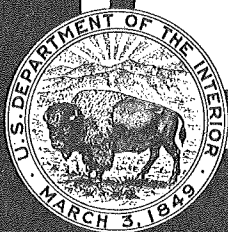


1967

Rebbs

Water Resources Data for California

Part 2. Water Quality Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

United States Department of the Interior
Geological Survey - Water Resources Division

WATER RESOURCES DATA
FOR
CALIFORNIA

1967

Part 2. Water Quality Records

Prepared in cooperation with

California Department of Water Resources
California Water Quality Control Board
Bolinas Harbor District
Monterey County Flood Control and Water
Conservation District
San Luis Obispo County Flood Control and
Water Conservation District
San Mateo County
Santa Clara County Flood Control and Water
Conservation District
Bureau of Reclamation, U.S. Department of
the Interior
Corps of Engineers, U.S. Army
Soil Conservation Service, U.S. Department
of Agriculture

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

Streamflow records for most of the water-quality stations in this report are contained in:

Water-Resources Data for California, 1967

Part 1. Surface-Water Records

Volume 1: Colorado River Basin, Southern Great Basin, and Pacific Slope Basins, excluding Central Valley

Volume 2: Northern Great Basin and Central Valley

CONTENTS

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

	Page
Introduction.....	1
Cooperation.....	2
Definition of terms and abbreviations.....	3
Station numbers.....	8
Special networks.....	8
Collection and examination of samples.....	9
Solutes.....	9
Temperature.....	11
Sediment.....	11
Turbidity.....	12
Water-supply papers.....	13
Selected references.....	14
Water-quality records.....	16
<u>Colorado River basin</u>	
Colorado River:	
Lake Mead at Hoover Dam, Ariz.-Nev. c.....	16
Colorado River below Hoover Dam, Ariz.-Nev. c.....	19
Lake Havasu:	
<u>Diversions from Lake Havasu</u>	
Colorado River aqueduct near Parker Dam, Ariz-Calif.c	20
Colorado River below Parker Dam, Ariz.-Calif. ct.....	21
Diversions and return flows at and below Imperial Dam	
Gila Gravity Main Canal at Imperial Dam, Ariz.-	
Calif. t.....	23
Yuma Main Canal below Colorado River siphon at Yuma,	
Ariz. ct.....	24
All-American Canal above Pilot Knob Wasteway, Calif.c	26
The Great Basin	
<u>Salton Sea basin</u>	
Salton Sea at Salton Sea State Park, Calif. c.....	27
Alamo River near Niland, Calif. c.....	28
New River near Westmoreland, Calif. c.....	29
Whitewater River at White Water, Calif. c.....	30
Whitewater River near Meca, Calif. c.....	31
<u>Mojave River basin</u>	
Mojave River at The Forks, near Cedar Springs, Calif. c	32
Mojave River at Lower Narrows, near Victorville,	
Calif. c.....	33
Miscellaneous analyses of streams in Mojave River	
basin s.....	34
<u>Antelope Valley</u>	
Big Rock Creek near Valyermo t.....	35

Water-quality records--Continued	
The Great Basin--Continued	
<u>Walker Lake basin</u>	Page
Miscellaneous analyses of streams in Walker Lake	
basin c.....	36
<u>Carson River basin</u>	
Miscellaneous analyses of streams in Carson River	
basin c.....	37
<u>Owens Lake basin</u>	
Owens River:	
Los Angeles aqueduct at outlet, at San Fernando,	
Calif. c.....	38
<u>Pyramid and Winnemucca Lakes basin</u>	
Truckee River at Floriston, Calif. ct.....	39
Miscellaneous analyses of streams in Pyramid and	
Winnemucca Lakes basin c.....	41
<u>Honey Lake basin</u>	
Susan River at Susanville, Calif. c.....	42
Pacific slope basins in California	
<u>Santa Margarita River basin</u>	
Santa Margarita River near Fallbrook, Calif. c.....	43
<u>San Juan Creek basin</u>	
San Juan Creek near San Juan Capistrano, Calif. ts.....	44
Arroyo Trabuco near San Juan Capistrano, Calif. ts....	48
<u>Santa Ana River basin</u>	
Santa Ana River at Colton, Calif. c.....	52
Santa Ana River below Prado Dam, Calif. cs.....	53
<u>San Gabriel River basin</u>	
San Gabriel River at Azusa powerhouse, at Azusa,	
Calif. c.....	56
San Gabriel River at Whittier Narrows, Calif. c.....	57
<u>Los Angeles River basin</u>	
Los Angeles River at Los Angeles, Calif. c.....	58
Rio Hondo:	
Mission Creek below Whittier Narrows Dam, Calif. c..	59
<u>Santa Clara River basin</u>	
Sespe Creek near Wheeler Springs, Calif. t.....	60
Sespe Creek near Fillmore, Calif. cts.....	61
Santa Clara River near Santa Paula, Calif. c.....	66
Santa Paula Creek near Santa Paula, Calif. c.....	67
Miscellaneous analyses of streams in Santa Clara River	
basin s.....	68
<u>Ventura River basin</u>	
Matilija Creek (head of Ventura River) above reservoir,	
near Matilija Hot Springs, Calif. c.....	70
Ventura River near Ventura, Calif. c.....	71
<u>Santa Maria River basin</u>	
Cuyama River (head of Santa Maria River) below Twitchell	
Dam, Calif. c.....	72

Water-quality records--Continued

Pacific slope basins in California--Continued

Page

Arroyo Grande basin

Miscellaneous analyses of streams in Arroyo Grande basin s.....	73
---	----

Big Sur River basin

Big Sur River near Big Sur, Calif. t.....	74
---	----

Salinas River basin

Nacimiento River near Bryson, Calif. ts.....	75
San Antonio River near Lockwood, Calif. ts.....	79
Arroyo Seco near Greenfield, Calif. ts.....	83
Salinas River near Chualar, Calif. cts.....	87

Pajaro River basin

Carnadero Creek:

Uvas Creek above Uvas Reservoir, near Morgan Hill, Calif. ts.....	91
Pajaro River at Chittenden, Calif. c.....	97

Soquel Creek basin

Soquel Creek at Soquel, Calif. t.....	98
---------------------------------------	----

San Lorenzo River basin

San Lorenzo River at Big Trees, Calif. ct.....	99
--	----

Pescadero Creek basin

Pescadero Creek near Pescadero, Calif. t.....	101
---	-----

Colma Creek basin

Colma Creek at South San Francisco, Calif. s.....	102
Spruce Branch at South San Francisco, Calif. s.....	106

Coyote Creek basin

Coyote Creek near Gilroy, Calif. ts.....	110
--	-----

Alameda Creek basin

Arroyo de la Laguna:

Arroyo Valle near Livermore, Calif. ts.....	116
Alameda Creek near Niles, Calif. cts.....	120

Buena Vista Lake basin

Kern River near Quaking Aspen Camp, Calif. t.....	124
Kern River Canal No. 3 near Kernville, Calif. t.....	125
Kern River at Kernville, Calif. ts.....	126
Borel Canal below Isabella Dam, Calif. t.....	128
Miscellaneous analyses of streams in Buena Vista Lake basin c.....	129

Tulare Lake basin

Tule River near Springville, Calif. t.....	130
Tule River below Success Dam, Calif. c.....	131

Middle Fork Kaweah River:

Marble Fork Kaweah River at Potwisha Camp, Calif. t.	132
Kaweah River at Three Rivers, Calif. t.....	133
Kaweah River below Terminus Dam, Calif. c.....	134
Kings River above North Fork, near Trimmer, Calif. t..	135
Kings River below North Fork, near Trimmer, Calif. t..	136
Kings River at Peoples Weir, near Kingsburg, Calif. c.	137

Water-quality records--Continued

Pacific slope basins in California--Continued

	Page
<u>San Joaquin River basin</u>	
Big Creek below Huntington Lake, Calif. t.....	138
Willow Creek at mouth, near Auberry, Calif. t.....	139
San Joaquin River below Kerckhoff powerhouse, Calif. t...	140
Merced River at Happy Isles Bridge, near Yosemite, Calif. t.....	141
Tuolumne River:	
Lily Creek (head of Clavey River) near Pinecrest, Calif. t.....	142
Tuolumne River at Modesto, Calif. t.....	143
Middle Fork Stanislaus River at Hells Half Acre Bridge, near Pinecrest, Calif. t.....	144
Stanislaus River below Goodwin Dam, near Knights Ferry, Calif. t.....	145
San Joaquin River near Vernalis, Calif. cts.....	146
Calaveras River:	
Stockton Ship channel near Rindge Pump, on Rindge Tract, Calif. c.....	151
Delta-Mendota Canal above Tracy pumping plant, near Tracy, Calif. c.....	152
Delta-Mendota Canal near Mendota, Calif. c.....	153
Mokelumne River near Mokelumne Hill, Calif. t.....	154
Mokelumne River below Camanche Dam, Calif. ts.....	155
Mokelumne River at Woodbridge, Calif. t.....	157
Cosumnes River at Michigan Bar, Calif. cts.....	158
San Joaquin River at Antioch, Calif. c.....	163
Miscellaneous analyses of streams in San Joaquin River basin s.....	164
<u>Sacramento River basin</u>	
Sacramento River near Mount Shasta, Calif. t.....	165
Sacramento River at Delta, Calif. ct.....	166
North Fork Pit River:	
South Fork Pit River near Likely, Calif. c.....	168
Pit River near Canby, Calif. cts.....	169
Pit River near Montgomery Creek, Calif. c.....	172
McCloud River above Shasta Lake, Calif. c.....	173
Sacramento River at Keswick, Calif. c.....	174
Clear Creek near Igo, Calif. t.....	175
Cow Creek:	
South Cow Creek near Millville, Calif. t.....	176
Cow Creek near Millville, Calif. t.....	177
Cottonwood Creek near Cottonwood, Calif. cts.....	178
Battle Creek below Coleman Fish Hatchery, near Cotton- wood, Calif. ts.....	182
Sacramento River at Bend, Calif. cts.....	184
Sacramento River near Red Bluff, Calif. t.....	189
Mill Creek at mouth, near Los Molinos, Calif. c.....	190
Thomes Creek at Paskenta, Calif. cts.....	191

Water-quality records--Continued

Pacific slope basins in California--Continued

Sacramento River basin--Continued	Page
Sacramento River near Hamilton City, Calif. c.....	196
Big Chico Creek near Chico, Calif. c.....	197
Stony Creek:	
Little Stony Creek above East Park Reservoir, near Lodoga, Calif. t.....	198
Stony Creek below Black Butte Dam, near Orland, Calif. c.....	199
Sacramento River at Butte City, Calif. t.....	200
Butte Creek near Chico, Calif. ct.....	201
Sacramento River below Wilkins Slough, near Grimes, Calif. t.....	203
Sacramento River above Colusa Trough, at Knights Land- ing, Calif. c.....	204
Colusa Trough near Colusa, Calif. c.....	205
Middle Fork Feather River (head of Feather River):	
Big Grizzly Creek near Portola, Calif. t.....	206
Middle Fork Feather River near Clio, Calif. t.....	207
Middle Fork Feather River near Merrimac, Calif. t.....	208
South Fork Feather River below Ponderosa Dam, Calif. t.....	209
North Fork Feather River:	
Indian Creek:	
Little Grizzly Creek near Genesee, Calif. t.....	210
Indian Creek near Crescent Mills, Calif. t.....	211
North Fork Feather River at Pulga, Calif. t.....	212
West Branch Feather River near Paradise, Calif. t.	213
Feather River at Oroville, Calif. cts.....	214
Feather River near Gridley, Calif. ts.....	219
Feather River at Yuba City, Calif. ts.....	223
Middle Yuba River (head of Yuba River):	
Middle Yuba River above Oregon Creek, near North San Juan, Calif. ts.....	227
Oregon Creek near North San Juan, Calif. t.....	229
North (North Fork) Yuba River below New Bullards Bar Dam, near North San Juan, Calif. t.....	230
South Yuba River at Jones Bar, near Grass Valley, Calif. ts.....	231
Yuba River at Marysville, Calif. t.....	233
Bear River near Wheatland, Calif. c.....	234
Feather River at Nicolaus, Calif. t.....	235
North Fork American River at North Fork Dam, Calif. t.	236
Middle Fork American River:	
Canyon Creek near Georgetown, Calif. t.....	237
South Fork American River near Kyburz, Calif. t.....	238
South Fork American River near Lotus, Calif. t.....	239
American River at Fair Oaks, Calif. t.....	240
Sacramento River at Sacramento, Calif. ts.....	241

Water-quality records--Continued

Pacific slope basins in California--Continued

Sacramento River basin--Continued	Page
Sacramento River at Freeport, Calif. ct.....	245
Yolo Bypass:	
Clear Lake (head of Cache Creek):	
Adobe Creek:	
Highland Creek below Highland Creek Dam, near	
Kelseyville, Calif. ts.....	247
Cache Creek above Rumsey, Calif. ts.....	251
Cache Creek near Capay, Calif. c.....	255
Cache Creek at Yolo, Calif. ts.....	256
Putah Creek near Guenoc, Calif. ts.....	259
Putah Creek near Winters, Calif. t.....	261
Sacramento River near Rio Vista, Calif. c.....	262
Miscellaneous analyses of streams in Sacramento River	
basin cs.....	263
<u>Napa River basin</u>	
Napa River near St. Helena, Calif. t.....	274
Bolinas Lagoon basin	
Pine Creek at Bolinas, Calif. ts.....	275
Miscellaneous analyses of streams in Bolinas Lagoon	
basin s.....	277
<u>Salmon Creek basin</u>	
Salmon Creek at Bodega, Calif. t.....	279
<u>Russian River basin</u>	
Russian River near Ukiah, Calif. ts.....	280
East Fork Russian River near Calpella, Calif. ts.....	289
Lake Mendocino near Ukiah, Calif. ts.....	298
East Fork Russian River near Ukiah, Calif. ts.....	303
Russian River near Hopland, Calif. t.....	313
Russian River near Cloverdale, Calif. ts.....	314
Big Sulphur Creek near Cloverdale, Calif. ts.....	322
Russian River near Healdsburg, Calif. t.....	328
Dry Creek near Cloverdale, Calif. t.....	329
Dry Creek near Geyserville, Calif. ts.....	330
Russian River near Guerneville, Calif. cts.....	339
Miscellaneous analyses of streams in Russian River	
basin s.....	344
<u>Garcia River basin</u>	
Garcia River near Point Arena, Calif. t.....	345
<u>Navarro River basin</u>	
Navarro River near Navarro, Calif. t.....	346
<u>Noyo River basin</u>	
Noyo River near Fort Bragg, Calif. t.....	347
<u>Ten Mile River basin</u>	
Ten Mile River:	
Middle Fork Ten Mile River near Fort Bragg, Calif. t...	348
<u>Mattole River basin</u>	
Mattole River near Petrolia, Calif. ct.....	349

Water-quality records--Continued

Pacific slope basins in California--Continued

Eel River basin

Page

Eel River:

Lake Pillsbury near Potter Valley, Calif. ts.....	351
Eel River below Scott Dam, near Potter Valley, Calif. ts	352
Potter Valley powerhouse tailrace near Potter Valley, Calif. ts.....	354
Eel River near Dos Rios, Calif. cts.....	364
Outlet Creek near Longvale, Calif. s.....	369
Eel River above Dos Rios, Calif. t.....	372
Middle Fork Eel River above Black Butte River, near Covelo, Calif. t.....	373
Black Butte River near Covelo, Calif. cts.....	374
Middle Fork Eel River below Black Butte River, near Covelo, Calif. ts.....	381
Elk Creek near Hearst, Calif. ts.....	388
Middle Fork Eel River near Dos Rios, Calif. cts.....	390
Eel River at Fort Seward, Calif. ts.....	400
Eel River at McCann, Calif. c.....	407
South Fork Eel River near Branscomb, Calif. ts.....	408
South Fork Eel River at Leggett, Calif. t.....	414
South Fork Eel River near Miranda, Calif. ct.....	415
Eel River at Scotia, Calif. cts.....	417
Van Duzen River near Dinsmores, Calif. t.....	427
Van Duzen River near Bridgeville, Calif. cts.....	428
Miscellaneous analyses of streams in Eel River basin s	431

Mad River basin

Mad River near Forest Glen, Calif. ts.....	436
Mad River near Kneeland, Calif. t.....	441
Mad River near Arcata, Calif. cts.....	442

Redwood Creek basin

Redwood Creek at Orick, Calif. t.....	447
---------------------------------------	-----

Klamath River basin

Klamath River below Iron Gate Dam, Calif. ct.....	448
Cottonwood Creek at Hornbrook, Calif. t.....	450
Shasta River near Yreka, Calif. ct.....	451
Scott River near Fort Jones, Calif. c.....	453
Klamath River near Seiad Valley, Calif. t.....	454
Salmon River at Somesbar, Calif. t.....	455
Klamath River at Orleans, Calif. cts.....	456
Trinity River at Lewiston, Calif. ct.....	461
Trinity River near Burnt Ranch, Calif. t.....	463
South Fork Trinity River:	
Hayfork Creek near Hyampom, Calif. t.....	464
South Fork Trinity River below Hyampom, Calif. ts...	465
South Fork Trinity River near Salyer, Calif. ts.....	469
Trinity River at Hoopa, Calif. cts.....	473
Blue Creek near Klamath, Calif. t.....	478

Water-quality records--Continued	
Pacific slope basins in california--Continued	
Klamath River basin--Continued	
Klamath River near Klamath, Calif. ct.....	Page 479
Miscellaneous analyses of streams in Klamath River	
basin s.....	481
<u>Smith River basin</u>	
Smith River near Crescent City, Calif. ct.....	486
Index.....	489

ILLUSTRATION

Figure 1. Map of California showing number and distribution of water-quality stations.....	10
---	----

WATER RESOURCES DATA FOR CALIFORNIA, 1967

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 1967 water year for the quality of surface waters 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 U.S. 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 includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium adsorption ratio, specific conductance, and pH. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle size distribution of suspended sediment and bed material. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder furnishes information from which daily minimums and maximums are obtained.

The Geological Survey has published the annual series of water-supply papers, "Quality of Surface Waters of the United States," from 1941 through 1963 which contained the chemical quality, temperature, and suspended sediment data of the water. Each volume covered 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, p. 13.) These publications are available in most public libraries. Beginning with the 1964

water year, water quality records for surface water, obtained by the Geological Survey were published in a new series of annual releases on a state boundary basis. This report is primarily for local and immediate use, and its distribution is limited. The records will be published in Geological Survey water-supply papers.

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

COOPERATION

In California the work was done under cooperative agreements with:

California Department of Water Resources, William E. Warne, director, succeeded by William R. Gianelli.
California Water Quality Control Board, Paul R. Bonderson, executive officer.
Bollinas Harbor District, Gene McDaniel, president.
Monterey County Flood Control and Water Conservation District, Loran A. Bunte, Jr., district engineer.
San Luis Obispo County Flood Control and Water Conservation District, Robert, H. Born, county hydraulic engineer.
San Mateo County, D. S. Wilson, county engineer and road commissioner.
Santa Clara County Flood Control and Water Conservation District, Donald K. Currlin, manager-counsel.

Assistance in the form of funds was given by the Bureau of Reclamation, U.S. Department of the Interior, Corps of Engineers, U.S. Army, and the Soil Conservation Service, U.S. Department of Agriculture.

Municipal agencies furnishing assistance were:

Alameda County Water District, M. P. Whitefield, general manager.
Metropolitan Water District of Southern California, Lee Streicher, water-purification engineer.
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 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 used or stored.

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.

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, flowing water 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 one 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)."

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.

Equivalents per million (epm) is a unit for expressing the concentration of chemical constituents in solution in terms of the interreacting values of the electrically charged particles, or ions. One equivalent per million of a positively charged ion will react with one equivalent per million of a negatively charged ion. Parts per million is converted to equivalents per million by multiplying by the reciprocal of the combining weight of the ion.

Conversion factors: Parts per million
to equivalents per million

Ion	Multiply by
Aluminum (Al^{+3})	0.11119
Barium (Ba^{+2})	.01456
Bicarbonate (HCO_3^{-1})	.01639
Bromide (Br^{-1})	.01251
Calcium (Ca^{+2})	.04990
Carbonate (CO_3^{-2})	.03333
Chloride (Cl^{-1})	.02821
Chromium (Cr^{+6})	.11539
Cobalt (Co^{+2})	.03394
Copper (Cu^{+2})	.03148
Fluoride (F^{-1})	.05264
Hydrogen (H^{+1})	.99209
Hydroxide (OH^{-1})	.05880
Iodide (I^{-1})	.00788
Iron (Fe^{+3})	.05372
Lead (Pb^{+2})	.00965
Lithium (Li^{+1})	.14411
Magnesium (Mg^{+2})	.08226
Manganese (Mn^{+2})	.03640
Nickel (Ni^{+2})	.03406
Nitrate (NO_3^{-1})	.01613
Nitrite (NO_2^{-1})	.02174
Phosphate (PO_4^{-3})	.03159
Potassium (K^{+1})	.02557
Sodium (Na^{+1})	.04350
Strontium (Sr^{+2})	.02283
Sulfate (SO_4^{-2})	.02082
Zinc (Zn^{+2})	.03060

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

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

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 and 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). The 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 are not necessarily representative of the particle sizes of sediment in transport in the natural stream. Most of the organic matter is removed and the sample is subjected to mechanical and chemical dispersion before analysis of the silt and clay.

Parts per million (ppm) is a unit for expressing the concentration of chemical constituents by weight, usually as grams of constituents per million grams of solution. In the laboratory the results are expressed

in weights of solutes in a given volume of water. To express the results in parts per million, the data must be converted. For most waters, this conversion is made by assuming that a liter of water weighs 1 kilogram; thus milligrams per liter is equivalent to parts per million. Parts per million, for suspended sediment, is computed as 1 million times the ratio of the weight of sediment to the weight of the mixture of water and sediment.

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

Sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks and is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. The following general relations are applicable:

Specific conductance x (0.65±0.05)=ppm dissolved solids;

$$\frac{\text{Specific conductance}}{100} = \frac{\text{total epm}}{2}$$

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 "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

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

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 parts per million 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.

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, 1967 is called the "1967 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.

STATION NUMBERS

A station number has been assigned as an added means of identification for each stream location where regular measurements of streamflow and determinations of water quality have been made. The numbers have been assigned to conform with the standard downstream order of listing gaging stations. The numbering system consists of 2 digits followed by a hyphen and a 6-digit number. The notation to the left of the hyphen identifies the Part or hydrologic region used by the Geological Survey for reporting hydrologic data. The number to the right of the hyphen represents the position of the location in the standard downstream order listing the stations within each of the parts. The assigned numbers are in numerical order but are not consecutive. They are so selected from the complete 6-digit-number scale that intervening numbers will be available for future assignments to new locations. The identification number for each station in this report is printed to the left of the station name and contains only the essential digits. For example, the number is printed as 11-0100. for a station whose complete identification number is 11-0100.00.

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 United States, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

Irrigation network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to water year 1966, 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 analyses 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, 1967, 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 on page 10.

Solutes

Data for daily chemical-quality sites include the average chemical characteristics of water for "composite periods" of about one month or less. The methods of collecting and compositing water samples for determining the kinds and concentrations of solutes are described by Rainwater and Thatcher (1960). One sample can define adequately the water quality at a given time

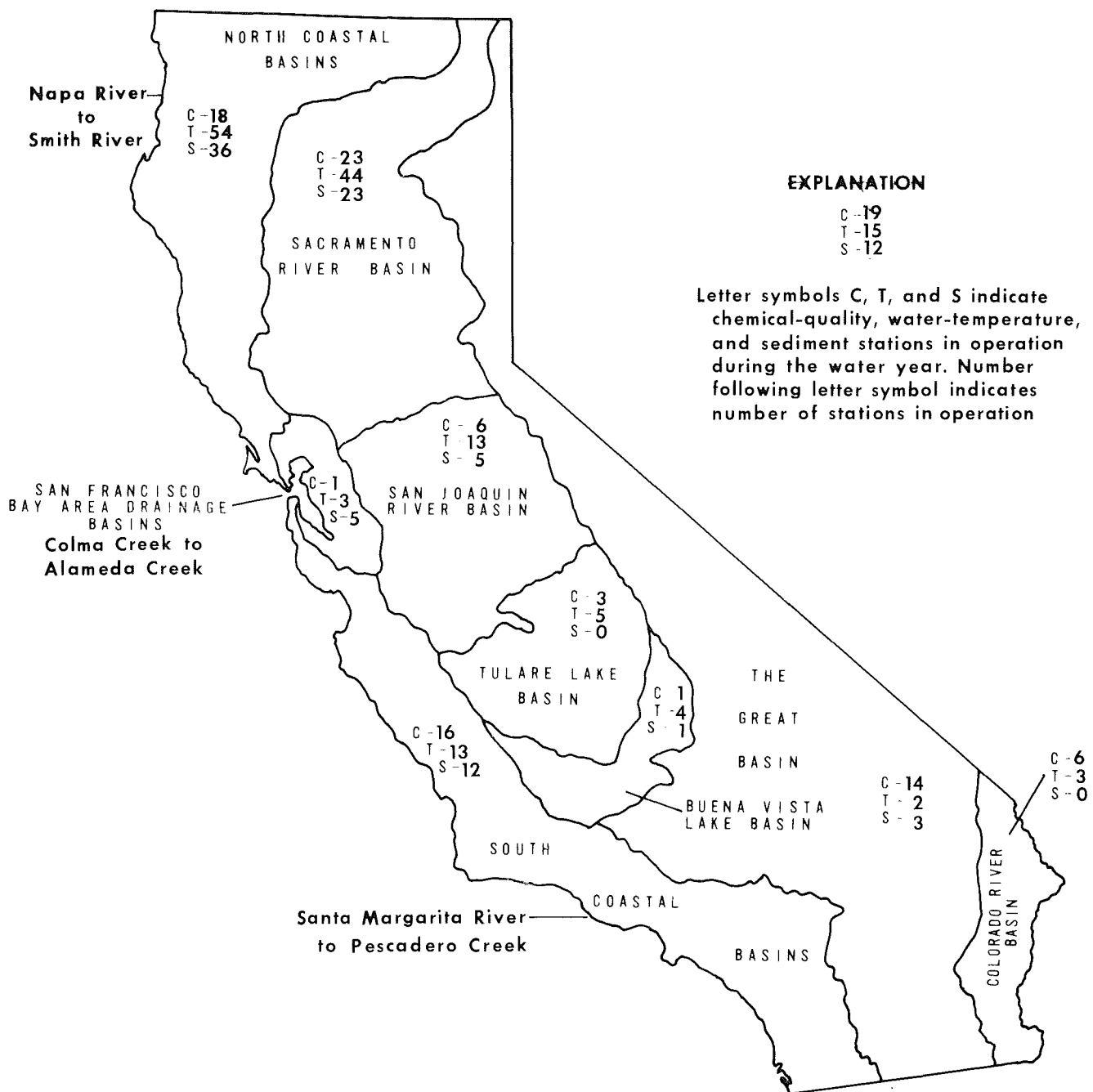


Figure 1.--Number and distribution of water-quality stations.

if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals across the channel to determine accurately the solute load. The daily chemical-quality data in this report generally represent equal-volume composites for 2- to 10-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.

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 normal variations in water temperature. Most large streams have a small diurnal variation in water temperature; small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. The thermometers used for determining the water temperature were accurate to plus or minus 0.5°F.

At stations where thermographs are located, the records consist of maximum and minimum temperatures for each day and the monthly averages of maximum daily and minimum daily temperatures.

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 parts of silica per million, is shown in relation to the concentration of suspended sediment of the simultaneously collected sample.

WATER-SUPPLY PAPERS

The table below shows the annual series of water-supply papers that give information on quality of surface waters in California. Data for the Colorado River basin are given in part 9 and For Pacific slope basins in California in part 11.

Water-supply-paper numbers and parts,
water years 1941-65

Year	Parts 1-14	Year	Parts 9-14	Year	Parts 9-14
1941	942	1950	1189	1959	1645
1942	950	1951	1200	1960	1745
1943	970	1952	1253	1961	1885
1944	1022	1953	1293	1962	1945
1945	1030	1954	1353	1963	1951
1946	1050	1955	1403	1964-65	B1962
1947	1102	1956	1453	1964-65	C1963
1948	A1133	1957	1523		
1949	A1163	1958	1574		

A Parts 7-14.

B In preparation. Contains parts 9-10.

C In preparation. Contains part 11.

SELECTED REFERENCES

- American Society for Testing Materials, 1954, Manual on industrial water: Philadelphia, Pa., p. 356.
- Benedict, P. C., 1948, Determination of the suspended-sediment discharge of streams, in Federal Inter-agency Sedimentation Conference, 1st, Denver, Colo., May 6-8, 1947, Proc.: Washington, D.C., U.S. Bur. Reclamation, p. 55-67.
- Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurement of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.
- 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.
- Hem, J. D., 1959, Study and interpretation of the chemical characteristics of natural water: U.S. Geol. Survey Water-Supply Paper 1473, 269 p.
- 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.
- Love, S. K., and Benedict, P. C., 1948, Discharge and sediment loads in the Boise River drainage basin, Idaho, 1939-40: U.S. Geol. Survey Water-Supply Paper 1048, 150 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. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

_____ 1957, The Development and calibration of visual accumulation tube: Rept. 11.

_____ 1957, Some fundamentals of particle-size analysis: Rept. 12.

_____ 1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.

_____ 1961, The single stage samples for suspended sediment: Rept. 13.

_____ 1963, Determinations of fluvial sediment discharge: Rept. 14.

PART 9. COLORADO RIVER BASIN

COLORADO RIVER MAIN STEM

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

LOCATION.--Lat 36°00'58", long 114°44'13", midway between intake towers, 225 feet upstream from gaging station on state line between Mohave County, Arizona, and Clark County, Nevada.

DRAINAGE AREA.--167,800 square miles, approximately.

RECORDS AVAILABLE.--Chemical analyses: October 1940 to September 1967.

