	19	19	19	19	19	18	18	18	18	18	18	18	18	17	17	17	18	19	19	19	19	19	20	20	20	18
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	23	23	22	22	23	22	22	23	23	22	22	22	22	23	22	22	23	23	21	19	19	19	21	21	21	21	21	21	20	20	--	22
MINIMUM	21	20	20	20	20	20	20	20	19	19	19	19	19	21	19	18	19	20	18	17	16	16	17	18	18	18	18	18	18	16	--	18

11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	328	10	8.9	335	15	14	270	22	16
2	347	12	11	335	13	12	231	22	14
3	355	15	14	330	11	9.8	1210	382	1560
4	350	15	14	330	14	12	776	197	500
5	348	15	14	330	17	15	2100	345	1960
6	347	15	14	330	20	18	950	90	231
7	346	14	13	325	22	19	1750	297	1400
8	346	14	13	330	25	22	1000	98	265
9	346	13	12	325	21	18	650	67	118
10	345	13	12	231	18	11	490	41	54
11	345	12	11	209	13	7.3	400	35	38
12	345	12	11	204	9	5.0	340	35	32
13	345	12	11	209	6	3.4	295	30	24
14	346	12	11	275	54	40	279	25	19
15	345	12	11	222	23	14	266	20	14
16	345	12	11	204	17	9.4	256	18	12
17	345	12	11	200	12	6.5	255	15	10
18	345	12	11	200	9	4.9	880	235	691
19	342	12	11	195	9	4.7	1080	112	337
20	319	12	10	195	8	4.2	848	52	119
21	344	12	11	195	11	5.8	736	38	76
22	348	13	12	191	14	7.2	470	35	44
23	340	13	12	191	12	6.2	335	32	29
24	339	13	12	191	10	5.2	295	29	23
25	337	13	12	191	8	4.1	275	25	19
26	336	13	12	191	7	3.6	260	25	18
27	336	14	13	191	6	3.1	350	40	38
28	336	14	13	191	10	5.2	350	39	37
29	335	14	13	218	16	9.4	265	36	26
30	335	14	13	270	34	25	245	33	22
31	335	15	14	--	--	--	236	26	17
TOTAL	10601	--	371.9	7334	--	325.0	18143	--	7763

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	231	30	19	3430	346	3460	1080	40	117
2	231	24	15	3780	414	4460	970	36	94
3	310	38	32	3720	300	3010	890	35	84
4	320	34	29	2950	120	956	849	35	80
5	325	29	25	2740	140	1040	834	35	79
6	325	27	24	3510	200	1900	801	35	76
7	325	25	22	3020	153	1280	920	32	79
8	325	24	21	872	48	119	980	26	69
9	410	38	70	665	24	43	808	23	50
10	5230	1880	30500	576	17	26	760	22	45
11	3970	318	3490	512	9	12	728	22	43
12	1670	146	699	470	4	5.1	1960	536	4990
13	956	95	245	439	23	27	2310	331	2350
14	6130	2110	54800	409	27	30	2500	98	662
15	7600	1480	34200	386	24	25	2140	80	462
16	5060	569	7790	500	49	75	4270	1130	15000
17	4470	258	3110	864	121	282	3340	250	2250
18	4150	205	2300	624	40	67	2610	190	1340
19	3280	189	1700	3210	1160	18800	3310	175	1560
20	790	95	203	6180	1520	29500	2660	127	953
21	534	35	50	5360	700	10100	1340	55	199
22	429	24	28	5380	460	6680	1110	45	135
23	366	18	18	3120	260	2190	1080	41	120
24	313	16	14	2010	154	836	918	37	92
25	280	13	9.8	1500	71	288	865	34	79
26	253	10	6.8	1380	65	272	826	30	67
27	237	4	2.6	2400	131	849	776	28	59
28	285	17	27	2290	85	526	728	28	55
29	7900	2350	56800	1810	65	318	664	29	52
30	6410	772	16400	--	--	--	518	29	41
31	3220	429	4030	--	--	--	476	26	33
TOTAL	66335	--	216680.2	64107	--	87176.1	44021	--	31315

11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	542	33	48	164	6	2.7	182	15	7.4
2	506	27	37	158	6	2.6	193	15	7.8
3	446	19	23	152	6	2.5	198	15	8.0
4	420	18	20	151	6	2.4	196	15	7.9
5	360	23	22	146	5	2.0	196	15	7.9
6	340	27	25	141	5	1.9	198	15	8.0
7	320	18	16	135	5	1.8	197	15	8.0
8	310	11	9.2	130	5	1.8	195	15	7.9
9	295	15	12	125	5	1.7	201	15	8.1
10	284	20	15	120	5	1.6	199	15	8.1
11	275	15	11	115	4	1.2	195	15	7.9
12	268	12	8.7	120	4	1.3	194	15	7.9
13	272	10	7.3	130	4	1.4	187	15	7.6
14	272	10	7.3	143	4	1.5	185	15	7.5
15	265	9	6.4	132	4	1.4	199	15	8.1
16	268	9	6.5	121	4	1.3	205	15	8.3
17	262	8	5.7	114	4	1.2	208	15	8.4
18	257	7	4.9	105	4	1.1	219	15	8.9
19	251	6	4.1	105	4	1.1	219	15	8.9
20	242	8	5.2	115	5	1.6	229	16	9.9
21	234	10	6.3	110	5	1.5	234	16	10
22	230	12	7.5	114	5	1.5	250	16	11
23	224	14	8.5	105	4	1.1	258	16	11
24	222	16	9.6	105	4	1.1	262	16	11
25	219	15	8.9	108	4	1.2	256	16	11
26	199	11	5.9	108	4	1.2	236	16	10
27	189	10	5.1	110	4	1.2	232	16	10
28	181	8	3.9	101	4	1.1	231	16	10
29	175	7	3.3	97	4	1.0	226	16	9.8
30	168	6	2.7	141	7	2.7	229	16	9.9
31	--	--	--	164	10	4.4	--	--	--
TOTAL	8496	--	356.0	3885	--	52.1	6409	--	266.2

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	231	16	10	232	14	8.8	209	12	6.8
2	246	16	11	242	14	9.1	211	12	6.8
3	247	16	11	243	14	9.2	209	12	6.8
4	246	16	11	246	14	9.3	208	12	6.7
5	248	16	11	246	14	9.3	210	12	6.8
6	234	16	10	236	13	8.3	212	12	6.9
7	233	16	10	220	12	7.1	194	12	6.3
8	232	16	10	217	12	7.0	190	12	6.2
9	228	16	9.8	209	12	6.8	187	12	6.1
10	228	16	9.8	209	12	6.8	146	12	4.7
11	227	16	9.8	207	12	6.7	131	11	3.9
12	226	16	9.8	208	12	6.7	124	11	3.7
13	228	16	9.8	210	12	6.8	119	10	3.2
14	229	16	9.9	211	12	6.8	117	10	3.2
15	232	16	10	211	12	6.8	116	10	3.1
16	233	16	10	212	12	6.9	116	10	3.1
17	231	16	10	213	12	6.9	113	10	3.1
18	225	16	9.7	215	12	7.0	129	11	3.8
19	232	16	10	218	12	7.1	149	12	4.8
20	218	15	8.8	216	12	7.0	153	12	5.0
21	217	15	8.8	225	12	7.3	157	12	5.1
22	218	15	8.8	197	12	6.4	157	12	5.1
23	229	15	9.3	182	12	5.9	160	12	5.2
24	232	15	9.4	177	12	5.7	151	12	4.9
25	240	15	9.7	175	12	5.7	119	11	3.5
26	243	15	9.8	175	12	5.7	167	11	5.0
27	244	15	9.9	174	12	5.6	171	11	5.1
28	249	15	10	189	12	6.1	173	10	4.7
29	245	15	9.9	191	12	6.2	170	9	4.1
30	232	14	8.8	205	12	6.6	174	9	4.2
31	234	14	8.8	208	12	6.7	--	--	--
TOTAL	7237	--	304.6	6519	--	218.3	4842	--	147.9

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 247929
TOTAL LOAD FOR YEAR (TONS) 344976.3

11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 3, 1967	1030	9	1880	919	4660	40	45	59	69	76	84	93	100	--	--	--	VPWC
DEC 7.....	1300	9	D 1750	500	2360	41	53	64	71	74	91	95	99	100	--	--	VBWC
JAN 10, 1968	0800	7	7480	4060	82000	28	35	45	55	64	69	79	90	99	100	--	VPWC
JAN 10.....	1730	7	3760	945	9590	34	45	59	70	80	86	93	98	100	--	--	VPWC
JAN 15.....	0845	10	8100	1460	31900	18	24	29	33	35	53	65	81	98	100	--	VBWC
JAN 29.....	0830	6	5960	1320	21200	--	32	--	49	--	65	75	87	96	100	--	VPWC
FEB 20.....	0815	12	7000	1210	22900	20	28	36	45	55	61	68	82	97	100	--	VPWC

D Daily mean discharge.

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 5, 1967.....	15	11
OCT. 11.....	11	10
OCT. 18.....	12	11
NOV. 1.....	16	12
NOV. 3.....	11	7
NOV. 6.....	20	20
NOV. 8.....	25	24
NOV. 10.....	18	20
NOV. 13.....	6	3
NOV. 14.....	54	50
NOV. 15.....	23	21
NOV. 18.....	9	8
NOV. 20.....	8	5
NOV. 22.....	14	5
NOV. 27.....	6	3
NOV. 29.....	16	20
NOV. 30.....	34	34
DEC. 1.....	22	29
DEC. 3.....	919	120
DEC. 4.....	249	120
DEC. 5.....	242	146
DEC. 6.....	73	70
DEC. 7.....	500	178
DEC. 8.....	91	78
DEC. 11.....	33	30
DEC. 13.....	31	39
DEC. 15.....	20	26
DEC. 18.....	152	115
DEC. 19.....	107	83
DEC. 20.....	51	30
DEC. 22.....	33	29
DEC. 27.....	43	38
DEC. 30.....	34	38
JAN. 1, 1968.....	19	20
JAN. 3.....	42	45
JAN. 6.....	26	29
JAN. 8.....	24	26
JAN. 10.....	4060	865
JAN. 11.....	320	130
JAN. 12.....	149	130
JAN. 13.....	93	155
JAN. 14.....	774	210
JAN. 15.....	1460	280
JAN. 16.....	586	200
JAN. 17.....	224	140
JAN. 18.....	209	72
JAN. 19.....	194	84
JAN. 22.....	24	8
JAN. 24.....	16	13
JAN. 26.....	10	8
JAN. 29.....	1320	140
JAN. 30.....	769	200
JAN. 31.....	230	120
FEB. 1.....	329	150
FEB. 2.....	526	180
FEB. 5.....	118	96
FEB. 6.....	182	135
FEB. 7.....	168	125
FEB. 9.....	24	17
FEB. 12.....	4	9
FEB. 13.....	23	10
FEB. 14.....	26	12
FEB. 16.....	22	20
FEB. 17.....	112	75
FEB. 19.....	1600	450
FEB. 20.....	1210	415
FEB. 21.....	696	295
FEB. 22.....	472	114
FEB. 23.....	234	100
FEB. 25.....	71	53
FEB. 27.....	134	80
FEB. 29.....	67	65
MAR. 2.....	36	38
MAR. 4.....	39	23
MAR. 6.....	35	30
MAR. 9.....	23	29
MAR. 11.....	22	22
MAR. 12.....	945	345
MAR. 13.....	106	74
MAR. 15.....	75	57
MAR. 16.....	932	385
MAR. 18.....	191	87
MAR. 21.....	53	45
MAR. 23.....	41	34
MAR. 25.....	34	30
MAR. 27.....	28	26
MAR. 29.....	29	30
APR. 1.....	44	35
APR. 3.....	18	20
APR. 6.....	28	14
APR. 8.....	11	6
APR. 10.....	21	30
APR. 15.....	9	6
APR. 17.....	8	3
APR. 19.....	6	5
APR. 22.....	12	13
APR. 24.....	16	14
APR. 26.....	11	3
APR. 29.....	7	3
MAY 14.....	4	2
JUNE 14.....	15	5
JULY 12.....	16	6
AUG. 14.....	12	6
SEPT. 9.....	12	4

11-4632. BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.

LOCATION.--Lat 38°49'21", long 122°59'07", in SW¼SW¼ sec.4, T.11 N., R.10 W., Mendocino County, at gaging station 0.5 mile downstream from unnamed tributary, 1.9 miles upstream from mouth, and 2.0 miles northeast of Cloverdale.
DRAINAGE AREA.--82.3 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1966 to September 1968 (discontinued).
Sediment records: October 1966 to September 1968 (discontinued).
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 3,030 mg/l Jan. 29; minimum daily, 1 mg/l on several days during October and November.
Sediment loads: Maximum daily, 51,100 tons Jan. 29; minimum daily, 0.02 ton on several days during October and November.
EXTREMES, 1966-68.--Sediment concentrations: Maximum daily, 5,570 mg/l Jan. 21, 1967; minimum daily, 1 mg/l on many days in 1966-67.
Sediment loads: Maximum daily, 88,900 tons Jan. 21, 1967; minimum daily, 0.02 ton on several days in 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	13	--	--	--	--	--	17	--	16	--	--	--	--	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	17	--	--	--	--	13	--	14	--	13	--	--	13	--	12	--	12	--	--	13	--	12	--	--	--	--	7	--	10	9	--	--
DECEMBER.	7	--	10	11	9	6	9	6	--	--	6	4	4	--	3	--	--	6	4	3	--	7	--	--	--	--	9	--	--	6	--	--
JANUARY..	--	--	3	--	--	4	--	5	--	8	4	--	9	9	11	9	6	6	9	--	--	11	--	7	--	6	--	--	6	8	8	--
FEBRUARY.	7	8	--	--	10	--	10	--	10	--	--	8	12	12	--	10	--	--	11	12	13	12	13	13	--	--	11	--	11	--	--	--
MARCH....	--	10	--	13	--	9	--	--	8	--	9	9	10	--	11	10	--	8	--	--	13	--	14	--	13	--	17	--	--	13	--	--
APRIL....	11	--	16	--	14	--	--	13	--	--	--	13	--	--	12	--	9	--	10	--	--	--	--	19	--	20	--	--	13	--	--	--
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	--	--	--	--	--	--	--	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	--	--	--	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	--	--	--	--	--	--	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-4632. BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	9.5	1	.03	7.4	1	.02	53	45	6.4
2	22	4	.24	6.0	1	.02	33	40	3.6
3	41	12	1.3	6.7	1	.02	680	1970	5050
4	23	8	.50	6.0	1	.02	782	1290	5570
5	26	9	.63	6.0	2	.03	531	1360	2510
6	19	8	.41	6.0	2	.03	142	45	17
7	15	6	.24	6.0	2	.03	546	470	1050
8	13	6	.21	8.8	6	.14	189	55	28
9	12	4	.13	12	6	.19	120	32	10
10	12	4	.13	12	4	.13	89	17	4.1
11	10	3	.08	11	4	.12	73	11	2.2
12	9.5	2	.05	11	4	.12	58	8	1.3
13	8.1	2	.04	13	11	.48	52	6	.84
14	6.7	2	.04	88	1200	326	48	9	1.2
15	7.4	2	.04	35	480	45	47	17	2.2
16	6.7	1	.02	20	100	5.4	46	11	1.4
17	6.0	1	.02	15	14	.57	45	5	.61
18	6.0	1	.02	13	9	.32	141	376	175
19	6.0	1	.02	13	5	.18	104	26	7.3
20	6.0	1	.02	12	4	.13	74	25	5.0
21	6.0	1	.02	11	4	.12	62	15	2.5
22	9.5	2	.05	11	4	.12	56	27	4.1
23	10	2	.05	10	4	.11	52	23	3.2
24	9.5	2	.05	9.5	4	.10	52	17	2.4
25	8.1	1	.02	9.5	4	.10	50	13	1.8
26	8.1	1	.02	8.8	3	.07	48	11	1.4
27	8.1	1	.02	8.1	2	.04	46	10	1.2
28	8.1	1	.02	8.1	2	.04	45	13	1.6
29	7.4	1	.02	77	414	217	44	20	2.4
30	7.4	1	.02	79	365	83	43	23	2.7
31	7.4	1	.02	--	--	--	43	14	1.6
TOTAL	354.5	--	4.48	539.9	--	679.65	4394	--	14471.05

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	43	6	.70	696	170	319	220	15	8.9
2	42	4	.45	828	320	715	200	13	7.0
3	42	6	.68	642	90	156	185	10	5.0
4	41	11	1.2	496	50	67	170	8	3.7
5	40	15	1.6	424	43	49	155	7	2.9
6	40	18	1.9	376	32	32	140	6	2.3
7	40	14	1.5	340	25	23	148	6	2.4
8	40	5	.54	312	19	16	142	6	2.3
9	41	2	.22	284	15	12	128	6	2.1
10	842	370	3100	260	11	7.7	120	5	1.6
11	1090	303	1530	240	9	5.8	116	5	1.6
12	304	80	66	225	8	4.9	482	540	1250
13	186	100	50	210	9	5.1	480	325	442
14	1010	504	2350	195	10	5.3	504	100	136
15	1190	488	1710	183	11	5.4	376	60	61
16	700	447	929	242	44	32	1150	873	3300
17	404	95	104	544	175	279	635	163	293
18	296	46	37	380	50	51	440	55	65
19	244	32	21	1020	717	3560	356	39	37
20	204	22	12	1170	495	1970	300	26	21
21	177	15	7.2	1370	611	2620	264	26	19
22	150	12	4.9	800	200	432	240	11	7.1
23	136	12	4.4	610	160	264	220	9	5.3
24	126	11	3.7	460	70	87	200	8	4.3
25	118	9	2.9	400	53	57	180	7	3.4
26	112	6	1.8	340	35	32	170	5	2.3
27	107	4	1.2	280	23	17	150	4	1.6
28	157	24	20	260	19	13	133	4	1.4
29	5350	3030	51100	240	17	11	118	3	.96
30	2490	1230	9500	--	--	--	108	3	.87
31	1090	360	1100	--	--	--	100	3	.81
TOTAL	16852	--	71663.89	13827	--	10848.2	8330	--	5691.84

11-4632, BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	200	27	15	48	4	.52	25	4	.27
2	170	13	6.0	47	4	.51	24	4	.26
3	145	5	2.0	46	5	.62	24	4	.26
4	132	4	1.4	46	5	.62	24	4	.26
5	120	3	.97	45	5	.61	23	4	.25
6	117	3	.95	44	6	.71	24	4	.26
7	112	3	.91	43	6	.70	23	3	.19
8	108	3	.87	43	6	.70	22	3	.18
9	100	3	.81	42	7	.79	20	3	.16
10	95	4	1.0	41	7	.77	19	3	.15
11	91	4	.98	42	7	.79	20	3	.16
12	88	5	1.2	45	8	.97	19	3	.15
13	84	5	1.1	48	8	1.0	18	3	.15
14	81	4	.87	49	8	1.1	17	3	.14
15	77	4	.83	46	8	.99	16	3	.13
16	73	3	.59	44	8	.95	16	3	.13
17	71	2	.38	40	8	.86	16	3	.13
18	68	2	.37	37	8	.80	16	3	.13
19	66	2	.36	36	7	.68	15	3	.12
20	64	2	.35	36	7	.68	15	3	.12
21	62	3	.50	35	7	.66	14	3	.11
22	61	4	.66	34	7	.64	12	3	.10
23	59	5	.80	34	6	.55	12	3	.10
24	57	6	.92	34	6	.55	11	3	.09
25	56	4	.60	35	6	.57	10	2	.05
26	55	3	.45	34	6	.55	11	2	.06
27	54	3	.44	31	5	.42	11	2	.06
28	52	4	.56	29	5	.39	9.8	2	.05
29	50	4	.54	27	5	.36	9.8	2	.05
30	49	4	.53	26	5	.35	9.8	2	.05
31	--	--	--	25	4	.27	--	--	--
TOTAL	2617	--	42.94	1212	--	20.68	506.4	--	4.32

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	9.8	2	.05	5.6	3	.05	5.8	5	.08
2	9.8	2	.05	5.6	3	.05	5.9	5	.08
3	10	2	.05	5.6	3	.05	5.6	5	.08
4	9.8	2	.05	5.6	3	.05	6.1	5	.08
5	9.2	2	.05	5.0	4	.05	6.1	5	.08
6	8.0	2	.04	5.0	4	.05	6.8	5	.09
7	8.0	2	.04	4.7	4	.05	6.7	5	.09
8	8.0	2	.04	4.7	4	.05	6.5	5	.09
9	8.0	2	.04	4.7	4	.05	6.6	5	.09
10	7.4	2	.04	4.7	4	.05	6.6	5	.09
11	7.4	2	.04	4.7	4	.05	6.1	5	.08
12	7.4	2	.04	5.0	4	.05	5.7	5	.08
13	7.4	2	.04	5.6	4	.06	6.0	5	.08
14	7.4	2	.04	6.2	4	.07	6.4	5	.09
15	8.0	2	.04	6.2	4	.07	6.5	5	.09
16	7.4	2	.04	6.8	4	.07	5.9	4	.06
17	7.4	2	.04	6.2	4	.07	5.0	4	.05
18	6.8	3	.06	6.2	4	.07	4.7	4	.05
19	6.2	3	.05	7.4	5	.10	4.7	4	.05
20	6.2	3	.05	14	10	.38	5.0	4	.05
21	6.2	3	.05	24	15	.97	5.0	4	.05
22	6.2	3	.05	13	12	.42	5.0	4	.05
23	5.6	3	.05	9.2	9	.22	5.0	4	.05
24	6.2	3	.05	7.4	7	.14	4.7	4	.05
25	6.2	3	.05	7.4	5	.10	4.7	4	.05
26	5.0	3	.04	7.4	5	.10	4.7	4	.05
27	5.0	3	.04	7.4	5	.10	4.4	4	.05
28	4.7	3	.04	7.4	5	.10	4.4	3	.04
29	5.0	3	.04	6.8	5	.09	4.4	3	.04
30	5.0	3	.04	5.6	5	.08	4.7	3	.04
31	5.0	3	.04	5.0	5	.07	--	--	--
TOTAL	219.7	--	1.38	220.1	--	3.88	165.7	--	2.00

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 49238.3
TOTAL LOAD FOR YEAR (TONS) 103434.31

11-4632. BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 30, 1967	1500	9	70	226	43	72	85	91	95	96	99	100	--	--	--	--	SBWC
DEC 18.....	0850	6	144	435	169	52	66	78	85	88	98	99	100	--	--	--	SBWC
JAN 10, 1968	1900	8	1760	1280	6080	30	38	51	62	76	84	95	98	100	--	--	VPWC
JAN 29.....	0915	6	4540	4110	50400	24	32	40	53	62	71	89	97	100	--	--	VPWC
JAN 30.....	1130	8	2300	1070	6640	--	35	--	57	--	78	91	99	100	--	--	VPWC
JAN 31.....	1100	8	1100	362	1080	18	26	37	42	45	74	84	92	98	100	--	VBWC
FEB 19.....	0830	11	360	159	155	16	35	54	63	70	94	97	100	--	--	--	SBWC

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 5, 1967.....	9	11
OCT. 11.....	3	2
OCT. 13.....	2	0
OCT. 18.....	1	1
NOV. 1.....	1	1
NOV. 6.....	2	1
NOV. 8.....	6	3
NOV. 10.....	2	1
NOV. 13.....	4	1
NOV. 15.....	550	168
NOV. 17.....	16	22
NOV. 20.....	4	3
NOV. 22.....	4	3
NOV. 27.....	2	1
NOV. 29.....	78	80
NOV. 30.....	226	320
DEC. 1.....	43	55
DEC. 3.....	4460	1250
DEC. 4.....	323	198
DEC. 5.....	144	128
DEC. 6.....	49	53
DEC. 7.....	228	182
DEC. 8.....	59	71
DEC. 11.....	11	11
DEC. 12.....	9	12
DEC. 13.....	6	7
DEC. 15.....	19	20
DEC. 18.....	435	260
DEC. 19.....	27	29
DEC. 20.....	16	17
DEC. 22.....	29	30
DEC. 27.....	10	8
DEC. 30.....	24	24
JAN. 1, 1968.....	3	3
JAN. 3.....	6	2
JAN. 6.....	19	23
JAN. 8.....	5	3
JAN. 10.....	1280	730
JAN. 11.....	124	82
JAN. 13.....	111	105
JAN. 14.....	359	215
JAN. 15.....	553	250
JAN. 16.....	901	365
JAN. 17.....	98	82
JAN. 18.....	49	40
JAN. 19.....	34	24
JAN. 22.....	12	92
JAN. 24.....	12	12
JAN. 26.....	6	5
JAN. 29.....	4110	935
JAN. 30.....	1070	500
JAN. 31.....	362	215
FEB. 1.....	190	130
FEB. 2.....	401	205
FEB. 5.....	43	37
FEB. 7.....	26	23
FEB. 9.....	15	12
FEB. 12.....	8	8
FEB. 13.....	9	7
FEB. 14.....	11	10
FEB. 16.....	28	27
FEB. 19.....	159	113
FEB. 20.....	454	275
FEB. 21.....	323	140
FEB. 22.....	199	115
FEB. 23.....	169	95
FEB. 24.....	80	55
FEB. 27.....	24	22
FEB. 29.....	17	12
MAR. 2.....	13	8
MAR. 4.....	7	4
MAR. 6.....	6	3
MAR. 9.....	6	4
MAR. 11.....	5	3
MAR. 12.....	1410	540
MAR. 13.....	181	115
MAR. 15.....	57	55
MAR. 16.....	668	330
MAR. 18.....	58	52
MAR. 21.....	16	17
MAR. 23.....	10	12
MAR. 25.....	7	8
MAR. 27.....	4	7
MAR. 30.....	3	3
APR. 1.....	19	19
APR. 3.....	4	6
APR. 5.....	3	3
APR. 8.....	2	3
APR. 12.....	6	2
APR. 15.....	4	2
APR. 17.....	2	1
APR. 19.....	2	1
APR. 24.....	6	1
APR. 26.....	3	2
APR. 29.....	4	1
MAY 14.....	8	3
JUNE 10.....	3	1
JULY 8.....	2	1
AUG. 14.....	4	2
SEPT 9.....	5	2

11-4640. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1965.
Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C on several days during July and August; minimum, 7°C on several days during December and January.
EXTREMES, 1965-68.--Water temperatures: Maximum, 26°C on several days in 1966-68; minimum, 6°C Dec. 21-23, 1965, Jan. 26, 1966.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	19	17	17	18	18	18	18	19	19	19	19	19	19	18	17	17	17	17	18	18	17	18	17	18	17	17	17	17	16	16	16	17
MINIMUM	17	14	14	14	16	15	16	16	16	17	17	17	16	15	14	14	14	14	15	15	16	17	16	16	15	14	14	16	13	13	13	15
NOVEMBER																																
MAXIMUM	16	16	16	16	16	17	17	17	16	16	16	16	16	16	16	15	16	16	14	14	14	13	12	12	12	11	11	11	12	11	--	14
MINIMUM	13	14	13	15	15	14	14	16	14	13	14	14	14	15	14	13	14	14	13	13	12	11	10	10	10	9	9	9	11	9	--	13
DECEMBER																																
MAXIMUM	9	11	12	12	12	11	11	11	11	11	11	10	9	8	8	8	9	9	8	8	9	9	9	9	10	11	12	11	11	9	9	9
MINIMUM	8	8	11	12	11	10	11	9	9	9	10	9	8	7	7	7	7	8	8	8	8	8	8	8	9	10	11	10	9	8	8	8
JANUARY																																
MAXIMUM	9	8	8	8	8	8	8	8	9	10	9	9	10	11	12	11	10	10	10	11	11	11	12	11	11	11	10	9	9	9	9	9
MINIMUM	8	8	7	7	7	8	8	8	8	9	8	7	8	10	11	10	9	9	9	9	10	11	11	11	11	9	9	8	8	9	9	8
FEBRUARY																																
MAXIMUM	9	10	11	11	11	11	11	12	12	12	12	12	12	12	13	13	13	13	13	14	14	14	15	16	16	16	16	13	13	--	--	13
MINIMUM	8	9	10	11	11	11	11	11	12	12	11	11	12	11	12	13	12	13	13	13	14	13	13	14	14	14	13	13	13	--	--	12
MARCH																																
MAXIMUM	13	14	14	15	15	14	14	14	14	13	13	13	12	12	13	12	12	12	12	13	13	13	14	15	15	14	15	16	17	17	17	14
MINIMUM	12	12	13	14	14	13	13	12	12	12	12	12	11	12	12	12	11	11	11	12	12	13	13	13	14	13	13	14	15	16	16	12
APRIL																																
MAXIMUM	16	16	16	16	16	16	17	17	18	19	19	18	18	19	18	16	16	17	18	17	17	18	18	19	19	20	21	21	21	21	--	18
MINIMUM	14	13	14	14	14	13	14	15	16	16	16	16	14	14	15	13	12	12	13	13	12	13	14	14	14	16	17	16	17	17	--	14
MAY																																
MAXIMUM	21	21	18	18	19	19	20	20	18	20	19	19	18	19	20	21	22	22	20	22	21	21	22	19	22	23	23	24	23	23	22	21
MINIMUM	15	16	17	16	14	14	14	16	16	14	15	14	15	13	14	14	16	17	18	18	17	16	16	16	17	18	20	19	21	22	21	16
JUNE																																
MAXIMUM	23	23	23	22	22	22	22	22	23	23	23	22	21	23	24	24	24	24	23	24	24	25	25	25	24	24	24	24	23	23	--	23
MINIMUM	21	22	22	21	21	20	20	21	21	21	22	21	20	21	22	24	23	22	22	22	23	24	24	24	23	23	22	22	21	21	--	22
JULY																																
MAXIMUM	23	23	24	25	26	26	24	23	24	24	24	24	25	24	24	24	24	26	26	26	24	24	24	24	24	24	24	23	24	24	23	24
MINIMUM	22	22	22	22	24	23	22	22	22	23	22	23	23	23	22	22	22	23	24	23	22	22	22	22	22	22	22	22	22	23	22	22
AUGUST																																
MAXIMUM	24	24	24	24	24	25	24	24	24	24	23	23	22	23	23	23	23	22	22	21	21	22	23	23	23	23	24	24	26	26	25	23
MINIMUM	21	22	22	22	21	22	23	23	22	22	22	22	22	22	21	21	21	21	21	19	19	19	21	21	22	22	22	23	23	23	23	21
SEPTEMBER																																
MAXIMUM	24	23	23	23	22	22	22	22	22	22	23	23	22	23	22	23	24	24	21	20	21	21	22	22	22	22	22	22	20	21	--	22
MINIMUM	23	22	22	22	21	21	21	21	21	21	20	19	19	21	19	18	20	19	18	16	15	15	16	17	17	17	17	17	17	16	--	18

11-4645. 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.
RECORDS AVAILABLE.--Water temperatures: May 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 29°C June 24; minimum, 3°C on several days during December and January.
EXTREMES, 1965-68.--Water temperatures: Maximum (1965-66, 1967-68), 33°C Aug. 6, 7, 1966; minimum (1966-68), 3°C on several days in 1967 and 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	22	23	23	22	23	22	23	23	23	23	26	21	22	21	21	20	21	20	21	19	19	21	20	20	19	19	19	19	18	18	18	21
MINIMUM	18	17	17	17	17	16	16	16	17	17	17	19	19	16	14	14	14	14	16	14	16	17	15	15	15	14	14	14	13	13	13	16
NOVEMBER																																
MAXIMUM	18	17	16	16	17	18	17	17	17	18	16	16	15	17	17	17	17	16	16	16	15	14	14	14	14	13	12	11	11	10	--	15
MINIMUM	13	13	12	14	14	14	13	14	13	14	14	14	14	14	14	12	12	12	12	12	10	9	9	9	9	8	8	9	9	8	--	12
DECEMBER																																
MAXIMUM	10	10	12	11	11	10	11	10	10	11	11	9	7	7	7	7	7	7	7	6	7	8	9	9	10	10	11	10	9	9	9	9
MINIMUM	8	8	10	10	8	8	9	8	8	9	7	5	3	3	3	3	4	6	4	4	5	6	6	6	5	6	7	6	5	4	4	6
JANUARY																																
MAXIMUM	8	7	8	8	9	8	8	7	8	9	8	8	9	9	10	10	9	9	9	9	10	11	10	10	10	8	8	7	8	9	10	8
MINIMUM	4	3	3	3	4	4	5	6	7	8	4	4	8	8	8	8	7	7	7	8	9	7	7	7	7	6	6	5	7	8	8	6
FEBRUARY																																
MAXIMUM	9	10	12	12	12	12	13	12	12	12	12	13	12	13	14	12	14	14	13	14	14	14	16	17	17	17	16	17	16	--	--	13
MINIMUM	8	8	10	10	10	10	10	11	11	9	9	9	10	11	11	12	12	13	13	13	13	13	14	14	13	13	14	13	13	--	--	11
MARCH																																
MAXIMUM	14	16	17	16	17	14	12	15	14	14	14	11	11	12	13	12	13	13	14	13	13	13	16	16	16	16	17	18	19	19	18	14
MINIMUM	13	11	12	12	12	11	11	10	9	9	10	10	10	10	10	10	9	9	9	9	9	10	11	11	12	9	10	11	12	12	12	10
APRIL																																
MAXIMUM	13	18	18	16	18	18	18	19	21	21	21	19	21	21	18	18	18	19	20	18	19	19	19	21	21	22	23	22	23	22	--	19
MINIMUM	11	11	11	11	11	11	11	12	12	13	14	13	12	12	12	10	10	10	11	11	10	11	11	12	12	13	13	13	14	15	--	12
MAY																																
MAXIMUM	23	23	21	21	21	22	22	22	22	23	21	21	18	20	23	23	23	24	20	22	22	23	23	19	24	24	26	26	24	25	24	22
MINIMUM	13	14	15	15	13	12	13	14	14	14	13	13	12	12	12	13	15	15	17	16	16	14	14	14	16	15	16	17	16	16	16	14
JUNE																																
MAXIMUM	27	24	24	26	20	24	25	26	24	26	26	23	24	25	27	28	27	27	26	27	28	27	28	29	27	27	27	26	26	26	--	26
MINIMUM	16	17	17	16	16	15	15	16	16	16	17	16	14	15	17	18	18	18	18	18	18	18	19	19	19	19	19	17	16	17	--	17
JULY																																
MAXIMUM	26	26	26	27	28	26	27	26	27	26	27	28	26	27	26	26	26	28	27	28	27	27	26	26	26	27	26	24	27	26	24	26
MINIMUM	17	18	18	18	26	19	19	19	18	19	19	25	18	19	18	18	18	19	19	19	19	19	24	19	18	18	19	18	19	19	19	19
AUGUST																																
MAXIMUM	27	26	26	26	26	27	26	26	26	26	24	26	24	24	24	25	26	24	23	22	22	26	27	27	24	26	27	27	28	28	28	26
MINIMUM	19	19	19	19	19	18	19	19	19	19	18	19	18	19	18	18	18	19	18	19	19	18	18	19	20	20	19	19	20	20	21	19
SEPTEMBER																																
MAXIMUM	28	27	26	26	27	26	26	26	26	26	26	26	24	26	24	25	26	24	22	22	22	22	23	23	23	22	22	22	21	21	--	24
MINIMUM	21	21	21	21	21	21	21	21	20	18	18	18	18	20	18	18	18	18	16	16	15	14	14	15	16	16	16	16	16	16	--	19

11-4652. 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.
RECORDS AVAILABLE.--Water temperatures: March 1964 to September 1968.
Sediment records: March 1964 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 23°C on several days during June; minimum, 6°C Dec. 20, Jan. 12.
Sediment concentrations: Maximum daily, 3,020 mg/l Jan. 29; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 44,600 tons Jan. 29; minimum daily, 0 ton on many days during July to September.
EXTREMES, 1964-68.--Water temperatures: Maximum, 25°C Sept. 15, 30, Oct. 6, 1965; minimum (1964-66, 1967-68), 6°C on several days in 1965, 1967-68.
Sediment concentrations: Maximum daily, 15,000 mg/l (estimated) Dec. 22, 1964; minimum daily, no flow on many days in 1964 and 1966.
Sediment loads: Maximum daily, 830,000 tons (estimated) Dec. 22, 1964; minimum daily, 0 ton on many days in 1964, 1966, and 1968.
REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	19	17	19	19	20	20	20	20	21	21	21	21	21	20	19	19	19	19	19	19	18	20	19	19	19	18	18	18	17	18	18	19
MINIMUM	17	16	15	16	16	16	16	17	17	18	18	15	17	17	16	16	17	17	17	17	17	18	17	17	16	16	16	16	15	15	15	16
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	18	18	17	17	18	18	18	18	17	18	18	17	17	17	17	17	17	17	17	17	17	16	16	16	15	15	14	14	13	12	--	16
MINIMUM	16	15	15	16	16	16	16	16	16	16	16	16	16	16	15	14	14	16	14	14	14	13	13	13	13	12	12	12	10	9	--	14
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	11	12	12	12	10	11	10	11	11	12	12	11	10	9	10	10	10	10	8	8	9	9	10	11	11	12	12	12	11	11	11	11
MINIMUM	9	10	10	11	8	9	9	9	8	10	11	9	8	7	7	8	8	8	7	6	7	8	8	8	9	10	10	10	9	9	9	9
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	11	11	11	10	11	10	10	11	11	11	10	9	11	11	12	12	11	10	10	11	11	11	11	11	11	11	9	8	9	10	10	10
MINIMUM	9	9	8	8	8	8	9	9	9	9	8	6	9	10	11	10	8	8	9	8	9	9	9	9	9	8	8	7	7	9	9	9
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	11	11	12	12	13	13	14	12	13	14	13	13	12	13	14	12	14	14	13	13	13	14	14	16	16	17	15	16	16	--	--	14
MINIMUM	11	10	11	11	11	11	12	12	12	12	11	10	10	11	12	12	12	13	13	13	13	14	14	13	13	13	14	13	13	--	--	12
MARCH....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	14	16	16	16	16	14	12	14	14	14	13	11	12	12	12	12	13	13	13	13	13	12	15	15	15	15	16	17	18	18	17	14
MINIMUM	13	12	12	13	13	12	13	11	9	9	11	10	9	10	10	10	9	9	9	8	9	10	11	11	11	9	10	11	12	12	13	11
APRIL....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	13	16	17	14	17	16	18	17	18	18	20	18	19	20	18	18	18	18	19	18	18	18	19	20	21	21	21	21	22	21	--	18
MINIMUM	11	11	11	11	11	11	11	12	12	13	13	14	13	14	13	12	12	12	13	12	12	13	13	13	14	14	14	16	16	15	--	13
MAY.....	--	--	--	--	--	--	--	22	21	21	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	19	19	20	21	21	21	--	--	--	--	--	--	18	20	21	20	21	18	19	19	19	20	17	21	21	22	22	21	21	21	20
MINIMUM	14	16	16	14	14	14	14	--	--	--	--	--	--	13	13	13	15	15	16	16	15	14	14	14	16	15	16	16	16	16	16	15
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	21	21	21	19	21	21	21	22	22	22	20	21	21	22	23	22	22	22	23	23	23	23	23	23	22	23	22	21	22	--	22
MINIMUM	16	17	17	16	15	15	16	16	16	16	17	16	15	16	17	18	18	18	18	18	18	18	18	18	18	19	18	18	17	17	--	17
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	21	21	22	22	22	22	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	17	18	18	18	19	19	19	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20	20	21	21	21	20	20	20	20	20	20	21	21	21	21	21	22	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19	19	19	19	19	19	19	18	18	18	19	19	19	19	19	20	21	--
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	21	21	21	21	21	21	21	20	21	20	21	21	21	20	20	21	21	20	19	19	18	19	19	19	20	20	20	20	20	--	20
MINIMUM	20	20	20	20	20	20	20	19	19	19	19	19	19	20	19	19	19	19	19	18	18	17	18	18	18	18	18	18	18	18	--	19

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	2.8	3	.02	4.6	4	.05	66	17	3.0
2	3.2	4	.03	4.6	3	.04	37	7	.70
3	4.0	5	.05	4.6	1	.01	827	1480	5410
4	4.1	5	.06	4.6	1	.01	535	518	1690
5	4.3	5	.06	4.6	2	.02	820	598	2000
6	4.2	5	.06	4.6	2	.02	230	55	34
7	4.1	5	.06	4.6	2	.02	941	1110	3940
8	4.1	5	.06	4.6	2	.02	300	92	75
9	4.0	5	.05	4.6	2	.02	188	21	11
10	4.3	5	.06	4.9	2	.03	140	12	4.5
11	4.1	5	.06	4.9	3	.04	100	9	2.4
12	4.0	5	.05	4.9	2	.03	80	11	2.4
13	4.1	5	.06	6.2	3	.05	66	9	1.6
14	4.1	4	.04	58	28	5.7	52	7	.98
15	4.1	4	.04	39	25	2.6	50	7	.95
16	4.3	4	.05	25	26	1.8	49	7	.93
17	4.3	3	.03	20	13	.70	49	6	.79
18	4.3	3	.03	16	4	.17	273	325	280
19	4.3	3	.03	13	3	.11	222	190	114
20	4.1	3	.03	12	5	.16	160	120	52
21	4.1	3	.03	12	7	.23	120	110	36
22	4.1	3	.03	9.3	4	.10	97	110	29
23	4.3	3	.03	8.4	2	.05	82	100	22
24	4.3	3	.03	8.0	3	.06	73	100	20
25	4.3	3	.03	7.7	5	.10	67	100	18
26	4.3	3	.03	7.7	3	.06	60	100	16
27	4.3	3	.03	7.4	1	.02	55	95	14
28	4.3	3	.03	7.4	1	.02	50	95	13
29	4.3	3	.03	16	3	.21	45	90	11
30	4.3	3	.03	78	59	13	42	90	10
31	4.6	4	.05	--	--	--	38	85	8.7
TOTAL	128.0	--	1.28	407.2	--	25.45	5914	--	13821.95

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	37	85	8.5	1180	200	637	424	58	66
2	36	80	7.8	1560	610	2570	368	51	51
3	33	80	7.1	1340	270	977	330	38	34
4	32	80	6.9	1060	195	558	309	31	26
5	31	75	6.3	870	110	258	294	25	20
6	31	72	6.0	720	80	156	270	21	15
7	31	65	5.4	605	60	98	252	21	14
8	31	60	5.0	516	43	60	252	22	15
9	44	101	18	456	36	44	226	18	11
10	2450	1960	16300	388	30	31	206	13	7.2
11	630	800	1360	336	22	20	192	12	6.2
12	351	360	341	312	18	15	639	1490	5220
13	309	270	225	300	18	15	1340	600	2490
14	2250	1370	12500	279	17	13	1090	250	736
15	2740	1250	9790	270	16	12	924	135	337
16	1400	650	2460	546	378	711	1740	1870	10300
17	870	290	681	1290	856	3200	1590	350	1500
18	625	180	304	967	150	392	1090	250	736
19	456	140	172	2220	933	10400	864	130	303
20	357	95	92	3100	1100	10600	685	130	240
21	282	70	53	2500	902	6440	555	150	225
22	238	60	39	1740	340	1600	460	160	199
23	216	40	23	1310	220	778	424	70	80
24	194	22	12	1040	150	421	351	65	62
25	176	18	8.6	852	110	253	315	32	27
26	168	17	7.7	720	80	156	279	20	15
27	166	12	5.4	615	70	116	258	16	11
28	183	31	19	525	65	92	232	11	6.9
29	4240	3020	44600	468	60	76	218	9	5.3
30	3750	1490	18300	--	--	--	210	7	4.0
31	1770	400	1910	--	--	--	200	6	3.2
TOTAL	24127	--	109273.7	28085	--	40699	16587	--	22765.8

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	252	35	24	48	7	.91	18	6	.29
2	240	16	10	47	7	.89	18	3	.15
3	202	6	3.3	47	7	.89	16	6	.26
4	186	6	3.0	47	8	1.0	16	4	.17
5	176	7	3.3	47	4	.51	15	5	.20
6	164	8	3.5	46	6	.75	15	5	.20
7	152	7	2.9	46	4	.50	15	6	.24
8	144	6	2.3	44	8	.95	15	6	.24
9	138	5	1.9	40	5	.54	14	5	.19
10	130	8	2.8	39	5	.53	13	6	.21
11	118	6	1.9	38	9	.92	12	5	.16
12	116	8	2.5	37	5	.50	12	4	.13
13	116	7	2.2	37	7	.70	12	5	.16
14	108	6	1.7	39	7	.74	10	5	.14
15	94	5	1.3	39	6	.63	9.0	5	.12
16	91	9	2.2	38	4	.41	8.7	6	.14
17	85	5	1.1	38	7	.72	8.4	6	.14
18	82	4	.89	37	6	.60	8.0	6	.13
19	79	5	1.1	35	4	.38	8.4	6	.14
20	79	5	1.1	30	4	.32	8.0	6	.13
21	73	4	.79	32	7	.60	7.4	7	.14
22	72	4	.78	32	8	.69	6.0	7	.11
23	70	5	.95	32	7	.60	4.8	7	.09
24	70	8	1.5	30	6	.49	3.9	7	.07
25	68	6	1.1	32	6	.52	4.4	9	.11
26	68	8	1.5	33	6	.53	5.0	11	.15
27	60	7	1.1	29	7	.55	4.6	10	.12
28	55	8	1.2	27	5	.36	4.1	8	.09
29	50	7	.95	25	7	.47	3.5	7	.07
30	49	7	.93	24	3	.19	3.3	6	.05
31	--	--	--	21	7	.40	--	--	--
TOTAL	3387	--	83.79	1136	--	18.79	298.5	--	4.54

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	3.3	5	.04	.56	1	0	.50	2	0
2	3.2	5	.04	.49	1	0	.35	1	0
3	3.4	8	.07	.44	1	0	.24	1	0
4	3.5	10	.09	.41	1	0	.24	1	0
5	3.5	12	.11	.36	1	0	.35	2	0
6	3.3	10	.09	.34	1	0	.35	3	0
7	3.0	8	.06	.30	1	0	.24	1	0
8	2.7	6	.04	.27	1	0	.35	2	0
9	2.5	5	.03	.25	1	0	.35	2	0
10	2.2	4	.02	.24	1	0	.30	3	0
11	2.0	4	.02	.22	1	0	.27	4	0
12	1.8	3	.01	.20	1	0	.25	2	0
13	1.7	3	.01	.17	1	0	.23	1	0
14	1.6	2	.01	.16	1	0	.22	1	0
15	1.7	2	.01	.15	1	0	.22	1	0
16	1.7	2	.01	.14	1	0	.21	2	0
17	1.6	2	.01	.13	1	0	.19	2	0
18	1.5	2	.01	.14	1	0	.18	2	0
19	1.4	2	.01	.20	1	0	.17	1	0
20	1.3	2	.01	1.3	1	0	.17	1	0
21	1.2	1	0	1.7	1	0	.16	1	0
22	1.1	1	0	1.5	1	0	.16	1	0
23	1.0	1	0	.77	1	0	.15	2	0
24	.90	1	0	.95	1	0	.15	1	0
25	.86	1	0	.77	1	0	.15	1	0
26	.80	1	0	.64	1	0	.14	1	0
27	.75	1	0	.64	1	0	.13	1	0
28	.70	1	0	.64	1	0	.13	1	0
29	.66	1	0	.50	1	0	.13	1	0
30	.65	1	0	.64	3	.01	.12	2	0
31	.61	1	0	.64	3	.01	--	--	--
TOTAL	56.13	--	.70	15.86	--	.02	6.80	--	0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 80148.49
TOTAL LOAD FOR YEAR (TONS) 186695.02

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 3, 1967	1000	11	2010	3780	20500	35	44	60	81	84	92	97	100	--	--	--	VPWC
DEC 7.....	0845	10	1520	1660	6810	38	52	66	80	92	96	97	98	100	--	--	SPWC
DEC 18.....	1040	8	330	380	339	55	69	79	85	87	94	94	95	95	100	--	SBWC
JAN 29, 1968	1610	9	5000	3600	48600	21	23	30	42	55	63	86	96	99	100	--	VPWC
FEB 20.....	1005	13	3130	813	6870	23	33	43	50	53	79	88	98	100	--	--	SBWC
MAR 12.....	1630	11	924	2850	7110	24	32	43	56	72	81	90	99	100	--	--	VPWC
MAR 16.....	0825	12	1960	2540	13400	24	33	43	54	67	77	88	98	99	99	100	VPWC

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 12, 1967	5	1
OCT. 12	3	1
OCT. 25	3	1
NOV. 1	4	1
NOV. 3	1	1
NOV. 6	2	1
NOV. 7	2	1
NOV. 8	2	1
NOV. 9	2	1
NOV. 10	2	1
NOV. 11	3	1
NOV. 12	2	1
NOV. 13	3	1
NOV. 14	38	48
NOV. 15	24	48
NOV. 16	28	20
NOV. 17	12	11
NOV. 18	3	1
NOV. 19	3	1
NOV. 20	5	3
NOV. 21	8	1
NOV. 22	4	1
NOV. 23	2	1
NOV. 24	2	1
NOV. 25	6	1
NOV. 26	2	1
NOV. 27	1	1
NOV. 28	15	1
NOV. 29	1	1
NOV. 30	74	100
DEC. 1	7	1
DEC. 2	7	3
DEC. 3	3780	2050
DEC. 5	243	155
DEC. 6	56	60
DEC. 7	1660	730
DEC. 8	59	54
DEC. 9	81	45
DEC. 10	12	9
DEC. 11	7	5
DEC. 12	11	4
DEC. 13	9	3
DEC. 14	20	4
DEC. 15	10	3
DEC. 16	11	4
DEC. 17	6	2
DEC. 18	380	215
JAN. 6, 1968	72	56
JAN. 7	62	36
JAN. 18	182	115
JAN. 19	153	115
JAN. 20	84	29
JAN. 21	70	29
JAN. 22	62	11
JAN. 23	39	15
JAN. 24	18	5
JAN. 25	20	6
JAN. 26	19	4
JAN. 27	11	3
JAN. 28	21	3
JAN. 29	3600	790
JAN. 30	1270	480
JAN. 31	409	220
FEB. 1	196	120
FEB. 2	1020	480
FEB. 3	261	170
FEB. 4	201	130
FEB. 5	116	83
FEB. 8	41	24
FEB. 9	37	22
FEB. 10	29	15
FEB. 11	21	12
FEB. 12	17	10
FEB. 13	30	13
FEB. 14	17	6
FEB. 15	16	5
FEB. 16	198	75
FEB. 17	1290	235
FEB. 18	137	85
FEB. 19	167	100
FEB. 20	813	440
FEB. 21	1240	500
FEB. 22	350	155
FEB. 23	228	130
FEB. 24	230	135
FEB. 25	102	85
FEB. 26	79	65
FEB. 28	59	45
FEB. 29	60	45
MAR. 1	59	30
MAR. 2	51	19
MAR. 3	38	19
MAR. 4	30	8
MAR. 5	17	9
MAR. 6	21	9
MAR. 7	36	10
MAR. 8	23	13
MAR. 9	34	14
MAR. 10	11	4
MAR. 11	12	6
MAR. 12	2850	535
MAR. 13	286	260
MAR. 14	272	195
MAR. 15	132	90
MAR. 16	2540	435
MAR. 17	290	130
MAR. 18	274	130
MAR. 19	116	90
MAR. 20	131	85
MAR. 22	184	53
MAR. 23	60	40
MAR. 24	72	37
MAR. 25	28	20
MAR. 26	20	19
MAR. 27	15	11
MAR. 28	11	9
MAR. 29	9	7
MAR. 30	21	6
MAR. 31	5	3
APR. 1	8	5
APR. 2	15	13
APR. 3	6	6
APR. 4	6	5
APR. 5	7	4
APR. 6	8	3
APR. 7	7	5
APR. 8	6	3
APR. 9	5	4
APR. 10	8	5
APR. 11	6	2
APR. 12	8	2
APR. 13	7	4
APR. 14	10	1
APR. 15	5	1
APR. 16	9	3
APR. 17	5	0
APR. 18	4	0
APR. 19	5	0
APR. 20	5	0
APR. 21	4	0
APR. 22	11	0
APR. 23	5	0
APR. 24	8	0
APR. 25	6	0
APR. 26	8	0
APR. 27	7	0
APR. 28	8	0
APR. 29	18	1
APR. 30	7	1
MAY 1	13	0

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
MAY 2	10	0
MAY 3	7	1
MAY 4	8	0
MAY 5	4	0
MAY 6	6	0
MAY 7	4	0
MAY 8	8	0
MAY 9	5	0
MAY 10	5	0
MAY 11	9	0
MAY 12	5	2
MAY 13	2	0
MAY 14	10	1
MAY 15	6	2
MAY 16	4	1
MAY 17	7	1
MAY 18	6	2
MAY 19	4	1
MAY 20	4	1
MAY 21	7	1
MAY 22	8	1
MAY 23	7	2
MAY 24	10	1
MAY 25	14	1
MAY 26	6	1
MAY 27	7	2
MAY 28	5	1
MAY 29	7	3
MAY 30	3	1
MAY 31	7	1
JUNE 1	6	1
JUNE 2	3	1
JUNE 3	6	1
JUNE 4	4	1
JUNE 5	5	1
JUNE 6	5	1
JUNE 7	6	1
JUNE 10	5	1
JUNE 12	4	1
JUNE 14	5	2
JUNE 17	6	2
JUNE 19	6	1
JUNE 21	7	0
JUNE 24	7	1
JUNE 26	11	2
JUNE 28	8	1
JULY 1	5	0
JULY 5	12	4
JULY 8	6	1
JULY 10	4	0
JULY 12	3	0
JULY 15	2	0
JULY 17	2	0
JULY 19	2	0
JULY 22	1	0
JULY 24	1	0
JULY 26	1	0
JULY 29	1	0
JULY 31	1	0
AUG. 2	1	0
AUG. 5	1	0
AUG. 9	1	0
AUG. 14	1	0
AUG. 16	1	0
AUG. 19	1	0
AUG. 21	1	0
AUG. 23	5	0
AUG. 26	1	0
AUG. 28	1	0
AUG. 30	3	0
SEPT. 2	1	0
SEPT. 4	1	0
SEPT. 6	3	0
SEPT. 9	2	0
SEPT. 11	2	1
SEPT. 13	1	0
SEPT. 16	2	0
SEPT. 18	7	0
SEPT. 20	1	0
SEPT. 23	4	0
SEPT. 25	1	0
SEPT. 27	1	0
SEPT. 30	2	0

11-4670. RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.