REMARKS.--Samples are collected by the U.S. Bureau of Reclamation and analyzed by the Metropolitan Water District of Southern California, LaVerne, California.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Depth (feet)	Elevation (feet)	Temperature (°F)	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids (sum)	Hardness as CaCO ₃	Non-carbonate hardness as CaCO ₃	Specific conductance (micromhos at 25°C)	pH
Sept. 30, 1966	Surface	1128	78	8.6	79	30	105	5	121	1	311	95	0.2	695	321	220	1090	8.4
Sept. 30.....	5	1123	78	--	--	--	--	--	123	0	--	95	--	--	--	--	1090	8.2
Sept. 30.....	25	1053	78	--	--	--	--	--	123	0	--	94	--	--	--	--	1090	8.1
Sept. 30.....	75	1053	70	8.2	86	29	94	6	150	0	284	88	2.2	672	334	211	1080	8.0
Sept. 30.....	125	1003	63	--	--	--	--	--	156	0	--	92	--	--	--	--	1100	7.7
Sept. 30.....	175	953	58	8.6	88	30	98	6	157	0	295	90	2.4	697	343	214	1090	7.9
Sept. 30.....	225	903	54	--	--	--	--	--	159	0	--	87	--	--	--	--	1070	8.0
Sept. 30.....	275	853	54	8.4	88	30	94	5	159	0	288	88	2.4	683	343	213	1080	8.0
Sept. 30.....	325	803	54	10	91	30	100	5	159	0	300	93	2.0	711	351	221	1110	7.8
Sept. 30.....	375	753	54	11	93	31	101	5	160	0	307	94	1.6	723	360	229	1140	7.7
Oct. 28.....	Surface	1128	72	6.8	80	30	103	5	126	0	307	92	.9	688	325	222	1090	7.9
Oct. 28.....	5	1123	72	--	--	--	--	--	--	--	--	90	--	--	--	--	1100	7.8
Oct. 28.....	25	1103	72	--	--	--	--	--	--	--	--	90	--	--	--	--	1100	8.0
Oct. 28.....	75	1053	71	5.4	80	30	102	6	126	0	308	90	.8	686	325	222	1100	8.1
Oct. 28.....	125	1003	63	--	--	--	--	--	--	--	--	92	--	--	--	--	1120	7.8
Oct. 28.....	175	953	57	--	--	--	--	--	--	--	--	88	--	--	--	--	1060	7.7
Oct. 28.....	225	903	54	--	--	--	--	--	--	--	--	87	--	--	--	--	1060	8.0
Oct. 28.....	275	853	54	6.6	88	30	100	6	156	0	291	88	2.2	689	341	213	1100	8.1
Oct. 28.....	325	803	54	6.4	89	30	101	6	157	0	297	90	2.2	700	343	214	1130	8.1
Oct. 28.....	375	753	54	7.1	92	30	103	6	159	0	307	98	1.2	724	355	225	1160	7.2
Nov. 30.....	Surface	1130	64	9.2	84	30	100	5	137	0	300	92	.9	689	331	219	1090	8.0
Nov. 30.....	5	1125	64	--	--	--	--	--	137	0	--	93	--	--	--	--	1100	8.1
Nov. 30.....	25	1105	64	--	--	--	--	--	137	0	--	96	--	--	--	--	1080	8.1
Nov. 30.....	75	1055	64	--	--	--	--	--	137	0	--	96	--	--	--	--	1100	8.1
Nov. 30.....	125	1005	63	--	--	--	--	--	137	0	--	94	--	--	--	--	1110	8.1
Nov. 30.....	175	955	59	10	88	29	99	5	159	0	286	92	2.7	691	339	209	1090	7.9
Nov. 30.....	225	905	54	9.2	86	28	100	5	157	0	292	89	2.7	690	330	201	1060	7.6
Nov. 30.....	275	855	54	9.2	88	28	100	5	157	0	289	92	.9	691	337	208	1090	8.2
Nov. 30.....	325	805	54	9.5	90	29	100	5	156	1	293	93	1.1	700	344	214	1110	8.3
Nov. 30.....	375	755	54	--	--	--	--	--	160	0	--	98	--	--	--	--	1140	8.2
Dec. 30.....	Surface	1132	59	9.7	84	30	103	5	137	0	305	94	2.1	701	333	121	1100	7.6
Dec. 30.....	5	1127	60	--	--	--	--	--	137	0	--	94	--	--	--	--	1100	8.1
Dec. 30.....	25	1107	60	--	--	--	--	--	137	0	--	94	--	--	--	--	1100	8.1
Dec. 30.....	75	1057	60	--	--	--	--	--	137	0	--	94	--	--	--	--	1100	7.8
Dec. 30.....	125	1007	60	--	--	--	--	--	135	0	--	95	--	--	--	--	1100	7.8
Dec. 30.....	175	957	58	9.7	83	30	102	5	139	0	302	93	2.1	696	331	217	1100	8.0
Dec. 30.....	225	905	55	9.7	84	28	97	4	145	4	276	87	2.2	664	325	200	1050	8.4
Dec. 30.....	275	857	54	10	87	28	101	5	153	0	291	89	2.1	690	334	209	1070	7.7
Dec. 30.....	325	807	54	--	--	--	--	--	154	0	--	91	--	--	--	--	1100	7.6
Dec. 30.....	375	757	54	10	90	30	104	5	155	0	302	95	2.0	716	348	221	1140	7.8
Feb. 1, 1967..	Surface	1133	58	9.0	84	30	100	5	142	0	296	92	.0	687	333	217	1080	8.0
Feb. 1.....	5	1128	58	--	--	--	--	--	143	0	--	93	--	--	--	--	1080	7.9
Feb. 1.....	25	1108	56	--	--	--	--	--	142	0	--	92	--	--	--	--	1080	7.8
Feb. 1.....	75	1058	56	--	--	--	--	--	140	0	--	93	--	--	--	--	1080	7.9
Feb. 1.....	125	1008	55	9.0	84	30	100	4	140	0	297	92	.0	686	333	218	1080	8.0
Feb. 1.....	175	958	55	--	--	--	--	--	140	0	--	92	--	--	--	--	1090	7.8
Feb. 1.....	225	908	55	8.5	84	30	100	5	142	0	297	92	.0	688	333	217	1090	7.9
Feb. 1.....	275	858	54	9.0	85	29	97	4	154	0	283	90	1.6	676	332	206	1070	7.6
Feb. 1.....	325	808	54	--	--	--	--	--	154	0	--	90	--	--	--	--	1070	7.6
Feb. 1.....	375	758	54	--	--	--	--	--	154	0	--	94	--	--	--	--	1100	7.7
Feb. 1.....	411	722	54	9.4	91	30	103	5	157	0	302	95	1.4	715	348	219	1100	7.8

Feb. 28.....	Surface	1133	58	8.9	86	29	99	5	143	0	296	92	1.6	689	334	217	1080	8.0
Feb. 28.....	5	1128	58	--	--	--	--	--	--	--	--	92	--	--	--	--	1090	8.1
Feb. 28.....	25	1108	56	--	--	--	--	--	--	--	--	93	--	--	--	--	1080	8.2
Feb. 28.....	75	1058	56	--	--	--	--	--	--	--	--	92	--	--	--	--	1090	7.9
Feb. 28.....	125	1008	55	8.7	86	29	99	5	143	0	293	92	1.5	686	334	217	1090	8.2
Feb. 28.....	175	958	55	--	--	--	--	--	--	--	--	91	--	--	--	--	1090	8.1
Feb. 28.....	225	908	54	9.2	86	29	97	5	143	0	288	91	1.6	678	334	217	1080	8.2
Feb. 28.....	275	858	54	9.7	86	29	98	5	151	1	286	88	1.9	680	334	208	1080	8.3
Feb. 28.....	325	808	54	--	--	--	--	--	--	--	--	87	--	--	--	--	1060	8.3
Feb. 28.....	375	758	54	--	--	--	--	--	--	--	--	83	--	--	--	--	1040	7.9
Feb. 28.....	411	722	54	9.7	83	28	92	4	155	0	267	83	1.8	646	322	195	1030	7.8
Mar. 30.....	Surface	1132	57	8.9	85	30	101	5	145	0	296	91	1.6	691	334	215	1080	8.2
Mar. 30.....	5	1127	57	--	--	--	--	--	144	0	--	91	--	--	--	--	1080	8.2
Mar. 30.....	25	1107	56	--	--	--	--	--	144	0	--	91	--	--	--	--	1080	8.1
Mar. 30.....	75	1057	55	--	--	--	--	--	145	0	--	90	--	--	--	--	1080	8.1
Mar. 30.....	125	1007	55	--	--	--	--	--	145	0	--	90	--	--	--	--	1080	8.0
Mar. 30.....	175	957	55	8.6	85	29	100	5	146	0	293	90	1.7	685	332	212	1080	8.2
Mar. 30.....	225	907	54	8.9	83	28	94	4	153	0	274	84	1.7	654	322	197	1040	7.9
Mar. 30.....	275	857	53	8.6	81	27	90	4	153	0	262	82	2.1	633	313	188	1010	8.0
Mar. 30.....	325	807	53	--	--	--	--	--	153	0	--	80	--	--	--	--	1000	8.0
Mar. 30.....	375	757	53	8.8	80	27	90	4	153	0	262	79	2.0	629	311	186	1010	8.0
Mar. 30.....	410	722	53	--	--	--	--	--	151	0	--	80	--	--	--	--	1010	8.2
Apr. 28.....	Surface	1132	60	9.0	84	30	98	5	150	0	293	86	1.3	681	331	208	1100	8.1
Apr. 28.....	5	1127	59	--	--	--	--	--	150	0	--	85	--	--	--	--	1100	8.2
Apr. 28.....	25	1107	57	--	--	--	--	--	149	0	--	86	--	--	--	--	1100	7.9
Apr. 28.....	75	1057	56	--	--	--	--	--	149	0	--	87	--	--	--	--	1100	8.2
Apr. 28.....	125	1007	56	8.5	84	29	94	4	148	0	285	85	1.3	665	329	208	1070	8.0
Apr. 28.....	175	957	54	9.0	81	28	92	4	151	0	275	82	2.0	651	320	196	1070	7.8
Apr. 28.....	225	907	54	9.0	81	28	92	5	153	0	270	81	1.8	644	317	192	1050	8.1
Apr. 28.....	275	857	54	8.7	81	28	91	4	154	0	267	79	1.0	637	317	191	1050	7.7
Apr. 28.....	325	807	54	--	--	--	--	--	154	0	--	78	--	--	--	--	1040	8.2
Apr. 28.....	375	757	54	--	--	--	--	--	154	0	--	80	--	--	--	--	1040	7.8
June 2.....	Surface	1131	70	8.5	85	30	100	4	151	0	293	86	1.3	683	336	212	1080	7.9
June 2.....	5	1126	69	--	--	--	--	--	150	0	--	86	--	--	--	--	1080	8.0
June 2.....	25	1106	65	--	--	--	--	--	150	0	--	86	--	--	--	--	1080	7.9
June 2.....	75	1056	63	--	--	--	--	--	150	0	--	86	--	--	--	--	1090	8.1
June 2.....	125	1006	57	--	--	--	--	--	150	0	--	86	--	--	--	--	1090	7.8
June 2.....	175	956	55	8.0	83	30	92	4	151	0	275	84	1.6	653	331	207	1070	7.6
June 2.....	225	906	54	8.0	81	30	90	4	153	0	269	82	1.4	641	324	199	1060	7.6
June 2.....	275	856	54	11	82	29	90	5	153	0	269	83	1.2	647	324	199	1060	7.7
June 2.....	325	806	54	--	--	--	--	--	154	0	--	79	--	--	--	--	1040	7.7
June 2.....	375	756	54	--	--	--	--	--	154	0	269	80	--	--	--	--	1050	7.6
June 29.....	Surface	1130	80	9.4	81	30	100	5	138	0	298	88	.7	681	326	213	1130	7.6
June 29.....	5	1125	79	--	--	--	--	--	--	--	--	87	--	--	--	--	1130	7.5
June 29.....	25	1105	77	--	--	--	--	--	--	--	--	88	--	--	--	--	1130	7.6
June 29.....	75	1055	62	10	87	29	96	5	150	0	288	88	1.5	680	337	214	1130	7.6
June 29.....	125	1005	58	--	--	--	--	--	--	--	--	87	--	--	--	--	1140	8.0
June 29.....	175	955	56	--	--	--	--	--	--	--	--	86	--	--	--	--	1120	7.9
June 29.....	225	905	55	10	84	28	88	5	151	0	265	86	1.4	643	325	201	1090	7.7
June 29.....	275	855	54	10	81	29	90	5	153	0	268	82	1.4	643	322	197	1090	7.9
June 29.....	325	805	54	--	--	--	--	--	--	--	--	82	--	--	--	--	1080	7.6
June 29.....	375	755	54	10	82	28	90	5	155	0	269	82	1.2	645	322	195	1090	7.6
July 31.....	Surface	1129	84	8.5	77	30	102	4	124	0	304	90	.6	678	316	214	1090	8.1
July 31.....	5	1124	83	--	--	--	--	--	122	0	--	90	--	--	--	--	1090	8.1
July 31.....	25	1104	81	--	--	--	--	--	124	0	--	89	--	--	--	--	1090	7.9
July 31.....	75	1054	67	8.3	85	29	100	4	148	0	294	88	1.7	684	332	211	1100	7.6
July 31.....	125	1004	60	--	--	--	--	--	149	0	--	86	--	--	--	--	1080	8.0
July 31.....	175	954	56	8.5	84	28	93	4	151	0	281	82	2.1	659	327	203	1070	8.0
July 31.....	225	904	55	8.5	83	28	93	4	153	0	278	80	1.6	653	322	197	1050	8.0
July 31.....	275	854	54	8.6	83	28	93	4	154	0	276	80	1.7	651	322	196	1050	7.8
July 31.....	325	804	54	--	--	--	--	--	154	0	--	79	--	--	--	--	1050	7.8
July 31.....	375	754	54	8.7	83	28	91	4	155	0	272	78	2.0	644	322	195	1050	7.7
July 31.....	407	722	54	--	--	--	--	--	157	0	--	78	--	--	--	--	1050	7.6

COLORADO RIVER MAIN STEM--Continued

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

Chemical analyses, in parts per million, water year October 1966 to September 1967--Continued

Date of collection	Depth (feet)	Elevation (feet)	Temperature (°F)	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids (sum)	Hardness as CaCO ₃	Non-carbonate hardness as CaCO ₃	Specific conductance (micromhos at 25°C)	pH
Aug. 30, 1967	Surface	1129	89	8.0	75	30	1061	5	112	0	318	92	0.3	691	313	221	1120	8.0
Aug. 30.....	5	1124	88	--	--	--	--	--	--	--	--	92	--	--	--	--	1110	7.9
Aug. 30.....	25	1104	86	--	--	--	--	--	--	--	--	91	--	--	--	--	1120	7.8
Aug. 30.....	75	1054	70	8.0	86	30	98	5	146	0	298	88	.9	686	336	216	1130	7.8
Aug. 30.....	125	1004	62	--	--	--	--	--	--	--	--	87	--	--	--	--	1130	7.9
Aug. 30.....	175	954	58	8.3	86	29	96	--	151	0	292	85	1.6	673	334	210	1120	8.0
Aug. 30.....	225	904	56	8.6	84	28	92	5	153	0	279	82	1.7	657	325	200	1080	8.0
Aug. 30.....	275	854	55	8.6	84	28	91	5	154	0	273	81	1.7	649	323	197	1080	7.9
Aug. 30.....	325	804	55	--	--	--	--	--	--	--	--	80	--	--	--	--	1070	7.9
Aug. 30.....	375	754	55	8.3	84	28	92	5	155	0	274	80	1.7	653	323	196	1070	7.8
Sept. 29.....	Surface	1130	81	8.8	--	--	--	--	112	0	--	93	.5	--	--	--	1100	7.6
Sept. 29.....	5	1125	81	9.2	76	31	108	5	112	0	316	94	.5	696	317	225	1120	7.5
Sept. 29.....	25	1105	80	--	--	--	--	--	113	0	--	93	--	--	--	--	1120	7.7
Sept. 29.....	75	1055	72	8.9	84	30	98	5	149	0	289	88	1.8	679	333	211	1110	7.8
Sept. 29.....	125	1005	62	9.5	86	29	95	5	151	0	283	86	2.5	672	334	210	1100	8.0
Sept. 29.....	175	955	57	--	--	--	--	--	154	0	--	85	--	--	--	--	1080	8.0
Sept. 29.....	225	905	55	9.3	83	29	95	4	156	0	277	82	2.1	659	327	199	1070	7.7
Sept. 29.....	275	855	54	9.3	83	28	95	4	155	0	274	81	2.3	654	320	193	1050	7.8
Sept. 29.....	325	805	54	--	--	--	--	--	154	0	--	80	--	--	--	--	1010	7.8
Sept. 29.....	375	755	54	--	--	--	--	--	160	0	--	81	--	--	--	--	1010	7.7
Sept. 29.....	409	721	54	10	83	28	95	4	161	0	272	81	1.0	655	322	190	1010	7.5

COLORADO RIVER MAIN STEM---Continued

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

LOCATION.--Lat 36°00'55", long 114°44'16", at Hoover Dam, on state line between Mohave County, Ariz., and Clark County, Nev., just downstream from gaging station.

DRAINAGE AREA.--167,800 square miles, approximately.

RECORDS AVAILABLE.--Chemical analyses: October 1939 to September 1967.

Water temperatures: October 1941 to September 1963.

REMARKS.--Records of specific conductance of individual samples available in district office at Tucson, Ariz.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH	Color
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate				
Oct. 5, 14, 25, 1966.....		8.7	--	94	20	116	--	158	0	300	89	--	1.4	--	707			316	186	2.8	1090	7.6	--
Nov. 8, 12, 25.		8.6	--	92	27	100	--	160	0	289	90	--	1.4	--	687			342	211	2.4	1080	7.5	--
Dec. 5, 15, 27.		8.5	--	91	26	102	--	160	0	283	90	--	2.4	--	682			332	201	2.4	1070	7.7	--
Jan. 6, 16, 25, 1967.....		8.4	--	91	26	105	--	150	0	290	95	--	.6	--	690			332	209	2.5	1090	7.7	--
Feb. 5, 15, 24.		8.4	--	91	26	100	--	150	0	281	96	--	1.5	--	678			334	211	2.4	1100	7.8	--
Mar. 6, 15, 24.		8.6	--	91	25	99	--	154	0	281	89	--	1.5	--	671			330	204	2.4	1070	7.7	--
Apr. 5, 14, 24.		9.0	--	86	31	93	--	158	0	278	88	--	1.3	--	664			342	212	2.2	1050	7.7	--
May 5, 15, 25..		9.1	--	90	24	106	--	156	0	284	92	--	.9	--	683			324	196	2.6	1060	7.7	--
June 5, 15, 26.		9.0	0.00	85	28	100	5.1	156	0	290	88	0.2	.7	0.20	A 692			326	198	2.4	1070	7.7	0
July 5, 18, 25.		9.1	--	84	28	100	--	154	0	281	86	--	1.5	--	666			324	198	2.4	1060	7.7	--
Aug. 4, 15, 25.		9.1	--	86	28	98	--	156	0	281	86	--	.2	--	665			328	200	2.4	1060	7.2	--
Sept. 5, 15, 25		9.2	.01	85	28	98	4.8	156	0	294	84	.4	1.2	.22	A 686			328	200	2.3	1050	7.4	3

A Residue at 180°C.

COLORADO RIVER MAIN STEM--Continued

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

LOCATION.--Lat 34°19'00", long 114°09'25", at gaging station at intake pumping plant of Metropolitan Water District of Southern California on Lake Havasu, San Bernardino County, 1.8 miles upstream from Parker Dam, and 154 miles downstream from Hoover Dam.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 7, 1966.....		11		85	31	111	5.0	135	1	321	101	0.4	0.9		735			340			1140	8.5
Nov. 8.....		9.0		87	31	111	6.0	145	0	319	100	.4	1.0		737			345			1140	8.2
Dec. 7.....		10		87	31	111	5.0	146	0	315	99	.5	.9		733			347			1140	8.2
Jan. 8, 1967.....		11		88	31	111	5.0	151	0	312	99	.5	1.6		734			347			1150	8.2
Feb. 7.....		9.0		89	31	109	5.0	150	0	315	100	.5	1.6		736			352			1150	8.2
Apr. 7.....		8.0		87	30	103	5.0	148	0	303	96	.4	1.4		708			341			1100	8.2
May 8.....		8.0		87	30	106	4.0	148	1	305	97	.5	1.9		715			343			1140	8.4
June 7.....		9.0		84	30	91	5.0	148	0	297	75	.5	.8		666			333			1100	8.2
July 8.....		10		76	30	90	5.0	132	0	268	90	.5	.8		637			315			1100	7.9
Aug. 8.....		7.0		65	29	38	4.0	90	2	291	89	.4	.3		634			284			1040	8.5
Aug. 23.....		9.0		75	29	101	5.0	122	2	289	89	.4	.7		661			309			1050	8.4
Sept. 9.....		9.0		75	29	100	5.0	123	2	289	90	.4	.6		663			309			1090	8.5

COLORADO RIVER MAIN STEM--Continued

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

LOCATION.--Lat 34°15'30", long 114°09'00", at gaging station 3.9 miles downstream from Parker Dam, 10.4 miles upstream from Headgate Rock Dam, and 11 miles north-east of Parker, Ariz.

DRAINAGE AREA.--178,000 square miles, approximately.

RECORDS AVAILABLE.--Chemical analyses: October 1963 to September 1967.

Water temperatures: February 1954 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 81°F Aug. 31; minimum, 48°F Jan. 25.

EXTREMES, 1954-67.--Water temperatures: Maximum, 83°F Aug. 12, 13, 18, 1955; minimum (1954-65, 1966-67), 47°F Jan. 12, 1964.

REMARKS.--Temperature recorder inoperative Jan. 3-17, May 26 to June 1.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH	Color
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate				
Oct. 3, 1966...	9120	9.2	--	93	28	105	--	150	0	298	100	--	0.1	--	707			346	223	2.5	1110	7.1	--
Nov. 1.....	4560	12	--	90	31	111	--	150	0	314	102	--	1.0	--	735			354	231	2.6	1150	8.1	--
Dec. 1.....	4580	11	--	93	33	99	--	150	0	302	102	--	1.0	--	715			368	245	2.2	1120	8.1	--
Jan. 3, 1967...	5450	10	--	88	31	109	--	154	0	310	93	--	1.6	--	719			345	219	2.5	1160	8.1	--
Feb. 1.....	4310	9.1	--	90	31	115	--	156	0	314	102	--	1.5	--	740			350	222	2.7	1170	--	--
Mar. 1.....	9190	8.7	--	90	31	109	--	157	0	303	101	--	1.3	--	721			350	222	2.5	1120	7.6	--
Apr. 3.....	13340	8.3	--	94	26	111	--	156	0	306	96	--	1.1	--	719			342	214	2.6	1130	7.8	--
May 1.....	12540	8.5	--	94	28	109	--	156	0	304	99	--	1.2	--	721			348	220	2.5	1130	7.5	--
June 1.....	4300	8.4	0.01	90	28	105	5.1	154	0	298	94	0.3	.9	0.22	A 742			340	214	2.5	1110	7.2	3
July 3.....	18660	9.0	--	86	28	110	--	152	0	298	92	.3	1.1	--	A 699			328	204	2.6	1090	6.9	--
Aug. 1.....	18820	9.2	.02	86	27	104	5.2	149	0	294	92	.2	2.4	.22	721			326	204	2.5	1080	7.0	3
Sept. 5.....	4630	9.6	.02	85	27	103	5.1	146	0	287	92	.4	1.1	.22	A 712			322	202	2.5	1070	7.0	3

A Residue at 180°C.

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

Temperature (°F) of water, water year October 1966 to September 1967

[illegible]

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

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

LOCATION.--Lat 32°52'35", long 114°27'15", temperature recorder at gaging station 3,200 feet downstream from intake at east end of Imperial Dam, Yuma County, Ariz.

RECORDS AVAILABLE.--Water temperatures: January 1956 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 89°F Aug. 13, 14; minimum, 51°F Jan. 11-14.

EXTREMES, 1956-67.--Water temperatures: Maximum, 89°F on many days during July and August of most years; minimum, 45°F Jan. 13-17, 1964.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1966 to September 1967																																		
Month	Day																															Average		
	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			
October	78	78	77	77	76	76	77	78	79	79	78	78	77	75	71	69	68	68	68	69	69	69	69	69	69	69	69	69	70	70	69	72		
Maximum	76	77	77	74	74	75	76	76	78	78	77	77	75	71	69	68	67	67	67	68	68	69	68	68	68	68	69	69	69	69	69	71		
Minimum	69	69	69	69	68	67	67	67	66	63	62	62	62	62	62	63	64	65	65	65	62	57	56	55	54	54	57	57	59	59	--	62		
November	69	69	69	68	67	67	67	66	63	62	62	62	61	61	62	62	63	64	64	61	57	55	55	54	53	53	53	57	57	58	--	61		
Maximum	69	69	69	68	67	67	67	66	63	62	62	62	61	61	62	62	63	64	64	61	57	55	55	54	53	53	53	57	57	58	--	61		
Minimum	60	60	60	61	62	63	63	62	60	58	57	56	56	56	56	56	56	56	55	55	55	55	55	55	53	53	53	53	53	53	53	57		
December	59	60	60	60	61	62	63	62	60	58	56	56	56	56	56	56	55	55	55	55	55	55	55	53	53	53	53	53	53	53	53	56		
Maximum	59	60	60	60	61	62	63	62	60	58	56	56	56	56	56	56	55	55	55	55	55	55	55	53	53	53	53	53	53	53	53	56		
Minimum	53	53	53	53	52	52	53	53	53	52	52	51	51	51	52	52	53	53	53	53	53	52	52	52	53	53	53	54	54	55	56	52		
January	53	52	52	52	52	52	53	53	52	52	51	51	51	51	52	52	53	53	53	53	53	52	52	52	53	53	53	54	54	55	56	52		
Maximum	53	52	52	52	52	52	53	53	52	52	51	51	51	51	52	52	53	53	53	53	53	52	52	52	53	53	53	54	54	55	56	52		
Minimum	56	56	56	56	56	56	55	55	55	55	55	55	56	57	56	56	55	55	55	55	55	55	55	55	56	57	58	59	60	--	--	56		
February	56	56	56	56	56	55	55	55	55	55	55	55	55	56	56	56	55	55	55	55	55	55	55	55	56	57	58	59	60	--	--	55		
Maximum	56	56	56	56	56	55	55	55	55	55	55	55	55	56	56	56	55	55	55	55	55	55	55	55	56	57	58	58	58	--	--	55		
Minimum	56	56	56	55	56	55	55	55	55	55	55	55	55	56	56	56	55	55	55	55	55	55	55	55	56	57	58	58	58	--	--	55		
March	60	60	61	61	59	59	58	59	59	59	60	61	61	60	61	64	65	65	65	65	65	65	65	65	65	65	65	64	64	63	63	62		
Maximum	59	60	60	59	58	58	58	58	59	59	59	59	60	60	60	61	63	64	63	63	64	64	64	64	64	64	64	64	64	63	61	61		
Minimum	59	60	60	59	58	58	58	58	59	59	59	59	60	60	60	61	63	64	63	63	64	64	64	64	64	64	64	64	64	63	61	61		
April	63	63	63	62	64	65	66	66	67	67	65	64	62	63	65	65	66	66	66	65	65	65	65	65	65	65	67	68	68	68	66	--	65	
Maximum	62	62	62	62	62	64	64	64	65	65	64	62	60	62	63	64	65	65	64	64	63	64	64	64	64	64	64	65	67	68	66	65	--	63
Minimum	66	66	68	69	69	70	72	74	74	73	72	72	71	71	72	73	74	76	77	78	80	79	78	78	79	78	78	77	76	75	74	73		
May	66	66	68	69	69	70	72	74	74	73	72	72	71	71	72	73	74	76	77	78	80	79	78	78	79	78	78	77	76	75	74	73		
Maximum	65	66	66	68	68	68	69	71	72	72	70	70	70	70	70	71	73	73	75	76	77	78	76	76	76	77	77	77	75	73	73	72		
Minimum	74	75	76	77	77	76	77	77	77	76	75	75	75	75	78	79	80	79	79	81	82	83	83	83	82	83	83	84	84	85	--	79		
June	74	75	76	77	77	76	77	77	77	76	75	75	75	75	78	79	80	79	79	81	82	83	83	83	82	83	83	84	84	85	--	79		
Maximum	73	73	74	75	75	75	76	76	76	74	74	74	74	74	75	77	78	77	78	79	80	81	81	81	81	81	80	81	82	82	83	--	77	
Minimum	86	86	85	85	84	83	83	86	87	87	87	87	87	86	87	87	87	87	87	87	86	86	86	87	87	87	87	87	87	88	88	86		
July	86	86	85	85	84	83	83	86	87	87	87	87	87	86	87	87	87	87	87	87	86	86	86	87	87	87	87	87	87	88	88	86		
Maximum	83	84	84	83	83	82	82	83	85	85	85	85	85	85	84	85	85	85	85	85	85	85	84	84	85	86	85	85	85	86	87	87	84	
Minimum	87	87	87	87	85	84	84	85	86	87	88	89	89	87	87	87	87	87	88	87	88	88	88	87	87	88	88	88	88	88	87	87		
August	87	87	87	87	85	84	84	85	86	87	88	89	89	87	87	87	87	87	88	87	88	88	88	87	87	88	88	88	88	88	87	87		
Maximum	86	85	85	85	85	84	83	83	83	84	86	87	87	86	85	85	85	85	86	86	86	86	86	86	87	85	85	86	87	87	87	85	85	
Minimum	85	--	--	--	--	--	86	86	86	86	86	86	86	84	82	81	81	81	80	79	80	80	80	80	80	80	81	81	81	83	--	82		
September	82	--	--	--	--	--	85	85	85	85	84	84	84	81	80	79	79	80	79	78	78	79	79	79	79	79	79	79	80	80	81	--	80	

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM--Continued

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

LOCATION.--Lat 32°43'50", long 114°37'10", at gaging station on Yuma Main Canal below Colorado River siphon on Arizona side of river, 3.5 miles downstream from siphon-drop powerplant, and 0.2 mile downstream from upper highway bridge over Colorado River at Yuma, Yuma County.

RECORDS AVAILABLE.--Chemical analyses: September 1926 to September 1928, October 1942 to September 1967.

Water temperatures: May 1961 to September 1967.

EXTREMES, 1966-67.--Dissolved solids: Maximum, 942 ppm Nov. 1-30; minimum, 716 ppm Dec. 14-19.

Hardness: Maximum, 390 ppm Nov. 1-30; minimum, 294 ppm Dec. 14-19.

Specific conductance: Maximum daily, 1,590 micromhos Nov. 25; minimum daily, 1,110 micromhos Dec. 14.

EXTREMES, 1943-67.--Dissolved solids: Maximum, 1,000 ppm Jan. 1-31, 1957; minimum, 532 ppm Jan. 1-10, 1953.

Hardness: Maximum, 520 ppm July 7, 1962; minimum, 260 ppm Jan. 1-10, 1953.

Specific conductance: Maximum daily, 1,670 micromhos Nov. 26, 27, Dec. 1, 1965; minimum daily, 795 micromhos Jan. 5, 1953.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH	Color	
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate					
Oct. 1-31, 1966	389	14	---	100	30	163	---	171	0	362	149	---	1.0	---	903	1.23	948	374	234	3.7	1400	8.0	---	
Nov. 1-30.....	258	14	---	105	31	171	---	182	0	371	160	---	1.0	---	942	1.28	656	390	241	3.8	1480	8.2	---	
Dec. 1-13.....	196	17	---	104	31	166	---	178	0	367	155	---	.9	---	929	1.26	492	386	240	3.7	1450	8.1	---	
Dec. 14-19.....	242	16	---	80	23	131	---	158	0	267	120	---	1.2	---	716	.97	468	294	164	3.3	1160	8.0	---	
Dec. 20-31.....	264	16	---	99	30	158	---	174	0	343	152	---	1.2	---	885	1.20	631	372	229	3.6	1400	8.2	---	
Jan. 1-31, 1967	266	20	---	100	32	155	---	178	0	350	146	---	.9	---	892	1.21	641	380	234	3.5	1400	8.2	---	
Feb. 1-28.....	404	18	---	102	28	147	---	169	0	345	135	---	1.8	---	860	1.17	938	370	231	3.3	1340	8.1	---	
Mar. 1-31.....	437	12	---	100	29	138	---	171	0	336	125	---	1.1	---	825	1.12	973	368	228	3.1	1290	8.1	---	
Apr. 1-30.....	436	16	---	98	29	145	---	174	0	337	131	---	1.4	---	843	1.15	992	364	221	3.3	1310	8.2	---	
May 1-31.....	539	19	---	100	28	147	---	176	0	338	132	---	1.4	---	852	1.16	1240	364	220	3.3	1320	8.1	---	
June 1-30.....	528	15	0.00	91	32	140	5.2	168	0	327	125	0.4	.7	0.27	A 855	1.16	1220	358	220	3.2	1270	8.2	0	
July 1-31.....	573	15	---	90	31	133	---	166	0	319	121	---	.6	---	792	1.08	1230	350	214	3.1	1260	8.0	---	
Aug. 1-31.....	597	15	---	92	29	137	---	168	0	319	124	---	.4	---	799	1.09	1290	348	210	3.2	1250	8.0	---	
Sept. 1-30.....	437	18	.01	92	30	152	5.3	176	0	331	136	.5	.2	.27	852	1.16	1010	352	208	3.5	1330	8.2	3	
Weighted average....	---	16	---	96	30	146	---	172	---	336	133	---	0.9	---	848	1.15	973	362	222	3.3	1320	8.1	---	
Time-weighted average....	425	16	---	97	30	149	---	173	---	339	136	---	1.0	---	857	---	---	365	223	3.4	1340	8.1	---	
Tons per day.	---	18	---	111	34	168	---	197	---	386	153	---	1.1	---	---	---	---	---	---	---	---	---	---	---

A Residue at 180°C.

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM--Continued

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

Specific conductance (micromhos at 25°C), water year October 1966 to September 1967

Day	October	November	December	January	February	March	April	May	June	July	August	September
1.....	1320	1450	1440	1360	1430	1340	1260	1360	1300	1260	--	1250
2.....	--	1430	1440	1390	1400	1350	1300	1330	1280	1250	--	--
3.....	1380	1450	1440	1400	1410	1350	--	1310	1290	1260	1240	--
4.....	1360	1450	1430	1450	1400	--	1320	1300	1320	1250	1230	1230
5.....	1380	1450	1430	1450	1420	--	1290	1330	1330	1250	--	1260
6.....	1280	1430	1460	1550	1350	--	1320	1320	1290	1250	--	--
7.....	1270	1430	1440	1440	1420	1310	1320	1350	1300	1260	1220	1360
8.....	1330	1450	1440	1350	1350	1280	1310	1370	1290	--	1240	1450
9.....	1460	1470	1440	1350	1340	1270	1330	1370	1270	1300	1220	1460
10.....	1520	1460	1500	1370	1320	--	1330	1340	1290	1280	1260	1450
11.....	1500	1440	1530	1360	1320	--	1300	1340	1300	1250	1230	1470
12.....	1490	1430	1460	1390	1310	--	1290	1310	1300	1250	--	1490
13.....	1480	1470	1390	1350	1320	1310	1270	1310	1280	1250	--	1390
14.....	1470	1510	1120	1330	1300	1290	1240	1320	1290	1240	1270	1360
15.....	1500	1490	1120	1350	1290	1280	1280	1320	1260	1250	1250	1310
16.....	1490	1480	1140	1370	1300	1250	--	1310	1270	1250	1240	1300
17.....	--	1430	1170	1390	1310	1320	--	1310	1250	1240	1220	1290
18.....	--	1450	1250	1350	1290	1280	--	1300	1240	1250	1240	1280
19.....	--	--	--	1420	1310	1300	--	1310	1260	1250	1260	1290
20.....	1340	--	--	1470	--	--	1330	1310	1250	1250	1260	1280
21.....	1350	1430	--	1370	--	--	1300	1340	1250	1260	--	1250
22.....	1310	1500	1410	1350	--	1270	1320	1340	1240	1260	1270	1290
23.....	1410	1570	1410	1400	1300	1280	1350	1330	1260	1270	--	1310
24.....	1430	--	1410	1450	1310	1300	1360	1270	1270	1260	1290	1310
25.....	1440	1590	1400	1400	1340	1290	1340	1300	1280	1240	1290	1320
26.....	1390	--	1430	1390	1360	1290	1280	1300	1270	1230	1300	1300
27.....	1390	--	1560	1390	1410	1280	1330	1310	1270	1260	1270	1280
28.....	1380	1480	1420	1400	1350	1270	1320	1300	1260	1260	1260	1280
29.....	1380	1530	1340	1480	--	1270	1330	1310	1250	1250	1250	1270
30.....	1380	1470	1340	1500	--	1260	1350	1290	1270	1260	1240	1290
31.....	1380	--	1340	1510	--	1260	--	1290	--	1260	1240	--
Average	1400	1470	1380	1400	1350	--	1310	1320	1280	1260	1250	1330

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	77	--	76	75	75	74	74	75	76	77	76	75	75	70	68	65	--	--	--	66	66	67	67	67	67	65	67	67	68	69	68	70
November	68	67	66	66	65	65	66	65	63	63	60	59	60	60	60	62	63	63	53	--	66	62	63	--	52	--	--	58	59	59	--	62
December	58	59	60	60	63	63	62	60	59	58	56	55	55	54	53	54	54	54	--	--	--	53	53	52	51	52	51	50	49	48	47	55
January.....	46	46	47	47	47	46	46	46	46	46	46	47	48	49	51	51	52	51	51	50	50	51	52	50	52	52	52	53	53	54	55	49
February.....	54	54	54	55	55	55	52	52	51	53	53	54	54	54	54	53	52	51	53	--	--	53	53	55	56	57	55	--	--	--	--	53
March.....	56	76	63	--	--	--	57	58	58	--	--	--	60	60	60	60	63	63	62	--	--	64	63	64	63	63	63	63	60	60	--	53
April.....	61	61	--	62	61	62	63	62	63	64	63	61	60	60	62	--	--	--	--	63	62	63	62	62	63	64	66	63	64	63	--	62
May.....	63	64	65	67	63	66	67	70	73	71	70	70	70	69	68	69	71	72	74	75	77	77	75	75	76	76	75	75	74	73	73	71
June.....	71	73	73	75	74	74	74	75	75	74	74	74	73	62	74	76	77	77	77	77	79	80	80	80	80	80	80	84	81	82	--	76
July.....	83	83	83	83	83	82	81	--	84	85	85	85	85	85	84	85	85	85	85	84	84	85	84	85	85	85	85	85	85	85	86	83
August.....	--	86	86	85	--	--	85	86	83	85	86	--	--	88	88	86	85	85	85	--	--	86	--	86	84	85	86	86	85	86	85	85
September	84	--	--	82	84	--	84	85	85	85	85	84	84	83	81	80	79	79	80	78	79	79	79	79	79	80	79	79	80	81	--	81

COLORADO RIVER MAIN STEM

9-5265. ALL-AMERICAN CANAL ABOVE PILOT KNOB WASTEWAY, CALIF.