LOCATION.--Lat 38°30'00", long 122°56'05", in NE¼ 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1965.
Water temperatures: January 1964 to September 1968.
Sediment records: October 1966 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 28°C on several days during June and July; minimum, 4°C Dec. 15, Jan. 12.
EXTREMES, 1964-68.--Water temperatures: Maximum, 28°C on several days in 1964 and 1968; minimum (1965-68), 4°C Dec. 15, 1967, Jan. 12, 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	--	17	18	18	19	19	19	19	19	20	20	21	21	19	18	18	18	18	18	18	18	18	19	19	18	18	18	18	17	17	16	18
MINIMUM	--	17	17	17	18	18	18	18	18	19	19	19	19	18	17	17	17	17	18	18	18	18	18	18	18	18	17	17	17	16	16	17
NOVEMBER																																
MAXIMUM	17	17	17	17	17	17	17	17	17	17	16	16	15	15	16	15	15	15	16	15	14	14	13	13	12	12	11	11	11	11	--	14
MINIMUM	16	17	17	17	17	17	17	17	17	16	16	16	15	15	15	15	15	15	15	14	14	13	12	12	12	11	11	11	11	11	--	14
DECEMBER																																
MAXIMUM	9	9	9	9	9	9	8	8	8	8	8	8	8	6	5	6	6	7	6	6	6	7	7	8	8	9	9	10	10	9	9	8
MINIMUM	9	9	9	9	9	8	8	8	8	8	8	8	6	5	4	5	6	6	6	6	6	6	7	7	8	8	9	9	9	9	8	7
JANUARY																																
MAXIMUM	9	8	8	7	7	6	6	6	6	7	6	7	8	9	10	10	10	9	9	9	10	11	11	11	11	11	11	9	9	9	8	8
MINIMUM	8	8	7	6	6	6	6	6	6	6	6	4	7	8	9	10	9	9	9	9	9	9	10	11	11	11	9	9	8	8	8	8
FEBRUARY																																
MAXIMUM	8	9	9	10	11	11	11	11	11	11	11	11	11	11	12	12	13	12	14	14	14	14	14	15	15	15	15	14	13	--	--	12
MINIMUM	9	8	9	9	9	11	11	11	11	11	11	11	11	11	11	12	12	11	12	14	14	14	14	14	15	15	14	13	13	--	--	12
MARCH																																
MAXIMUM	13	13	14	14	14	14	13	13	13	13	13	13	12	11	12	12	12	12	12	13	13	13	14	14	15	14	15	16	17	17	17	13
MINIMUM	13	13	13	14	14	13	13	12	12	12	12	12	10	11	11	11	11	11	12	11	12	13	13	14	14	14	14	14	16	17	16	13
APRIL																																
MAXIMUM	17	14	16	16	16	16	16	17	18	19	18	18	17	18	18	17	15	16	17	17	17	17	17	18	19	20	21	21	21	21	--	17
MINIMUM	14	13	14	14	14	14	15	16	17	17	18	17	17	17	17	15	14	15	16	16	16	16	16	16	18	18	19	19	18	19	--	16
MAY																																
MAXIMUM	21	22	21	19	20	20	21	21	21	21	20	20	19	19	21	22	22	23	22	23	23	23	23	21	23	25	26	27	27	27	26	22
MINIMUM	19	19	20	18	18	18	18	19	19	18	19	18	18	17	18	19	20	21	21	21	20	19	19	19	19	20	22	23	23	23	22	19
JUNE																																
MAXIMUM	26	26	26	26	24	24	26	26	26	25	25	24	24	25	27	27	28	28	28	26	27	27	28	28	27	26	27	27	26	26	--	26
MINIMUM	23	23	24	22	21	21	21	22	22	20	21	21	20	21	23	22	23	23	23	22	22	23	24	23	23	23	22	23	22	21	--	22
JULY																																
MAXIMUM	26	26	26	27	28	27	26	26	26	26	26	26	27	27	27	27	27	28	28	28	27	27	26	26	26	26	26	24	24	26	26	26
MINIMUM	22	22	22	22	23	23	23	23	23	23	22	22	23	23	23	23	22	23	23	24	23	22	22	22	22	22	22	22	22	22	23	22
AUGUST																																
MAXIMUM	25	26	24	25	25	26	26	26	26	26	24	23	23	24	24	24	24	23	22	22	21	22	23	24	23	23	24	26	27	27	26	24
MINIMUM	22	22	22	22	22	22	23	23	22	22	22	22	21	21	22	22	21	21	21	21	20	20	21	21	22	22	22	22	23	23	23	22
SEPTEMBER																																
MAXIMUM	26	26	24	22	23	23	22	22	23	23	23	24	23	23	23	24	24	24	23	21	20	20	21	22	22	22	22	21	20	20	--	22
MINIMUM	23	23	22	21	21	21	21	21	21	21	21	22	21	22	21	21	21	21	21	19	18	17	18	18	19	19	19	19	19	18	--	20

11-4670. RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

MONTHLY AND ANNUAL SUMMARY OF SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DISCHARGE (CFS)	SUSPENDED-SEDIMENT (TONS)
OCTOBER 1967...	10,527	630
NOVEMBER.....	8,614	1,422
DECEMBER.....	36,276	44,912
JANUARY 1968...	176,154	747,461
FEBRUARY.....	190,220	253,717
MARCH.....	118,990	97,089
APRIL.....	24,370	917
MAY.....	6,940	252
JUNE.....	4,531	152
JULY.....	5,207	210
AUGUST.....	5,927	208
SEPTEMBER.....	4,665	99
TOTAL FOR YEAR...	592,421	1,147,069

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 10, 1968	0900	7	13700	2600	96200	32	43	56	69	82	89	98	100	--	--	--	VPWC
JAN 12.....	1605	6	4600	236	2930	20	27	33	38	41	67	91	100	--	--	--	VBWC
MAR 4.....	1500	14	2350	29	184	24	40	57	65	70	95	100	--	--	--	--	SBWC
MAR 21.....	1515	12	4300	136	1580	24	34	48	57	62	95	98	99	100	--	--	SBWC
MAY 28.....	1330	23	89	15	3.6	71	79	92	95	97	100	--	--	--	--	--	SBWC

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 2, 1967.....	27	25
OCT. 4.....	15	8
OCT. 11.....	16	10
OCT. 18.....	42	10
OCT. 25.....	23	9
NOV. 1.....	28	91
NOV. 8.....	27	87
NOV. 9.....	24	18
NOV. 13.....	26	90
NOV. 20.....	28	96
NOV. 22.....	24	94
NOV. 24.....	28	93
NOV. 27.....	32	88
DEC. 15.....	14	7
JAN. 3, 1968.....	30	90
JAN. 10.....	2600	1520
JAN. 12.....	236	160
FEB. 12.....	74	65
FEB. 14.....	64	66
FEB. 16.....	162	100
FEB. 21.....	598	230
MAR. 4.....	29	27
MAR. 6.....	10	7
MAR. 8.....	9	6
MAR. 11.....	7	8
MAR. 21.....	134	85
MAR. 29.....	31	13
APR. 1.....	29	9
APR. 23.....	9	4
MAY 1.....	14	6
MAY 2.....	13	6
MAY 28.....	14	5
JUNE 5.....	25	13
JUNE 7.....	13	12
JUNE 10.....	10	13
JUNE 12.....	13	14
JUNE 14.....	11	18
JUNE 17.....	13	14
JUNE 18.....	16	15
JUNE 21.....	13	13
JUNE 24.....	12	15
JUNE 26.....	11	10
JUNE 28.....	10	11
JULY 1.....	16	12
JULY 3.....	16	13
JULY 5.....	18	13
JULY 8.....	14	13
JULY 10.....	15	13
JULY 12.....	16	13
JULY 15.....	16	11
JULY 17.....	13	12
JULY 19.....	14	12
JULY 22.....	15	13
JULY 24.....	17	11
JULY 26.....	12	13
JULY 29.....	14	12
JULY 31.....	14	11
AUG. 2.....	13	10
AUG. 5.....	14	9
AUG. 7.....	12	9
AUG. 9.....	15	10
AUG. 12.....	12	9
AUG. 14.....	15	11
AUG. 16.....	14	10
AUG. 19.....	15	11
AUG. 21.....	13	12
AUG. 23.....	13	10
AUG. 26.....	15	12
AUG. 28.....	6	7
AUG. 30.....	11	5
SEPT. 2.....	8	7
SEPT. 4.....	7	7
SEPT. 6.....	4	7
SEPT. 9.....	4	6
SEPT. 11.....	5	5
SEPT. 13.....	9	6
SEPT. 16.....	8	8
SEPT. 18.....	9	7
SEPT. 20.....	8	7
SEPT. 23.....	10	6
SEPT. 25.....	8	6
SEPT. 27.....	7	7
SEPT. 30.....	16	13

11-4676. 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.
RECORDS AVAILABLE.--Water temperatures: October 1963 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C Aug. 29, 30; minimum, 5°C Dec. 14-16.
EXTREMES, 1963-68.--Water temperatures: Maximum, 22°C June 22, 1964, Aug. 29, 30, 1968; minimum, 5°C Dec. 14-16, 1967.
REMARKS.--Recorder stopped Feb. 6-28; temperature range, 9°C to 14°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	17	16	17	17	18	17	17	17	18	17	18	18	17	17	17	17	17	17	17	16	15	17	17	17	16	16	17	16	16	16	16	16
MINIMUM	15	14	14	14	15	14	14	14	14	16	15	16	14	13	13	13	13	14	14	14	14	15	15	14	14	14	13	14	13	12	13	14
NOVEMBER																																
MAXIMUM	16	16	16	15	16	17	16	16	16	16	16	14	16	16	15	15	15	15	14	14	14	13	13	13	13	13	12	12	11	10	--	14
MINIMUM	13	12	13	13	14	14	14	15	14	14	14	14	14	13	14	13	13	14	12	13	12	11	11	11	11	11	11	11	10	9	--	12
DECEMBER																																
MAXIMUM	10	11	12	12	11	11	11	11	10	11	11	9	8	6	7	7	8	7	8	8	8	9	9	9	9	9	8	7	8	8	8	9
MINIMUM	8	9	11	11	10	9	10	10	9	10	9	8	6	5	5	5	7	7	7	6	7	7	7	7	8	8	7	6	7	7	7	7
JANUARY																																
MAXIMUM	9	8	7	8	8	8	10	10	10	10	9	9	10	11	12	11	10	9	10	10	11	11	11	11	11	10	10	9	9	9	9	9
MINIMUM	7	7	6	6	7	7	8	9	9	9	7	7	9	10	11	10	9	8	9	8	9	9	9	8	9	8	9	8	8	9	8	8
FEBRUARY																																
MAXIMUM	9	10	11	11	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	--	--	--
MINIMUM	8	9	10	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12	--	--	--
MARCH																																
MAXIMUM	12	13	14	13	13	12	11	13	12	12	13	11	11	12	12	11	12	12	12	12	12	12	14	14	14	14	14	16	16	16	15	13
MINIMUM	11	11	11	11	11	10	11	10	10	9	10	10	10	11	11	10	10	9	9	9	10	10	11	11	12	10	11	11	12	12	12	10
APRIL																																
MAXIMUM	14	14	14	13	15	14	14	16	17	17	16	14	16	16	14	13	14	14	14	14	14	15	15	16	16	17	18	17	17	16	--	15
MINIMUM	12	11	10	11	12	11	11	11	11	12	12	12	11	11	11	10	10	10	11	11	10	11	11	12	12	12	13	13	13	13	--	11
MAY																																
MAXIMUM	16	17	14	16	21	16	17	17	14	16	13	14	14	16	17	17	17	18	17	17	18	18	17	16	17	19	19	18	18	18	18	17
MINIMUM	12	12	12	12	17	11	11	12	13	12	12	11	12	11	12	12	13	14	15	14	14	14	14	13	14	13	15	14	14	13	13	13
JUNE																																
MAXIMUM	19	19	17	16	14	17	17	18	18	19	18	18	18	19	19	19	20	20	20	20	20	18	19	20	21	21	19	18	19	20	--	18
MINIMUM	14	16	16	14	13	12	13	13	13	14	14	13	13	14	14	14	14	15	16	15	14	14	14	15	16	15	15	14	13	14	--	14
JULY																																
MAXIMUM	20	19	20	20	20	21	21	20	20	21	20	21	20	20	20	19	20	20	20	20	20	19	20	19	21	21	19	20	20	20	20	20
MINIMUM	14	16	15	15	15	15	16	16	16	16	16	16	16	16	15	15	15	16	15	16	16	15	14	16	15	16	17	16	16	17	17	15
AUGUST																																
MAXIMUM	19	19	18	18	19	20	21	21	21	19	19	17	18	21	19	19	19	19	19	19	18	19	20	21	19	20	21	21	22	22	21	19
MINIMUM	16	16	16	15	14	14	14	16	16	16	16	16	15	16	15	15	14	16	16	16	16	16	16	17	18	17	17	17	16	17	17	16
SEPTEMBER																																
MAXIMUM	19	18	20	18	18	18	18	18	19	19	19	19	20	19	19	19	20	19	17	17	17	18	19	18	18	17	17	18	16	17	--	18
MINIMUM	17	16	16	17	17	16	16	16	15	15	15	16	16	17	16	15	16	16	14	14	13	13	14	14	14	14	14	14	15	15	--	15

11-4680. NAVARRO RIVER NEAR NAVARRO, CALIF.

LOCATION.--Lat 39°10'15", long 123°39'55", in SE¼ sec.7, T.15 N., R.16 W., Mendocino County, temperature recorder at gaging station on left bank, 2.7 miles downstream from North Fork, 5.4 miles upstream from mouth, and 6.6 miles west of Navarro.
DRAINAGE AREA.--303 sq mi.
RECORDS AVAILABLE.--Chemical analyses: January 1959 to July 1965.
Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C on many days during June to August; minimum, 6°C on several days during December and January.
EXTREMES, 1965-68.--Water temperatures: Maximum, 25°C Aug. 20, 1966, June 30, 1967; minimum (1967-68), 6°C on several days in 1967 and 1968.
REMARKS.--Recorder malfunction Dec. 13-18.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	20	18	18	18	19	18	18	18	18	19	19	19	18	17	17	16	16	17	17	17	17	18	18	18	17	17	17	17	16	15	14	17
MINIMUM	18	17	17	17	17	17	16	16	17	18	17	17	16	15	14	13	13	14	16	15	16	16	17	16	16	16	14	16	14	13	13	16
NOVEMBER																																
MAXIMUM	14	14	14	15	17	17	17	17	17	17	17	16	16	16	16	16	15	12	12	12	11	11	11	11	11	9	10	11	11	11	--	13
MINIMUM	13	13	13	14	14	16	16	16	16	16	16	16	16	15	15	14	11	11	11	11	10	10	11	10	9	9	9	10	10	10	--	12
DECEMBER																																
MAXIMUM	10	10	10	10	10	11	10	9	8	7	7	7	--	--	--	--	--	--	7	7	7	7	7	7	7	7	7	7	7	7	7	8
MINIMUM	10	10	10	10	10	10	9	8	7	7	7	7	--	--	--	--	--	--	7	7	7	7	7	7	7	7	7	7	7	7	6	7
JANUARY																																
MAXIMUM	7	7	6	6	6	7	7	8	9	7	8	9	10	11	10	10	10	9	9	9	9	9	9	9	9	8	8	7	8	8	8	8
MINIMUM	6	6	6	6	6	6	7	7	8	6	6	8	9	10	10	10	9	8	9	9	9	9	9	9	8	8	7	6	6	8	8	7
FEBRUARY																																
MAXIMUM	8	9	10	10	11	11	11	11	11	11	11	11	10	11	11	11	12	12	12	13	13	13	13	14	14	13	13	12	13	--	--	11
MINIMUM	8	8	9	10	10	11	11	11	11	11	11	10	10	10	10	11	11	12	12	12	13	13	13	13	13	13	12	12	12	--	--	11
MARCH																																
MAXIMUM	13	12	13	13	13	13	13	13	13	13	12	12	12	12	12	11	12	12	12	12	11	12	12	12	12	13	13	14	14	14	14	12
MINIMUM	12	12	12	12	13	13	13	13	13	12	12	12	12	12	11	11	11	11	11	10	10	11	11	11	12	12	13	13	13	14	14	12
APRIL																																
MAXIMUM	14	14	13	13	14	13	13	14	14	15	15	15	14	14	14	14	14	13	13	13	13	14	14	15	15	16	16	17	17	17	--	14
MINIMUM	13	13	13	13	13	13	13	13	13	14	14	13	13	13	12	12	12	11	12	12	12	12	13	13	13	13	14	15	15	15	--	13
MAY																																
MAXIMUM	17	16	16	16	15	15	16	14	15	16	14	14	15	16	16	17	17	18	17	17	18	18	18	17	17	19	19	20	20	19	19	17
MINIMUM	14	14	14	14	13	13	13	13	14	14	13	13	13	13	13	14	16	16	16	16	16	17	17	16	16	16	18	18	18	18	18	15
JUNE																																
MAXIMUM	20	19	19	18	17	17	18	19	19	19	19	18	19	20	21	21	21	21	21	22	22	22	22	22	22	22	22	21	21	21	--	20
MINIMUM	17	19	18	17	14	14	16	17	17	17	17	17	16	18	18	19	19	19	19	19	19	19	21	20	20	21	20	19	18	19	--	18
JULY																																
MAXIMUM	21	20	21	22	22	22	21	21	22	22	22	21	22	22	22	22	22	22	22	22	22	22	21	21	22	22	21	21	21	21	21	21
MINIMUM	19	19	19	20	20	20	19	19	20	20	20	20	19	20	20	19	19	19	20	20	20	19	19	19	20	20	19	19	19	19	19	19
AUGUST																																
MAXIMUM	20	21	21	21	21	21	21	22	22	21	21	20	20	21	21	21	21	21	21	21	21	21	21	22	21	22	22	21	22	22	22	21
MINIMUM	19	19	19	19	19	19	19	20	20	19	19	19	19	19	19	19	19	20	19	19	19	19	20	21	21	21	21	20	20	20	21	19
SEPTEMBER																																
MAXIMUM	21	21	21	20	20	19	18	18	18	18	19	19	19	19	19	18	19	19	18	17	16	16	16	16	17	17	17	16	16	16	--	18
MINIMUM	20	20	19	19	19	18	17	17	17	17	18	18	18	19	18	17	17	18	17	16	14	14	14	15	16	16	16	15	15	16	--	17

11-4685. NOYO RIVER NEAR FORT BRAGG, CALIF.

LOCATION.--Lat 39°25'42", long 123°44'12", in SW¼ sec.10, 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.
RECORDS AVAILABLE.--Chemical analyses: January 1959 to September 1965.
Water temperatures: December 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C July 24, 25, Aug. 29; minimum, 3°C Dec. 13, 14, Jan. 3.
EXTREMES, 1965-68.--Water temperatures: Maximum, 22°C on several days in 1966-68; minimum, 2°C Dec. 17-21, 1965.
REMARKS.--Recorder stopped Oct. 1 to Nov. 15; temperature range, 10°C to 19°C. Recorder malfunction Dec. 18, 19.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	13	13	11	10	10	10	10	9	9	9	9	8	8	9	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	12	10	9	8	8	8	8	7	8	8	8	7	7	7	--	--
DECEMBER																																
MAXIMUM	10	11	10	9	10	9	9	9	9	8	7	4	4	4	6	7	6	--	--	7	7	7	7	7	7	7	7	7	6	6	7	7
MINIMUM	9	9	8	8	9	8	8	8	8	7	4	4	3	3	4	6	5	--	--	6	6	6	6	6	6	6	6	6	4	5	6	6
JANUARY																																
MAXIMUM	7	6	4	6	6	7	8	8	9	9	8	9	10	11	11	10	9	9	9	9	9	9	9	9	9	7	6	8	9	9	9	8
MINIMUM	4	4	3	4	4	6	7	8	8	8	7	8	9	10	10	9	9	8	8	9	8	8	7	8	7	6	5	6	8	8	8	7
FEBRUARY																																
MAXIMUM	9	9	10	10	11	11	11	11	11	11	11	10	10	10	10	11	12	12	12	12	12	12	12	12	12	12	12	12	12	--	--	11
MINIMUM	8	8	9	10	10	11	11	11	10	10	9	9	9	9	9	9	11	11	11	11	12	12	12	12	12	11	11	11	11	--	--	10
MARCH																																
MAXIMUM	12	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11	10	10	10	11	11	12	12	12	12	12	13	13	13	13	13	11
MINIMUM	11	11	11	11	9	9	9	9	8	9	9	9	10	10	10	10	9	9	9	9	9	10	10	11	9	9	9	10	11	11	11	9
APRIL																																
MAXIMUM	13	13	12	14	13	13	13	14	14	14	14	13	13	13	13	12	12	12	13	12	13	13	14	14	15	16	16	16	16	16	--	13
MINIMUM	11	9	11	11	9	9	9	10	12	11	10	9	9	10	9	8	8	9	9	8	8	11	11	11	11	11	11	12	12	11	--	9
MAY																																
MAXIMUM	16	16	16	16	15	15	16	16	14	14	14	14	15	16	16	17	17	17	17	17	17	17	17	14	18	18	19	18	18	18	19	16
MINIMUM	11	12	13	11	10	11	12	13	12	11	12	12	11	11	12	13	13	14	14	14	13	14	13	13	13	14	16	14	14	14	13	12
JUNE																																
MAXIMUM	19	18	17	17	17	17	17	17	18	17	18	18	18	18	21	21	20	20	20	20	20	20	20	20	20	19	19	19	20	20	--	18
MINIMUM	16	16	14	14	12	13	13	13	14	15	13	12	13	14	14	16	15	16	15	16	16	17	15	16	15	15	15	14	13	14	--	14
JULY																																
MAXIMUM	19	19	20	19	20	20	20	19	21	20	20	20	20	20	20	19	20	20	20	19	20	19	19	22	22	19	20	19	19	20	18	19
MINIMUM	16	16	16	16	15	16	16	16	17	16	16	17	17	16	14	15	14	15	15	16	14	14	16	15	16	15	16	16	16	16	16	15
AUGUST																																
MAXIMUM	18	19	19	19	20	20	21	18	18	18	18	17	18	19	19	19	19	19	18	20	20	20	21	21	19	20	21	21	22	21	20	19
MINIMUM	16	16	16	15	16	17	17	17	16	16	16	16	16	16	16	15	17	17	16	17	16	16	17	18	17	18	17	17	18	18	18	16
SEPTEMBER																																
MAXIMUM	20	20	20	18	18	17	17	17	19	18	19	19	19	19	18	18	19	18	16	16	15	15	16	16	16	16	16	16	16	15	--	17
MINIMUM	17	17	18	17	17	17	16	16	15	16	16	18	17	17	16	15	16	16	14	13	12	11	12	13	13	13	13	13	13	14	--	14

11-4686. MIDDLE FORK TENMILE RIVER NEAR FORT BRAGG, CALIF.

LOCATION.--Lat 39°34'20", long 123°41'45", in NE¼NE¼ sec.25, T.20 N., R.17 W., Mendocino County, temperature recorder at gaging station on right bank, 0.9 mile upstream from confluence with North Fork Tenmile River, and 10.4 miles northeast of Fort Bragg.
DRAINAGE AREA.--32.9 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 20°C June 24; minimum, 4°C on several days during December and January.
EXTREMES, 1964-68.--Water temperatures: Maximum, 21°C June 14, 18, 1966; minimum (1964-65, 1966-68), 4°C on several days in 1967 and 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	16	14	15	14	15	14	14	16	14	15	16	16	15	14	13	13	13	13	14	13	13	14	14	14	14	13	14	13	13	12	12	14
MINIMUM	14	14	14	13	14	13	14	13	13	14	13	14	13	13	12	12	12	12	13	12	13	13	14	13	13	13	13	13	12	12	11	13
NOVEMBER																																
MAXIMUM	12	12	12	12	13	13	13	14	13	13	13	13	13	14	14	13	13	12	13	12	12	11	10	10	10	10	9	8	9	9	--	12
MINIMUM	11	11	11	12	12	13	13	13	13	13	13	13	13	13	13	13	12	12	12	11	11	10	10	9	10	9	8	8	8	9	--	11
DECEMBER																																
MAXIMUM	9	9	10	10	10	9	9	9	9	9	8	8	7	5	5	4	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7
MINIMUM	9	9	9	10	9	9	9	9	8	8	8	7	5	4	4	4	4	5	6	5	5	6	6	6	6	6	6	6	6	5	5	6
JANUARY																																
MAXIMUM	6	6	6	4	4	5	6	7	8	8	8	8	9	9	10	9	9	9	9	8	8	9	9	9	9	8	7	7	8	10	9	8
MINIMUM	6	6	4	4	4	4	5	6	7	8	8	8	8	9	9	9	9	8	8	8	8	9	8	8	8	7	7	7	7	8	9	7
FEBRUARY																																
MAXIMUM	9	10	10	10	10	10	10	10	10	10	10	10	11	11	11	12	12	12	12	12	12	12	12	12	12	12	12	12	12	--	--	11
MINIMUM	9	9	10	9	9	10	10	10	10	10	9	9	10	11	10	11	11	12	12	12	12	12	12	12	11	11	11	11	11	--	--	11
MARCH																																
MAXIMUM	11	12	12	12	11	11	11	11	11	10	11	10	10	11	11	11	11	10	11	10	11	11	12	12	12	11	12	13	13	13	13	11
MINIMUM	11	11	11	11	11	10	11	10	9	8	9	10	9	10	10	11	10	9	9	9	9	10	10	10	11	10	10	11	11	12	11	10
APRIL																																
MAXIMUM	12	13	13	12	12	12	12	12	14	14	14	13	13	13	13	12	12	12	12	12	12	13	12	14	13	14	16	15	14	16	--	13
MINIMUM	11	11	11	11	11	10	9	10	11	12	12	12	11	11	11	10	9	9	9	9	9	9	11	11	11	11	12	12	12	13	--	11
MAY																																
MAXIMUM	15	15	15	14	14	14	14	14	13	14	14	13	13	14	15	15	16	16	14	15	15	16	14	13	13	16	18	18	18	17	17	15
MINIMUM	12	11	13	13	12	10	11	11	12	12	12	12	12	11	11	11	13	13	14	14	13	13	13	12	13	13	14	15	14	13	14	12
JUNE																																
MAXIMUM	18	17	17	16	16	16	16	17	17	17	17	16	16	17	18	19	18	19	18	18	18	19	19	20	19	18	19	17	17	18	--	17
MINIMUM	14	16	16	15	14	13	13	13	13	14	15	13	13	13	14	15	16	15	16	16	15	14	17	15	17	16	16	14	13	13	--	14
JULY																																
MAXIMUM	17	17	18	18	18	17	17	17	17	17	17	17	18	18	17	17	17	18	18	18	18	17	17	17	17	17	17	16	16	16	16	17
MINIMUM	14	15	15	15	15	15	15	14	15	15	15	15	16	16	14	14	14	14	14	15	14	14	14	14	14	14	13	13	14	14	14	14
AUGUST																																
MAXIMUM	16	17	17	17	17	19	18	17	17	17	17	16	16	18	17	17	17	17	17	16	17	17	18	18	17	18	18	19	19	19	18	17
MINIMUM	14	15	14	14	13	13	15	16	16	15	16	14	16	16	16	14	13	16	16	16	16	16	15	17	17	17	17	17	17	17	17	15
SEPTEMBER																																
MAXIMUM	18	18	18	17	17	16	16	16	17	16	17	18	17	17	17	17	18	17	15	14	14	14	15	16	16	15	15	16	14	14	--	16
MINIMUM	17	17	16	17	16	16	16	16	14	14	15	16	16	16	14	14	15	15	13	12	11	11	12	13	13	13	13	13	13	14	--	14

11-4690. MATTOLE RIVER NEAR PETROLIA, CALIF.

LOCATION (revised).--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.
RECORDS AVAILABLE.--Chemical analyses: January 1959 to September 1968.
Water temperatures: November 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 27°C on several days during June and August; minimum, 4°C Jan. 3, 4, 6.
EXTREMES, 1966-68.--Water temperatures: Maximum, 27°C on several days in 1968; minimum, 4°C Jan. 3, 4, 6, 1968.
REMARKS.--Probe buried Oct. 12-26; recorder stopped Dec. 4-20.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
03...	583	--	--	8.6	--	80	0	--	5.5	--	.06
NOV.											
07...	55	--	--	11	--	121	0	--	6.2	--	.10
DEC.											
05...	4320	--	--	6.1	--	51	0	--	4.2	--	.11
JAN.											
09...	3300	--	--	5.6	--	26	0	--	6.7	--	.20
FEB.											
06...	2550	--	--	4.8	--	56	0	--	3.9	--	.07
MAR.											
05...	1160	--	--	6.0	--	64	0	--	3.8	--	.02
APR.											
02...	733	--	--	5.8	--	69	0	--	4.3	--	.10
MAY											
07...	185	26	3.6	7.5	1.0	84	2	1.6	3.8	.0	.05
JUNE											
04...	145	--	--	7.7	--	94	0	--	3.7	--	.07
JULY											
09...	61	--	--	6.7	--	111	0	--	3.9	--	.13
AUG.											
06...	49	--	--	10	--	116	0	--	4.7	--	.08
SEPT.											
10...	57	38	7.3	9.8	1.6	127	0	32	4.8	.0	.09

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
03...	--	94	28	--	17	.4	66	243	7.7	16	9.2
NOV.											
07...	--	123	24	--	16	.4	99	297	8.1	18	10.6
DEC.											
05...	--	52	10	--	20	.4	42	134	7.6	10	11.0
JAN.											
09...	--	32	11	--	28	.4	21	80	7.0	9	11.3
FEB.											
06...	--	47	1	--	18	.3	46	129	7.9	11	11.2
MAR.											
05...	--	64	11	--	17	.3	52	150	7.9	12	10.8
APR.											
02...	--	63	6	--	17	.3	57	151	8.0	12	11.1
MAY											
07...	118	80	8	.16	17	.4	72	194	8.4	18	10.2
JUNE											
04...	--	86	9	--	16	.4	77	210	8.2	21	9.9
JULY											
09...	--	105	14	--	12	.3	91	250	8.2	26	9.0
AUG.											
06...	--	110	15	--	17	.4	95	255	8.2	25	10.3
SEPT.											
10...	157	125	21	.21	14	.4	104	290	7.9	18	10.5

11-4690. MATTOLE RIVER NEAR PETROLIA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	21	21	21	21	21	20	20	20	19	19	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	17	16	16	17	--
MINIMUM	21	21	20	20	20	19	19	19	19	19	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12	13	12	11	12	--
NOVEMBER																																
MAXIMUM	17	18	17	14	16	16	17	17	15	16	16	17	15	14	14	15	14	14	14	13	13	12	12	12	12	10	9	10	10	8	--	13
MINIMUM	13	13	13	13	14	14	14	14	13	14	14	14	14	13	13	13	12	12	11	11	11	9	9	10	9	8	8	8	8	8	--	11
DECEMBER																																
MAXIMUM	8	9	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	7	7	7	9	8	8	8	8	7	7	--
MINIMUM	7	8	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	6	6	6	7	6	7	7	6	5	6	--
JANUARY																																
MAXIMUM	7	7	6	6	7	6	7	8	9	9	8	8	11	11	11	12	9	9	9	9	11	10	9	9	9	8	7	7	7	8	8	8
MINIMUM	6	5	4	4	5	4	6	7	8	8	7	7	8	11	11	9	9	8	8	9	9	9	8	8	8	7	6	6	6	7	8	7
FEBRUARY																																
MAXIMUM	8	10	11	10	12	12	12	12	12	12	12	12	12	11	12	12	14	14	14	13	13	13	13	14	14	14	14	14	14	--	--	12
MINIMUM	8	8	10	9	10	12	11	11	12	12	11	11	11	11	11	12	12	13	13	13	13	13	13	13	13	13	13	13	13	--	--	11
MARCH																																
MAXIMUM	14	14	14	14	14	13	13	13	13	12	14	12	12	12	12	12	11	12	12	12	12	12	14	14	13	13	13	14	15	14	14	13
MINIMUM	13	12	13	13	13	11	11	11	10	10	11	12	11	11	11	11	11	10	9	10	11	11	12	11	12	10	10	11	12	11	12	11
APRIL																																
MAXIMUM	13	12	14	13	13	14	14	15	17	17	17	15	15	16	15	14	15	16	16	15	16	16	13	16	17	18	20	20	19	19	--	16
MINIMUM	11	11	9	11	12	11	11	11	12	13	13	12	11	11	11	10	9	11	11	10	10	11	12	11	12	13	13	14	14	14	--	11
MAY																																
MAXIMUM	18	19	18	19	18	18	20	20	20	21	16	17	17	19	21	21	20	23	19	19	20	21	18	16	19	19	23	23	22	23	21	19
MINIMUM	13	13	14	14	13	12	14	13	14	14	13	13	14	14	13	14	16	16	16	16	16	17	16	14	15	17	17	18	17	16	16	14
JUNE																																
MAXIMUM	24	21	23	23	18	18	22	22	23	23	22	22	22	24	25	26	27	27	27	26	26	27	26	27	26	27	25	22	23	24	--	24
MINIMUM	17	19	18	17	15	15	14	16	16	17	18	17	16	16	18	18	18	19	18	19	19	19	19	18	19	20	18	16	15	16	--	17
JULY																																
MAXIMUM	24	26	26	26	25	26	24	26	24	24	23	22	21	24	24	23	23	24	23	19	22	22	24	24	26	24	24	24	21	24	24	23
MINIMUM	17	18	18	19	19	19	19	19	19	19	18	19	18	18	17	17	18	19	19	18	17	17	18	18	18	18	18	19	18	17	18	18
AUGUST																																
MAXIMUM	24	26	26	26	26	26	26	24	26	25	24	26	25	25	25	24	26	26	27	27	26	26	25	26	20	21	23	24	26	22	25	24
MINIMUM	19	19	18	18	18	19	19	19	19	19	19	19	19	20	18	18	17	18	19	19	18	18	18	20	19	18	19	19	19	20	20	18
SEPTEMBER																																
MAXIMUM	26	26	25	25	24	23	22	23	24	24	24	26	21	24	23	23	26	22	20	21	20	22	23	23	23	22	23	22	21	19	--	23
MINIMUM	19	19	18	19	20	19	19	19	19	17	18	19	18	19	18	17	18	17	16	15	14	14	15	16	17	16	17	16	15	16	--	17

11-4700. LAKE PILLSBURY NEAR POTTER VALLEY, CALIF.

LOCATION.--Lat 39°24'30", long 122°57'30", on line between secs. 14 and 23, T.18 N., R.10 W., Mendocino County, temperature recorder at gaging station at Scott Dam, near right bank of Eel River, 0.3 mile downstream from Rice Fork, and 10.2 miles northeast of town of Potter Valley.
DRAINAGE AREA.--289 sq mi.
RECORDS AVAILABLE.--Water temperatures: December 1965 to September 1968 (discontinued).
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C on several days in July and August; minimum, 4°C on several days during December and January.
EXTREMES, 1965-68.--Water temperatures: Maximum, 27°C July 1, 2, 4, 5, 1967; minimum (1967-68), 4°C on several days during 1967 and 1968.
REMARKS.--Recorder malfunction Mar. 8-19, May 13-23, June 25 to July 8, Sept. 11-27.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	21	21	20	20	19	19	20	19	19	19	19	19	19	19	18	18	18	18	18	18	17	17	17	17	17	17	17	16	16	16	16	18
MINIMUM	21	20	20	19	19	19	19	19	19	18	18	19	18	18	18	18	18	17	17	17	17	17	17	17	17	16	16	16	16	16	16	17
NOVEMBER																																
MAXIMUM	17	16	16	15	15	15	16	15	15	15	15	14	14	14	14	14	14	14	13	14	13	13	12	12	12	12	11	11	11	10	--	13
MINIMUM	16	16	15	15	15	15	15	15	15	14	14	14	14	14	14	14	14	13	13	13	12	12	12	12	11	11	11	11	10	9	--	13
DECEMBER																																
MAXIMUM	9	9	9	9	8	8	7	7	7	7	8	7	7	6	6	6	6	6	6	5	4	4	4	5	5	6	5	7	6	7	6	6
MINIMUM	9	9	9	8	7	7	7	7	7	7	7	6	6	5	6	6	6	6	5	4	4	4	4	4	4	4	4	5	6	6	6	6
JANUARY																																
MAXIMUM	7	6	7	6	6	6	6	6	5	6	5	5	6	7	8	9	9	9	8	8	8	8	9	9	9	8	8	8	8	8	7	7
MINIMUM	6	6	6	6	6	6	5	5	5	4	4	5	5	6	7	8	8	8	7	7	7	7	8	8	8	8	8	8	7	7	7	6
FEBRUARY																																
MAXIMUM	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	7	7	9	8	9	9	9	10	11	13	12	12	12	11	--	--	8
MINIMUM	7	7	7	7	7	6	6	5	6	5	6	6	6	6	6	6	7	7	8	8	8	8	9	9	10	9	9	9	9	--	--	7
MARCH																																
MAXIMUM	11	12	12	12	10	10	10	--	--	--	--	--	--	--	--	--	--	--	--	12	10	9	9	9	9	12	11	12	12	13	13	--
MINIMUM	10	10	10	9	9	9	9	--	--	--	--	--	--	--	--	--	--	--	--	9	9	9	9	9	9	9	11	11	11	11	11	--
APRIL																																
MAXIMUM	12	12	12	12	11	14	13	13	13	14	17	15	16	15	14	14	12	13	12	13	14	13	12	12	14	14	16	16	16	16	--	13
MINIMUM	11	11	11	11	11	11	11	11	12	12	13	14	13	13	13	12	12	11	11	12	12	12	11	11	12	13	13	13	13	13	--	12
MAY																																
MAXIMUM	16	17	17	17	17	17	16	16	16	17	16	16	--	--	--	--	--	--	--	--	--	--	--	17	17	17	19	19	20	21	21	--
MINIMUM	14	14	16	15	16	16	15	15	16	15	15	14	--	--	--	--	--	--	--	--	--	--	--	16	16	16	17	18	18	18	19	--
JUNE																																
MAXIMUM	21	19	20	20	18	19	19	19	21	19	19	20	20	21	24	23	23	23	24	23	23	24	24	24	--	--	--	--	--	--	--	21
MINIMUM	18	19	18	18	18	18	18	18	18	18	18	18	18	18	19	21	21	21	22	22	22	22	23	23	--	--	--	--	--	--	--	19
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	26	26	26	25	24	24	24	24	24	24	26	26	26	25	25	25	25	26	26	25	26	26	26	--
MINIMUM	--	--	--	--	--	--	--	--	24	24	24	23	23	23	23	23	23	23	23	24	24	23	23	23	23	23	24	24	24	24	24	--
AUGUST																																
MAXIMUM	26	26	26	26	25	26	26	25	26	25	25	24	24	24	24	23	23	23	22	22	21	21	22	22	21	22	22	23	24	24	24	23
MINIMUM	24	24	24	24	24	24	24	24	24	24	24	24	23	23	23	23	22	22	22	21	21	21	21	21	21	21	21	22	22	22	22	22
SEPTEMBER																																
MAXIMUM	24	23	24	24	24	24	24	24	23	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	22	22	22	23	23	23	23	22	21	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-4705. EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CALIF.

LOCATION.--Lat 39°24'30", long 122°58'15", in SE¼ sec.15, T.18 N., R.10 W., Mendocino County, 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.
RECORDS AVAILABLE.--Water temperatures: October 1963 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C Oct. 1; minimum, 5°C Dec. 27, 28.
EXTREMES, 1963-68.--Water temperatures: Maximum, 23°C on several days in September 1967; minimum (1966-68), 5°C on several days in 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	22	21	21	20	20	20	19	19	19	19	19	19	19	19	18	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	18
MINIMUM	21	21	20	20	20	19	19	19	19	19	19	19	19	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	18
NOVEMBER																																
MAXIMUM	17	17	17	17	17	17	17	17	17	16	16	16	16	15	15	14	14	14	14	14	14	14	13	13	13	13	13	13	12	12	12	--	14
MINIMUM	17	17	17	17	17	17	17	17	16	16	16	16	15	15	14	14	14	14	14	14	14	13	13	13	13	13	12	12	12	11	--	14
DECEMBER																																
MAXIMUM	11	11	11	9	9	9	9	9	8	8	8	8	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7
MINIMUM	11	11	9	9	9	9	8	8	8	8	8	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	5	5	6	6	6	7
JANUARY																																
MAXIMUM	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	8	8	8	7	7	7	7	7	7	6
MINIMUM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6
FEBRUARY																																
MAXIMUM	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	9	10	10	10	10	11	11	--	--	8
MINIMUM	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	9	--	--	7
MARCH																																
MAXIMUM	10	11	11	10	9	9	8	8	8	8	8	9	8	9	9	9	9	9	10	10	10	9	9	10	9	10	11	11	11	11	11	9
MINIMUM	9	10	10	9	9	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	9
APRIL																																
MAXIMUM	10	10	10	9	10	10	10	10	10	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	12	13	13	13	13	13	--	11
MINIMUM	10	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	11	10	11	11	11	11	11	11	11	12	12	12	--	10
MAY																																
MAXIMUM	14	14	14	14	14	14	14	14	14	14	14	14	13	14	14	14	14	14	13	13	13	14	14	13	15	15	15	16	14	14	14	14
MINIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	12	13	12	12	13	13	13	13	13	13	13	12
JUNE																																
MAXIMUM	15	14	14	15	13	15	15	15	15	15	15	15	15	16	16	16	16	16	14	14	14	14	14	14	14	14	14	14	14	14	--	14
MINIMUM	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	14	14	14	14	13	13	13	13	13	13	13	13	13	13	13	--	13
JULY																																
MAXIMUM	14	14	14	14	15	15	15	15	14	14	14	14	14	14	14	14	14	15	15	15	15	15	15	16	16	16	16	16	16	16	16	14
MINIMUM	13	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	15	15	14
AUGUST																																
MAXIMUM	16	16	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	18	18	18	18	18	18	19	19	19	17
MINIMUM	15	15	15	15	15	15	16	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	18	18	18	18	18	18	19	19	16
SEPTEMBER																																
MAXIMUM	19	19	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21	21	21	21	20	20	20	20	20	20	20	20	20	20	--	20
MINIMUM	19	19	19	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	20	20	19	19	--	19

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.

LOCATION.--Lat 39°21'42", long 123°07'38", in SW¼NW¼ sec.6, T.17 N., R.11 W., Mendocino County, at gaging station 100 ft downstream from powerhouse of Pacific Gas and Electric Company, 1.8 miles southwest of Van Arsdale Dam, and 2.9 miles northwest of town of Potter Valley.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1965.
Water temperatures: March 1964 to September 1968.
Sediment records: March 1964 to May 1968 (discontinued).

EXTREMES, 1967-68.--Water temperatures: Maximum, 23°C June 19; minimum, 4°C on many days during December and January.
Sediment concentrations: Maximum daily, 764 mg/l Jan. 3; minimum daily, 2 mg/l Nov. 5-8.
Sediment loads: Maximum daily, 631 tons Jan. 3; minimum daily, 1.0 ton May 3.

EXTREMES, 1964-68.--Water temperatures (1964-65, 1966-68): Maximum (1967-68), 23°C June 19, 1968; minimum, 4°C on many days in 1967-68.
Sediment concentrations: Maximum daily, 3,970 mg/l Jan. 4, 1965; minimum daily, 1 mg/l Nov. 3, 1965.
Sediment loads: Maximum daily, 3,280 tons Jan. 4, 1965; minimum daily, less than 0.05 ton Oct. 19, Nov. 2-4, 1965.

REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	14	--	--	--	--	--	--	14	--	--	--	--	--	12	12	12	12	--	--	--	12	--	11	12	11	12	12	12	11	11	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	10	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	9	9	8	8	8	8	8	8	7	7	5	6	6	6	6	6	6	6	6	6	6	6	7	7	6	6	6	6	7
MINIMUM	--	--	--	8	8	7	8	7	7	7	6	6	5	4	4	4	4	5	4	4	4	5	5	4	5	5	6	5	6	4	4	5
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	6	6	5	5	5	5	6	6	7	7	7	6	7	9	9	8	8	8	7	8	8	8	8	8	8	7	7	6	6	6	6	7
MINIMUM	4	4	4	4	4	4	4	6	6	6	4	4	6	7	8	7	7	7	7	7	7	7	7	6	7	6	6	5	4	5	6	6
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	6	6	6	7	7	7	7	8	8	8	8	8	8	8	8	8	9	8	9	9	9	10	10	11	11	11	11	11	11	--	--	8
MINIMUM	5	6	6	6	6	6	6	7	7	7	7	6	6	7	7	7	7	7	8	8	9	9	10	10	10	10	9	9	9	--	--	7
MARCH....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	11	11	11	11	11	10	10	10	10	10	10	8	9	9	10	10	10	11	11	11	11	10	12	12	12	12	12	13	13	13	12	11
MINIMUM	9	9	9	9	9	9	9	8	8	8	8	8	8	8	9	9	9	9	9	8	8	9	9	9	9	9	9	9	10	10	9	9
APRIL....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	11	12	12	12	12	12	13	13	13	14	14	13	14	14	13	13	13	13	14	13	14	14	14	15	16	17	17	17	18	18	--	14
MINIMUM	9	9	9	11	10	9	9	10	10	11	11	11	11	11	11	10	10	10	11	11	11	11	11	12	12	13	14	14	14	14	--	11
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	17	18	17	18	18	17	17	18	18	18	17	17	17	16	17	18	18	19	19	17	17	17	18	18	17	19	20	21	20	20	20	18
MINIMUM	14	15	15	17	17	15	14	16	16	16	16	15	14	13	14	15	16	17	17	16	16	14	16	16	14	17	18	18	18	17	16	16
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	21	21	19	19	19	18	19	19	20	20	20	19	19	20	21	22	22	22	23	21	21	21	21	21	20	20	20	19	18	18	--	20
MINIMUM	16	18	17	17	16	15	17	17	18	18	18	17	17	18	18	19	20	20	20	19	18	18	19	18	17	17	17	17	16	16	--	17
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	19	19	19	19	21	21	20	20	20	20	20	19	19	19	20	20	20	20	21	21	21	21	20	20	20	21	21	21	21	22	21	20
MINIMUM	16	17	16	17	17	18	17	17	17	17	17	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	18	18	18	18	19	17
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	20	20	20	20	19	20	20	19	20	20	19	19	18	19	19	19	19	19	18	17	17	19	20	20	20	20	21	21	21	22	22	20
MINIMUM	17	18	17	17	17	17	17	18	18	18	17	17	17	17	17	17	16	17	17	16	16	16	17	17	18	17	18	18	18	18	19	17
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	22	22	22	22	21	22	21	21	21	21	21	20	21	20	20	21	21	19	18	18	18	19	19	19	19	18	18	18	18	--	20
MINIMUM	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	17	17	18	17	16	16	16	16	16	16	16	16	16	15	16	--	17

11-4710. POTTER VALLEY POWERHOUSE NEAR POTTER VALLEY, CALIF.--Continued

SUSPENDED SEDIMENT, OCTOBER 1967 TO MAY 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	309	8	6.7	318	3	2.6	109	94	28
2	173	7	3.3	317	3	2.6	126	95	32
3	162	6	2.6	284	3	2.3	315	98	83
4	164	6	2.7	218	3	1.8	266	95	68
5	166	6	2.7	218	2	1.2	293	95	75
6	166	6	2.7	217	2	1.2	263	95	67
7	163	6	2.6	218	2	1.2	315	96	82
8	162	6	2.6	214	2	1.2	316	98	84
9	162	6	2.6	164	3	1.3	276	112	83
10	213	6	3.5	151	3	1.2	302	114	93
11	313	6	5.1	151	8	3.3	302	126	103
12	313	6	5.1	155	12	5.0	283	151	115
13	313	6	5.1	158	20	8.5	312	126	106
14	315	6	5.1	188	24	12	313	124	105
15	315	6	5.1	163	29	13	315	116	99
16	313	6	5.1	156	72	30	316	74	63
17	312	6	5.1	146	98	39	313	67	57
18	312	6	5.1	146	68	27	299	68	55
19	312	6	5.1	149	42	17	312	70	59
20	314	6	5.1	152	21	8.6	302	77	63
21	317	6	5.1	148	15	6.0	313	77	65
22	317	6	5.1	146	15	5.9	316	72	61
23	317	6	5.1	148	15	6.0	313	58	49
24	315	6	5.1	147	14	5.6	312	60	51
25	276	5	3.7	150	12	4.9	312	61	51
26	155	4	1.7	150	9	3.6	312	61	51
27	299	4	3.2	137	7	2.6	309	63	53
28	315	3	2.6	95	9	2.3	300	62	50
29	315	3	2.6	183	43	25	300	62	50
30	314	3	2.5	146	95	37	304	60	49
31	315	3	2.6	--	--	--	310	60	50
TOTAL	8227	--	122.3	5333	--	278.9	9049	--	2100

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	310	164	137	303	114	93	306	71	59
2	310	718	601	303	108	88	304	67	55
3	306	764	631	303	101	83	303	70	57
4	312	660	556	303	96	79	303	72	59
5	312	636	536	303	90	74	302	68	55
6	312	672	566	302	83	68	302	64	52
7	312	672	566	300	80	65	304	62	51
8	270	664	484	300	79	64	310	62	52
9	316	674	575	303	78	64	310	67	56
10	293	670	530	309	80	67	310	63	53
11	303	201	162	307	80	66	310	58	49
12	273	165	122	307	84	70	310	48	40
13	307	283	235	307	76	63	306	51	42
14	304	282	231	304	78	64	300	52	42
15	306	241	199	300	94	76	300	53	43
16	303	234	191	300	154	125	299	51	41
17	303	234	191	300	158	128	297	52	42
18	306	230	190	300	158	128	297	44	35
19	309	200	167	302	156	127	296	22	18
20	309	204	170	303	156	128	296	27	22
21	309	222	185	307	157	130	296	21	17
22	307	228	189	313	163	138	297	23	18
23	309	196	164	309	165	138	297	23	18
24	307	207	172	302	167	136	297	24	19
25	304	192	158	303	143	117	297	22	18
26	304	167	137	307	87	72	297	23	18
27	303	132	108	306	78	64	299	22	18
28	303	133	109	297	78	63	304	24	20
29	303	132	108	309	79	66	309	26	22
30	303	126	103	--	--	--	304	26	21
31	303	120	98	--	--	--	306	24	20
TOTAL	9431	--	8571	8812	--	2644	9368	--	1132

11-4710. POTTER VALLEY POWERHOUSE NEAR POTTER VALLEY, CALIF.--Continued

SUSPENDED SEDIMENT, OCTOBER 1967 TO MAY 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	304	24	20	83	6	1.3			
2	304	24	20	69	6	1.1			
3	304	24	20	62	6	1.0			
4	304	22	18	70	6	1.1			
5	284	25	19	71	6	1.2			
6	307	23	19	72	6	1.2			
7	307	22	18	72	6	1.2			
8	286	18	14	69	6	1.1			
9	304	10	8.2	67	6	1.1			
10	266	8	5.7	70	6	1.1			
11	269	9	6.5	70	6	1.1			
12	232	10	6.3	70	6	1.1			
13	188	10	5.1	70	6	1.1			
14	188	10	5.1	72	6	1.2			
15	185	12	6.0	74	6	1.2			
16	184	10	5.0	68	6	1.1			
17	184	10	5.0	68	6	1.1			
18	176	19	9.0	68	6	1.1			
19	177	14	6.7	70	6	1.1			
20	94	9	2.3	79	7	1.5			
21	94	8	2.0	75	8	1.6			
22	91	7	1.7	71	9	1.7			
23	93	7	1.8	70	10	1.9			
24	94	7	1.8	72	12	2.3			
25	98	7	1.9	70	10	1.9			
26	91	8	2.0	68	10	1.8			
27	91	9	2.2	68	10	1.8			
28	91	8	2.0	62	10	1.7			
29	91	8	2.0	103	10	2.8			
30	91	6	1.5	104	10	2.8			
31	--	--	--	106	10	2.9			
TOTAL	5772	--	237.8	2283	--	46.2			

TOTAL DISCHARGE FOR PERIOD OCT. 1, 1967 TO MAY 31, 1968 (CFS-DAYS)..... 58275
TOTAL LOAD FOR PERIOD OCT. 1, 1967 TO MAY 31, 1968 (TONS)..... 15132.2

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 20, 1967	0845	4	302	79	64	85	92	94	96	97	100	--	--	--	--	--	SBWC
JAN 6, 1968	0800	5	312	671	565	54	66	77	85	87	96	96	98	100	--	--	SBWC
MAR 20.....	0845	11	296	30	24	49	67	78	84	89	99	100	--	--	--	--	SBWC

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 20, 1967	6	1
NOV. 1	3	3
NOV. 8	2	4
NOV. 14	25	30
NOV. 15	24	32
NOV. 16	68	32
NOV. 17	101	34
NOV. 21	14	12
NOV. 23	15	13
NOV. 24	13	13
NOV. 25	12	7
NOV. 26	8	7
NOV. 27	6	7
NOV. 28	8	7
NOV. 29	12	8
NOV. 30	95	136
DEC. 1	94	136
DEC. 2	92	136
DEC. 3	98	136
DEC. 4	96	125
DEC. 5	94	124
DEC. 6	96	126
DEC. 7	93	120
DEC. 8	96	120
DEC. 9	115	168
DEC. 10	114	162
DEC. 11	120	146
DEC. 12	156	160
DEC. 20	79	120
DEC. 13	121	130
DEC. 14	124	150
DEC. 15	128	140
DEC. 16	72	93
DEC. 17	67	98
DEC. 18	70	71
DEC. 19	68	59
DEC. 20	79	120
DEC. 21	76	97
DEC. 22	67	79
DEC. 23	58	74
DEC. 24	60	74
DEC. 25	62	72
DEC. 26	62	72
DEC. 27	65	77
DEC. 28	62	70
DEC. 29	63	77
DEC. 30	61	75
DEC. 31	62	69
JAN. 1, 1968	60	78
JAN. 2	700	600
JAN. 3	784	640
JAN. 4	668	675
JAN. 5	625	675
JAN. 6	671	560
JAN. 7	674	570
JAN. 8	664	605
JAN. 9	674	570
JAN. 10	670	600
JAN. 11	152	170
JAN. 12	134	180
JAN. 13	278	340
JAN. 14	298	320
JAN. 15	242	310
JAN. 16	238	340
JAN. 17	230	340
JAN. 18	238	390
JAN. 19	201	350
JAN. 20	203	290
JAN. 21	220	315
JAN. 22	236	315
JAN. 23	196	285
JAN. 24	211	315
JAN. 25	196	290
JAN. 26	178	245
JAN. 27	132	180
JAN. 28	133	220
JAN. 29	134	210
FEB. 6	78	115
FEB. 7	80	115
FEB. 8	80	115
FEB. 9	78	115
FEB. 10	80	115
FEB. 11	80	115
FEB. 12	84	110
FEB. 13	77	105
FEB. 14	78	110
FEB. 15	82	75
FEB. 16	154	135
FEB. 17	158	130
FEB. 18	156	130
FEB. 19	158	130
FEB. 20	156	130
FEB. 21	158	130
FEB. 22	164	130
FEB. 23	164	130
FEB. 24	164	130
FEB. 25	160	130
FEB. 26	88	96
FEB. 27	78	98
FEB. 28	78	95
FEB. 29	80	97
MAR. 1	75	97
MAR. 2	66	97
MAR. 3	69	90
MAR. 4	72	95
MAR. 6	66	100
MAR. 7	64	100
MAR. 8	63	105
MAR. 9	66	105
MAR. 10	64	105
MAR. 11	65	105
MAR. 12	50	76
MAR. 13	51	76
MAR. 14	51	75
MAR. 15	53	75
MAR. 16	50	75
MAR. 17	50	75
MAR. 18	54	75
MAR. 19	21	37
MAR. 20	30	58

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
MAR. 21	21	37
MAR. 22	24	35
MAR. 23	22	22
MAR. 24	24	37
MAR. 25	22	37
MAR. 26	24	37
MAR. 27	22	36
MAR. 28	24	37
MAR. 29	27	37
MAR. 30	25	37
MAR. 31	23	37
APR. 1	24	36
APR. 2	24	34
APR. 3	24	37
APR. 4	25	37
APR. 6	23	37
APR. 7	22	37
APR. 8	24	35
APR. 9	10	9
APR. 10	8	6
APR. 11	9	4
APR. 12	10	4
APR. 13	10	7
APR. 14	10	5
APR. 15	12	7
APR. 16	9	6
APR. 17	8	7
APR. 18	20	5
APR. 19	19	22
APR. 20	8	4
APR. 21	8	4
APR. 22	7	4
APR. 23	7	3
APR. 24	7	4
APR. 25	7	3
APR. 26	10	3
APR. 27	8	3
APR. 28	8	5
APR. 29	7	3
APR. 30	6	3
MAY 1	6	2
MAY 8	6	3
MAY 24	12	3
JULY 9	3	1

11-4721.5. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1968.
Water temperatures: October 1966 to September 1968.
Sediment records: October 1966 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 1,740 mg/l Dec. 7; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 55,800 tons Feb. 20; minimum daily, 0.01 ton on many days.
EXTREMES, 1966-68.--Water temperatures (1966-67): Minimum, 2°C Dec. 29, 1966.
Sediment concentrations: Maximum daily, 3,590 mg/l Jan. 21, 1967; minimum daily, 1 mg/l on many days in 1966-68.
Sediment loads: Maximum daily, 204,000 tons Jan. 21, 1967; minimum daily, 0.01 ton on many days in 1966-68.
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 IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)	PHOS-PHATE (PO4)
OCT.												
04...	41	--	--	12	--	116	0	--	8.4	.4	.44	.01
NOV.												
08...	7.9	--	--	12	--	128	0	24	9.2	.8	.43	--
DEC.												
05...	2530	--	--	5.7	--	66	0	--	4.1	1.6	.15	.27
JAN.												
10...	4500	--	--	3.9	--	47	0	--	3.1	1.6	.30	.44
FEB.												
07...	2110	--	--	3.4	--	65	0	--	2.4	.9	.12	.24
MAR.												
06...	509	--	--	3.8	--	74	0	--	1.1	.2	.17	.03
APR.												
04...	258	--	--	4.2	--	84	0	--	3.1	.0	.23	.06
MAY												
08...	53	29	8.1	8.8	1.1	111	4	16	4.2	.0	.29	--
JUNE												
05...	33	--	--	8.6	--	109	0	--	4.2	.0	.38	.00
JULY												
10...	7.6	--	--	8.6	--	120	0	--	4.8	.0	.50	.00
AUG.												
07...	5.8	--	--	12	--	104	0	--	6.1	.1	.48	.08
SEPT.												
12...	2.8	28	9.5	12	1.6	111	0	29	7.7	.0	.57	.07

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
04...	--	112	17	--	19	.5	95	270	8.2	18	9.6
NOV.											
08...	--	120	15	--	18	.5	105	276	8.2	17	10.3
DEC.											
05...	--	62	8	--	17	.3	54	144	7.9	6	11.7
JAN.											
10...	--	31	0	--	22	.3	39	97	7.6	7	11.6
FEB.											
07...	--	55	2	--	12	.2	53	128	8.0	7	11.7
MAR.											
06...	--	68	7	--	11	.2	61	149	8.1	11	10.8
APR.											
04...	--	78	9	--	10	.2	69	166	8.2	12	10.4
MAY											
08...	137	106	8	.19	15	.4	98	239	8.6	21	9.7
JUNE											
05...	--	97	8	--	16	.4	89	232	8.2	19	9.8
JULY											
10...	--	107	9	--	15	.4	98	260	8.1	29	9.4
AUG.											
07...	--	99	14	--	21	.5	85	250	8.2	27	10.5
SEPT.											
12...	152	109	18	.21	19	.5	91	272	8.2	21	8.5

11-4721.5. EEL RIVER NEAR DOS RIOS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	--	--	--	--	--	--	--	--	--	--	--	--	7	--	--
DECEMBER.	--	--	9	9	8	6	6	--	--	8	--	6	3	--	--	--	8	--	--	--	8	--	--	--	--	--	--	--	5	--	--	--
JANUARY..	7	--	--	4	--	--	6	--	4	--	--	6	--	2	9	--	--	9	--	9	--	--	6	--	7	--	7	--	6	5	4	--
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9	--	9	9	9	--	10	--	--	12	11	--	--	--	--	--
MARCH....	12	--	11	--	12	--	10	--	--	--	--	--	--	--	--	--	--	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL....	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY.....	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	21	24	19	--	18	--	--	21	--	19	--	21	--	--	22	--	24	--	22	--	--	24	--	24	--	22	--	--	--	--
JULY.....	21	--	22	--	24	--	--	26	--	24	--	23	--	--	21	--	22	--	23	--	--	24	--	22	--	28	--	--	26	--	27	--
AUGUST...	--	24	--	--	28	--	27	--	29	--	--	26	--	26	--	24	--	--	23	--	18	--	25	--	--	23	--	27	--	28	--	--
SEPTEMBER	--	--	--	28	--	28	--	--	--	--	21	--	23	--	--	19	--	22	--	18	--	--	19	--	19	--	19	--	--	19	--	--

11-4721.5. EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	3.0	2	.02	6.5	3	.05	108	54	16
2	20	20	1.1	5.8	3	.05	298	272	757
3	59	15	2.4	6.5	3	.05	1900	865	4640
4	41	8	.89	7.2	3	.06	1800	732	5850
5	31	4	.33	6.5	3	.05	2530	433	3390
6	27	2	.15	7.9	3	.06	832	130	292
7	24	2	.13	10	3	.08	2210	1740	11000
8	15	1	.04	7.9	3	.06	799	430	928
9	12	1	.03	8.6	3	.07	270	120	87
10	13	1	.04	7.9	3	.06	178	18	8.7
11	13	1	.04	7.2	3	.06	133	13	4.7
12	27	1	.07	7.2	3	.06	105	10	2.8
13	13	1	.04	7.9	3	.06	83	6	1.3
14	9.3	1	.03	96	100	26	73	4	.79
15	8.6	1	.02	86	35	8.1	68	4	.73
16	7.9	1	.02	31	6	.50	63	4	.68
17	7.2	1	.02	22	6	.36	61	4	.66
18	5.8	1	.02	17	6	.28	786	33	74
19	7.2	2	.04	13	6	.21	526	24	34
20	7.2	2	.04	12	6	.19	199	18	9.7
21	7.9	2	.04	10	6	.16	129	16	5.6
22	10	2	.05	9.3	6	.15	105	14	4.0
23	9.3	2	.05	8.6	6	.14	108	13	3.8
24	8.6	2	.05	8.6	6	.14	146	11	4.3
25	7.9	2	.04	8.6	6	.14	178	11	5.3
26	7.2	2	.04	7.9	6	.13	192	13	6.7
27	6.5	2	.04	7.9	6	.13	167	14	6.3
28	7.9	2	.04	9.3	6	.15	143	15	5.8
29	17	3	.14	73	44	14	129	14	4.9
30	12	3	.10	126	62	21	108	13	3.8
31	7.9	3	.06	--	--	--	86	11	2.6
TOTAL	453.4	--	6.12	643.3	--	72.55	14513	--	27151.16

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	73	8	1.6	1880	135	685	1220	18	59
2	65	5	.88	4280	672	8260	1060	25	72
3	59	4	.64	4930	530	7050	916	34	84
4	54	3	.44	3260	225	1980	793	32	69
5	56	2	.30	2480	180	1210	730	30	59
6	52	2	.28	2190	140	828	509	27	37
7	52	2	.28	2110	120	684	350	19	18
8	52	2	.28	1940	100	524	298	15	12
9	637	87	797	1750	90	425	246	13	8.6
10	4500	860	10400	1620	80	350	202	12	6.5
11	1480	220	879	1450	75	294	174	10	4.7
12	610	50	82	1270	75	257	1140	164	786
13	716	55	106	1130	60	183	1340	72	260
14	5000	795	10700	1030	45	125	1440	118	471
15	5800	850	13300	929	35	88	1470	60	238
16	4800	620	8040	962	65	169	3760	365	3850
17	3300	375	3340	2000	355	2030	3640	185	1820
18	2110	245	1400	2650	350	2500	2200	110	653
19	1370	170	629	6960	701	19500	1800	75	365
20	870	115	270	13100	1550	55800	1360	60	220
21	550	85	126	10100	1220	33700	1240	51	171
22	380	80	82	7660	580	12000	1130	47	143
23	251	85	58	5860	420	6650	1030	40	111
24	172	85	39	4110	320	3550	962	39	101
25	141	80	30	3300	237	2110	786	32	68
26	123	75	25	2600	160	1120	773	28	58
27	122	70	23	2100	99	561	786	28	59
28	133	60	22	1800	72	350	767	20	41
29	2900	390	3050	1600	43	186	712	15	29
30	3650	530	5220	--	--	--	688	12	22
31	2380	170	1090	--	--	--	688	10	19
TOTAL	42458	--	59712.70	97051	--	163169	34210	--	9914.8

11-4721.5. EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	686	5	9.3	62	2	.33	37	2	.20
2	370	5	5.0	60	2	.32	33	2	.18
3	385	5	5.2	58	2	.31	33	2	.18
4	258	5	3.5	55	2	.30	33	1	.09
5	220	5	3.0	54	2	.29	33	1	.09
6	171	5	2.3	53	2	.29	33	1	.09
7	157	5	2.1	54	2	.29	33	1	.09
8	150	5	2.0	53	2	.29	31	1	.08
9	153	5	2.1	50	2	.27	31	1	.08
10	136	5	1.8	49	2	.26	25	1	.07
11	126	5	1.7	47	2	.25	29	1	.08
12	123	5	1.7	47	2	.25	27	1	.07
13	117	5	1.6	55	2	.30	27	1	.07
14	111	5	1.5	72	2	.39	27	1	.07
15	102	5	1.4	69	2	.37	28	1	.08
16	99	5	1.3	56	2	.30	31	1	.08
17	96	4	1.0	49	2	.26	27	1	.07
18	93	4	1.0	46	2	.25	24	1	.06
19	88	4	.95	44	2	.24	22	1	.06
20	88	4	.95	66	2	.36	20	1	.05
21	88	4	.95	68	2	.37	18	1	.05
22	83	4	.90	69	2	.37	16	1	.04
23	78	3	.63	60	2	.32	17	1	.05
24	78	3	.63	53	2	.29	18	1	.05
25	75	3	.61	56	2	.30	18	1	.05
26	75	3	.61	55	2	.30	17	1	.05
27	70	3	.57	50	2	.27	15	1	.04
28	68	3	.55	46	2	.25	11	6	.18
29	65	2	.35	41	2	.22	10	3	.08
30	64	2	.35	39	2	.21	11	2	.06
31	--	--	--	38	2	.21	--	--	--
TOTAL	4473	--	55.55	1674	--	9.03	735	--	2.49

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	12	1	.03	7.2	1	.02	5.3	2	.03
2	12	1	.03	6.9	1	.02	4.1	2	.02
3	10	1	.03	6.5	1	.02	3.7	2	.02
4	9.1	1	.02	6.3	1	.02	3.2	3	.03
5	8.6	1	.02	5.8	2	.03	3.7	3	.03
6	9.2	1	.02	5.8	2	.03	3.3	2	.02
7	8.6	1	.02	5.8	2	.03	3.0	2	.02
8	8.6	1	.02	5.2	1	.01	3.0	2	.02
9	8.4	1	.02	5.6	1	.02	3.5	2	.02
10	7.6	1	.02	6.8	1	.02	3.0	1	.01
11	7.2	1	.02	5.6	1	.02	2.8	1	.01
12	7.2	2	.04	5.7	1	.02	2.8	1	.01
13	6.8	2	.04	5.8	1	.02	3.3	1	.01
14	6.5	1	.02	5.8	2	.03	5.3	1	.01
15	6.9	1	.02	5.8	2	.03	5.3	1	.01
16	7.2	3	.06	4.8	3	.04	5.1	1	.01
17	7.2	2	.04	4.9	2	.03	5.8	1	.02
18	7.2	1	.02	6.4	1	.02	5.4	1	.01
19	7.2	1	.02	7.4	1	.02	5.1	1	.01
20	7.2	1	.02	23	2	.12	4.5	1	.01
21	7.2	2	.04	40	7	.76	4.4	1	.01
22	7.5	2	.04	32	3	.26	4.4	1	.01
23	7.2	1	.02	18	1	.05	4.4	1	.01
24	7.2	1	.02	11	1	.03	4.4	1	.01
25	7.2	1	.02	9.6	1	.03	5.1	1	.01
26	7.9	5	.11	12	1	.03	5.1	1	.01
27	7.2	3	.06	12	1	.03	4.8	8	.10
28	6.6	2	.04	11	2	.06	4.2	1	.01
29	7.2	1	.02	9.3	2	.05	3.7	1	.01
30	7.2	1	.02	7.6	2	.04	3.7	1	.01
31	7.2	2	.04	5.4	2	.03	--	--	--
TOTAL	244.3	--	.96	305.0	--	1.94	125.4	--	.52

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 196885.4
TOTAL LOAD FOR YEAR (TONS) 260096.82

11-4721.5. EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 3, 1967	1430	9	2060	590	3280	42	52	62	70	73	94	99	100	--	--	--	VBWC
DEC 7.....	0715	6	2620	2250	15900	42	56	71	85	95	98	100	--	--	--	--	VPWC
JAN 15, 1968	1545	9	5800	732	11500	28	42	51	58	60	87	95	99	100	--	--	VBWC
FEB 20.....	1205	9	12800	1490	51500	17	24	30	35	38	58	75	90	100	--	--	VBWC
FEB 21.....	0655	9	10600	1580	45200	15	19	25	28	29	46	64	84	99	100	--	VBWC
FEB 23.....	1130	10	6100	411	6770	29	40	50	56	58	77	86	97	100	--	--	VBWC
FEB 27.....	1255	11	2080	96	539	36	55	65	73	77	91	94	97	100	--	--	SBWC

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
NOV. 17, 1967.....	6	9
NOV. 30.....	63	66
DEC. 3.....	590	174
DEC. 4.....	95	112
DEC. 5.....	382	198
DEC. 6.....	96	127
DEC. 7.....	2250	1090
DEC. 10.....	17	25
DEC. 12.....	11	13
DEC. 13.....	5	7
DEC. 17.....	4	3
DEC. 21.....	17	36
DEC. 29.....	14	14
JAN. 1, 1968.....	7	11
JAN. 4.....	3	2
JAN. 7.....	2	3
JAN. 9.....	2	1
JAN. 12.....	42	57
JAN. 15.....	732	445
JAN. 18.....	241	280
JAN. 20.....	102	120
JAN. 23.....	82	115
JAN. 25.....	84	115
JAN. 27.....	74	98
JAN. 29.....	440	240
JAN. 30.....	416	245
JAN. 31.....	172	170
FEB. 7.....	130	120
FEB. 9.....	98	100
FEB. 11.....	70	90
FEB. 13.....	64	85
FEB. 17.....	466	130
FEB. 19.....	168	110
FEB. 20.....	1490	380
FEB. 21.....	1580	340
FEB. 23.....	411	245
FEB. 26.....	140	100
FEB. 27.....	96	125
FEB. 28.....	73	70
MAR. 1.....	17	25
MAR. 3.....	35	49
MAR. 5.....	30	9
MAR. 7.....	24	7
MAR. 18.....	109	60
MAY 1.....	2	1
JUNE 3.....	2	0
JUNE 4.....	1	0
JUNE 5.....	1	0
JUNE 7.....	1	0
JUNE 10.....	1	0
JUNE 12.....	1	0
JUNE 14.....	1	0
JUNE 17.....	1	0
JUNE 19.....	1	1
JUNE 21.....	1	0
JUNE 24.....	1	0
JUNE 26.....	1	0
JUNE 28.....	6	0
JULY 1.....	1	0
JULY 3.....	1	0
JULY 5.....	1	0
JULY 8.....	1	0
JULY 10.....	1	0
JULY 12.....	2	0
JULY 15.....	1	0
JULY 16.....	3	1
JULY 17.....	2	0
JULY 19.....	1	0
JULY 22.....	2	0
JULY 24.....	1	1
JULY 26.....	5	2
JULY 29.....	1	1
JULY 31.....	2	1
AUG. 2.....	1	1
AUG. 5.....	2	3
AUG. 7.....	2	1
AUG. 9.....	1	1
AUG. 12.....	1	2
AUG. 14.....	2	1
AUG. 16.....	3	1
AUG. 19.....	1	1
AUG. 21.....	7	8
AUG. 23.....	1	1
AUG. 26.....	1	1
AUG. 28.....	2	1
AUG. 30.....	1	1
SEPT. 4.....	3	1
SEPT. 6.....	2	1
SEPT. 9.....	2	1
SEPT. 11.....	1	1
SEPT. 13.....	1	1
SEPT. 16.....	1	1
SEPT. 18.....	1	1
SEPT. 20.....	1	1
SEPT. 23.....	1	1
SEPT. 25.....	1	1
SEPT. 27.....	8	1
SEPT. 30.....	1	1

11-4722. 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 8.2 miles downstream from Longvale.
DRAINAGE AREA.--161 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1966.
Water temperatures: October 1967 to September 1968.
Sediment records: October 1966 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 330 mg/l Feb. 20; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 4,480 tons Jan. 14; minimum daily, 0 ton on many days during November, July, and August.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	19	--	21	--	--	17	--	--	17	--	--	17	--	--	18	16	--	--	--	14	--	--	18	--
NOVEMBER.	--	--	16	--	--	17	--	16	16	--	--	15	--	10	--	14	11	--	13	9	10	--	11	12	7	9	--	6	--	7	--	--
DECEMBER.	--	--	9	9	7	6	6	--	--	8	--	6	3	2	--	--	2	--	--	--	2	--	--	--	--	--	--	--	4	--	--	--
JANUARY..	--	--	--	4	--	--	6	--	4	--	--	6	--	--	--	9	--	9	6	9	--	--	6	--	7	--	7	--	6	5	4	--
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	9	--	--	--	8	--	9	9	9	--	12	--	--	13	--	12	--	--	--	--
MARCH....	--	--	12	--	12	--	12	--	--	--	--	--	--	--	--	--	--	11	--	--	--	--	--	--	--	--	--	13	--	--	--	--
APRIL....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY.....	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	21	21	19	--	18	--	--	21	--	20	--	21	--	--	25	--	24	--	23	--	--	26	--	24	--	24	--	--	--	--
JULY.....	21	--	--	--	26	--	--	26	--	24	--	24	--	--	23	26	23	--	25	--	--	24	--	24	--	28	--	--	24	--	26	--
AUGUST...	--	24	--	--	26	--	27	--	27	--	--	26	--	24	--	26	--	--	22	--	17	--	23	--	--	23	--	27	--	23	--	--
SEPTEMBER	--	--	--	29	--	28	--	--	27	--	21	--	22	--	--	20	--	22	--	18	--	--	18	--	19	--	20	--	--	19	--	--

11-4722. OUTLET CREEK NEAR LONGVALE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.1	8	.02	2.1	4	.02	184	38	19
2	16	36	1.6	2.1	3	.02	586	74	273
3	35	28	2.6	1.9	3	.02	2020	165	1000
4	16	8	.35	1.8	3	.01	2210	160	1600
5	20	6	.32	1.7	3	.01	2190	170	1120
6	16	5	.22	1.7	3	.01	787	52	118
7	12	6	.19	1.7	2	.01	2040	248	1460
8	9.4	4	.10	1.7	1	0	745	110	221
9	7.2	2	.04	2.5	1	.01	346	35	33
10	5.6	5	.08	2.8	1	.01	222	12	7.2
11	4.7	3	.04	2.6	1	.01	162	10	4.4
12	3.6	5	.05	2.9	1	.01	122	8	2.6
13	3.0	5	.04	3.7	5	.05	88	7	1.7
14	2.7	4	.03	113	138	52	71	4	.77
15	2.8	5	.04	58	45	7.0	60	3	.49
16	2.2	5	.03	28	7	.53	54	2	.29
17	2.1	2	.01	19	6	.31	56	3	.45
18	2.0	3	.02	15	4	.16	1070	45	136
19	1.9	2	.01	13	3	.11	668	24	45
20	1.8	2	.01	11	3	.09	326	13	11
21	3.2	2	.02	8.9	1	.02	219	10	5.9
22	6.4	3	.05	7.7	1	.02	180	7	3.4
23	5.7	4	.06	7.7	1	.02	168	5	2.3
24	4.7	3	.04	6.5	3	.05	159	4	1.7
25	5.0	3	.04	5.3	2	.03	142	4	1.5
26	4.4	3	.04	4.3	4	.05	122	4	1.3
27	3.8	4	.04	4.3	3	.03	103	3	.83
28	3.3	4	.04	5.0	1	.01	88	3	.71
29	2.8	4	.03	219	129	123	77	3	.62
30	2.4	4	.03	258	101	70	65	3	.53
31	2.2	5	.03	--	--	--	60	3	.49
TOTAL	209.0	--	6.22	812.9	--	253.62	15390	--	6073.18

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	54	2	.29	1180	34	130	298	1	.80
2	50	2	.27	2820	237	1810	262	1	.71
3	45	2	.24	1910	130	699	229	1	.62
4	41	2	.22	1090	67	197	198	1	.53
5	38	2	.21	682	43	79	226	1	.61
6	38	1	.10	510	30	41	205	1	.55
7	35	1	.09	395	20	21	208	1	.56
8	39	1	.11	326	12	11	194	1	.52
9	925	137	943	282	7	5.3	162	1	.44
10	4230	292	3790	258	7	4.9	142	1	.38
11	1530	118	508	219	7	4.1	129	1	.35
12	696	56	105	191	5	2.6	1190	133	666
13	808	54	127	171	4	1.8	1240	160	536
14	5040	271	4480	153	4	1.7	1300	151	530
15	5750	240	4090	140	4	1.5	787	138	293
16	3030	178	1500	165	12	5.3	2400	169	1110
17	1720	72	334	362	46	45	1870	53	268
18	882	24	57	318	15	13	1110	16	48
19	544	11	16	3960	169	3120	696	10	19
20	385	11	11	4300	330	3950	510	10	14
21	310	10	8.4	3680	277	2840	410	10	11
22	254	10	6.9	2590	147	1030	346	10	9.3
23	215	9	5.2	2070	78	436	362	10	9.8
24	180	9	4.4	1290	29	101	306	10	8.3
25	162	9	3.9	858	8	19	395	32	34
26	147	6	2.4	654	8	14	346	17	16
27	147	4	1.6	500	6	8.1	270	13	9.5
28	156	4	1.7	410	3	3.3	229	10	6.2
29	2860	225	2850	342	1	.92	203	9	4.9
30	3080	234	2060	--	--	--	182	8	3.9
31	1780	74	372	--	--	--	163	7	3.1
TOTAL	35171	--	21279.03	31826	--	14595.52	16568	--	3606.07

11-4722. OUTLET CREEK NEAR LONGVALE, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	158	7	3.0	30	2	.16	14	2	.08
2	159	7	3.0	29	2	.16	14	2	.08
3	140	6	2.3	29	2	.16	15	2	.08
4	125	6	2.0	28	2	.15	13	2	.07
5	116	6	1.9	27	2	.15	12	2	.06
6	106	5	1.4	25	2	.14	12	1	.03
7	96	5	1.3	25	2	.14	11	1	.03
8	90	5	1.2	24	2	.13	11	1	.03
9	84	5	1.1	23	2	.12	11	1	.03
10	79	4	.85	23	2	.12	9.3	1	.03
11	74	4	.80	23	2	.12	8.5	1	.02
12	69	4	.75	22	2	.12	8.0	2	.04
13	63	3	.51	27	5	.36	7.7	1	.02
14	61	3	.49	31	5	.42	7.4	1	.02
15	59	2	.32	30	4	.32	6.8	2	.04
16	56	2	.30	25	3	.20	6.6	3	.05
17	54	2	.29	23	3	.19	6.5	4	.07
18	51	2	.28	21	2	.11	5.8	3	.05
19	49	2	.26	21	2	.11	5.1	3	.04
20	47	2	.25	28	5	.38	4.7	2	.03
21	45	2	.24	32	4	.35	4.2	1	.01
22	43	2	.23	30	3	.24	3.7	1	.01
23	41	2	.22	26	3	.21	3.4	2	.02
24	40	2	.22	24	3	.19	3.2	2	.02
25	40	2	.22	29	6	.47	2.5	2	.01
26	38	2	.21	34	5	.46	2.4	2	.01
27	36	2	.19	28	4	.30	2.1	2	.01
28	35	2	.19	23	3	.19	2.0	3	.02
29	32	2	.17	20	2	.11	1.9	2	.01
30	31	2	.17	18	2	.10	1.9	1	.01
31	--	--	--	15	2	.08	--	--	--
TOTAL	2117	--	24.36	793	--	6.46	216.7	--	1.03

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	2.0	1	.01	.57	4	.01	2.3	2	.01
2	1.8	1	0	.59	4	.01	2.0	2	.01
3	1.7	1	0	.58	5	.01	1.9	3	.02
4	1.9	1	.01	.71	7	.01	1.8	3	.01
5	1.9	1	.01	.68	9	.02	1.8	4	.02
6	1.9	1	.01	.57	6	.01	1.7	5	.02
7	1.7	1	0	.56	5	.01	1.6	6	.03
8	1.3	1	0	.57	4	.01	1.6	8	.03
9	1.3	1	0	.52	3	0	1.5	9	.04
10	1.5	1	0	.49	3	0	1.4	7	.03
11	1.4	1	0	.45	2	0	1.4	3	.01
12	1.5	1	0	.47	2	0	1.4	3	.01
13	1.6	1	0	.52	3	0	1.5	3	.01
14	1.6	1	0	.68	3	.01	1.9	3	.02
15	2.0	1	.01	.65	4	.01	1.7	4	.02
16	1.3	1	0	.61	5	.01	1.7	4	.02
17	1.3	1	0	.62	5	.01	1.6	3	.01
18	1.3	1	0	.79	6	.01	1.5	3	.01
19	1.2	1	0	1.6	6	.03	1.5	2	.01
20	1.0	1	0	10	6	.16	1.4	2	.01
21	.93	2	.01	25	17	1.1	1.4	3	.01
22	.96	2	.01	12	12	.39	1.4	4	.02
23	.81	3	.01	7.3	9	.18	1.4	5	.02
24	.91	5	.01	5.3	7	.10	1.4	6	.02
25	.90	6	.01	4.7	6	.08	1.5	7	.03
26	.76	7	.01	6.5	4	.07	1.4	6	.02
27	.77	6	.01	6.1	4	.07	1.5	5	.02
28	.69	6	.01	4.7	4	.05	1.5	6	.02
29	.71	6	.01	4.1	2	.02	1.2	7	.02
30	.78	5	.01	3.4	4	.04	1.5	9	.04
31	.67	4	.01	2.8	2	.02	--	--	--
TOTAL	40.09	--	.16	104.13	--	2.45	47.4	--	.57

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 103295.22
TOTAL LOAD FOR YEAR (TONS) 45848.67

11-4722. OUTLET CREEK NEAR LONGVALE, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 30, 1967	1200	7	262	95	67	78	89	94	96	96	99	100	--	--	--	--	SBWC
JAN 16, 1968	1545	9	2660	171	1230	29	46	57	65	69	84	90	95	99	100	--	SBWC
FEB 21.....	0720	9	4440	308	3690	29	40	49	57	60	78	88	98	100	--	--	VBWC
FEB 23.....	1220	12	2050	67	371	40	47	61	70	75	87	92	97	100	--	--	SBWC

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 9, 1967.....	2	0
OCT. 11.....	3	1
OCT. 14.....	4	1
OCT. 17.....	2	1
OCT. 20.....	2	1
OCT. 23.....	4	2
OCT. 24.....	3	1
OCT. 28.....	4	1
OCT. 31.....	5	3
NOV. 3.....	3	1
NOV. 6.....	3	1
NOV. 8.....	1	1
NOV. 9.....	1	1
NOV. 12.....	1	1
NOV. 14.....	158	152
NOV. 16.....	8	7
NOV. 17.....	6	5
NOV. 19.....	3	2
NOV. 20.....	3	2
NOV. 21.....	1	2
NOV. 23.....	1	2
NOV. 24.....	3	2
NOV. 25.....	1	1
NOV. 26.....	4	2
NOV. 28.....	1	1
NOV. 30.....	95	129
DEC. 3.....	132	120
DEC. 4.....	66	100
DEC. 5.....	168	128
DEC. 6.....	53	90
DEC. 7.....	275	200
DEC. 10.....	12	20
DEC. 12.....	8	11
DEC. 13.....	7	7
DEC. 14.....	4	5
DEC. 17.....	2	4
DEC. 21.....	10	22
DEC. 29.....	3	5
JAN. 4, 1968.....	2	2
JAN. 7.....	1	1
JAN. 9.....	48	6
JAN. 12.....	52	82
JAN. 16.....	171	115
JAN. 19.....	11	29
JAN. 20.....	10	20
JAN. 23.....	9	10
JAN. 25.....	9	10
JAN. 27.....	4	4
JAN. 29.....	446	130
JAN. 30.....	289	270
JAN. 31.....	82	100
FEB. 7.....	19	13
FEB. 9.....	7	8
FEB. 11.....	7	8
FEB. 13.....	4	3
FEB. 17.....	40	37
FEB. 19.....	25	27
FEB. 20.....	311	270
FEB. 21.....	308	215
FEB. 23.....	67	66
FEB. 26.....	9	9
FEB. 28.....	2	6
MAR. 3.....	1	1
MAR. 5.....	1	2
MAR. 7.....	1	2
MAR. 18.....	14	30
MAY 1.....	2	1
JUNE 3.....	2	0
JUNE 4.....	1	1
JUNE 5.....	3	0
JUNE 7.....	1	0
JUNE 10.....	1	1
JUNE 12.....	2	0
JUNE 14.....	1	1
JUNE 17.....	4	0
JUNE 19.....	3	1
JUNE 21.....	1	0
JUNE 24.....	2	0
JUNE 26.....	2	0
JUNE 28.....	3	0
JULY 1.....	1	0
JULY 3.....	1	1
JULY 5.....	1	0
JULY 8.....	1	0
JULY 10.....	1	0
JULY 12.....	1	0
JULY 15.....	1	0
JULY 17.....	1	0
JULY 19.....	1	0
JULY 22.....	2	1
JULY 24.....	5	1
JULY 26.....	7	1
JULY 29.....	6	1
JULY 31.....	4	1
AUG. 2.....	4	1
AUG. 5.....	9	1
AUG. 7.....	5	1
AUG. 9.....	3	1
AUG. 12.....	2	2
AUG. 14.....	3	2
AUG. 16.....	5	1
AUG. 19.....	6	1
AUG. 21.....	17	62
AUG. 23.....	9	2
AUG. 26.....	4	1
AUG. 28.....	4	1
AUG. 30.....	6	1
SEPT. 4.....	3	1
SEPT. 6.....	5	2
SEPT 9.....	9	2
SEPT. 11.....	3	1
SEPT. 13.....	3	1
SEPT. 16.....	4	1
SEPT. 18.....	3	1
SEPT. 20.....	2	1
SEPT. 23.....	5	2
SEPT. 25.....	7	2
SEPT. 27.....	5	1
SEPT. 30.....	9	1

11-4725. 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.

RECORDS AVAILABLE.--Water temperatures: October 1957 to September 1959, October 1960 to September 1965, May 1966. to September 1968.
Sediment records: October 1957 to September 1965.

EXTREMES, 1962-65, May to September 1966.--Water temperatures: Maximum, 29°C June 15, 1966; minimum (1962-65), 3°C Nov. 23, 1964.

REMARKS.--No records available for Dec. 14 to Sept. 30; probe broken by high water of Dec. 14.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	21	17	17	17	18	18	21	20	21	22	23	22	22	21	20	20	20	20	21	20	17	20	21	20	20	19	19	19	19	18	19	19
MINIMUM	17	13	13	15	15	15	15	16	17	16	17	17	16	14	12	13	13	13	14	14	14	16	16	16	15	13	14	13	12	12	12	14
NOVEMBER																																
MAXIMUM	19	19	19	16	19	19	19	17	17	18	17	16	16	16	16	15	15	14	14	14	14	13	12	12	12	10	9	9	8	7	--	14
MINIMUM	12	12	12	13	14	14	14	14	13	14	13	14	14	14	14	12	12	12	12	11	11	9	8	8	8	7	6	7	7	6	--	11
DECEMBER																																
MAXIMUM	7	7	9	9	9	7	8	7	7	7	7	6	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	4	6	7	8	7	6	7	6	4	6	4	4	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-4728. 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.
RECORDS AVAILABLE.--Water temperatures: May 1966 to September 1968.
Sediment records: October 1967 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 29°C July 5; minimum, 1°C Jan. 29.
Sediment concentrations: Maximum daily, 7,150 mg/l Jan. 14; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 264,000 tons Jan. 14; minimum daily, 0.02 ton Oct. 1.
EXTREMES, 1966-68.--Water temperatures: Maximum, 29°C July 5, 1968; minimum (1967-68), 1°C Jan. 29, 1968.
Sediment concentrations (1967-68): Maximum daily, 7,150 mg/l Jan. 14, 1968; minimum daily, 1 mg/l on many days.
Sediment loads (1967-68): Maximum daily, 264,000 tons Jan. 14, 1968; minimum daily, 0.02 ton Oct. 1, 1967.
REMARKS.--Temperature recorder stopped Dec. 13 to Jan. 22; probe out of water Aug. 27 to Sept. 30. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	18	17	14	14	15	15	16	16	17	17	17	17	18	17	17	17	18	17	17	17	16	17	17	17	17	16	16	16	16	16	17	16
MINIMUM	17	12	12	13	13	13	13	13	13	14	14	14	14	13	13	13	13	13	13	13	13	14	13	13	13	12	12	12	11	12	12	13
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	16	16	16	14	16	16	16	16	15	15	14	14	14	12	12	12	12	12	12	12	11	11	11	11	10	9	9	9	9	8	--	12
MINIMUM	12	12	12	13	13	13	13	13	13	13	12	12	12	11	11	10	11	10	11	11	10	9	9	9	8	8	8	8	8	7	--	11
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	4	4	4	7	6	--	--	--	--
MAXIMUM	7	7	6	6	6	5	5	5	5	5	5	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	7	6	6	6	5	4	5	5	5	5	5	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY..	4	--	--	3	--	--	--	3	4	4	4	3	5	6	7	6	6	5	5	6	6	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	6	6	4	3	3	2	2	4	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	4	4	3	3	2	1	2	3	--
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	3	3	5	6	6	7	7	6	6	6	6	7	7	7	7	7	7	7	7	8	8	7	7	8	8	8	8	7	7	--	--	7
MINIMUM	2	3	3	3	5	6	5	5	5	5	5	5	6	5	5	7	6	6	7	7	8	7	7	7	8	7	7	7	7	--	--	6
MARCH....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
MINIMUM	7	7	7	7	7	8	8	8	8	8	8	8	8	8	7	7	7	7	8	8	8	7	8	8	8	8	8	7	7	7	7	7
APRIL....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	10	10	10	11	10	--	9
MINIMUM	8	8	8	8	8	8	8	8	8	8	8	9	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	--	9
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	11	11	12	12	11	12	12	12	12	12	12	12	12	12	12	12	13	13	12	13	13	13	13	13	13	13	14	14	13	14	14	12
MINIMUM	10	10	11	11	11	11	11	11	11	11	11	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	13	13	13	13	12
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	14	14	14	15	14	15	15	16	16	16	16	20	20	22	23	24	23	25	26	26	26	26	27	27	27	28	27	24	25	26	--	21
MINIMUM	13	13	14	14	14	14	14	14	14	14	14	13	12	13	14	14	16	16	17	16	17	16	17	16	16	17	17	14	13	14	--	15
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	26	26	27	28	29	28	28	28	27	26	21	22	22	22	22	21	23	24	24	24	24	24	24	24	24	25	26	24	26	26	26	25
MINIMUM	15	16	16	17	18	18	17	17	17	18	18	17	18	17	17	17	18	19	19	19	20	20	20	20	19	20	20	21	22	22	22	18
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--
MAXIMUM	26	26	26	25	24	25	24	26	24	24	23	23	21	22	21	21	20	20	19	17	17	20	22	22	19	22	--	--	--	--	--	22
MINIMUM	22	22	21	21	20	20	20	21	21	21	20	21	19	19	18	18	17	18	17	14	15	15	16	16	22	17	--	--	--	--	--	19
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-4728. MIDDLE FORK EEL RIVER ABOVE BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	9.0	1	.02	15	2	.08	51	3	.41
2	105	6	1.7	14	2	.08	424	166	628
3	112	2	.60	14	2	.08	2080	361	2030
4	53	2	.29	14	1	.04	1940	300	2510
5	40	2	.22	14	1	.04	1630	294	1780
6	35	2	.19	14	1	.04	418	35	40
7	29	2	.16	14	1	.04	740	124	309
8	24	2	.13	13	1	.04	345	17	16
9	21	2	.11	16	1	.04	287	9	7.0
10	19	2	.10	17	1	.05	310	8	6.7
11	18	2	.10	17	1	.05	282	6	4.6
12	17	2	.09	17	1	.05	260	4	2.8
13	15	2	.08	17	1	.05	215	4	2.3
14	15	2	.08	890	295	1050	174	4	1.9
15	14	2	.08	177	18	8.6	177	4	1.9
16	13	2	.07	85	4	.92	177	4	1.9
17	12	2	.06	58	2	.31	162	6	2.6
18	12	2	.06	45	1	.12	187	20	10
19	12	2	.06	41	1	.11	150	4	1.6
20	12	2	.06	37	1	.10	135	2	.73
21	15	2	.08	33	1	.09	103	1	.28
22	28	2	.15	32	2	.17	121	2	.65
23	27	2	.15	30	2	.16	159	3	1.3
24	23	2	.12	28	2	.15	215	5	2.9
25	21	2	.11	27	2	.15	430	8	9.3
26	19	2	.10	25	2	.14	830	62	154
27	18	2	.10	26	2	.14	1460	141	558
28	17	2	.09	28	2	.15	1020	77	229
29	17	2	.09	70	50	13	637	18	31
30	17	2	.09	65	16	2.8	436	13	15
31	16	2	.09	--	--	--	340	9	8.3
TOTAL	805.0	--	5.43	1893	--	1077.79	15895	--	8367.17

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	291	7	5.5	235	52	48	1680	110	499
2	243	7	4.6	1890	915	5180	1390	72	270
3	198	6	3.2	3000	726	5960	1220	55	181
4	180	6	2.9	2230	410	2470	1140	50	154
5	159	6	2.6	1860	215	1080	1180	45	143
6	145	5	2.0	1690	165	753	920	38	94
7	140	4	1.5	1990	135	725	736	30	60
8	148	3	1.2	1830	110	544	615	22	37
9	474	177	678	1390	87	327	530	19	27
10	4800	444	6290	1250	68	230	466	17	21
11	2860	50	386	972	52	136	427	15	17
12	2150	32	186	810	42	92	780	132	399
13	5200	1410	23900	619	35	58	662	68	122
14	12400	7150	264000	554	32	48	728	80	157
15	6170	6150	117000	418	30	34	680	23	42
16	2760	1920	14300	760	126	371	1270	161	583
17	2100	900	5100	2780	907	7280	1080	113	330
18	1250	490	1650	2740	460	3400	800	90	194
19	720	322	626	6860	3270	105000	674	78	142
20	619	235	393	8420	3570	92500	688	65	121
21	880	210	499	8460	3280	76600	712	52	100
22	1010	178	485	6700	2640	47800	688	42	78
23	860	108	251	8020	2080	45000	680	31	57
24	810	80	175	5700	1450	22300	720	25	49
25	730	80	158	3340	762	6870	1640	293	1420
26	602	80	130	2190	425	2510	1500	115	466
27	412	73	81	2000	285	1540	1180	45	143
28	315	57	48	2030	215	1180	1240	34	114
29	467	96	143	1850	155	774	1570	40	170
30	375	60	61	--	--	--	1610	43	187
31	300	33	27	--	--	--	1360	41	151
TOTAL	49768	--	436590.5	82588	--	430810	30566	--	6528

11-4728. MIDDLE FORK EEL RIVER ABOVE BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1190	34	109	333	6	5.4	125	3	1.0
2	920	27	67	331	5	4.5	120	3	.97
3	704	20	38	337	5	4.5	112	3	.91
4	650	18	32	340	5	4.6	105	4	1.1
5	595	16	26	333	5	4.5	100	4	1.1
6	525	14	20	305	4	3.3	98	4	1.1
7	492	13	17	294	4	3.2	96	4	1.0
8	484	11	14	275	4	3.0	92	5	1.2
9	516	11	15	265	4	2.9	87	5	1.2
10	590	11	18	255	4	2.8	81	5	1.1
11	644	10	17	245	3	2.0	76	5	1.0
12	595	10	16	235	3	1.9	72	5	.97
13	504	9	12	225	3	1.8	69	5	.93
14	463	9	11	250	3	2.0	66	5	.89
15	449	9	11	230	3	1.9	64	5	.86
16	418	9	10	215	3	1.7	61	5	.82
17	375	8	8.1	200	3	1.6	58	5	.78
18	346	8	7.5	195	3	1.6	56	5	.76
19	337	8	7.3	195	3	1.6	53	5	.72
20	325	8	7.0	370	8	8.0	51	5	.69
21	313	8	6.8	290	4	3.1	49	5	.66
22	303	7	5.7	245	4	2.6	47	6	.76
23	299	7	5.7	215	3	1.7	45	8	.97
24	294	7	5.6	185	3	1.5	43	12	1.4
25	294	7	5.6	170	2	.92	41	9	1.0
26	302	7	5.7	165	2	.89	39	6	.63
27	315	6	5.1	158	2	.85	37	3	.30
28	316	6	5.1	150	2	.81	36	3	.29
29	325	6	5.3	145	2	.78	35	2	.19
30	340	6	5.5	135	3	1.1	34	2	.18
31	--	--	--	130	3	1.1	--	--	--
TOTAL	14223	--	519.0	7416	--	78.15	2048	--	25.48

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	33	2	.18	10	1	.03	19	1	.05
2	31	2	.17	10	1	.03	17	1	.05
3	30	2	.16	9.9	2	.05	15	1	.04
4	29	2	.16	9.8	2	.05	14	1	.04
5	27	2	.15	9.7	2	.05	13	1	.04
6	26	2	.14	9.6	2	.05	12	1	.03
7	25	2	.14	9.5	2	.05	12	1	.03
8	24	2	.13	9.5	2	.05	11	1	.03
9	23	2	.12	9.4	2	.05	11	1	.03
10	22	2	.12	9.2	2	.05	11	1	.03
11	21	1	.06	9.0	2	.05	10	1	.03
12	20	1	.05	8.9	2	.05	10	1	.03
13	19	1	.05	8.9	2	.05	9.8	1	.03
14	18	1	.05	8.9	2	.05	11	2	.06
15	18	1	.05	8.9	2	.05	13	3	.11
16	17	1	.05	8.9	2	.05	14	3	.11
17	17	1	.05	8.9	2	.05	13	3	.11
18	16	1	.04	9.0	2	.05	12	3	.10
19	15	1	.04	9.8	2	.05	11	3	.09
20	15	1	.04	26	190	13	10	3	.08
21	14	1	.04	130	31	11	10	3	.08
22	14	1	.04	93	8	2.0	10	3	.08
23	13	1	.04	60	5	.81	10	3	.08
24	13	1	.04	43	3	.35	10	3	.08
25	12	1	.03	36	1	.10	10	2	.05
26	12	1	.03	38	1	.10	10	2	.05
27	11	1	.03	38	1	.10	9.9	2	.05
28	11	1	.03	35	1	.09	9.8	2	.05
29	11	1	.03	29	1	.08	9.7	2	.05
30	10	1	.03	21	1	.06	9.6	2	.05
31	10	1	.03	22	1	.06	--	--	--
TOTAL	577	--	2.32	748.8	--	28.66	347.8	--	1.74

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 206875.6
TOTAL LOAD FOR YEAR (TONS) 884034.24

11-4728. MIDDLE FORK EEL RIVER ABOVE BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 13, 1968	0955	6	5540	812	12100	18	25	31	37	40	57	71	88	100	--	--	SBWC
JAN 13.....	1600	5	6950	2020	37900	10	15	21	27	30	48	60	77	96	100	--	VBWC
JAN 14.....	0815	5	12000	6590	214000	17	23	32	41	51	53	74	89	98	100	--	VPWC
JAN 15.....	0850	7	7190	6820	132000	10	16	23	28	36	41	67	88	99	100	--	VPWC
JAN 17.....	1555	6	1910	907	4680	20	28	37	48	57	64	72	79	86	100	--	VPWC
FEB 2.....	1500	3	2200	1220	7250	16	24	31	36	39	53	66	82	100	--	--	VBWC
FEB 19.....	1235	7	4800	1700	22000	13	20	27	33	35	61	74	87	99	100	--	VBWC
FEB 19.....	1725	7	6470	5860	102000	15	22	25	39	50	58	75	92	100	--	--	VPWC
FEB 22.....	1230	7	6740	2640	48000	13	19	25	29	30	46	54	65	79	99	100	VBWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 17, 1968	1640	6	5	2030	1	2	4	12	25	37	54	58	74	100	--	S
FEB 22.....	1530	-	6	6700	1	4	7	19	34	50	65	78	87	92	100	S

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 22, 1967.....	2	1
NOV. 11.....	1	1
NOV. 14.....	407	310
NOV. 19.....	1	1
NOV. 27.....	2	1
NOV. 29.....	68	87
NOV. 30.....	16	22
DEC. 1.....	4	5
DEC. 2.....	1	1
DEC. 3.....	375	115
DEC. 4.....	127	58
DEC. 5.....	378	108
DEC. 6.....	28	25
DEC. 7.....	128	99
DEC. 8.....	17	22
DEC. 9.....	8	13
DEC. 10.....	8	7
DEC. 12.....	4	7
DEC. 17.....	4	3
DEC. 18.....	26	40
DEC. 19.....	2	2
DEC. 24.....	5	5
DEC. 25.....	38	29
DEC. 26.....	46	22
DEC. 27.....	146	66
DEC. 28.....	78	37
JAN. 1, 1968.....	7	4
JAN. 4.....	6	4
JAN. 8.....	3	2
JAN. 9.....	76	95
JAN. 10.....	410	290
JAN. 11.....	50	44
JAN. 12.....	22	21
JAN. 13.....	2020	460
JAN. 14.....	6590	2600
JAN. 15.....	6820	1760
JAN. 16.....	1880	750
JAN. 17.....	906	630
JAN. 18.....	482	300
JAN. 19.....	329	155
JAN. 20.....	235	130
JAN. 21.....	212	155
JAN. 22.....	168	100
JAN. 23.....	92	70
JAN. 28.....	54	44
JAN. 29.....	78	66
JAN. 30.....	46	47
JAN. 31.....	32	32
FEB. 2.....	1220	345
FEB. 3.....	728	290
FEB. 5.....	198	150
FEB. 6.....	160	120
FEB. 8.....	108	78
FEB. 10.....	62	54
FEB. 13.....	37	29
FEB. 16.....	114	85
FEB. 17.....	932	290
FEB. 18.....	433	220
FEB. 19.....	5860	320
FEB. 20.....	3290	870
FEB. 21.....	3480	780
FEB. 22.....	2720	580
FEB. 24.....	1560	620
FEB. 25.....	784	320
FEB. 26.....	444	245
FEB. 28.....	216	150
MAR. 2.....	64	48
MAR. 8.....	20	17
MAR. 12.....	114	100
MAR. 13.....	27	30
MAR. 14.....	62	66
MAR. 16.....	163	150
MAR. 17.....	118	125
MAR. 24.....	20	11
MAR. 25.....	276	155
MAR. 27.....	36	29
MAR. 31.....	42	34
APR. 3.....	20	17
APR. 9.....	11	8
APR. 14.....	9	4
MAY 4.....	4	3
MAY 7.....	4	3
MAY 14.....	3	1
MAY 19.....	3	1
MAY 20.....	16	8
MAY 21.....	4	2
MAY 26.....	2	1
JUNE 11.....	5	1
JULY 17.....	1	0
AUG. 27.....	1	1