LOCATION.--Lat 32°45'00", long 114°42'20", near right bank on downstream side of pier of bridge on U.S. Highway 80, 1.1 miles upstream from Pilot Knob wasteway, Imperial County, 5 miles downstream from turnout to Yuma Main Canal, 5.5 miles northwest of Yuma, and 19.5 miles downstream from intake at Imperial Dam.
 RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Nov. 16, 1966....	2560			100	36	163	5.0	187	0	363	157	0.8	1.5	0.19	976			398			1520	8.1
Jan. 10, 1967....	5040			97	34	148	5.0	179	0	342	135	.6	2.0	.19	896			382			1360	8.1
Mar. 7.....	6600			96	35	132	5.0	173	0	340	126	.6	5.5	.19	891			384			1200	8.2
May 9.....	4920			95	34	160	5.0	165	0	346	149	.7	1.0	.01	952			377			1350	8.2
July 4.....	7660			88	28	135	6.0	171	0	324	115	.7	2.0	.18	853			335			1220	8.1
Sept. 13.....	6070			94	32	162	5.0	173	7	351	148	.7	2.0	.26	975			366			1380	8.3

PART 10. THE GREAT BASIN

SALTON SEA BASIN

10-2540.02. SALTON SEA AT SALTON SEA STATE PARK, CALIF.

LOCATION.--Lat 33°30'11", long 115°54'51", on northeast shore of boat landing in Salton Sea State Park, Imperial County.
 RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Cal- cium (Ca)	Mag- ne- sium (Mg)	Sodium (Na)	Po- tas- sium (K)	Bi- car- bon- ate (HCO ₃)	Car- bon- ate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluo- ride (F)	Ni- trate (NO ₃)	Bo- ron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		So- dium ad- sorp- tion ratio	Specific con- duct- ance (micro- mhos at 25°C)	pH
															Parts per million	Tons per acre- foot	Tons per day	Cal- cium, Mag- ne- sium	Non- car- bon- ate			
Nov. 15, 1966....				876	1100	1500	164	190	0	8170	15000	3.0	6.2	9.4	37100			6710			44200	7.4
Jan. 9, 1967.....				874	1020	--	160	159	26	7770	14300	2.8	2.5	9.2	35500			6390			43000	8.4
Mar. 6.....				848	1100	--	196	179	0	7710	14200	3.1	12	4.9	37100			6630			42000	7.7
May 8.....				873	1070	1300	219	153	0	7910	14800	3.0	12	3.0	37000			6590			39600	6.9
July 3.....				842	1140	1250	164	181	0	7850	14800	3.8	5.0	9.8	36000			6780			41100	7.9
Sept. 12.....				883	1050	1500	168	195	0	7930	15000	3.4	3.7	9.0	36900			6530			42200	7.9

SALTON SEA BASIN--Continued

10-2547.3. ALAMO RIVER NEAR NILAND, CALIF.

LOCATION.--Lat 33°12'03", long 115°36'07", at gaging station 0.6 mile upstream from mouth, and 5.8 miles southwest of Niland, Imperial County.
 RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Nov. 15, 1966....	714			231	125	610	10	246	0	972	840	0.8	29	0.80	3130			1090			4520	7.5
Jan. 9, 1967....	738			194	104	510	10	220	0	806	690	.8	41	.64	2560			912			3650	7.2
Mar. 6.....	960			186	113	476	13	210	0	807	651	.9	38	.65	2520			2390			3380	7.8
Mar. 17.....	A 1120			185	95	450	11	212	0	783	590	1.0	17	.60	2370			853			3420	7.3
May 8.....	900			191	101	483	14	220	0	782	639	.9	31	.26	2540			892			3510	8.0
July 3.....	885			194	112	500	12	237	0	838	670	.8	21	.64	2680			945			3800	7.6
Sept. 12.....	636			226	132	695	13	251	0	1020	955	1.1	22	.84	3400			1110			4760	7.8

A Daily mean discharge.

SALTON SEA BASIN--Continued

10-2555.5. NEW RIVER NEAR WESTMORELAND, CALIF.

LOCATION.--Lat 33°06'17", long 115°39'49", 3.5 miles upstream from mouth, and 5.2 miles northwest of Westmoreland, Imperial County.
 RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Cal- cium (Ca)	Mag- ne- sium (Mg)	Sodium (Na)	Po- tas- sium (K)	Bi- car- bon- ate (HCO ₃)	Car- bon- ate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluo- ride (F)	Ni- trate (NO ₃)	Bo- ron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		So- dium ad- sorp- tion ratio	Specific con- duct- ance (micro- mhos at 25°C)	pH
															Parts per million	Tons per acre- foot	Tons per day	Cal- cium, Mag- ne- sium	Non- car- bon- ate			
Nov. 15, 1966....	534			237	113	860	24	268	0	837	1300	0.8	16	1.5	3660			1060			5590	7.3
Jan. 9, 1967.....	498			237	118	860	26	278	0	817	1340	.9	24	1.4	3750			1080			5710	7.3
Mar. 6.....	617			210	109	726	23	250	0	756	1080	.9	22	1.2	3200			973			4480	7.6
May 8.....	592			227	110	782	25	261	0	798	1140	.7	14	1.28	3470			1020			5010	7.6
July 3.....	551			211	127	800	20	264	0	837	1170	.9	16	1.3	3610			1050			5260	7.6
Sept. 12.....	511			249	127	1000	27	283	0	905	1550	.8	10	1.4	4200			1140			6250	7.8

SALTON SEA BASIN--Continued

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

LOCATION.--Lat 33°56'48", long 116°38'24", at gaging station 1.5 miles north of White Water, Riverside County, and 3.5 miles upstream from San Geronio River.
 DRAINAGE AREA.--57.4 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Cal- cium (Ca)	Mag- ne- sium (Mg)	Sodium (Na)	Po- tas- sium (K)	Bi- car- bon- ate (HCO ₃)	Car- bon- ate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluo- ride (F)	Ni- trate (NO ₃)	Bo- ron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		So- dium ad- sorp- tion ratio	Specific con- duct- ance (micro- mhos at 25°C)	pH
															Parts per million	Tons per acre- foot	Tons per day	Cal- cium, Mag- ne- sium	Non- car- bon- ate			
Nov. 15, 1966....	12			52	13	14	4.0	210	0	33	3.0	0.9	1.2	0.00	240			183			403	8.2
Jan. 9, 1967.....	11			60	13	16	5.0	229	0	44	4.0	1.1	2.5	.00	277			203			441	8.0
Mar. 6.....	13			52	15	13	4.0	198	7	38	7.0	1.0	1.0	.00	246			191			418	8.3
May 8.....	35			50	6.0	13	4.0	196	0	34	8.0	1.0	1.0	.00	199			149			378	7.9
July 3.....	30			46	14	13	4.0	193	5	30	2.0	1.1	1.0	.00	238			172			378	8.4
Sept. 12.....	29			48	14	14	5.0	207	0	33	3.0	.9	1.0	.02	267			177			397	8.2

SALTON SEA BASIN--Continued

10-2595.4. WHITEWATER RIVER NEAR MECCA, CALIF.

LOCATION.--Lat 33°31'00", long 116°04'02", at gaging station 0.9 mile upstream from mouth, and 3.9 miles south of Mecca, Riverside County.

DRAINAGE AREA.--1,299 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Nov. 15, 1966....	101			170	46	535	13	327	0	838	425	2.9	33	1.2	2330			614			3320	8.0
Jan. 9, 1967.....	90			133	32	425	9.0	283	0	663	330	3.5	21	.74	1810			464			2670	8.1
Mar. 6.....	118			152	43	452	12	304	0	720	356	3.6	15	.72	2010			556			2940	7.8
May 8.....	125			162	49	520	9.0	280	0	866	442	3.6	5.0	.85	2330			606			3300	8.1
July 3.....	108			142	48	530	13	283	0	849	400	4.0	33	1.0	2270			552			3240	7.7
Sept. 12.....	108			157	41	515	12	320	0	811	400	3.2	28	1.0	2270			561			3140	8.0

MOJAVE RIVER BASIN

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

LOCATION.--Lat 34°20'35", long 117°14'01", 100 feet downstream from confluence of Deep Creek and West Fork Mojave River, 12 miles south of Apple Valley, San Bernardino County.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 10, 1966....	6.0			22	5.0	47	3.0	123	0	59	11	3.2	0.0	0.12	211			75			370	8.1
Nov. 3.....	6.0			23	5.0	42	2.0	118	0	52	10	2.7	.0	.11	176			78			339	7.8
Dec. 7.....	2000			7.0	1.0	7.0	2.0	39	0	5.0	3.0	.2	1.9	.10	80			22			--	7.0
Jan. 5, 1967....	30			23	5.0	17	2.0	98	0	17	9.0	.6	1.3	.06	146			78			229	7.6
Feb. 8.....	80			21	5.0	14	2.0	96	0	14	7.0	.4	1.5	.02	150			73			207	7.9
Mar. 21.....	150			17	3.0	11	2.0	78	0	9.0	7.0	.4	1.5	.02	125			55			160	7.4
Apr. 5.....	2000			13	3.0	9.0	2.0	59	0	8.0	5.0	.2	.0	.03	104			45			127	7.4
May 3.....	300			14	4.0	9.0	2.0	71	0	8.0	4.0	.2	.8	.03	116			51			146	7.8
May 31.....	150			17	3.0	11	2.0	85	0	8.0	3.0	.3	.4	.01	117			55			164	8.1
July 11.....	60			16	5.0	16	2.0	93	0	11	5.0	.8	.6	.02	141			60			191	7.8
Aug. 10.....	35			17	5.0	22	2.0	99	0	20	4.0	1.2	.0	.04	125			63			226	7.9
Aug. 31.....	7.0			19	5.0	27	2.0	110	0	25	6.0	1.3	.0	.07	175			68			258	7.7

MOJAVE RIVER BASIN--Continued

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

LOCATION.--Lat 34°34'22", long 117°19'08", at gaging station 1,000 feet upstream from bridge on county road, formerly U.S. Highway 66, 2,500 feet downstream from Atchison, Topeka and Santa Fe Railway bridge, and 3 miles northwest of Victorville, San Bernardino County.

DRAINAGE AREA.--514 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 10, 1966....	16			48	11	60	9.0	221	0	65	38	0.7	4.2	0.13	358			165			601	7.7
Nov. 3.....	14			49	10	57	6.0	214	0	60	36	.6	4.0	.10	337			163			576	7.8
Dec. 7.....	1200			23	2.0	10	3.0	83	0	15	4.0	.3	3.7	.04	140			66			170	7.4
Jan. 5, 1967....	35			47	11	51	5.0	211	0	55	29	.6	4.5	.09	320			163			528	7.9
Feb. 8.....	35			45	9.0	47	5.0	199	0	50	26	.6	4.0	.08	317			149			494	7.9
Mar. 21.....	141			26	6.0	22	3.0	122	0	22	11	.5	3.5	.06	193			90			277	7.3
Apr. 5.....	714			17	30	11	2.0	73	0	12	6.0	.3	1.5	.04	116			55			161	7.3
May 3.....	255			18	6.0	14	2.0	93	0	12	7.0	.3	2.5	.02	147			70			200	7.7
May 31.....	26			41	8.0	45	6.0	193	0	46	22	.5	5.5	.09	313			135			475	7.7
July 11.....	17			43	10	56	6.0	217	0	50	28	.7	3.5	.16	343			148			532	7.5
Aug. 10.....	11			38	10	59	7.0	210	0	53	28	.6	4.3	.14	307			136			541	7.4
Aug. 31.....	10			41	11	58	7.0	220	0	50	30	.6	3.5	.15	346			148			545	7.4

MISCELLANEOUS ANALYSES OF STREAMS IN MOJAVE RIVER BASIN

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment con- cen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
10-2605.5. WEST FORK MOJAVE RIVER ABOVE CEDAR SPRINGS, CALIF. (Lat 34°55'20", long 117°45'10")																		
Dec. 5, 1966.....	1445	52	--	272	2440	1790	15	20	27	36	48	58	76	89	98	100	VPWC	
Dec. 8.....	1430	49	--	13	31	1.1												
Jan. 25, 1967.....	1500	44	--	30	252	20												
Feb. 14.....	1630	45	--	2.8	6	T												
Mar. 13.....	--	--	1	113	2010	613												
Mar. 13.....	--	--	2	158	2680	1140												
Mar. 13.....	--	--	3	203	2160	1180												
Mar. 13.....	--	--	4	253	3320	2270												
Mar. 14.....	1215	47	--	48	163	21												
Mar. 14.....	1630	47	--	142	816	313												
Mar. 14.....	1645	--	--	142	1050	403												
Mar. 17.....	0900	53	--	24	19	1.2												
Apr. 4.....	0950	48	--	71	9	1.7												
Apr. 5.....	--	--	--	113	3280	1000												
Apr. 22.....	--	--	1	113	1970	601												
Apr. 22.....	--	--	2	158	2830	1210												
10-2607. EAST FORK OF WEST FORK MOJAVE RIVER ABOVE CEDAR SPRINGS, CALIF. (Lat 34°16'18", long 117°18'40")																		
Dec. 5, 1966.....	1300	--		165	3480	1550	8	8	12	20	30	46	78	96	100		VPWC	
Dec. 6.....	1600	--		884	6900	16500												
Dec. 8.....	1600	47		52	219	31												
Dec. 21.....	1250	47		6.8	6	.1												
Jan. 22, 1967.....	1545	--		44	2010	239												
Jan. 23.....	1345	--		44	574	68												
Jan. 24.....	1815	--		192	3150	1630												
Jan. 25.....	1300	43		148	1010	404												
Feb. 1.....	1330	46		27	14	1.0												
Feb. 14.....	1650	43		13	15	.5												
Feb. 16.....	1500	52		56	42	6.4												
Apr. 4.....	0935	47		26	2	.1												
June 5.....	1000	53		15	5	.2												
10-2608. WEST FORK OF MOJAVE RIVER BELOW CEDAR SPRINGS, CALIF. (Lat 34°18'25", long 117°18'40")																		
Dec. 6, 1966.....	1500	43		2973	7890	63300	3	6	8	12	17	22	32	45	70	88	100	SPWC
Dec. 7.....	1505	52		405	2260	2470						--	--	--	--	--	--	VPWC
Jan. 23, 1967.....	1115	--		149	1700	684						--	--	--	--	--	--	
Jan. 25.....	--	47		801	2060	4460						18	33	60	88	98	100	
Mar. 16.....	1330	54		178	1870	899						--	--	--	--	--	--	
Apr. 6.....	1100	52		143	808	312						--	--	--	--	--	--	

ANTELOPE VALLEY

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

LOCATION.--Lat 34°25'15", long 117°50'19", temperature recorder at gaging station 0.1 mile upstream from Punchbowl Canyon, and 1.9 miles southeast of Valyermo, Los Angeles County.

DRAINAGE AREA.--23.0 square miles.

RECORDS AVAILABLE.--Water temperatures: January 1962 to September 1967.

EXTREMES, 1962-66.--Water temperatures: Maximum, 65°F June 20, 21, 1962, Aug. 14-17, 1963, Aug. 10, 1965; minimum, 43°F Feb. 16, Dec. 18, 1964.

REMARKS.--Temperature probe covered with silt or exposed to air Oct. 1 to July 26.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	--	--	--	--	--	--	--	--	--	--	61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
December	--	--	--	--	--	--	--	--	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January	--	--	--	--	--	--	--	--	--	--	46	--	--	--	--	--	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
February	--	--	--	--	--	--	--	--	--	--	--	--	--	--	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March	--	--	--	--	--	--	--	--	--	--	--	--	--	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
April	--	--	--	--	--	--	--	--	--	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--	--	--	52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	70	68	70	70	70	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	57	57	57	57	57	--
August	70	70	70	70	70	70	68	66	70	68	68	66	66	70	66	68	68	70	70	70	68	64	64	68	70	70	70	70	64	70	68	--	--
Maximum	57	57	57	57	55	57	55	55	57	57	57	57	57	57	57	59	61	59	57	57	55	55	57	57	61	59	55	55	57	57	57	57	57
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	64	64	70	64	68	68	68	68	66	64	68	68	68	64	66	66	66	63	66	66	66	64	66	66	64	64	64	64	64	66	--	65	
Maximum	61	61	57	57	55	55	57	55	54	55	55	55	55	55	54	55	54	54	57	55	55	55	55	55	55	55	57	57	57	55	--	55	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS ANALYSES OF STREAMS IN WALKER LAKE BASIN

Chemical analyses, in parts per million, July 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
10-2930. EAST WALKER RIVER NEAR BRIDGEPORT, CALIF. (Lat 38°19'40", long 119°12'50")																						
July 19, 1966....	239					13		123	0		2.2			0.1				87			215	8.0
Sept. 8.....	180			29	5.0	15	4.3	139	0	11	1.0			--				93			251	8.0
Nov. 23.....	12					14		120	0		2.8			.1				92			237	8.0
Jan. 26, 1967....	5.0					17		128	0		2.6			.1				102			253	7.5
Mar. 23.....	379					17		104	0		4.3			.2				69			218	8.1
July 11.....	931					5.4		46	0		1.2			.0				32			97	7.6
Sept. 13.....	315					8.5		77	0		1.9			.1				56			152	8.2

MISCELLANEOUS ANALYSES OF STREAMS IN CARSON RIVER BASIN

Chemical analyses, in parts per million, July 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
10-3082. EAST FORK CARSON RIVER NEAR MARKLEEVILLE, CALIF. (Lat 38°42'50", long 119°45'50")																						
July 31, 1966....	131					5.2		50	0		2.0			0.0				34			90	7.9
Sept. 8.....	52					8.8		88	0		2.2			--				65			156	7.7
Nov. 23.....	68					11		73	0		5.1			.3				60			161	7.7
Jan. 26, 1967....	143					19		77	0		4.6			.1				65			168	7.9
Mar. 23.....	535					7.9		74	0		2.9			.2				57			160	8.2
July 11.....	1150					2.8		27	0		.8			.0				17			50	7.6
Sept. 13.....	153					5.9		55	0		1.7			.1				39			105	8.0
10-3100. WEST FORK CARSON RIVER AT WOODFORDS, CALIF. (Lat 38°46'10", long 119°49'55")																						
July 19, 1966....	52					2.6		36	0		0.0			0.0				29			65	7.0
Sept. 8.....	A 11					4.5		54	0		.4			--				32			87	8.1
Nov. 23.....	25					4.2		43	0		1.5			.0				32			79	7.8
Jan. 26, 1967....	31					4.3		40	0		1.2			.0				30			73	7.2
Mar. 23.....	80					2.6		30	0		1.0			.1				22			60	7.9
July 11.....	303					1.7		24	0		.6			.0				19			44	7.7
Sept. 13.....	55					2.8		37	0		.8			.0				27			70	7.8

OWENS LAKE BASIN

10-2783. LOS ANGELES AQUEDUCT AT OUTLET, AT SAN FERNANDO, CALIF.

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

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 18, 1966....	--	23		26	7.0	35	4.0			26	15	0.7	0.8	0.50				95			356	8.4
Nov. 15.....	396	23		22	6.0	32	4.0			16	15	.4	.8	.30				79			318	8.3
Dec. 21.....	336	23		22	6.0	32	4.0			23	14	.5	.2	.42				79			310	8.2
Feb. 14, 1967....	323	20		25	6.0	42	4.0			49	18	.4	1.2	.65				88			400	7.8
May 16.....	495	21		25	7.0	44	4.0			37	21	.7	.2	.52				90			436	8.3

PYRAMID AND WINNEMUCCA LAKES BASIN

10-3459. TRUCKEE RIVER AT FLORISTON, CALIF.

LOCATION.--Lat 39°23'40", long 120°01'25", at bridge at Floriston, Nevada County, 0.2 mile above flume diversion, 2.5 miles upstream from gage at Farad, and 1.8 miles upstream from Farad.

DRAINAGE AREA.--932 square miles, upstream from gaging station.

RECORDS AVAILABLE.--Chemical analyses: January 1964 to September 1967.

Water temperatures: January 1964 to September 1967.

EXTREMES, 1966-67.--Dissolved solids: Maximum, 81 ppm Feb. 1-28; minimum, 54 ppm Nov. 29-30.

Hardness: Maximum, 41 ppm Jan. 1-31; minimum, 24 ppm June 1-30.

Water temperatures: Maximum, 63°F July 31; minimum, freezing point Jan. 7, Feb. 7, 15, 16.

EXTREMES, 1964-67.--Dissolved solids: Maximum, 85 ppm Dec. 1-21, 1964; minimum, 45 ppm Dec. 22-31, 1964.

Hardness: Maximum, 43 ppm Mar. 1-31, 1964; minimum, 18 ppm Dec. 22-31, 1964.

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

Water temperatures: Maximum, 68°F July 24, 1964; minimum, freezing point on several days during winter months.

REMARKS.--Records of daily discharge data given for 10-3460. Truckee River at Farad, Calif.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 1-31, 1966..	393	--	--	9.5	2.9	6.0	1.8	54	0	3.0	1.8	--	0.0	0.0	65	0.09	69.0	36	0	0.4	101	7.7
Nov. 1-26.....	316	--	--	10	3.2	6.4	1.8	56	0	5.0	2.0	--	0.4	0	65	0.09	55.5	38	0	0.5	108	7.7
Nov. 27-28 A.....	424	--	--	16	3.0	5.7	3.7	62	0	25	73	--	1.0	2.3	234	0.32	268	52	1	0.3	408	7.8
Nov. 29-30.....	611	--	--	9.0	2.6	4.8	1.5	44	0	5.0	2.4	--	0.3	0	54	0.07	89.0	33	0	0.4	92	7.7
Dec. 1-31.....	523	--	--	10	3.1	5.8	1.5	52	0	5.0	3.0	--	0.3	0	62	0.08	87.5	38	0	0.4	104	7.5
Jan. 1-31, 1967..	432	18	0.01	11	3.3	6.2	1.6	56	0	4.0	3.2	0.1	0.4	0	79	0.11	92.1	41	0	0.4	109	8.1
Feb. 1-28.....	519	--	--	10	3.2	5.3	1.4	51	0	4.0	3.7	--	0.4	0	81	0.11	114	38	0	0.4	104	8.0
Mar. 1-15.....	561	18	--	9.7	3.2	5.1	1.4	52	0	4.0	2.8	0.2	1.0	0	78	0.11	118	37	0	0.4	102	8.1
Mar. 16-31.....	1637	--	--	7.6	2.3	4.0	1.2	36	0	3.0	2.8	--	1.6	0	66	0.09	292	28	0	0.3	80	7.9
Apr. 1-30.....	542	18	0.01	9.5	3.0	5.4	1.3	46	0	4.0	4.5	0.1	1.0	0	76	0.10	111	36	0	0.4	99	7.7
May 1-31.....	3697	--	--	7.5	2.2	4.1	1.2	40	0	1.0	1.6	--	1.0	0	64	0.09	639	28	0	0.3	75	8.0
June 1-30.....	4320	--	--	6.8	1.8	3.1	--	34	0	1.0	1.3	--	0.5	0	56	0.08	653	24	0	0.3	64	7.4
July 1-31.....	1696	16	0.02	7.2	1.7	3.6	1.3	40	0	1.0	1.5	0	0.1	0	55	0.07	252	25	0	0.3	71	7.8
Aug. 1-8.....	575	--	--	8.2	2.3	4.0	1.3	42	0	2.0	2.2	--	0.4	0	62	0.08	96.2	30	0	0.3	80	7.4
Aug. 9-31.....	588	--	--	10	2.9	5.4	1.7	50	0	4.0	2.9	--	2.0	0	72	0.10	114	37	0	0.4	100	7.2
Sept. 1-30.....	659	--	--	7.0	1.9	3.2	1.2	36	0	1.0	2.3	--	0.5	0	58	0.08	103	26	0	0.3	68	7.7
Weighted average.....	--	--	--	7.8	2.2	4.1	1.3	41	--	1.9	2.1	--	0.7	0.0	63	0.08	210	29	0	0.3	78	7.6
Time-weighted average.....	1239	--	--	8.9	2.6	4.9	1.5	46	--	3.1	2.9	--	0.6	0.0	68	--	--	33	0	0.4	92	7.7
Tons per day...	--	--	--	26	7.4	14	3.5	136	--	6.3	7.0	--	2.3	--	--	--	--	--	--	--	--	--

A Deterioration of quality caused by a NaClSO₄ salt of undetermined origin. This analysis not used in determining extremes values.

PYRAMID AND WINNEMUCCA LAKES BASIN--Continued

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

Specific conductance (micromhos at 25°C), water year October 1966 to September 1967

Day	October	November	December	January	February	March	April	May	June	July	August	September
1.....	99	109	106	107	98	--	83	105	65	71	77	85
2.....	102	109	96	107	93	--	99	89	65	70	81	81
3.....	103	108	97	107	94	100	81	89	66	67	79	82
4.....	94	109	101	106	96	98	99	88	64	67	81	81
5.....	--	109	104	107	98	--	94	86	68	67	81	82
6.....	91	109	103	114	98	--	101	85	66	68	81	67
7.....	92	109	97	114	105	100	99	78	67	69	81	66
8.....	93	109	97	114	108	100	101	78	67	74	81	66
9.....	96	109	102	114	106	104	102	79	64	74	103	66
10.....	98	109	102	110	107	--	100	78	64	74	100	63
11.....	98	109	100	107	106	--	102	77	63	74	87	63
12.....	98	109	106	110	106	--	104	--	63	74	90	63
13.....	99	109	99	110	106	--	104	--	63	74	84	61
14.....	100	109	100	109	106	--	101	--	64	66	84	63
15.....	100	106	99	108	105	97	102	--	66	71	100	64
16.....	101	--	102	108	105	69	102	--	66	66	102	63
17.....	101	--	102	108	100	74	103	76	64	66	92	67
18.....	102	104	112	--	358	75	101	--	63	66	92	67
19.....	101	104	112	--	104	79	100	69	64	69	102	67
20.....	101	104	113	--	105	77	99	67	60	69	106	--
21.....	101	99	100	--	105	77	105	65	61	70	92	--
22.....	101	--	102	--	103	91	107	--	60	71	104	--
23.....	101	102	100	--	107	--	99	63	60	71	104	68
24.....	101	101	102	--	107	79	99	--	62	73	105	68
25.....	102	--	103	--	105	--	99	--	62	74	95	--
26.....	106	--	105	--	105	81	105	--	74	76	109	67
27.....	104	501	121	--	106	78	103	--	67	--	108	67
28.....	106	343	106	--	106	78	103	--	69	76	108	67
29.....	--	98	106	--	--	81	101	--	70	77	107	--
30.....	--	78	108	--	--	83	105	--	70	75	108	--
31.....	--	--	106	92	--	79	--	--	--	76	108	--
Average	99	130	103	--	112	--	100	--	64	71	94	68

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Aver- age
	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	
October	55	56	55	57	—	58	53	53	53	51	51	51	48	48	45	45	45	48	45	45	46	45	49	51	49	48	48	48	—	—	—	50
November	48	48	48	48	47	45	45	46	42	45	46	48	48	45	47	—	45	45	45	45	—	35	35	—	—	37	38	43	45	—	44	
December	43	40	39	37	45	43	37	36	42	43	36	35	37	36	39	36	33	37	37	36	35	39	37	35	34	35	33	33	33	33	33	37
January.....	36	35	33	35	36	33	32	34	35	35	37	39	38	37	36	37	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35
February.....	35	35	37	35	35	33	32	35	35	36	35	38	37	36	32	32	35	34	34	35	35	37	34	40	35	33	35	37	—	—	35	—
March.....	—	—	35	35	—	—	35	34	35	—	—	—	—	—	36	34	36	36	35	36	38	39	—	35	—	36	35	37	35	36	35	—
April.....	35	36	35	35	36	39	37	42	42	41	38	43	42	43	44	39	41	39	38	37	39	39	40	39	39	40	39	38	40	40	—	39
May.....	40	42	40	40	45	41	41	41	41	41	40	—	—	—	45	—	39	42	45	—	45	—	—	—	—	—	—	—	—	—	—	—
June	44	45	45	45	49	49	47	48	46	47	46	46	48	50	51	51	51	54	54	48	49	49	56	55	55	55	53	52	55	56	—	50
July.....	58	56	57	55	55	56	56	59	56	57	57	58	60	58	58	53	54	53	52	55	52	53	54	55	52	58	—	60	58	58	63	56
August.....	59	60	58	59	55	55	55	55	54	56	60	61	60	59	55	54	59	59	58	59	56	55	57	59	54	59	61	59	57	59	58	58
September.....	61	58	60	58	56	58	58	54	55	55	55	54	53	51	53	52	53	53	53	—	—	—	54	55	—	55	55	55	—	—	—	55

MISCELLANEOUS ANALYSES OF STREAMS IN PYRAMID AND WINNEMUCCA LAKES BASIN

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
10-3370. LAKE TAHOE AT TAHOE, CALIF. (Lat 39°10'04", long 120°08'23")																						
Nov. 22, 1966....						5.9		51	0		2.4			0.0				32			93	7.8
Jan. 25, 1967....						—		51	0		2.1			.0				34			91	8.0
Mar. 22.....						6.2		53	0		2.0			.1				32			96	8.1
May 18.....						5.5		51	0		1.7			.0				31			96	7.8
July 10.....						6.0		49	0		2.0			.0				30			93	7.9
Sept. 14.....						6.2		52	0		2.0			.0				35			93	8.0

HONEY LAKE BASIN

10-3565. SUSAN RIVER AT SUSANVILLE, CALIF.

LOCATION.--Lat 40°25'05", long 120°40'15", at gaging station 0.5 mile west of Susanville, Lassen County, and 1.1 miles upstream from Piute Creek.

DRAINAGE AREA.--184 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Cal- cium (Ca)	Mag- ne- sium (Mg)	Sodium (Na)	Po- tas- sium (K)	Bi- car- bon- ate (HCO ₃)	Car- bon- ate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluo- ride (F)	Ni- trate (NO ₃)	Bo- ron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		So- dium ad- sorp- tion ratio	Specific con- duct- ance (micro- mhos at 25°C)	pH
															Parts per million	Tons per acre- foot	Tons per day	Cal- cium, Mag- ne- sium	Non- car- bon- ate			
Oct. 10, 1966....	3.2			18	9.9	6.7	2.1	122	0	--	0.6		--	0.0	--			86			191	8.1
Nov. 8.....	8.5			17	9.1	6.2	2.1	111	0	--	.7		--	.0	--			80			172	7.3
Dec. 5.....	158			9.5	3.7	3.8	1.0	49	0	--	.9		--	.0	--			38			92	7.3
Jan. 6, 1967....	22			16	7.7	5.8	1.4	94	1	--	1.0		--	.0	--			72			158	8.3
Feb. 6.....	89			12	4.4	4.2	1.0	62	0	--	1.0		--	.0	--			48			108	7.3
Mar. 7.....	81			12	4.8	4.5	1.0	67	0	--	1.0		--	.0	--			50			112	7.5
Apr. 10.....	142			11	4.3	4.1	.9	61	0	--	.6		--	.0	--			45			103	7.8
May 8.....	357	28		8.5	3.1	3.2	.9	44	0	1.0	.6		0.6	.0	70			34			81	7.1
June 5.....	298			7.1	2.9	2.5	.6	38	0	--	.2		--	.0	--			30			69	7.1
July 6.....	61			--	--	3.7	--	59	0	--	1.2		--	.1	--			43			99	7.7
Aug. 9.....	112			--	--	3.2	--	36	0	--	1.3		--	.0	--			28			70	7.7
Sept. 7.....	7.8			16	8.3	6.0	2.3	104	0	3.4	1.4		.4	.0	129			74			171	8.2

PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA

SANTA MARGARITA RIVER BASIN

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

LOCATION.--Lat 33°23'54", long 117°15'44", at gaging station 180 feet upstream from De Luz Road, 1.3 miles northwest of Fallbrook, San Diego County, and 1.9 miles downstream from Sandia Canyon.