11-4729. 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.
RECORDS AVAILABLE.--Chemical analyses: November 1964 to September 1966.
Specific conductance: October 1966 to February 1968.
Water temperatures: May 1964 to September 1968.
Sediment records: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 31°C July 6; minimum, freezing point on several days during December and January.
Sediment concentrations: Maximum daily, 5,830 mg/l Jan. 14; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 80,200 tons Jan. 14; minimum daily, 0.01 ton on many days during October, August, and September.
EXTREMES, 1964-68.--Water temperatures: Maximum, 32°C Aug. 23, 1964, Aug. 2, 1967; minimum (1965-68), freezing point on several days in 1965-68.
Sediment concentrations (1965-68): Maximum daily, 10,600 mg/l Jan. 4, 1966; minimum daily, 1 mg/l on many days in 1967-68.
Sediment loads (1965-68): Maximum daily, 143,000 tons Jan. 4, 1966; minimum daily, 0.01 ton on many days in 1967-68.
REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), OCTOBER 1967 TO FEBRUARY 1968

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	MINIMUM
1.....	504	486	477	445	--	--	--	--	195	135		
2.....	505	482	482	446	--	--	--	--	136	119		
3.....	532	494	477	445	--	--	--	--	142	119		
4.....	537	512	478	448	--	--	--	--	147	116		
5.....	534	493	474	443	--	--	--	--	135	118		
6.....	532	489	471	439	--	--	--	--	122	97		
7.....	532	483	473	440	--	--	--	--	112	85		
8.....	520	473	473	447	--	--	--	--	114	90		
9.....	514	467	474	443	--	--	--	--	114	100		
10.....	510	463	472	449	--	--	--	--	114	97		
11.....	504	453	473	439	--	--	--	--	117	94		
12.....	503	454	463	438	--	--	--	--	120	93		
13.....	672	465	462	345	--	--	--	--	118	109		
14.....	571	476	448	317	--	--	--	--	119	103		
15.....	549	470	443	397	--	--	--	--	119	104		
16.....	535	463	464	431	--	--	126	108	114	103		
17.....	525	433	475	447	--	--	134	115	118	88		
18.....	515	456	504	472	--	--	141	121	121	109		
19.....	513	449	506	455	--	--	147	122	121	84		
20.....	507	447	476	425	--	--	150	125	107	89		
21.....	509	482	471	401	--	--	148	132	--	--		
22.....	503	464	414	354	--	--	152	105	--	--		
23.....	488	462	388	229	--	--	156	125	--	--		
24.....	483	454	--	--	--	--	158	131	--	--		
25.....	485	450	--	--	--	--	160	135	--	--		
26.....	477	453	--	--	--	--	164	160	--	--		
27.....	484	445	--	--	--	--	169	163	--	--		
28.....	485	454	--	--	--	--	172	164	--	--		
29.....	476	449	--	--	--	--	173	101	--	--		
30.....	475	438	--	--	--	--	178	150	--	--		
31.....	476	436	--	--	--	--	188	178	--	--		
AVERAGE	514	465	--	--	--	--	--	--	--	--		

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	16	19	18	20	19	20	20	20	21	22	21	19	20	20	20	20	20	20	20	13	19	19	15	19	18	--	--	18	19	19	19
MINIMUM	16	12	12	12	12	11	12	12	12	12	13	12	12	11	10	10	10	11	11	11	12	12	12	11	11	10	--	--	11	11	11	11
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	19	19	19	15	19	19	19	19	16	16	16	14	13	12	15	14	14	13	13	15	14	13	13	13	12	12	11	11	7	6	--	14
MINIMUM	11	11	11	12	12	12	12	12	12	11	11	12	12	10	10	9	9	10	9	9	9	8	7	7	6	6	6	6	5	5	--	9
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	8	6	6	7	7	5	6	6	6	7	6	6	4	3	4	3	2	4	4	4	3	6	6	6	7	7	8	7	7	6	6	5
MINIMUM	4	4	4	5	3	3	3	3	3	3	2	2	1	0	0	0	1	2	1	1	1	3	3	2	3	3	4	3	2	2	2	2
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	6	5	4	5	5	4	4	3	5	5	4	4	6	7	7	6	6	6	7	8	7	9	8	8	8	4	3	2	1	4	4	5
MINIMUM	2	1	0	0	0	0	0	2	3	2	1	1	4	6	5	3	2	2	3	3	4	4	4	3	3	2	1	0	0	1	2	2
FEBRUARY.	--	--	--	--	--	--	--	--	--	7	--	--	6	--	--	6	7	6	7	7	8	8	--	8	8	7	--	--	--	--	--	--
MAXIMUM	4	4	6	7	8	8	9	8	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	10	--	--	--
MINIMUM	2	3	3	3	3	4	4	4	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	4	--	--	--
MARCH....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	7	10	11	9	9	8	7	11	11	10	11	7	8	8	9	8	9	11	12	12	11	11	13	14	13	13	14	17	17	17	16	11
MINIMUM	6	6	6	6	6	5	5	5	5	4	6	5	4	6	7	6	6	5	6	6	6	8	9	8	8	7	6	9	11	11	10	6
APRIL....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	12	14	13	13	13	13	14	15	17	16	16	14	15	16	14	13	13	14	14	13	13	14	11	15	16	17	17	17	18	18	--	14
MINIMUM	11	11	11	9	9	7	8	8	9	9	10	9	7	8	8	6	5	5	7	6	5	5	7	6	8	7	8	8	9	9	--	8
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	17	18	19	18	17	16	14	18	19	19	17	18	13	17	18	19	18	19	15	15	14	18	18	13	19	21	21	22	21	21	22	18
MINIMUM	8	9	10	10	10	7	7	9	10	10	10	11	9	8	8	9	11	11	13	12	11	9	10	9	11	11	11	13	12	12	12	10
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	23	18	20	22	16	21	21	22	22	23	22	22	22	23	25	26	26	27	27	27	28	27	28	28	29	29	28	27	26	27	--	24
MINIMUM	14	14	14	19	13	12	12	13	13	13	16	13	13	13	14	15	17	17	18	18	18	18	19	18	18	19	19	18	17	17	--	16
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	28	28	29	29	30	31	30	30	29	30	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	28	28	30	26	29
MINIMUM	18	19	19	19	26	22	21	20	20	21	21	21	21	21	20	20	18	19	19	19	20	20	20	20	20	20	20	20	21	21	22	20
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	30	30	30	29	29	29	29	29	29	29	28	28	27	27	27	27	26	26	24	18	20	24	25	26	21	24	25	26	27	27	28	26
MINIMUM	21	21	21	21	20	20	20	22	21	20	20	21	20	21	20	19	18	19	19	16	16	15	16	17	18	18	18	17	17	17	18	18
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	28	27	28	27	28	27	28	27	26	27	26	26	26	26	25	26	27	26	24	23	23	23	24	24	24	24	24	24	23	23	--	25
MINIMUM	18	18	18	18	18	19	18	18	18	18	18	17	20	19	16	16	17	17	16	14	14	14	14	14	15	16	16	15	15	15	--	17

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	4.2	1	.01	7.1	2	.04	19	2	.10
2	9.3	16	.57	6.8	2	.04	26	10	2.4
3	52	11	1.6	6.8	2	.04	313	356	303
4	21	2	.11	6.8	2	.04	422	266	638
5	16	2	.09	6.5	2	.04	334	316	376
6	15	2	.08	6.5	1	.02	93	32	8.0
7	13	2	.07	6.5	1	.02	260	387	297
8	11	2	.06	6.5	1	.02	128	42	15
9	10	2	.05	6.5	1	.02	93	11	2.8
10	9.4	2	.05	6.8	1	.02	100	10	2.7
11	9.4	3	.08	6.8	1	.02	86	4	.93
12	9.0	3	.07	6.8	1	.02	78	2	.42
13	7.7	3	.06	7.4	1	.02	64	1	.17
14	7.4	3	.06	166	238	128	43	2	.23
15	7.1	3	.06	38	98	10	50	2	.27
16	6.8	3	.06	19	32	1.6	50	3	.41
17	6.8	3	.06	13	5	.18	46	7	.87
18	6.8	3	.06	11	1	.03	69	40	7.5
19	6.5	3	.05	11	1	.03	52	5	.70
20	6.5	3	.05	9.9	3	.08	43	4	.46
21	7.1	3	.06	9.9	5	.13	40	5	.54
22	13	3	.11	9.0	4	.10	41	6	.66
23	13	3	.11	8.1	4	.09	55	10	1.5
24	10	3	.08	7.7	3	.06	93	23	5.8
25	9.0	3	.07	7.4	3	.06	176	128	61
26	8.1	3	.07	7.4	3	.06	213	117	67
27	7.4	3	.06	7.4	2	.04	246	136	90
28	7.4	3	.06	8.6	2	.05	184	48	24
29	7.4	2	.04	35	167	17	133	28	10
30	7.4	2	.04	31	34	2.9	89	17	4.1
31	7.4	2	.04	--	--	--	69	10	1.9
TOTAL	332.1	--	4.04	487.2	--	160.77	3708	--	1923.46

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	56	7	1.1	458	160	243	760	224	460
2	46	7	.87	1690	1520	7100	600	180	292
3	37	6	.60	1260	860	2930	500	155	209
4	32	6	.52	875	405	957	460	140	174
5	28	6	.45	853	315	725	440	135	160
6	23	5	.31	990	380	1020	425	108	124
7	23	5	.31	864	310	723	395	75	80
8	26	5	.35	820	270	598	365	55	54
9	150	424	763	820	238	527	330	44	39
10	1020	2000	8340	800	209	451	300	39	32
11	143	270	104	702	184	349	275	38	28
12	111	100	30	614	150	249	1400	418	1580
13	374	526	588	614	110	182	660	152	271
14	4610	5830	80200	590	75	119	700	175	331
15	3620	3730	38100	508	52	71	510	100	138
16	1520	1750	7460	1200	348	1130	2300	561	3480
17	675	800	1460	1600	1380	5960	1150	205	637
18	508	480	658	1050	770	2180	920	144	358
19	515	304	423	3800	3870	39700	700	120	227
20	558	230	347	2850	3680	28300	610	105	173
21	550	192	285	3370	2860	26000	550	75	111
22	360	142	138	2950	1820	14500	525	50	71
23	321	92	80	3170	1520	13000	410	35	39
24	260	67	47	2440	1260	8300	500	28	38
25	250	57	38	1890	1090	5560	645	293	510
26	240	54	35	1560	652	2750	555	70	105
27	215	43	25	1260	445	1510	460	49	61
28	360	39	38	1010	340	927	415	48	54
29	688	600	1110	978	278	734	450	46	56
30	550	260	386	--	--	--	495	43	57
31	456	130	160	--	--	--	435	39	46
TOTAL	18325	--	140819.51	41586	--	166795	19240	--	9995

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	410	30	33	113	3	.92	44	2	.24
2	385	24	25	106	3	.86	44	2	.24
3	355	22	21	106	3	.86	43	2	.23
4	330	19	17	106	3	.86	42	2	.23
5	297	14	11	104	3	.84	42	2	.23
6	254	11	7.5	95	2	.51	42	2	.23
7	234	10	6.3	84	2	.45	42	2	.23
8	210	8	4.5	82	2	.44	39	2	.21
9	199	7	3.8	79	2	.43	39	2	.21
10	199	7	3.8	79	2	.43	37	2	.20
11	203	7	3.8	75	2	.41	35	2	.19
12	199	7	3.8	73	1	.20	34	2	.18
13	193	7	3.6	77	1	.21	33	2	.18
14	176	7	3.3	86	1	.23	32	1	.09
15	170	7	3.2	75	1	.20	29	1	.08
16	159	7	3.0	62	1	.17	29	1	.08
17	156	7	2.9	62	1	.17	26	1	.07
18	143	6	2.3	59	1	.16	26	1	.07
19	143	6	2.3	59	4	.64	24	1	.06
20	140	6	2.3	113	3	.92	22	1	.06
21	125	6	2.0	75	2	.41	21	2	.11
22	123	5	1.7	88	2	.48	20	3	.16
23	118	5	1.6	72	1	.19	20	4	.22
24	115	5	1.6	62	1	.17	19	5	.26
25	108	5	1.5	75	1	.20	18	5	.24
26	106	5	1.4	69	2	.37	16	5	.22
27	106	4	1.1	59	2	.32	15	5	.20
28	106	4	1.1	58	2	.31	15	4	.16
29	106	4	1.1	54	2	.29	14	4	.15
30	115	4	1.2	51	2	.28	13	4	.14
31	--	--	--	48	2	.26	--	--	--
TOTAL	5683	--	177.7	2406	--	13.19	875	--	5.17

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	13	4	.14	5.6	1	.02	7.7	1	.02
2	13	3	.11	5.6	1	.02	6.6	1	.02
3	12	3	.10	5.3	1	.01	6.2	1	.02
4	12	3	.10	5.3	1	.01	6.2	1	.02
5	11	3	.09	5.0	1	.01	5.9	1	.02
6	11	2	.06	4.7	1	.01	5.9	1	.02
7	11	2	.06	4.5	1	.01	5.3	1	.01
8	11	2	.06	4.5	1	.01	5.3	1	.01
9	10	2	.05	4.5	1	.01	5.0	1	.01
10	9.9	2	.05	4.5	1	.01	4.7	1	.01
11	9.4	2	.05	4.2	1	.01	4.7	1	.01
12	9.0	2	.05	4.2	1	.01	4.7	1	.01
13	8.6	1	.02	4.2	1	.01	5.0	1	.01
14	8.6	1	.02	4.0	1	.01	5.9	1	.02
15	8.6	1	.02	4.2	1	.01	5.9	1	.02
16	8.6	1	.02	4.2	1	.01	5.6	1	.02
17	8.1	1	.02	4.5	1	.01	5.3	1	.01
18	8.1	1	.02	5.0	1	.01	4.7	1	.01
19	8.1	1	.02	6.5	1	.02	4.5	1	.01
20	7.7	1	.02	12	3	.10	4.0	1	.01
21	7.4	1	.02	27	4	.29	3.7	1	.01
22	7.1	1	.02	22	2	.12	3.7	1	.01
23	6.8	1	.02	15	1	.04	3.7	1	.01
24	6.5	1	.02	12	1	.03	3.7	1	.01
25	6.2	1	.02	11	1	.03	3.7	1	.01
26	6.2	1	.02	13	1	.04	3.7	1	.01
27	6.2	1	.02	15	1	.04	3.7	1	.01
28	6.2	1	.02	11	1	.03	3.3	1	.01
29	5.9	1	.02	10	1	.03	3.3	1	.01
30	5.9	1	.02	9.0	1	.02	3.0	1	.01
31	5.6	1	.02	8.1	1	.02	--	--	--
TOTAL	268.7	--	1.30	255.6	--	1.01	144.8	--	.39

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 93311.4
TOTAL LOAD FOR YEAR (TONS) 319896.54

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 14, 1967	0910	12	315	383	326	55	69	76	86	90	98	99	100	--	--	--	VBWC
JAN 14, 1968	1045	7	2950	4100	32700	19	27	37	48	59	68	80	93	99	100	--	VPWC
JAN 14.....	1505	7	5300	8150	117000	21	26	35	45	56	64	82	95	99	100	--	VPWC
JAN 16.....	1450	6	1370	1810	6700	17	22	32	40	47	53	57	64	76	97	100	VPWC
FEB 19.....	1705	8	7300	6630	131000	21	29	35	50	63	69	85	95	100	--	--	VPWC
FEB 20.....	1120	8	3450	3830	35700	17	24	31	44	54	60	73	85	97	100	--	VPWC

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 31, 1967	0930		5	7.1	1	1	3	10	17	25	35	49	66	85	100	S
NOV 14.....	1200		3	220	--	1	2	7	16	30	44	56	74	83	100	S
DEC 14.....	1230		3	39	1	2	5	29	35	42	50	86	86	100	--	S
JAN 16, 1968	1400		6	1320	--	--	--	5	19	33	45	57	76	100	--	S
FEB 20.....	1030		5	3450	1	2	5	18	36	54	72	92	100	--	--	S

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 2, 1967.....	18	20
OCT. 13.....	3	0
OCT. 22.....	3	1
NOV. 11.....	1	1
NOV. 14.....	383	334
NOV. 19.....	1	1
NOV. 21.....	5	1
NOV. 29.....	230	220
NOV. 30.....	28	30
DEC. 1.....	2	2
DEC. 2.....	2	1
DEC. 3.....	451	375
DEC. 4.....	46	42
DEC. 5.....	440	128
DEC. 6.....	31	30
DEC. 7.....	530	120
DEC. 8.....	41	42
DEC. 9.....	10	11
DEC. 10.....	7	10
DEC. 12.....	2	3
DEC. 17.....	4	1
DEC. 18.....	58	68
DEC. 19.....	4	4
DEC. 24.....	17	23
DEC. 25.....	120	92
DEC. 26.....	58	47
DEC. 27.....	106	77
DEC. 28.....	48	39
JAN. 1, 1968.....	7	2
JAN. 4.....	6	1
JAN. 8.....	5	1
JAN. 9.....	157	120
JAN. 10.....	2380	850
JAN. 11.....	286	155
JAN. 12.....	96	45
JAN. 13.....	494	340
JAN. 14.....	8150	3200
JAN. 15.....	4080	1900
JAN. 16.....	1660	640
JAN. 17.....	872	400
JAN. 18.....	474	275
JAN. 19.....	309	225
JAN. 20.....	227	170
JAN. 21.....	181	135
JAN. 22.....	143	115
JAN. 23.....	88	70
JAN. 26.....	56	40
JAN. 28.....	39	30
JAN. 29.....	1220	645
JAN. 30.....	218	150
JAN. 31.....	132	100
FEB. 2.....	1360	545
FEB. 3.....	887	330
FEB. 5.....	314	210
FEB. 6.....	429	200
FEB. 8.....	276	175
FEB. 10.....	202	135
FEB. 13.....	116	80
FEB. 16.....	432	145
FEB. 17.....	1760	690
FEB. 18.....	770	310
FEB. 19.....	6630	2000
FEB. 20.....	3830	1180
FEB. 21.....	2900	1030
FEB. 22.....	1850	820
FEB. 24.....	1280	545
FEB. 25.....	1130	350
FEB. 26.....	680	280
FEB. 28.....	345	210
MAR. 2.....	176	120
MAR. 8.....	48	30
MAR. 12.....	582	290
MAR. 13.....	92	70
MAR. 14.....	180	110
MAR. 16.....	472	280
MAR. 17.....	212	130
MAR. 24.....	26	24
MAR. 25.....	256	115
MAR. 27.....	49	37
MAR. 29.....	37	30
MAR. 31.....	33	29
APR. 3.....	22	13
APR. 9.....	7	3
APR. 14.....	7	4
MAY 4.....	3	1
MAY 7.....	2	1
MAY 14.....	1	1
MAY 19.....	4	1
MAY 20.....	3	1
MAY 21.....	2	1
MAY 28.....	2	1
JUNE 11.....	2	0
JUNE 17.....	1	1
AUG. 27.....	1	2

11-4730. 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.
RECORDS AVAILABLE.--Chemical analyses: November 1964 to September 1966.
Water temperatures: July to November 1961, October 1962 to September 1968.
Sediment records: October 1962 to September 1967.
EXTREMES, 1967-68.--Water temperatures: Maximum, 27°C on several days during July and August.
EXTREMES, 1962-63, 1965-66, 1967-68.--Water temperatures: Maximum, 27°C on several days in 1963, 1966, and 1968.
REMARKS.--No record Oct. 1-25; recorder stopped Dec. 17 to Jan. 22.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	17	17	16	17	17	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	14	14	13	13	14	--
NOVEMBER																																
MAXIMUM	17	17	17	15	17	16	16	16	16	16	14	14	14	14	12	12	12	12	12	12	12	11	11	11	11	10	9	10	9	8	--	13
MINIMUM	13	13	13	14	14	14	14	14	14	14	13	14	14	12	12	11	12	12	12	12	11	11	10	10	10	9	9	9	8	8	--	12
DECEMBER																																
MAXIMUM	8	8	7	7	7	6	7	6	7	6	6	6	3	2	3	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	8	7	6	7	6	6	6	6	6	6	6	3	2	1	2	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	6	6	6	4	3	2	3	3	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5	5	6	4	4	2	2	2	3	--
FEBRUARY																																
MAXIMUM	4	4	5	6	6	7	7	7	7	7	6	7	7	7	7	7	7	7	7	8	8	8	9	9	9	10	10	10	9	--	--	7
MINIMUM	3	4	4	4	5	6	6	6	6	6	6	6	6	6	6	6	6	7	7	8	8	8	8	8	8	8	8	8	8	--	--	6
MARCH																																
MAXIMUM	8	9	9	9	8	8	8	8	8	8	8	7	7	7	8	7	8	8	8	8	8	7	9	9	9	8	9	9	9	9	8	8
MINIMUM	8	8	7	8	8	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	7	7	7	8	7	7	8	8	7	7	7
APRIL																																
MAXIMUM	8	9	9	9	10	10	10	11	12	12	12	11	11	12	11	10	10	11	12	11	11	11	10	12	13	14	14	14	14	14	--	11
MINIMUM	7	7	7	8	8	7	8	8	9	9	10	9	8	8	9	8	7	7	8	8	8	8	8	8	9	9	10	10	11	11	--	8
MAY																																
MAXIMUM	14	14	15	15	13	13	14	--	16	15	14	14	12	14	14	16	16	16	14	14	13	14	14	13	16	16	17	18	17	18	18	14
MINIMUM	11	11	12	12	11	10	11	--	12	12	12	12	11	10	11	12	13	13	14	12	12	12	12	12	12	13	13	14	14	14	14	12
JUNE																																
MAXIMUM	19	17	17	19	16	18	18	19	19	20	20	20	19	21	22	23	22	23	23	24	24	23	24	25	25	25	24	23	23	23	--	21
MINIMUM	15	16	15	16	14	14	14	15	15	16	16	16	16	16	17	17	18	18	19	19	19	19	20	20	19	21	21	20	19	19	--	17
JULY																																
MAXIMUM	24	24	25	26	26	26	26	26	26	26	25	26	25	25	25	24	25	26	26	26	27	27	26	26	26	27	27	26	26	27	25	26
MINIMUM	19	20	20	21	21	22	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	21	22	22	22	21	21	22	22	22	23	21
AUGUST																																
MAXIMUM	26	27	27	26	26	26	26	26	26	26	25	24	23	24	23	23	23	23	22	20	19	21	22	--	--	--	23	24	24	25	25	24
MINIMUM	22	22	22	22	22	22	22	23	22	22	22	22	21	21	21	21	20	21	20	17	17	17	18	--	--	--	19	19	19	19	20	20
SEPTEMBER																																
MAXIMUM	25	25	25	25	26	26	26	25	24	24	24	24	23	24	23	23	24	23	22	21	21	21	22	22	23	22	22	22	21	21	--	23
MINIMUM	20	20	21	21	21	21	20	20	20	20	20	20	20	19	19	19	19	19	18	18	17	17	18	18	18	18	18	18	18	18	--	19

11-4738. ELK CREEK NEAR HEARST, CALIF.

LOCATION.--Lat 39°38'57", long 123°07'12", in NE¼ sec.30, T.21 N., R.11 W., Mendocino County, temperature recorder at gaging station on right bank, 300 ft upstream from unnamed tributary and 13.5 miles northeast of Hearst.
DRAINAGE AREA.--84.1 sq mi.
RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1968.
EXTREMES, 1965-67.--Water temperatures: Maximum, 34°C Aug. 2, 1967; minimum (1966-67), 3°C Feb. 19-22, 1967.
REMARKS.--Recorder stopped Oct. 1 to Jan. 31, Feb. 20 to Mar. 11, Apr. 8-23, June 26 to Aug. 29.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	7	8	8	8	9	9	9	10	9	9	9	9	10	10	8	9	7	3	6	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	7	7	7	6	7	8	7	7	7	8	7	7	8	7	7	7	2	2	1	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	9	9	10	10	9	8	8	10	10	9	9	12	12	9	11	11	12	13	13	12	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	7	7	7	7	8	7	7	6	5	6	7	7	6	7	6	5	6	6	6	6	--
APRIL																																
MAXIMUM	9	10	11	11	11	11	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	13	14	14	14	15	14	--	--
MINIMUM	6	6	4	6	6	5	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	6	6	7	7	7	8	--	--
MAY																																
MAXIMUM	14	16	16	16	14	14	15	16	16	22	22	21	18	21	21	22	21	22	20	21	19	21	22	19	23	22	24	24	24	25	25	19
MINIMUM	8	8	9	9	9	7	8	8	9	15	16	16	16	14	14	16	17	17	19	17	17	16	17	16	17	17	18	18	19	19	18	14
JUNE																																
MAXIMUM	26	26	24	26	26	24	24	24	24	24	26	25	26	27	28	28	28	29	29	29	29	29	29	29	29	--	--	--	--	--	--	27
MINIMUM	19	20	21	19	20	19	18	18	18	19	20	19	19	21	21	22	23	23	24	24	24	24	26	25	25	--	--	--	--	--	--	21
JULY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25	25	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23	23	--
SEPTEMBER																																
MAXIMUM	26	25	26	26	26	26	24	25	24	24	24	23	23	23	22	21	22	22	21	21	19	19	19	19	19	19	18	18	18	18	--	22
MINIMUM	24	23	24	24	24	24	22	23	23	23	22	21	21	22	20	19	20	21	19	18	17	17	17	17	17	17	17	17	16	16	--	20

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 11, 1967	0845	15	4.7	1	.01	--	--	--	--	--	--	--	--	--	--	--	
NOV 2.....	1410	14	4.0	4	.04	--	--	--	--	--	--	--	--	--	--	--	
DEC 14.....	0845	1	35	4	.38	--	--	--	--	--	--	--	--	--	--	--	
JAN 25, 1968	1100	6	115	34	11	--	--	--	--	--	--	--	--	--	--	--	
JAN 31.....	1245	6	265	158	113	32	41	51	56	58	69	72	77	91	100	--	VBWC
MAR 12.....	1130	7	196	265	140	24	30	38	43	44	64	73	87	96	100	--	VBWC
APR 8.....	1630	11	101	4	1.1	--	--	--	--	--	--	--	--	--	--	--	
MAY 10.....	1055	15	36	1	.10	--	--	--	--	--	--	--	--	--	--	--	
JUN 13.....	1205	19	16	5	.22	--	--	--	--	--	--	--	--	--	--	--	
JUL 18.....	1145	24	4.0	2	.02	--	--	--	--	--	--	--	--	--	--	--	
AUG 29.....	1230	23	4.6	4	.05	--	--	--	--	--	--	--	--	--	--	--	

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 25, 1968	0915		3	118	1	1	3	8	16	27	39	53	72	88	100	S
JAN 31.....	1320		3	260	--	1	2	7	14	27	42	58	79	86	100	S
MAR 12.....	1250		3	310	--	1	4	14	40	47	65	84	96	100	--	S

11-4739. 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.
RECORDS AVAILABLE.--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 1968.
Sediment records: October 1957 to September 1968.
EXTREMES, 1967-68.--Sediment concentrations: Maximum daily, 7,670 mg/l Jan. 14; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 585,000 tons Jan. 14; minimum daily, 0.04 ton on several days during August and September.
EXTREMES, 1965-68.--Sediment concentrations: Maximum daily, 11,800 mg/l Jan. 4, 1966; minimum daily, 1 mg/l on manys days in 1965-68.
Sediment loads: Maximum daily, 1,430,000 tons Jan. 4, 1966; minimum daily, 0.04 ton on several days in 1966 and 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	17	--	17	16	17	--	--	20	--	19	--	14	--	--	16	--	14	--	15	--	16	16	--	17	--	16	--	--	13	--	--
NOVEMBER.	14	--	13	--	--	14	--	14	--	14	--	--	14	15	13	--	13	--	--	13	--	10	--	10	--	--	8	--	9	7	--	--
DECEMBER.	7	8	7	7	7	4	7	--	6	--	6	--	3	--	2	--	--	3	--	3	--	4	--	--	5	--	6	--	4	--	--	--
JANUARY..	4	--	2	--	2	--	--	4	5	6	4	--	7	8	9	7	--	5	4	--	--	9	--	6	--	4	--	--	4	4	5	--
FEBRUARY.	--	6	6	--	7	--	9	--	7	--	--	9	--	9	--	8	9	--	10	10	9	10	11	10	9	9	10	10	9	--	--	--
MARCH....	10	--	9	12	10	9	8	12	--	7	11	8	7	8	8	8	7	7	7	8	7	8	9	10	11	12	11	10	11	12	13	9
APRIL....	10	10	--	10	10	9	--	11	--	12	--	12	--	11	12	--	10	--	11	--	--	11	--	16	--	17	--	--	13	--	--	--
MAY.....	16	--	19	--	--	14	--	15	--	19	--	--	14	17	19	--	17	--	18	16	13	17	--	14	20	--	18	--	21	--	22	--
JUNE.....	--	--	18	--	17	--	16	--	--	19	--	23	--	19	--	--	22	--	21	--	22	--	--	24	--	23	--	22	--	--	--	--
JULY.....	20	--	21	--	23	--	--	24	--	23	--	22	--	--	21	--	21	27	23	--	--	23	--	21	--	27	--	--	23	--	24	--
AUGUST...	--	22	--	--	27	--	26	--	27	--	--	26	--	25	--	24	--	--	23	--	18	--	24	--	--	23	--	23	--	28	--	--
SEPTEMBER	--	--	--	28	--	28	--	--	26	--	22	--	21	--	--	19	--	21	--	16	--	--	18	--	18	--	18	--	--	18	--	--

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	23	1	.06	38	1	.10	210	14	7.9
2	39	19	2.4	39	1	.11	213	1240	1130
3	163	35	17	38	1	.10	4500	2970	33000
4	123	10	3.3	37	1	.10	3640	1820	29100
5	80	7	1.5	37	1	.10	6110	2640	61700
6	67	1	.18	37	1	.10	1250	250	844
7	59	1	.16	37	1	.10	3500	1500	17300
8	53	1	.14	37	1	.10	1220	143	471
9	47	1	.13	37	1	.10	749	96	194
10	43	1	.12	38	1	.10	658	71	126
11	40	1	.11	39	1	.11	646	53	92
12	40	1	.11	39	1	.11	616	34	57
13	40	1	.11	40	1	.11	538	20	29
14	39	1	.11	677	90	240	410	9	10
15	39	1	.11	484	77	106	380	6	6.2
16	37	1	.10	234	26	16	332	4	3.6
17	37	1	.10	183	7	3.5	360	5	4.9
18	37	1	.10	160	6	2.6	640	96	178
19	36	1	.10	148	7	2.8	544	8	12
20	36	1	.10	138	7	2.6	395	6	6.4
21	38	1	.10	131	6	2.1	352	11	10
22	41	1	.11	127	6	2.1	304	20	16
23	50	1	.14	122	8	2.6	380	38	39
24	50	1	.14	118	27	8.6	562	62	94
25	45	1	.12	114	14	4.3	910	209	514
26	44	1	.12	110	6	1.8	1300	267	937
27	41	1	.11	110	4	1.2	1870	375	1910
28	41	1	.11	116	3	.94	1600	198	855
29	41	1	.11	190	134	95	1160	151	473
30	40	1	.11	304	115	109	870	128	301
31	40	1	.11	--	--	--	721	87	169
TOTAL	1549	--	27.32	3959	--	602.48	36940	--	149590.0

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	652	27	48	2100	420	2380	2850	458	3520
2	592	15	24	8350	1880	43700	2450	475	3140
3	526	10	14	8320	1530	37200	2100	458	2600
4	466	9	11	4970	760	10200	1800	395	1920
5	445	6	7.2	3930	640	6790	1600	278	1200
6	420	2	2.3	3930	650	6900	1390	187	702
7	375	1	1.0	3980	720	7740	1250	182	614
8	395	1	1.1	3650	590	5810	1130	126	384
9	826	262	1950	3430	420	3890	1060	90	258
10	11000	3340	118000	3300	400	3560	980	76	201
11	2350	180	1140	3000	400	3240	930	68	171
12	1360	100	367	2740	420	3110	2080	1090	6120
13	2860	1380	13900	2660	415	2980	3900	615	6480
14	24300	7670	585000	2580	340	2370	4700	841	10700
15	25400	5620	419000	2300	280	1740	3900	620	6530
16	9720	2150	56400	2680	360	2600	9000	1900	46200
17	5480	1300	19200	5510	1710	26200	7000	651	12300
18	3650	1000	9860	5330	523	8210	5400	368	5370
19	2740	970	7180	12600	3990	205000	4000	292	3150
20	2080	795	4460	20600	3900	233000	3100	316	2640
21	1890	500	2550	15900	3520	156000	2600	380	2670
22	1740	270	1270	12100	2150	70200	2100	302	1710
23	1630	215	946	12700	2080	71300	1800	285	1390
24	1520	262	1080	9100	948	23300	1650	285	1270
25	1440	228	886	6700	1040	18800	2080	462	2590
26	1320	172	613	5200	830	11700	2190	425	2510
27	1220	140	461	4200	675	7650	1830	374	1850
28	1070	125	361	3750	585	5920	1750	346	1630
29	3490	1650	23300	3400	472	4330	1980	431	2300
30	6400	1070	18500	--	--	--	2000	208	1120
31	2820	440	3350	--	--	--	1900	224	1150
TOTAL	120177	--	1289882.6	179010	--	985820	82500	--	134390

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1740	278	1310	567	11	17	283	5	3.8
2	1540	241	1000	566	13	20	263	4	2.8
3	1410	183	697	568	14	21	249	4	2.7
4	1280	152	525	575	15	23	242	5	3.3
5	1190	128	411	568	15	23	223	6	3.6
6	1100	78	232	526	15	21	220	4	2.4
7	986	73	194	489	13	17	216	3	1.7
8	931	75	189	462	10	12	204	3	1.7
9	934	86	217	444	12	14	191	3	1.5
10	996	98	264	436	15	18	182	3	1.5
11	1080	110	321	426	15	17	179	2	.97
12	1060	119	341	410	13	14	169	2	.91
13	942	116	295	406	10	11	153	2	.83
14	833	101	227	435	6	7.0	149	2	.80
15	799	82	177	385	6	6.2	143	2	.77
16	756	65	133	356	5	4.8	140	2	.76
17	698	57	107	345	5	4.7	133	2	.72
18	643	45	78	340	6	5.5	130	3	1.1
19	614	24	40	346	7	6.5	126	3	1.0
20	591	19	30	662	139	301	121	3	.98
21	564	23	35	533	33	47	117	3	.95
22	529	30	43	506	20	27	115	3	.93
23	504	21	29	426	18	21	110	2	.59
24	502	11	15	391	24	25	108	2	.58
25	494	14	19	397	11	12	105	2	.57
26	505	13	18	389	7	7.4	99	3	.80
27	531	10	14	364	8	7.9	95	3	.77
28	525	8	11	354	12	11	92	2	.50
29	535	8	12	337	15	14	89	2	.48
30	571	9	14	322	13	11	86	1	.23
31	--	--	--	305	5	4.1	--	--	--
TOTAL	25383	--	6998	13636	--	751.1	4732	--	40.24

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	82	1	.22	18	2	.10	35	2	.19
2	76	1	.21	18	4	.19	31	1	.08
3	70	2	.38	17	3	.14	28	1	.08
4	68	2	.37	17	2	.09	26	1	.07
5	64	2	.35	16	2	.09	24	1	.06
6	58	2	.31	15	1	.04	22	1	.06
7	56	1	.15	15	1	.04	22	1	.06
8	54	1	.15	15	2	.08	20	1	.05
9	48	1	.13	15	2	.08	19	2	.10
10	47	2	.25	14	2	.08	19	2	.10
11	44	2	.24	14	1	.04	19	2	.10
12	42	1	.11	13	1	.04	19	2	.10
13	40	1	.11	13	1	.04	15	3	.12
14	39	1	.11	13	1	.04	20	2	.11
15	39	1	.11	14	1	.04	25	1	.07
16	38	1	.10	14	1	.04	26	1	.07
17	38	1	.10	13	1	.04	24	1	.06
18	37	1	.10	13	1	.04	23	1	.06
19	34	1	.09	17	1	.05	21	1	.06
20	33	1	.09	49	3	.40	19	1	.05
21	31	1	.08	263	24	18	19	1	.05
22	30	1	.08	206	3	1.7	19	2	.10
23	28	1	.08	124	2	.67	19	2	.10
24	26	1	.07	90	1	.24	18	1	.05
25	25	2	.14	72	1	.19	18	1	.05
26	24	8	.52	74	1	.20	18	1	.05
27	22	2	.12	75	1	.20	18	1	.05
28	20	1	.05	69	1	.19	16	1	.04
29	20	1	.05	55	2	.30	17	2	.09
30	19	1	.05	38	4	.41	16	2	.09
31	19	1	.05	40	3	.32	--	--	--
TOTAL	1271	--	4.97	1439	--	24.12	635	--	2.32

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 471231
TOTAL LOAD FOR YEAR (TONS) 2568133.15

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 2, 1967	1820	8	210	2230	1260	--	31	--	55	--	76	88	96	100	--	--	VPWC
DEC 5.....	0935	7	6800	1650	30300	--	26	--	41	--	61	74	89	98	100	--	VPWC
DEC 6.....	1055	4	1290	236	822	14	25	34	39	42	59	70	91	100	--	--	VBWC
JAN 10, 1968	1015	6	14300	3750	145000	20	27	34	45	53	63	75	87	97	100	--	VPWC
JAN 15.....	1150	9	27400	5090	377000	19	26	33	45	55	63	80	91	97	100	--	VPWC
JAN 15.....	1445	8	22200	4470	268000	18	26	34	45	56	66	82	92	98	99	100	VPWC
JAN 15.....	1730	8	17900	4480	217000	17	25	33	42	51	61	75	86	92	98	100	VPWC
JAN 16.....	1135	7	9860	2670	71100	18	27	35	43	53	61	74	88	96	97	100	VPWC
JAN 18.....	1040	5	3750	966	9780	21	29	38	45	51	58	66	78	91	100	--	VPWC
JAN 29.....	1615	4	2980	3660	29400	18	22	31	39	47	56	70	84	94	98	100	VPWC
JAN 30.....	0920	4	6020	1010	16400	18	23	29	33	33	48	55	69	83	92	100	VBWC
FEB 2.....	0915	6	8530	1640	37800	24	25	34	43	53	60	70	87	98	100	--	VPWC
FEB 19.....	1655	10	18200	5700	280000	16	18	30	39	49	57	73	93	99	100	--	VPWC
FEB 20.....	1715	10	14300	3190	123000	17	28	34	45	55	64	78	89	95	100	--	VPWC
FEB 21.....	1420	9	17000	3850	177000	17	23	26	39	49	56	69	80	89	96	100	VPWC
FEB 27.....	1220	10	D 4200	677	7680	15	24	35	40	44	60	68	79	99	100	--	VBWC

D Daily mean discharge.

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968
(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 18, 1968	0945		5	3780	--	--	--	2	6	16	28	41	57	100	--	S
JAN 22.....	1600		3	1730	--	--	--	--	2	6	11	16	22	72	100	S
FEB 21.....	1040		5	19200	1	2	4	7	14	22	28	35	64	70	100	S

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 2, 1967	33	51
OCT. 4	3	1
OCT. 5	7	1
OCT. 6	1	0
OCT. 9	1	0
OCT. 11	1	0
OCT. 13	1	0
OCT. 16	1	0
OCT. 18	1	1
OCT. 20	1	1
OCT. 22	1	1
OCT. 23	1	1
OCT. 25	1	1
OCT. 27	1	1
OCT. 30	1	1
NOV. 1	1	1
NOV. 3	1	1
NOV. 6	1	1
NOV. 8	1	1
NOV. 10	1	1
NOV. 13	1	1
NOV. 14	72	70
NOV. 15	82	50
NOV. 17	6	3
NOV. 20	7	7
NOV. 22	7	4
NOV. 24	31	7
NOV. 27	3	1
NOV. 29	149	140
NOV. 30	120	124
DEC. 1	15	5
DEC. 2	2230	1160
DEC. 3	2720	1160
DEC. 4	1360	896
DEC. 5	1650	920
DEC. 6	236	125
DEC. 7	1580	984
DEC. 8	138	54
DEC. 11	52	24
DEC. 13	22	16
DEC. 15	6	5
DEC. 18	196	136
DEC. 20	7	10
DEC. 22	19	5
DEC. 25	228	117
DEC. 27	448	180
DEC. 29	152	80
JAN. 1, 1968	22	20
JAN. 3	11	11
JAN. 5	6	3
JAN. 8	1	5
JAN. 9	8	3
JAN. 10	3750	1530
JAN. 11	614	270
JAN. 13	897	190
JAN. 14	8020	2900
JAN. 15	5090	2000
JAN. 16	2670	1170
JAN. 18	982	435
JAN. 19	982	280
JAN. 22	246	185
JAN. 24	264	145
JAN. 26	173	87
JAN. 29	3660	1050
JAN. 30	1010	425
JAN. 31	437	200
FEB. 2	1640	690
FEB. 3	1400	625
FEB. 5	614	270
FEB. 7	706	240
FEB. 9	426	230
FEB. 12	429	130
FEB. 14	338	110
FEB. 16	221	90
FEB. 17	1930	500
FEB. 19	5700	1250
FEB. 20	3190	1280
FEB. 21	3850	1380
FEB. 22	2180	921
FEB. 23	2850	1000
FEB. 24	946	720
FEB. 25	1180	640
FEB. 26	835	360
FEB. 27	677	320
FEB. 28	599	240
FEB. 29	469	270
MAR. 1	448	215
MAR. 3	463	155
MAR. 4	278	130
MAR. 5	288	124
MAR. 6	183	105
MAR. 7	186	93
MAR. 8	116	75
MAR. 10	78	59
MAR. 11	68	50
MAR. 12	2510	650
MAR. 13	516	220
MAR. 14	954	355
MAR. 15	608	195
MAR. 16	2960	1000
MAR. 17	758	280
MAR. 18	313	190
MAR. 19	288	150
MAR. 20	312	120
MAR. 21	400	110
MAR. 22	299	90
MAR. 23	320	85
MAR. 24	283	88
MAR. 25	590	190
MAR. 26	416	180
MAR. 27	373	130
MAR. 28	348	125
MAR. 29	532	150
MAR. 30	204	115
MAR. 31	241	115
APR. 1	280	105
APR. 2	249	86
APR. 4	154	60
APR. 5	130	58
APR. 6	74	48
APR. 8	76	39
APR. 10	96	42
APR. 12	118	55
APR. 14	116	37
APR. 15	82	33
APR. 17	57	23
APR. 19	23	20
APR. 22	30	4
APR. 24	11	8
APR. 26	12	6
APR. 29	8	5
MAY 1	11	5
MAY 3	14	2
MAY 6	16	5
MAY 8	10	4
MAY 10	15	4
MAY 13	10	4
MAY 14	6	2
MAY 15	6	1
MAY 17	5	1
MAY 19	7	1
MAY 20	314	37
MAY 21	26	3
MAY 22	20	2
MAY 24	27	2
MAY 25	9	3
MAY 27	8	1
MAY 29	15	1
MAY 31	3	1
JUNE 3	4	1

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
JUNE 5	6	1
JUNE 7	3	0
JUNE 10	3	1
JUNE 12	2	1
JUNE 14	2	0
JUNE 17	2	0
JUNE 19	3	0
JUNE 21	3	1
JUNE 24	2	0
JUNE 26	3	0
JUNE 28	2	0
JULY 1	1	1
JULY 3	2	0
JULY 5	2	0
JULY 8	1	1
JULY 10	2	0
JULY 12	1	0
JULY 15	1	0
JULY 17	1	0
JULY 18	1	0
JULY 19	1	0
JULY 22	1	0
JULY 24	1	1
JULY 26	8	1
JULY 29	1	1
JULY 31	1	1
AUG. 2	4	1
AUG. 5	2	3
AUG. 7	1	1
AUG. 9	2	1
AUG. 12	1	1
AUG. 14	1	1
AUG. 16	1	1
AUG. 19	1	2
AUG. 21	40	73
AUG. 23	2	1
AUG. 26	1	2
AUG. 28	1	2
AUG. 30	4	3
SEPT. 4	1	2
SEPT. 6	1	2
SEPT. 9	2	2
SEPT. 11	2	1
SEPT. 13	3	2
SEPT. 16	1	1
SEPT. 18	1	1
SEPT. 20	1	1
SEPT. 23	2	1
SEPT. 25	1	1
SEPT. 27	1	1
SEPT. 30	2	1

11-4750. 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.
RECORDS AVAILABLE.--Water temperatures: November 1960 to September 1968.
Sediment records: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 34°C June 25, July 7; minimum, freezing point Dec. 14-17.
Sediment concentrations: Maximum daily, 5,850 mg/l Jan. 10; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 945,000 tons Jan. 15; minimum daily, 0.09 ton Aug. 13-16.
EXTREMES, 1960-64, 1965-68.--Water temperatures: Maximum, 34°C June 25, July 7, 1968; minimum, freezing point Dec. 14-17, 1968.
Sediment concentrations (1965-68): Maximum daily, 13,900 mg/l Jan. 4, 1966; minimum daily, 1 mg/l on many days in 1965-68.
Sediment loads (1965-68): Maximum daily, 4,270,000 tons Jan. 4, 1966; minimum daily, 0.09 ton Aug. 13-16, 1968.
REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	24	20	23	25	21	23	24	22	24	25	24	24	23	17	24	23	24	21	23	23	18	22	22	21	20	19	19	19	19	19	19	22
MINIMUM	19	17	17	17	17	17	17	17	17	19	19	19	17	16	16	14	14	14	17	17	16	17	16	17	16	16	15	14	13	13	13	16
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	20	21	20	16	18	18	18	17	16	18	16	17	15	17	16	16	15	12	14	13	14	12	12	12	12	11	7	10	8	6	--	15
MINIMUM	14	14	14	14	14	14	14	15	14	14	14	8	14	14	13	12	12	11	9	9	9	8	7	8	8	7	6	6	6	4	--	11
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	6	6	7	7	7	6	7	7	7	7	7	6	4	3	3	3	2	3	4	3	3	5	6	7	7	7	8	8	8	7	6	6
MINIMUM	3	5	5	6	6	5	5	5	5	5	5	3	1	0	0	0	0	2	2	2	2	3	3	4	4	4	5	5	5	4	3	3
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	6	6	6	5	6	6	4	4	7	7	6	4	8	9	9	8	8	8	8	8	9	10	9	9	8	6	6	3	3	3	4	7
MINIMUM	3	3	3	2	3	2	2	4	4	6	3	2	4	8	8	7	5	4	4	5	6	7	6	6	6	4	3	2	2	2	3	4
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	5	11	8	8	8	10	11	10	9	11	10	11	8	10	10	9	13	11	10	11	11	11	12	12	13	14	14	16	14	--	--	11
MINIMUM	4	5	6	6	6	8	7	7	7	7	8	7	8	8	7	8	9	9	9	10	10	10	11	11	11	11	10	11	10	--	--	8
MARCH....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	12	14	16	13	13	11	11	13	13	13	14	10	8	9	10	9	10	11	13	13	12	11	14	15	13	13	14	16	16	19	17	13
MINIMUM	10	9	9	11	11	9	9	8	8	8	9	8	7	7	7	7	7	6	7	7	8	8	9	9	10	9	9	11	12	13	12	9
APRIL....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	13	14	17	15	16	16	16	18	20	22	19	18	18	18	17	16	16	16	17	16	17	18	17	18	19	21	23	23	24	22	--	18
MINIMUM	12	11	11	12	11	10	10	11	13	14	9	13	11	11	12	10	9	10	11	10	11	11	12	13	12	14	14	15	16	18	--	12
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	21	23	24	22	20	21	22	23	23	22	20	19	18	21	22	24	24	24	21	22	22	21	21	18	23	23	27	26	25	26	27	22
MINIMUM	16	15	16	17	15	13	14	16	17	17	16	16	14	13	14	16	18	18	19	18	17	17	16	16	16	18	19	21	19	19	19	17
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	28	25	28	26	20	22	23	24	26	28	27	26	26	28	29	31	32	31	31	32	31	31	31	33	34	33	30	27	32	29	--	28
MINIMUM	19	21	21	20	17	16	17	18	18	18	19	16	15	17	18	19	19	20	19	21	19	18	21	19	22	22	22	18	14	15	--	19
JULY.....	--	--	--	--	--	--	--	--	--	28	--	--	--	26	--	--	--	--	27	--	--	27	--	--	26	--	--	26	--	--	27	--
MAXIMUM	31	29	31	30	32	32	34	33	32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	18	19	20	20	19	19	19	21	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUGUST...	--	--	--	23	--	--	26	--	--	23	--	--	21	--	--	--	21	--	--	20	20	19	23	--	--	21	--	24	--	--	27	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER	--	--	27	--	--	27	--	--	26	--	--	--	26	--	--	--	24	--	--	19	--	--	23	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25	24	25	24	21	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	16	16	15	16	--	--

11-4750. EEL RIVER AT FORT SEWARD, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	76	4	.82	98	1	.26	1140	152	468
2	118	8	2.5	97	1	.26	1520	245	1500
3	190	18	9.2	94	1	.25	14400	1220	49700
4	310	16	13	92	1	.25	10100	1090	30100
5	510	10	14	90	1	.24	18200	2590	134000
6	380	7	7.2	90	1	.24	7000	686	14100
7	275	5	3.7	90	2	.49	11400	1590	52800
8	195	3	1.6	88	2	.48	6980	630	11900
9	143	3	1.2	88	2	.48	3850	160	1660
10	122	2	.66	88	2	.48	2650	61	436
11	123	2	.66	88	2	.48	2170	44	258
12	123	2	.66	88	2	.48	1800	31	151
13	123	2	.66	93	2	.50	1490	25	101
14	123	2	.66	336	6	7.3	1210	25	82
15	122	2	.66	1300	53	193	972	15	39
16	119	2	.64	622	31	52	895	11	27
17	119	2	.64	342	21	19	855	8	18
18	118	1	.32	246	14	9.3	2370	157	1290
19	115	1	.31	200	8	4.3	3590	180	1740
20	115	1	.31	174	4	1.9	2090	80	451
21	118	1	.32	158	2	.85	1460	29	114
22	118	1	.32	144	1	.39	1190	16	51
23	117	1	.32	137	1	.37	1150	14	43
24	117	1	.32	128	1	.35	1460	19	75
25	114	1	.31	122	1	.33	1910	37	191
26	114	1	.31	115	1	.31	2530	86	587
27	107	1	.29	114	1	.31	2870	190	1520
28	105	1	.28	118	1	.32	3000	137	1110
29	102	1	.28	230	34	26	2400	70	454
30	98	1	.26	1250	301	1110	1910	43	222
31	97	1	.26	--	--	--	1540	27	112
TOTAL	4726	--	62.67	6920	--	1430.92	116102	--	305300

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1320	19	68	8800	420	9980	5730	228	3530
2	1170	13	41	18700	1820	108000	5150	182	2530
3	1020	9	25	23700	1920	128000	4620	150	1870
4	890	10	24	16300	990	43600	4210	122	1390
5	800	7	15	12500	680	23000	4040	105	1150
6	750	5	10	10800	510	14900	4000	91	983
7	694	4	7.5	10100	438	11900	3530	81	772
8	658	6	11	8930	347	8370	3120	68	573
9	2520	345	5490	7800	272	5730	2780	55	413
10	28600	5850	490000	7180	222	4300	2470	41	273
11	12500	1780	68000	6550	186	3290	2250	35	213
12	6030	438	7300	5750	158	2450	4220	540	8890
13	6830	730	15300	5400	134	1950	9250	1140	30800
14	33400	4470	496000	4980	114	1530	10800	527	16600
15	61700	5390	945000	4580	102	1260	9550	460	11900
16	28800	2390	186000	4410	98	1170	14500	1310	58800
17	19700	1500	79800	6630	345	6780	16200	890	38900
18	13500	1000	36500	9850	1190	32200	11100	482	14400
19	9220	680	16900	14600	1270	77600	8530	310	7140
20	7180	390	7560	47200	4500	597000	6700	202	3650
21	6100	230	3790	35600	2530	245000	5800	148	2320
22	5400	180	2620	30100	1790	145000	5250	122	1730
23	4750	150	1920	26900	1640	119000	4850	105	1370
24	4230	110	1260	22100	1480	88300	4290	95	1100
25	3900	95	1000	16000	1000	43200	4710	118	1500
26	3470	80	750	12100	710	23200	5550	250	3750
27	3240	70	612	9610	520	13500	4600	134	1660
28	3050	413	3780	7950	390	8370	4300	90	1040
29	6750	1000	21700	6630	290	5190	4080	88	969
30	18600	2120	113000	--	--	--	4020	91	988
31	11900	600	19300	--	--	--	3960	88	941
TOTAL	308672	--	2523783.5	401750	--	1773770	184160	--	222145