DRAINAGE AREA.--644 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Nov. 17, 1966....	2.5			115	37	148	4.0	373	0	175	192	0.7	0.6	0.24	910			439			1430	8.0
Jan. 12, 1967....	8.0			105	40	125	3.0	309	0	186	174	.6	.0	.19	849			427			1340	8.1
Mar. 8.....	6.8			94	34	112	3.0	295	0	157	150	.6	1.0	.18	734			375			1170	8.0
May 11.....	7.9			69	34	97	2.0	248	0	125	128	.7	1.0	.13	625			312			1020	8.2
July 5.....	2.3			94	40	118	3.0	351	0	146	150	1.4	1.0	.20	818			399			1250	8.0
Sept. 3.....	.8			102	37	139	4.0	409	0	126	176	.6	.0	.22	896			407			1360	8.0

SAN JUAN CREEK BASIN

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

LOCATION.--Lat 33°31'08", long 117°37'27", at gaging station on right pier of bridge on State Highway 74, 2.5 miles northeast of San Juan Capistrano, Orange County.

DRAINAGE AREA.--106 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1966 to September 1967.

Sediment records: October 1966 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 10,600 ppm Dec. 6; minimum daily, no flow on many days during October.

Sediment loads: Maximum daily, 110,000 tons Dec. 6; minimum daily, 0 ton on many days during October.

REMARKS.--No flow Oct. 3-9, 17-29.

Month	Temperature (°F) of water, water year October 1966 to September 1967																															Average	
	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		
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November	--	--	--	--	--	--	64	64	--	--	--	--	--	--	--	64	--	--	--	--	--	64	--	--	--	--	--	--	--	--	--	--	--
December	--	--	63	61	61	61	59	55	59	61	59	54	57	57	48	48	--	--	48	--	--	--	--	54	--	--	--	--	--	--	--	54	--
January	--	--	--	--	--	--	45	--	--	--	45	--	--	46	--	--	--	48	--	--	46	--	52	52	54	57	55	55	57	57	55	--	--
February	48	--	--	46	--	--	46	--	--	46	--	--	46	46	--	--	--	45	--	--	43	--	43	--	55	55	--	--	--	--	--	--	
March	48	--	--	52	--	63	--	--	--	55	--	--	68	57	54	--	57	--	--	--	--	--	--	52	--	--	--	--	66	--	54	--	--
April	52	63	66	--	--	--	63	--	--	--	55	57	54	--	--	--	63	55	--	--	66	61	72	--	54	--	--	--	57	--	--	--	
May	--	64	--	--	--	--	73	--	--	--	--	--	54	--	--	--	--	--	--	81	--	--	--	--	--	--	66	--	--	--	--	--	--
June	--	70	55	--	--	--	--	--	--	63	--	--	--	--	--	--	63	--	--	--	--	--	--	64	--	--	--	--	81	--	--	--	--
July	64	--	--	--	--	--	84	--	--	--	--	--	--	--	88	--	--	--	--	--	75	--	--	--	--	--	--	--	--	--	82	--	--
August	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	--	--	--	--
September	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	75	--	--	--	--	--

SAN JUAN CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.1	1	T	0.8	5	T	1.5	4	T
2..	.1	1	T	.8	7	T	1.6	4	T
3..	0	--	0	.7	7	T	121	1360	S 1670
4..	0	--	0	.7	7	T	63	530	S 182
5..	0	--	0	.8	9	T	1220	5700	S 29600
6..	0	--	0	1.1	12	T	3500	10600	S 110000
7..	0	--	0	1.5	27	0.1	1000	7020	S 25700
8..	0	--	0	1.9	4	T	400	3490	S 3700
9..	0	--	0	2.1	4	T	200	3000	1620
10..	.2	1	T	2.2	4	T	120	2200	710
11..	.3	1	T	2.3	4	T	100	1000	270
12..	.3	1	T	2.4	4	T	80	700	151
13..	.2	1	T	2.3	4	T	65	540	95
14..	.1	1	T	2.8	4	T	55	460	68
15..	.1	1	T	2.8	4	T	50	390	53
16..	.1	1	T	2.6	4	T	45	350	43
17..	0	--	0	2.8	4	T	42	330	37
18..	0	--	0	2.7	4	T	40	310	33
19..	0	--	0	3.0	4	T	38	290	30
20..	0	--	0	3.1	4	T	36	280	27
21..	0	--	0	3.5	4	T	34	270	25
22..	0	--	0	3.4	4	T	31	260	22
23..	0	--	0	3.1	4	T	30	260	21
24..	0	--	0	2.8	4	T	31	280	23
25..	0	--	0	2.5	4	T	30	320	26
26..	0	--	0	2.3	4	T	30	320	26
27..	0	--	0	2.0	4	T	28	320	24
28..	0	--	0	1.6	4	T	28	310	23
29..	0	--	0	1.6	4	T	27	290	21
30..	.2	1	T	1.4	4	T	27	250	18
31..	.7	5	T	--	--	--	25	200	14
Total	2.4	--	T	63.6	--	0.8	7499.1	--	174232
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	24	150	9.7	60	250	40	13	30	1.1
2..	23	120	7.5	55	208	31	13	28	1.0
3..	21	96	5.4	50	170	23	13	27	.9
4..	20	80	4.3	45	145	18	13	25	.9
5..	18	64	3.1	40	127	14	13	24	.8
6..	17	53	2.4	36	113	11	12	23	.7
7..	16	45	1.9	35	110	10	12	22	.7
8..	15	38	1.5	34	180	17	12	21	.7
9..	14	33	1.2	33	165	15	11	20	.6
10..	13	28	1.0	32	143	12	10	19	.5
11..	13	25	.9	31	125	10	16	35	1.5
12..	13	23	.8	30	110	8.9	17	110	5.0
13..	13	22	.8	29	100	7.8	27	720	52
14..	13	21	.7	28	90	6.8	69	600	112
15..	13	20	.7	27	82	6.0	36	560	54
16..	13	20	.7	26	74	5.2	27	110	8.0
17..	14	45	1.7	24	67	4.3	25	50	3.4
18..	14	44	1.7	22	62	3.7	25	39	2.6
19..	13	42	1.5	21	57	3.2	25	26	1.8
20..	12	40	1.3	20	53	2.9	24	24	1.6
21..	11	38	1.1	19	49	2.5	19	24	1.2
22..	42	800	91	18	47	2.3	17	22	1.0
23..	140	1700	643	18	43	2.1	11	20	.6
24..	800	2500	5400	17	40	1.8	11	20	.6
25..	338	2400	2190	17	37	1.7	11	20	.6
26..	160	1200	518	17	34	1.6	11	20	.6
27..	130	1000	351	16	33	1.4	12	20	.6
28..	110	700	208	16	31	1.3	12	19	.6
29..	90	500	122	--	--	--	20	35	1.9
30..	75	400	81	--	--	--	21	82	4.6
31..	65	310	54	--	--	--	38	500	51
Total	2273	--	9707.9	816	--	264.5	596	--	313.1

S Computed by subdividing day.
T Less than 0.05 ton.

SAN JUAN CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	77	1700	353	33	10	0.9	9.5	3	0.1
2..	108	600	175	31	9	.8	7.4	2	T
3..	41	260	29	27	6	.4	6.1	2	T
4..	22	90	5.3	27	4	.3	5.5	2	T
5..	23	720	45	24	3	.2	7.1	2	T
6..	18	500	24	25	2	.1	6.5	1	T
7..	15	250	10	22	2	.1	7.6	1	T
8..	15	140	5.7	21	2	.1	7.7	1	T
9..	13	80	2.8	20	2	.1	8.4	1	T
10..	11	49	1.5	24	2	.1	8.9	1	T
11..	20	1500	81	21	2	.1	12	1	T
12..	12	500	16	19	2	.1	11	1	T
13..	11	240	7.1	18	2	.1	10	1	T
14..	12	140	4.5	16	2	.1	9.4	1	T
15..	12	140	4.5	15	2	.1	10	1	T
16..	14	150	5.7	14	2	.1	11	1	T
17..	14	150	5.7	13	2	.1	9.7	1	T
18..	24	250	16	13	3	.1	7.6	1	T
19..	65	1700	298	13	3	.1	7.9	1	T
20..	66	1400	249	13	3	.1	5.9	1	T
21..	59	980	156	13	3	.1	4.2	1	T
22..	74	620	124	11	3	.1	3.6	1	T
23..	72	240	4.7	12	3	.1	3.5	1	T
24..	67	150	27	11	4	.1	4.2	1	T
25..	58	96	15	11	4	.1	3.9	1	T
26..	52	50	7.0	11	4	.1	3.2	1	T
27..	50	40	5.4	12	4	.1	3.9	2	T
28..	49	27	3.6	13	4	.1	3.0	2	T
29..	45	20	2.4	14	4	.2	2.6	2	T
30..	39	14	1.5	13	4	.1	2.6	2	T
31..	--	--	--	11	3	.1	--	--	--
Total	1158	--	1727.7	541	--	5.3	203.9	--	0.7
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2.4	2		1.7	2		0.41	1	
2..	2.4	2		1.5	2		.56	1	
3..	2.0	3		1.1	2		.69	1	
4..	2.0	3		1.1	1		.74	1	
5..	2.0	4		.97	1		.85	1	
6..	2.8	4		.97	1		.88	1	
7..	1.7	5		1.1	1		.93	1	
8..	1.7	5		1.0	1		.92	1	
9..	1.8	5		1.0	1		.95	1	
10..	1.4	4		.94	1		.96	1	
11..	2.2	4		.86	1		.94	1	
12..	1.9	3		.75	1		.91	1	
13..	1.8	3		.82	1		1.0	1	
14..	1.6	2		.83	1		1.0	1	
15..	1.5	2		.83	1		1.1	1	
16..	1.4	2		.81	1		1.1	1	
17..	1.3	2		.77	1		1.1	1	
18..	1.2	2		.64	1		1.2	1	
19..	.99	2		.58	1		1.2	1	
20..	.86	2		.72	1		1.3	1	
21..	.90	2		.80	1		1.3	1	
22..	.86	2		.71	1		1.2	1	
23..	.78	2		.58	1		1.4	1	
24..	.87	2		.48	1		1.3	1	
25..	.82	2		.38	1		1.4	1	
26..	.74	2		.36	1		1.4	1	
27..	.78	2		.59	1		1.3	1	
28..	.81	2		.59	1		1.6	1	
29..	.77	2		.47	1		1.7	1	
30..	.84	2		.45	1		1.7	1	
31..	1.0	2		.50	1		--	--	--
Total	43.12	--	0.3	24.90	--	0.1	33.04	--	0.1
Total discharge for year (cfs-days).....									13254.06
Total load for year (tons).....									186252.5

T Less than 0.05 ton.

SAN JUAN CREEK BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)																		
Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Dec. 4, 1966.....	0900	59		53	1560		--	--	--	--	--	17	17	28	62	100	--	V
Dec. 5.....	1050	61		3000	13200		20	26	34	43	52	58	72	82	94	100	--	VPWC
Dec. 6.....	0955	61		1770	6960		13	16	21	29	36	43	59	70	86	99	100	VPWC
Dec. 7.....	1130	61		892	8630		11	13	17	23	30	34	55	74	90	99	100	VPWC
Dec. 8.....	1315	61		325	3370		9	12	17	21	27	33	46	77	98	100	--	VPWC
Dec. 13.....	1345	60		76	689		--	--	--	--	--	21	30	45	84	100	--	S
Jan. 26, 1967.....	1430	62		160	646		--	--	--	--	--	26	30	61	96	100	--	V

Particle-size analyses of bed material, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (° F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Bed material											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.062	0.125	0.250	0.500	1.000	2.000	4.000	8.000	16.000	32.000	64.000	
Nov. 7, 1966.....	1530		4	1.6			2	3	9	28	53	69	75	80	87	90	98	S
Jan. 25, 1967.....	0600		1	545			--	1	4	23	60	87	94	98	100	--	--	S
Jan. 25.....	--		2	--			--	2	9	32	72	93	98	99	100	--	--	S
Jan. 25.....	--		3	--			--	2	13	57	91	98	100	--	--	--	--	S
Jan. 30.....	1300		4	69			1	2	9	28	50	61	69	78	94	98	100	S

SAN JUAN CREEK BASIN--Continued

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

LOCATION.--Lat 33°31'36", long 117°40'08", at gaging station on downstream side of right pier of county road bridge, and 1.8 miles north of San Juan Capistrano, Orange County.

DRAINAGE AREA.--35.7 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1966 to September 1967.

Sediment records: October 1966 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 9,360 ppm Dec. 7; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 30,700 tons Dec. 7; minimum daily, 0 ton on many days.

REMARKS.--No flow Oct. 1-27, Oct. 31 to Nov. 1, Nov. 4-6, Nov. 8 to Dec. 2. Records of discharge furnished by Orange County Flood Control District.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
December	--	--	63	--	63	66	63	61	57	52	54	52	54	52	52	52	52	--	52	--	--	--	--	--	54	--	--	--	--	--	--	48	--
January	--	--	--	--	--	--	45	--	--	--	46	--	--	48	--	--	--	52	--	--	48	--	52	52	52	55	54	54	55	55	55	--	
February	52	--	--	50	--	--	48	--	--	52	--	--	--	50	--	--	48	--	--	--	48	--	--	55	--	--	--	--	--	--	--	--	
March	54	--	--	54	--	66	--	--	--	57	--	--	--	63	55	--	61	--	--	--	--	--	--	55	--	--	--	--	--	--	55	--	
April	55	61	64	--	--	--	59	--	--	--	57	57	54	--	--	--	--	57	55	64	--	55	66	--	54	--	--	--	57	--	--		
May	--	--	--	--	--	--	72	--	--	--	--	--	59	--	--	--	--	--	--	81	--	--	--	--	--	--	66	--	--	--	--	--	
June	--	--	61	--	--	--	--	--	--	63	--	--	--	--	--	--	63	--	--	--	--	--	--	66	--	--	--	--	--	--	--	--	
July	61	--	--	--	--	--	--	81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
August	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
September	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

SAN JUAN CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0		0	0		0	0	--	0
2..	0		0	.1		T	0	--	0
3..	0		0	.1		T	14	3460 S	173
4..	0		0	0		0	7.4	--	67
5..	0		0	0		0	833	9250 S	23700
6..	0		0	0		0	1370	6970 S	29400
7..	0		0	1.6		T	958	9360 S	30700
8..	0		0	0		0	183	1900	939
9..	0		0	0		0	88	525	125
10..	0		0	0		0	75	208	42
11..	0		0	0		0	59	129	21
12..	0		0	0		0	50	100	14
13..	0		0	0		0	36	91	8.8
14..	0		0	0		0	31	91	7.6
15..	0		0	0		0	30	106	8.6
16..	0		0	0		0	26	91	6.4
17..	0		0	0		0	23	60	3.7
18..	0		0	0		0	21	--	2.3
19..	0		0	0		0	16	33	1.4
20..	0		0	0		0	12	--	.9
21..	0		0	0		0	10	--	.6
22..	0		0	0		0	10	--	.6
23..	0		0	0		0	9.5	--	.5
24..	0		0	0		0	6.2	40	.7
25..	0		0	0		0	4.6	--	.4
26..	0		0	0		0	4.2	--	.3
27..	0		0	0		0	3.8	--	.2
28..	.1		T	0		0	3.8	--	.2
29..	.1		T	0		0	3.4	--	.1
30..	.1		T	0		0	3.4	--	.2
31..	0		0	--		--	.9	25	.1
Total	0.3		T	1.8		T	3892.2	--	85224.6
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	1.6	--	0.1	26	106	7.4	6.2	87	1.5
2..	1.4	--	.1	22	--	6.0	6.2	--	1.4
3..	1.2	--	.1	17	--	4.6	5.8	--	1.2
4..	1.0	--	T	17	100	4.6	5.8	91	1.4
5..	1.2	--	T	17	--	4.5	5.4	--	1.2
6..	1.0	--	T	17	--	4.5	5.4	62	.9
7..	1.6	21	.1	18	--	4.7	5.4	--	.7
8..	1.9	--	.1	17	122	5.6	5.0	--	.6
9..	2.6	--	.2	15	--	4.6	5.0	--	.5
10..	2.6	--	.1	13	--	3.9	5.4	28	.4
11..	2.6	17	.1	8.8	108	2.6	5.4	--	.4
12..	3.0	--	.3	8.1	--	2.3	5.8	--	.3
13..	4.2	--	.4	8.8	--	2.5	7.4	--	2.1
14..	4.2	29	.3	9.5	--	2.6	14	71	2.7
15..	4.2	--	.3	9.5	100	2.6	8.1	54	1.2
16..	4.2	--	.2	9.5	--	2.5	5.4	--	.6
17..	4.2	--	.3	8.8	--	2.3	5.4	33	.5
18..	3.4	32	.3	7.4	96	1.9	5.4	--	.5
19..	3.0	--	.2	7.4	--	1.9	5.4	--	.5
20..	3.0	--	.2	8.8	--	2.2	5.4	--	.5
21..	2.6	40	.3	8.1	--	2.7	5.4	--	.5
22..	23	-- S	80	8.1	120	2.6	5.0	--	.4
23..	46	492 S	76	8.1	--	2.5	3.8	--	.3
24..	295	2230 S	4230	8.1	--	2.4	2.2	--	.2
25..	197	1420 S	1060	8.1	108	2.4	2.2	31	.2
26..	68	270	50	8.1	--	2.3	3.4	--	.3
27..	44	142	17	8.1	--	2.1	3.8	--	.3
28..	30	79 S	6.6	8.1	--	2.1	3.0	--	.3
29..	31	102	8.5	--	--	--	2.6	--	.2
30..	29	106	8.3	--	--	--	2.6	--	.2
31..	31	136	11	--	--	--	8.1	103	2.3
Total	848.7	--	5551.2	330.4	--	92.9	165.4	--	24.3

S Computed by subdividing day.

T Less than 0.05 ton.

SAN JUAN CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	10	56	1.5	20	--	0.6	5.0	--	0.3
2..	11	52	1.5	19	--	.4	5.4	--	.4
3..	7.4	19	.4	20	--	.3	4.6	25	.3
4..	6.8	--	.3	19	--	.3	3.0	--	.1
5..	6.2	--	.2	18	--	.2	2.6	--	T
6..	6.2	--	.2	168	--	.1	3.4	--	T
7..	6.2	9	.2	13	2	.1	3.0	--	T
8..	6.2	--	.1	12	--	.1	3.0	--	T
9..	6.2	--	.1	8.1	--	T	4.2	--	.3
10..	6.2	--	.1	10	--	T	4.6	20	.2
11..	36	195	19	11	--	.1	4.2	--	.2
12..	39	80	8.4	11	--	.1	3.8	--	.1
13..	29	70	5.5	10	3	.1	4.2	--	.1
14..	24	--	3.9	8.1	--	.1	3.4	--	.1
15..	20	--	2.9	6.8	--	T	3.0	--	.1
16..	17	--	2.4	5.0	--	T	3.4	--	.1
17..	16	--	2.2	6.2	--	T	4.2	48	.5
18..	18	48	2.3	6.8	--	T	3.8	--	.3
19..	31	85	7.1	7.4	--	.1	3.4	--	.1
20..	30	62	5.0	5.0	1	T	3.0	--	.1
21..	27	--	3.6	3.4	--	T	1.9	--	.5
22..	33	120	11	3.4	--	T	.9	--	.3
23..	33	58	5.2	3.8	--	T	1.0	--	.3
24..	33	--	5.2	3.4	--	T	1.0	118	.3
25..	30	64	5.2	3.4	--	T	1.2	--	.4
26..	27	--	3.9	4.2	--	.3	1.2	--	.4
27..	27	--	2.7	2.2	22	.1	1.2	--	.4
28..	26	--	2.0	1.9	--	.1	1.2	--	.4
29..	24	20	1.3	2.2	--	.1	1.4	--	.5
30..	23	--	.9	5.4	--	.5	1.4	--	.2
31..	--	--	--	4.2	--	.2	--	--	--
Total	615.4	--	104.3	269.9	--	4.1	87.6	--	7.2
	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	1.0	35	0.1	0.1			0.5		
2..	.2	--	.1	.1			.5		
3..	.5	--	T	.1			.5		
4..	.5	--	T	.1			.5		
5..	.6	--	T	.1			.5		
6..	.5	--	T	.1			.5		
7..	.4	--	T	.1			.4		
8..	.2	5	T	.1			.4		
9..	.2	--	T	.2			.4		
10..	.2	--	T	.3			.4		
11..	.8	--	T	.4			.4		
12..	1.4	--	.1	.3			.4		
13..	1.6	--	.3	.5			.3		
14..	1.8	--	.2	.7			.3		
15..	1.7	--	.1	.8			.3		
16..	1.5	--	T	.9			.3		
17..	1.6	--	T	1.0			.3		
18..	1.6	--	T	1.0			.3		
19..	1.6	--	T	1.0			.4		
20..	1.6	--	T	.9			.4		
21..	1.6	--	T	1.0			.4		
22..	1.6	--	T	1.0			.4		
23..	.8	--	T	1.0			.5		
24..	.1	--	T	.9			.5		
25..	.1	--	T	.8			.6		
26..	.1	--	T	.8			.7		
27..	.1	--	T	.8			.8		
28..	.1	--	T	.6			.6		
29..	.1	--	T	.6			.5		
30..	.1	--	T	.6			.5		
31..	.1	--	T	.5			--		
Total	24.8	--	1.2	17.4	--	0.2	13.5	--	0.1
Total discharge for year (cfs-days).....									6267.4
Total load for year (tons).....									91010.1

T Less than 0.05 ton.

SAN JUAN RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 3, 1966.....	1220	62		14	3050		58	67	73	89	91	97	100	--	--	--	--	VPWC
Dec. 5.....	1400	62		968	6610		44	54	66	78	87	92	96	98	99	100	--	VPWC
Dec. 6.....	1510	66		1370	9400		34	45	59	75	90	95	98	99	100	--	--	VPWC
Dec. 7.....	0430	59		1520	12200		33	43	51	65	81	90	96	98	99	100	--	VPWC
Jan. 24, 1967.....	1715	53		820	7040		33	38	42	53	65	77	91	96	99	100	--	VPWC
Jan. 26.....	1330	54		60	203		--	--	--	--	--	97	98	99	99	99	100	S

Particle-size analyses of bed material, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Bed material														Method of analysis
							Percent finer than size indicated, in millimeters														
							0.062	0.125	0.250	0.500	1.000	2.000	4.000	8.000	16.0	32.0	64.0	128	256		
Dec. 2, 1966.....	--	--	1	0			1	1	9	13	17	20	24	28	37	45	69	91	100	S	
Dec. 2.....	--	--	2	0			2	3	5	12	25	38	51	62	73	83	97	100	--	S	
Dec. 13.....	1100	55	3	36			--	1	1	3	4	8	14	25	38	44	61	93	100	S	
Dec. 13.....	--	--	1	--			2	3	5	11	17	21	28	38	59	81	89	100	--	S	
Jan. 25, 1967.....	1430	57	3	420			--	--	--	1	7	11	15	27	48	100	--	--	--	S	
Jan. 25.....	--	--	4	--			--	2	2	4	11	17	26	47	100	--	--	--	--	S	
Jan. 25.....	--	--	5	--			--	--	1	3	7	15	23	35	48	100	--	--	--	S	
Jan. 30.....	--	57	3	27			1	1	2	4	8	12	19	30	54	67	89	100	--	S	
Jan. 30.....	--	--	1	--			1	1	2	6	11	15	19	27	43	54	88	100	--	S	

SANTA ANA RIVER BASIN

11-0660.5. SANTA ANA RIVER AT COLTON, CALIF.

LOCATION.--Lat 34°03'45", long 117°18'30", in San Bernardino Grant, 60 feet downstream from Southern Pacific Railroad bridge, 200 feet downstream from Warm Creek, and 1 mile southeast of Colton, San Bernardino County.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 10, 1966....	38			48	20	104	13	200	0	74	119	1.1	54	0.52	530			202			943	7.1
Nov. 4.....	15			40	22	107	14	190	0	79	100	1.2	96	.53	559			190			974	6.9
Dec. 8.....	400			40	11	50	8.0	134	0	40	52	.9	36	.21	350			145			542	6.9
Jan. 6, 1967....	25			62	14	120	13	327	0	72	135	1.1	2.5	.60	606			212			1080	7.5
Mar. 22.....	12			46	21	124	14	234	0	77	154	1.7	30	.78	644			201			1050	7.1
Apr. 6.....	15			58	13	79	9.0	205	0	54	103	1.1	30	.34	487			198			803	7.4
May 4.....	15			34	15	78	8.0	186	0	57	78	1.2	25	.34	420			147			709	7.6
May 31.....	150			41	22	78	12	142	0	75	73	3.6	99	.32	555			193			793	6.8
July 11.....	100			56	21	102	12	185	0	82	122	1.0	62	.66	606			226			967	7.2
Aug. 11.....	50			42	22	158	11	227	0	74	179	.9	55	.42	680			195			1170	7.1
Aug. 31.....	35			49	22	108	12	251	0	78	122	.9	32	.52	645			213			991	7.2

SANTA ANA RIVER BASIN--Continued

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

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

DRAINAGE AREA.--1,485 square miles, not including 768 square miles above Elsinore Lake.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 11, 1966....	48			89	25	110	9.0	275	0	124	135	1.0	28	0.45	650			325			1140	7.3
Nov. 4.....	30			110	28	110	7.0	334	0	137	141	.7	20	.38	760			390			1200	7.3
Dec. 8.....	1130			39	6.0	23	7.0	114	0	50	18	.8	10	.10	240			122			360	7.6
Jan. 6, 1967....	62			126	32	126	9.0	373	0	167	158	.8	33	.35	853			446			1360	7.5
Feb. 9.....	62			116	30	122	9.0	352	0	147	160	.8	28	.46	828			413			1340	7.3
Mar. 22.....	60			112	24	123	11	332	0	140	150	1.3	30	.54	785			378			1250	7.3
Apr. 6.....	70			106	26	108	9.0	338	0	132	144	1.0	19	.52	758			372			1200	7.3
May 4.....	52			101	31	120	9.0	361	0	141	140	1.0	23	.51	772			380			1290	7.4
May 31.....	45			107	30	121	10	351	0	143	152	1.0	24	.43	845			391			1280	7.1
July 11.....	30			111	29	120	7.0	342	0	139	151	1.0	29	.46	810			396			1260	7.6
Aug. 11.....	28			109	31	125	7.0	351	0	142	151	1.0	40	.48	803			400			1280	7.8
Aug. 31.....	21			108	31	126	8.0	337	0	144	160	.8	32	.54	865			397			1310	7.6

SANTA ANA RIVER BASIN--Continued

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

Periodic determinations of suspended-sediment discharge, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Percent finer than size indicated, in millimeters										Method of analysis
Aug. 8, 1967.....	1025	72		35	612	58											
Aug. 9.....	0630	--		31	427	36											
Aug. 10.....	0630	--		31	611	51											
Aug. 12.....	0630	--		27	717	52											
Aug. 13.....	0630	--		26	210	15											
Aug. 14.....	0630	--		20	176	9.5											
Aug. 15.....	0630	--		27	202	15											
Aug. 16.....	0630	--		20	200	11											
Aug. 17.....	0630	--		22	193	11											
Aug. 18.....	0630	--		18	515	25											
Aug. 19.....	0630	--		22	218	13											
Aug. 20.....	0630	--		22	263	16											
Aug. 21.....	0630	--		25	299	20											
Aug. 22.....	0630	--		43	1670	194											
Aug. 23.....	0630	--		40	504	54											
Aug. 24.....	0630	--		45	978	119											
Aug. 25.....	0630	69		46	1770	220											
Aug. 26.....	0630	--		34	554	51											
Aug. 27.....	0630	--		32	419	36											
Aug. 28.....	0630	--		26	281	20											
Aug. 29.....	0630	--		27	271	20											
Aug. 30.....	0630	--		30	281	23											
Aug. 31.....	0630	--		26	219	15											
Sept. 21.....	1600	79		44	158	19											
Sept. 22.....	0630	--		41	260	29											
Sept. 23.....	0630	--		38	342	35											
Sept. 24.....	0630	--		40	581	63											
Sept. 25.....	0630	--		38	2440	250											
Sept. 26.....	0630	--		41	7960	881											
Sept. 27.....	0630	--		43	4430	514											
Sept. 30.....	0630	--		44	26300	3120											
Oct. 5.....	0630	--		38	57000	6060											
Oct. 6.....	0630	--		37	25000	2500											
Oct. 12.....	0920	62		34	100	9.2											
Oct. 13.....	0630	--		34	109	10											
Oct. 14.....	0630	--		32	99	8.6											
Oct. 15.....	0630	--		34	68	6.2											
Oct. 16.....	0630	--		26	37	2.6											

Oct. 17	0630	--		28	75	5.7													
Oct. 18	0630	--		32	232	20													
Oct. 19	0630	--		35	322	30													
Oct. 21	0630	--		34	132	12													
Oct. 22	0630	--		37	131	13													
Oct. 23	0630	--		38	113	12													
Oct. 24	0630	--		40	75	8.1													
Oct. 25	0630	--		37	455	45													
Oct. 26	0630	--		40	272	29													
Oct. 27	0630	--		40	127	14													
Oct. 28	0630	--		40	236	25													
Oct. 29	0630	--		43	149	17													
Oct. 30	0630	--		32	100	8.6													
Oct. 31	0630	--		35	132	12													

SAN GABRIEL RIVER BASIN

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

LOCATION.--Lat 34°09'17", long 117°54'26", at the tailrace of Azusa Powerhouse, and 1 mile north of Azusa, Los Angeles County.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Cal- cium (Ca)	Mag- ne- sium (Mg)	Sodium (Na)	Po- tas- sium (K)	Bi- car- bon- ate (HCO ₃)	Car- bon- ate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluo- ride (F)	Ni- trate (NO ₃)	Bo- ron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		So- dium ad- sorp- tion ratio	Specific con- duct- ance (micro- mhos at 25°C)	pH
															Parts per million	Tons per acre- foot	Tons per day	Cal- cium, Mag- ne- sium	Non- car- bon- ate			
Oct. 12, 1966....	85			55	14	10	5.0	231	0	27	5.0	0.5	0.6	0.06	230			195			412	7.8
Dec. 9.....	12			56	17	12	5.0	168	0	67	5.0	.6	27	.02	300			210			458	7.8
Jan. 14, 1967....	82			46	11	7.0	4.0	174	0	23	3.0	.3	3.8	.05	185			160			338	8.0
Feb. 9.....	85			41	11	8.0	3.0	171	0	20	4.0	.3	3.5	.06	192			148			322	8.0
Mar. 15.....	78			39	10	7.0	3.0	151	0	20	6.0	.3	3.0	.02	175			138			293	8.0
Apr. 6.....	81			47	10	7.0	3.0	181	0	18	3.0	.4	3.5	.04	207			158				
May 4.....	100			43	10	8.0	3.0	173	0	19	3.0	.4	3.0	.03	179			148			316	8.2
May 29.....	160			40	12	7.0	3.0	172	0	20	1.0	.4	4.0	.05	192			149			317	8.2
July 12.....	82			37	15	7.0	3.0	171	0	21	3.0	.4	3.5	.04	243			154			313	8.1
Aug. 9.....	80			41	12	9.0	3.0	176	0	24	1.0	.4	2.3	.04	163			152			328	8.0

SAN GABRIEL RIVER BASIN--Continued

11-0870.4. SAN GABRIEL RIVER AT WHITTIER NARROWS, CALIF.