11-4750. EEL RIVER AT FORT SEWARD, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	3770	80	814	925	5	12	435	2	2.3
2	3530	59	562	910	3	7.4	414	2	2.2
3	2990	43	347	900	4	9.7	405	2	2.2
4	2690	35	254	885	5	12	399	2	2.2
5	2490	29	195	880	8	19	369	2	2.0
6	2290	23	142	855	8	18	351	3	2.8
7	2100	20	113	770	7	15	345	2	1.9
8	2040	20	110	720	5	9.7	342	1	.92
9	1950	22	116	686	4	7.4	318	1	.86
10	1910	23	119	658	4	7.1	300	1	.81
11	1910	21	108	646	3	5.2	285	1	.77
12	1920	22	114	634	3	5.1	272	1	.73
13	1850	29	145	646	3	5.2	258	1	.70
14	1700	30	138	686	3	5.6	252	1	.68
15	1620	19	83	702	3	5.7	246	1	.66
16	1540	13	54	634	3	5.1	242	1	.65
17	1460	13	51	578	3	4.7	226	1	.61
18	1340	16	58	547	3	4.4	222	1	.60
19	1280	21	73	540	3	4.4	214	1	.58
20	1220	21	69	606	5	8.2	194	1	.52
21	1170	14	44	1070	23	66	186	1	.50
22	1110	8	24	875	16	38	171	1	.46
23	1040	9	25	800	8	17	167	1	.45
24	996	12	32	686	5	9.3	162	1	.44
25	960	15	39	630	4	6.8	158	1	.43
26	935	14	35	642	3	5.2	155	1	.42
27	925	12	30	622	3	5.0	141	1	.38
28	935	9	23	570	3	4.6	119	1	.32
29	915	7	17	529	3	4.3	115	1	.31
30	905	8	20	484	2	2.6	113	1	.31
31	--	--	--	459	2	2.5	--	--	--
TOTAL	51491	--	3954	21775	--	332.2	7576	--	28.71

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	113	1	.31	50	1	.14	99	1	.27
2	112	2	.60	50	1	.14	87	1	.23
3	110	2	.59	48	1	.13	87	2	.47
4	109	2	.59	48	1	.13	85	2	.46
5	107	2	.58	48	1	.13	82	2	.44
6	106	1	.29	46	1	.12	72	1	.19
7	105	1	.28	44	1	.12	70	1	.19
8	104	1	.28	42	1	.11	66	1	.18
9	84	1	.23	42	1	.11	64	1	.17
10	81	1	.22	42	1	.11	60	1	.16
11	81	1	.22	42	1	.11	58	1	.16
12	81	1	.22	41	1	.11	54	1	.15
13	81	1	.22	34	1	.09	54	1	.15
14	81	1	.22	34	1	.09	52	1	.14
15	80	1	.22	34	1	.09	52	1	.14
16	80	1	.22	34	1	.09	52	1	.14
17	76	1	.21	34	2	.18	52	1	.14
18	76	1	.21	34	2	.18	52	2	.28
19	76	1	.21	34	2	.18	52	2	.28
20	72	1	.19	44	2	.24	52	3	.42
21	70	1	.19	147	26	10	52	2	.28
22	68	1	.18	501	20	27	52	1	.14
23	66	1	.18	390	15	16	52	1	.14
24	62	1	.17	252	14	9.5	48	1	.13
25	60	1	.16	179	11	5.3	44	1	.12
26	58	1	.16	158	9	3.8	42	2	.23
27	58	1	.16	146	2	.79	42	2	.23
28	58	1	.16	144	2	.78	42	1	.11
29	58	1	.16	137	2	.74	41	1	.11
30	54	1	.15	126	2	.68	42	1	.11
31	52	1	.14	108	1	.29	--	--	--
TOTAL	2479	--	7.92	3113	--	77.48	1759	--	6.36

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1110523
TOTAL LOAD FOR YEAR (TONS) 4830898.76

11-4750. EEL RIVER AT FORT SEWARD, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 3, 1967	1425	7	19000	3890	200000	--	25	--	49	--	77	92	98	100	--	--	VPWC
JAN 10, 1968	1600	7	32300	7380	644000	22	32	44	55	68	77	91	99	100	--	--	VPWC
JAN 14.....	1400	9	37000	4340	434000	17	24	31	43	56	67	87	98	100	--	--	VPWC
JAN 15.....	0730	9	71900	5830	1130000	21	29	41	53	67	76	90	99	100	--	--	VPWC
JAN 15.....	1655	9	53400	4030	581000	19	28	36	50	62	74	88	98	100	--	--	VPWC
JAN 16.....	1655	8	26100	2090	147000	--	30	--	54	--	75	87	97	99	100	--	VPWC
JAN 18.....	1645	7	12500	819	27600	25	34	43	50	54	75	84	96	99	100	--	VBWC
JAN 29.....	1610	3	6930	827	15500	27	36	45	53	57	82	93	99	100	--	--	VBWC
JAN 30.....	1650	3	15900	1410	60500	21	29	38	46	49	72	85	99	99	100	--	VBWC
FEB 2.....	1600	7	23300	2180	137000	20	25	37	47	59	62	85	99	100	--	--	VPWC
FEB 6.....	1400	9	10900	588	17300	23	27	37	45	53	59	66	82	99	100	--	VPWC
FEB 21.....	1655	11	38700	2740	286000	19	28	34	49	60	73	86	95	100	--	--	VPWC
FEB 22.....	1600	11	29600	1710	137000	22	31	41	48	51	76	86	95	99	100	--	VBWC
MAR 12.....	1410	10	4080	544	5990	31	41	53	62	66	93	98	100	--	--	--	VBWC

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 2, 1967.....	9	6
OCT. 3.....	20	29
OCT. 4.....	14	10
OCT. 8.....	3	3
OCT. 11.....	2	3
OCT. 15.....	2	1
OCT. 18.....	1	1
OCT. 22.....	1	1
OCT. 25.....	2	1
OCT. 29.....	1	1
NOV. 1.....	1	1
NOV. 5.....	1	1
NOV. 8.....	2	1
NOV. 10.....	3	1
NOV. 19.....	8	10
NOV. 22.....	1	3
NOV. 26.....	1	1
NOV. 29.....	94	174
NOV. 30.....	451	388
DEC. 1.....	110	100
DEC. 2.....	318	264
DEC. 3.....	3890	1410
DEC. 4.....	1120	880
DEC. 5.....	2500	1300
DEC. 6.....	626	316
DEC. 7.....	2090	1230
DEC. 8.....	384	264
DEC. 9.....	192	148
DEC. 10.....	57	63
DEC. 11.....	42	40
DEC. 12.....	29	28
DEC. 13.....	24	24
DEC. 14.....	25	20
DEC. 15.....	13	14
DEC. 16.....	12	11
DEC. 17.....	8	7
DEC. 18.....	276	276
DEC. 19.....	162	200
DEC. 20.....	65	63
DEC. 21.....	27	34
DEC. 22.....	16	20
DEC. 23.....	12	14
DEC. 28.....	122	120
DEC. 29.....	67	75
DEC. 30.....	38	47
DEC. 31.....	26	30
JAN. 1, 1968.....	18	20
JAN. 2.....	12	15
JAN. 3.....	9	11
JAN. 4.....	11	10
JAN. 5.....	6	8
JAN. 6.....	5	7
JAN. 7.....	4	5
JAN. 8.....	6	7
JAN. 9.....	230	224
JAN. 10.....	7380	2360
JAN. 11.....	1010	600
JAN. 12.....	378	235
JAN. 13.....	699	370
JAN. 14.....	4340	1380
JAN. 15.....	5830	2820
JAN. 16.....	2090	870
JAN. 17.....	1330	680
JAN. 18.....	819	570
JAN. 19.....	528	358
JAN. 20.....	328	220
JAN. 21.....	224	160
JAN. 22.....	182	140
JAN. 23.....	142	125
JAN. 24.....	112	110
JAN. 25.....	95	120
JAN. 26.....	77	72
JAN. 27.....	70	73
JAN. 28.....	60	67
JAN. 29.....	827	445
JAN. 30.....	1410	745
JAN. 31.....	572	370
FEB. 1.....	327	215
FEB. 2.....	2180	1030
FEB. 3.....	2040	920

11-4750. EEL RIVER AT FORT SEWARD, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
FEB. 4	884	430
FEB. 5	572	315
FEB. 6	474	275
FEB. 7	418	285
FEB. 8	326	240
FEB. 9	259	325
FEB. 10	238	165
FEB. 11	192	155
FEB. 12	150	135
FEB. 13	129	115
FEB. 14	114	100
FEB. 15	100	92
FEB. 16	98	90
FEB. 17	448	240
FEB. 18	913	405
FEB. 19	1380	410
FEB. 20	3420	1200
FEB. 21	2740	1100
FEB. 22	1710	800
FEB. 23	1780	640
FEB. 24	1400	650
FEB. 25	960	500
FEB. 26	660	345
FEB. 27	496	290
FEB. 28	379	260
FEB. 29	265	210
MAR. 1	219	180
MAR. 2	178	130
MAR. 3	158	130
MAR. 4	114	115
MAR. 5	106	90
MAR. 6	94	88
MAR. 7	78	77
MAR. 8	68	61
MAR. 9	56	57
MAR. 10	42	45
MAR. 11	35	39
MAR. 12	538	350
MAR. 13	827	137
MAR. 14	928	360
MAR. 15	384	235
MAR. 16	1980	610
MAR. 17	854	410
MAR. 18	448	265
MAR. 19	277	205
MAR. 20	188	115
MAR. 21	148	100
MAR. 22	120	90
MAR. 23	104	85
MAR. 24	88	72
MAR. 25	127	93
MAR. 26	252	205
MAR. 27	111	74
MAR. 28	86	79
MAR. 30	92	80
MAR. 31	86	80
APR. 1	80	68
APR. 2	53	56
APR. 3	42	9
APR. 4	34	30
APR. 5	27	40
APR. 6	37	45
APR. 7	19	33
APR. 9	23	20
APR. 11	20	22
APR. 13	31	22
APR. 15	16	20
APR. 17	13	10
APR. 19	22	13
APR. 21	13	11
APR. 24	13	10
APR. 28	8	2
APR. 30	8	3
MAY 5	8	3
MAY 8	5	3
MAY 12	3	1
MAY 15	3	2
MAY 19	3	1
MAY 22	13	13
MAY 26	3	1
MAY 30	2	1
JUNE 2	2	1
JUNE 5	2	1
JUNE 6	3	1
JUNE 9	1	1
JUNE 13	1	1
JUNE 17	1	1
JUNE 20	1	1
JUNE 24	1	1
JUNE 27	1	1
JUNE 30	1	1
JULY 3	2	1
JULY 7	1	1
JULY 10	1	1
JULY 14	1	1
JULY 22	1	1
JULY 25	1	1
JULY 28	1	1
JULY 31	1	1
AUG. 4	1	1
AUG. 7	1	1
AUG. 10	1	3
AUG. 13	1	2
AUG. 17	2	2
AUG. 20	2	2
AUG. 21	83	82
AUG. 22	19	20
AUG. 23	14	35
AUG. 26	9	3
AUG. 27	2	2
AUG. 31	1	2
SEPT. 3	2	2
SEPT. 6	1	2
SEPT. 9	1	1
SEPT. 13	1	2
SEPT. 17	1	1
SEPT. 20	3	2
SEPT. 23	1	1
SEPT. 27	2	1
SEPT. 30	1	2

11-4752.5. EEL RIVER AT SOUTH FORK, CALIF.
(Formerly published as Eel River at McCann, Calif.)

LOCATION.--Lat 40°21'04", long 123°54'48", in SE¼NE¼ sec.26, 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.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.

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. Prior to October 1967, samples collected 5.5 miles upstream. Records of daily discharge are given for station 11-4750. Eel River at Fort Seward.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
04...	310	--	--	8.4	--	146	0	--	6.7	--	.12
NOV.											
08...	88	--	--	9.0	--	156	0	--	8.8	--	.21
DEC.											
06...	7000	--	--	4.3	--	65	0	--	3.5	--	.15
JAN.											
10...	28600	--	--	4.1	--	64	0	--	3.0	--	.28
FEB.											
07...	10100	--	--	3.2	--	73	0	--	1.6	--	.09
MAR.											
06...	4000	--	--	3.9	--	84	0	--	--	--	.09
APR.											
03...	2990	--	--	3.8	--	84	0	--	2.8	--	.19
MAY											
08...	720	30	5.8	8.3	1.0	100	4	15	7.4	.0	.07
JUNE											
05...	369	--	--	6.1	--	122	0	--	3.3	--	.13
JULY											
10...	81	--	--	6.4	--	147	0	--	4.6	--	.21
AUG.											
07...	44	--	--	9.2	--	162	0	--	5.6	--	.15
SEPT.											
11...	58	43	14	9.8	1.6	158	0	38	7.4	.0	.12

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
04...	--	146	26	--	11	.3	120	321	8.2	16	9.1
NOV.											
08...	--	162	34	--	11	.3	128	373	8.2	17	9.2
DEC.											
06...	--	63	10	--	13	.2	53	141	8.1	7	11.8
JAN.											
10...	--	63	10	--	12	.2	52	119	7.8	7	12.1
FEB.											
07...	--	63	3	--	10	.2	60	142	8.2	8	11.8
MAR.											
06...	--	81	12	--	9	.2	69	170	8.1	11	11.0
APR.											
03...	--	78	9	--	10	.2	69	170	8.1	12	10.8
MAY											
08...	124	99	10	.17	15	.4	89	217	8.5	17	9.8
JUNE											
05...	--	113	13	--	11	.2	100	249	8.2	18	9.1
JULY											
10...	--	140	19	--	9	.2	121	305	8.2	22	8.6
AUG.											
07...	--	158	25	--	11	.3	133	338	8.2	20	8.1
SEPT.											
11...	194	163	33	.26	23	.5	130	369	8.1	19	7.9

11-4755. 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.
RECORDS AVAILABLE.--Water temperatures: October 1960 September 1968.
Sediment records: October 1962 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C Aug. 2, 3, 7, 8; minimum, 7°C on many days during December to February.
Sediment concentrations: Maximum daily, 750 mg/l Jan. 15; minimum daily, 1 mg/l on many days.
Sediment loads: Maximum daily, 3,630 tons Jan. 15; minimum daily, 0.01 ton on several days during October and September.
EXTREMES, 1960-68.--Water temperatures: Maximum (1960-61, 1962-68), 28°C Aug. 7, 1961; minimum (1961-65, 1966-68), 3°C Nov. 17, 18, 1961.
Sediment concentrations (1962-68): Maximum daily, 4,900 mg/l (estimated) Dec. 22, 1964; minimum daily, 1 mg/l on many days during 1963-68.
Sediment loads (1962-68): Maximum daily, 230,000 tons (estimated) Dec. 22, 1964; minimum daily, 0 ton on many days in 1964-65, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	16	14	13	13	13	13	13	13	13	14	14	14	13	13	12	12	11	11	12	12	11	11	12	12	12	12	12	12	12	11	11	12
MINIMUM	14	13	13	13	13	13	13	13	12	13	13	13	13	12	12	11	11	11	11	11	11	11	11	12	12	12	12	12	11	11	11	12
NOVEMBER																																
MAXIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	--	11
MINIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	--	11
DECEMBER																																
MAXIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	9	9	9	9	8	8	8	8	8	8	8	7	7	9
MINIMUM	11	11	11	11	11	11	10	11	11	11	11	11	11	10	10	10	10	9	9	9	9	8	8	8	8	8	8	8	8	7	7	9
JANUARY																																
MAXIMUM	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
MINIMUM	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
FEBRUARY																																
MAXIMUM	7	7	7	7	7	7	7	7	7	7	7	7	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	--	--	8
MINIMUM	7	7	7	7	7	7	7	7	7	7	7	7	7	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	--	--	8
MARCH																																
MAXIMUM	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	9	9	9	9	8
MINIMUM	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	9	9	8	8	8	8	8	8	9	9	9	8
APRIL																																
MAXIMUM	9	9	9	9	9	9	9	11	12	12	13	13	13	12	13	12	12	12	12	12	13	13	13	14	15	16	17	17	17	18	--	12
MINIMUM	9	9	9	9	9	9	9	9	10	12	12	13	12	12	12	12	12	12	12	12	12	12	12	13	14	15	16	17	17	17	--	12
MAY																																
MAXIMUM	18	18	17	16	16	14	14	14	15	15	15	14	13	13	13	14	15	15	15	15	14	14	14	14	14	14	17	18	18	18	18	15
MINIMUM	17	17	14	14	14	13	13	13	14	14	14	13	13	13	13	13	14	14	15	14	14	14	14	14	14	14	14	17	17	17	16	14
JUNE																																
MAXIMUM	18	18	18	17	17	15	16	17	17	17	17	17	16	17	19	23	21	21	22	22	21	21	22	23	24	23	23	21	21	21	--	19
MINIMUM	17	18	17	16	15	14	14	15	15	15	16	15	14	14	16	19	18	18	18	18	17	17	18	18	18	18	19	17	16	16	--	16
JULY																																
MAXIMUM	21	21	22	23	24	24	24	23	22	22	22	20	19	19	19	19	20	22	21	22	22	22	22	22	22	23	24	23	23	25	23	21
MINIMUM	16	17	17	18	18	19	18	18	17	17	19	17	17	16	15	15	15	16	17	17	16	17	17	17	17	18	18	19	21	21	21	17
AUGUST																																
MAXIMUM	24	26	26	25	24	25	26	26	25	24	25	24	22	22	22	22	22	22	21	21	19	19	21	22	22	21	22	23	24	25	24	23
MINIMUM	21	21	21	21	20	20	21	23	21	21	21	21	21	20	21	21	20	21	20	19	19	19	19	20	21	21	21	21	21	21	22	20
SEPTEMBER																																
MAXIMUM	25	24	24	23	24	22	23	22	21	21	21	22	21	21	20	21	22	22	20	19	18	18	19	20	19	19	20	19	19	18	--	20
MINIMUM	22	21	21	21	21	21	21	20	20	19	19	20	20	19	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	--	19

11-4755. SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1.5	2	.01	8.7	6	.14	108	52	15
2	28	65	8.8	7.7	6	.12	180	90	101
3	25	18	1.2	7.7	5	.10	787	259	577
4	12	6	.19	7.3	4	.08	804	191	695
5	21	93	5.3	7.7	3	.06	857	212	550
6	13	15	.53	7.7	2	.04	432	46	57
7	9.6	4	.10	7.0	1	.02	708	161	343
8	7.8	3	.06	11	6	.18	409	32	35
9	6.9	3	.06	13	7	.25	274	22	16
10	6.6	3	.05	11	8	.24	198	12	6.4
11	6.6	3	.05	9.6	10	.26	155	7	2.9
12	6.3	3	.05	8.9	9	.22	122	7	2.3
13	5.9	3	.05	9.2	10	.26	101	6	1.6
14	5.5	3	.04	87	224	60	86	6	1.4
15	5.5	3	.04	37	52	5.2	77	5	1.0
16	5.5	3	.04	24	24	1.6	68	5	.92
17	5.2	3	.04	19	13	.67	75	19	4.8
18	4.8	3	.04	16	7	.30	295	138	120
19	4.8	3	.04	14	5	.19	200	9	4.9
20	4.8	3	.04	13	6	.21	160	8	3.5
21	19	11	.87	12	7	.23	134	7	2.5
22	26	5	.35	11	6	.18	116	6	1.9
23	16	3	.13	11	6	.18	103	6	1.7
24	13	3	.11	10	7	.19	95	5	1.3
25	11	3	.09	10	8	.22	90	5	1.2
26	10	3	.08	9.6	8	.21	82	6	1.3
27	9.6	3	.08	10	8	.22	75	6	1.2
28	11	5	.15	12	6	.19	68	5	.92
29	11	5	.15	131	156	80	62	5	.84
30	9.6	5	.13	158	108	46	58	5	.78
31	9.1	5	.12	--	--	--	53	5	.72
TOTAL	331.6	--	18.99	701.1	--	197.76	7032	--	2553.08

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	50	5	.68	436	25	31	190	6	3.1
2	47	4	.51	875	179	460	166	7	3.1
3	44	3	.36	910	160	393	145	8	3.1
4	41	2	.22	631	50	85	131	9	3.2
5	38	2	.21	464	14	18	148	32	13
6	37	3	.30	359	10	9.7	123	12	4.0
7	36	4	.39	287	8	6.2	114	9	2.8
8	38	4	.41	237	6	3.8	104	7	2.0
9	265	135	361	202	5	2.7	95	4	1.0
10	1150	374	1350	177	4	1.9	88	2	.48
11	508	120	165	154	3	1.2	82	1	.22
12	341	70	64	136	3	1.1	283	30	34
13	320	45	39	122	2	.66	306	21	17
14	1100	586	2210	111	2	.60	476	65	88
15	1680	750	3630	101	2	.55	440	20	24
16	990	170	454	101	2	.55	658	95	181
17	645	52	91	120	18	5.8	559	26	39
18	469	28	35	102	9	2.5	457	14	17
19	356	16	15	604	292	860	367	11	11
20	277	12	9.0	935	185	467	295	9	7.2
21	226	10	6.1	1150	232	752	244	8	5.3
22	187	9	4.5	995	135	363	212	8	4.6
23	159	8	3.4	920	118	293	188	7	3.6
24	137	6	2.2	686	48	89	161	4	1.7
25	122	4	1.3	515	28	39	224	39	26
26	112	5	1.5	400	19	21	183	13	6.4
27	107	7	2.0	318	12	10	161	4	1.7
28	117	9	3.0	260	8	5.6	144	5	1.9
29	619	137	344	219	6	3.5	131	5	1.8
30	731	107	211	--	--	--	120	4	1.3
31	518	32	45	--	--	--	110	3	.89
TOTAL	11467	--	9050.08	12527	--	3927.36	7105	--	509.39

11-4755. SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	107	3	.87	28	2	.15	17	1	.05
2	98	3	.79	27	1	.07	17	1	.05
3	86	3	.70	25	1	.07	18	1	.05
4	84	3	.68	25	1	.07	17	3	.14
5	79	3	.64	25	1	.07	17	3	.14
6	74	4	.80	24	2	.13	17	3	.14
7	70	3	.57	24	2	.13	16	3	.13
8	67	2	.36	23	2	.12	15	3	.12
9	62	2	.33	23	2	.12	14	3	.11
10	59	5	.80	23	2	.12	14	2	.08
11	58	4	.63	23	2	.12	14	2	.08
12	55	3	.45	22	2	.12	13	2	.07
13	52	3	.42	28	3	.23	13	2	.07
14	50	3	.41	25	8	.54	13	3	.11
15	49	3	.40	22	6	.36	12	4	.13
16	46	3	.37	21	3	.17	12	5	.16
17	44	3	.36	21	1	.06	11	5	.15
18	42	2	.23	20	1	.05	11	6	.18
19	41	2	.22	24	2	.13	9.6	6	.16
20	40	2	.22	42	10	1.1	9.7	7	.18
21	38	2	.21	32	5	.43	9.5	9	.23
22	37	2	.20	28	4	.30	8.2	10	.22
23	35	3	.28	24	2	.13	9.1	6	.15
24	35	4	.38	23	1	.06	8.2	4	.09
25	34	4	.37	34	1	.09	7.9	3	.06
26	32	3	.26	28	4	.30	7.7	3	.06
27	32	3	.26	24	1	.06	7.0	3	.06
28	32	3	.26	22	1	.06	6.6	2	.04
29	31	3	.25	20	1	.05	6.6	2	.04
30	30	2	.16	19	2	.10	6.8	2	.04
31	--	--	--	18	2	.10	--	--	--
TOTAL	1599	--	12.88	767	--	5.61	357.9	--	3.29

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	6.5	2	.04	2.4	6	.04	6.9	2	.04
2	5.9	2	.03	2.3	8	.05	6.2	2	.03
3	6.4	2	.03	2.2	8	.05	6.0	2	.03
4	6.0	2	.03	2.2	10	.06	5.9	2	.03
5	5.8	2	.03	2.2	8	.05	5.9	2	.03
6	5.5	2	.03	2.2	8	.05	5.8	2	.03
7	4.8	3	.04	1.9	7	.04	5.8	2	.03
8	4.5	3	.04	1.8	6	.03	5.6	2	.03
9	4.3	4	.05	1.7	6	.03	5.7	3	.05
10	4.3	3	.03	1.7	8	.04	5.5	3	.04
11	4.2	3	.03	1.7	9	.04	5.3	3	.04
12	4.2	2	.02	1.7	8	.04	5.3	3	.04
13	4.2	2	.02	1.7	7	.03	5.4	3	.04
14	4.3	2	.02	1.6	6	.03	8.2	3	.07
15	4.2	2	.02	1.7	6	.03	6.8	3	.06
16	4.0	2	.02	1.7	5	.02	6.0	3	.05
17	4.0	2	.02	1.7	5	.02	5.5	3	.04
18	3.8	2	.02	1.6	5	.02	5.3	2	.03
19	3.5	2	.02	3.1	5	.04	4.8	2	.03
20	3.4	2	.02	23	29	2.9	4.8	2	.03
21	3.4	2	.02	51	301	46	4.5	1	.01
22	3.3	2	.02	21	48	2.7	4.5	1	.01
23	3.1	2	.02	13	7	.25	4.7	1	.01
24	2.8	2	.02	10	4	.11	4.5	1	.01
25	2.6	3	.02	9.8	2	.05	4.1	1	.01
26	2.7	4	.03	17	8	.37	4.1	2	.02
27	2.4	6	.04	13	5	.18	3.9	2	.02
28	2.5	6	.04	11	3	.09	3.9	2	.02
29	2.5	6	.04	9.0	2	.05	3.9	2	.02
30	2.4	6	.04	8.0	2	.04	3.9	2	.02
31	2.4	6	.04	7.2	2	.04	--	--	--
TOTAL	123.9	--	.89	230.1	--	53.49	158.7	--	.92

ITAL DISCHARGE FOR YEAR (CFS-DAYS) 42400.3
TAL LOAD FOR YEAR (TONS) 16333.74

11-4755. SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 14, 1967	0800	11	148	382	153	63	82	93	95	96	99	99	99	100	--	--	SBWC
DEC 7.....	1000	10	735	158	314	42	55	67	77	80	94	97	99	100	--	--	SBWC
JAN 10, 1968	1105	7	1060	331	947	31	45	56	67	72	86	88	94	99	100	--	SBWC
JAN 15.....	1605	7	1440	555	2160	24	35	49	61	67	91	95	98	100	--	--	SBWC
FEB 19.....	1640	9	722	690	1350	38	52	62	82	92	96	99	100	--	--	--	SPWC
MAR 14.....	1700	9	523	55	78	19	43	60	69	74	90	93	96	100	--	--	SBWC

11-4755. SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 2, 1967	106	104
OCT. 5	59	108
OCT. 16	3	1
OCT. 21	26	23
OCT. 25	3	2
OCT. 28	6	4
NOV. 2	6	2
NOV. 7	1	1
NOV. 9	6	2
NOV. 10	9	7
NOV. 11	10	6
NOV. 13	8	3
NOV. 14	382	630
NOV. 17	11	4
NOV. 18	6	3
NOV. 19	5	1
NOV. 20	6	2
NOV. 22	6	1
NOV. 24	7	2
NOV. 27	7	4
NOV. 30	110	115
DEC. 2	42	44
DEC. 3	317	245
DEC. 4	263	185
DEC. 5	193	135
DEC. 6	24	20
DEC. 7	157	149
DEC. 9	17	17
DEC. 11	7	5
DEC. 15	5	3
DEC. 17	6	3
DEC. 18	173	205
DEC. 20	8	5
DEC. 23	5	4
DEC. 26	6	3
DEC. 28	5	3
DEC. 31	4	3
JAN. 4, 1968	2	3
JAN. 7	4	4
JAN. 9	13	20
JAN. 10	331	240
JAN. 14	33	47
JAN. 15	555	430
JAN. 16	100	84
JAN. 19	15	10
JAN. 22	9	9
JAN. 25	4	4
JAN. 26	5	5
JAN. 27	8	6
JAN. 29	324	200
FEB. 1	14	12
FEB. 2	90	80
FEB. 3	171	125
FEB. 4	29	29
FEB. 6	10	11
FEB. 8	6	6
FEB. 15	2	6
FEB. 17	38	80
FEB. 18	5	5
FEB. 19	690	600
FEB. 20	113	100
FEB. 21	294	238
FEB. 22	91	82
FEB. 26	18	20
FEB. 28	7	7
MAR. 1	6	7
MAR. 4	9	4
MAR. 5	39	61
MAR. 6	7	6
MAR. 7	10	20
MAR. 10	2	5
MAR. 12	24	37
MAR. 13	22	30
MAR. 14	55	96
MAR. 16	91	82
MAR. 17	20	27
MAR. 18	16	20
MAR. 19	10	9
MAR. 20	8	10
MAR. 21	8	6
MAR. 22	10	8
MAR. 23	6	11
MAR. 25	47	83
MAR. 26	5	10
MAR. 27	4	5
MAR. 28	5	5
MAR. 29	5	5
MAR. 31	3	2
APR. 2	3	5
APR. 4	3	2
APR. 6	4	2
APR. 8	2	1
APR. 10	5	3
APR. 13	3	2
APR. 16	3	1
APR. 21	2	1
APR. 24	4	2
APR. 26	3	1
APR. 28	3	2
APR. 30	2	1
MAY 3	1	1
MAY 6	2	1
MAY 8	2	1
MAY 10	2	1
MAY 12	2	0
MAY 13	3	1
MAY 14	10	13
MAY 17	1	1
MAY 19	2	1
MAY 20	9	8
MAY 21	4	2
MAY 24	1	1
MAY 25	1	1
MAY 26	6	8
MAY 27	1	2
MAY 29	1	1
MAY 31	2	2
JUNE 3	1	0
JUNE 4	3	1
JUNE 9	3	1
JUNE 12	2	1
JUNE 16	5	2
JUNE 19	6	3
JUNE 22	10	3
JUNE 25	3	2
JUNE 30	2	2
JULY 3	2	2
JULY 9	4	2
JULY 13	2	2
JULY 16	2	1
JULY 21	2	2
JULY 27	6	2
AUG. 4	10	6
AUG. 9	6	2
AUG. 11	9	2
AUG. 16	5	3
AUG. 20	14	13
AUG. 21	249	320
AUG. 22	22	61
AUG. 31	2	4
SEPT. 15	3	2
SEPT. 23	1	1
SEPT. 27	2	1

11-4755.6. 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.
RECORDS AVAILABLE.--Chemical analyses: February to September 1968.
Water temperatures: October 1967 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 21°C July 6, 7; minimum, 6°C on several days during January and February.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	FLUO-RIDE (F)
FEB. 15...	24	15	.00	9.4	3.0	5.6	.5	49	0	2.0	1.8	.2
JUNE 14...	2.9	14	.00	13	4.2	7.3	.6	70	0	4.0	2.6	.1
JULY 11...	1.3	14	--	13	4.4	7.8	.7	75	0	4.0	2.6	.2
AUG. 28...	1.9	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRATE (NO3)	BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	DISS-OLVED OXYGEN
FEB. 15...	.4	.00	62	.08	36	0	25	.4	40	92	7.9	--
JUNE 14...	.0	.00	81	.11	50	0	24	.5	57	122	7.8	9.4
JULY 11...	.1	.00	84	.11	50	0	25	.5	62	132	7.3	--
AUG. 28...	.1	--	--	--	--	--	--	--	--	--	--	--

DATE	PHOS-PHATE (PO4)	ORTHO PHOS-PHATE (PO4)	AMMONIA (NH4)	ORGANIC NITRO-GEN (N)	TEMP-ERATURE (DEG C)
FEB. 15...	.19	--	--	--	--
JUNE 14...	.17	.07	.13	.09	15
JULY 11...	.21	--	.12	.12	--
AUG. 28...	.10	.13	.01	1.2	--

11-4755.6. ELDER CREEK NEAR BRANSCOMB, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	14	14	14	14	13	13	13	13	13	13	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11	12
MINIMUM	14	14	14	13	13	13	13	13	13	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11	12
NOVEMBER																																
MAXIMUM	11	11	9	9	9	9	9	11	11	11	10	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9	8	8	8	8	--	9
MINIMUM	11	9	9	9	9	9	9	9	11	10	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9	8	8	8	8	8	--	9
DECEMBER																																
MAXIMUM	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	8	8	8	7	7	7	7	7
MINIMUM	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	8	7	7	7	7	7	7
JANUARY																																
MAXIMUM	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	7	6	6	6	6	7
MINIMUM	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	7	6	6	6	6	6	7
FEBRUARY																																
MAXIMUM	6	7	7	7	8	8	8	8	8	7	7	7	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	--	--	8
MINIMUM	6	6	7	7	7	8	8	8	7	7	7	7	7	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	--	--	8
MARCH																																
MAXIMUM	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	9	9	9	8	8	8	8	8	8	8	9	9	8	8
MINIMUM	9	9	9	9	9	9	9	9	8	8	8	8	8	7	8	8	8	8	8	9	8	8	8	8	8	8	8	8	8	8	8	8
APRIL																																
MAXIMUM	8	9	10	10	10	10	10	11	12	12	12	11	11	11	10	9	9	9	10	9	9	10	9	11	11	12	13	12	12	12	--	11
MINIMUM	8	8	9	10	10	9	9	9	10	11	11	11	9	9	9	8	8	8	9	9	8	8	9	9	10	11	11	11	11	11	--	9
MAY																																
MAXIMUM	12	13	13	13	12	11	12	12	12	12	13	11	11	11	11	12	12	13	13	13	12	12	12	12	11	12	14	14	14	14	14	12
MINIMUM	11	11	12	12	11	11	11	11	11	11	11	11	11	10	10	11	11	11	13	12	12	12	12	11	11	11	12	13	13	13	12	11
JUNE																																
MAXIMUM	15	14	16	16	14	14	15	16	16	16	16	15	14	16	17	18	18	19	19	19	19	19	19	20	20	20	20	18	17	18	--	17
MINIMUM	13	14	14	13	13	13	13	13	13	13	14	13	13	13	13	14	15	16	16	16	16	16	16	16	16	16	17	16	14	14	--	14
JULY																																
MAXIMUM	18	18	19	19	20	21	21	20	19	19	19	18	18	18	18	18	18	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19
MINIMUM	15	16	16	16	17	17	17	17	17	17	17	16	16	16	16	15	15	16	16	16	16	16	16	16	16	16	16	17	18	17	17	16
AUGUST																																
MAXIMUM	19	19	19	19	18	18	18	19	18	18	17	17	16	17	16	16	16	16	16	15	14	14	14	15	15	14	16	16	16	17	17	16
MINIMUM	17	17	17	17	16	16	16	17	16	16	16	16	16	16	16	15	14	15	15	14	14	14	13	14	14	14	14	15	16	16	16	15
SEPTEMBER																																
MAXIMUM	17	17	17	17	16	16	16	16	16	16	15	15	14	14	14	14	14	14	14	14	13	12	12	12	12	12	12	12	12	12	--	14
MINIMUM	16	16	16	16	16	16	16	16	16	15	15	14	14	14	14	14	14	14	14	13	12	12	12	12	12	12	12	12	12	12	--	14

11-4758. 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.
RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 24°C on many days during June to September; minimum, 3°C on several days during December and January.
EXTREMES, 1965-68.--Water temperatures: Maximum, 26°C on several days in 1966 and 1967; minimum, 3°C on several days in 1966-68.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	21	17	18	18	16	18	18	18	18	18	20	19	18	18	18	18	18	18	17	18	15	17	17	18	16	16	16	16	15	15	14	17
MINIMUM	17	17	16	16	15	15	15	15	15	16	16	17	15	14	13	13	13	13	14	14	14	15	14	15	14	13	13	13	12	12	11	14
NOVEMBER																																
MAXIMUM	14	14	14	12	14	14	14	14	13	14	13	13	13	13	12	12	12	12	12	12	12	11	11	11	10	9	8	9	8	7	--	12
MINIMUM	12	12	11	11	12	12	12	13	12	13	12	12	12	12	12	12	11	11	11	10	9	9	9	9	9	8	7	8	7	7	--	11
DECEMBER																																
MAXIMUM	7	7	8	8	8	8	8	8	7	7	7	7	6	4	3	3	3	3	4	4	4	6	6	6	6	6	6	6	6	6	5	6
MINIMUM	7	7	7	8	8	7	7	7	7	7	7	6	4	3	3	3	3	3	3	4	4	4	6	5	5	6	6	6	6	5	4	5
JANUARY																																
MAXIMUM	4	4	4	3	4	4	4	4	6	7	8	7	9	10	10	10	9	9	8	8	9	9	9	9	8	8	7	6	6	7	7	7
MINIMUM	4	4	3	3	3	4	4	4	4	6	7	7	7	9	10	9	9	8	8	8	8	9	9	8	8	7	6	5	5	6	7	6
FEBRUARY																																
MAXIMUM	7	8	9	9	9	10	10	10	10	10	10	10	9	9	9	10	11	11	11	11	11	12	12	12	12	12	12	12	12	--	--	10
MINIMUM	7	7	8	9	9	9	10	10	10	9	10	9	9	9	9	9	10	11	11	11	11	11	12	12	12	12	12	12	11	--	--	10
MARCH																																
MAXIMUM	11	12	12	12	12	11	11	12	11	11	11	10	9	9	9	9	9	9	9	9	9	9	11	11	11	11	11	12	12	13	13	11
MINIMUM	11	11	11	11	11	11	11	9	10	9	10	9	8	8	9	9	9	8	8	9	9	9	9	10	11	10	9	11	11	12	11	9
APRIL																																
MAXIMUM	11	12	12	13	14	13	14	14	15	16	16	16	15	16	14	14	14	14	14	14	14	14	14	15	16	16	17	17	18	18	--	14
MINIMUM	11	11	10	12	12	11	11	11	12	13	13	13	12	12	12	11	11	11	11	11	11	11	11	11	12	12	13	13	13	14	--	11
MAY																																
MAXIMUM	18	18	18	18	18	18	18	18	18	18	17	18	16	17	18	18	18	18	16	18	17	18	17	16	18	18	20	20	20	20	21	18
MINIMUM	13	13	14	14	13	13	13	14	14	14	14	14	14	13	13	13	14	14	16	16	15	14	14	14	14	15	16	16	16	15	15	14
JUNE																																
MAXIMUM	21	19	20	21	17	19	20	21	21	21	21	21	21	22	22	23	23	23	23	23	23	23	23	24	24	24	23	23	22	23	--	22
MINIMUM	16	17	17	16	16	16	15	16	16	16	16	16	16	16	17	17	17	18	18	18	18	18	19	18	19	18	19	18	17	17	--	17
JULY																																
MAXIMUM	23	23	23	23	24	24	24	24	24	24	23	23	23	24	23	23	23	24	24	24	24	24	24	24	24	24	24	24	23	24	24	23
MINIMUM	17	18	18	19	19	19	19	19	19	18	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	19	18	18	20	19	19	18
AUGUST																																
MAXIMUM	24	24	24	24	23	24	24	24	23	24	23	23	20	23	22	22	22	22	21	19	20	22	23	23	20	21	22	23	24	24	24	22
MINIMUM	19	19	19	19	18	18	19	19	19	18	18	18	18	18	17	18	17	18	18	17	17	18	18	19	19	16	19	19	19	18	19	18
SEPTEMBER																																
MAXIMUM	24	24	24	23	24	23	24	23	23	23	23	23	22	23	22	22	23	22	21	21	21	21	22	22	22	21	22	22	21	21	--	22
MINIMUM	19	18	19	19	19	19	19	19	18	18	17	18	19	19	18	17	18	17	16	16	14	14	16	16	16	16	16	16	16	17	--	17

11-4765. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
Water temperatures: November 1960 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 28°C June 25; minimum, 3°C Dec. 14, 15.
EXTREMES, 1960-64, 1965-68.--Water temperatures: Maximum (1960-61, 1963-64, 1965-68), 34°C July 25, 1964; minimum, 1°C Jan. 20, 21, 1963.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)	PHOS-PHATE (PO4)
OCT.												
04...	322	--	--	11	--	127	0	--	7.2	2.4	.13	.08
NOV.												
08...	81	--	--	11	--	151	1	16	8.9	--	.11	--
DEC.												
06...	3950	--	--	5.5	--	60	0	--	3.9	2.1	.12	.79
JAN.												
10...	12800	--	--	4.5	--	45	0	--	4.1	2.6	.24	.83
FEB.												
07...	3420	--	--	4.4	--	62	0	--	2.9	1.0	.06	.40
MAR.												
06...	1490	--	--	5.0	--	73	0	--	2.2	.1	.05	.07
APR.												
03...	1030	--	--	5.4	--	80	0	--	4.0	.0	.10	.10
MAY												
08...	278	25	6.2	7.9	1.1	96	3	9.2	4.9	.0	.06	.24
JUNE												
05...	190	--	--	8.0	--	111	0	--	4.7	.0	.11	.04
JULY												
10...	64	--	--	7.5	--	135	0	--	5.4	.1	.13	.01
AUG.												
07...	53	--	--	10	--	126	0	--	6.6	.1	.13	.00
SEPT.												
11...	60	18	18	10	1.5	142	0	13	7.4	.0	.16	.02

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
04...	--	111	7	--	18	.5	104	268	8.2	16	8.8
NOV.											
08...	--	130	4	--	16	.4	125	299	8.4	16	9.9
DEC.											
06...	--	51	2	--	19	.3	49	129	7.8	8	1.1
JAN.											
10...	--	45	8	--	18	.3	37	91	7.6	8	11.9
FEB.											
07...	--	50	0	--	16	.3	51	126	8.0	9	11.7
MAR.											
06...	--	61	1	--	15	.3	60	150	8.1	11	10.2
APR.											
03...	--	69	3	--	15	.3	66	155	8.0	13	10.9
MAY											
08...	--	88	4	--	16	.4	84	202	8.5	18	10.2
JUNE											
05...	--	93	2	--	16	.4	91	219	8.1	19	8.8
JULY											
10...	--	113	2	--	13	.3	111	259	8.2	24	9.5
AUG.											
07...	--	106	3	--	17	.4	103	264	8.2	22	10.5
SEPT.											
11...	143	120	4	.19	15	.4	116	278	8.2	21	10.8

11-4765. SOUTH FORK EEL RIVER NEAR MIRANDA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	20	19	18	18	18	18	19	18	19	19	20	20	18	17	17	17	17	17	18	18	17	18	19	18	18	17	17	18	16	15	16	18
MINIMUM	19	16	16	17	17	17	16	16	16	17	17	17	16	14	14	13	14	14	16	16	16	17	17	16	16	15	15	16	13	13	13	16
NOVEMBER																																
MAXIMUM	17	17	17	16	17	17	17	17	16	17	17	16	16	16	15	15	14	14	13	13	13	12	12	12	11	10	9	9	10	9	--	14
MINIMUM	14	14	14	14	14	15	16	16	16	16	16	15	15	15	14	14	14	13	12	12	12	11	11	9	9	8	8	8	9	8	--	12
DECEMBER																																
MAXIMUM	8	9	10	11	11	9	9	9	9	9	9	8	7	5	4	5	6	6	6	6	6	7	7	8	8	8	8	8	8	8	7	7
MINIMUM	8	8	9	10	9	8	9	9	8	8	8	7	5	3	3	4	4	6	5	6	6	6	7	7	7	7	7	7	7	7	7	7
JANUARY																																
MAXIMUM	7	7	6	6	7	6	7	8	9	9	8	7	9	11	11	10	9	8	8	9	9	9	9	9	9	8	7	6	6	7	7	8
MINIMUM	7	5	4	4	5	6	6	7	8	8	7	6	7	9	10	9	8	8	8	8	8	9	9	8	8	7	6	5	5	6	7	7
FEBRUARY																																
MAXIMUM	7	8	9	9	10	11	10	10	10	10	10	10	10	9	10	10	12	12	12	12	12	12	12	12	13	13	13	13	12	--	--	11
MINIMUM	7	7	8	9	9	10	10	9	9	9	9	9	9	9	9	10	10	11	12	11	12	12	12	12	12	11	11	12	11	--	--	10
MARCH																																
MAXIMUM	12	12	13	12	12	11	11	12	12	11	12	11	9	10	11	11	10	11	11	11	11	11	12	13	13	12	13	14	14	14	14	12
MINIMUM	11	11	12	12	11	11	10	10	10	9	11	9	9	9	10	9	9	8	8	9	9	10	11	11	12	11	11	11	13	12	12	10
APRIL																																
MAXIMUM	13	13	14	13	14	13	14	15	17	18	17	15	14	15	15	13	14	14	15	14	14	16	14	16	15	18	19	19	19	19	--	15
MINIMUM	12	12	11	13	13	11	11	12	13	14	14	13	11	12	12	11	11	11	12	11	11	12	13	12	13	14	14	16	16	16	--	12
MAY																																
MAXIMUM	18	19	21	19	18	17	19	20	19	18	16	17	17	18	19	21	21	21	19	19	18	18	18	16	19	20	22	22	22	21	22	19
MINIMUM	15	14	16	16	14	14	14	16	16	16	15	14	14	14	15	16	17	17	17	17	17	17	16	15	16	18	19	19	18	17	17	16
JUNE																																
MAXIMUM	23	22	23	23	20	18	21	21	22	23	23	22	22	23	24	25	26	26	26	26	25	25	26	27	28	27	25	23	23	24	--	23
MINIMUM	18	20	19	19	17	16	16	17	17	18	18	17	17	18	18	19	20	19	19	20	19	19	21	20	23	23	22	18	17	17	--	18
JULY																																
MAXIMUM	25	24	24	24	26	26	27	27	26	27	26	26	25	25	24	24	24	24	25	26	24	24	24	23	24	26	27	27	27	27	26	25
MINIMUM	19	21	20	20	19	19	20	23	22	21	22	22	21	21	19	19	19	19	19	21	19	19	19	19	19	19	21	23	24	23	21	20
AUGUST																																
MAXIMUM	27	26	25	24	24	24	24	25	25	26	24	23	21	22	23	22	23	23	22	20	22	22	23	24	23	21	24	24	25	26	26	23
MINIMUM	22	22	21	20	20	20	20	22	22	21	21	19	20	19	19	19	19	20	20	19	18	19	20	21	21	19	20	20	19	22	23	20
SEPTEMBER																																
MAXIMUM	25	24	25	24	24	24	24	24	24	23	23	23	22	22	21	21	22	22	20	18	18	18	20	21	21	21	21	21	20	19	--	22
MINIMUM	17	21	19	21	21	21	21	21	21	19	19	20	20	20	19	17	18	19	17	16	14	14	15	17	18	18	18	18	18	17	--	18

11-4770. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
Water temperatures: October 1957 to September 1968.
Sediment records: October 1957 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 24°C June 24-26, July 10, Aug. 30; minimum, 4°C Dec. 15, 16.
Sediment concentrations: Maximum daily, 6,650 mg/l Jan. 15; minimum daily, 2 mg/l June 12, 21, July 8, 9.
Sediment loads: Maximum daily, 2,140,000 tons Jan. 15; minimum daily, 1.0 ton on several days during August.
EXTREMES, 1957-68.--Water temperatures: Maximum (1960-64, 1965-68), 24°C on several days in 1962, 1967-68; minimum, 3°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.
Sediment loads: Maximum daily, 57,000,000 tons (estimated) Dec. 23, 1964; minimum daily, 0.3 ton on many days in 1958-63, 1966.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	LITHIUM (LI)	STRON-TIUM (SR)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)
OCT.												
04...	716	11	.01	45	12	9.2	1.5	.01	.40	170	0	38
NOV.												
08...	243	9.2	.01	48	14	9.5	1.4	.02	.01	176	0	33
DEC.												
06...	17700	8.4	.06	18	4.8	4.5	.9	.01	.20	64	0	15
JAN.												
10...	37400	8.7	.10	13	5.2	2.0	2.7	.00	.20	48	0	8.0
FEB.												
06...	20200	11	.19	16	4.9	4.6	1.1	.00	.19	68	0	9.0
MAR.												
05...	6560	11	.01	20	6.2	4.8	.9	.00	.26	87	0	11
APR.												
03...	4720	10	.05	21	6.1	5.1	1.0	.00	.30	87	0	13
MAY												
08...	1210	10	.00	28	8.0	6.4	1.0	.00	.37	120	0	17
JUNE												
04...	752	7.3	.00	31	8.9	7.4	1.2	.00	.42	132	0	18
JULY												
10...	226	7.8	.00	40	11	9.3	1.5	.00	.23	164	0	21
AUG.												
07...	128	7.5	.00	38	12	10	1.6	.00	.45	163	2	22
SEPT.												
11...	123	8.3	.00	41	13	10	1.6	.01	.48	165	2	26

DATE	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	PHOS-PHATE (PO4)	BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3
OCT.												
04...	7.6	.1	.4	.18	.10	209	162	23	.28	11	.3	139
NOV.												
08...	9.1	.2	.4	.15	.10	212	178	34	.29	10	.3	144
DEC.												
06...	4.2	.1	2.3	.22	.10	91	64	11	.12	13	.2	52
JAN.												
10...	2.8	.2	3.0	.09	.10	72	54	15	.10	14	.3	39
FEB.												
06...	2.1	.1	.6	.20	.00	83	60	4	.11	14	.3	56
MAR.												
05...	2.4	.1	.5	.15	.04	100	76	5	.14	12	.2	71
APR.												
03...	1.6	.1	1.4	.12	.06	103	78	7	.14	12	.2	71
MAY												
08...	3.5	.1	.8	.08	.11	134	103	5	.18	12	.3	98
JUNE												
04...	4.2	.2	.7	.03	.05	144	114	6	.20	12	.3	108
JULY												
10...	6.2	.1	.9	.00	.02	179	145	11	.24	12	.3	135
AUG.												
07...	6.2	.2	.0	.06	.03	180	145	8	.24	13	.4	137
SEPT.												
11...	11	.2	.2	--	.12	194	156	17	.26	12	.4	139

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	TURBIDITY	DISSOLVED OXYGEN
OCT.					
04...	333	8.2	--	22	9.3
NOV.					
08...	353	8.1	--	5.0	9.1
DEC.					
06...	144	7.9	8	2800	11.3
JAN.					
10...	107	7.2	8	900	11.4
FEB.					
06...	136	7.7	--	550	11.6
MAR.					
05...	169	7.9	--	90	10.6
APR.					
03...	169	7.9	--	30	10.7
MAY					
08...	226	8.1	16	1.0	10.2
JUNE					
04...	250	8.1	20	1.0	9.9
JULY					
10...	310	8.1	20	1.0	8.7
AUG.					
07...	316	8.3	21	10	11.5
SEPT.					
11...	334	8.3	19	--	9.8

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	21	19	17	17	17	18	18	18	19	19	20	19	18	17	17	17	17	17	18	17	17	17	18	18	17	17	18	17	16	16	16	17
MINIMUM	19	17	16	16	17	17	17	17	17	18	18	18	17	16	14	14	15	16	16	16	16	17	17	16	17	16	16	16	15	14	14	16
NOVEMBER																																
MAXIMUM	16	16	17	17	16	17	17	17	17	16	17	16	17	16	15	15	16	15	14	13	13	12	12	12	12	11	11	9	9	9	--	14
MINIMUM	15	15	16	16	16	16	17	17	16	16	16	15	15	15	15	14	14	12	12	12	12	12	11	11	10	9	9	9	8	--	--	13
DECEMBER																																
MAXIMUM	8	8	9	9	8	9	8	9	9	9	9	8	7	6	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	6	7
MINIMUM	8	8	8	8	8	8	8	9	9	8	8	7	6	5	4	4	5	5	6	6	6	6	6	6	7	7	6	7	7	6	6	7
JANUARY																																
MAXIMUM	6	6	6	6	7	7	7	7	8	8	8	7	8	9	9	9	9	8	8	8	8	8	8	8	8	8	8	7	6	6	6	7
MINIMUM	6	5	6	6	6	6	7	7	7	8	7	7	7	8	9	9	8	8	8	8	8	8	8	8	8	8	7	6	6	6	6	7
FEBRUARY																																
MAXIMUM	7	7	8	8	8	9	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	11	11	11	12	11	--	--	9
MINIMUM	6	7	7	8	8	8	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	11	11	11	11	--	--	--	9
MARCH																																
MAXIMUM	12	12	13	13	12	12	12	12	11	11	12	11	11	9	10	10	10	10	11	11	11	11	12	12	12	12	12	13	12	14	14	11
MINIMUM	12	12	12	12	12	12	11	11	11	11	11	11	9	9	9	10	10	9	10	10	10	11	11	11	12	12	11	12	12	12	13	11
APRIL																																
MAXIMUM	14	13	12	13	13	13	13	14	14	15	15	14	13	13	13	13	13	13	13	13	13	14	14	14	14	15	16	17	17	18	--	14
MINIMUM	13	12	12	12	13	12	12	12	13	14	14	13	12	12	13	12	12	12	12	12	12	12	13	13	13	13	14	14	16	17	--	13
MAY																																
MAXIMUM	17	17	17	17	16	16	17	17	17	17	15	14	15	16	17	18	18	19	19	18	18	18	17	17	17	18	20	20	19	19	19	17
MINIMUM	16	15	16	16	14	14	14	16	16	15	14	13	14	15	15	16	17	17	18	18	17	17	17	16	16	17	18	18	17	17	17	16
JUNE																																
MAXIMUM	21	21	21	21	19	17	19	19	20	21	20	21	20	21	22	23	23	22	23	23	23	23	22	24	24	24	23	20	21	22	--	21
MINIMUM	17	19	19	19	17	16	16	17	18	18	19	18	18	18	19	19	19	20	20	20	19	19	20	19	21	21	20	18	17	17	--	18
JULY																																
MAXIMUM	23	21	20	21	22	22	23	23	23	24	21	21	22	22	22	22	22	23	22	23	23	23	22	21	19	22	23	23	21	22	22	22
MINIMUM	18	19	19	20	19	19	20	19	20	21	21	20	19	21	19	19	19	19	19	20	20	20	20	19	19	19	19	20	19	19	19	19
AUGUST																																
MAXIMUM	22	22	21	20	22	22	23	22	22	22	21	20	19	21	22	21	21	21	21	19	22	22	22	22	22	22	22	22	23	24	23	21
MINIMUM	20	20	20	19	19	19	19	19	20	20	20	19	19	19	18	19	19	19	19	18	19	19	20	21	19	19	20	20	20	20	21	19
SEPTEMBER																																
MAXIMUM	22	22	23	21	21	21	20	20	22	22	22	22	21	21	21	21	22	20	19	19	19	19	20	21	21	21	20	20	19	18	--	21
MINIMUM	21	20	19	19	21	20	20	20	20	19	19	20	19	20	19	18	19	18	17	17	16	16	16	17	18	18	18	17	17	18	--	18