LOCATION.--Lat 34°01'25", long 118°03'11", 200 feet from end of San Gabriel Boulevard (Siphon Road), upstream from Whittier Narrows Dam, and 2.5 miles northeast of Montebello, Los Angeles County.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 12, 1966....	140			90	32	115	5.0	151	0	325	106	0.5	4.2	0.24	790			356			1170	8.2
Nov. 9.....	10			92	23	86	20	198	0	207	91	.5	30	.36	680			324			1020	7.2
Dec. 9.....	134			56	15	22	6.0	163	0	67	18	.4	34	.08	330			201			500	7.6
Jan. 14, 1967....	55			100	27	115	13	281	0	192	122	1.2	43	.52	791			361			1220	7.6
Feb. 10.....	58			94	30	112	6.0	174	0	295	102	.5	7.5	.20	762			358			1160	8.1
Mar. 15.....	18			105	26	88	14	284	0	199	96	.8	9.0	.40	722			369			1100	7.1
Apr. 7.....	270			93	29	110	5.0	163	0	311	99	.6	4.5	.16	776			351			1120	7.8
May 5.....	105			70	23	69	5.0	169	0	175	65	.7	8.0	.05	497			269			807	7.8
May 29.....	10			101	31	109	10	278	0	203	104	.8	38	.47	813			380			1200	7.6
July 12.....	10			82	25	115	11	198	0	211	120	.7	16	.46	774			308			1100	7.6
Aug. 9.....	15			82	26	106	11	244	0	164	110	.8	32	.52	706			312			1060	7.7
Sept. 1.....	5.5			89	27	118	11	232	0	202	128	.6	25	.54	785			333			1170	7.4

LOS ANGELES RIVER BASIN

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

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

DRAINAGE AREA.--514 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 5, 1966.....	0.5			134	49	425	--	366	0	494	417	--	0.4	--	1860			536			--	8.2
Nov. 2.....	.6			140	54	453	--	406	0	522	431	--	.4	--	1960			572			--	8.0
Dec. 13.....	18.4			104	31	124	--	230	0	285	89	--	19	--	870			387			--	8.2
Jan. 4, 1967.....	14.2			94	23	109	--	190	10	251	90	--	13	--	775			329			--	8.5
Feb. 2.....	28.4			124	46	108	--	255	0	365	77	--	.2	--	990			499			--	8.2
Mar. 1.....	28.6			90	31	176	--	195	20	282	119	--	12	--	905			352			--	8.6
Apr. 6.....	20.3			84	28	90	--	201	0	204	70	--	11	--	675			325			--	8.2
May 3.....	9.2			80	24	116	--	197	24	182	90	--	11	--	710			298			--	8.5
May 12.....	10.4			77	30	114	5.0	218	9	218	96	0.7	14	0.50	701			316		1100	--	8.4
June 7.....	13.5			90	33	136	--	221	0	250	119	--	11	--	880			360			--	8.1
July 5.....	6.2			80	23	157	--	200	0	250	131	--	3.0	--	850			294			--	8.2
Aug. 2.....	7.7			82	24	162	--	159	34	267	129	--	6.0	--	883			303			--	8.8
Sept. 1.....	293			55	20	55	13	204	0	120	46	.8	3.7	.50	551			220			733	7.1

LOS ANGELES RIVER BASIN--Continued

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

LOCATION.--Lat 34°01'15", long 118°04'15", at gaging station near north boundary of Paso de Bartolo Grant, approximately 500 feet downstream from axis of Whittier Narrows Dam, and 1.4 miles north of Pico, Los Angeles County.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Dec. 9, 1966.....				84	19	19	3.0	206	0	129	13	0.8	2.5	0.07	411			288			608	7.6
Jan. 14, 1967....				76	18	17	2.0	205	0	111	10	.6	2.0	.10	378			264			551	7.8
Feb. 10.....				81	21	19	2.0	204	0	141	15	.6	2.8	.09	412			289			626	7.6
Mar. 15.....				74	17	17	3.0	196	0	109	11	.7	2.3	.08	366			255			550	7.5
Apr. 7.....				79	15	17	3.0	200	0	110	11	.6	3.0	.10	372			259			551	7.5
May 5.....				86	13	17	2.0	192	0	116	18	.6	11	.08	371			268			543	8.0
May 29.....				73	18	17	3.0	201	0	108	11	.5	3.3	.08	383			256			553	8.1
July 12.....				73	32	25	4.0	98	0	216	43	.5	1.5	.14	560			314			703	7.3
Aug. 9.....				124	31	23	5.0	271	0	198	37	.5	8.0	.12	654			437			869	7.8
Sept. 1.....				126	31	24	5.0	259	0	213	40	.4	9.5	.12	665			442			896	7.8

SANTA CLARA RIVER BASIN

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

LOCATION.--Lat 34°34'40", long 119°15'25", 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, Ventura County.

DRAINAGE AREA.--49.5 square miles.

RECORDS AVAILABLE.--Water temperatures: February 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 75°F June 30, July 1, 4; minimum, 37°F on several days in December, January, February and April.

EXTREMES, 1962-67.--Water temperatures: Maximum, 84°F Aug. 11, 1964; minimum (1962-64, 1965-67), 35°F Mar. 16, 1963.

REMARKS.--Temperature probe buried in silt Dec. 9-14.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	64	63	63	61	57	61	63	63	63	61	61	57	57	54	52	54	54	54	54	54	54	54	55	55	54	54	54	55	54	55	54	57
Minimum	57	57	57	54	54	55	55	54	54	55	54	54	52	46	46	48	46	46	48	48	48	48	48	50	48	48	48	50	50	48	48	50
November																																
Maximum	55	54	52	54	52	48	48	50	50	48	50	50	48	50	50	52	52	52	50	52	52	48	46	45	45	45	45	48	48	48	--	49
Minimum	52	48	48	48	48	48	46	46	48	46	48	48	46	48	48	50	52	48	48	48	48	46	46	45	45	43	43	45	45	46	46	--
December																																
Maximum	46	46	46	45	48	48	48	46	--	--	--	--	--	--	--	45	45	45	45	45	45	45	43	45	43	43	41	39	41	43	43	44
Minimum	46	46	46	43	45	45	46	46	--	--	--	--	--	--	--	43	43	43	43	43	41	43	41	39	39	39	39	37	37	39	39	41
January																																
Maximum	43	43	43	43	43	41	41	41	43	43	45	46	46	46	43	46	45	45	45	45	45	45	45	45	43	43	45	46	48	46	46	44
Minimum	39	39	39	39	39	37	39	37	37	39	39	43	43	43	41	43	39	39	39	39	39	43	45	41	37	39	39	41	43	43	41	43
February																																
Maximum	45	46	45	46	46	46	46	46	46	48	48	48	50	48	45	45	46	48	46	45	46	46	46	45	48	48	48	48	50	--	--	--
Minimum	41	43	39	39	39	41	43	41	43	43	43	43	46	43	39	39	39	41	41	39	37	37	39	43	43	43	43	43	43	--	--	--
March																																
Maximum	52	50	48	48	50	50	52	52	52	48	46	46	48	46	48	52	50	52	59	55	55	54	55	55	54	52	52	55	55	54	48	46
Minimum	43	43	45	45	43	43	43	43	45	43	46	46	45	46	43	46	50	48	48	46	46	46	45	46	45	43	48	45	46	46	39	39
April																																
Maximum	46	52	54	50	54	55	52	55	55	52	50	52	55	55	50	55	57	54	48	55	48	54	50	57	57	59	57	48	57	59	--	53
Minimum	37	37	43	39	37	45	45	41	43	43	39	39	43	48	45	43	43	45	43	41	41	43	43	46	45	45	46	46	45	46	--	42
May																																
Maximum	61	61	55	52	50	57	55	61	57	55	57	57	57	61	63	63	64	64	63	64	63	64	64	64	63	61	61	61	61	61	59	60
Minimum	45	48	43	46	45	45	45	48	52	46	46	46	46	46	48	52	52	54	52	52	54	54	54	54	52	50	52	52	52	50	50	49
June																																
Maximum	57	63	64	63	59	66	66	66	66	66	66	66	66	66	70	68	68	72	70	72	73	73	73	72	72	72	73	73	73	75	--	68
Minimum	50	48	50	50	52	54	55	55	55	55	57	57	57	57	57	61	63	61	61	61	61	63	63	63	61	61	59	61	61	64	63	--
July																																
Maximum	75	73	73	75	70	72	72	70	72	72	72	72	70	72	72	70	70	70	70	72	72	70	70	70	72	72	70	70	72	73	73	71
Minimum	64	64	63	64	64	63	61	61	59	59	61	64	64	63	63	63	61	61	61	61	61	61	61	61	63	63	61	63	63	64	66	62
August																																
Maximum	72	72	72	72	70	70	72	72	70	70	70	72	73	73	73	73	73	73	73	73	73	72	72	70	72	72	70	72	72	72	72	71
Minimum	64	63	64	64	63	61	61	61	63	61	63	63	66	66	66	66	66	66	66	66	66	64	63	63	61	63	63	63	63	63	64	64
September																																
Maximum	72	68	73	73	73	72	68	66	66	63	66	68	68	68	63	61	64	64	66	66	68	66	66	68	68	68	70	70	70	68	--	67
Minimum	64	64	64	64	63	61	63	61	59	59	57	61	61	61	57	57	57	61	61	63	63	61	61	61	61	64	63	64	64	64	--	61

SANTA CLARA RIVER BASIN--Continued

11-1130. SESPE CREEK NEAR FILLMORE, CALIF.

LOCATION.--Lat 34°27'03", long 118°55'30", at gaging station 0.1 mile downstream from Little Sespe Creek, and 3.5 miles north of Fillmore, Ventura County.

DRAINAGE AREA.--251 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Water temperatures: October 1966 to September 1967.

Sediment records: October 1966 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 12,300 ppm Dec. 6; minimum daily, 1 ppm on several days in October and November.

Sediment loads: Maximum daily, 385,000 tons Dec. 6; minimum daily, less than 0.05 ton on many days in October and November.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 7, 1966.....	0.3			263	80	148	6.0	214	0	999	54	1.4	0.6	0.70	1910			986			2110	7.9
Nov. 2.....	.3			219	57	129	6.0	231	0	719	77	1.4	.0	1.1	1440			781			1820	8.0
Dec. 6.....	A10400			55	9.0	12	3.0	129	0	88	4.0	.6	1.2	.14	263			174			388	7.8
Jan. 4, 1967.....	51			112	30	58	2.0	224	0	293	25	1.1	.5	.76	682			403			922	8.2
Feb. 7.....	A 150			115	30	43	2.0	232	0	275	15	.8	.5	.42	645			410			897	8.2
Mar. 14.....	1320			52	14	16	1.0	134	0	99	7.0	.4	1.0	.10	290			187			427	7.8
Mar. 20.....	300			76	22	26	--	212	0	139	12	.5	--	.20	487			280			649	8.2
Apr. 4.....	242			113	29	35	2.0	220	0	267	11	.8	.0	.27	645			401			848	8.1
May 2.....	439			148	40	40	3.0	207	0	415	70	.8	1.2	.21	832			534			1070	8.0
May 30.....	A 106			97	31	40	2.0	176	0	283	11	.8	.0	.37	666			370			841	8.2
June 21.....	60			72	22	53	--	183	0	198	22	.6	--	.56	550			270			779	8.2
July 10.....	26			100	29	54	3.0	183	0	284	27	1.2	.5	.80	657			369			865	8.0
Aug. 8.....	9.4			92	28	62	3.0	173	0	273	34	1.3	1.0	1.1	634			345			874	7.8
Aug. 28.....	A 4.8			89	27	65	3.0	178	0	254	41	1.2	.0	1.2	629			333			896	8.0

A Daily mean discharge.

SANTA CLARA RIVER BASIN--Continued

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

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
November	--	--	--	--	--	--	--	52	55	--	--	--	--	--	--	--	--	--	--	--	--	61	52	--	--	--	--	55	55	--	--	--	
December	--	57	55	52	52	57	54	52	48	52	--	52	52	50	--	--	--	--	54	--	--	--	--	--	--	--	--	--	46	--	--	--	
January	46	--	--	--	46	--	--	--	48	--	--	--	54	--	--	52	--	--	--	50	--	52	48	48	48	48	--	48	50	54	52	--	
February	52	--	48	--	--	52	--	52	--	--	--	57	--	52	--	--	48	--	--	48	--	--	52	--	--	52	--	--	--	--	--	--	
March	55	--	55	--	--	--	52	--	--	54	50	50	52	50	50	55	--	--	--	54	54	61	--	59	--	--	--	57	55	--	50	--	
April	48	46	48	52	46	52	54	48	54	--	48	52	52	54	54	--	54	52	46	50	48	48	52	55	54	54	54	--	--	--	--	51	
May	54	54	--	57	--	55	--	61	--	--	--	55	--	--	68	--	--	64	--	--	--	70	--	--	--	64	--	66	--	66	--	63	--
June	--	59	--	--	61	--	63	--	--	--	--	63	--	--	--	--	--	--	64	--	--	--	--	--	--	--	66	--	66	--	70	--	--
July	--	--	--	--	70	--	--	--	--	--	70	--	--	--	--	--	--	--	70	--	--	--	--	--	--	--	--	--	72	--	--	--	--
August	--	73	--	--	--	--	--	--	--	--	--	--	--	--	--	73	--	--	--	--	--	--	--	--	--	--	--	--	75	--	75	--	--
September	--	--	--	--	--	--	--	--	--	--	--	--	75	--	--	--	--	72	--	--	--	--	68	--	--	70	--	--	68	--	--	--	--

SANTA CLARA RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.6	46	0.1	0.3	1	T	21	20	1.1
2..	.4	39	T	.3	1	T	84	2560	S 2050
3..	.3	38	T	.4	1	T	1900	3900	S 23500
4..	.3	34	T	.4	1	T	311	808	S 750
5..	.3	32	T	.4	1	T	1600	1310	S 5580
6..	.4	30	T	.5	1	T	10400	12300	S 385000
7..	.3	28	T	774	4090	S 7890	2440	3500	S 61400
8..	.3	26	T	334	1340	S 1380	621	774	S 4730
9..	.3	23	T	76	1350	S 277	380	280	287
10..	.3	21	T	43	650	75	296	120	96
11..	.3	20	T	32	300	26	246	95	63
12..	.3	19	T	25	147	9.9	216	82	48
13..	.3	18	T	21	112	6.4	186	75	38
14..	.2	17	T	19	98	5.0	155	65	27
15..	.2	16	T	18	88	4.3	138	55	20
16..	.2	15	T	17	68	3.1	129	46	16
17..	.2	14	T	16	43	1.9	122	35	12
18..	.2	12	T	14	33	1.2	114	25	7.7
19..	.2	11	T	12	21	.7	106	16	4.6
20..	.2	9	T	31	2850	S 388	100	11	3.0
21..	.3	8	T	44	235	S 27	94	8	2.0
22..	.3	6	T	34	200	18	90	7	1.7
23..	.3	4	T	28	130	9.8	85	6	1.4
24..	.3	3	T	26	100	7.0	81	5	1.1
25..	.3	2	T	22	79	4.7	77	5	1.0
26..	.3	2	T	21	60	3.4	74	5	1.0
27..	.3	2	T	19	45	2.3	71	5	1.0
28..	.3	2	T	19	32	1.6	67	5	.9
29..	.3	2	T	20	25	1.4	63	5	.9
30..	.3	2	T	21	21	1.1	60	5	.8
31..	.3	1	T	--	--	--	59	5	.8
Total	9.1	--	0.5	1686.3	--	10144.8	20386	--	483646.0
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	58	5	0.8	236	66	42	68	8	1.5
2..	56	5	.8	216	57	33	68	10	1.8
3..	54	5	.7	198	47	25	66	10	1.8
4..	54	5	.7	183	30	15	65	12	2.1
5..	54	5	.7	174	18	8.5	65	13	2.3
6..	54	5	.7	160	13	5.6	63	13	2.2
7..	53	5	.7	150	10	4.0	62	16	2.7
8..	53	4	.6	145	8	3.1	60	18	2.9
9..	53	4	.6	140	6	2.3	60	21	3.4
10..	51	4	.6	129	5	1.7	60	24	3.9
11..	51	3	.4	122	4	1.3	91	933	S 344
12..	49	3	.4	120	3	1.0	2500	4320	S 32300
13..	49	3	.4	122	2	.7	3220	2920	S 28700
14..	49	3	.4	114	2	.6	1310	552	S 2040
15..	48	2	.3	110	2	.6	754	280	S 582
16..	48	2	.3	106	2	.6	594	125	200
17..	48	2	.3	102	2	.6	540	83	121
18..	47	2	.3	98	3	.8	417	72	81
19..	47	2	.3	94	3	.8	350	63	60
20..	47	2	.3	90	3	.7	304	55	45
21..	47	2	.3	88	3	.7	268	47	34
22..	1160	5710	S 23300	83	3	.7	250	41	28
23..	433	994	S 1480	79	3	.6	232	35	22
24..	3300	5600	S 78400	77	3	.6	213	30	17
25..	1540	1410	S 7750	85	3	.7	195	26	14
26..	637	315	542	81	3	.7	177	21	10
27..	444	160	192	73	4	.8	162	17	7.4
28..	355	105	101	68	5	.9	155	14	5.9
29..	304	95	78	--	--	--	145	12	4.7
30..	268	91	66	--	--	--	136	12	4.4
31..	264	79	56	--	--	--	223	837	S 622
Total	9775	--	111975.6	3443	--	153.6	12873	--	65267.0

S Computed by subdividing day.

T Less than 0.05 ton.

SANTA CLARA RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	227	358	S 261	450	105	128	102	18	5.0
2..	242	135	S 90	439	80	95	98	18	4.8
3..	232	90	S 56	417	72	81	94	18	4.6
4..	442	424	S 647	395	66	70	92	18	4.5
5..	684	598	S 1240	365	62	61	90	18	4.4
6..	417	80	S 90	340	58	53	87	18	4.2
7..	527	213	S 334	340	54	50	85	20	4.6
8..	456	100	S 123	332	51	46	83	24	5.4
9..	385	85	S 88	336	48	44	81	28	6.1
10..	360	85	S 83	314	44	37	79	28	6.0
11..	646	382	S 739	288	42	33	76	28	5.7
12..	480	140	S 181	264	38	27	73	28	5.5
13..	406	100	S 110	242	36	24	71	28	5.4
14..	385	90	S 94	228	34	21	69	28	5.2
15..	370	80	S 80	216	31	18	68	28	5.1
16..	340	75	S 69	210	28	16	65	28	4.9
17..	314	75	S 64	207	26	15	62	28	4.7
18..	1060	1800	S 6220	195	23	12	60	28	4.5
19..	945	425	S 846	183	22	11	59	28	4.5
20..	700	300	S 567	174	22	10	58	28	4.4
21..	1390	1030	S 4950	160	22	9.5	55	23	4.2
22..	1820	858	S 4840	150	22	8.9	54	28	4.1
23..	1120	281	S 853	145	22	8.6	53	26	3.7
24..	916	195	S 482	142	21	8.1	51	24	3.3
25..	780	185	S 390	131	21	7.4	49	24	3.2
26..	724	178	S 348	122	21	6.9	48	24	3.1
27..	732	170	S 336	118	21	6.7	47	24	3.0
28..	658	125	S 222	118	20	6.4	46	24	3.0
29..	582	119	S 187	114	20	6.2	44	24	2.9
30..	504	105	S 143	106	20	5.7	43	24	2.8
31..	--	--	--	104	19	5.3	--	--	--
Total	18844	--	24733	7345	--	931.7	2042	--	132.8
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	40	24	2.6	13	8	0.3	4.5	8	0.1
2..	38	24	2.5	12	8	.3	4.5	8	.1
3..	35	24	2.3	12	8	.3	5.8	8	.1
4..	34	24	2.2	11	8	.2	5.5	8	.1
5..	34	24	2.2	11	8	.2	5.5	8	.1
6..	33	24	2.1	11	8	.2	5.2	8	.1
7..	33	24	2.1	11	8	.2	5.0	8	.1
8..	30	24	1.9	9.4	8	.2	5.0	8	.1
9..	28	24	1.8	9.4	8	.2	5.0	8	.1
10..	26	24	1.7	9.0	8	.2	5.0	8	.1
11..	24	24	1.6	8.6	8	.2	5.0	8	.1
12..	23	22	1.4	7.4	8	.2	5.0	8	.1
13..	22	20	1.2	7.4	8	.2	5.0	8	.1
14..	21	18	1.0	7.1	8	.2	5.0	8	.1
15..	21	16	.9	6.8	8	.1	5.0	8	.1
16..	22	14	.8	6.4	8	.1	5.0	8	.1
17..	21	12	.7	6.1	8	.1	5.2	8	.1
18..	19	10	.5	5.8	8	.1	5.2	8	.1
19..	18	8	.4	5.8	8	.1	5.5	8	.1
20..	17	8	.4	5.5	8	.1	6.4	8	.1
21..	15	8	.3	5.5	8	.1	6.4	8	.1
22..	15	8	.3	5.2	8	.1	6.4	8	.1
23..	14	8	.3	5.2	8	.1	6.4	8	.1
24..	16	8	.3	5.0	8	.1	6.4	8	.1
25..	16	8	.3	5.0	8	.1	7.1	8	.2
26..	16	8	.3	5.0	8	.1	7.1	8	.2
27..	16	8	.3	4.8	8	.1	7.1	8	.2
28..	15	8	.3	4.8	8	.1	7.4	8	.2
29..	14	8	.3	4.8	8	.1	6.8	8	.1
30..	14	8	.3	4.8	8	.1	6.8	8	.1
31..	14	8	.3	4.5	8	.1	--	--	--
Total	704	--	33.6	230.3	--	4.8	171.2	--	3.4

Total discharge for year (cfs-days)..... 77508.90

Total load for year (tons)..... 697026.8

S Computed by subdividing day.

SANTA CLARA RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment												Method of analysis
							Percent finer than size indicated, in millimeters												
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000		
Nov. 8, 1966.....	1330	52		219	1200		51	71	88	92	96	99	100	--	--	--	--	VPWC	
Dec. 3.....	0030	--		2220	14300		15	19	32	46	65	81	98	100	--	--	--	VPWC	
Dec. 3.....	1330	56		1690	2180		23	35	47	61	72	78	84	90	95	100	--	SPWC	
Dec. 4.....	1335	52		232	784		--	55	--	73	--	85	92	96	100	--	--	VPWC	
Dec. 6.....	0600	--		4300	7320		13	17	26	39	55	71	90	97	100	--	--	VPWC	
Dec. 6.....	0730	57		6500	18400		7	9	14	18	24	30	45	69	91	98	100	SPWC	
Dec. 6.....	0900	--		7400	13100		15	19	24	36	51	63	85	97	100	--	--	SPWC	
Dec. 6.....	1430	58		16200	18300		--	17	--	28	--	50	62	80	95	99	100	SPWC	
Dec. 6.....	1500	--		21600	9890		16	25	37	48	64	75	96	100	--	--	--	VPWC	
Dec. 7.....	0100	54		7820	8800		18	30	48	52	64	75	86	93	97	99	100	SPWC	
Dec. 7.....	0455	50		3660	4960		--	27	--	58	--	84	93	96	98	100	--	SPWC	
Jan. 23, 1967.....	1545	48		332	502		--	--	--	--	--	89	95	99	100	--	--	V	
Mar. 12.....	0500	--		650	3240		22	24	31	49	68	85	98	99	100	--	--	VPWC	
Mar. 12.....	2050	--		3100	1840		--	--	--	--	--	77	92	99	100	--	--	V	
Apr. 18.....	0900	53		480	2550		18	27	41	57	74	86	98	100	--	--	--	VPWC	
Apr. 18.....	1530	50		1460	1110		28	31	40	55	67	80	93	99	100	--	--	VPWC	

SANTA CLARA RIVER BASIN--Continued

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

LOCATION.--Lat 34°21'13", long 119°01'38", 1.5 miles upstream from Santa Paula bridge, and 1.8 miles east of Santa Paula, Ventura County.
RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 7, 1966.....	26			268	102	224	8.0	366	0	1090	92	1.3	13	1.1	2210			1090			2540	7.9
Nov. 2.....	15			207	84	152	5.0	325	0	792	71	.9	7.5	.94	1600			862			1950	7.9
Dec. 6.....	5000			44	18	34	4.0	129	0	137	6.0	.4	4.5	.12	300			184			505	7.6
Jan. 4, 1967.....	150			92	29	61	2.0	198	0	269	26	.6	3.0	.22	632			349			852	7.8
Feb. 7.....	80			157	50	102	4.0	283	0	508	43	.9	8.5	.63	1120			598			1440	8.1
Mar. 14.....	2000			102	36	68	3.0	193	0	336	27	.8	6.0	.38	751			403			976	7.8
Apr. 4.....	1000			80	24	40	1.0	190	0	200	15	.5	1.5	.10	511			298			717	8.0
May 2.....	700			82	23	35	2.0	188	0	196	11	.5	1.0	.15	482			299			686	8.1
May 30.....	200			122	46	80	4.0	234	0	400	32	.9	6.0	.58	946			494			1190	8.2
July 10.....	80			118	46	78	4.0	232	0	388	37	.8	4.5	.60	904			484			1160	7.9
Aug. 8.....	10			154	66	115	5.0	287	0	563	49	1.0	11	.78	1260			656			1550	8.0
Aug. 28.....	80			117	52	75	4.0	220	0	418	28	.9	5.8	.69	908			506			1180	7.9

SANTA CLARA RIVER BASIN--Continued

11-1135. SANTA PAULA CREEK NEAR SANTA PAULA, CALIF.

LOCATION.--Lat 34°23'44", long 119°04'32", at gaging station 15 feet upstream from Santa Paula Water Works diversion dam, 200 feet upstream from Mud Creek, and 3 miles north of Santa Paula, Ventura County.

DRAINAGE AREA.--40.0 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 7, 1966.....	2.4			93	35	97	3.0	260	0	267	64	0.6	1.3	0.46	749			376			1080	8.0
Nov. 2.....	1.1			110	44	110	3.0	322	0	309	76	.6	2.5	.54	865			456			1240	7.8
Dec. 6.....	1630			42	7.0	13	2.0	115	0	57	6.0	.3	3.5	.10	190			134			329	7.6
Jan. 4, 1967.....	20			102	26	42	2.0	229	0	226	21	.6	2.2	.14	578			362			806	8.2
Feb. 7.....	38			88	22	34	1.0	201	0	189	14	.5	1.3	.08	494			310			701	8.2
Mar. 13.....	530			35	9.0	15	2.0	96	0	72	6.0	.4	1.0	.06	223			124			315	7.8
Mar. 20.....	60			64	19	18	--	165	0	115	14	.2	--	.10	395			238			563	7.8
Apr. 3.....	12			78	25	29	1.0	198	0	176	14	.5	.6	.10	441			298			662	8.1
May 2.....	95			72	18	24	1.0	168	0	150	80	.4	.8	.07	388			254			567	8.1
May 30.....	15			78	23	31	1.0	173	0	188	12	.5	.8	.11	514			289			672	8.0
June 21.....	12			67	20	41	--	159	0	179	23	.2	2.0	.16	491			250			712	8.2
July 10.....	40			93	26	38	2.0	215	0	204	21	.5	1.0	.16	562			339			761	8.1
Aug. 8.....	4.8			96	26	65	2.0	229	0	208	21	.6	1.5	.20	555			347			789	7.9
Aug. 28.....	6.0			80	27	48	2.0	198	0	207	24	.5	.3	.23	549			311			782	7.8

MISCELLANEOUS ANALYSES OF STREAMS IN SANTA CLARA RIVER BASIN

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	

11-1080.85. CASTAIC CREEK ABOVE CORDOVA RANCH, NEAR CASTAIC, CALIF. (Lat 34°35'51", long 118°39'46")																		
Nov. 8, 1966.....	0815	52		6	416	6.7	--	--	--	--	--	--	--	--	--	--	--	VPWC
Dec. 2.....	1020	54		.1	2	T	--	--	--	--	--	--	--	--	--	--	--	
Dec. 3.....	1115	59		32	1780	154	--	--	--	--	--	--	--	--	--	--	--	
Dec. 3.....	1130	59		29	1520	119	20	29	39	51	62	71	88	92	100	--	--	
Dec. 3.....	1520	58		21	1120	64	--	--	--	--	--	--	--	--	--	--	--	
Dec. 4.....	1645	53		8	180	3.9	--	--	--	--	--	--	--	--	--	--	--	VPWC
Dec. 6.....	0810	57		85	5070	1160	--	--	--	--	--	--	--	--	--	--	--	
Dec. 6.....	1130	53		94	4220	1070	--	--	--	--	--	--	--	--	--	--	--	
Dec. 6.....	2230	53		161	5650	2460	6	10	13	20	28	39	59	78	95	100	--	
Dec. 7.....	1315	54		61	1080	178	--	--	--	--	--	--	--	--	--	--	--	
Dec. 9.....	1000	49		21	253	14	--	--	--	--	--	--	--	--	--	--	--	VPWC
Dec. 14.....	1245	56		3	78	.6	--	--	--	--	--	--	--	--	--	--	--	
Dec. 22.....	1630	52		3	14	.1	--	--	--	--	--	--	--	--	--	--	--	
Jan. 22, 1967.....	2130	48		182	8410	4130	--	--	--	--	--	--	--	--	--	--	--	
Jan. 22.....	2135	48		182	6560	3220	8	11	17	24	33	40	59	79	95	100	--	
Jan. 23.....	0930	43		68	2110	387	--	--	--	--	--	--	--	--	--	--	--	VPWC
Jan. 24.....	0910	44		116	4360	1370	13	18	25	33	42	52	78	94	99	100	--	
Jan. 24.....	1830	48		472	32600	43100	--	--	--	--	--	--	--	--	--	--	--	
Jan. 25.....	1030	50		116	3860	1210	--	--	--	--	--	--	--	--	--	--	--	
Jan. 26.....	1645	50		72	744	145	--	--	--	--	--	--	--	--	--	--	--	VPWC
Jan. 27.....	1610	53		63	386	66	--	--	--	--	--	--	--	--	--	--	--	
Jan. 31.....	1300	55		32	135	12	--	--	--	--	--	--	--	--	--	--	--	
Feb. 1.....	1155	52		27	123	9.0	--	--	--	--	--	--	--	--	--	--	--	
Feb. 14.....	1340	53		9	124	3.0	--	--	--	--	--	--	--	--	--	--	--	
Feb. 27.....	1310	62		6	96	1.6	--	--	--	--	--	--	--	--	--	--	--	VPWC
Mar. 9.....	1515	54		3	70	.6	--	--	--	--	--	--	--	--	--	--	--	
Mar. 13.....	1630	50		86	953	221	--	--	--	--	--	--	--	--	--	--	--	
Mar. 15.....	1315	56		36	186	18	--	--	--	--	--	--	--	--	--	--	--	
Mar. 15.....	1330	56		36	276	27	--	--	--	--	--	--	--	--	--	--	--	
Apr. 6.....	1700	--		36	176	17	--	--	--	--	--	--	--	--	--	--	--	VPWC
Apr. 17.....	1350	62		33	94	8.4	--	--	--	--	--	--	--	--	--	--	--	
Apr. 22.....	1530	54		201	2830	1540	--	--	--	--	--	--	--	--	--	--	--	
Apr. 22.....	1540	--		201	2430	1320	--	--	--	--	--	--	--	--	--	--	--	
May 2.....	0930	55		58	232	36	--	--	--	--	--	--	--	--	--	--	--	
May 30.....	1340	72		13	34	1.2	--	--	--	--	--	--	--	--	--	--	--	VPWC
June 13.....	0800	58		9	56	1.4	--	--	--	--	--	--	--	--	--	--	--	
June 20.....	1230	79		6	9	.1	--	--	--	--	--	--	--	--	--	--	--	

11-1305. SANTA YNEZ RIVER NEAR BUELTON, CALIF. (Lat 34°36'50", long 120°14'30")															
Dec. 8.....	1500	56		86	312	72									
Dec. 9.....	0800	---		56	336	51									
Dec. 14.....	1245	---		70	128	24									
Jan. 5, 1967.....	1000	48		55	78	12									
Feb. 3.....	1100	54		301	103	84		17	28	35	72	84	94	100	SVBW
Mar. 6.....	0950	57		82	24	5									
Mar. 31.....	1100	56		238	44	28									
May 3.....	1340	66		240	20	13									
June 6.....	1215	68		77	39	8									
11-1325. SALSIPUEDES CREEK NEAR LOMPOC, CALIF. (Lat 34°35'20", long 120°24'27")															
Dec. 1, 1966.....	1005	53		1.2	293	1.0									
Jan. 26, 1967.....	1330	58		34	169	16	8	24	49	64	75	94	99	100	SVBW
Feb. 2.....	1145	54		12	275	8.9									
Mar. 3.....	0950	54		5.2	64	.9									
Mar. 30.....	1010	56		5.0	79	1.1									
Apr. 20.....	1500	56		13	184	6.5									
May 2.....	1015	57		8.8	39	.9									
June 5.....	0910	58		3.2	87	.8									

T Less than 0.05 ton.

VENTURA RIVER BASIN

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

LOCATION.--Lat 34°29'41", long 119°19'48", at gaging station 1.6 miles upstream from Matilija Dam, and 1.7 miles northwest of Matilija Hot Springs, Ventura County.

DRAINAGE AREA.--50.7 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 7, 1966.....	3.3			129	32	80	3.0	268	0	294	73	1.4	0.0	2.3	780			454			1130	8.0
Nov. 1.....	2.4			128	31	84	3.0	261	0	288	76	1.3	.5	2.5	775			447			1120	7.8
Dec. 5.....	345			70	18	19	2.0	144	0	157	7.0	.4	4.0	.24	340			249			558	7.6
Jan. 4, 1967.....	28			119	33	41	2.0	244	0	288	15	.7	.0	.50	664			433			882	7.8
Feb. 6.....	51			111	28	33	2.0	236	0	247	10	.6	.0	.30	605			392			837	8.2
Mar. 13.....	246			70	17	18	2.0	167	0	135	50	.6	.0	.18	372			245			528	7.9
Apr. 3.....	46			105	30	30	2.0	220	0	251	10	.6	.0	.29	573			386			809	7.7
May 1.....	130			99	30	25	2.0	205	0	242	4.0	.5	.0	.17	543			371			765	7.8
May 30.....	40			96	35	31	2.0	198	0	270	7.0	.7	.0	.30	601			384			821	7.9
July 10.....	22			105	37	38	2.0	220	0	282	17	.9	.5	.52	678			414			876	7.9
Aug. 7.....	14			115	32	46	2.0	224	0	286	24	1.0	.5	.84	676			419			923	8.0
Aug. 28.....	8.7			108	32	55	2.0	225	0	274	34	1.1	.0	1.0	711			401			960	7.7

VENTURA RIVER BASIN--Continued

11-1185. VENTURA RIVER NEAR VENTURA, CALIF.

LOCATION.--Lat 34°21'05", long 119°18'23", at gaging station in southeast corner of Santa Ana Grant, 500 feet downstream from county highway bridge at Foster Memorial Park, 0.2 mile downstream from Coyote Creek, and 5 miles north of Ventura, Ventura County.

DRAINAGE AREA.--188 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1966 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 7, 1966.....	0.1			146	37	68	3.0	337	0	279	67	0.7	1.0	0.72	830			517			1160	7.4
Dec. 5.....	858			56	15	24	5.0	122	0	113	18	.4	13	.20	324			201			519	7.2
Jan. 4, 1967.....	12			119	34	67	3.0	242	0	288	55	.7	14	.56	733			437			1040	7.8
Feb. 6.....	22			140	39	69	3.0	304	0	303	51	.7	19	.44	826			510			1160	8.1
Mar. 13.....	183			86	23	36	3.0	195	0	178	26	.6	10	.24	512			309			714	7.8
Apr. 3.....	34			102	38	59	3.0	218	0	278	46	.7	14	.45	714			411			990	8.0
May 1.....	50			117	37	53	2.0	244	0	278	37	.6	16	.32	723			444			1010	7.8
May 30.....	25			110	38	59	2.0	227	0	280	45	.7	22	.42	743			431			1030	8.1
July 10.....	7.6			131	41	62	2.0	290	0	290	49	.7	20	.52	881			496			1110	8.0
Aug. 7.....	5.6			134	40	66	2.0	305	0	300	52	.7	13	.48	897			499			1150	7.8
Aug. 28.....	7.1			131	40	67	2.0	296	0	294	49	.6	12	.50	833			492			1140	7.8

SANTA MARIA RIVER BASIN

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

LOCATION.--Lat 34°56'40", long 120°17'30", at gaging station in Suey Grant, 3.5 miles upstream from mouth, 4 miles northeast of Garey, Santa Barbara County, and 4.4 miles downstream from Twitchell Dam.

DRAINAGE AREA.--1,133 square miles.

RECORDS AVAILABLE.--Chemical analyses: May to September 1967

Chemical analyses, in parts per million, May to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
May 30, 1967.....	203			81	31	44	3.0	198	0	218	24	0.7	1.0	0.19	550			330			787	8.2
July 9.....	237			81	29	41	3.0	190	0	207	25	.7	2.0	.16	558			321			741	8.2
Aug. 7.....	355			79	30	40	3.0	181	7	202	24	.6	1.5	.20	530			321			745	8.3
Aug. 29.....	235			77	29	41	3.0	200	0	191	25	.5	2.0	.20	536			311			759	7.7

MISCELLANEOUS ANALYSES OF STREAMS IN ARROYO GRANDE BASIN

Periodic determinations of suspended-sediment discharge, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm) 1/	Sediment discharge (tons per day)	Suspended sediment												Method of analysis
							Percent finer than size indicated, in millimeters												
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000		
11-1411.5. ARROYO GRANDE ABOVE PHOENIX CREEK NEAR ARROYO GRANDE, CALIF. (Lat 35°11'03", long 120°26'11")																			
July 28, 1967.....	1300	73		1.8	9	T													
Aug. 4.....	0900	62		1.7	274	1.3													
Aug. 18.....	1055	70		1.6	17	.1													
Aug. 22.....	1235	70		1.7	59	.3													
Aug. 25.....	1615	72		1.5	35	.1													
Aug. 29.....	1610	73		1.3	75	.3													
Aug. 31.....	1645	71		1.0	101	.3													
Sept. 5.....	1655	70		.74	6	T													
Sept. 6.....	1000	67		1.3	114	.4													
Sept. 9.....	1610	70		1.0	64	.2													
Sept. 13.....	1615	70		1.1	2	T													
Sept. 16.....	1605	68		1.3	2	T													
Sept. 21.....	1630	69		1.3	1	T													
Sept. 23.....	1700	69		1.4	1	T													
Sept. 27.....	1615	70		1.4	1	T													
Sept. 30.....	1645	70		1.5	2	T													

Particle-size analyses of bed material, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Bed material												Method of analysis
							Percent finer than size indicated, in millimeters												
							0.062	0.125	0.250	0.500	1.000	2.000	4.000	8.000	16.000	32.000	64.000		
Sept. 6, 1967.....	1015			1.3				1	23	65	86	99	100						S

T Less than 0.05 ton.

^{1/} High concentration caused by equipment working in reservoir.

BIG SUR RIVER BASIN

11-1430. BIG SUR RIVER NEAR BIG SUR, CALIF.

LOCATION.--Lat 36°14'45", long 121°46'20", 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, Monterey County.

DRAINAGE AREA.--46.5 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 66°F on several days in July and August.

EXTREMES, 1965-67.--Water temperatures: Maximum, 68°F Aug. 1, 5, 17, 1966; minimum (1965-66), 43°F Dec. 17, 19, 23, 1965.

REMARKS.--Clock stopped Nov. 20 to Jan. 17.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	61	61	60	60	59	59	59	59	59	59	58	58	58	58	54	55	54	55	56	56	55	56	56	56	56	56	56	56	56	55	57	55	
Minimum	60	60	59	58	59	58	58	57	58	58	58	57	56	53	53	54	53	54	55	54	55	54	55	55	56	55	55	55	55	55	55	55	
November																																	
Maximum	56	56	56	56	56	56	56	56	56	54	55	55	56	56	58	58	58	57	58	---	---	---	---	---	---	---	---	---	---	---	---	---	
Minimum	55	55	56	56	55	56	56	56	54	54	53	54	55	55	56	58	57	56	57	---	---	---	---	---	---	---	---	---	---	---	---	---	
December																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
January																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	48	49	50	53	53	51	53	53	54	55	55	56	56	55	---	
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	46	47	48	50	51	49	51	51	52	52	55	55	55	54	---	
February																																	
Maximum	54	52	53	53	54	54	53	53	53	54	54	54	54	53	50	50	50	52	52	51	51	50	51	51	51	51	51	51	---	---	---	.52	
Minimum	52	50	51	50	51	51	50	51	50	52	51	51	51	50	47	48	48	50	49	49	48	47	48	50	50	50	48	48	49	---	---	49	
March																																	
Maximum	51	51	51	49	49	50	50	51	51	51	51	51	51	50	52	55	55	54	53	54	55	55	56	50	53	54	54	52	50	50	52		
Minimum	48	49	49	47	46	47	48	48	50	50	50	51	50	48	49	52	54	52	50	50	52	53	53	50	50	52	51	52	49	49	49	49	
April																																	
Maximum	49	50	52	52	51	52	52	53	54	54	52	53	53	53	53	52	52	51	51	51	51	52	52	53	54	54	53	52	52	53	---	52	
Minimum	48	48	48	51	50	51	51	50	51	52	49	50	50	50	52	51	49	50	49	49	50	50	51	51	50	51	52	50	49	49	---	50	
May																																	
Maximum	54	55	54	55	54	56	57	58	56	56	54	55	56	57	59	59	61	60	60	61	63	63	63	61	58	57	59	59	58	58	56	57	
Minimum	50	50	50	52	52	51	53	54	54	53	51	50	51	52	54	54	56	57	55	56	58	59	58	57	54	55	54	56	55	53	54	53	
June																																	
Maximum	55	55	57	56	56	57	59	58	58	57	57	59	58	59	60	61	61	60	60	62	62	62	61	62	61	62	62	63	63	64	---	59	
Minimum	54	53	53	54	55	54	55	55	56	54	55	56	56	56	57	59	58	59	58	58	58	58	58	58	59	59	58	59	59	60	---	56	
July																																	
Maximum	64	65	66	65	64	65	66	65	65	65	66	66	66	66	66	65	63	63	64	65	66	66	66	65	65	65	65	66	66	66	65	65	
Minimum	61	61	62	62	62	62	62	60	61	62	63	63	63	63	63	63	60	59	60	61	62	63	62	62	62	61	63	64	63	63	62	61	
August																																	
Maximum	64	63	63	64	64	64	63	62	61	61	62	62	64	66	65	64	65	66	66	66	64	64	64	64	65	65	65	64	63	64	63	63	
Minimum	62	61	61	62	62	61	60	60	60	58	58	59	61	62	62	61	62	64	63	63	62	62	62	62	62	63	63	63	61	61	62	61	61
September																																	
Maximum	63	62	63	64	65	65	65	65	64	64	64	64	64	64	63	63	63	64	64	64	64	64	64	64	64	63	63	63	64	64	---	63	
Minimum	61	62	61	63	63	63	63	62	62	62	63	63	62	62	62	61	62	62	62	63	63	63	62	62	63	62	62	62	62	64	63	---	62

SALINAS RIVER BASIN

11-1488. NACIMIENTO RIVER NEAR BRYSON, CALIF.

LOCATION.--Lat 35°48'06", long 121°06'50", at gaging station 0.6 mile upstream from Turtle Creek, 1.6 miles west of Bryson, Monterey County, and 10 miles southwest of Lockwood.

DRAINAGE AREA.--140 square miles.

RECORDS AVAILABLE.--Water temperatures: March 1958 to September 1959, October 1960 to September 1964, March 1965 to September 1967.

Sediment records: March 1958 to September 1959, October 1960 to September 1964, March 1965 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 4,900 ppm Jan. 24; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 172,000 tons Jan. 24; minimum daily, 0 ton on many days.

EXTREMES, 1958-59, 1960-64, 1965-67.--Sediment concentrations: Maximum daily, 6,860 ppm Nov. 13, 1960; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 172,000 tons Jan. 24, 1967; minimum daily, 0 ton on many days.

REMARKS.--No flow Oct. 1 to Nov. 19, Aug. 6 to Sept. 30.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
December	--	--	--	52	52	--	--	--	--	--	--	--	--	50	53	51	48	47	46	45	47	47	45	46	--	44	42	41	40	41	--	--
January	--	--	40	--	42	41	--	--	39	40	40	--	--	43	--	--	42	--	--	44	--	49	45	--	47	48	48	--	--	--	51	--
February	50	47	48	--	--	48	--	--	49	--	--	52	--	--	49	--	51	--	--	51	--	--	--	51	--	52	--	--	--	--	--	--
March	--	--	52	--	--	51	--	59	--	51	--	--	48	47	49	--	51	--	--	53	--	--	--	53	--	--	54	--	--	--	46	--
April	--	--	--	51	--	--	50	--	--	52	--	--	--	52	--	51	--	--	--	53	--	--	56	--	--	--	50	--	--	--	--	--
May	--	55	--	--	54	--	--	--	60	--	--	62	62	--	--	68	--	--	--	--	--	71	--	--	--	66	--	--	--	--	64	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	83	--	--	--	--	--
August	--	75	--	--	--	--	--	--	--	80	--	--	--	81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SALINAS RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..				0	--	0	40	5	0.5
2..				0	--	0	1500	1070	S 14300
3..				0	--	0	1030	940	K 4160
4..				0	--	0	516	120	170
5..				0	--	0	6060	875	S 21700
6..				0	--	0	19800	1520	S 99100
7..				0	--	0	3180	30	260
8..				0	--	0	1300	20	70
9..				0	--	0	756	10	20
10..				0	--	0	516	10	14
11..				0	--	0	380	5	5.1
12..				0	--	0	297	5	4.0
13..				0	--	0	245	5	3.3
14..				0	--	0	204	3	1.7
15..				0	--	0	175	7	3.3
16..				0	--	0	154	6	2.5
17..				0	--	0	135	4	1.5
18..				0	--	0	120	3	1.0
19..				0	--	0	110	8	2.4
20..				154	48	48	100	2	.5
21..				62	10	1.7	92	2	.5
22..				114	20	6.2	85	2	.5
23..				50	10	1.4	81	2	.4
24..				30	10	.8	76	2	.4
25..				22	5	.3	72	2	.4
26..				18	5	.2	68	2	.4
27..				15	5	.2	64	2	.3
28..				17	5	.2	59	2	.3
29..				130	20	7.0	57	3	.5
30..				61	10	1.6	57	2	.3
31..				--	--	--	55	2	.3
Total	0	--	0	673	--	67.6	37384	--	139824.1
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	52	2	0.3	1150	750	2330	92	2	0.5
2..	50	3	.4	814	180	396	86	2	.5
3..	48	4	.5	630	250	425	83	4	.9
4..	47	6	.8	510	200	280	89	4	1.0
5..	45	7	.9	430	160	190	81	4	.9
6..	42	9	1.0	369	140	139	76	6	1.2
7..	42	5	.6	317	90	77	73	4	.8
8..	41	2	.2	281	10	7.6	73	1	.2
9..	41	1	.1	253	2	1.4	68	4	.7
10..	40	3	.3	229	2	1.2	68	8	1.5
11..	38	2	.2	206	2	1.1	676	500	K 1460
12..	38	2	.2	191	2	1.0	2540	1800	S 17800
13..	37	2	.2	179	2	1.0	2040	1090	S 7010
14..	35	1	.1	161	2	.9	1270	250	S 857
15..	34	2	.2	149	4	1.6	838	245	S 762
16..	33	2	.2	140	4	1.5	5960	2310	S 34900
17..	32	2	.2	131	4	1.4	2210	750	4500
18..	32	2	.2	125	2	.7	1180	500	1590
19..	30	2	.2	122	2	.7	820	100	220
20..	30	3	.2	113	1	.3	630	10	17
21..	701	436	S 5780	101	2	.5	520	7	9.8
22..	3600	771	S 13000	98	2	.5	439	5	5.9
23..	540	250	365	95	2	.5	385	5	5.2
24..	9950	4900	K 172000	95	2	.5	341	5	4.6
25..	2890	4100	32000	194	3	1.6	305	3	2.5
26..	1490	2600	10500	140	2	.8	281	3	2.3
27..	1040	300	842	110	1	.3	260	3	2.1
28..	742	30	60	98	2	.5	239	3	1.9
29..	886	50	120	--	--	--	222	3	1.8
30..	2970	2610	K 34900	--	--	--	260	15	27
31..	2280	2900	S 19100	--	--	--	706	293	S 619
Total	27876	--	288674.0	7431	--	3862.6	22911	-	69806.3

S Computed by subdividing day.

K Computed from estimated-concentration graph and subdividing day.

SALINAS RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	500	30	41	345	2	1.9	71	2	0.4
2..	505	10	14	313	2	1.7	83	2	.4
3..	413	10	11	291	2	1.6	71	2	.4
4..	417	6	6.8	270	2	1.5	66	2	.4
5..	377	5	5.1	253	1	.7	63	2	.3
6..	650	203 K	919	235	1	.6	61	2	.3
7..	1460	1310 K	5720	219	1	.6	58	2	.3
8..	796	100	210	206	1	.6	56	2	.3
9..	580	20	31	194	1	.5	52	2	.3
10..	595	73 K	200	203	2	1.1	52	2	.3
11..	964	240 K	712	182	2	1.0	50	2	.3
12..	640	20	35	173	2	.9	50	2	.3
13..	520	5	7.0	161	3	1.3	48	2	.3
14..	443	3	3.6	152	2	.8	46	2	.2
15..	457	4	4.9	143	2	.8	42	2	.2
16..	417	4	4.5	137	2	.7	40	2	.2
17..	393	4	4.2	131	1	.4	36	2	.2
18..	766	10	21	122	1	.3	35	2	.2
19..	874	20	47	113	1	.3	35	2	.2
20..	718	10	19	104	1	.3	35	2	.2
21..	1230	807 S	2850	98	1	.3	32	2	.2
22..	1010	164 S	474	92	1	.2	30	2	.2
23..	958	20	52	86	1	.2	27	2	.1
24..	1020	13	36	81	1	.2	25	2	.1
25..	772	10	21	78	1	.2	24	2	.1
26..	640	5	8.6	76	1	.2	22	2	.1
27..	550	2	3.0	76	1	.2	21	2	.1
28..	480	1	1.3	71	1	.2	20	2	.1
29..	430	2	2.3	71	1	.2	19	2	.1
30..	381	2	2.1	68	1	.2	17	2	.1
31..	--	--	--	66	1	.2	--	--	--
Total	19956	--	11466.4	4810	--	19.9	1287	--	6.9
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	15	--		0.80	--	T			
2..	14	--		.60	8	T			
3..	13	--		.40	--	T			
4..	13	--		.20	--	T			
5..	12	--		.5	--	T			
6..	11	--		0	--	0			
7..	11	--		0	--	0			
8..	11	--		0	--	0			
9..	9.8	--		0	--	0			
10..	9.1	--		0	--	0			
11..	7.8	--		0	--	0			
12..	7.8	--		0	--	0			
13..	6.5	--		0	--	0			
14..	6.5	--		0	--	0			
15..	5.9	--		0	--	0			
16..	5.9	--		0	--	0			
17..	5.4	--		0	--	0			
18..	4.4	--		0	--	0			
19..	4.9	--		0	--	0			
20..	4.4	--		0	--	0			
21..	3.6	--		0	--	0			
22..	3.2	--		0	--	0			
23..	2.8	--		0	--	0			
24..	2.8	--		0	--	0			
25..	2.8	--		0	--	0			
26..	2.5	--		0	--	0			
27..	2.1	1		0	--	0			
28..	2.3	--		0	--	0			
29..	2.0	--		0	--	0			
30..	1.7	--		0	--	0			
31..	1.3	--		0	--	0			
Total	205.5	--	0.5	2.05	--	0.0	0	--	0

Total discharge for year (cfs-days).....122535.55

Total load for year (tons).....513728.3

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

SALINAS RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
Jan. 22, 1967.....	1210	49		2020	354						80	97	100	—			V
Jan. 26.....	1425	48		1420	2650						15	56	98	100			V
Feb. 1.....	1530	50		1050	527						48	90	100	—			V
Mar. 31.....	0850	46		630	352						26	52	97	100			V

SALINAS RIVER BASIN--Continued

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

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

DRAINAGE AREA.--223 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

Sediment records: October 1965 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 7,420 ppm Dec. 6; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 161,000 tons Dec. 6; minimum daily, 0 ton on many days.

EXTREMES, 1965-67.--Sediment concentrations: Maximum daily, 7,420 ppm 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. 2, July 26-29, July 31 to Sept. 30.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
December	--	--	51	51	49	58	53	52	52	52	53	56	53	54	53	53	55	57	53	--	--	54	--	--	--	54	--	--	--	--	53	--
January	--	--	--	--	--	49	--	--	--	55	--	--	--	--	--	--	55	--	--	55	--	50	43	49	52	48	56	52	54	54	53	--
February	50	56	--	55	51	50	48	--	--	52	--	--	64	--	--	--	--	--	--	51	--	--	--	--	47	--	--	--	--	--	--	--
March	--	--	--	--	--	58	--	--	--	--	--	55	50	47	52	54	--	57	59	65	--	64	--	62	--	--	59	--	--	--	53	--
April	--	--	--	--	--	53	58	--	64	--	53	--	--	57	--	51	57	--	56	--	55	52	--	58	51	49	53	--	59	--	--	--
May	66	--	--	59	--	--	57	--	--	--	--	52	--	--	--	--	--	--	--	68	--	--	--	--	--	--	--	--	70	--	--	--
June	--	--	--	--	--	77	--	80	--	--	--	--	81	--	--	--	--	--	--	83	--	--	--	--	--	--	78	--	--	--	--	--
July	--	--	--	--	88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
August	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SALINAS RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..							0	--	0
2..							0	--	0
3..							486	434	S 1330
4..							656	782	S 3140
5..							2470	3010	S 27000
6..							7830	7420	S 161000
7..							1200	2420	S 11500
8..							567	330	505
9..							553	250	373
10..							454	104	127
11..							394	135	144
12..							352	112	106
13..							310	179	150
14..							294	180	143
15..							272	80	59
16..							256	62	43
17..							240	5	3.2
18..							225	24	15
19..							220	10	5.9
20..							209	1	.6
21..							118	5	1.6
22..							96	10	2.6
23..							85	27	6.2
24..							85	10	2.3
25..							69	5	.9
26..							72	3	.6
27..							63	10	1.7
28..							54	10	1.5
29..							57	20	3.1
30..							43	20	2.3
31..							46	10	1.2
Total	0	--	0	0	--	0	17776	--	205668.7
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	46	10	1.2	728	500	983	10	20	0.5
2..	48	10	1.3	560	250	380	10	20	.5
3..	46	10	1.2	484	250	330	8.0	30	.6
4..	36	5	.5	430	200	230	6.4	30	.5
5..	39	5	.5	364	200	200	5.2	40	.6
6..	39	3	.3	310	202	169	5.2	42	.6
7..	37	5	.5	261	110	78	5.2	50	.7
8..	34	5	.5	235	100	63	5.2	50	.7
9..	32	10	.9	220	100	59	3.8	50	.5
10..	32	12	1.0	199	121	65	3.5	50	.5
11..	34	10	.9	186	150	75	20	80	4.3
12..	32	10	.9	172	150	70	260	873	S 1510
13..	32	10	.9	149	182	73	546	429	S 696
14..	36	10	1.0	82	150	33	382	500	516
15..	34	5	.5	60	120	19	283	600	458
16..	32	5	.4	48	100	13	2140	2470	S 20200
17..	32	6	.5	43	80	9.3	1540	840	K 3660
18..	32	5	.4	36	60	5.8	1050	250	709
19..	34	5	.5	30	40	3.2	872	123	290
20..	34	5	.5	29	20	1.4	693	93	174
21..	36	5	.5	21	6	.3	700	37	70
22..	880	1840	S 7230	21	5	.3	637	150	260
23..	340	350	321	16	5	.2	525	334	473
24..	2600	4580	S 54200	16	5	.2	412	200	220
25..	1360	2110	S 8020	20	5	.3	388	49	51
26..	840	1500	3400	14	6	.2	352	100	95
27..	666	447	S 838	11	5	.1	316	200	170
28..	567	214	328	10	10	.3	272	361	265
29..	588	320	508	--	--	--	225	360	220
30..	1180	1910	S 9860	--	--	--	195	380	200
31..	1110	1940	S 6120	--	--	--	322	380	330
Total	10908	--	90839.9	4751	--	2861.6	12192.5	--	30577.0

S Computed by subdividing day.

K Computed from estimated-concentration graph and subdividing day.

SALINAS RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	267	300	220	267	128	92	64	30	5.2
2..	240	200	130	246	100	66	64	30	5.2
3..	214	182	105	240	100	65	63	30	5.1
4..	204	230	130	235	416	263	63	30	5.1
5..	204	290	160	220	460	270	62	100	17
6..	227	350	215	220	380	230	61	129	21
7..	759	759	S 1580	220	290	172	60	50	8.1
8..	560	360	540	204	270	150	60	21	3.4
9..	511	180	248	145	250	98	54	21	3.1
10..	406	150	160	145	230	90	54	21	3.1
11..	483	966	S 1280	127	210	72	54	21	3.1
12..	442	1060	1300	118	198	63	54	21	3.1
13..	382	1050	1100	118	193	61	54	22	3.2
14..	340	948	S 875	136	188	69	51	22	3.0
15..	294	230	K 182	136	183	67	51	22	3.0
16..	294	120	95	132	178	63	46	22	2.7
17..	267	117	84	127	173	59	46	22	2.7
18..	380	90	92	114	168	52	39	22	2.3
19..	442	20	24	110	163	48	39	30	3.2
20..	430	20	23	107	159	46	41	38	4.2
21..	630	111	S 214	110	150	45	36	37	3.6
22..	644	35	61	110	135	40	34	36	3.3
23..	582	30	47	107	120	35	32	35	3.0
24..	760	450	S 935	92	105	26	27	34	2.5
25..	623	280	471	75	90	18	30	33	2.7
26..	567	220	337	72	65	13	27	32	2.3
27..	484	489	S 638	69	50	9.3	27	31	2.3
28..	424	470	540	67	40	7.2	25	31	2.1
29..	400	350	378	66	32	5.7	25	32	2.2
30..	322	250	220	65	30	5.3	25	32	2.2
31..	--	--	--	64	30	5.2	--	--	--
Total	12782	--	12384	4264	--	2305.7	1368	--	133.0
Day	JULY			AUGUST			SEPTEMBER		
1..	25	33	2.2						
2..	21	34	1.9						
3..	20	35	1.9						
4..	20	36	1.9						
5..	16	37	1.6						
6..	14	30	1.1						
7..	5.8	10	.2						
8..	4.8	5	.1						
9..	4.8	--	T						
10..	4.8	--	T						
11..	2.6	--	T						
12..	2.6	--	T						
13..	2.6	--	T						
14..	2.3	--	T						
15..	2.0	--	T						
16..	.8	--	T						
17..	.7	--	T						
18..	.6	--	T						
19..	.5	--	T						
20..	.4	--	T						
21..	0	--	0						
22..	0	--	0						
23..	0	--	0						
24..									
25..	0	--	0						
26..									
27..	0	--	0						
28..	0	--	0						
29..	0	--	0						
30..	.6	--	T						
31..	0	--	0						
Total	151.9	--	11.0	0	--	0	0	--	0
Total discharge for year (cfs-days).....								64193.4	
Total load for year (tons).....								344780.9	

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

SALINAS RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (° F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 5, 1966.....	1625	49		1090	1490		--	10	--	13	--	17	21	32	62	99	100	VPWC
Dec. 6.....	1500	58		9260	8850		14	19	27	39	46	59	88	97	99	100	--	VPWC
Dec. 8.....	1500	55		749	428		--	--	--	--	--	28	55	92	98	100	--	V
Jan. 22, 1967.....	1100	50		960	2400		--	--	--	--	--	34	58	92	100	--	--	V
Jan. 24.....	0900	49		1490	4970		--	20	--	31	--	43	67	91	96	99	100	VPWC
Jan. 24.....	1005	48		4600	13100		--	10	--	19	--	34	61	90	98	100	--	SPWC
Jan. 24.....	1135	48		6820	12600		8	10	15	20	28	37	57	79	94	98	100	SPWC
Jan. 24.....	1655	50		3580	4830		--	10	--	17	--	30	63	89	96	99	100	VPWC
Mar. 12.....	1800	55		504	3360		--	--	--	--	--	21	32	71	97	100	--	V

SALINAS RIVER BASIN--Continued

11-1518.7. ARROYO SECO NEAR GREENFIELD, CALIF.

LOCATION.--Lat 36°14'15", long 121°28'50", at gaging station 0.6 mile downstream from Rocky Creek, and 14.5 miles southwest of Greenfield, Monterey County.

DRAINAGE AREA.--113 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1962 to September 1967.

Sediment records: October 1962 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 3,040 ppm Dec. 6; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 84,800 tons Dec. 6; minimum daily, less than 0.05 ton on many days.

EXTREMES, 1962-67.--Water temperatures (1964-66): Minimum, 39°F Dec. 18, 20-24, 1965.

Sediment concentrations: Maximum daily, 3,040 ppm Dec. 6, 1966; minimum daily, no flow Aug. 25-27, 1966.

Sediment loads: Maximum daily, 84,800 tons Dec. 6, 1966; minimum daily, 0 ton Aug. 25-27, 1966.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Aver- age
	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	
October	--	--	70	--	70	--	68	--	--	68	--	66	--	60	--	--	60	--	61	--	60	--	63	--	--	60	--	60	--	--	56	--
November	--	--	58	55	--	--	54	55	55	55	55	--	--	56	57	55	--	56	--	55	54	52	50	--	47	45	--	48	51	50	--	--
December	51	51	50	48	52	55	51	50	48	50	--	50	51	50	48	48	--	--	47	47	47	45	46	--	--	44	47	40	40	43	--	47
January	--	41	42	43	43	42	--	--	40	43	43	--	45	--	--	45	45	43	45	45	48	47	45	46	47	48	--	--	--	54	52	--
February	48	51	49	51	53	52	49	48	50	49	50	54	--	49	--	47	49	52	--	49	--	48	49	49	48	49	50	53	--	--	49	--
March	52	--	50	50	--	47	--	47	50	50	49	48	47	--	50	54	57	55	54	51	50	52	52	53	51	50	--	--	--	--	--	--
April	--	49	52	--	--	50	50	--	--	--	--	--	55	--	--	54	--	51	--	--	49	--	51	--	54	--	--	53	--	54	--	--
May	--	58	--	--	--	--	--	59	--	59	52	--	--	--	--	58	--	--	64	60	--	65	--	--	--	63	--	--	--	--	--	--
June	--	--	--	--	56	58	--	--	--	--	--	--	--	--	--	--	--	--	69	66	--	--	--	66	--	66	67	--	--	--	--	--
July	--	--	--	--	--	69	74	--	--	75	--	--	--	76	--	--	--	--	75	--	--	--	--	--	--	--	--	72	--	--	--	--
August	--	--	--	--	--	--	--	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	71	--	--	--	--	--	76	--	--	--	72	--	--	--	--	--	--	73	--	--	69	--	--	--	79	--	--	--	--	--	--	--

SALINAS RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	1.0	---	T	2.3	---	T	35	2	0.2
2..	1.2	---	T	2.2	---	T	695	162	S 889
3..	1.2	2	T	2.2	1	T	489	61	S 135
4..	1.2	---	T	2.1	1	T	402	32	S 112
5..	1.5	1	T	2.0	---	T	3280	1610	S 33900
6..	1.3	---	T	2.3	---	T	8480	3040	S 84800
7..	1.2	2	T	5.6	3	T	1640	458	S 2230
8..	1.2	---	T	5.0	1	T	865	200	467
9..	1.2	---	T	3.4	3	T	594	50	80
10..	1.1	1	T	3.0	1	T	454	18	22
11..	1.2	---	T	2.7	2	T	363	20	20
12..	1.2	1	T	2.6	---	T	303	22	18
13..	1.2	---	T	2.6	---	T	263	7	5.0
14..	1.3	1	T	2.6	10	0.1	235	2	1.3
15..	1.6	---	T	2.7	1	T	205	5	2.8
16..	1.7	---	T	64	14	S 3.4	185	2	1.0
17..	1.6	1	T	24	10	.6	168	2	.9
18..	1.7	---	T	12	5	.2	154	2	.8
19..	1.8	1	T	11	5	.1	142	1	.4
20..	1.8	---	T	177	56	S 37	133	3	1.1
21..	1.8	2	T	106	16	S 5.8	125	1	.3
22..	1.8	---	T	98	4	1.1	116	3	.9
23..	1.9	---	T	50	8	1.1	109	1	.3
24..	2.0	1	T	30	4	.3	104	1	.3
25..	2.0	---	T	24	1	.1	98	1	.3
26..	2.0	1	T	19	1	.1	94	1	.3
27..	2.2	---	T	17	---	T	89	1	.2
28..	2.2	1	T	26	14	S 1.3	85	1	.2
29..	2.2	---	T	94	17	S 4.5	84	2	.5
30..	2.4	---	T	50	2	.3	80	1	.2
31..	2.4	1	T	---	---	---	75	1	.2
Total	50.1	---	0.1	845.3	---	56.2	20144	---	122690.2
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	73	1	0.2	1160	50	157	140	4	1.5
2..	70	1	.2	955	50	129	136	4	1.5
3..	68	1	.2	830	35	78	126	4	1.4
4..	66	2	.3	715	10	19	140	4	1.5
5..	64	2	.3	646	6	10	129	1	.3
6..	62	2	.3	578	6	9.4	124	1	
7..	60	2	.3	522	4	5.6	119	1	.3
8..	58	2	.3	475	3	3.8	115	1	.3
9..	57	1	.2	423	3	3.4	113	1	.3
10..	55	2	.3	375	5	5.1	112	3	.9
11..	54	2	.3	345	2	1.9	658	56	S 150
12..	53	2	.3	318	2	1.7	1270	75	S 337
13..	51	2	.3	300	2	1.6	1110	33	S 103
14..	50	2	.3	288	3	2.3	850	10	23
15..	48	2	.3	273	2	1.5	750	4	8.1
16..	46	3	.4	258	2	1.4	4250	1320	S 19100
17..	44	2	.2	245	2	1.3	2000	198	S 1160
18..	43	4	.5	230	2	1.2	1270	65	223
19..	42	2	.2	220	2	1.2	950	35	90
20..	41	5	.6	207	2	1.1	745	23	46
21..	538	64	S 549	189	2	1.0	650	14	25
22..	1320	474	S 2830	179	1	.5	582	19	30
23..	444	20	24	171	3	1.4	522	11	16
24..	3240	1900	S 30000	168	4	1.8	458	9	11
25..	1560	200	842	215	3	1.7	419	9	10
26..	1020	100	275	175	3	1.4	375	3	3.0
27..	815	70	150	161	5	2.2	348	3	2.8
28..	686	60	110	152	3	1.2	324	3	2.6
29..	900	160	K 421	---	---	---	308	3	2.5
30..	1970	394	S 2490	---	---	---	351	50	47
31..	1600	91	S 412	---	---	---	475	20	26
Total	15198	---	38109.0	10773	---	446.7	19919	---	21424.3

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

SALINAS RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	378	10	10	552	5	7.5	160	2	0.9
2..	350	8	7.6	517	2	2.8	154	2	.8
3..	330	6	5.3	487	2	2.6	141	2	.8
4..	350	5	4.7	463	2	2.5	135	2	.7
5..	341	5	4.6	437	2	2.4	133	2	.7
6..	755	58	K 163	413	2	2.2	128	2	.7
7..	920	44	110	394	2	2.1	123	2	.7
8..	690	30	56	378	1	1.0	118	2	.6
9..	586	20	32	371	1	1.0	115	2	.6
10..	582	20	31	382	2	2.1	111	2	.6
11..	630	10	17	347	1	.9	108	2	.6
12..	570	6	9.2	325	1	.9	106	2	.6
13..	526	6	8.5	304	1	.8	103	2	.6
14..	493	6	8.0	287	1	.8	100	2	.5
15..	500	6	8.1	275	1	.7	97	3	.8
16..	458	6	7.4	262	1	.7	94	3	.8
17..	472	9	K 12	248	1	.7	89	3	.7
18..	715	24	K 46	234	1	.6	87	3	.7
19..	666	10	18	223	1	.6	84	3	.7
20..	618	10	17	211	4	2.3	82	2	.4
21..	980	48	S 130	201	3	1.6	77	2	.4
22..	885	30	72	190	3	1.5	73	2	.4
23..	1000	46	S 143	182	3	1.5	71	2	.4
24..	1030	40	110	173	3	1.4	70	3	.6
25..	895	16	39	167	3	1.4	68	2	.4
26..	820	13	29	162	3	1.3	65	1	.2
27..	745	10	20	156	3	1.3	63	2	.3
28..	686	7	13	154	3	1.2	62	1	.2
29..	634	7	12	151	2	.8	60	1	.2
30..	582	7	11	145	2	.8	57	1	.2
31..	--	--	--	142	2	.8	--	--	--
Total	19187	--	1154.4	8933	--	48.8	2934	--	16.8
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	59	1	0.2	18	4	0.2	11	4	0.1
2..	57	1	.2	18	4	.2	8.0	3	.1
3..	52	1	.1	17	4	.2	9.9	2	.1
4..	49	1	.1	19	4	.2	7.5	--	T
5..	47	1	.1	20	4	.2	7.5	--	T
6..	48	2	.3	15	4	.2	8.0	--	T
7..	47	2	.3	14	4	.2	8.1	1	T
8..	46	2	.2	14	4	.2	8.0	--	T
9..	45	2	.2	14	4	.2	8.3	--	T
10..	43	3	.3	14	4	.2	8.9	--	T
11..	41	2	.2	13	3	.1	9.4	21	.5
12..	40	2	.2	11	3	.1	9.6	10	.3
13..	38	2	.2	11	3	.1	9.1	5	.1
14..	37	2	.2	10	3	.1	8.7	3	.1
15..	35	2	.2	9.2	3	.1	8.9	3	.1
16..	33	2	.2	8.5	3	.1	8.3	3	.1
17..	31	2	.2	7.9	3	.1	8.1	3	.1
18..	30	2	.2	7.5	3	.1	7.8	3	.1
19..	28	2	.2	11	3	.1	8.3	--	T
20..	27	2	.1	12	3	.1	8.1	--	T
21..	26	2	.1	7.3	3	.1	7.7	2	T
22..	27	2	.1	7.5	3	.1	11	10	.3
23..	28	2	.2	8.5	3	.1	12	10	.3
24..	26	2	.1	7.9	3	.1	11	10	.3
25..	24	2	.1	7.4	3	.1	11	25	.7
26..	23	2	.1	7.4	3	.1	10	20	.5
27..	23	2	.1	7.6	3	.1	9.1	10	.2
28..	23	4	.2	7.3	3	.1	8.5	10	.2
29..	22	4	.2	7.3	3	.1	10	10	.3
30..	21	4	.2	6.9	3	.1	10	10	.3
31..	19	4	.2	8.7	3	.1	--	--	--
Total	1095	--	5.5	347.9	--	4.1	271.8	--	5.2
Total discharge for year (cfs-days).....								99698.1	
Total load for year (tons).....								183961.3	

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

SALINAS RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concent- ration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 2, 1966.....	2030	50		3310	505							64	74	84	98	100	--	V
Dec. 6.....	0800	56		11600	3710		7	11	15	21	29	36	55	84	98	100	--	VPWC
Dec. 6.....	1345	55		8720	3130							26	42	74	96	100	--	V
Jan. 30, 1967.....	1715	53		2850	346							46	55	67	100	--	--	V
Mar. 16.....	0730	53		4480	1610							30	45	65	88	99	100	V
Mar. 16.....	0840	53		6090	2670							28	44	67	85	99	100	V

Particle-size analyses of bed material, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (° F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Bed material												Method of analysis
							Percent finer than size indicated, in millimeters												
							0.062	0.125	0.250	0.500	1.000	2.000	4.000	8.000	16.000	32.000	64.000		
Mar. 3, 1967.....	1340	50		126			1	4	30	79	95	98	100						S

SALINAS RIVER BASIN--Continued

11-1523. SALINAS RIVER NEAR CHUALAR, CALIF.
(Formerly reported as 11-1525. Salinas River near Spreckels, Calif.)