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	149	4	1.6	247	4	2.7	3710	1130	11300
2	212	30	17	246	6	4.0	3680	780	7750
3	488	34	45	246	9	6.0	12900	1180	42600
4	716	35	68	228	11	6.8	20700	2860	161000
5	882	40	95	233	10	6.3	34200	3860	367000
6	821	48	106	220	8	4.8	17700	1440	75000
7	652	34	60	219	5	3.0	18000	1720	89400
8	506	14	19	243	4	2.6	17300	1100	51400
9	392	6	6.4	264	5	3.6	9500	520	13300
10	346	4	3.7	261	9	6.3	6310	330	5620
11	342	4	3.7	273	17	13	5060	230	3140
12	285	4	3.1	261	20	14	4100	160	1770
13	259	4	2.8	320	23	20	3480	100	940
14	244	3	2.0	1200	237	822	2860	40	309
15	237	3	1.9	1970	252	1440	2400	45	292
16	228	3	1.8	2030	253	1390	2120	40	229
17	217	4	2.3	1260	105	357	2040	35	193
18	204	4	2.2	885	55	131	4120	576	8130
19	197	4	2.1	692	35	65	7280	903	18100
20	192	4	2.1	573	26	40	5170	290	4050
21	201	3	1.6	502	15	20	3750	125	1270
22	226	3	1.8	438	10	12	3080	45	374
23	265	4	2.9	383	7	7.2	2850	45	346
24	323	5	4.4	345	6	5.6	2960	80	639
25	325	5	4.4	321	6	5.2	3270	100	883
26	302	4	3.3	306	5	4.1	3710	95	952
27	291	3	2.4	327	4	3.5	3970	85	911
28	285	3	2.3	340	20	18	4150	80	896
29	279	3	2.3	731	220	434	3720	60	603
30	275	3	2.2	2610	1330	10500	3140	59	500
31	261	3	2.1	--	--	--	2740	39	289
TOTAL	10602	--	475.4	18174	--	15347.7	219970	--	869186

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	2380	22	141	19200	800	41500	10800	280	8160
2	2170	10	59	34400	1490	191000	8810	110	2620
3	1990	9	48	52000	2630	369000	7720	140	2920
4	1850	11	55	37500	1070	108000	6850	470	8690
5	1710	11	51	24500	830	54900	6560	430	7620
6	1650	13	58	20200	670	36500	6530	350	6170
7	1580	17	73	17800	560	26900	5920	260	4160
8	1540	13	54	15500	550	23000	5330	190	2730
9	1550	250	1050	13500	600	21900	4800	140	1810
10	37400	4820	487000	12000	700	22700	4360	80	942
11	28300	1860	158000	10800	770	22500	4030	50	544
12	13300	870	31200	9640	700	18200	6070	110	1800
13	13600	1260	49400	8700	500	11700	16400	2340	106000
14	60500	5820	1150000	8000	290	6260	20700	1920	107000
15	113000	6650	2140000	7430	230	4610	20700	1420	79400
16	60200	4600	757000	7040	240	4560	24400	2780	193000
17	40000	2380	257000	8560	410	9480	33700	1680	153000
18	26800	1660	120000	13100	1080	38200	22800	840	51700
19	18700	1180	59600	15800	1180	54400	16700	470	21200
20	13900	840	31500	74200	4980	1020000	13000	380	13300
21	11400	580	17900	65100	3480	616000	10900	360	10600
22	9820	450	11900	59500	2410	387000	9430	410	10400
23	8520	400	9200	51400	2030	282000	8650	450	10500
24	7640	370	7630	44400	1790	215000	7960	480	10300
25	7010	260	4920	31600	1310	112000	8200	570	12600
26	6560	180	3190	23800	980	63000	9430	800	20400
27	6140	180	2980	19000	840	43100	7960	750	16100
28	6170	360	6000	15700	760	32200	7080	450	8600
29	13000	860	30200	13300	600	21500	6580	210	3730
30	37000	3330	345000	--	--	--	6330	110	1880
31	25100	1690	118000	--	--	--	6070	110	1800
TOTAL	580480	--	5799209	733670	--	3857110	334770	--	879676

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	5610	110	1670	1420	13	50	835	3	6.8
2	5410	100	1460	1430	12	46	799	3	6.5
3	4720	91	1160	1400	11	42	768	3	6.2
4	4270	80	922	1370	9	33	752	3	6.1
5	3960	78	834	1350	8	29	762	3	6.2
6	3650	81	798	1320	7	25	739	3	6.0
7	3400	88	808	1280	6	21	711	3	5.8
8	3210	107	927	1210	6	20	690	4	7.5
9	3070	92	763	1160	6	19	684	4	7.4
10	2960	47	376	1130	5	15	639	5	8.6
11	2890	37	289	1110	4	12	603	3	4.9
12	2840	42	322	1100	4	12	583	2	3.1
13	2740	44	326	1130	5	15	561	3	4.5
14	2560	44	304	1210	5	16	543	3	4.4
15	2400	41	266	1200	5	16	531	3	4.3
16	2290	38	235	1130	5	15	519	3	4.2
17	2210	34	203	1040	5	14	500	3	4.1
18	2120	27	155	986	5	13	481	3	3.9
19	1990	26	140	982	5	13	466	3	3.8
20	1910	27	139	1060	5	14	443	3	3.6
21	1860	26	131	1250	13	44	411	2	2.2
22	1800	24	117	1580	19	81	399	3	3.2
23	1730	20	93	1380	7	26	370	3	3.0
24	1670	18	81	1260	6	20	371	3	3.0
25	1620	18	79	1130	7	21	352	3	2.9
26	1560	17	72	1060	8	23	341	3	2.8
27	1530	16	66	1090	7	21	327	3	2.6
28	1510	15	61	1030	6	17	312	3	2.5
29	1480	15	60	946	5	13	299	4	3.2
30	1430	14	54	921	5	12	298	4	3.2
31	--	--	--	876	4	9.5	--	--	--
TOTAL	80400	--	12911	36541	--	727.5	16089	--	136.5

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	289	5	3.9	130	3	1.1	270	4	2.9
2	277	5	3.7	129	3	1.0	245	3	2.0
3	276	4	3.0	128	3	1.0	220	4	2.4
4	268	4	2.9	127	3	1.0	208	4	2.2
5	275	4	3.0	126	3	1.0	171	5	2.3
6	266	4	2.9	127	3	1.0	161	5	2.2
7	254	3	2.1	128	3	1.0	154	5	2.1
8	247	2	1.3	129	4	1.4	157	5	2.1
9	235	2	1.3	131	5	1.8	148	5	2.0
10	226	3	1.8	128	4	1.4	130	5	1.8
11	212	4	2.3	130	4	1.4	123	5	1.7
12	203	5	2.7	126	3	1.0	167	5	2.3
13	196	4	2.1	125	3	1.0	302	4	3.3
14	191	4	2.1	136	4	1.5	352	3	2.9
15	180	3	1.5	131	5	1.8	259	3	2.1
16	176	3	1.4	131	5	1.8	196	4	2.1
17	170	3	1.4	128	5	1.7	164	5	2.2
18	164	3	1.3	135	5	1.8	146	5	2.0
19	159	3	1.3	140	5	1.9	180	5	2.4
20	156	3	1.3	182	6	2.9	167	5	2.3
21	151	3	1.2	243	13	8.5	149	5	2.0
22	152	3	1.2	386	39	41	197	5	2.7
23	141	3	1.1	860	66	153	136	5	1.8
24	143	3	1.2	642	13	23	134	5	1.8
25	140	3	1.1	533	5	7.2	199	4	2.1
26	138	3	1.1	440	5	5.9	298	4	3.2
27	136	3	1.1	404	5	5.5	252	5	3.4
28	134	3	1.1	374	5	5.0	154	5	2.1
29	132	3	1.1	350	4	3.8	137	5	1.8
30	131	3	1.1	315	3	2.6	134	5	1.8
31	130	3	1.1	290	3	2.3	--	--	--
TOTAL	5948	--	55.7	7484	--	286.3	5710	--	68.0

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 2049838
TOTAL LOAD FOR YEAR (TONS) 11435189.1

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 4, 1967	1600	9	19300	2450	128000	24	30	43	54	69	81	93	97	100	--	--	VPWC
JAN 10, 1968	0900	8	46200	7020	876000	22	28	33	50	63	72	83	94	100	--	--	VPWC
JAN 14.....	0900	9	47700	4100	528000	19	27	34	49	63	71	92	100	--	--	--	VPWC
JAN 15.....	0900	9	140000	6970	2630000	20	30	31	48	63	72	92	98	100	--	--	VPWC
JAN 30.....	1600	6	41000	3730	413000	17	24	31	36	38	65	87	99	100	--	--	VBWC
FEB 1.....	1400	7	19000	756	38800	20	29	36	40	42	61	76	100	--	--	--	VBWC
FEB 20.....	1600	10	82300	4730	1050000	20	28	35	49	65	74	91	98	99	100	--	VPWC
MAR 1.....	1330	12	10100	287	7830	30	44	52	56	58	75	82	98	100	--	--	VBWC
MAR 13.....	1700	11	17200	2440	113000	15	20	27	33	37	51	62	89	100	--	--	VBWC

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

Date of collection	Concentration of suspended sediment (mg/l)	Turbidity (mg/l silica)
OCT. 18, 1967	4	2
OCT. 21	3	2
OCT. 24	5	2
OCT. 27	3	2
OCT. 31	3	2
NOV. 4	11	2
NOV. 7	5	1
NOV. 9	5	4
NOV. 11	18	7
NOV. 14	306	210
NOV. 16	293	210
NOV. 18	58	56
NOV. 20	28	22
NOV. 22	9	7
NOV. 24	5	2
NOV. 26	5	2
NOV. 29	283	260
DEC. 2	730	440
DEC. 4	2450	600
DEC. 5	4480	1300
DEC. 7	2100	1080
DEC. 8	876	800
DEC. 9	478	368
DEC. 13	113	57
DEC. 15	50	30
DEC. 17	29	20
DEC. 19	1010	412
DEC. 21	133	152
DEC. 23	51	30
DEC. 26	82	37
DEC. 30	63	54
JAN. 1, 1968	24	22
JAN. 5	10	8
JAN. 9	296	135
JAN. 10	7020	2450
JAN. 12	1130	385
JAN. 14	4100	1280
JAN. 15	6970	1520
JAN. 17	2460	850
JAN. 19	1240	430
JAN. 21	540	220
JAN. 23	400	150
JAN. 25	246	105
JAN. 28	390	50
JAN. 30	3730	1100
FEB. 1	756	335
FEB. 7	574	270
FEB. 9	564	220
FEB. 11	777	170
FEB. 13	504	120
FEB. 15	216	84
FEB. 17	451	91
FEB. 20	4730	2080
FEB. 24	1680	585
FEB. 26	995	420
FEB. 28	772	255
MAR. 1	287	185
MAR. 4	540	105
MAR. 6	381	86
MAR. 8	212	70
MAR. 10	90	42
MAR. 13	2440	630
MAR. 15	1320	410
MAR. 17	1410	525
MAR. 19	427	220
MAR. 22	424	120
MAR. 25	581	120
MAR. 27	1080	115
MAR. 29	200	66
APR. 2	101	48
APR. 5	80	32
APR. 8	108	25
APR. 10	44	19
APR. 12	41	20
APR. 15	38	20
APR. 17	33	10
APR. 20	27	9
APR. 23	16	9
MAY 1	14	2
MAY 4	9	4
MAY 7	7	2
MAY 11	4	1
MAY 14	5	1
MAY 18	5	1
MAY 22	14	6
MAY 25	8	4
MAY 29	5	1
JUNE 1	3	0
JUNE 4	3	1
JUNE 7	3	1
JUNE 10	4	0
JUNE 12	2	1
JUNE 15	3	1
JUNE 18	3	0
JUNE 21	1	0
JUNE 24	2	0
JUNE 27	2	0
JUNE 30	4	2
JULY 5	2	2
JULY 8	2	0
JULY 9	1	1
JULY 12	5	2
JULY 21	2	2
JULY 28	4	2
AUG. 4	3	2
AUG. 11	3	2
AUG. 18	4	1
AUG. 25	6	2
SEPT. 4	4	3

11-4775. 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., Trinity 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.
RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 24°C on several days during July and August; minimum, freezing point Dec. 18, Jan. 13, 28, 29.
EXTREMES, 1965-68.--Water temperatures: Maximum, 24°C on several days in 1966-68; minimum, freezing point on several days during winter months.
REMARKS.--Recorder malfunction Sept. 1-30.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	19	14	15	15	15	15	16	15	16	16	17	16	15	14	14	14	14	14	15	14	13	15	15	14	15	14	13	14	12	13	13	14
MINIMUM	14	11	11	13	13	13	12	13	13	14	15	15	13	12	12	11	11	11	12	12	12	13	13	12	13	12	12	12	11	11	11	12
NOVEMBER																																
MAXIMUM	13	13	13	12	14	14	14	13	13	13	12	13	12	12	12	12	12	11	10	10	10	9	9	9	9	7	7	8	8	4	--	11
MINIMUM	11	11	11	12	12	12	12	13	12	12	11	12	12	11	9	11	10	9	9	9	9	8	7	7	7	6	6	6	4	3	--	9
DECEMBER																																
MAXIMUM	7	6	5	6	6	6	6	7	7	7	7	6	4	2	4	4	3	2	3	4	5	6	6	6	6	6	6	6	6	5	4	5
MINIMUM	4	3	3	4	4	3	4	6	5	4	4	3	2	1	2	2	2	0	2	3	3	4	4	3	3	3	3	3	3	2	2	3
JANUARY																																
MAXIMUM	5	4	4	4	4	4	4	5	5	4	4	5	6	7	7	6	6	6	7	8	8	8	8	7	7	4	4	2	1	3	4	5
MINIMUM	3	2	1	2	2	1	2	4	3	3	2	2	0	7	6	5	4	4	4	4	6	6	4	4	4	2	2	0	0	1	3	3
FEBRUARY																																
MAXIMUM	4	4	6	7	7	7	8	8	8	8	7	8	7	8	8	7	9	8	8	9	9	9	9	9	10	11	11	11	11	--	--	8
MINIMUM	3	2	3	3	4	5	4	4	5	6	6	5	5	6	4	6	6	6	7	7	8	8	8	8	8	7	7	7	6	--	--	6
MARCH																																
MAXIMUM	9	12	12	11	9	8	9	11	10	10	11	9	7	7	9	6	8	9	10	10	9	9	11	12	9	10	11	13	13	13	13	9
MINIMUM	8	7	7	7	7	6	6	6	6	4	7	5	3	3	6	4	4	4	5	4	6	6	7	6	6	6	6	7	8	8	7	6
APRIL																																
MAXIMUM	10	11	13	11	12	13	13	14	16	16	15	14	14	14	12	11	13	13	13	13	13	14	12	15	14	16	17	17	17	17	--	13
MINIMUM	8	7	7	8	8	7	8	8	9	10	10	9	8	8	9	7	6	7	8	7	7	8	9	9	9	10	11	11	11	12	--	8
MAY																																
MAXIMUM	16	18	18	17	16	16	17	17	17	17	16	14	14	15	17	18	17	18	17	16	15	15	15	14	18	17	19	19	18	19	19	17
MINIMUM	11	11	12	13	12	9	11	11	13	13	12	12	11	11	11	12	13	14	15	13	13	12	12	11	12	13	14	15	14	13	14	12
JUNE																																
MAXIMUM	20	20	19	19	18	15	18	19	19	19	18	18	17	19	21	21	21	22	22	22	21	21	22	22	23	23	22	20	19	21	--	20
MINIMUM	15	16	16	16	13	13	13	14	14	15	16	13	13	14	16	17	17	18	18	18	17	17	19	18	19	19	19	18	16	16	--	16
JULY																																
MAXIMUM	21	21	22	22	23	24	23	24	23	23	22	22	22	22	22	22	22	22	23	23	23	23	23	22	23	23	24	24	22	24	24	22
MINIMUM	17	18	18	19	19	19	19	20	19	19	19	19	18	19	18	18	18	18	18	18	19	18	18	18	18	19	19	20	21	21	20	18
AUGUST																																
MAXIMUM	24	24	24	24	23	24	24	23	23	24	23	23	19	20	21	20	20	21	18	16	18	19	19	20	19	18	20	21	21	21	22	21
MINIMUM	21	20	20	19	18	18	19	20	19	18	19	18	18	18	16	17	16	17	16	15	15	16	16	18	17	17	17	23	18	18	19	18
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-4785. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1968.
Water temperatures: December 1960 to September 1968.
Sediment records: October 1955 to September 1963.
EXTREMES, 1967-68.--Water temperatures: Maximum, 29°C June 24; minimum, 3°C on several days during December and January.
EXTREMES, 1960-64, 1965-68.--Water temperatures: Maximum, 29°C July 1, 2, 1967, June 24, 1968; minimum, 1°C Dec. 18-20, 23, 1965.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
02...	26	--	--	8.1	--	139	0	--	4.8	--	.04
NOV.											
06...	25	--	--	8.7	--	139	0	--	6.1	--	.06
DEC.											
06...	1500	--	--	4.1	--	67	0	--	2.8	--	.07
JAN.											
10...	6990	--	--	2.6	--	50	0	--	2.3	--	.26
FEB.											
06...	1870	--	--	2.6	--	62	0	--	1.2	--	.09
MAR.											
05...	624	--	--	3.2	--	69	0	--	--	--	.02
APR.											
01...	666	--	--	3.0	--	69	0	--	2.0	--	.13
MAY											
08...	120	28	5.6	5.1	1.0	95	3	13	3.0	.1	.02
JUNE											
05...	71	--	--	5.2	--	111	1	--	2.4	--	.06
JULY											
10...	16	--	--	5.6	--	143	0	--	3.3	--	.05
AUG.											
07...	13	--	--	9.0	--	152	0	--	4.0	--	.04
SEPT.											
11...	17	40	9.7	8.8	1.6	135	5	--	4.8	.0	.04

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
02...	--	137	23	--	11	.3	114	306	8.1	16	9.5
NOV.											
06...	--	137	23	--	12	.3	114	312	8.2	18	10.2
DEC.											
06...	--	64	9	--	12	.2	55	144	8.2	6	12.4
JAN.											
10...	--	45	4	--	11	.2	41	91	8.0	5	13.2
FEB.											
06...	--	52	1	--	10	.2	51	115	8.1	8	12.2
MAR.											
05...	--	65	8	--	10	.2	57	141	8.1	11	11.1
APR.											
01...	--	68	11	--	9	.2	57	137	8.1	12	10.6
MAY											
08...	186	93	10	.25	11	.2	83	202	8.5	14	10.2
JUNE											
05...	--	102	9	--	10	.2	93	226	8.4	16	9.7
JULY											
10...	--	131	14	--	9	.2	117	288	8.2	18	8.2
AUG.											
07...	--	147	22	--	12	.3	125	308	8.2	18	8.2
SEPT.											
11...	--	140	21	--	12	.3	119	315	8.4	18	8.6

11-4785. VAN DUZEN RIVER NEAR BRIDGEVILLE, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	21	17	18	19	19	21	20	19	21	21	22	21	20	19	19	19	20	18	19	18	17	18	19	19	19	18	18	18	16	17	18	19
MINIMUM	17	14	14	13	14	14	13	14	14	16	15	16	15	13	12	11	12	12	14	14	14	16	16	14	15	13	13	15	12	11	12	13
NOVEMBER																																
MAXIMUM	17	17	18	16	18	18	18	17	16	17	16	17	16	14	14	14	14	12	13	14	13	12	12	13	12	10	8	10	9	7	--	14
MINIMUM	12	12	12	13	14	12	13	15	13	14	13	14	13	13	12	11	10	11	10	9	9	8	9	11	8	7	7	7	7	6	--	11
DECEMBER																																
MAXIMUM	7	8	8	9	7	7	7	7	7	7	7	6	6	4	4	4	4	4	4	4	5	6	6	6	6	6	6	6	6	5	5	6
MINIMUM	5	7	7	7	6	6	6	6	6	6	6	6	4	4	3	4	4	4	4	4	4	5	6	5	5	5	5	6	5	5	5	5
JANUARY																																
MAXIMUM	5	5	4	4	4	4	5	6	7	6	5	6	8	9	9	8	7	7	7	8	8	9	8	8	8	6	5	3	4	5	6	6
MINIMUM	4	4	4	3	4	4	4	6	6	5	4	4	6	8	8	7	6	6	6	6	8	7	7	7	6	4	3	3	3	3	4	5
FEBRUARY																																
MAXIMUM	6	6	7	7	8	9	8	8	8	8	9	9	8	9	9	9	10	10	10	10	10	11	11	11	11	11	11	12	12	--	--	9
MINIMUM	4	5	5	6	6	8	7	7	7	8	7	7	8	7	7	8	9	8	9	9	10	10	11	11	9	9	9	10	9	--	--	8
MARCH																																
MAXIMUM	11	12	13	12	12	10	11	12	12	12	13	9	8	8	9	9	8	9	10	11	11	10	12	12	11	10	11	13	12	14	14	11
MINIMUM	11	10	11	11	9	8	9	9	8	7	9	7	7	7	7	7	7	6	7	7	8	8	9	9	9	7	8	10	11	11	10	8
APRIL																																
MAXIMUM	12	11	13	13	14	14	15	16	17	18	15	16	16	16	14	14	14	15	16	15	16	17	14	17	17	19	20	21	23	20	--	16
MINIMUM	11	9	9	11	10	9	9	11	12	13	13	12	10	9	11	9	8	9	10	8	9	8	11	11	11	12	13	12	13	13	--	10
MAY																																
MAXIMUM	19	21	21	19	18	19	20	21	20	18	15	17	16	18	21	22	21	22	18	19	18	17	18	16	21	21	23	19	17	22	23	19
MINIMUM	13	13	14	14	13	11	12	13	14	14	13	13	12	12	13	13	15	15	17	16	15	13	13	12	14	15	16	17	16	16	16	14
JUNE																																
MAXIMUM	26	22	18	20	18	17	23	23	24	25	22	23	23	24	26	27	27	26	27	27	27	28	26	29	28	28	26	24	25	26	--	24
MINIMUM	16	18	17	17	16	15	14	16	16	17	16	14	14	14	17	18	18	18	18	18	18	16	19	18	19	19	19	17	16	16	--	17
JULY																																
MAXIMUM	27	23	24	23	27	27	28	28	27	27	24	21	26	26	26	24	26	26	27	26	25	26	25	19	19	26	26	26	22	26	26	25
MINIMUM	17	18	18	18	18	18	19	18	18	19	19	18	18	19	17	18	17	18	18	19	18	18	18	18	17	17	17	17	18	18	18	18
AUGUST																																
MAXIMUM	26	24	20	23	23	25	26	25	25	25	24	21	19	23	24	23	22	24	22	19	23	24	24	26	21	22	24	20	27	28	27	23
MINIMUM	18	19	18	18	18	18	18	19	18	18	18	18	18	18	17	17	17	18	18	17	16	16	17	19	19	18	18	17	19	18	19	18
SEPTEMBER																																
MAXIMUM	23	22	26	24	24	24	24	24	25	24	24	21	22	24	23	23	24	21	20	20	20	21	22	22	23	21	22	22	21	18	--	22
MINIMUM	19	19	18	18	19	19	19	19	19	18	18	19	18	18	17	17	16	17	15	14	14	13	13	14	16	16	16	14	14	16	--	17

MISCELLANEOUS ANALYSES OF STREAMS IN EEL RIVER BASIN

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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
11-4731. WILLIAMS CREEK NEAR COVELO, CALIF. (LAT 39°49'30", LONG 123°08'25")																	
OCT 13, 1967	0830	13	1.2	1	0	--	--	--	--	--	--	--	--	--	--	--	
NOV 16.....	1025	11	4.2	3	.03	--	--	--	--	--	--	--	--	--	--	--	
DEC 14.....	1530	3	23	4	.25	--	--	--	--	--	--	--	--	--	--	--	
JAN 16, 1968	0950	8	710	573	1100	19	26	33	38	41	58	65	79	95	100	--	VBWC
JAN 16.....	1240	8	610	486	800	18	25	32	37	40	57	65	76	89	98	100	VBWC
JAN 16.....	1420	8	570	437	673	--	--	--	--	--	--	--	--	--	--	--	
JAN 16.....	1545	8	510	431	593	--	--	--	--	--	--	--	--	--	--	--	
JAN 17.....	0950	4	273	148	109	--	--	--	--	--	--	--	--	--	--	--	
JAN 18.....	1120	6	180	77	37	--	--	--	--	--	--	--	--	--	--	--	
JAN 23.....	1440	8	62	5	.84	--	--	--	--	--	--	--	--	--	--	--	
FEB 21.....	1315	10	D 580	795	1240	13	18	25	29	30	48	65	67	82	98	100	VBWC
FEB 27.....	1030	12	162	26	11	--	--	--	--	--	--	--	--	--	--	--	
MAR 29.....	1045	9	98	4	1.1	--	--	--	--	--	--	--	--	--	--	--	
MAY 7.....	1550	20	14	1	.04	--	--	--	--	--	--	--	--	--	--	--	
JUN 11.....	1715	24	6.2	8	.13	--	--	--	--	--	--	--	--	--	--	--	
JUL 17.....	1300	27	1.4	4	.02	--	--	--	--	--	--	--	--	--	--	--	
AUG 27.....	1445	27	3.5	6	.06	--	--	--	--	--	--	--	--	--	--	--	
11-4737. MILL CREEK NEAR COVELO, CALIF. (LAT 39°44'45", LONG 123°10'15")																	
DEC 12, 1967	1045	2	16	6	.26	--	--	--	--	--	--	--	--	--	--	--	
JAN 17, 1968	0905	4	353	111	106	--	--	--	--	--	--	--	--	--	--	--	
JAN 18.....	0930	4	231	101	63	24	32	35	39	41	48	56	69	96	100	--	SBWC
JAN 24.....	1010	4	75	12	2.4	--	--	--	--	--	--	--	--	--	--	--	
JAN 31.....	1000	3	382	97	100	27	33	40	45	47	60	70	86	100	--	--	VBWC
FEB 21.....	1100	11	1360	433	1590	25	34	40	45	47	64	69	78	89	100	--	VBWC
FEB 26.....	1800	13	279	29	22	--	--	--	--	--	--	--	--	--	--	--	
MAR 28.....	1700	17	105	4	1.1	--	--	--	--	--	--	--	--	--	--	--	
JUN 13.....	0950	17	2.0	4	.02	--	--	--	--	--	--	--	--	--	--	--	

PARTICLE SIZE OF BED MATERIAL, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 15, 1967	1530		5	0	4	7	16	26	31	38	46	60	76	87	100	S
JAN 31, 1968	1030		6	382	6	8	12	21	28	39	51	65	86	100	--	S

D Daily mean discharge.

11-4805. 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, temperature recorder at gaging station on right bank, 0.7 mile downstream from Lamb Creek, and 11.0 miles (revised) northwest of Forest Glen.
DRAINAGE AREA.--143 sq mi.
RECORDS AVAILABLE.--Water temperatures: November 1960 to September 1968.
Sediment records: January 1957 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C on several days during June; minimum, freezing point Jan. 5, 6.
EXTREMES, 1960-68.--Water temperatures: Maximum (1960-66, 1967-68), 26°C June 25, 1961; minimum, freezing point Jan. 5, 6, 1968.
REMARKS.--Recorder stopped Oct. 20 to Nov. 6, Nov. 22 to Dec. 6, Dec. 19-30, Jan. 8, 9, Jan. 23 to Feb. 6, Feb. 29, Mar. 1-12, 20-23.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	16	13	16	15	15	16	17	17	17	18	18	17	17	16	17	17	17	17	17	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	13	12	12	13	13	13	13	13	13	14	15	14	14	13	13	13	13	14	14	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	14	13	13	14	13	13	13	13	13	13	12	12	11	12	11	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	13	12	12	12	12	12	12	11	11	11	11	9	9	9	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER																																
MAXIMUM	--	--	--	--	--	--	4	5	5	5	5	4	3	3	3	3	3	2	--	--	--	--	--	--	--	--	--	--	--	--	3	--
MINIMUM	--	--	--	--	--	--	2	4	4	4	4	3	1	1	2	2	1	1	--	--	--	--	--	--	--	--	--	--	--	--	2	--
JANUARY																																
MAXIMUM	3	3	3	2	2	2	--	--	3	3	2	2	4	6	6	3	3	3	3	4	4	4	--	--	--	--	--	--	--	--	--	--
MINIMUM	1	1	1	1	0	0	--	--	1	1	1	1	2	4	3	2	2	3	3	3	3	3	--	--	--	--	--	--	--	--	--	--
FEBRUARY																																
MAXIMUM	--	--	--	--	--	--	6	6	6	6	6	7	6	7	7	6	8	7	7	7	7	7	8	8	8	8	8	8	--	--	--	7
MINIMUM	--	--	--	--	--	--	4	4	5	5	5	5	5	5	5	5	6	6	6	7	7	7	7	8	7	7	8	7	--	--	--	6
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	8	8	8	8	8	8	9	--	--	--	--	10	9	9	10	11	11	11	11	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	6	6	7	7	8	7	7	--	--	--	--	8	8	7	8	8	8	8	7	--
APRIL																																
MAXIMUM	9	9	11	11	11	11	12	12	12	13	12	12	12	12	12	9	11	12	12	12	12	13	12	14	14	14	14	14	14	14	--	12
MINIMUM	8	7	7	7	7	7	8	8	8	8	8	8	7	7	8	7	6	7	8	8	8	8	9	9	9	9	9	9	9	10	--	8
MAY																																
MAXIMUM	15	16	17	17	15	15	15	16	16	17	16	14	13	14	16	17	16	17	16	14	14	15	16	14	16	16	18	18	17	18	18	16
MINIMUM	11	11	12	13	12	10	11	12	12	13	12	12	11	10	11	12	13	13	13	12	12	12	12	12	12	13	13	14	14	13	13	12
JUNE																																
MAXIMUM	18	16	18	19	17	17	18	20	20	20	21	20	19	21	22	22	22	22	22	22	21	19	19	19	19	19	18	17	17	19	--	19
MINIMUM	14	14	14	14	14	10	14	14	16	16	17	15	15	16	16	17	17	17	18	18	17	14	14	14	14	13	14	13	12	14	--	14
JULY																																
MAXIMUM	21	21	19	20	21	21	21	20	19	20	18	18	18	18	18	18	18	18	18	19	19	19	18	18	19	19	19	19	19	19	19	19
MINIMUM	16	17	15	16	16	16	21	16	16	15	16	14	13	13	13	13	12	14	13	14	14	14	14	15	14	14	14	15	16	15	15	14
AUGUST																																
MAXIMUM	19	20	19	19	19	19	19	19	19	19	18	18	17	17	18	17	17	17	16	15	16	18	19	18	17	17	18	19	19	19	19	18
MINIMUM	15	15	15	15	14	14	14	16	15	14	14	14	14	15	14	14	13	13	14	13	13	14	14	14	14	14	15	16	15	14	15	14
SEPTEMBER																																
MAXIMUM	19	19	19	19	19	19	19	19	19	18	18	18	17	17	18	18	18	18	16	16	16	16	17	17	17	17	17	17	17	17	--	18
MINIMUM	16	16	16	15	15	16	15	15	16	14	15	15	16	15	14	14	14	16	14	12	13	12	13	14	14	14	14	14	14	14	--	14

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 12, 1967	0800	14	140	11	4.2	--	--	--	--	--	--	--	--	--	--	--	
NOV 7.....	1255	14	146	13	5.1	--	--	--	--	--	--	--	--	--	--	--	
DEC 7.....	1025	3	178	42	20	77	90	91	94	96	100	--	--	--	--	--	SBWC
FEB 7, 1968	1550	4	1240	42	141	30	58	63	70	76	87	91	93	96	100	--	SBWC
MAR 13.....	1215	7	424	26	30	--	--	--	--	--	--	--	--	--	--	--	
APR 2.....	0850	8	321	18	16	--	--	--	--	--	--	--	--	--	--	--	
MAY 1.....	0950	11	56	9	1.4	--	--	--	--	--	--	--	--	--	--	--	
JUN 6.....	1325	15	11	3	.09	--	--	--	--	--	--	--	--	--	--	--	
AUG 27.....	1305	17	87	4	.94	--	--	--	--	--	--	--	--	--	--	--	

11-4807.5. 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.
RECORDS AVAILABLE.--Water temperatures: November 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 28°C July 19-22; minimum, 3°C Dec. 29, 31, Jan. 1-3.
EXTREMES, 1965-68.--Water temperatures: Maximum, 28°C July 19-22, 1968; minimum, 2°C Mar. 2, 1966.
REMARKS.--Recorder stopped Jan. 4-11, May 3 to June 6.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	18	18	17	17	16	16	16	16	16	16	16	16	16	16	16	16	16	15	15	15	15	15	16	16	16	16	15	15	15	15	14	16
MINIMUM	18	17	17	16	16	16	16	15	15	15	15	15	15	15	15	15	14	14	14	14	14	14	15	15	15	15	14	15	14	14	14	15
NOVEMBER																																
MAXIMUM	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	13	13	13	13	13	13	12	12	12	11	11	10	9	9	--	13
MINIMUM	14	14	13	14	14	14	14	14	14	14	14	14	14	14	14	13	13	13	13	13	13	12	12	12	11	11	10	9	9	8	--	12
DECEMBER																																
MAXIMUM	8	7	7	8	8	7	7	7	7	7	7	7	6	6	4	4	5	6	6	5	5	6	6	6	6	5	4	4	4	4	4	6
MINIMUM	7	7	7	7	7	6	6	7	6	6	7	6	6	4	4	4	4	5	5	5	5	5	5	5	5	4	4	4	3	4	3	5
JANUARY																																
MAXIMUM	3	4	4	--	--	--	--	--	--	--	--	7	8	11	10	9	8	8	8	8	8	8	8	8	8	8	6	7	7	7	6	--
MINIMUM	3	3	3	--	--	--	--	--	--	--	--	7	7	8	9	7	7	7	7	8	7	8	8	8	8	6	5	4	7	6	5	--
FEBRUARY																																
MAXIMUM	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	8	8	9	9	9	9	9	9	9	9	--	--	7
MINIMUM	5	6	6	6	6	6	6	6	6	6	6	6	7	6	6	6	6	7	7	7	8	8	9	8	8	8	8	8	8	--	--	7
MARCH																																
MAXIMUM	9	9	9	9	9	8	8	8	8	8	8	9	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	7
MINIMUM	9	8	8	8	8	8	7	7	7	7	7	7	7	6	6	7	7	7	7	7	7	7	7	7	8	8	8	7	8	7	8	7
APRIL																																
MAXIMUM	8	8	9	9	9	10	10	10	10	10	10	10	10	10	11	11	11	12	12	12	13	13	12	14	14	15	14	14	15	14	--	11
MINIMUM	8	8	8	9	9	9	9	9	9	10	9	9	9	10	10	10	10	10	11	10	10	10	11	11	11	11	11	12	12	12	--	9
MAY																																
MAXIMUM	16	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	13	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE																																
MAXIMUM	--	--	--	--	--	--	17	17	16	17	16	16	16	16	16	17	19	20	21	22	21	22	23	24	24	24	24	24	24	22	--	19
MINIMUM	--	--	--	--	--	--	16	16	16	16	16	16	15	15	16	16	16	17	17	18	17	17	19	19	19	20	20	18	18	19	--	17
JULY																																
MAXIMUM	21	21	20	21	21	21	22	22	22	22	22	22	24	23	23	--	--	--	28	28	28	28	27	26	26	27	27	26	26	26	26	24
MINIMUM	19	20	19	19	19	20	21	21	21	21	21	21	21	21	20	--	--	--	24	24	24	24	24	24	24	24	23	23	24	23	23	22
AUGUST																																
MAXIMUM	26	26	25	24	25	24	24	24	24	25	25	26	23	23	24	23	23	23	22	22	23	23	23	23	22	23	23	24	23	23	24	23
MINIMUM	24	24	24	24	23	22	22	23	23	23	23	22	22	22	21	22	21	21	21	21	20	19	19	21	21	21	21	21	21	21	21	22
SEPTEMBER																																
MAXIMUM	24	23	23	23	24	24	24	23	23	23	23	23	23	23	23	23	23	23	22	21	22	22	22	22	21	22	23	22	21	21	--	22
MINIMUM	22	22	22	22	22	22	22	22	22	21	21	22	21	22	21	21	21	22	21	21	21	19	18	19	19	19	19	19	19	20	--	21

11-4810. 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.
RECORDS AVAILABLE.--Chemical analyses: November 1958 to September 1968.
Water temperatures: December 1957 to September 1968.
Sediment records: December 1957 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 27°C on several days in July; minimum, 4°C on several days in January.
Sediment concentrations: Maximum daily, 7,100 mg/l Jan. 14; minimum daily, 1 mg/l Nov. 20, 21, June 10, Aug. 8, 9.
Sediment loads: Maximum daily, 187,000 tons Jan. 14; minimum daily, 0.02 ton June 13, Aug. 8, 9.
EXTREMES, 1957-68.--Water temperatures: Maximum (1963-64, 1965-68), 27°C on several days in July 1968; minimum, 1°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, 1967-68.
Sediment loads: Maximum daily, 3,140,000 tons Dec. 22, 1964; minimum daily, 0.02 ton June 13, Aug. 8, 9, 1968.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Where no maximum or minimum is shown, temperature is once-daily reading.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
02...	92	--	--	4.8	--	101	0	--	2.8	--	.03
NOV.											
06...	101	--	--	5.6	--	97	0	--	3.3	--	.07
DEC.											
04...	2570	--	--	4.2	--	50	0	--	4.0	--	.10
JAN.											
03...	304	--	--	4.3	--	76	0	--	3.7	--	.08
FEB.											
05...	3560	--	--	2.6	--	50	0	--	2.2	--	.02
MAR.											
04...	1360	--	--	2.8	--	60	0	--	--	--	.07
APR.											
01...	981	--	--	3.0	--	59	0	--	3.0	--	.07
MAY											
06...	125	30	3.6	4.9	.8	93	3	9.5	3.5	.2	.00
JUNE											
03...	68	--	--	5.0	--	104	0	--	3.1	--	.06
JULY											
08...	23	--	--	3.9	--	120	0	--	2.9	--	.06
AUG.											
05...	24	--	--	5.4	--	117	0	--	2.7	--	.02
SEPT.											
10...	23	33	3.5	5.4	1.3	119	0	13	3.0	.1	.00

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
02...	--	89	6	--	11	.2	83	198	8.0	16	9.4
NOV.											
06...	--	86	6	--	12	.3	80	190	8.1	16	10.4
DEC.											
04...	--	55	14	--	14	.2	41	121	7.7	9	11.1
JAN.											
08...	--	72	10	--	12	.2	62	162	7.8	7	12.2
FEB.											
05...	--	46	5	--	11	.2	41	105	8.0	7	12.5
MAR.											
04...	--	55	6	--	10	.2	49	123	8.0	12	10.9
APR.											
01...	--	54	6	--	11	.2	48	124	7.8	12	10.6
MAY											
06...	113	90	9	.15	11	.2	81	200	8.5	18	10.3
JUNE											
03...	--	94	9	--	10	.2	85	210	8.0	17	10.0
JULY											
08...	--	108	10	--	7	.2	98	234	8.2	22	9.6
AUG.											
05...	--	102	6	--	10	.2	96	224	8.2	21	10.4
SEPT.											
10...	108	97	0	.15	11	.2	98	226	7.8	21	10.2

11-4810. MAD RIVER NEAR ARCATA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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	AVER-AGE
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	16	18	--	16	--	16	14	13	13	16	--
MAXIMUM	16	16	18	17	19	18	18	17	18	19	19	19	18	17	17	17	17	17	18	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	13	14	14	14	14	14	14	14	14	16	16	16	14	13	12	12	12	14	14	--	--	--	--	--	--	--	--	--	--	--	--	--
NOVEMBER.	15	14	--	13	--	14	--	14	--	14	--	15	--	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15	14	14	13	14	12	13	12	12	13	13	13	9	10	10	9	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12	12	12	12	11	11	11	9	9	9	9	8	8	8	8	8	--	--
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	8	9	10	9	11	9	10	11	11	10	9	9	9	8	8	7	7	7	7	7	7	7	8	8	8	7	7	7	7	7	6	8
MINIMUM	7	8	9	9	9	9	9	9	9	9	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	7
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	6	7	7	6	6	6	6	6	6	6	7	5	5	6	5	6	5	6	6	6	6	7	7	7	7	7	7	6	5	5	--	6
MINIMUM	6	6	6	5	5	6	6	6	6	5	5	5	5	5	4	4	4	4	5	5	6	6	6	6	7	6	6	5	4	4	--	5
FEBRUARY.	7	8	8	8	9	10	7	8	8	8	--	9	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9	9	8	9	9	9	9	10	10	10	10	9	10	9	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	8	8	8	9	9	9	9	9	9	9	9	9	9	--	--	--
MARCH....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	9	10	10	10	11	10	10	9	9	9	9	9	8	8	8	8	8	8	9	8	8	9	9	9	9	9	9	9	9	10	9	9
MINIMUM	9	9	9	10	10	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	8	8	8	9	9	9	8
APRIL....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	9	10	10	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	--	11
MINIMUM	9	9	9	10	10	10	10	11	11	11	11	11	10	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	12	12	--	11
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	13	13	13	13	13	13	13	13	13	13	13	13	12	12	19	18	18	19	15	17	17	18	18	14	17	14	21	18	20	21	19	16
MINIMUM	12	12	13	13	12	12	12	12	13	13	13	12	12	12	12	12	13	13	14	13	13	12	12	11	12	12	13	14	13	13	13	12
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	19	16	15	15	13	16	17	19	21	21	19	19	18	23	24	24	24	21	23	23	23	23	23	24	22	24	23	22	22	23	--	21
MINIMUM	13	14	13	13	11	12	12	13	14	15	11	9	7	13	16	17	17	12	16	17	16	16	17	18	17	18	17	16	16	16	--	14
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	24	21	21	24	25	27	26	24	24	26	22	22	27	26	25	26	27	27	27	25	27	26	25	21	21	25	27	27	23	26	23	24
MINIMUM	17	19	19	19	19	19	20	20	18	19	19	19	19	20	18	18	18	19	19	20	20	19	20	19	19	19	20	21	20	19	20	19
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	24	22	21	23	24	22	23	21	21	20	19	18	19	21	22	23	23	23	23	20	22	22	22	22	20	19	22	23	23	23	22	22
MINIMUM	19	20	19	19	18	19	19	19	18	18	18	17	17	18	17	19	19	20	20	18	17	17	18	19	19	18	18	18	18	18	20	18
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	20	21	22	19	18	18	18	17	19	21	22	19	18	21	21	21	21	18	18	18	18	18	19	19	20	17	17	18	16	14	--	19
MINIMUM	18	18	18	18	18	18	17	17	16	16	17	18	18	17	18	16	17	16	14	13	12	12	13	14	14	16	14	14	14	13	--	16

11-4810. MAD RIVER NEAR ARCATA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	78	2	.42	107	3	.87	630	75	128
2	92	12	3.0	104	3	.84	810	527	1850
3	188	82	43	105	3	.85	1960	800	4230
4	120	43	14	100	4	1.1	2570	954	8370
5	107	20	5.8	101	4	1.1	5250	2010	33200
6	98	7	1.9	101	4	1.1	1910	390	2010
7	86	5	1.2	91	4	.98	3770	1470	15700
8	75	4	.81	92	4	.99	2530	340	2320
9	87	5	1.2	107	5	1.4	1450	109	427
10	73	4	.79	96	5	1.3	1200	91	295
11	69	3	.56	92	6	1.5	1230	86	286
12	66	4	.71	104	6	1.7	1310	66	233
13	71	5	.96	131	240	85	1210	60	196
14	95	6	1.5	1240	626	2290	650	62	109
15	105	9	2.6	545	205	302	585	49	77
16	128	11	3.8	287	40	31	625	25	42
17	141	14	5.3	205	21	12	515	17	24
18	163	16	7.0	159	14	6.0	800	415	896
19	177	17	8.1	106	6	1.7	1320	132	470
20	202	16	8.7	77	1	.21	918	40	99
21	280	17	13	79	1	.21	754	23	47
22	345	45	42	62	2	.33	660	19	34
23	298	24	19	83	3	.67	726	19	37
24	280	23	17	48	3	.39	824	36	80
25	276	17	13	42	3	.34	995	53	142
26	190	10	5.1	41	4	.44	1200	76	246
27	121	7	2.3	43	5	.58	1280	82	283
28	214	31	18	77	15	3.1	1130	78	238
29	163	35	15	529	146	315	967	68	178
30	120	8	2.6	946	180	460	782	46	97
31	117	4	1.3	--	--	--	660	30	53
TOTAL	4625	--	259.65	5900	--	3522.70	41221	--	72397

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	580	22	34	1860	290	1460	2010	319	1730
2	493	18	24	2870	1530	14500	1740	234	1100
3	454	10	12	5090	2710	37900	1510	172	701
4	383	10	10	4430	1510	18100	1360	142	521
5	359	6	5.8	3560	1400	13500	1400	145	548
6	342	7	6.5	3240	1090	9540	1270	144	494
7	283	8	6.1	3190	770	6630	1160	122	382
8	304	9	7.4	2870	730	5660	981	98	260
9	1090	236	1780	2560	620	4290	848	80	183
10	5070	2840	40600	2210	510	3040	765	68	140
11	2430	1000	6560	1850	400	2000	732	68	134
12	1460	280	1100	1630	350	1540	1180	613	1950
13	2400	1210	10500	1500	300	1220	1800	900	4370
14	8950	7100	187000	1320	230	820	1810	610	2980
15	12200	4210	143000	1170	180	569	2310	1020	6360
16	7400	2040	40800	1070	160	462	3070	940	7790
17	5190	1220	17100	1230	240	797	4580	2070	25700
18	3820	680	7010	1380	220	820	3740	1060	10700
19	2740	610	4510	1670	180	812	2940	780	6190
20	2040	470	2590	6120	3950	66100	2260	620	3780
21	1710	200	923	8530	5680	134000	1790	440	2130
22	1480	260	1040	10400	4020	111000	1520	300	1230
23	1250	140	473	10800	3150	91900	1370	210	777
24	1130	108	330	9130	2500	61600	1230	220	731
25	1020	102	281	6140	1710	28300	2690	1180	9830
26	981	88	233	4650	1320	16600	2430	770	5050
27	1050	81	230	3700	1000	9990	1760	400	1900
28	1130	164	619	2840	820	6290	1460	300	1180
29	2570	606	4650	2340	530	3350	1270	202	693
30	3500	840	7940	--	--	--	1210	152	497
31	2400	440	2850	--	--	--	1070	108	312
TOTAL	76209	--	482224.8	109350	--	652790	55266	--	100343

11-4810. MAD RIVER NEAR ARCATA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	981	73	193	208	16	9.0	72	4	.78
2	953	62	160	167	20	9.0	66	4	.71
3	866	61	143	155	17	7.1	68	4	.73
4	770	61	127	157	10	4.2	66	4	.71
5	732	73	144	135	3	1.1	61	4	.66
6	605	67	109	125	4	1.4	56	4	.60
7	556	24	36	128	6	2.1	53	4	.57
8	493	22	29	113	3	.92	44	3	.36
9	454	46	56	113	2	.61	40	2	.22
10	422	35	40	105	2	.57	34	1	.09
11	394	11	12	105	3	.85	11	2	.06
12	373	8	8.1	112	4	1.2	3.6	3	.03
13	356	10	9.6	145	7	2.7	2.1	4	.02
14	342	10	9.2	145	16	6.3	6.8	5	.09
15	329	10	8.9	118	11	3.5	6.8	5	.09
16	316	10	8.5	95	7	1.8	6.8	3	.06
17	301	11	8.9	93	5	1.3	6.6	3	.05
18	283	10	7.6	83	5	1.1	47	5	.63
19	265	10	7.2	84	6	1.4	60	8	1.3
20	254	7	4.8	135	19	6.9	54	8	1.2
21	239	3	1.9	142	30	12	44	7	.83
22	226	3	1.8	159	15	6.4	43	5	.58
23	210	9	5.1	145	9	3.5	48	4	.52
24	196	3	1.6	107	6	1.7	58	4	.63
25	179	4	1.9	93	5	1.3	54	4	.58
26	165	5	2.2	112	4	1.2	52	4	.56
27	194	7	3.7	125	4	1.4	50	6	.81
28	201	9	4.9	112	4	1.2	45	10	1.2
29	192	11	5.7	99	4	1.1	47	11	1.4
30	208	13	7.3	84	4	.91	48	8	1.0
31	--	--	--	75	4	.81	--	--	--
TOTAL	12055	--	1157.9	3774	--	94.57	1253.7	--	17.07

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	35	4	.38	22	5	.30	31	4	.33
2	18	3	.15	19	4	.21	43	4	.46
3	34	5	.46	21	4	.23	49	4	.53
4	44	7	.83	24	4	.26	48	4	.52
5	54	6	.87	24	4	.26	46	4	.50
6	51	5	.69	18	3	.15	35	7	.66
7	37	11	1.1	25	2	.14	30	9	.73
8	23	9	.56	8.5	1	.02	27	11	.80
9	14	6	.23	8.9	1	.02	26	11	.77
10	13	4	.14	15	2	.08	23	11	.68
11	13	4	.14	20	2	.11	21	11	.62
12	13	4	.14	21	3	.17	19	10	.51
13	23	4	.25	25	4	.27	27	10	.73
14	31	5	.42	27	4	.29	41	10	1.1
15	30	6	.49	29	4	.31	41	9	1.0
16	29	3	.23	18	4	.19	32	7	.60
17	28	4	.30	12	4	.13	38	5	.51
18	30	6	.49	16	4	.17	29	5	.39
19	30	7	.57	31	5	.42	17	5	.23
20	31	6	.50	37	11	1.1	14	5	.19
21	32	5	.43	65	28	4.9	14	5	.19
22	29	4	.31	47	17	2.2	16	5	.22
23	38	5	.51	36	11	1.1	20	5	.27
24	40	9	.97	29	10	.78	18	5	.24
25	40	13	1.4	42	19	2.2	18	5	.24
26	40	11	1.2	161	146	63	20	5	.27
27	40	10	1.1	115	50	16	33	5	.45
28	33	9	.80	70	17	3.2	39	6	.63
29	24	7	.45	45	9	1.1	29	7	.55
30	28	4	.30	34	6	.55	23	6	.37
31	29	6	.47	31	5	.42	--	--	--
TOTAL	954	--	16.88	1096.4	--	100.28	867	--	15.29

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 312571.1
TOTAL LOAD FOR YEAR (TONS) 1312939.14

11-4810. MAD RIVER NEAR ARCATA, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 14, 1967	1715	14	1410	842	3210	44	59	67	84	91	96	98	99	100	--	--	VPWC
DEC 3.....	1000	9	1750	691	3260	34	44	55	64	68	85	89	94	99	100	--	VBWC
DEC 4.....	1400	9	1640	618	2740	30	39	51	61	65	82	84	90	96	100	--	SBWC
DEC 5.....	1100	10	4830	1830	23900	--	25	--	43	--	67	80	93	98	100	--	VPWC
JAN 10, 1968	1100	6	5700	3030	46600	21	24	35	45	57	67	86	98	99	100	--	VPWC
JAN 14.....	0830	6	7040	6880	131000	14	18	28	37	50	60	86	95	98	100	--	VPWC
JAN 14.....	1500	6	11500	9580	297000	16	19	22	34	43	50	75	91	98	100	--	VPWC
JAN 15.....	0830	6	14000	4850	183000	15	20	26	36	47	56	77	95	100	--	--	VPWC
FEB 3.....	1030	8	5150	2560	35600	--	19	--	33	--	51	66	82	97	100	--	VPWC
FEB 7.....	1205	7	3210	552	4780	30	34	53	67	76	86	92	99	100	--	--	VPWC
MAR 8.....	1145	9	953	92	237	16	31	46	56	61	81	86	95	100	--	--	SBWC

11-4825. 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, temperature recorder at gaging station on pier of bridge on U.S. Highway 101 at Orick, and 0.9 mile downstream from Prairie Creek.
DRAINAGE AREA.--278 sq mi.
RECORDS AVAILABLE.--Chemical analyses: November 1958 to September 1966.
Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, 1°C Dec. 14.
EXTREMES, 1966-68.--Water temperatures: Minimum, 1°C Dec. 14, 1967.
REMARKS.--Recorder stopped Oct. 31 to Nov. 6, Dec. 30 to Jan. 9, Feb. 24 to Mar. 12, Aug. 15 to Sept. 20; recorder malfunction Jan. 14, 15.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	20	16	18	16	18	18	18	17	19	19	19	18	16	18	18	18	19	16	18	13	16	17	18	17	17	14	14	16	16	16	--	17
MINIMUM	13	12	12	12	12	11	11	12	12	14	13	13	12	10	11	11	11	12	11	11	12	14	14	13	14	12	12	13	10	10	--	12
NOVEMBER																																
MAXIMUM	--	--	--	--	--	--	15	15	14	13	15	15	15	14	14	14	14	13	13	14	12	13	12	12	11	12	11	8	10	9	--	13
MINIMUM	--	--	--	--	--	--	14	13	12	12	12	12	13	13	12	10	10	10	9	9	8	8	8	7	7	6	6	6	8	6	--	9
DECEMBER																																
MAXIMUM	8	9	9	9	9	7	7	8	9	8	8	7	6	4	6	6	5	4	5	6	7	8	7	7	7	7	7	6	7	--	--	7
MINIMUM	6	7	8	9	7	6	7	7	6	6	4	3	2	1	2	2	2	3	3	3	4	6	5	5	5	5	5	4	4	--	--	4
JANUARY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	7	6	8	9	--	--	8	7	8	8	8	10	11	10	9	9	6	6	4	5	6	6	--
MINIMUM	--	--	--	--	--	--	--	--	--	4	4	6	8	--	--	6	6	6	6	7	8	8	7	7	6	4	3	4	4	4	5	--
FEBRUARY																																
MAXIMUM	7	8	9	8	8	9	9	8	8	9	10	9	9	9	10	11	12	11	11	11	11	12	11	--	--	--	--	--	--	--	--	9
MINIMUM	6	7	7	7	7	8	7	8	8	8	7	8	8	8	7	8	9	9	10	10	11	11	11	--	--	--	--	--	--	--	--	8
MARCH																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	9	10	11	9	9	10	11	11	10	11	12	13	11	12	12	13	12	14	12	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	8	8	9	8	7	6	7	8	8	9	9	10	9	7	8	9	11	10	9	--
APRIL																																
MAXIMUM	12	12	13	13	13	13	14	14	15	13	15	14	14	14	14	13	14	13	14	14	14	14	11	16	16	17	18	17	14	17	--	14
MINIMUM	9	9	9	9	9	9	9	9	10	11	11	9	8	8	9	8	6	7	9	7	7	7	9	8	8	10	10	11	11	11	--	9
MAY																																
MAXIMUM	17	17	14	16	16	16	17	17	16	13	13	13	15	16	18	18	17	18	15	17	18	17	17	15	16	15	20	17	19	19	19	16
MINIMUM	11	12	11	12	10	8	9	9	12	11	11	11	10	9	9	10	12	12	13	13	13	12	12	11	12	13	13	14	13	12	12	11
JUNE																																
MAXIMUM	20	17	17	17	14	17	19	20	20	20	20	19	19	21	22	21	22	19	22	21	22	22	23	23	23	23	22	21	21	22	--	20
MINIMUM	13	14	14	13	13	13	12	12	13	13	13	12	12	13	13	14	14	15	14	15	17	16	18	17	17	18	18	16	16	16	--	14
JULY																																
MAXIMUM	22	18	19	20	21	19	21	21	22	22	19	20	22	22	22	22	21	21	19	21	21	20	18	17	17	19	20	20	19	20	18	20
MINIMUM	16	17	17	17	17	17	17	17	17	18	18	18	17	18	17	17	17	15	15	16	16	15	15	15	15	15	16	16	16	15	16	16
AUGUST																																
MAXIMUM	19	17	17	19	20	20	20	19	17	17	17	16	17	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	16	16	16	15	15	16	14	15	16	15	15	15	14	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SEPTEMBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20	21	19	19	20	21	21	22	18	17	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	18	17	17	17	16	16	16	16	16	--	--

11-5165.3. KLAMATH RIVER BELOW IRON GATE DAM, CALIF.