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

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1967.

Water temperatures: December 1966 to September 1967.

Sediment records: December 1966 to September 1967.

EXTREMES, December 1966 to September 1967.--Sediment concentrations: Maximum daily, 7,670 ppm Dec. 8; minimum daily, 6 ppm Sept. 30.

Sediment loads: Maximum daily, 362,000 tons Dec. 9; minimum daily, 0.7 ton Sept. 30.

REMARKS.--Records of daily discharge data given for station 11-1525. Salinas River near Spreckels. No appreciable inflow between sampling point and gaging station except during periods of heavy local flow.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Nov. 30, 1966....	1.5			53	32	138	12	200	0		130			0.4				264			1140	7.9
Jan. 12, 1967....	160			81	34	69	4.4	230	14		60			.2				342			917	8.5
Mar. 9.....	305			77	32	60	3.1	228	8		48			.2				324			838	8.5
May 18.....	455	23		71	23	49	2.9	230	2	141	50		2.9	.2	496			292			740	8.3
July 18.....	82			--	--	50	--	210	0		39			.2				273			739	8.2
Sept. 6.....	285			--	--	15	--	137	0		11			.0				140			356	7.8

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Aver age
	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		
October	--	--	--	--	--	--	--	--	--	61	--	--	--	--	--	--	--	--	--	--	68	--	--	--	--	--	--	--	--	--	--	--	--
November	73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	58	--	--	--	--	--	--	--	--	--	--	--	--	57	--	--	--	
December	--	--	--	--	--	--	--	49	47	--	52	--	--	--	56	--	--	--	--	53	--	--	--	--	--	--	--	--	--	--	50	--	--
January.....	--	--	49	57	50	48	46	--	48	53	--	54	54	54	--	55	46	52	--	50	--	54	48	49	46	46	--	--	48	--	54	--	
February.....	56	55	53	--	--	54	56	--	57	59	--	--	--	54	55	53	--	--	--	--	59	--	--	42	53	--	--	61	--	--	--	--	
March.....	--	--	55	--	--	--	55	--	59	--	56	--	--	--	61	--	63	--	--	--	--	66	--	--	58	--	--	--	56	--	56	--	
April.....	--	--	--	52	--	--	--	60	--	--	61	--	--	--	60	--	--	59	--	--	--	62	--	--	64	59	--	--	60	--	--	--	
May.....	--	67	--	--	--	72	--	--	67	--	--	--	65	--	--	72	--	--	--	72	--	65	68	--	--	--	69	--	--	66	--	--	
June.....	--	--	64	--	--	--	68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
July.....	--	--	--	--	--	--	--	--	--	--	--	--	76	--	--	--	--	--	--	--	--	--	--	--	--	74	--	76	--	--	74	--	
August.....	76	74	--	74	--	--	--	74	74	--	75	--	--	76	--	75	--	73	--	--	--	--	75	--	--	69	--	75	--	75	--	--	
September	74	73	--	72	74	73	--	72	--	--	75	--	72	--	72	--	--	75	--	--	--	66	68	71	--	73	--	73	--	73	--	--	

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

Suspended sediment, December 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..							--	--	--
2..							--	--	--
3..							--	--	--
4..							--	--	--
5..							--	--	--
6..							--	--	--
7..							3880	3070 S	44500
8..							7080	7670 S	158000
9..							16400	7570 S	362000
10..							5730	1300 K	21600
11..							2800	800	6050
12..							1910	940	4800
13..							1500	1980	8000
14..							1220	2400	7910
15..							1000	2300	6200
16..							880	1900	4500
17..							815	1400	3100
18..							715	770	1500
19..							638	360	620
20..							582	160	251
21..							530	152	220
22..							490	148	200
23..							446	145	170
24..							415	141	160
25..							387	137	140
26..							362	133	130
27..							338	129	120
28..							320	125	110
29..							302	122	99
30..							285	117	90
31..							270	116	85
Total							49295	--	630555
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	255	115	79	4440	1500	18000	590	130	210
2..	245	114	75	4360	1980 S	22700	534	120	170
3..	232	113	71	3020	2240 S	18400	491	114	151
4..	220	118	70	3730	980	9900	447	115	140
5..	209	70	40	3600	820	8000	408	115	130
6..	201	82	45	3330	694	6240	377	115	120
7..	195	66	35	3270	639	5640	350	194	183
8..	185	60	30	3140	575	4900	328	130	120
9..	177	54	26	3050	500	4120	304	100	82
10..	169	52	24	2780	319	2390	287	100	77
11..	160	53	23	2480	300	2000	283	460	351
12..	152	54	22	2310	250	1600	382	460	470
13..	143	50	19	2160	400	2300	764	1290 S	2980
14..	138	58	22	1970	376	2000	1410	1600	6100
15..	130	56	20	1780	374	1800	1720	1400	6500
16..	124	53	18	1640	142	629	2020	900	4900
17..	119	47	15	1570	140	590	4240	525	6010
18..	113	30	9.2	1490	130	523	3620	500	4900
19..	110	32	9.5	1410	150	570	3380	500	4600
20..	106	35	10	1340	200	724	2790	450	3400
21..	110	50	15	1270	208	713	2160	450	2600
22..	132	1180 S	473	1200	210	680	1800	451	2190
23..	578	1310 S	1880	1120	210	640	1530	400	1700
24..	422	3360 S	3800	1060	210	600	1330	350	1300
25..	2270	1570 S	7370	1020	222	611	1140	310	954
26..	2840	5370 S	41000	904	200	490	1050	300	850
27..	3750	2600 K	26400	759	175	360	968	250	650
28..	2840	1300 K	9500	653	141	249	891	200	480
29..	3540	1440 S	13500	--	--	--	789	184	392
30..	3680	980	9700	--	--	--	705	170	320
31..	4100	1070	11800	--	--	--	700	260	491
Total	27645	--	126100.7	60856	--	117369	37788	--	53521

S Computed by subdividing day.

K Computed from estimated-concentration graph and subdividing day.

SALINAS RIVER BASIN--Continued

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

Suspended sediment, December 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	815	250	550	1590	408	1800	460	200	250
2..	770	240	500	1500	408	1650	470	160	200
3..	865	300	700	1370	360	1300	487	142	187
4..	890	430	1030	1290	330	1100	479	170	220
5..	920	470	1200	1210	300	980	418	170	190
6..	902	530	1300	1050	259	734	375	164	166
7..	1090	1000	2900	986	240	640	345	160	150
8..	1620	2770	12100	914	220	540	328	155	140
9..	1730	1600	7500	865	204	476	311	150	130
10..	2000	1100	5900	825	185	410	300	140	110
11..	1860	828	4160	770	170	350	290	135	110
12..	1830	750	3700	632	150	260	280	125	95
13..	1860	700	3500	655	124	219	270	125	91
14..	1870	680	3400	618	120	200	260	120	84
15..	1720	662	3070	584	125	200	250	120	81
16..	1530	580	2400	549	133	197	240	115	75
17..	1390	500	1900	503	120	160	230	115	71
18..	1310	425	1500	462	110	140	220	110	65
19..	1480	410	1600	424	105	120	210	110	62
20..	1590	430	1800	388	102	107	205	110	61
21..	2100	480	2700	363	110	110	200	110	59
22..	2740	3030	22400	344	118	110	200	120	65
23..	2820	1500	11000	317	126	108	205	140	77
24..	3070	600	5000	290	115	90	250	120	81
25..	3210	428	3710	267	105	76	230	110	68
26..	2930	425	3400	242	150	98	210	106	60
27..	2780	420	3200	305	250	206	190	102	52
28..	2440	415	2700	388	380	400	180	100	49
29..	2120	410	2350	355	320	310	170	95	44
30..	1840	409	2000	417	280	320	160	90	39
31..	--	--	--	440	252	299	--	--	--
Total	54092	--	119170	20913	--	13710	8423	--	3132
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	150	85	34	216	230	130	278	97	73
2..	145	84	33	213	228	131	280	114	86
3..	140	80	30	213	210	120	278	100	75
4..	135	75	27	203	191	105	296	94	75
5..	130	71	25	203	175	96	293	112	89
6..	125	67	23	199	160	86	282	110	84
7..	120	64	21	201	150	81	268	110	80
8..	115	61	19	209	148	84	259	116	81
9..	110	58	17	205	149	82	282	100	76
10..	104	55	15	199	150	81	319	105	90
11..	98	53	14	197	180	96	334	112	101
12..	93	51	13	213	210	120	338	135	120
13..	88	48	11	250	220	150	332	158	142
14..	80	46	9.9	280	200	151	322	130	110
15..	72	44	8.6	296	180	140	352	110	105
16..	64	43	7.4	296	168	134	388	115	120
17..	61	41	6.8	296	150	120	404	115	130
18..	82	45	10.0	290	140	110	420	120	140
19..	91	60	15	280	140	110	428	122	141
20..	94	150	38	270	140	100	462	130	160
21..	94	190	48	270	138	101	486	140	180
22..	102	150	41	290	130	100	501	150	200
23..	109	180	53	280	120	91	293	68	54
24..	125	230	78	268	120	87	172	48	22
25..	166	310	140	273	125	92	118	46	15
26..	179	239	116	273	131	97	100	38	10
27..	189	230	120	270	128	93	80	29	6.3
28..	189	223	114	293	123	97	65	15	2.6
29..	173	225	110	305	120	99	55	7	1.0
30..	185	230	110	293	114	90	45	6	.7
31..	197	232	123	285	105	81	--	--	--
Total	3805	--	1430.7	7829	--	3255	8530	--	2569.6

Total discharge for period Dec. 7, 1966 to Sept. 30, 1967 (cfs-days)..... 279176
 Total load for period Dec. 7, 1966 to Sept. 30, 1967 (tons)..... 1070813.0

SALINAS RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 7, 1966.....	1645	--		5980	894		55	73	85	91	92	94	95	99	100			VPWC
Dec. 8.....	1110	49		3920	6090		63	81	90	93	94	94	95	99	100			VPWC
Dec. 9.....	1145	49		19400	5390		64	80	86	89	90	91	94	99	100			VPWC
Dec. 11.....	1530	52		2570	729		58	76	87	90	92	93	94	98	100			VPWC
Feb. 3, 1967.....	1425	53		3430	606		--	--	--	--	--	67	70	99	100			V
Mar. 15.....	1110	61		1730	1410		--	--	--	--	--	77	78	85	98	100		V
Mar. 17.....	1210	52		4900	1420		33	42	54	63	67	68	75	91	100			VPWC
Mar. 29.....	1345	55		780	245		--	--	--	--	--	45	48	68	100			V
Apr. 8.....	0835	60		1630	2770		50	66	80	87	90	91	92	96	100			VPWC
Apr. 26.....	1125	58		2900	869		--	--	--	--	--	60	65	94	100			V

PAJARO RIVER BASIN

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

LOCATION.--Lat 37°05'34", long 121°43'02", 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, Santa Clara County.

DRAINAGE AREA.--21.0 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

Sediment records: October 1965 to September 1967.

EXTREMES, 1965-66.--Sediment concentrations: Maximum daily, 330 ppm Jan. 5; minimum daily, 1 ppm Oct. 31, Nov. 29, Dec. 15, 17, July 20.

Sediment loads: Maximum daily, 100 tons Dec. 25; minimum daily, less than 0.05 ton on many days.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 2,400 ppm Jan. 21; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 22,200 tons Jan. 21; minimum daily, less than 0.05 ton on many days.

EXTREMES, 1965-67.--Sediment concentrations: Maximum daily, 2,400 ppm Jan. 21, 1967; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 22,200 tons Jan. 21, 1967; minimum daily, less than 0.05 ton on many days.

Temperature (°F) of water, water year October 1965 to September 1966

Month	Day																															Average
	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	
October	--	--	--	70	77	--	69	--	--	--	69	--	--	--	79	--	--	77	68	--	78	--	--	--	69	--	--	69	--	--	--	--
November	--	--	--	63	60	--	--	--	--	--	--	--	--	61	59	58	54	--	56	--	--	--	--	--	--	--	--	--	50	--	--	--
December	--	52	--	--	--	48	--	--	47	--	--	--	--	46	--	44	--	45	--	--	--	--	--	--	--	--	--	43	50	--	--	--
January	--	--	43	--	44	--	42	--	--	43	--	--	44	43	40	--	41	--	43	--	37	--	--	38	--	38	--	--	40	--	38	--
February	37	--	39	--	39	--	42	--	47	--	49	--	--	48	--	45	--	49	--	48	--	49	--	51	--	--	50	--	--	--	--	--
March	55	48	--	53	--	--	--	54	--	--	58	--	--	--	54	--	59	--	--	56	--	--	--	54	--	--	--	56	--	--	54	--
April	59	--	--	54	65	--	--	--	--	--	--	--	59	--	61	--	--	62	--	54	--	64	--	--	63	--	63	--	--	59	--	--
May	--	--	--	--	63	--	--	--	--	--	--	--	--	--	--	60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	75	--	--	--	--	--	--	--	--	--	--	--	--
August	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	66	--	--	--	--	--	--	--	--	--	--	--	--
September	73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October	--	--	--	--	74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November	--	57	--	--	74	--	--	--	--	--	--	--	--	--	--	56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51	--	--
December	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January	--	--	--	--	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	50	--	--	--	--	--	54	--	--
February	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March	--	50	--	--	--	58	--	57	--	57	--	--	55	--	54	--	56	--	--	56	--	53	--	54	--	--	52	--	53	--	52	--	--
April	--	--	52	--	52	--	51	--	--	53	--	52	--	52	--	--	52	--	52	--	53	--	--	53	--	53	--	53	--	--	--	--	--
May	--	--	--	55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	73	--	--	--	--	--
August	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

PAJARO RIVER BASIN--Continued

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

Suspended sediment, water year October 1965 to September 1966
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.9	2	T	.4	2	T	4.5	--	T
2..	.9	--	T	.5	3	T	4.2	--	T
3..	.9	--	T	.4	--	T	3.9	--	T
4..	.6	--	T	.6	--	T	3.6	--	T
5..	.5	--	T	1.0	--	T	3.3	--	T
6..	.5	--	T	.9	--	T	3.5	--	T
7..	.7	13	T	.8	--	T	3.6	--	T
8..	.8	--	T	.4	--	T	3.6	--	T
9..	.9	--	T	.3	--	T	2.7	--	T
10..	1.0	25	0.1	.8	--	T	2.8	--	T
11..	.8	38	.1	.9	--	T	3.1	--	T
12..	.7	36	.1	1.1	--	T	5.0	--	0.1
13..	.7	34	.1	1.8	--	T	4.0	--	.1
14..	1.1	32	.1	14	--	15	3.5	--	T
15..	1.2	32	.1	3.1	--	.2	3.3	1	T
16..	1.1	26	.1	8.6	--	5.0	3.8	--	T
17..	.9	22	.1	21	--	30	3.6	1	T
18..	.5	16	T	33	--	30	3.3	--	T
19..	.6	--	T	12	--	10	3.3	--	T
20..	.5	--	T	6.1	--	.2	3.3	--	T
21..	.7	--	T	4.5	--	.1	3.5	--	T
22..	.6	--	T	4.1	--	.1	3.3	--	T
23..	.8	--	T	9.0	--	.5	2.8	--	T
24..	.8	--	T	28	--	5.0	22	--	15
25..	.4	8	T	40	--	20	246	--	100
26..	.3	--	T	14	20	.8	30	--	10
27..	.2	--	T	9.0	10	.2	18	--	1.0
28..	.3	5	T	7.0	4	.1	173	--	30
29..	.7	--	T	5.9	1	T	196	--	50
30..	.7	--	T	5.2	--	T	118	--	7.0
31..	.8	1	T	--	--	--	100	--	4.0
Total	22.1	--	1.9	234.4	--	117.3	984.7	--	217.4
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	59	150	24	30	--	10	12	12	0.4
2..	42	140	16	26	5	.4	12	12	.4
3..	32	132	11	20	4	.2	11	12	.4
4..	28	125	9.5	28	8	2.0	11	12	.4
5..	45	330	40	37	--	5.0	10	10	.3
6..	36	100	9.7	41	--	2.0	9.6	8	.2
7..	30	17	1.4	32	20	1.7	9.6	6	.2
8..	26	20	1.4	28	15	1.1	9.3	4	.1
9..	23	24	1.5	27	9	.7	9.3	10	.3
10..	20	27	1.5	22	7	.4	9.3	15	.4
11..	18	28	1.4	20	5	.3	8.7	20	.5
12..	16	28	1.2	18	4	.2	8.2	20	.4
13..	14	29	1.1	16	4	.2	8.2	20	.4
14..	13	22	.8	15	3	.1	7.7	21	.4
15..	12	16	.5	14	6	.2	7.2	21	.4
16..	11	14	.4	13	8	.3	7.2	22	.4
17..	10	11	.3	13	8	.3	7.0	23	.4
18..	9.8	12	.3	13	8	.3	6.8	24	.4
19..	9.6	12	.3	29	--	2.0	6.3	23	.4
20..	9.0	13	.3	19	5	.3	6.6	22	.4
21..	8.4	14	.3	16	2	.1	6.1	20	.3
22..	7.9	11	.2	14	3	.1	5.9	20	.3
23..	7.7	8	.2	14	4	.2	5.7	21	.3
24..	7.7	5	.1	15	7	.3	5.7	22	.3
25..	6.8	5	.1	14	10	.4	5.6	23	.3
26..	6.6	5	.1	14	12	.5	5.4	28	.4
27..	6.8	5	.1	13	14	.5	5.4	32	.5
28..	6.6	6	.1	13	15	.5	5.0	36	.5
29..	30	--	10	--	--	--	4.7	32	.4
30..	60	--	50	--	--	--	4.5	28	.3
31..	26	--	5.0	--	--	--	4.7	24	.3
Total	637.9	--	188.8	574	--	30.3	235.7	--	11.1

T Less than 0.05 ton.

PAJARO RIVER BASIN--Continued

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

Suspended sediment, water year October 1965 to September 1966--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4.1	20	0.2	2.7	9	0.1	1.0		
2..	3.8	16	.2	2.6	8	.1	1.2		
3..	3.9	12	.1	2.0	---	T	1.7		
4..	4.0	8	.1	2.3	---	T	1.4		
5..	3.8	4	T	2.4	5	T	1.3		
6..	3.9	---	T	2.3	---	T	1.2		
7..	3.9	---	T	2.1	---	T	1.5		
8..	4.0	---	T	2.1	---	T	1.5		
9..	5.0	---	.5	2.4	---	T	.9		
10..	9.0	---	1.0	2.3	---	T	1.4		
11..	5.9	25	.4	2.3	---	T	1.3		
12..	5.7	24	.4	2.3	---	T	1.2		
13..	4.8	23	.3	2.3	---	T	.6		
14..	4.8	22	.3	2.1	---	T	.5		
15..	4.2	20	.2	2.4	---	T	.6		
16..	3.8	17	.2	2.0	3	T	.7		
17..	3.8	14	.1	1.8	---	T	.8		
18..	3.4	11	.1	1.2	---	T	1.0		
19..	3.1	10	.1	.9	---	T	1.0		
20..	2.9	8	.1	1.0	---	T	.6		
21..	3.3	7	.1	1.1	---	T	.6		
22..	3.5	6	.1	1.5	---	T	.4		
23..	3.1	7	.1	1.5	---	T	.6		
24..	2.4	---	T	1.1	---	T	.9		
25..	2.0	8	T	1.0	---	T	.9		
26..	2.7	---	T	1.2	---	T	.5		
27..	2.4	4	T	1.3	---	T	.3		
28..	2.2	---	T	1.8	---	T	.3		
29..	1.9	---	T	2.1	---	T	.3		
30..	2.1	10	.1	1.8	---	T	.4		
31..	---	---	---	1.4	---	T	---		
Total	113.4	---	5.1	57.3	---	0.7	26.6	---	0.2
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.9	3		0.2	4		0.1	3	
2..	.6	---		.2	---		.1		
3..	.7	---		.4	---		.1		
4..	.2	---		.1	---		.1		
5..	.4	---		.4	---		.1		
6..	.3	---		.3	---		.1		
7..	.3	---		.4	---		.1		
8..	.7	---		.3	---		.1		
9..	.8	---		.3	---		.2		
10..	.8	---		.2	---		.1		
11..	.4	---		.1	---		.3		
12..	.5	---		.3	---		.3		
13..	.3	---		.2	---		.3		
14..	.4	---		.3	---		.3		
15..	.6	---		.3	---		.3		
16..	.6	---		.1	---		.2		
17..	.7	---		.1	---		.3		
18..	.3	---		.1	---		.3		
19..	.2	---		.1	8		.3		
20..	.2	1		.1	---		.5		
21..	.2	---		.2	---		.5		
22..	.1	---		.2	---		.4		
23..	.4	---		.2	---		.3		
24..	.4	---		.1	---		.2		
25..	.2	---		.2	---		.2		
26..	.1	---		.2	---		.3		
27..	.1	---		.2	---		.3		
28..	.3	---		.1	---		.3		
29..	.3	---		.1	---		.3		
30..	.7	---		.1	---		.2		
31..	.7	---		.2	---		---		
Total	13.4	---	T	6.3	---	0.1	7.2	---	T

Total discharge for year (cfs-days)..... 2913.0

Total load for year (tons)..... 572.9

T Less than 0.05 ton.

PAJARO RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.10	3		0.30	2	T	9.6	4	0.1
2..	.30	3		.30	2	T	475	808 S	2930
3..	.30	3		.20	2	T	85	130 K	44
4..	.40	3		.40	2	T	177	250 K	453
5..	.30	3		.20	2	T	407	270 S	541
6..	.40	3		1.6	16 K	.3	533	560 K	1490
7..	.40	3		3.4	16 K	.2	154	10 S	4.4
8..	.40	3		1.2	4	T	72	3	.6
9..	.30	3		1.0	4	T	46	2	.2
10..	.30	3		.80	4	T	34	2	.2
11..	.30	3		.80	4	T	28	2	.2
12..	.40	3		.80	3	T	23	2	.1
13..	.30	3		.70	3	T	20	2	.1
14..	.40	3		.70	3	T	18	1	T
15..	.40	3		1.3	4 K	T	16	1	T
16..	.30	3		19	239 S	20	15	1	T
17..	.40	3		2.9	8	.1	14	1	T
18..	.30	3		1.8	6	T	13	1	T
19..	.20	2		3.0	39 K	.8	12	1	T
20..	.30	2		46	210 K	37	12	2	.1
21..	.30	2		29	61 K	5.3	11	2	.1
22..	.40	2		22	53 K	4.0	10	2	.1
23..	.40	2		8.4	5	.1	9.8	1	T
24..	.30	2		5.4	5	.1	9.6	1	T
25..	.30	2		4.2	4	T	9.3	2	.1
26..	.10	2		3.6	4	T	8.6	2	T
27..	.20	2		3.0	4	T	8.2	4	.1
28..	.40	2		13	59 K	8.6	7.9	5	.1
29..	.20	2		40	150 K	22	7.7	4	.1
30..	.30	2		12	8	.3	7.7	3	.1
31..	.20	2		--	--	--	7.5	3	.1
Total	9.60	--	T	227.00	--	99.0	2260.9	--	5465.1
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	7.2	2	T	248	120	80	19	1	0.1
2..	6.8	2	T	186	65	33	18	1	T
3..	6.4	1	T	144	30	12	18	1	T
4..	6.6	1	T	116	10	3.1	18	1	T
5..	6.6	3	0.1	97	5	1.3	16	1	T
6..	6.2	5	.1	83	3	.7	16	1	T
7..	6.2	5	.1	74	3	.6	16	1	T
8..	6.0	5	.1	64	3	.5	15	1	T
9..	5.9	5	.1	58	3	.5	14	1	T
10..	5.9	5	.1	53	2	.3	15	1	T
11..	5.7	5	.1	47	2	.3	63	23 K	4.5
12..	5.7	4	.1	44	2	.2	247	110 K	99
13..	5.5	2	T	41	2	.2	236	100 K	68
14..	5.5	3	T	37	2	.2	144	55 K	22
15..	5.3	4	.1	35	2	.2	101	40 K	12
16..	5.1	6	.1	33	1	.1	1660	1300 K	7780
17..	5.1	6	.1	31	1	.1	373	130 K	138
18..	5.0	5	.1	30	1	.1	233	47 K	30
19..	5.0	4	.1	28	1	.1	166	15	6.7
20..	5.9	5 S	.1	26	1	.1	125	6	2.0
21..	2500	2400 K	22200	25	1	.1	102	3	.8
22..	888	950 K	3470	24	1	.1	84	2	.5
23..	272	200	150	23	1	.1	78	4	.8
24..	981	984 S	4970	24	5	.3	66	6	1.1
25..	328	159 S	142	25	10	.7	60	4	.6
26..	211	140	80	21	1	.1	56	1	.2
27..	161	138	60	20	1	.1	50	1	.1
28..	134	130	47	19	1	.1	47	2	.3
29..	402	230 K	297	--	--	--	43	2	.2
30..	824	639 S	2110	--	--	--	167	74 K	93
31..	379	180	180	--	--	--	157	15 S	6.7
Total	7197.6	--	33707.6	1656	--	135.2	4423	--	8267.0

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

PAJARO RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	100	6	1.6	66	3	0.5	21	50	2.8
2..	81	4	.9	61	2	.3	21	8	.5
3..	71	2	.4	56	2	.3	17	6	.3
4..	68	2	.4	52	2	.3	16	4	.2
5..	63	2	.3	50	2	.3	15	2	.1
6..	329	160	K 250	46	2	.2	15	2	.1
7..	204	30	17	43	2	.2	14	2	.1
8..	143	10	3.9	39	2	.2	14	2	.1
9..	114	5	1.5	38	2	.2	13	2	.1
10..	186	44	K 38	42	2	.2	14	2	.1
11..	184	26	K 13	36	2	.2	14	2	.1
12..	138	10	3.7	33	2	.2	13	2	.1
13..	114	8	2.5	31	2	.2	13	2	.1
14..	98	5	1.3	29	2	.2	12	2	.1
15..	100	10	2.7	28	2	.2	12	2	.1
16..	84	5	1.1	26	2	.1	12	2	.1
17..	124	17	K 9.5	24	2	.1	12	2	.1
18..	158	12	5.1	23	2	.1	11	2	.1
19..	145	10	3.9	22	2	.1	12	2	.1
20..	126	7	2.4	21	2	.1	11	2	.1
21..	256	54	K 41	20	2	.1	11	2	.1
22..	200	28	K 15	19	2	.1	10	2	.1
23..	185	19	K 9.6	18	2	.1	9.8	1	T
24..	165	16	7.1	18	2	.1	9.6	1	T
25..	141	10	3.8	18	2	.1	9.8	1	T
26..	120	8	2.6	17	2	.1	9.1	1	T
27..	104	6	1.7	16	2	.1	8.4	1	T
28..	92	5	1.2	16	2	.1	8.2	1	T
29..	81	4	.9	16	2	.1	8.4	1	T
30..	72	3	.6	15	2	.1	7.2	1	T
31..	--	--	--	16	2	.1	--	--	--
Total	4046	--	442.7	955	--	5.3	373.5	--	5.8
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day
1..	7.0	1	T	1.7	4		0.27	3	
2..	7.5	1	T	1.9	4		.42	3	
3..	7.0	1	T	1.7	4		1.0	3	
4..	6.6	1	T	1.9	4		1.3	3	
5..	6.2	1	T	1.9	4		.45	3	
6..	5.9	1	T	2.2	4		.37	3	
7..	5.3	1	T	2.2	4		1.4	3	
8..	5.9	1	T	2.2	4		1.5	3	
9..	5.7	1	T	1.9	4		1.6	3	
10..	4.7	1	T	2.0	4		1.3	3	
11..	4.0	1	T	2.3	4		1.5	3	
12..	4.2	1	T	1.9	4		1.1	3	
13..	4.0	1	T	1.6	4		.94	3	
14..	3.5	1	T	.95	3		1.0	3	
15..	4.0	1	T	.63	3		1.4	3	
16..	4.0	1	T	.95	3		.88	3	
17..	4.0	1	T	1.1	3		.57	3	
18..	3.8	1	T	.72	3		1.0	3	
19..	3.6	1	T	.85	3		.88	3	
20..	2.7	1	T	1.3	3		.97	3	
21..	3.0	1	T	1.6	3		.63	3	
22..	3.0	1	T	1.4	3		.96	3	
23..	3.6	2	T	1.3	3		1.4	3	
24..	3.2	4	T	1.5	3		1.4	3	
25..	2.9	6	T	1.4	3		1.4	3	
26..	2.5	8	0.1	.75	3		.93	3	
27..	2.8	10	.1	.52	3		.46	3	
28..	2.7	8	.1	.45	3		.56	3	
29..	2.5	6	T	.44	3		.97	3	
30..	2.7	4	T	.62	3		.98	3	
31..	2.2	4	T	.44	3		--	--	
Total	130.7	--	0.7	42.32	--	0.4	29.54	--	0.2

Total discharge for year (cfs-days)..... 21351.16
 Total load for year (tons)..... 48129.0

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

PAJARO RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, October 1965 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Nov. 14, 1965.....	1230	59		12	324							100	--	--	--			S
Nov. 14.....	1400	59		9.8	508							100	--	--	--			S
Nov. 16.....	1000	58		3.1	33							100	--	--	--			S
Nov. 16, 1966.....	1020	55		17	259							100	--	--	--			S
Dec. 2.....	1330	--		380	935							72	80	88	100			V
Jan. 24, 1967.....	1455	50		553	285							94	96	98	100			V

Particle-size analyses of bed material, water year October 1965 to September 1966
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Bed material										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.062	0.125	0.250	0.500	1.000	2.000	4.000	8.000	16.000	32.000		64.000
May 15, 1966.....	1100							1	2	5	12	20	30	46	68	100		S

PAJARO RIVER BASIN--Continued

11-1590. PAJARO RIVER AT CHITTENDEN, CALIF.

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

DRAINAGE AREA.--1,186 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Nov. 30, 1966....	1.8			52	70	141	4.4	388	31		133			0.6				418			1330	8.5
Jan. 12, 1967....	A 15			102	82	112	3.6	398	8		118			.7				592			1490	8.3
Mar. 9.....	A 24			75	56	65	1.6	288	8		64			.3				418			994	8.4
May 18.....	150	13		57	38	45	2.0	272	0	13	44		13	.2	468			298			743	7.8
July 18.....	19			--	--	104	--	436	13		106			.6				547			1410	8.5
Sept. 6.....	5.0			--	--	114	--	486	0		120			.6				511			1390	8.2

A Daily mean discharge.

SOQUEL CREEK BASIN

11-1600. SOQUEL CREEK AT SOQUEL, CALIF.

LOCATION.--Lat 36°59'29", long 121°57'17", at gaging station, 0.2 mile upstream from highway bridge in town of Soquel, Santa Cruz County, and 0.4 mile downstream from Bates Creek.