LOCATION.--Lat 41°55'40", long 122°26'35", in E½NE¼ 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.

RECORDS AVAILABLE.--Chemical analyses: October 1961 to September 1968.
Water temperatures: October 1962 to September 1968.

EXTREMES, 1967-68.--Water temperatures: Maximum, 22°C on several days during June to August; minimum, 2°C on many days during December and January.

EXTREMES, 1962-68.--Water temperatures: Maximum, 23°C Aug. 6, 1967; minimum, 1°C on several days during January 1965.

REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Thermograph clock stopped Dec. 16 to Jan. 1; temperature range, 2°C to 6°C.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	PHOS-PHATE (PO4)
OCT.											
09...	1710	--	--	16	--	88	0	--	4.0	4.5	.63
NOV.											
08...	1760	--	--	21	--	96	0	--	5.5	5.5	.60
DEC.											
12...	2840	--	--	20	--	88	0	--	5.6	6.1	.26
JAN.											
03...	1860	--	--	15	--	82	0	--	2.8	7.6	.39
FEB.											
13...	1830	--	--	19	--	93	0	--	3.9	6.7	.36
MAR.											
06...	2900	--	--	17	--	88	0	--	3.8	5.7	.42
APR.											
01...	1320	--	--	17	--	88	0	--	--	2.6	.22
MAY											
06...	1020	14	7.5	17	2.5	86	0	21	5.0	1.0	.34
JUNE											
11...	715	--	--	14	--	83	0	--	3.8	.9	.28
JULY											
03...	708	--	--	17	--	69	13	--	4.4	2.3	.44
AUG.											
06...	729	--	--	17	--	93	0	--	4.4	2.0	.58
SEPT.											
04...	1040	13	6.2	15	2.7	89	0	14	4.8	3.0	.66

DATE	BORON (B)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.										
09...	.09	62	0	36	.9	72	197	8.0	17	6.0
NOV.										
08...	.08	69	0	40	1.1	79	231	7.9	11	5.8
DEC.										
12...	.13	59	0	42	1.1	72	217	7.8	6	10.3
JAN.										
03...	.06	52	0	39	.9	67	181	7.5	2	11.5
FEB.										
13...	.08	66	0	39	1.0	76	230	7.6	4	12.6
MAR.										
06...	.11	65	0	36	.9	72	211	7.9	8	12.8
APR.										
01...	.10	71	0	34	.9	72	225	7.7	9	9.7
MAY										
06...	.15	66	0	35	.9	71	207	8.0	14	11.2
JUNE										
11...	.08	55	0	36	.8	68	177	8.1	18	9.4
JULY										
03...	.07	65	0	36	.9	78	212	9.2	21	10.9
AUG.										
06...	.10	62	0	37	.9	76	229	8.0	22	8.9
SEPT.										
04...	.04	58	0	35	.9	73	194	7.5	20	9.6

11-5165.3. KLAMATH RIVER BELOW IRON GATE DAM, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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	AVER-AGE
OCTOBER																																
MAXIMUM	17	17	16	16	16	15	15	15	15	15	15	14	14	14	14	14	14	14	14	14	14	14	13	13	13	13	13	13	13	13	12	14
MINIMUM	17	16	16	15	15	15	15	15	15	15	14	14	14	14	14	14	14	14	14	14	14	13	13	13	13	13	13	13	13	12	12	14
NOVEMBER																																
MAXIMUM	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	10	10	10	9	9	9	9	9	8	8	--	11
MINIMUM	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	10	10	10	9	9	9	9	9	8	8	8	--	10
DECEMBER																																
MAXIMUM	8	8	7	7	7	7	7	7	7	7	6	6	6	6	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	8	7	7	7	7	7	7	7	7	6	6	6	6	6	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY																																
MAXIMUM	--	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	2
MINIMUM	--	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	2
FEBRUARY																																
MAXIMUM	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	7	7	--	--	4
MINIMUM	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	7	--	--	4
MARCH																																
MAXIMUM	7	7	7	7	7	7	7	7	8	8	8	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	10	9	9	7
MINIMUM	7	7	7	6	6	7	7	7	7	8	6	6	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9	9	8	7
APRIL																																
MAXIMUM	9	9	9	10	10	10	10	10	10	11	12	11	11	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	11	12	--	11
MINIMUM	8	9	9	9	9	9	9	10	10	10	11	11	11	10	11	11	10	11	11	10	10	11	11	10	11	11	11	11	11	11	--	10
MAY																																
MAXIMUM	13	13	13	15	14	14	14	14	15	16	15	14	14	14	14	14	15	14	14	14	14	15	15	14	15	14	16	17	18	16	17	14
MINIMUM	12	13	13	13	14	13	13	13	13	14	14	13	13	13	14	14	14	14	14	13	13	14	14	13	13	14	15	15	16	16	16	13
JUNE																																
MAXIMUM	17	16	18	18	17	16	17	17	17	17	17	17	17	18	19	19	21	22	22	21	21	18	18	19	18	19	21	21	19	19	--	18
MINIMUM	16	16	16	16	16	16	15	15	16	16	17	16	16	16	17	18	18	19	20	19	17	17	17	17	17	18	18	18	18	18	--	17
JULY																																
MAXIMUM	18	19	19	21	20	21	21	21	22	21	20	21	21	21	21	22	21	21	22	21	22	21	21	21	22	21	21	22	22	22	22	21
MINIMUM	18	18	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20	21	21	20	21	21	21	21	21	21	21	21	21	21	20	19
AUGUST																																
MAXIMUM	20	21	21	22	22	22	21	21	21	21	21	21	21	21	21	20	19	19	19	18	17	17	17	17	17	17	17	18	18	18	18	19
MINIMUM	20	20	21	21	21	21	21	21	21	21	21	20	20	20	20	19	19	19	18	17	17	17	17	16	17	17	17	17	17	18	18	19
SEPTEMBER																																
MAXIMUM	19	19	18	19	18	19	19	19	19	19	20	20	18	18	18	18	18	18	18	17	17	17	16	16	16	17	17	17	17	16	--	18
MINIMUM	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	17	17	17	16	16	16	16	16	16	17	16	16	--	17

11-5166. COTTONWOOD CREEK AT HORNBROOK, CALIF.

LOCATION.--Lat 41°55'00", 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.
RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 30° July 7, 8; minimum, 1°C on many days during December to February.
EXTREMES, 1964-68.--Water temperatures: Maximum (1964-65, 1966-68), 30°C July 7, 8, 1968; minimum, freezing point on several days in December 1965, December 1966, and January 1967.
REMARKS.--Clock stopped Dec. 20 to Jan. 2; temperature range, 1°C to 2°C.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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

11-5175. SHASTA RIVER NEAR YREKA, CALIF.

LOCATION.--Lat 41°49'30", long 122°35'40", in E½ 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.
RECORDS AVAILABLE.--Chemical analyses: December 1958 to September 1968.
Water temperatures: June 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 30°C sometime during period July 2-17, and July 27, 28; minimum, 1°C Dec. 14-18.
EXTREMES, 1965-68.--Water temperatures: Maximum, 30°C Aug. 2, 3, 1966, July 1, 2, 12, 1967, sometime during period July 2-17, and July 27, 28, 1968; minimum, 1°C Dec. 14-18, 1967.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. Thermograph clock stopped Nov. 8 to Dec. 1, Dec. 29 to Jan. 4, June 28 to July 2, July 3-16, Aug. 29 to Sept. 3; temperature ranges, 4°C to 12°C, 2°C to 4°C, 15°C to 27°C, 18°C to 30°C, and 17°C to 24°C, respectively. Recorder malfunction Jan. 5 to Feb. 1.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
09...	191	--	--	41	--	309	0	--	24	--	.43
NOV.											
04...	195	--	--	38	--	287	17	--	21	--	.45
DEC.											
12...	224	--	--	43	--	275	10	--	26	--	.46
JAN.											
03...	211	--	--	36	--	269	0	--	15	--	.46
FEB.											
13...	249	--	--	37	--	259	11	--	19	--	.41
MAR.											
06...	243	--	--	30	--	197	8	--	19	--	.38
APR.											
01...	103	--	--	43	--	288	16	--	23	--	.47
MAY											
06...	43	43	46	52	3.6	378	22	8.7	30	.7	.69
JUNE											
11...	80	--	--	46	--	331	15	--	26	--	.78
JULY											
03...	16	--	--	49	--	346	39	--	33	--	.68
AUG.											
06...	11	--	--	55	--	380	21	--	39	--	.76
SEPT.											
04...	39	34	37	50	4.0	324	19	7.9	31	.4	.72

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
09...	--	206	0	--	30	1.2	253	571	8.2	13	10.6
NOV.											
08...	--	193	0	--	30	1.2	263	513	8.7	11	11.5
DEC.											
12...	--	195	0	--	32	1.3	242	556	8.5	4	12.3
JAN.											
03...	--	194	0	--	30	1.2	221	507	8.2	3	13.4
FEB.											
13...	--	196	0	--	29	1.2	230	513	8.5	6	12.2
MAR.											
06...	--	189	14	--	26	.9	175	506	8.6	8	11.1
APR.											
01...	--	223	0	--	30	1.3	262	574	8.7	14	10.2
MAY											
06...	336	297	0	.46	27	1.3	346	724	8.7	14	10.2
JUNE											
11...	--	249	0	--	29	1.3	296	636	8.7	17	8.8
JULY											
03...	--	292	0	--	27	1.2	348	749	9.0	24	9.8
AUG.											
06...	--	285	0	--	30	1.4	346	688	8.7	26	9.7
SEPT.											
04...	350	238	0	.48	31	1.4	297	632	8.6	19	9.9

11-5175. SHASTA RIVER NEAR YREKA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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

11-5195. SCOTT RIVER NEAR FORT JONES, CALIF.

LOCATION.--Lat 41°38'28", long 123°00'54", in NE¼NE¼ sec.29, T.44 N., R.10 W., Siskiyou County, at gaging station 1.7 miles upstream from Snow Creek, and 10.8 miles downstream from Fort Jones.
DRAINAGE AREA.--653 sq mi.
RECORDS AVAILABLE.--Chemical analyses: November 1958 to September 1968.
REMARKS.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
09...	106	--	--	5.3	--	175	0	--	5.0	--	.03
NOV.											
09...	89	--	--	5.1	--	160	4	--	4.4	--	.00
DEC.											
12...	153	--	--	5.3	--	143	0	--	6.0	--	.05
JAN.											
04...	138	--	--	3.2	--	142	0	--	3.2	--	.02
FEB.											
13...	575	--	--	2.4	--	116	0	--	1.4	--	.00
MAR.											
06...	1350	--	--	2.2	--	86	0	--	1.1	--	.01
APR.											
02...	868	--	--	2.0	--	86	0	--	.5	--	.00
MAY											
06...	608	15	11	2.7	.9	95	0	.8	2.6	1.2	.04
JUNE											
11...	335	--	--	3.5	--	119	2	--	2.2	--	.06
JULY											
03...	103	--	--	3.4	--	145	6	--	5.2	--	.00
AUG.											
04...	45	--	--	5.7	--	165	0	--	4.9	--	.00
SEPT.											
05...	41	30	15	4.4	.7	162	0	7.4	6.0	2.7	.00

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CARB-ONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
09...	--	145	1	--	7	.2	144	297	8.2	16	11.4
NOV.											
09...	--	143	5	--	7	.2	138	283	8.4	11	11.6
DEC.											
12...	--	120	3	--	9	.2	117	253	8.2	4	12.4
JAN.											
04...	--	122	6	--	5	.1	116	241	8.0	0	12.9
FEB.											
13...	--	97	2	--	5	.1	95	202	7.9	7	11.5
MAR.											
06...	--	74	3	--	6	.1	71	152	8.2	7	10.8
APR.											
02...	--	70	0	--	6	.1	71	149	7.8	8	10.6
MAY											
06...	94	82	4	.13	7	.1	78	171	7.9	20	10.0
JUNE											
11...	--	109	7	--	7	.1	101	212	8.5	16	9.8
JULY											
03...	--	137	8	--	5	.1	129	288	8.7	24	11.3
AUG.											
06...	--	151	16	--	8	.2	135	285	8.0	24	11.3
SEPT.											
05...	155	137	2	.21	7	.2	134	285	7.8	15	7.4

11-5205. KLAMATH RIVER NEAR SEIAD VALLEY, CALIF.

LOCATION.--Lat 41°51'20", long 123°13'50", in SW¼SW¼ sec.3, T.46 N., R.12 W, Siskiyou County, 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.
RECORDS AVAILABLE.--Chemical analyses: December 1958 to September 1966.
Water temperatures: October 1963 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 27°C July 28-30; minimum, 1°C on several days during December and January.
EXTREMES, 1963-68.--Water temperatures: Maximum, 27°C July 28-30, 1968; minimum (1963-64, 1966-68), 1°C on several days during December 1967 and January 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	17	16	14	15	16	16	16	17	17	17	17	16	16	14	14	14	14	14	15	15	15	15	15	14	15	14	13	14	12	12	12	14
MINIMUM	16	13	12	13	13	13	14	14	15	15	16	15	14	13	12	12	12	13	13	13	13	13	13	13	13	13	13	12	11	11	11	13
NOVEMBER																																
MAXIMUM	13	12	12	11	12	12	12	12	12	12	12	11	11	12	11	10	10	10	9	9	8	8	8	8	8	7	6	7	7	6	--	9
MINIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	9	9	9	9	9	8	8	7	7	7	7	6	6	6	5	6	--	9
DECEMBER																																
MAXIMUM	7	6	6	6	5	5	4	5	6	5	5	4	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	1	1	3
MINIMUM	6	6	6	5	4	4	4	4	5	5	4	3	2	2	1	1	2	1	2	2	2	2	2	2	2	2	2	2	1	1	1	2
JANUARY																																
MAXIMUM	1	1	1	3	3	3	3	4	4	4	4	3	5	6	5	5	4	4	5	6	6	6	6	6	6	4	4	4	3	3	4	4
MINIMUM	1	1	1	1	2	2	2	3	4	4	3	3	3	5	5	5	4	4	4	5	5	5	5	5	5	4	4	3	3	3	3	3
FEBRUARY																																
MAXIMUM	4	4	4	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	8	8	8	8	8	8	9	8	8	--	--	6
MINIMUM	4	4	4	4	4	5	5	5	6	6	6	6	6	5	6	6	6	7	7	7	7	8	8	8	8	8	8	8	8	--	--	6
MARCH																																
MAXIMUM	8	8	9	9	9	8	8	8	8	8	9	9	7	8	8	8	8	8	8	9	9	9	10	11	11	10	10	12	13	12	12	9
MINIMUM	8	8	8	9	8	8	8	8	8	8	8	7	6	7	8	8	8	8	8	8	9	9	9	9	10	9	9	9	11	11	11	8
APRIL																																
MAXIMUM	12	11	11	11	11	11	12	12	14	14	14	13	12	12	12	12	11	12	12	12	12	13	12	13	14	15	15	16	16	16	--	12
MINIMUM	11	10	9	10	11	9	9	10	11	12	12	11	9	10	11	10	8	9	10	9	9	9	11	9	11	12	12	12	13	13	--	10
MAY																																
MAXIMUM	16	16	17	17	14	14	14	16	16	16	16	15	14	14	16	17	16	17	16	15	14	15	16	14	16	17	18	18	18	18	18	16
MINIMUM	12	12	13	14	13	11	11	13	13	13	13	13	12	12	12	13	14	14	15	13	13	12	13	13	13	15	14	16	16	15	15	13
JUNE																																
MAXIMUM	19	18	18	19	18	17	17	18	18	19	18	18	17	19	21	21	23	24	24	24	24	23	23	23	24	25	24	22	21	21	--	21
MINIMUM	16	17	17	16	16	14	14	14	15	16	17	15	14	15	17	18	19	20	21	21	20	20	19	19	20	21	20	18	17	17	--	17
JULY																																
MAXIMUM	23	23	24	26	26	26	26	26	25	24	24	23	23	23	22	23	23	24	24	24	24	24	24	24	24	25	26	27	27	27	26	24
MINIMUM	18	20	20	21	22	22	22	22	21	21	21	20	19	19	18	19	19	19	20	19	20	20	20	21	21	21	22	23	23	23	22	21
AUGUST																																
MAXIMUM	24	25	24	23	23	23	24	23	24	24	24	24	23	21	21	21	20	19	18	17	18	19	19	20	19	18	19	20	20	21	22	21
MINIMUM	22	21	21	20	18	19	19	21	21	20	20	20	20	18	17	18	17	17	16	16	16	16	17	18	17	17	17	17	17	17	19	18
SEPTEMBER																																
MAXIMUM	22	21	21	21	21	22	22	22	21	21	20	20	19	18	18	18	19	18	17	16	15	16	17	17	17	18	17	17	17	17	--	18
MINIMUM	19	18	18	18	19	19	19	19	19	18	18	18	18	17	16	15	16	17	14	13	13	13	14	15	16	16	15	14	14	14	--	16

11-5225. SALMON RIVER AT SOMESBAR, CALIF.

LOCATION.--Lat 41°22'40", long 123°28'35", in NE¼ sec.3, T.11 N., R.6 E., Siskiyou County, temperature recorder at gaging station on left bank at Somesbar, and 1.0 mile upstream from mouth.
DRAINAGE AREA.--751 sq mi.
RECORDS AVAILABLE.--Chemical analyses: November 1958 to September 1964.
Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 29°C July 30; minimum, freezing point Dec. 14, 15.
EXTREMES, 1965-68.--Water temperatures: Maximum (1965-66, 1967-68), 32°C Sept. 4, 5, 1966; minimum, freezing point Dec. 14, 15, 1967.
REMARKS.--Probe out of water Oct. 1-19; recorder stopped Apr. 6 to May 26.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	18	18	17	17	16	16	18	16	13	13	14	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12	13	16	14	14	13	12	13	12	11	11	11	--
NOVEMBER																																
MAXIMUM	14	15	17	16	18	19	18	18	16	17	17	17	17	15	13	12	13	14	13	13	11	12	9	9	8	6	8	10	8	8	--	13
MINIMUM	12	12	12	13	14	14	14	14	14	13	13	14	14	13	11	11	11	11	9	9	8	7	7	7	4	3	4	7	7	6	--	10
DECEMBER																																
MAXIMUM	8	8	7	7	7	6	6	7	6	6	6	4	3	1	1	1	3	3	3	4	4	6	4	4	4	3	3	4	3	3	3	4
MINIMUM	6	6	7	7	6	5	4	6	6	6	4	3	1	0	0	1	1	2	2	2	3	3	4	4	3	3	3	3	3	2	2	3
JANUARY																																
MAXIMUM	3	3	2	2	2	2	3	4	4	4	4	4	6	6	6	6	4	5	6	6	6	6	6	6	6	5	4	3	2	3	3	4
MINIMUM	2	2	2	1	2	1	2	3	4	4	2	2	3	5	6	4	4	4	4	5	6	5	5	6	5	4	3	2	2	2	3	3
FEBRUARY																																
MAXIMUM	4	4	6	6	6	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	9	9	9	9	9	8	8	--	--	7
MINIMUM	3	4	4	5	5	6	6	6	6	6	6	7	6	6	6	6	7	7	7	7	8	8	8	8	8	8	7	7	7	--	--	6
MARCH																																
MAXIMUM	8	9	9	9	9	8	8	8	8	7	8	8	7	7	8	8	8	8	8	8	8	9	10	11	10	9	9	11	11	11	11	9
MINIMUM	8	8	7	8	8	7	7	7	6	6	7	7	6	7	7	7	7	6	6	6	7	7	8	9	8	7	7	8	9	8	8	7
APRIL																																
MAXIMUM	10	11	10	9	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	9	8	8	8	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY																																
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16	22	16	16	16	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	14	13	13	14	--
JUNE																																
MAXIMUM	18	17	17	17	19	17	17	17	17	18	18	17	16	18	19	20	21	21	22	25	21	21	22	23	23	23	23	22	21	21	--	19
MINIMUM	14	15	14	14	14	13	14	14	14	14	15	14	13	14	16	17	17	18	18	18	18	18	19	19	19	20	20	18	16	17	--	16
JULY																																
MAXIMUM	22	21	22	23	24	24	24	24	24	24	22	23	23	23	22	22	23	23	23	24	24	24	24	25	25	26	27	28	28	29	27	24
MINIMUM	18	19	18	19	21	21	21	21	20	20	20	20	19	19	18	17	18	19	19	19	19	19	19	20	19	21	21	21	26	25	24	20
AUGUST																																
MAXIMUM	25	25	24	23	23	23	23	22	23	23	23	22	21	22	21	21	20	20	19	18	19	19	20	21	18	17	19	19	20	21	22	21
MINIMUM	23	21	21	19	19	19	19	19	19	20	19	19	19	19	18	18	18	18	17	16	16	17	17	18	16	16	17	17	17	17	18	18
SEPTEMBER																																
MAXIMUM	21	21	21	21	21	21	22	22	21	21	21	21	18	19	19	19	20	19	17	17	17	17	17	18	18	18	18	18	18	18	--	19
MINIMUM	18	18	17	17	18	18	18	18	18	17	18	17	17	17	17	16	16	16	15	14	13	13	13	14	14	16	16	14	14	14	--	16

11-5230. 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, at gaging station at Orleans, 25 ft upstream from highway bridge, and 0.2 mile downstream from Cheenitch Creek.
DRAINAGE AREA.--8,500 sq mi, approximately, not including Lost River or Lower Klamath Lake basins.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
Water temperatures: October 1965 to September 1968.
Sediment records: January 1967 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 28°C July 7, 8, 30, 31; minimum, 1°C Dec. 15-17.
Sediment concentrations: Maximum daily, 3,220 mg/l Feb. 23; minimum daily, 2 mg/l Sept. 28-30.
Sediment loads: Maximum daily, 825,000 tons Feb. 23; minimum daily, 8.2 tons Sept. 28-30.
EXTREMES, 1965-68.--Water temperatures: Maximum, 28°C on several days in 1967-68; minimum (1965-66, 1967-68), 1°C on several days in 1965 and 1967.
Sediment concentrations (1967-68): Maximum daily, 3,220 mg/l Feb. 23, 1968; minimum daily, 2 mg/l Sept. 28-30, 1968.
Sediment loads (1967-68): Maximum daily, 825,000 tons Feb. 23, 1968; minimum daily, 8.2 tons Sept. 28-30, 1968.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
02...	2380	--	--	14	--	109	0	--	6.2	--	.06
NOV.											
06...	2300	--	--	16	--	110	0	--	6.5	--	.14
DEC.											
04...	6200	--	--	12	--	91	0	--	4.4	--	.06
JAN.											
08...	3510	--	--	12	--	93	0	--	4.5	--	.14
FEB.											
05...	12300	--	--	5.0	--	73	0	--	2.2	--	.03
MAR.											
04...	13700	--	--	4.8	--	74	0	--	--	--	.05
APR.											
01...	9340	--	--	4.4	--	72	0	--	2.0	--	.11
MAY											
06...	5240	14	6.1	5.1	1.1	73	0	3.1	2.6	.1	.05
JUNE											
03...	4210	--	--	5.3	--	73	0	--	2.4	--	.03
JULY											
08...	1880	--	--	7.5	--	100	0	--	3.6	--	.08
AUG.											
05...	1290	--	--	13	--	107	0	--	5.0	--	.08
SEPT.											
09...	1350	17	9.1	14	2.4	100	0	10	5.3	.1	.08

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
02...	--	80	0	--	28	.7	89	227	8.0	16	9.2
NOV.											
06...	--	81	0	--	30	.8	90	228	8.1	13	11.5
DEC.											
04...	--	68	0	--	28	.6	75	193	8.2	6	12.2
JAN.											
08...	--	65	0	--	29	.6	76	186	7.8	3	14.0
FEB.											
05...	--	66	6	--	14	.3	60	147	8.1	6	13.4
MAR.											
04...	--	64	3	--	14	.3	61	147	8.1	9	12.2
APR.											
01...	--	62	3	--	13	.2	59	142	8.0	11	11.9
MAY											
06...	90	60	0	.12	15	.3	60	148	8.2	13	10.5
JUNE											
03...	--	59	0	--	16	.3	60	142	7.9	17	9.7
JULY											
08...	--	79	0	--	17	.4	82	195	8.1	24	8.8
AUG.											
05...	--	79	0	--	26	.6	88	212	8.2	22	9.7
SEPT.											
09...	136	80	0	.18	27	.7	89	216	7.7	21	9.9

11-5230. KLAMATH RIVER AT ORLEANS, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	18	17	14	15	16	16	17	17	17	17	16	16	16	14	14	14	14	14	14	14	14	14	14	14	14	13	13	13	12	11	12	14
MINIMUM	17	13	13	13	14	14	14	14	15	16	16	15	14	13	12	12	12	13	13	13	13	14	14	13	13	12	12	12	11	10	10	13
NOVEMBER																																
MAXIMUM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11	10	10	10	10	9	8	8	7	7	7	6	6	5	6	6	--	9
MINIMUM	11	12	11	11	11	12	12	12	11	11	11	12	11	11	10	9	9	9	9	8	8	7	6	6	6	4	4	4	5	4	--	9
DECEMBER																																
MAXIMUM	6	7	7	7	6	5	5	6	6	6	6	6	4	3	2	2	2	3	3	3	4	4	5	6	5	4	5	5	5	5	4	4
MINIMUM	5	6	6	6	5	5	4	4	6	6	6	4	2	2	1	1	1	2	2	3	3	3	4	5	4	4	4	5	4	4	3	4
JANUARY																																
MAXIMUM	4	4	4	3	4	3	4	6	7	7	7	6	7	8	8	8	8	8	8	8	9	9	9	8	8	8	7	6	4	4	6	6
MINIMUM	3	4	3	3	3	3	3	4	6	7	6	4	5	7	8	8	8	8	8	8	8	9	8	8	8	7	6	4	4	4	4	6
FEBRUARY																																
MAXIMUM	7	7	8	8	9	9	9	9	9	9	9	9	9	9	9	9	11	10	11	11	11	11	11	11	11	11	11	11	11	--	--	9
MINIMUM	6	7	7	8	8	8	8	8	8	8	9	9	8	8	8	8	9	10	10	10	11	11	11	11	11	11	11	11	11	--	--	9
MARCH																																
MAXIMUM	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	13	13	12	12	13	13	14	14	12
MINIMUM	11	12	12	12	12	12	11	11	11	11	11	11	10	10	11	11	11	11	11	11	11	12	12	12	12	12	12	12	13	13	13	11
APRIL																																
MAXIMUM	14	13	13	13	13	13	13	14	14	16	16	15	14	14	14	13	13	13	14	14	14	14	14	14	15	16	17	17	17	17	--	14
MINIMUM	13	13	12	13	13	13	13	13	14	14	15	13	13	13	13	12	12	12	13	13	12	13	13	13	14	15	16	16	16	17	--	13
MAY																																
MAXIMUM	17	17	18	18	18	17	17	18	18	18	18	18	17	17	17	18	18	19	19	18	17	17	17	17	18	18	19	20	21	21	21	18
MINIMUM	16	17	17	17	17	16	16	16	17	17	17	17	16	16	16	17	18	18	18	17	17	16	17	17	17	18	18	19	20	19	19	17
JUNE																																
MAXIMUM	21	21	22	22	21	21	21	22	22	22	22	21	21	22	23	24	25	26	26	26	26	26	26	26	27	27	27	26	24	24	--	23
MINIMUM	20	21	20	20	20	19	20	20	20	21	21	20	19	20	21	22	23	24	24	24	24	24	25	25	26	26	26	24	23	22	--	22
JULY																																
MAXIMUM	24	24	25	26	27	27	28	28	27	27	27	25	25	25	24	24	24	24	24	26	26	26	26	26	26	27	27	27	27	28	28	26
MINIMUM	23	23	23	24	26	26	26	26	26	25	25	24	23	23	23	22	21	22	22	23	23	23	23	22	23	23	24	24	25	25	24	23
AUGUST																																
MAXIMUM	26	26	25	24	23	23	24	23	24	24	24	23	23	22	21	21	21	21	19	18	19	19	20	21	21	18	19	20	21	21	22	22
MINIMUM	23	23	23	22	21	21	21	22	22	22	22	21	20	19	19	19	19	18	18	17	16	17	17	18	18	17	17	17	17	18	19	19
SEPTEMBER																																
MAXIMUM	22	22	22	22	22	22	23	22	22	21	21	21	21	19	19	19	20	20	18	18	16	16	18	18	19	19	19	19	18	18	--	19
MINIMUM	20	19	19	19	19	20	20	20	19	18	19	18	18	18	17	17	17	18	17	16	14	13	14	16	16	17	17	16	16	16	--	17

11-5230. KLAMATH RIVER AT ORLEANS, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	2190	12	71	2560	4	28	3580	22	213
2	2380	82	527	2500	6	41	4000	111	1280
3	2980	177	1420	2420	6	39	5130	184	2580
4	2710	53	388	2350	7	44	6200	219	3830
5	2700	16	117	2320	7	44	9050	244	6230
6	2600	14	98	2300	5	31	6140	79	1310
7	2820	17	129	2320	4	25	6030	68	1110
8	2790	16	121	2430	4	26	5440	35	514
9	2760	15	112	2680	6	43	5150	23	320
10	2750	12	89	2820	8	61	5110	18	248
11	2740	10	74	2650	10	72	4980	21	282
12	2720	8	59	2550	12	83	4810	23	299
13	2720	8	59	5500	15	223	4660	23	289
14	2700	9	66	11400	114	3510	4480	21	254
15	2680	10	72	5400	46	671	4250	20	230
16	2670	10	72	4200	19	215	4210	21	239
17	2670	10	72	3750	14	142	3920	17	180
18	2660	9	65	3500	10	95	4530	27	330
19	2660	9	65	3200	8	69	4550	27	332
20	2650	10	72	3050	7	58	4360	19	224
21	2840	11	84	2900	6	47	4260	18	207
22	3130	11	93	2780	6	45	4210	20	227
23	2930	9	71	2760	6	45	4350	22	258
24	2820	10	76	2760	6	45	4530	19	232
25	2810	13	99	2770	6	45	4710	20	254
26	2810	15	114	2710	6	44	5170	27	377
27	2780	18	135	2700	6	44	6850	80	1510
28	3220	27	235	2740	6	44	6260	37	625
29	3160	22	188	3310	58	544	5900	20	319
30	2910	10	79	3400	29	266	5200	16	225
31	2740	5	37	--	--	--	4520	14	171
TOTAL	85700	--	4959	98730	--	6689	156540	--	24699

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	4160	15	168	5090	27	371	16100	245	10700
2	4000	14	151	5260	47	667	14600	210	8280
3	3910	13	137	15600	495	21200	13700	185	6840
4	3730	13	131	14600	165	6500	13700	215	7950
5	3570	11	106	12300	135	4480	14200	180	6900
6	3460	11	103	11100	95	2850	13300	138	4960
7	3390	11	101	11000	175	5200	12400	112	3750
8	3510	22	208	11300	100	3050	11500	81	2520
9	4510	36	438	10700	60	1730	10900	70	2060
10	7920	157	3450	10200	54	1490	10400	78	2190
11	5920	36	575	9650	52	1350	10100	101	2750
12	5000	22	297	9230	52	1300	10600	107	3060
13	9360	150	3790	8930	50	1210	11000	87	2580
14	34900	968	105000	8390	43	974	11200	83	2510
15	55200	1810	282000	7930	34	728	10900	81	2380
16	25600	631	45600	7570	29	593	11500	89	2760
17	15100	332	13500	8440	46	1050	11900	79	2540
18	10600	222	6350	9950	68	1830	10900	72	2120
19	8480	158	3620	13700	233	11700	10300	65	1810
20	6920	120	2240	33100	701	64000	9810	57	1510
21	6600	114	2030	44400	903	116000	9460	52	1330
22	6880	122	2270	60300	1470	262000	9190	49	1220
23	6940	82	1540	92800	3220	825000	8830	45	1070
24	6660	66	1190	55200	2020	301000	7900	40	853
25	6540	50	883	34300	1530	142000	12300	226	7970
26	6300	42	714	26100	800	56400	11900	118	3790
27	5960	37	595	21700	500	29300	10600	69	1970
28	5530	36	538	19000	380	19500	9750	53	1400
29	5510	35	521	17100	285	13200	9700	49	1280
30	5490	30	445	--	--	--	9700	38	995
31	5310	32	459	--	--	--	9420	34	865
TOTAL	286960	--	479150	594940	--	1896673	347760	--	102913

11-5230. KLAMATH RIVER AT ORLEANS, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	9340	35	883	5900	15	239	4270	7	81
2	9110	37	910	5490	11	163	4330	7	82
3	8430	41	933	5350	9	130	4210	6	68
4	7900	38	811	5750	12	186	3980	6	64
5	7570	32	654	5750	9	140	3900	6	63
6	7210	28	545	5240	12	170	4040	3	33
7	6850	28	518	4900	10	132	3960	8	86
8	6560	24	425	4820	10	130	3700	9	90
9	6570	16	284	4890	10	132	3460	6	56
10	7090	22	421	4920	10	133	3300	3	27
11	7730	29	605	4880	11	145	3220	4	35
12	7810	31	654	4910	11	146	3200	12	104
13	7010	21	397	4750	9	115	3050	7	58
14	6640	19	341	4570	9	111	2960	4	32
15	6490	22	386	4300	9	104	2900	4	31
16	6250	15	253	4210	9	102	2840	4	31
17	5880	20	318	4340	10	117	2830	10	76
18	5630	17	258	4480	20	242	2810	8	61
19	5500	18	267	5300	21	301	2760	12	89
20	5340	14	202	7710	52	1080	2710	7	51
21	5170	16	223	6580	22	391	2870	7	54
22	5000	16	216	5850	13	205	2720	7	51
23	5320	21	302	5300	10	143	2720	7	51
24	5660	15	229	4860	10	131	2640	6	43
25	5510	14	208	4930	10	133	2410	5	33
26	5170	14	195	5080	12	165	2370	7	45
27	5240	13	184	5350	14	202	2250	7	43
28	5400	10	146	5190	13	182	2190	6	35
29	5730	16	248	5090	11	151	2190	6	35
30	6010	17	276	4770	19	245	2160	6	35
31	--	--	--	4450	9	108	--	--	--
TOTAL	195120	--	12292	159910	--	6074	92950	--	1643

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	2120	6	34	1360	8	29	1420	4	15
2	2090	5	28	1340	7	25	1390	4	15
3	2060	5	28	1320	6	21	1400	4	15
4	2050	5	28	1300	6	21	1410	4	15
5	2080	6	34	1290	5	17	1410	4	15
6	2050	6	33	1280	5	17	1400	4	15
7	1920	7	36	1280	7	24	1380	3	11
8	1880	6	30	1290	8	28	1370	6	22
9	1810	6	29	1290	8	28	1350	8	29
10	1730	6	28	1290	8	28	1340	15	54
11	1680	7	32	1280	7	24	1390	10	38
12	1670	7	32	1280	7	24	1410	5	19
13	1670	8	36	1280	10	35	1430	4	15
14	1660	7	31	1280	13	45	1430	4	15
15	1650	6	27	1280	11	38	1430	4	15
16	1610	8	35	1280	10	35	1430	4	15
17	1650	9	40	1280	8	28	1450	3	12
18	1620	8	35	1290	5	17	1460	3	12
19	1600	8	35	1410	6	23	1450	3	12
20	1550	8	33	1690	7	32	1440	3	12
21	1510	8	33	1840	7	35	1460	3	12
22	1500	11	45	1700	8	37	1440	4	16
23	1470	14	56	1610	9	39	1450	4	16
24	1500	12	49	1500	10	41	1480	4	16
25	1430	11	42	2050	11	61	1510	4	16
26	1460	12	47	3000	57	462	1520	4	16
27	1410	13	49	2540	22	151	1530	3	12
28	1410	12	46	2020	8	44	1520	2	8.2
29	1400	11	42	1720	6	28	1510	2	8.2
30	1410	10	38	1580	5	21	1520	2	8.2
31	1380	7	26	1490	5	20	--	--	--
TOTAL	52030	--	1117	47440	--	1478	43130	--	499.6

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 2161210
TOTAL LOAD FOR YEAR (TONS) 2538186.6

11-5230. KLAMATH RIVER AT ORLEANS, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 15, 1968	1300	8	54800	1760	260000	13	14	30	41	53	64	76	91	99	100	--	VPWC
FEB 23.....	1400	11	93600	2720	687000	12	19	29	41	54	67	80	94	99	100	--	VPWC
FEB 28.....	1400	11	18400	353	17500	8	19	29	36	40	67	77	94	100	--	--	VBWC
MAR 27.....	1330	12	10600	70	2000	19	40	52	60	66	85	89	94	98	100	--	SBWC

11-5255. TRINITY RIVER AT LEWISTON, CALIF.

LOCATION.--Lat 40°43'10", 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.
RECORDS AVAILABLE.--Chemical analyses: December 1953 to September 1968.
Water temperatures: September 1951 to September 1955, October 1957 to September 1958, July 1959 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 11°C on many days during April and June to September; minimum, 4°F on several days during January and February.
EXTREMES, 1951-55, 1957-58, 1959-68.--Water temperatures: Maximum (1951-55, 1957-58, 1959-63, 1964-68), 26°C July 20, 21, 28, 29, 1960; minimum, 1°C on several days in January 1952.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)	PHOS-PHATE (PO4)
OCT.												
02...	166	--	--	2.5	--	52	0	--	1.8	.2	.02	.13
NOV.												
06...	259	--	--	2.5	--	53	0	.3	2.2	.0	.00	--
DEC.												
04...	212	--	--	2.8	--	53	0	--	2.0	.5	.06	.04
JAN.												
08...	159	--	--	2.9	--	54	0	--	2.2	.5	.05	.09
FEB.												
05...	161	--	--	2.0	--	51	0	--	1.5	.2	.06	.06
MAR.												
04...	153	--	--	2.6	--	53	0	--	--	.1	.02	.01
APR.												
01...	164	--	--	2.2	--	53	0	--	1.3	.0	.07	.02
MAY												
06...	155	5.5	6.7	2.6	.4	50	0	.5	1.9	.1	.00	.19
JUNE												
03...	155	--	--	2.3	--	50	0	--	1.4	.1	.03	.01
JULY												
08...	150	--	--	1.7	--	50	0	--	1.1	.1	.00	.00
AUG.												
05...	158	--	--	2.5	--	52	0	--	1.5	.0	.00	.08
SEPT.												
09...	203	5.2	6.6	2.5	.5	51	0	.0	1.5	.0	.04	.02

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
02...	--	38	0	--	13	.2	43	96	7.7	8	10.1
NOV.											
06...	--	42	0	--	11	.2	43	97	7.4	8	10.7
DEC.											
04...	--	43	0	--	12	.2	43	95	7.7	6	10.8
JAN.											
08...	--	43	0	--	13	.2	44	98	7.6	6	11.8
FEB.											
05...	--	39	0	--	10	.1	42	92	7.8	6	11.6
MAR.											
04...	--	46	3	--	11	.2	43	97	7.7	8	11.3
APR.											
01...	--	44	1	--	10	.1	43	97	7.6	9	9.8
MAY											
06...	44	41	0	.06	12	.2	41	90	8.1	7	11.7
JUNE											
03...	--	40	0	--	11	.2	41	90	7.6	8	10.8
JULY											
08...	--	40	0	--	8	.1	41	89	8.1	8	10.8
AUG.											
05...	--	43	0	--	11	.2	43	92	7.9	8	10.7
SEPT.											
09...	76	40	0	.10	12	.2	42	91	8.2	11	10.2

11-5255. TRINITY RIVER AT LEWISTON, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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	AVER-AGE
OCTOBER																																
MAXIMUM	9	8	8	8	8	8	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
MINIMUM	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
NOVEMBER																																
MAXIMUM	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	--	7
MINIMUM	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	--	7
DECEMBER																																
MAXIMUM	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	5
MINIMUM	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	5
JANUARY																																
MAXIMUM	6	6	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	5	5	5	5
MINIMUM	6	6	6	6	6	6	6	6	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	5	5	5	5	5
FEBRUARY																																
MAXIMUM	5	4	4	4	5	5	5	5	5	6	6	6	6	6	6	6	7	6	6	6	7	7	7	7	7	7	7	7	7	--	--	6
MINIMUM	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	--	--	6
MARCH																																
MAXIMUM	7	8	8	8	8	7	7	8	8	8	8	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	9	9	9	9	9	8
MINIMUM	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	7
APRIL																																
MAXIMUM	9	9	9	9	9	9	9	9	10	11	11	11	11	11	10	9	10	9	9	9	9	9	8	9	9	10	10	10	10	10	--	9
MINIMUM	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	--	8
MAY																																
MAXIMUM	9	10	10	10	9	9	9	9	10	10	9	9	9	9	9	10	9	9	9	9	9	9	10	9	10	10	10	10	10	10	10	9
MINIMUM	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
JUNE																																
MAXIMUM	10	9	9	10	9	10	10	10	10	10	10	10	9	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	--	10
MINIMUM	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	--	8
JULY																																
MAXIMUM	11	10	11	11	11	11	11	11	11	11	11	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	9	10	10	10	9	10
MINIMUM	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	9	8	8	8
AUGUST																																
MAXIMUM	10	11	11	11	11	11	11	10	11	10	11	11	11	11	10	10	10	10	9	9	9	10	10	11	10	11	11	11	11	11	11	10
MINIMUM	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	10	9	10	10	10	9
SEPTEMBER																																
MAXIMUM	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	--	11
MINIMUM	10	10	10	10	10	10	10	10	10	10	10	10	11	10	10	10	11	11	11	11	10	10	10	10	10	10	10	10	10	10	--	10

11-5285. HAYFORK CREEK NEAR HYAMPOM, CALIF.

LOCATION.--Lat 40°37'35", long 123°26'00", in NW¼ sec.19, T.3 N., R.7 E., Trinity County, 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.
RECORDS AVAILABLE.--Water temperatures: December 1960 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C Aug. 1; minimum, freezing point Jan. 6, 14-17.
EXTREMES, 1960-66, 1967-68.--Water temperatures: Maximum (1960-61, 1962-66, 1967-68), 28°C July 13, 1961; minimum, freezing point on several days in January 1962 and 1968.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	17	14	13	13	13	13	13	13	13	13	14	13	12	12	11	11	11	12	12	12	12	13	13	13	13	12	11	12	11	10	10	12
MINIMUM	14	13	12	11	12	12	12	11	12	12	12	12	11	11	8	9	9	10	11	11	11	12	12	12	11	11	10	11	9	9	9	11
NOVEMBER																																
MAXIMUM	10	10	10	9	11	11	11	11	11	11	11	11	11	11	11	11	10	11	10	9	9	8	7	7	7	6	5	6	6	6	--	9
MINIMUM	8	8	9	9	9	11	11	11	11	11	11	11	11	11	10	10	10	9	9	9	8	7	6	6	6	4	4	5	6	5	--	8
DECEMBER																																
MAXIMUM	6	5	5	5	5	4	4	4	4	4	4	4	3	4	6	6	5	5	4	5	5	5	5	4	4	4	4	3	2	2	2	4
MINIMUM	5	4	4	4	4	4	3	3	4	4	4	3	2	2	4	5	4	4	4	4	4	4	4	4	4	4	3	1	1	1	1	3
JANUARY																																
MAXIMUM	2	2	2	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	2	2	2	3	3	3	3	3	3	3	2	3	3	2
MINIMUM	1	1	1	1	1	0	1	1	2	1	1	1	1	0	0	0	0	1	1	1	2	2	3	3	2	2	2	2	2	1	2	1
FEBRUARY																																
MAXIMUM	4	4	4	4	4	5	6	6	6	6	6	6	6	6	6	6	7	7	7	8	9	8	8	8	9	9	9	9	8	--	--	6
MINIMUM	3	3	3	4	4	4	4	4	5	6	6	6	6	6	6	6	6	7	7	7	8	8	8	8	8	9	8	7	--	--	--	6
MARCH																																
MAXIMUM	8	8	9	9	9	8	8	8	8	7	8	7	7	7	8	8	7	8	8	8	8	8	9	9	9	9	9	10	11	11	10	8
MINIMUM	8	8	8	8	8	8	8	8	7	7	7	6	6	6	7	7	7	7	7	7	7	8	8	8	9	8	8	8	10	10	9	7
APRIL																																
MAXIMUM	10	10	11	10	11	10	11	11	12	13	13	12	12	12	12	10	10	11	11	11	11	12	11	12	13	14	14	14	15	16	--	12
MINIMUM	9	9	9	9	9	9	9	9	10	11	12	11	10	10	9	9	8	8	9	9	9	9	9	9	10	11	12	12	12	13	--	9
MAY																																
MAXIMUM	15	15	17	17	15	14	14	16	16	16	16	15	14	13	15	16	16	17	16	16	15	15	15	13	16	17	18	18	18	17	18	16
MINIMUM	13	12	13	14	13	11	12	13	13	14	13	13	12	11	12	13	14	14	16	14	14	13	13	13	13	14	15	16	16	16	15	13
JUNE																																
MAXIMUM	19	18	18	18	17	17	19	18	18	19	19	19	17	18	20	21	22	23	23	23	22	22	23	23	23	23	23	21	20	21	--	20
MINIMUM	16	17	17	16	15	14	14	16	16	16	17	16	15	15	16	18	18	19	19	20	19	19	20	20	20	21	20	19	17	17	--	17
JULY																																
MAXIMUM	22	21	22	23	23	23	23	23	23	23	23	23	23	23	22	22	22	22	23	23	23	23	23	23	23	23	24	24	23	24	24	23
MINIMUM	18	19	18	19	20	19	20	21	21	21	21	20	20	20	19	19	18	19	19	19	20	20	20	20	20	21	21	21	22	21	22	19
AUGUST																																
MAXIMUM	26	25	24	23	24	24	24	24	23	23	22	23	22	22	21	21	19	20	19	17	17	20	20	21	19	18	20	21	21	21	22	21
MINIMUM	22	22	22	21	21	21	21	21	21	21	21	21	20	19	18	18	17	18	17	16	16	17	17	18	18	18	17	18	18	19	19	19
SEPTEMBER																																
MAXIMUM	22	22	22	22	22	23	23	22	22	21	21	21	19	20	19	19	20	19	18	16	16	16	16	17	17	17	18	17	17	16	--	19
MINIMUM	20	19	19	19	20	20	21	20	19	19	19	19	18	18	18	17	17	17	16	14	14	13	13	14	14	15	15	14	14	14	--	17

11-5287. 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, 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.
RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1968.
Sediment records: October 1966 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 29°C Aug. 1, 2; minimum, freezing point on several days during December and January.
Sediment concentrations: Maximum daily, 3,630 mg/l Jan. 16; minimum daily, 1 mg/l Oct. 5, Nov. 10, 11, July 29.
Sediment loads: Maximum daily, 193,000 tons Jan. 14; minimum daily, 0.28 ton July 29.
EXTREMES, 1965-68.--Water temperatures: Maximum, 29°C June 30, July 1, 3, 1967, Aug. 1, 2, 1968; minimum, freezing point on several days in 1965, 1967-68.
Sediment concentrations (1966-68): Maximum daily, 3,890 mg/l Jan. 29, 1967; minimum daily, 1 mg/l Aug. 1, Oct. 5, Nov. 10, 11, 1967, July 29, 1968.
Sediment loads (1966-68): Maximum daily, 260,000 tons Jan. 29, 1967; minimum daily, 0.28 ton July 29, 1968.
REMARKS.--Low flow samples during July to September are erratic because of work in basin above gage. Where no maximum or minimum is shown, temperature is once-daily reading.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	17	13	16	16	16	17	18	17	17	18	18	18	17	18	17	17	17	16	18	17	14	17	17	17	17	16	15	14	15	14	15	16
MINIMUM	13	11	11	12	12	12	11	11	11	12	13	12	11	13	9	9	9	10	12	11	12	13	12	12	12	11	10	10	9	8	9	11
NOVEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	15	14	15	12	15	15	14	16	13	15	13	14	13	13	12	11	11	12	12	11	12	9	10	10	11	9	6	7	7	5	--	12
MINIMUM	9	9	9	10	12	11	12	12	12	11	10	11	11	11	10	10	9	9	9	8	7	6	6	6	7	4	4	6	5	3	--	8
DECEMBER.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	6	5	4	5	4	6	5	6	6	6	6	6	4	3	3	3	3	3	3	4	4	7	7	6	6	4	4	4	4	3	3	4
MINIMUM	4	4	3	3	3	3	3	4	5	5	5	3	1	0	0	0	1	2	2	2	3	3	4	4	3	3	3	2	2	1	1	2
JANUARY..	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5	5	7	7	7	7	--	--	--	--	--	--	--	--
MAXIMUM	4	4	3	3	3	2	3	3	4	3	3	3	4	7	6	6	6	6	--	--	--	--	--	--	6	5	4	3	2	4	4	4
MINIMUM	1	1	1	0	0	0	0	2	3	2	2	1	3	4	6	5	4	4	--	--	--	--	--	--	4	3	3	1	1	2	3	2
FEBRUARY.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	4	4	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	7	8	8	9	9	9	9	10	10	9	9	9	--	--	7
MINIMUM	3	4	4	4	4	4	4	4	5	6	5	5	5	5	5	6	6	6	7	7	8	8	9	9	8	8	7	7	7	--	--	6
MARCH....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	9	10	10	10	9	8	9	10	9	9	10	8	7	7	8	8	8	8	9	9	9	9	11	11	9	10	11	12	13	12	12	9
MINIMUM	8	8	7	8	7	7	7	7	6	5	7	7	5	7	7	6	6	6	6	5	6	7	8	7	8	7	7	8	9	8	6	7
APRIL....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	10	12	12	11	12	12	13	13	15	16	16	14	14	14	13	12	12	13	13	13	13	14	12	14	15	17	17	18	18	17	--	13
MINIMUM	9	8	8	9	8	7	8	8	9	10	10	9	8	8	8	7	6	6	8	7	6	7	8	8	8	9	10	10	10	11	--	8
MAY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	17	18	19	18	16	16	17	18	18	18	17	17	14	16	18	19	17	19	17	17	16	16	16	14	19	19	21	21	21	21	21	18
MINIMUM	10	10	14	12	11	8	9	11	11	12	11	11	11	10	10	11	13	13	14	13	12	12	12	11	12	13	13	14	13	13	13	12
JUNE.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	22	19	22	22	17	21	21	21	22	23	21	21	21	23	24	25	25	26	26	26	25	26	26	27	27	27	25	23	24	26	--	23
MINIMUM	15	16	16	14	14	14	14	13	13	14	16	13	13	14	15	16	16	17	17	18	17	17	19	18	18	18	18	17	15	16	--	16
JULY.....	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	27	23	26	26	26	27	27	28	28	28	27	27	26	26	24	25	25	26	26	26	27	27	27	27	27	28	28	28	26	28	28	26
MINIMUM	17	18	21	18	18	18	18	21	20	18	19	19	18	19	17	17	17	18	18	18	18	18	18	18	18	19	19	19	21	21	19	18
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	29	29	28	27	28	28	28	28	28	28	24	26	24	24	24	24	23	24	20	18	23	23	24	24	19	21	23	24	25	26	26	24
MINIMUM	21	21	20	19	19	19	19	19	18	19	19	19	19	19	18	18	17	18	18	17	17	17	16	17	18	17	17	18	17	17	18	18
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	25	24	26	26	26	26	26	26	23	24	24	24	23	22	22	23	24	22	19	20	21	21	22	22	23	22	22	22	22	22	--	23
MINIMUM	18	17	17	18	18	18	18	18	18	17	17	18	17	18	16	16	16	16	14	14	13	13	13	14	14	15	15	14	13	14	--	16

11-5287. SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	63	2	.34	104	2	.56	277	542	405
2	120	6	1.9	104	2	.56	297	480	385
3	293	21	17	126	2	.68	1020	750	2070
4	214	5	2.9	155	2	.84	1400	1060	4010
5	166	1	.45	135	2	.73	1380	520	1940
6	148	2	.80	120	2	.65	1140	85	262
7	134	2	.72	115	2	.62	1250	12	41
8	124	2	.67	110	2	.59	992	29	72
9	119	3	.96	106	3	.86	735	18	36
10	110	7	2.1	106	1	.29	648	11	19
11	106	12	3.4	106	1	.29	585	16	25
12	106	14	4.0	106	2	.57	549	17	25
13	105	12	3.4	111	3	.90	482	14	18
14	104	6	1.7	446	112	141	386	11	11
15	102	2	.55	403	40	44	397	7	7.5
16	102	2	.55	235	15	9.5	394	8	8.5
17	100	2	.54	181	10	4.9	394	9	9.6
18	99	3	.80	161	5	2.2	517	12	17
19	95	2	.51	152	9	3.7	470	11	14
20	93	2	.50	146	13	5.1	399	9	9.7
21	107	2	.58	144	13	5.1	370	7	7.0
22	120	4	1.3	138	13	4.8	358	5	4.8
23	117	4	1.3	132	13	4.6	358	3	2.9
24	114	3	.92	126	14	4.8	373	4	4.0
25	111	3	.90	123	14	4.6	405	17	19
26	108	4	1.2	121	20	6.5	532	21	30
27	104	3	.84	119	300	96	771	21	44
28	103	3	.83	126	390	133	920	19	47
29	104	3	.84	188	280	142	888	15	36
30	104	2	.56	302	185	151	796	14	30
31	104	2	.56	--	--	--	709	20	38
TOTAL	3699	--	53.62	4747	--	770.94	20192	--	9648.0

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	653	8	14	1380	129	481	3330	550	4950
2	610	9	15	2350	215	1360	3060	400	3300
3	548	13	19	5220	960	13500	2770	290	2170
4	495	12	16	3900	492	5180	2470	160	1070
5	467	8	10	3330	348	3130	2430	170	1120
6	432	3	3.5	3160	294	2510	2230	270	1630
7	407	4	4.4	3390	254	2320	2060	160	890
8	447	20	24	3490	255	2400	1920	170	881
9	657	812	2180	3510	350	3320	1820	170	835
10	1160	2040	6270	3550	302	2890	1730	160	747
11	1160	370	1160	3420	247	2280	1650	140	624
12	1030	230	640	3240	246	2150	1930	537	3040
13	1820	1040	5670	3090	280	2340	2180	600	3530
14	23000	2980	193000	2870	301	2330	2260	230	1400
15	19800	3160	161000	2630	314	2230	2240	260	1570
16	8670	3630	87000	2850	366	2820	3190	636	5620
17	4730	1270	17200	4920	500	6730	3650	220	2170
18	3160	462	3940	5070	443	6060	2950	109	868
19	2370	429	2750	9900	1680	63400	2530	108	738
20	2070	429	2400	18200	2280	122000	2230	82	494
21	2020	284	1550	15000	1950	79300	2110	94	536
22	2190	164	970	13400	1790	64800	2030	78	428
23	2290	220	1360	15100	1890	77300	2000	74	400
24	2240	182	1100	11400	1010	30400	1940	72	377
25	2150	148	859	7740	1320	27600	2430	208	1360
26	2040	219	1210	5760	620	9640	2410	82	534
27	1900	218	1120	4800	370	4800	2130	70	403
28	1770	111	530	4050	360	3940	1950	56	295
29	1910	62	320	3600	360	3500	1870	49	247
30	1880	75	381	--	--	--	1810	60	293
31	1630	104	458	--	--	--	1690	38	173
TOTAL	95706	--	493173.9	170320	--	550711	71000	--	42693

11-5287. SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	1620	54	236	700	29	55	374	3	3.0
2	1550	46	193	693	19	36	365	3	3.0
3	1430	34	131	686	24	44	365	2	2.0
4	1340	22	80	666	26	47	359	3	2.9
5	1300	27	95	646	21	37	351	4	3.8
6	1230	31	103	635	21	36	347	4	3.7
7	1180	35	112	616	24	40	341	4	3.7
8	1140	36	111	598	21	34	331	4	3.6
9	1110	37	111	577	9	14	319	4	3.4
10	1100	39	116	565	4	6.1	313	4	3.4
11	1100	40	119	562	8	12	304	4	3.3
12	1070	39	113	550	3	4.5	295	4	3.2
13	1030	38	106	530	7	10	289	4	3.1
14	995	39	105	520	10	14	281	4	3.0
15	973	42	110.	510	9	12	275	4	3.0
16	940	39	99	500	7	9.5	267	4	2.9
17	918	40	99	494	5	6.7	257	4	2.8
18	889	45	108	487	4	5.3	247	4	2.7
19	871	58	136	491	4	5.3	244	4	2.6
20	839	63	143	571	5	7.7	236	4	2.5
21	824	64	142	568	5	7.7	229	3	1.9
22	801	68	147	535	4	5.8	222	2	1.2
23	788	140	298	492	4	5.3	217	2	1.2
24	785	196	415	474	4	5.1	211	2	1.1
25	763	62	128	462	4	5.0	201	3	1.6
26	745	38	76	450	4	4.9	198	3	1.6
27	741	26	52	435	4	4.7	189	3	1.5
28	727	29	57	416	4	4.5	184	3	1.5
29	718	32	62	406	4	4.4	184	3	1.5
30	706	33	63	400	3	3.2	181	3	1.5
31	--	--	--	384	3	3.1	--	--	--
TOTAL	30223	--	3866	16619	--	489.8	8176	--	76.2

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	179	3	1.4	100	4	1.1	98	2	.53
2	172	3	1.4	99	9	2.4	95	2	.51
3	167	3	1.4	97	16	4.2	92	2	.50
4	166	10	4.5	97	15	3.9	88	2	.48
5	164	9	4.0	95	14	3.6	86	2	.46
6	159	7	3.0	93	12	3.0	86	2	.46
7	152	6	2.5	93	10	2.5	84	2	.45
8	145	3	1.2	91	12	2.9	82	2	.44
9	141	3	1.1	94	9	2.3	81	7	1.5
10	139	3	1.1	95	11	2.8	79	6	1.3
11	134	4	1.4	93	5	1.3	77	6	1.2
12	130	4	1.4	88	8	1.9	75	6	1.2
13	130	5	1.8	86	8	1.9	75	6	1.2
14	128	5	1.7	84	9	2.0	79	6	1.3
15	128	5	1.7	84	10	2.3	83	6	1.3
16	126	6	2.0	84	10	2.3	84	6	1.4
17	122	6	2.0	84	10	2.3	82	6	1.3
18	123	16	5.3	84	11	2.5	82	6	1.3
19	123	16	5.3	89	4	.96	79	6	1.3
20	122	16	5.3	108	18	5.2	77	6	1.2
21	119	15	4.8	152	9	3.7	77	7	1.5
22	117	13	4.1	154	7	2.9	72	11	2.1
23	113	10	3.1	138	4	1.5	72	5	.97
24	110	8	2.4	124	6	2.0	72	5	.97
25	108	7	2.0	115	8	2.5	72	6	1.2
26	108	6	1.7	127	8	2.7	72	8	1.6
27	106	4	1.1	129	7	2.4	70	9	1.7
28	104	2	.56	126	6	2.0	68	12	2.2
29	102	1	.28	117	6	1.9	66	14	2.5
30	102	5	1.4	110	4	1.2	64	10	1.7
31	102	11	3.0	103	7	1.9	--	--	--
TOTAL	4041	--	73.94	3233	--	76.06	2369	--	35.77

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 430325
TOTAL LOAD FOR YEAR (TONS) 1101668.23

11-5287. SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 14, 1967	1100	11	446	204	246	4	30	46	57	64	90	99	100	--	--	--	SBWC
DEC 3.....	1000	4	992	575	1540	17	25	35	42	45	74	85	97	100	--	--	VPWC
JAN 14, 1968	0900	4	24000	3850	249000	9	18	26	35	44	54	76	90	94	99	100	VPWC
JAN 14.....	1200	4	29200	3540	279000	11	19	29	38	48	57	79	93	97	100	--	VPWC
JAN 14.....	1400	4	31600	3350	286000	12	19	27	38	47	56	78	92	95	99	100	VPWC
JAN 15.....	1045	6	21000	2910	165000	7	13	19	25	31	38	54	86	99	100	--	VPWC
JAN 15.....	1635	6	16800	3700	168000	6	9	11	18	22	27	40	81	99	100	--	VPWC
JAN 16.....	1000	6	9120	3970	97800	3	4	6	8	8	14	17	27	60	91	100	VBWC
JAN 16.....	1500	6	7840	3660	77500	3	5	6	8	9	14	18	31	69	97	100	VBWC
JAN 17.....	0945	5	4680	1170	14800	2	5	10	13	14	24	30	50	95	100	--	VBWC
FEB 6.....	1130	6	3160	308	2630	9	13	21	25	27	39	53	100	--	--	--	VBWC
FEB 19.....	1800	8	13500	1720	62700	7	11	16	21	23	37	48	69	93	100	--	VBWC
FEB 24.....	0900	9	12000	700	22700	21	33	47	60	65	91	97	100	--	--	--	SBWC
MAR 14.....	1330	7	2290	181	1120	12	20	30	39	44	60	69	87	99	100	--	VBWC
APR 4.....	1030	9	1320	22	78	7	13	24	32	36	47	52	64	96	100	--	VBWC
MAY 3.....	1100	14	690	26	48	13	26	40	51	54	86	95	98	100	--	--	SBWC

11-5300. TRINITY RIVER AT HOOPA, CALIF.

LOCATION.--Lat 41°03'00" (revised), long 123°40'15", in SE¼NW¼ sec.25, T.8 N., R.4 E., Humboldt County, at gaging station in Hoopa Valley Indian Reservation at Hoopa, and 0.4 mile upstream from Supply Creek.
DRAINAGE AREA.--2,865 sq mi.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
Water temperatures: November 1956 to September 1968.
Sediment records: November 1956 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Minimum, 2°C Dec. 17.
Sediment concentrations: Maximum daily, 3,720 mg/l Feb. 23; minimum daily, 1 mg/l on several days during September.
Sediment loads: Maximum daily, 456,000 tons Feb. 23; minimum daily, 1.2 tons Sept. 30.
EXTREMES, 1956-68.--Water temperatures (1963-68): Maximum (1963-66), 27°C July 16, 1965; minimum (1964-68), 2°C Dec. 17, 1967.
Sediment concentrations: Maximum daily, 20,400 mg/l Dec. 23, 1964; minimum daily, 1 mg/l on many days during 1957-64, 1968.
Sediment loads: Maximum daily, 8,900,000 tons Dec. 23, 1964; minimum daily, 1.0 ton on several days in 1960.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey. 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.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)	PHOS-PHATE (PO4)
OCT.												
02...	570	--	--	4.8	--	110	0	--	5.3	1.0	.05	.14
NOV.												
06...	731	--	--	5.8	--	109	0	12	6.7	.6	.02	--
DEC.												
04...	4290	--	--	3.9	--	80	0	--	4.1	.4	.07	.95
JAN.												
08...	1610	--	--	4.1	--	99	0	--	4.0	.6	.02	.03
FEB.												
05...	8700	--	--	2.5	--	88	0	--	2.4	.5	.01	.53
MAR.												
04...	5200	--	--	2.2	--	84	0	--	--	.2	.00	.35
APR.												
01...	3200	--	--	2.2	--	86	0	--	3.0	.1	.05	.09
MAY												
06...	2210	21	5.5	3.3	.5	86	0	6.2	2.7	.1	.00	--
JUNE												
03...	1450	--	--	3.5	--	88	0	--	2.8	.0	.00	.05
JULY												
08...	640	--	--	3.1	--	107	1	--	3.9	.4	.00	.00
AUG.												
05...	344	--	--	5.4	--	115	0	--	5.2	.0	.01	.08
SEPT.												
09...	482	16	16	5.6	1.0	113	0	12	5.7	.0	.02	.04

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC COND-UCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
02...	--	99	9	--	10	.2	90	224	7.9	16	8.6
NOV.											
06...	--	101	12	--	11	.3	89	220	8.0	14	10.1
DEC.											
04...	--	82	16	--	9	.2	66	179	7.1	7	11.4
JAN.											
08...	--	94	13	--	9	.2	81	198	8.0	4	13.2
FEB.											
05...	--	78	6	--	7	.1	72	164	8.2	6	12.2
MAR.											
04...	--	79	10	--	6	.1	69	157	8.1	9	11.3
APR.											
01...	--	78	7	--	6	.1	71	158	8.1	11	10.7
MAY											
06...	100	75	4	.14	9	.2	71	164	8.2	12	10.9
JUNE											
03...	--	79	7	--	9	.2	72	172	7.8	18	9.4
JULY											
08...	--	100	11	--	6	.1	89	214	8.4	24	8.5
AUG.											
05...	--	113	19	--	9	.2	94	231	8.2	21	9.1
SEPT.											
09...	121	105	12	.16	10	.2	93	228	8.2	21	9.2

11-5300. TRINITY RIVER AT HOOPA, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER..	19	--	16	--	16	--	17	--	17	--	18	--	16	--	16	--	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	16	15	14	15	15	14	15	15	14	14	14	13	13	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	14	13	13	13	14	13	14	13	13	13	12	11	12	--
NOVEMBER.	--	--	--	--	--	--	--	14	13	14	--	14	13	14	13	12	12	--	12	11	--	9	--	9	--	9	--	7	7	6	--	--
MAXIMUM	13	13	13	12	13	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	12	12	12	12	12	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DECEMBER.	7	7	8	7	6	6	6	6	7	7	6	6	4	3	3	3	2	3	4	4	4	6	6	6	6	6	6	5	6	6	5	5
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JANUARY..	5	5	4	3	3	3	3	4	5	4	4	4	4	6	7	7	7	7	7	7	7	7	7	7	7	4	5	3	3	4	4	5
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEBRUARY.	3	3	7	7	7	7	8	8	8	9	9	9	9	8	8	8	9	8	9	9	9	9	9	11	11	11	11	11	11	--	--	8
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MARCH....	11	11	11	11	11	9	10	10	10	10	11	9	8	9	9	8	8	9	11	11	9	10	9	9	11	11	9	11	12	13	13	10
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APRIL....	12	12	9	12	12	13	13	14	16	--	16	15	14	14	13	11	--	13	13	13	13	14	14	14	15	11	18	18	18	18	--	13
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY.....	18	18	19	18	18	17	18	18	18	18	17	16	20	15	18	19	18	20	17	18	15	16	16	--	17	18	21	21	21	21	19	18
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE.....	--	--	21	--	16	--	19	--	--	21	--	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23	--	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JULY.....	--	--	25	--	26	--	--	--	26	26	--	25	--	--	24	--	24	--	24	--	--	24	--	24	--	25	--	--	26	--	--	--
MAXIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	24	23	--
MINIMUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	20	--
AUGUST...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	24	24	23	22	22	22	23	22	23	23	22	22	19	21	20	19	19	19	18	17	18	18	19	19	19	17	19	20	21	21	22	20
MINIMUM	20	20	20	19	18	18	18	19	19	19	19	19	18	18	17	17	17	17	17	15	17	15	16	17	16	15	16	17	17	18	18	17
SEPTEMBER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAXIMUM	21	21	21	21	21	21	21	21	20	20	19	20	19	18	18	19	19	18	17	16	15	16	16	17	17	18	18	17	17	17	--	18
MINIMUM	19	18	18	18	18	19	18	18	18	17	17	17	17	17	16	16	17	16	15	14	13	13	13	14	15	15	15	15	14	14	--	16

11-5300. TRINITY RIVER AT HOOPA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	328	6	5.3	651	5	8.8	1210	81	265
2	570	24	37	642	8	14	1260	108	406
3	1410	111	450	688	11	20	2440	243	1660
4	1270	70	240	698	9	17	4290	863	10400
5	1010	39	106	712	7	13	7170	1920	37600
6	934	26	66	731	11	22	4090	549	6380
7	840	13	29	707	12	23	3850	263	2730
8	775	6	13	730	16	32	3100	150	1260
9	732	5	9.9	794	22	47	2220	120	719
10	709	10	19	826	17	38	1900	120	616
11	686	8	15	826	12	27	1800	118	573
12	671	5	9.1	794	10	21	1740	72	338
13	660	7	12	794	14	30	1650	45	200
14	648	6	10	2530	454	3500	1330	43	154
15	643	3	5.2	2770	343	2710	1380	45	168
16	640	2	3.5	1440	69	268	1370	48	178
17	602	3	4.9	1070	23	66	1390	34	128
18	611	17	28	898	13	32	1960	128	701
19	608	16	26	810	11	24	1790	181	875
20	602	10	16	762	17	35	1530	109	450
21	742	34	68	722	23	45	1400	70	265
22	881	25	59	690	27	50	1350	42	153
23	850	13	30	666	34	61	1420	38	146
24	766	8	17	642	37	64	1570	46	195
25	732	7	14	626	24	41	1830	41	203
26	700	6	11	610	13	21	2450	186	1230
27	673	6	11	626	16	27	3400	392	3600
28	731	23	45	690	19	35	3950	272	2900
29	726	21	41	1070	191	629	3800	172	1760
30	692	10	19	1390	242	917	3190	126	1090
31	669	5	9.0	--	--	--	2760	95	708
TOTAL	23111	--	1428.9	27605	--	8837.8	74590	--	78051

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	2490	85	571	3930	480	5090	6430	1020	17700
2	2260	101	616	5220	704	10400	6030	861	14000
3	2030	82	449	10800	1660	48500	5600	712	10800
4	1880	46	233	9800	820	21700	5200	679	9530
5	1780	37	178	8700	630	14800	4900	751	9940
6	1670	35	158	8340	710	16000	4600	681	8460
7	1540	28	116	8840	700	16700	4300	530	6150
8	1610	37	161	9200	600	14900	3900	444	4680
9	2260	193	1430	9010	600	14600	3700	432	4320
10	6640	1410	26400	8890	540	13000	3500	392	3700
11	5080	700	9600	8400	510	11600	3200	358	3090
12	3620	320	3130	7800	480	10100	2900	452	3540
13	5040	675	10700	7500	580	11700	3530	550	5240
14	25800	3680	277000	7160	520	10100	3350	459	4150
15	45100	2690	328000	6590	495	8810	3350	468	4230
16	30300	1780	146000	6430	400	6940	3910	548	5790
17	18800	1360	69000	8890	695	16700	5090	728	10000
18	12200	1300	42800	11500	1480	46000	4170	530	5970
19	8700	1020	24000	13700	1470	62000	3580	563	5440
20	7100	760	14600	36700	3150	316000	3240	428	3740
21	6460	660	11500	33800	2100	192000	3010	355	2890
22	6460	820	14300	37000	2340	241000	2800	304	2300
23	6410	750	13000	44900	3720	456000	2690	344	2500
24	6050	780	12700	30300	2280	187000	2560	349	2410
25	5620	700	10600	21700	1820	107000	3410	451	4150
26	4970	560	7510	15900	1410	60500	3440	346	3210
27	4650	630	7910	12100	1190	38900	3250	332	2910
28	4250	780	8950	9320	1190	29900	3150	350	2980
29	4470	820	9900	7580	1130	23100	3200	350	3020
30	4880	1080	14200	--	--	--	3300	332	2960
31	4200	680	7710	--	--	--	3350	284	2570
TOTAL	244320	--	1073422	410000	--	2011040	118640	--	172370

11-5300. TRINITY RIVER AT HOOPA, CALIF.--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	3200	248	2140	2460	110	731	1370	20	74
2	3050	277	2280	2360	91	580	1410	22	84
3	3000	261	2110	2320	109	683	1450	24	94
4	2900	164	1280	2380	151	970	1320	30	107
5	2780	298	2240	2370	81	518	1250	58	196
6	2650	230	1650	2210	68	406	1210	25	82
7	2550	106	730	2050	88	487	1150	18	56
8	2500	108	729	1950	119	627	1060	20	57
9	2500	90	608	2000	78	421	994	25	67
10	2700	117	853	2050	39	216	914	29	72
11	2900	253	1980	2000	41	221	906	27	66
12	2700	188	1370	1890	50	255	906	25	61
13	2530	99	676	1890	51	260	898	28	68
14	2460	70	465	1840	51	253	826	31	69
15	2400	99	642	1750	60	284	794	28	60
16	2300	149	925	1650	80	356	794	24	51
17	2230	148	891	1650	46	205	830	21	47
18	2150	111	644	1700	23	106	880	18	43
19	2100	91	516	1850	41	205	920	15	37
20	2000	82	443	2500	168	1130	990	13	35
21	2000	70	378	2800	70	529	990	10	27
22	2100	61	346	2500	51	344	950	14	36
23	2200	38	226	2000	46	248	930	18	45
24	2300	60	373	1690	30	137	910	22	54
25	2360	82	523	1650	57	254	900	18	44
26	2350	63	400	1700	49	225	880	13	31
27	2380	34	218	1710	42	194	870	8	19
28	2400	62	402	1650	42	187	850	3	6.9
29	2390	70	452	1620	28	122	770	3	6.2
30	2450	109	721	1510	27	110	720	4	7.8
31	--	--	--	1410	19	72	--	--	--
TOTAL	74530	--	27211	61110	--	11336	29642	--	1702.9

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT (TONS/DAY)
1	680	5	9.2	347	4	3.7	518	4	5.6
2	630	6	10	350	3	2.8	481	3	3.9
3	630	6	10	360	3	2.9	502	3	4.1
4	620	7	12	357	4	3.9	513	4	5.5
5	630	7	12	344	4	3.7	512	3	4.1
6	650	7	12	331	3	2.7	498	2	2.7
7	670	8	14	333	3	2.7	490	2	2.6
8	640	8	14	332	3	2.7	485	2	2.6
9	600	6	9.7	354	4	3.8	482	1	1.3
10	570	4	6.2	353	4	3.8	473	1	1.3
11	560	3	4.5	341	4	3.7	475	1	1.3
12	540	2	2.9	332	4	3.6	472	2	2.5
13	530	2	2.9	319	4	3.4	483	3	3.9
14	520	2	2.8	334	4	3.6	561	2	3.0
15	510	2	2.8	332	4	3.6	581	1	1.6
16	495	3	4.0	340	4	3.7	540	1	1.5
17	480	4	5.2	348	4	3.8	538	1	1.5
18	470	5	6.3	372	5	5.0	515	2	2.8
19	465	7	8.8	461	10	12	488	2	2.6
20	455	6	7.4	612	25	41	494	2	2.7
21	445	4	4.8	772	16	33	501	2	2.7
22	435	3	3.5	730	10	20	506	1	1.4
23	430	5	5.8	638	8	14	503	1	1.4
24	410	9	10	584	10	16	504	1	1.4
25	390	7	7.4	630	25	43	503	2	2.7
26	365	4	3.9	1020	47	129	492	2	2.7
27	360	4	3.9	953	29	75	487	1	1.3
28	420	4	4.5	802	11	24	479	1	1.3
29	420	4	4.5	698	4	7.5	465	1	1.3
30	370	4	4.0	612	5	8.3	457	1	1.2
31	360	5	4.9	553	5	7.5	--	--	--
TOTAL	15750	--	213.9	15244	--	493.4	14998	--	74.5

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1109540
TOTAL LOAD FOR YEAR (TONS) 3386181.4

11-5300. TRINITY RIVER AT HOOPA, CALIF.--Continued

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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 10, 1968	1625	4	8280	2090	46700	13	20	29	39	51	59	67	76	86	99	100	VPWC
JAN 14.....	1105	6	24800	5100	341000	14	20	30	43	52	59	82	95	100	--	--	VPWC
JAN 14.....	1500	6	30900	5030	420000	14	22	31	44	54	62	83	96	100	--	--	VPWC
JAN 15.....	1600	6	45000	2440	296000	13	20	32	42	54	62	81	94	99	100	--	VPWC
FEB 21.....	1630	9	36500	2460	242000	11	16	23	32	40	47	59	81	96	100	--	VPWC
FEB 22.....	1645	9	36700	2640	262000	14	20	30	41	49	57	68	87	98	100	--	VPWC
FEB 23.....	1620	9	45300	2960	362000	13	20	29	39	51	60	73	92	99	100	--	VPWC
FEB 25.....	1505	11	20700	1860	104000	--	--	--	--	--	41	51	74	93	100	--	V
FEB 26.....	1610	11	15000	1300	52700	11	16	22	28	30	44	53	72	92	100	--	VBWC
FEB 27.....	1615	11	11000	1190	35300	10	16	21	24	25	40	46	66	96	100	--	VBWC
MAR 16.....	1535	8	4030	558	6070	3	12	22	28	31	51	56	66	93	100	--	VBWC

11-5303. BLUE CREEK NEAR KLAMATH, CALIF.

LOCATION.--Lat 41°27'00", long 123°53'40", in NE¼NW¼ sec.12, T.12 N., R.2 E., Del Norte 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.
RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 21°C on many days during June to September; minimum, 4°C Jan. 27-29.
EXTREMES, 1966-68.--Water temperatures: Maximum, 21°C on many days in 1967 and 1968; minimum, 4°C Feb. 15, Mar. 3, 1967, Jan. 27-29, 1968.
REMARKS.--Recorder stoppped Jan. 9-14.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	14	14	14	14	15	16	16	16	16	16	17	17	16	16	16	16	16	15	16	15	14	14	14	15	15	14	14	13	13	13	14	14
MINIMUM	13	12	13	13	13	13	13	13	13	14	14	14	14	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12	12	12	12	13
NOVEMBER																																
MAXIMUM	13	14	14	14	15	15	15	14	14	13	13	13	13	12	12	11	12	12	11	11	11	11	11	11	11	9	9	9	9	9	--	12
MINIMUM	12	13	13	13	13	13	13	14	12	12	12	12	12	12	10	10	10	11	10	10	10	9	10	9	9	8	9	9	8	8	--	11
DECEMBER																																
MAXIMUM	9	9	9	9	8	8	8	9	9	8	8	8	7	6	6	6	7	7	7	7	7	8	8	7	7	8	7	7	7	7	7	7
MINIMUM	8	8	8	8	8	8	8	8	8	8	7	6	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7	6	6	6	7
JANUARY																																
MAXIMUM	7	6	6	6	6	6	7	7	--	--	--	--	--	--	8	8	7	8	8	8	9	9	9	8	8	7	6	6	6	6	6	7
MINIMUM	6	6	5	6	6	5	6	7	--	--	--	--	--	--	8	7	6	7	7	8	8	8	8	8	7	6	4	4	4	5	6	6
FEBRUARY																																
MAXIMUM	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	9	8	9	9	9	9	9	10	10	10	10	10	10	--	--	8
MINIMUM	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	9	9	9	9	9	9	9	9	8	--	--	7
MARCH																																
MAXIMUM	9	10	10	10	9	9	9	9	9	9	9	8	8	8	9	8	8	9	9	9	9	10	10	10	9	9	9	11	11	10	10	9
MINIMUM	9	8	9	9	8	8	8	8	7	7	8	8	7	7	8	7	7	7	7	7	8	9	9	9	8	7	7	8	8	8	8	8
APRIL																																
MAXIMUM	9	11	11	11	11	12	12	12	13	13	13	12	12	12	11	11	11	12	12	12	12	12	11	13	13	13	13	14	14	13	--	12
MINIMUM	8	9	9	9	9	8	9	9	9	11	11	9	9	9	9	8	8	8	9	8	8	8	9	9	9	9	10	10	11	11	--	9
MAY																																
MAXIMUM	14	14	15	13	14	14	14	14	14	12	14	12	12	14	14	16	14	16	13	13	13	13	13	12	14	13	15	15	16	16	15	14
MINIMUM	11	10	11	11	10	9	10	10	11	11	11	11	10	10	10	11	12	12	12	12	11	11	11	11	12	12	11	12	11	12	12	11
JUNE																																
MAXIMUM	16	14	16	17	14	14	17	17	17	17	17	17	16	18	18	19	19	19	19	19	19	19	20	20	21	20	19	19	19	19	--	18
MINIMUM	12	13	13	14	13	13	12	13	13	13	13	12	12	13	13	13	14	14	14	14	14	14	16	15	16	16	16	15	13	14	--	13
JULY																																
MAXIMUM	19	18	20	20	21	21	21	21	21	21	18	18	21	19	19	20	20	21	21	21	21	21	21	20	21	21	21	21	21	21	20	20
MINIMUM	14	15	16	16	16	16	16	16	16	16	16	16	16	16	15	16	15	16	16	16	16	16	16	16	16	16	16	17	17	17	17	16
AUGUST																																
MAXIMUM	21	21	21	18	21	21	21	19	21	21	21	20	18	20	20	19	19	19	18	18	19	19	20	19	17	17	18	19	19	20	21	19
MINIMUM	17	17	17	17	16	16	16	17	17	17	17	17	17	17	16	17	16	17	16	16	17	16	16	16	16	16	15	16	16	16	16	16
SEPTEMBER																																
MAXIMUM	21	21	20	19	21	20	21	19	18	19	19	20	18	18	19	19	19	17	18	18	18	18	18	18	19	18	18	18	18	18	--	18
MINIMUM	17	17	16	17	17	17	17	17	16	16	16	17	16	16	16	15	16	16	14	14	14	14	14	15	16	16	16	15	14	16	--	16

11-5305. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
Water temperatures: November 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 26°C on several days during July and August; minimum, 4°C on several days in December.
EXTREMES, 1965-68.--Water temperatures: Maximum (1966-68). 26°C on several days during July and August 1968; minimum, 4°C on several days during January and December 1967.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	DIS-CHARGE (CFS)	SILICA (SIO2)	DIS-SOLVED IRON (FE)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	LITHIUM (LI)	STRON-TIUM (SR)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)
OCT.												
03...	4540	17	.02	22	8.8	12	1.7	.01	.10	105	0	18
NOV.												
07...	3680	19	.03	21	10	11	1.7	.02	.01	120	0	13
DEC.												
05...	26700	13	.00	14	5.9	5.6	1.0	.01	.10	63	0	11
JAN.												
09...	8700	16	.04	16	7.3	7.3	1.2	.00	.10	84	0	9.0
FEB.												
05...	28600	14	.05	14	6.4	4.2	.9	.00	.10	64	0	17
MAR.												
04...	27600	15	.01	15	6.5	3.8	.8	.00	.09	76	0	7.0
APR.												
02...	18900	14	.05	15	6.5	3.9	.9	.00	.10	74	0	9.0
MAY												
07...	9080	12	.01	15	6.6	4.3	.9	.00	.09	77	0	9.0
JUNE												
04...	6600	12	.00	16	6.7	4.5	.9	.00	.10	81	0	9.0
JULY												
09...	3160	13	.01	20	8.4	7.0	1.4	.00	.14	100	0	12
AUG.												
06...	2270	13	.00	22	9.3	8.6	1.7	.00	.14	114	0	9.0
SEPT.												
10...	2530	15	.00	21	9.2	10	1.7	.01	.14	111	0	14

DATE	CHLO-RIDE (CL)	FLUO-RIDE (F)	NITRATE (NO3)	PHOS-PHATE (PO4)	BORON (B)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3
OCT.												
03...	6.1	.1	1.2	.50	.10	139	91	5	.19	22	.5	86
NOV.												
07...	6.0	.1	1.4	.39	.10	142	94	0	.19	20	.5	98
DEC.												
05...	4.5	.0	1.4	.23	.00	88	60	8	.12	16	.3	52
JAN.												
09...	1.6	.1	3.5	.03	.10	103	70	1	.16	18	.4	69
FEB.												
05...	1.9	.0	.6	.18	.00	91	62	10	.12	13	.2	52
MAR.												
04...	1.4	.1	.5	.20	.00	87	64	2	.12	12	.2	62
APR.												
02...	1.4	.0	1.3	.07	.01	88	64	3	.12	12	.2	61
MAY												
07...	2.4	.0	.8	.08	.28	89	64	1	.12	13	.2	63
JUNE												
04...	2.6	.1	1.3	.10	.00	93	68	2	.13	13	.2	66
JULY												
09...	4.0	.1	2.0	.27	.00	117	84	2	.16	15	.3	82
AUG.												
06...	4.6	.1	.0	.24	.03	124	94	1	.17	16	.4	94
SEPT.												
10...	6.8	.2	1.3	--	.07	134	90	0	.18	19	.5	91

11-5305. KLAMATH RIVER NEAR KLAMATH, CALIF.--Continued

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	TURBIDITY	DISSOLVED OXYGEN
OCT.					
03...	216	7.8	15	41	9.1
NOV.					
07...	221	8.0	12	5.0	10.2
DEC.					
05...	140	7.8	7	1650	11.6
JAN.					
09...	167	7.4	4	5.0	12.6
FEB.					
05...	133	7.5	7	110	12.6
MAR.					
04...	141	7.9	11	105	11.3
APR.					
02...	140	7.8	13	30	10.8
MAY					
07...	145	7.7	13	5.0	10.4
JUNE					
04...	148	7.7	18	3.0	9.1
JULY					
09...	195	8.0	22	1.0	8.4
AUG.					
06...	216	7.9	21	15	8.5
SEPT.					
10...	215	8.1	20	--	10.0

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

MONTH	DAY 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
OCTOBER																																
MAXIMUM	21	20	20	19	17	17	17	17	17	17	17	17	17	18	17	16	16	15	16	16	16	16	16	16	16	16	16	16	15	14	14	16
MINIMUM	20	20	19	17	17	17	17	17	17	17	17	17	17	16	15	14	14	15	15	16	16	16	15	16	16	16	16	14	14	13	13	16
NOVEMBER																																
MAXIMUM	13	13	14	14	14	14	14	14	14	14	13	13	13	13	12	12	12	12	11	11	11	11	10	9	9	8	8	7	7	7	--	11
MINIMUM	13	13	13	14	14	14	14	14	14	14	13	13	13	13	12	12	11	11	11	11	10	11	9	8	8	8	7	7	7	7	--	11
DECEMBER																																
MAXIMUM	7	6	6	6	6	6	6	6	6	5	5	5	4	4	4	4	4	4	5	4	4	4	5	5	4	4	5	5	6	6	6	5
MINIMUM	6	6	6	6	6	6	6	6	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	6	4
JANUARY																																
MAXIMUM	6	6	6	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	7	7	7	7	7	7	6	6	7
MAXIMUM	6	6	6	6	6	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	7	7	7	7	7	7	6	6	6
MINIMUM	6	6	6	6	6	5	7	7	7	7	7	7	7	7	7	7	7	6	7	7	6	7	7	7	7	7	7	7	6	6	6	6
FEBRUARY																																
MAXIMUM	6	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	--	--	8
MINIMUM	6	6	7	7	7	7	7	7	8	8	8	8	8	8	7	8	8	8	8	8	9	9	9	9	9	8	9	9	9	--	--	8
MARCH																																
MAXIMUM	9	9	10	10	10	10	10	9	9	9	10	10	10	10	9	10	10	10	10	10	11	11	11	11	12	12	11	11	11	12	12	10
MINIMUM	9	9	9	10	10	10	9	9	9	8	9	10	10	9	9	9	10	9	9	9	10	10	10	11	11	11	11	11	11	11	12	9
APRIL																																
MAXIMUM	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	13	12	12	12	12	12	12	12	12	13	13	14	14	14	--	12
MINIMUM	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	12	12	12	12	12	12	12	12	12	12	12	13	14	14	--	12
MAY																																
MAXIMUM	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15	15	16	16	16	17	17	17	16	16	16	16	16	16	16	17	17	16
MINIMUM	14	15	16	16	16	16	15	15	16	16	15	16	16	15	14	14	15	16	16	16	17	16	16	16	16	16	15	15	16	16	17	15
JUNE																																
MAXIMUM	17	17	17	17	17	18	18	17	18	18	18	18	18	18	18	18	19	19	20	21	21	21	21	21	22	22	23	23	23	23	--	19
MINIMUM	17	17	17	17	17	17	17	17	17	18	18	18	18	18	17	18	18	19	19	20	21	21	21	21	21	22	22	23	23	22	--	19
JULY																																
MAXIMUM	23	22	22	23	23	23	23	24	24	24	24	25	25	24	24	24	24	24	24	24	24	24	24	25	25	24	24	25	25	26	26	24
MINIMUM	22	22	22	22	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	25	25	26	23
AUGUST																																
MAXIMUM	26	26	26	26	26	24	24	25	25	25	25	25	24	23	24	24	24	23	23	23	23	22	22	22	22	22	21	21	21	22	22	23
MINIMUM	26	26	26	25	24	24	24	24	25	25	25	24	23	23	23	24	23	23	23	22	20	21	21	21	22	21	20	20	21	21	22	23
SEPTEMBER																																
MAXIMUM	22	23	23	23	23	23	23	23	23	23	22	22	22	22	22	22	22	22	22	21	21	20	19	20	21	21	21	21	21	21	--	22
MINIMUM	22	22	23	23	23	23	23	23	23	22	22	22	22	21	21	21	21	22	21	20	19	19	18	19	19	20	20	20	21	20	--	21

MISCELLANEOUS ANALYSES OF STREAMS IN KLAMATH RIVER BASIN

SUSPENDED SEDIMENT AND PARTICLE SIZE, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

(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
11-5258. WEAVER CREEK NEAR DOUGLAS CITY, CALIF. (LAT 40°40'16", LONG 122°56'31")																	
DEC 4, 1967	1550	4	43	66	7.7	--	--	--	--	--	--	--	--	--	--	--	
DEC 4.....	1605	4	46	64	7.9	--	--	--	--	--	--	--	--	--	--	--	
JAN 14, 1968	1700	2	1080	1630	4750	14	16	25	34	42	54	73	87	97	100	--	VPWC
FEB 19.....	1755	6	1540	2390	9940	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1820	6	1540	2380	9900	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1825	6	1540	2150	8940	16	19	27	36	47	57	72	86	96	99	100	VPWC
FEB 21.....	1310	8	715	1260	2430	--	--	--	--	--	--	--	--	--	--	--	
FEB 21.....	1400	8	715	1520	2930	--	--	--	--	--	--	--	--	--	--	--	
FEB 21.....	1405	8	715	1380	2660	22	26	35	44	52	61	70	84	98	100	--	VPWC
MAR 18.....	0940	3	96	9	2.3	--	--	--	--	--	--	--	--	--	--	--	
MAY 1.....	1350	17	34	3	.28	--	--	--	--	--	--	--	--	--	--	--	
JUN 3.....	1225	18	15	1	.04	--	--	--	--	--	--	--	--	--	--	--	
JUL 2.....	0930	18	4.4	4	.05	--	--	--	--	--	--	--	--	--	--	--	
AUG 12.....	1200	22	.40	3	.01	--	--	--	--	--	--	--	--	--	--	--	
11-5265. NORTH FORK TRINITY RIVER AT HELENA, CALIF. (LAT 40°46'55", LONG 123°07'40")																	
NOV 14, 1967	1720	12	408	17	19	--	--	--	--	--	--	--	--	--	--	--	
NOV 15.....	1140	9	197	2	1.1	--	--	--	--	--	--	--	--	--	--	--	
NOV 15.....	1700	9	169	1	.46	--	--	--	--	--	--	--	--	--	--	--	
DEC 2.....	1220	3	66	2	.36	--	--	--	--	--	--	--	--	--	--	--	
DEC 4.....	1445	3	131	11	3.9	--	--	--	--	--	--	--	--	--	--	--	
JAN 4, 1968	1325	1	177	1	.48	--	--	--	--	--	--	--	--	--	--	--	
JAN 13.....	1030	3	560	10	15	--	--	--	--	--	--	--	--	--	--	--	
JAN 13.....	1300	3	682	24	44	--	--	--	--	--	--	--	--	--	--	--	
JAN 13.....	1620	4	860	19	44	--	--	--	--	--	--	--	--	--	--	--	
JAN 14.....	0930	6	3610	622	6060	1	9	21	28	33	72	80	94	100	--	--	SCBW
JAN 14.....	1200	6	3230	594	5180	2	9	20	27	31	68	75	90	100	--	--	SCBW
JAN 14.....	1440	6	3100	666	5570	--	--	--	--	--	--	--	--	--	--	--	
JAN 14.....	1830	4	3940	962	10200	--	--	--	--	--	--	--	--	--	--	--	
JAN 14.....	1835	4	3940	1240	13200	5	12	17	26	34	45	60	77	94	99	100	VPWC
JAN 15.....	1130	7	3730	713	7180	--	--	--	--	--	--	--	--	--	--	--	
FEB 19.....	1700	7	2380	1020	6550	--	--	--	--	--	--	--	--	--	--	--	
MAR 18.....	1250	9	466	5	6.3	--	--	--	--	--	--	--	--	--	--	--	
MAY 1.....	1500	12	287	2	1.5	--	--	--	--	--	--	--	--	--	--	--	
JUN 3.....	1330	14	224	1	.60	--	--	--	--	--	--	--	--	--	--	--	
JUL 2.....	1110	17	72	1	.19	--	--	--	--	--	--	--	--	--	--	--	
AUG 12.....	1420	21	28	1	.08	--	--	--	--	--	--	--	--	--	--	--	
11-5270. TRINITY RIVER NEAR BURNT RANCH, CALIF. (LAT 40°47'20", LONG 123°26'20")																	
OCT 17, 1967	1630	14	369	2	2.0	--	--	--	--	--	--	--	--	--	--	--	
NOV 20.....	1510	10	474	43	55	--	--	--	--	--	--	--	--	--	--	--	
DEC 5.....	1300	5	1500	58	235	--	--	--	--	--	--	--	--	--	--	--	
JAN 8, 1968	1200	4	574	13	20	--	--	--	--	--	--	--	--	--	--	--	
FEB 7.....	1100	4	2290	38	235	--	--	--	--	--	--	--	--	--	--	--	
MAR 12.....	1800	8	1650	12	53	--	--	--	--	--	--	--	--	--	--	--	
JUN 22.....	1330	26	522	2	2.8	--	--	--	--	--	--	--	--	--	--	--	
AUG 21.....	1400	20	346	2	1.9	--	--	--	--	--	--	--	--	--	--	--	

11-5325. 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.
RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1968.
Water temperatures: October 1965 to September 1968.
EXTREMES, 1967-68.--Water temperatures: Maximum, 23°C July 28, 30; minimum, 4°C on several days during December and January.
EXTREMES, 1966-68.--Water temperatures: Maximum, 23°C July 28, 30, 1968; minimum, 4°C on several days during 1967-68.
REMARKS.--Chemical-quality records furnished by California Department of Water Resources and reviewed by Geological Survey.

CHEMICAL ANALYSES IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	MEAN DIS-CHARGE (CFS)	CAL-CIUM (CA)	MAG-NE-SIUM (MG)	SODIUM (NA)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO3)	CAR-BONATE (CO3)	SULFATE (SO4)	CHLO-RIDE (CL)	NITRATE (NO3)	BORON (B)
OCT.											
03...	1170	--	--	2.8	--	70	0	--	3.9	--	.00
NOV.											
07...	373	--	--	2.7	--	83	0	--	3.3	--	.00
DEC.											
05...	16300	--	--	2.4	--	51	0	--	4.7	--	.00
JAN.											
09...	7460	--	--	1.6	--	53	0	--	2.5	--	.16
FEB.											
05...	11100	--	--	1.5	--	48	0	--	3.1	--	.05
MAR.											
05...	3260	--	--	1.6	--	52	0	--	1.6	--	.00
APR.											
02...	3050	--	--	1.6	--	52	0	--	2.0	--	.03
MAY											
07...	336	9.4	7.9	2.2	.4	65	0	3.4	2.2	.0	.00
JUNE											
03...	1230	--	--	1.9	--	66	0	--	2.0	--	.00
JULY											
09...	418	--	--	1.8	--	80	0	--	2.4	--	.00
AUG.											
06...	319	--	--	2.7	--	90	0	--	2.7	--	.00
SEPT.											
10...	300	9.5	13	2.8	.9	96	0	5.9	3.7	.0	.00

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C)	HARD-NESS (CA,MG)	NON-CAR-BONATE HARD-NESS	DIS-SOLVED SOLIDS (TONS PER AC-FT)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	ALKA-LINITY AS CACO3	SPECI-FIC CONDUCTANCE (MICRO-MHOS)	PH	TEMP-ERATURE (DEG C)	DISS-OLVED OXYGEN
OCT.											
03...	--	67	10	--	8	.1	57	150	7.8	13	10.5
NOV.											
07...	--	75	7	--	7	.1	68	160	8.0	12	10.8
DEC.											
05...	--	53	11	--	9	.1	42	99	8.1	8	12.2
JAN.											
09...	--	48	5	--	7	.1	43	100	8.0	7	12.6
FEB.											
05...	--	42	2	--	7	.1	39	90	8.0	8	12.6
MAR.											
05...	--	47	4	--	7	.1	43	96	8.0	9	12.0
APR.											
02...	--	45	2	--	7	.1	43	94	8.0	9	12.2
MAY											
07...	72	56	3	.10	8	.1	53	118	8.2	11	11.4
JUNE											
03...	--	56	2	--	7	.1	54	119	8.2	16	10.3
JULY											
09...	--	70	4	--	5	.1	66	148	8.2	19	9.4
AUG.											
06...	--	78	4	--	7	.1	74	166	8.2	18	10.2
SEPT.											
10...	92	79	0	.13	7	.1	79	164	7.6	19	10.7

11-5325. SMITH RIVER NEAR CRESCENT CITY, CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

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
OCTOBER																																
MAXIMUM	19	16	15	14	15	15	15	15	15	16	16	15	14	14	13	14	14	13	14	13	14	14	14	14	14	13	13	13	12	12	13	14
MINIMUM	16	14	13	13	14	14	14	14	14	14	16	14	14	13	13	12	13	13	13	13	13	13	14	13	13	12	13	12	11	11	12	13
NOVEMBER																																
MAXIMUM	13	13	13	13	13	13	13	13	12	12	12	12	12	12	11	11	10	11	10	9	9	9	8	9	9	8	7	8	8	8	--	11
MINIMUM	12	12	12	12	12	13	13	12	12	12	12	12	12	11	10	9	10	10	9	9	9	8	8	8	8	7	7	7	8	7	--	10
DECEMBER																																
MAXIMUM	8	8	9	9	8	8	8	8	8	8	7	7	6	4	4	5	5	6	6	6	6	7	7	7	7	7	7	7	7	6	6	7
MINIMUM	7	8	8	8	8	7	8	8	8	7	7	6	4	4	4	4	4	5	6	6	6	6	7	7	7	7	7	7	6	6	6	6
JANUARY																																
MAXIMUM	6	6	5	4	5	4	6	7	8	7	6	7	9	9	9	8	7	7	8	8	9	8	8	8	8	6	5	4	5	6	7	7
MINIMUM	6	5	4	4	4	4	4	6	7	6	6	6	8	8	8	7	7	7	7	8	8	8	8	7	6	5	4	4	4	5	6	6
FEBRUARY																																
MAXIMUM	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	10	10	10	--	--	8
MINIMUM	6	7	7	7	7	7	7	7	7	8	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	9	9	9	9	--	--	8
MARCH																																
MAXIMUM	10	10	10	10	10	9	9	9	9	8	9	9	8	9	9	9	8	9	9	9	9	10	11	11	10	9	10	11	11	11	10	9
MINIMUM	9	9	9	9	8	8	8	7	7	7	8	8	8	8	8	8	8	7	7	7	8	8	9	9	8	7	9	8	9	8	8	8
APRIL																																
MAXIMUM	10	10	11	10	11	11	12	12	13	13	13	12	12	12	12	12	12	12	12	12	13	13	12	14	14	15	16	17	17	17	--	12
MINIMUM	9	9	8	9	9	8	9	9	9	11	11	9	9	9	11	9	8	9	9	9	9	10	11	11	11	12	13	13	14	14	--	10
MAY																																
MAXIMUM	16	17	17	17	17	16	16	17	17	17	16	16	14	16	16	17	17	18	17	16	16	14	14	14	14	16	17	17	18	18	17	16
MINIMUM	13	13	14	14	14	13	13	13	14	14	14	14	13	13	13	14	16	15	16	14	13	13	13	13	13	13	14	14	14	14	15	13
JUNE																																
MAXIMUM	17	17	18	19	17	17	17	18	18	17	17	17	17	18	19	20	20	20	20	21	21	19	21	22	22	22	21	20	19	20	--	19
MINIMUM	16	17	16	17	15	14	14	14	15	15	15	14	14	14	16	17	17	17	17	18	18	17	18	18	19	19	19	18	17	17	--	16
JULY																																
MAXIMUM	21	19	20	21	21	22	22	22	22	22	21	19	21	21	20	20	21	21	21	22	22	21	21	20	21	22	22	23	22	23	22	21
MINIMUM	18	18	18	18	19	19	19	19	19	19	19	17	19	18	18	18	18	19	19	19	19	19	19	18	19	19	19	20	21	21	20	18
AUGUST																																
MAXIMUM	21	20	20	20	21	21	21	20	21	21	20	19	19	20	19	20	19	19	18	18	19	19	20	19	19	18	18	19	19	21	21	19
MINIMUM	19	19	19	18	18	18	19	19	19	19	19	18	18	18	18	18	19	18	18	17	17	17	18	18	17	17	16	16	17	18	19	18
SEPTEMBER																																
MAXIMUM	21	20	19	19	19	19	19	19	19	18	18	19	19	18	18	18	18	18	17	16	16	16	17	17	18	17	17	17	17	16	--	18
MINIMUM	19	18	18	18	18	18	18	18	18	17	18	18	17	17	16	16	17	17	16	14	14	14	14	16	16	17	16	16	16	16	--	16

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