DRAINAGE AREA.--40.2 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1966.

Water temperatures: January 1966 to September 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	68	63	64	66	65	64	65	65	65	60	61	64	58	58	57	58	58	58	58	59	59	57	60	63	59	59	58	59	60	60	60	60	
Minimum	59	61	60	57	58	56	57	57	57	57	59	57	53	50	49	50	51	51	53	55	52	51	53	54	53	55	54	54	51	52	52	54	
November																																	
Maximum	59	59	57	59	57	56	58	57	55	55	56	53	57	59	58	57	57	59	57	58	56	54	52	52	52	52	50	52	54	53	--	55	
Minimum	53	54	53	55	55	54	53	52	49	49	52	54	54	55	57	53	52	51	55	54	53	50	47	46	45	45	45	50	52	50	--	51	
December																																	
Maximum	53	54	53	53	54	56	53	51	51	54	54	53	54	53	51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	52	53	51	51	53	52	51	49	49	51	49	49	49	47	44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
January																																	
Maximum	--	--	--	--	51	48	48	48	48	50	49	51	52	52	52	48	48	49	47	50	48	46	48	47	48	--	--	--	--	--	--		
Minimum	--	--	--	--	43	41	41	41	41	43	43	45	44	44	44	43	38	39	39	43	47	44	43	45	45	46	--	--	--	--	--	--	
February																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
March																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
April																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	57	56	57	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	55	54	55	--	--	
May																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
June																																	
Maximum	--	--	57	58	57	56	58	59	60	59	59	59	60	60	60	60	60	59	61	62	62	62	63	62	61	61	61	63	63	62	--	60	
Minimum	--	--	54	55	56	55	55	56	57	57	57	56	57	57	57	58	58	58	57	58	58	58	59	57	58	58	58	58	59	60	--	57	
July																																	
Maximum	62	63	64	63	63	64	70	70	69	71	76	76	75	75	73	73	69	74	74	74	75	71	69	73	73	74	71	77	76	74	--	71	
Minimum	59	59	59	60	60	59	60	61	61	60	58	63	64	63	63	62	63	61	60	61	62	62	62	60	61	60	60	64	64	64	--	61	
August																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	75	74	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	61	62	--	--
September																																	
Maximum	74	69	74	70	75	76	75	75	76	76	76	74	72	73	71	72	72	71	72	69	68	71	69	66	70	69	69	66	69	69	--	71	
Minimum	60	62	60	61	60	62	62	59	61	60	61	61	62	62	61	59	62	62	61	62	63	64	63	63	62	61	62	61	60	59	--	61	

SAN LORENZO RIVER BASIN

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

LOCATION.--Lat 37°01'40", long 122°03'30", At Sequoia Picnic and Camp Grounds at Big Trees, Santa Cruz County, approximately 0.5 mile upstream from gaging station, and 4 miles north of Santa Cruz.

DRAINAGE AREA--111 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1966.

Water temperatures: May 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 69°F July 2, 3, 12, Aug. 17, 18; minimum, 42°F on several days during December and January.

EXTREMES, May 1966 to September 1967.--Water temperatures: Maximum, 70°F on several days in July 1966; minimum, 42°F on several days in December 1966 and January 1967.

REMARKS.--Temperature recorder installed 0.5 mile downstream at gaging station site.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Nov. 15, 1966....	36			36	7.0	22	2.3	116	0		23			0.1				119			346	8.1
Jan. 18, 1967....	36			43	9.2	23	1.6	130	3		22			.0				146			387	8.4
May 3.....	288	22		37	7.9	16	1.5	111	0	51	13		0.5	.0	216			125			315	8.2
July 18.....	A 18			--	--	19	--	129	0		18			.0				139			368	8.2
Sept. 6.....	28			--	--	20	--	132	0		20			.0				128			361	8.0

A Daily mean discharge.

SAN LORENZO RIVER BASIN--Continued

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

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	67	63	64	64	64	64	64	64	64	62	61	62	58	57	56	57	56	57	57	58	57	--	--	--	--	--	--	--	--	--	56	--	
Minimum	61	62	61	57	57	56	58	57	57	57	60	57	53	51	49	50	50	50	51	54	53	--	--	--	--	--	--	--	--	--	51	--	
November																																	
Maximum	57	55	56	57	56	55	56	55	53	52	53	56	56	58	58	58	57	55	55	57	57	56	53	50	49	48	49	52	54	--	54		
Minimum	52	52	52	55	55	55	55	53	50	49	51	53	55	56	57	57	55	54	55	57	57	56	53	50	48	47	46	47	49	52	--	52	
December																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	50	49	49	49	49	50	49	48	48	48	46	45	44	44	44	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	50	49	48	48	48	48	49	48	48	48	46	45	44	42	42	42	42	--	
January																																	
Maximum	43	43	45	46	47	46	46	46	45	46	46	48	48	48	47	48	46	46	46	47	50	52	52	50	50	50	52	53	53	53	53	48	
Minimum	42	42	42	44	45	44	44	44	43	44	44	46	46	46	45	45	43	44	44	47	50	50	49	50	50	50	50	52	53	53	53	46	
February																																	
Maximum	53	52	52	51	52	52	51	51	51	50	51	51	52	53	54	53	50	48	50	51	51	50	50	50	51	50	51	51	51	--	--	51	
Minimum	52	52	51	51	51	51	50	50	50	50	51	51	53	50	48	48	48	48	49	50	50	48	47	48	50	50	50	50	50	--	--	49	
March																																	
Maximum	51	52	50	49	49	49	49	49	50	50	50	49	48	47	49	50	51	51	51	51	53	53	54	53	51	51	51	51	51	48	47	50	
Minimum	49	51	48	49	49	49	49	49	49	50	49	48	47	46	47	49	50	51	50	51	50	51	53	53	51	49	50	50	48	46	46	49	
April																																	
Maximum	47	47	49	48	48	48	49	50	50	49	48	51	50	51	50	50	48	48	48	49	49	50	50	51	50	51	51	50	49	50	--	49	
Minimum	47	47	47	46	44	44	44	45	49	49	48	48	49	49	48	47	48	48	48	47	48	49	50	50	51	50	49	48	48	46	--	47	
May																																	
Maximum	51	53	53	54	52	55	56	59	56	55	53	53	56	59	61	63	62	61	62	63	64	62	61	58	59	60	60	59	59	58	57		
Minimum	47	49	48	50	51	50	52	54	54	53	50	48	49	50	53	55	56	57	55	56	57	58	58	56	54	56	55	56	55	53	54		
June																																	
Maximum	55	54	54	58	56	55	59	60	59	60	60	60	62	62	63	63	62	--	--	--	--	--	--	--	--	--	--	--	--	68	--	--	
Minimum	54	53	53	54	55	54	54	54	56	55	55	55	56	56	56	57	57	--	--	--	--	--	--	--	--	--	--	--	--	60	--	--	
July																																	
Maximum	67	69	69	68	66	68	67	67	67	67	68	69	66	66	67	65	63	66	65	66	65	66	67	66	--	--	--	--	--	--	--	--	
Minimum	60	61	60	61	61	61	60	60	60	59	59	60	61	61	60	60	60	58	57	58	58	59	--	--	--	--	--	--	--	--	--	--	
August																																	
Maximum	--	67	68	68	67	67	67	64	65	66	66	66	67	68	67	67	69	69	68	67	67	66	66	66	67	68	67	67	66	66	66	59	
Minimum	--	61	60	59	59	59	58	58	58	58	58	58	58	59	59	59	60	60	59	59	59	59	59	60	60	60	60	60	60	58	58	59	
September																																	
Maximum	66	62	66	64	66	67	66	65	65	64	65	64	64	64	63	62	62	64	64	64	64	64	64	64	61	63	63	63	63	62	--	63	
Minimum	57	58	57	58	58	58	59	56	57	56	57	56	58	58	57	56	57	58	57	57	58	59	58	59	58	58	58	58	58	57	--	57	

PESCADERO CREEK BASIN

11-1625. PESCADERO CREEK NEAR PESCADERO, CALIF.

LOCATION.--Lat 37°15'40", long 122°19'40", temperature recorder at gaging station on left bank at downstream side of highway bridge, 3.0 miles east of Pescadero, San Mateo County, and 5.3 miles upstream from mouth.

DRAINAGE AREA.--45.9 square miles.

RECORDS AVAILABLE.--Water temperatures: April 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 69°F July 2, 3.

EXTREMES, 1965-67.--Water temperatures: Maximum, 71°F Aug. 9, 1965, July 22-24, 31, 1966; minimum (1965-66), 35°F Dec. 19, 1965.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	64	62	61	61	61	61	61	63	62	61	59	60	56	55	54	54	54	55	55	57	55	55	57	57	56	56	55	56	55	55	55	57	
Minimum	61	61	58	56	57	56	58	58	56	56	58	56	52	49	48	48	48	48	49	52	51	49	50	51	51	53	54	53	50	49	49	53	
November																																	
Maximum	57	54	54	56	54	54	53	53	51	50	53	54	53	54	56	56	55	54	56	56	55	54	51	48	46	45	46	50	51	51	—	52	
Minimum	51	50	50	53	53	53	52	51	48	47	49	51	51	52	54	55	53	52	52	55	53	51	48	46	44	44	44	46	50	50	—	50	
December																																	
Maximum	52	54	54	52	54	54	54	53	52	52	52	52	51	52	50	49	48	48	47	47	49	49	48	48	47	46	46	44	42	44	—	49	
Minimum	50	52	51	51	52	54	52	52	51	51	51	51	50	50	49	48	47	46	46	47	48	47	47	46	45	44	42	41	41	—	48		
January																																	
Maximum	—	—	—	—	—	—	43	43	43	42	43	43	44	44	—	—	—	—	—	—	—	—	—	—	—	—	—	52	52	52	54	54	—
Minimum	—	—	—	—	—	—	41	40	40	40	40	40	42	42	—	—	—	—	—	—	—	—	—	—	—	—	50	51	52	52	53	—	
February																																	
Maximum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
March																																	
Maximum	—	46	46	45	44	46	47	48	51	51	50	49	49	49	52	53	53	53	53	54	55	55	55	53	52	51	52	53	51	51	49	49	50
Minimum	—	43	44	42	42	43	45	46	48	50	48	48	48	46	47	52	50	51	50	52	53	54	53	51	51	51	49	48	48	48	48	48	
April																																	
Maximum	50	52	51	50	51	52	52	52	51	50	48	50	52	53	51	52	51	50	50	50	50	51	51	52	52	53	53	51	50	52	—	51	
Minimum	47	50	49	50	50	50	49	51	51	50	48	50	51	51	50	49	50	49	49	47	49	49	50	50	50	50	49	51	48	48	49	49	
May																																	
Maximum	52	54	55	55	54	56	58	58	58	56	54	54	56	58	60	62	63	63	62	62	63	64	63	61	60	58	60	58	57	60	57	58	
Minimum	48	51	52	52	53	51	52	54	56	54	52	50	50	51	54	56	58	59	59	58	58	59	56	58	57	56	55	56	55	55	54	54	
June																																	
Maximum	56	55	58	59	58	57	56	58	57	58	58	57	60	62	61	64	62	60	61	60	64	66	65	65	62	61	65	66	68	68	---	60	
Minimum	55	54	54	55	56	56	56	56	55	56	56	56	56	58	58	58	59	59	59	59	58	60	60	60	60	60	59	59	59	61	61	---	57
July																																	
Maximum	68	69	69	68	68	68	68	64	67	68	67	67	68	67	67	67	67	67	66	66	65	65	65	66	66	65	64	68	68	68	68	66	
Minimum	62	63	62	63	63	62	62	62	61	61	60	61	61	61	62	62	61	63	61	59	59	59	61	61	60	60	59	60	62	62	63	64	61
August																																	
Maximum	67	67	67	67	66	67	66	66	65	66	66	66	66	66	66	66	67	66	66	66	65	65	66	65	66	66	65	66	66	65	64	65	
Minimum	61	62	62	62	60	62	61	62	62	62	62	60	60	60	60	60	60	60	60	60	61	60	62	61	62	62	61	62	61	59	61	61	
September																																	
Maximum	66	64	64	64	65	66	65	65	64	64	64	65	65	65	65	65	65	65	67	65	66	65	65	66	64	65	66	65	64	66	65	---	65
Minimum	61	61	59	60	60	61	60	60	59	58	60	60	59	62	61	60	62	63	61	61	61	63	63	63	62	61	62	62	62	62	---	60	

COLMA CREEK BASIN

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

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

DRAINAGE AREA.--10.9 square miles.

RECORDS AVAILABLE.--Sediment records: October 1965 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 19,000 ppm Jan. 21; minimum daily, (estimated) 10 ppm Oct. 1.

Sediment loads: Maximum daily, 26,900 tons Jan. 21; minimum daily, less than 0.05 ton on many days.

EXTREMES, 1965-67.--Sediment concentrations: Maximum daily, 19,000 ppm Jan. 21, 1967; minimum daily, (estimated) 5 ppm on many days during 1965-66.

Sediment loads: Maximum daily, 26,900 tons Jan. 21, 1967; minimum daily, less than 0.05 ton on many days during 1965-67.

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.4			0.4	25	T	6.7	660	K 26
2..	.4			.3	--	T	96	8100	S 4690
3..	.4			.3	--	T	9.2	600	K 60
4..	.2			.2	--	T	55	5400	K 2370
5..	.2			.2	--	T	125	13400	S 6800
6..	.2			40	3800	K 2150	68	7040	S 3280
7..	.3	16		1.4	290	1.1	34	4400	K 960
8..	.3			.9	--	.2	6.7	--	14
9..	.3			.7	--	.2	42	4000	K 1870
10..	.3			.5	--	.1	11	1400	K 74
11..	.3			.4	--	T	3.0	--	6.1
12..	.3			.3	--	T	2.1	--	3.1
13..	.3			.3	--	T	1.4	--	1.3
14..	.2			3.6	78	K 4.3	1.4	--	1.2
15..	.2			64	2730	S 1010	1.8	--	1.5
16..	.2			18	1470	S 280	.9	--	.7
17..	.2			2.5	--	1.7	.7	--	.5
18..	.3			.9	--	.5	.7	--	.5
19..	.3			87	5380	S 4020	.7	--	.4
20..	.3			48	3700	K 3140	.6	--	.4
21..	.4			18	1600	K 226	.6	--	.3
22..	.4			4.6	--	2.0	.9	182	.4
23..	.4			2.5	--	.5	1.2	--	.6
24..	.3			2.5	--	.5	.9	--	.4
25..	.2			2.1	--	.3	.7	--	.3
26..	.3			2.1	--	.3	.7	--	.3
27..	.4			2.1	--	.3	.9	--	.4
28..	.2			47	2520	S 461	1.2	--	.5
29..	.2			15	990	K 88	.6	--	.2
30..	.2			1.8	--	.6	.3	--	.1
31..	.2			--	--	--	.3	--	.1
Total	8.8	--	0.4	367.6	--	11387.7	475.2	--	20163.3

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

COLMA CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.3	--	0.1	14	--	30	1.0	--	0.2
2..	.3	--	.1	10	--	20	1.0	--	.2
3..	.2	--	.1	8.2	--	15	.9	--	.1
4..	.2	--	.1	4.6	--	6.2	1.2	--	.2
5..	.2	--	.1	4.0	--	4.9	1.2	--	.2
6..	.2	--	.1	4.0	--	4.3	.9	--	.1
7..	.2	--	.1	3.4	--	3.2	.9	--	.1
8..	.2	--	.1	3.0	--	2.4	.7	--	.1
9..	.2	--	T	2.5	--	1.7	.6	--	.1
10..	.2	--	T	2.1	--	1.1	23	2100 K	1010
11..	.2	--	T	2.1	--	.9	95	5300 K	5890
12..	.2	--	T	2.1	--	.8	17	2300 K	238
13..	.2	--	T	2.5	--	.8	29	4540 S	932
14..	.2	--	T	2.1	--	.6	6.0	--	9.7
15..	.2	--	T	1.8	--	.5	23	1500 K	918
16..	.2	--	T	1.4	--	.3	79	6200 K	2410
17..	.2	--	T	1.4	--	.3	7.4	--	6.6
18..	.3	67	.1	1.4	--	.2	5.8	180 K	3.2
19..	.3	--	.1	1.4	--	.2	2.5	--	.9
20..	156	7920 S	6220	1.4	--	.2	8.8	890 K	75
21..	462	19400 S	26900	1.8	--	.5	5.5	300 K	6.8
22..	48	--	210	1.8	--	.3	2.5	--	.5
23..	39	960 K	670	1.8	--	.3	4.9	1000 K	26
24..	199	7500 K	9300	12	880 K	225	1.8	--	1.2
25..	24	--	26	4.1	870 K	30	1.8	--	.7
26..	27	867 S	127	2.5	--	1.2	1.8	--	.5
27..	12	--	11	1.5	--	.4	1.8	--	.4
28..	94	4000 K	2430	1.2	--	.3	4.0	530 K	15
29..	108	6100 K	3370	--	--	--	1.4	--	.8
30..	187	8930 S	8900	--	--	--	67	4340 S	2760
31..	38	--	120	--	--	--	27	3200 K	312
Total	1398.2	--	58285.3	100.1	--	351.6	424.4	--	14618.6

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	5.3	--	16	2.1	--	1.0	3.6	530 K	18
2..	3.0	--	2.0	1.8	--	.8	57	2700 K	487
3..	3.0	--	1.6	1.8	--	.7	4.0	--	5.2
4..	2.5	--	1.2	1.8	--	.6	1.2	--	.4
5..	50	4000 K	1000	1.8	--	.6	.9	--	.2
6..	197	10000 K	9690	2.1	--	.6	.9	--	.2
7..	22	--	95	1.4	--	.4	.9	--	.2
8..	10	--	22	.9	--	.2	.9	--	.2
9..	6.0	--	8.1	8.4	990 K	152	.9	--	.2
10..	54	4600 K	1550	3.7	1000 K	26	.9	--	.2
11..	45	4300 K	1110	.9	--	.2	.9	--	.2
12..	7.4	--	10.0	.9	52	.1	.9	--	.1
13..	5.3	--	4.3	1.2	--	.2	.9	--	.1
14..	6.0	450 K	23	1.2	--	.2	.9	--	.1
15..	18	1900 K	262	.9	--	.1	.9	--	.1
16..	3.0	--	2.0	1.2	--	.2	.9	--	.1
17..	24	2800 K	407	.9	--	.1	.9	--	.1
18..	26	2500 K	436	.9	--	.1	.9	--	.1
19..	9.8	870 K	44	.9	--	.1	.9	--	.1
20..	10	930 K	180	1.2	--	.1	.9	--	.1
21..	33	4100 K	620	.9	--	.1	.9	--	.1
22..	6.0	--	19	.9	--	.1	.9	--	.1
23..	45	4300 K	941	.9	--	.1	.9	--	.1
24..	11	1400 K	110	.9	--	.1	1.2	--	.1
25..	6.0	--	6.5	.9	--	.1	1.2	--	.1
26..	4.0	369	4.0	.9	--	.1	.9	--	.1
27..	6.0	--	8.4	.7	--	.1	1.2	--	.1
28..	4.8	600 K	12	.9	--	.1	.9	--	.1
29..	2.5	--	1.5	.7	--	.1	1.2	--	.1
30..	3.0	--	1.6	.7	--	.1	.9	--	.1
31..	--	--	--	.7	30	.1	--	--	--
Total	628.6	--	16588.2	45.1	--	185.4	90.4	--	513.9

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

COLMA CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	1.2		0.2	1.2	18	0.1	.9	73	0.2
2..	1.2		.2	1.2	--	.1	.9		.2
3..	1.2		.3	1.2	--	.1	.9		.1
4..	1.2		.3	.9	--	T	1.2		.2
5..	.8		.2	.9	--	T	.7		.1
6..	.6	121	.2	.9	--	T	.7		.1
7..	1.2		.4	.7	--	T	.7		.1
8..	1.2		.3	.7	--	T	.9		.1
9..	.9		.2	.7	--	T	1.2		.1
10..	.7		.2	.7	--	T	1.2		.1
11..	.6		.1	.9	--	T	.7		.1
12..	.6		.1	.9	--	T	.9		.1
13..	.6		.1	.9	--	T	.7		.1
14..	.4		T	.9	--	T	.7		T
15..	.6		.1	1.2	--	.1	.6		T
16..	.7		.1	.9	--	T	.7		T
17..	1.2		.1	.9	--	T	.7		T
18..	1.2		.1	1.2	--	.1	.7		.1
19..	1.2		.1	1.4	--	.1	.7		.1
20..	1.2		.1	1.4	--	.1	.7		T
21..	1.4		.1	1.4	--	.1	.6		T
22..	1.4		.1	1.4	--	.1	.7		T
23..	1.2		.1	1.2	--	T	.7		T
24..	.9		.1	1.8	--	.1	.7		T
25..	1.2		.1	1.4	--	.1	.7		T
26..	1.2		.1	1.8	--	.1	.7		T
27..	1.4		.1	1.8	--	.1	.6		T
28..	1.4		.1	1.8	--	.1	.6		T
29..	1.4		.1	7.9	680 K	53	.7		T
30..	1.4		.1	2.5	--	1.8	.7		T
31..	1.2		.1	2.1	--	.5	--		--
Total	32.6	--	4.5	44.8	--	57.3	23.1	--	2.3
Total discharge for year (cfs-days).....								3638.9	
Total load for year (tons).....								122158.5	

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

COLMA CREEK BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
Nov. 19, 1966.....	1940	59		194	6120		32	35	40	49	55	67	87	98	100		VPWC
Nov. 19.....	2300	57		130	12700		34	43	51	62	72	78	88	99	100		VPWC
Dec. 6.....	1025	53		49	7580		15	45	57	71	82	88	96	100	—		VPWC
Jan. 20, 1967.....	1745	—		302	18300		18	21	24	32	37	45	63	91	100		VPWC
Jan. 21.....	1120	—		608	19500		17	19	23	31	38	46	73	97	100		VPWC
Jan. 21.....	1250	—		790	21600		16	18	22	31	38	48	76	97	100		VPWC

COLMA CREEK BASIN--Continued

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

LOCATION.--Lat 37°38'46", long 122°25'15", at gaging station in Buri Buri Grant, 0.5 mile upstream from mouth, and 1.0 mile southwest of South San Francisco Post Office, San Mateo County.

DRAINAGE AREA.--1.68 square miles.

RECORDS AVAILABLE.--Sediment records: October 1965 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 6,350 ppm Jan. 21; minimum daily, no flow on several days in May, August, and September.

Sediment loads: Maximum daily, 2,320 tons Jan. 21; minimum daily, 0 ton on several days in May, August, and September.

EXTREMES, 1965-67.--Sediment concentrations: Maximum daily, 6,350 ppm Jan. 21, 1967; minimum daily, no flow on many days during 1965-67.

Sediment loads: Maximum daily, 2,320 tons Jan. 21, 1967; minimum daily, 0 ton on many days during 1965-67.

REMARKS.--No flow May 22-27, Aug. 20, Sept. 22, 24-30.

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.1			0.1	30	T	1.6	150	K 1.1
2..	.1			.1	--	T	26	1680	S 271
3..	.1			.1	--	T	1.6	--	1.0
4..	.1			.1	--	T	16	780	K 97
5..	.1			.1	--	T	27	1290	S 192
6..	.1			9.6	730	K 120	14	960	S 155
7..	.1	26		.1	--	T	6.0	490	K 22
8..	.1			.1	--	T	.8	--	.5
9..	.2			.1	--	T	7.9	520	K 36
10..	.1			.1	--	T	.8	--	.6
11..	.1			.1	--	T	.2	--	.1
12..	.2			.1	--	T	.1	--	.1
13..	.1			.1	--	T	.1	--	.1
14..	.2			.8	140	K .9	.1	--	.1
15..	.2			19	1200	K 182	.1	--	.1
16..	.2			3.1	410	K 13	.1	--	.1
17..	.2			.2	--	T	.1	--	.1
18..	.2			.1	--	T	.1	--	.1
19..	.1			17	1040	S 133	.1	--	.1
20..	.1			8.3	980	K 85	.1	--	.1
21..	.1			5.6	580	K 23	.1	--	.1
22..	.1			.2	--	T	.1	187	.1
23..	.4			.1	--	T	.1	--	T
24..	.2			.1	--	T	.1	--	T
25..	.2			.1	--	T	.1	--	T
26..	.2			.1	--	T	.1	--	T
27..	.2			.2	--	T	.1	--	T
28..	.2			14	795	S 44	.1	--	T
29..	.2			1.6	--	.6	.1	--	T
30..	.1			.2	--	.1	.1	--	T
31..	.1			--	--	--	.1	--	T
Total	4.7	--	0.3	81.5	--	602.2	103.9	--	777.8

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

COLMA CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.1	--	T	0.8	--	0.6	0.1	--	T
2..	.1	--	T	.5	--	.3	.1	--	T
3..	.1	--	T	.4	--	.2	.1	--	T
4..	.1	--	T	.4	--	.2	.1	--	T
5..	.1	--	T	.2	--	.1	.1	--	T
6..	.1	--	T	.2	--	.1	.1	--	T
7..	.1	--	T	.2	--	.1	.1	--	T
8..	.1	--	T	.1	--	T	.1	--	T
9..	.1	--	T	.1	--	T	.1	--	T
10..	.1	--	T	.1	--	T	10	960 K	217
11..	.1	--	T	.1	--	T	27	2800 K	746
12..	.1	--	T	.1	--	T	2.2	--	1.8
13..	.1	--	T	.2	--	.1	3.6	1140 S	23
14..	.1	--	T	.1	--	T	.2	--	.2
15..	.1	--	T	.2	--	.1	6.2	730 K	86
16..	.1	--	T	.2	--	.1	20	2240 S	389
17..	.1	--	T	.2	--	.1	.5	--	.3
18..	.1	151	T	.2	--	.1	.5	--	.4
19..	.1	--	T	.2	--	.1	.4	--	.2
20..	36	3200 S	760	.2	--	.1	1.5	--	.6
21..	113	6350 S	2320	.1	--	T	.5	--	.2
22..	4.5	--	13	.2	--	.1	.2	--	.1
23..	6.7	540 K	70	.2	--	.1	1.2	540 K	3.8
24..	51	3500 K	1230	.4	--	.2	.1	--	.1
25..	2.6	--	3.2	.2	--	.1	.1	--	.1
26..	2.6	--	2.8	.1	--	T	.1	--	T
27..	1.8	--	1.5	.1	--	T	.1	--	T
28..	13	1600 K	152	.1	--	T	1.2	330 K	2.9
29..	23	2400 K	361	--	--	--	.1	--	.1
30..	35	2170 S	470	--	--	--	19	2600 S	110
31..	3.3	--	4.5	--	--	--	5.0	900 K	21
Total	294.4	--	5388.8	6.1	--	3.1	100.6	--	1603.1
Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.3	--	0.2	0.1	--	T	1.0	--	0.2
2..	.2	--	.1	.2	--	0.1	10	480 K	19
3..	.2	--	.1	.2	--	.1	.5	--	.1
4..	.2	--	.1	.2	--	.1	.1	--	T
5..	11	1300 K	119	.2	--	.1	.1	--	T
6..	42	3800 K	994	.2	--	.1	.1	--	T
7..	.8	--	.6	.2	--	.1	.1	--	T
8..	.2	--	.1	.2	--	.1	.2	--	T
9..	.2	--	.1	1.0	130 K	.8	.1	--	T
10..	15	2000 K	189	1.5	160 K	1.8	.1	--	T
11..	3.7	520 K	7.2	.1	--	T	.1	--	T
12..	.2	--	.1	.1	123	T	.1	--	T
13..	.1	--	T	.1	--	T	.2	--	T
14..	.2	--	.1	.1	--	T	.1	--	T
15..	3.5	300 K	8.8	.1	--	T	.2	--	T
16..	.1	--	T	.1	--	T	.2	--	T
17..	8.0	590 K	48	.4	--	.1	.2	--	T
18..	6.7	420 K	22	.6	--	.1	.2	--	T
19..	3.0	270 K	4.6	.4	--	.1	.2	--	T
20..	1.7	220 K	11	.2	--	T	.2	--	T
21..	5.4	420 K	7.8	.1	--	T	.2	--	T
22..	.5	--	.2	0	--	0	.2	--	T
23..	6.1	420 K	18	0	--	0	.2	--	T
24..	3.4	640 K	30	0	--	0	.2	--	T
25..	.1	--	.1	0	--	0	.2	--	T
26..	.1	91	T	0	--	0	.2	--	T
27..	.2	--	.2	0	--	0	.2	--	T
28..	.1	--	T	.1	--	T	.2	--	T
29..	.1	--	T	.1	--	T	.2	--	T
30..	.1	--	T	.1	--	T	.2	--	T
31..	--	--	--	.1	18	T	--	--	--
Total	113.4	--	1461.6	6.7	--	3.9	16.0	--	19.9

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

COLMA CREEK BASIN--Continued

11-1627,22. SPRUCE BRANCH AT SOUTH SAN FRANCISCO, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.2			0.1	34		0.2	12	T
2..	.2			.1			.1		T
3..	.2			.2			.2		T
4..	.2			.2			.2		T
5..	.2			.2			.2		T
6..	.2	48		.2			.1		T
7..	.1			.1			.1		T
8..	.1			.1			.1		T
9..	.2			.2			.2		T
10..	.2			.1			.2		T
11..	.2			.1			.2		T
12..	.2			.1			.2		T
13..	.2			.1			.2		T
14..	.4			.1			.2		T
15..	.2			.1			.2		T
16..	.2			.2			.2		T
17..	.2			.2			.2		T
18..	.1			.2			.2		T
19..	.2			.1			.2		T
20..	.1			0		0	.2		T
21..	.1			.1			.1		T
22..	.1			.1			0		0
23..	.1			.1			.2		0
24..	.1			.1			0		0
25..	.1			.1			0		0
26..	.2			.1			0		0
27..	.2			.1			0		0
28..	.2			.1			0		0
29..	.2			.1			0		0
30..	.1			.1			0		0
31..	.2			.1			--		--
Total	5.4	--	0.6	3.8	--	0.2	3.9	--	0.1
Total discharge for year (cfs-days).....									740.4
Total load for year (tons).....									9861.6

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

COLMA CREEK BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

F, pipet, S, sieve, V, visual accumulation tube, W, in distilled water																		
Date of collection	Time (24 hour)	Water tem- per- ature (° F)	Sam- pling point	Discharge (cfs)	Sediment con- cen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Nov. 19, 1966.....	1840	60		32	745		37	38	50	58	69	84	94	100	—	—		VPWC
Nov. 19.....	2330	57		11	1010		29	31	41	47	55	68	82	93	99	100		VPWC
Dec. 2.....	1145	56		104	3800		15	16	21	26	34	48	90	99	100	—		VPWC
Dec. 6.....	0945	54		7.9	652		34	36	45	53	60	72	96	100	—	—		VPWC
Jan. 20, 1967.....	1615	—		46	2790		—	—	—	—	—	67	91	99	100	—		V
Jan. 20.....	1840	—		83	7570		11	15	18	21	28	43	85	99	100	—		VPWC
Jan. 21.....	1025	—		140	5750		—	—	—	—	—	47	73	97	100	—		V
Jan. 30.....	1150	58		37	3110		—	—	—	—	—	61	94	100	—	—		V
Mar. 13.....	1530	54		19	4820		10	12	15	19	27	52	96	100	—	—		VPWC

COYOTE CREEK BASIN

11-1698. COYOTE CREEK NEAR GILROY, CALIF.

LOCATION.--Lat 37°04'40", long 121°29'36", 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, Santa Clara County.

DRAINAGE AREA.--109 square miles.

RECORDS AVAILABLE.--Water temperatures: December 1964 to September 1967.

Sediment records: December 1964 to September 1967.

EXTREMES, 1965-66.--Sediment concentrations: Maximum daily, 351 ppm Dec. 29; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 1,050 tons Dec. 29; minimum daily, 0 ton on many days.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 2,060 ppm Mar. 16; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 16,700 tons Mar. 16; minimum daily, 0 ton on many days.

EXTREMES, 1965-67.--Sediment concentrations: Maximum daily, 2,060 ppm Mar. 16, 1967; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 16,700 tons Mar. 16, 1967; minimum daily, 0 ton on many days.

REMARKS.--No flow Oct. 1 to Nov. 17, 1965, Aug. 1 to Nov. 20, 1966, Sept. 4-30, 1967.

Temperature (°F) of water, water year October 1965 to September 1966

Month	Day																																Average
	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		
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	55	--	--	--	--	55	53	46	--	--	45	--	--	--	--	--
December	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	44	--	--	--	--	44	47	46	--	--
January	41	39	--	--	--	--	--	--	--	--	--	48	--	--	--	--	--	45	--	--	--	--	--	--	--	--	--	--	--	47	--	--	--
February	--	--	--	--	--	49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March	--	46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
April	--	--	--	65	--	57	--	58	--	64	--	65	--	66	--	--	--	--	66	--	68	--	--	68	--	68	--	68	--	--	--	--	--
May	--	--	--	--	67	--	--	--	--	--	--	--	--	--	66	--	70	--	--	--	66	--	--	--	--	--	68	--	--	--	--	--	--
June	--	71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
August	--	71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51	--	--	--	--	--	--	55	--	--	--
December	--	55	50	--	53	53	48	50	51	--	--	53	--	53	--	52	--	--	52	--	50	--	--	--	--	47	--	47	--	47	--	--
January	--	45	--	48	--	47	--	--	48	--	50	--	50	--	--	50	--	49	--	50	49	45	44	46	46	50	52	49	53	53	52	--
February	50	50	--	52	--	51	--	51	--	48	--	--	--	44	--	52	--	--	53	--	53	--	--	--	--	55	--	--	--	--	--	--
March	55	--	47	--	--	54	--	52	--	53	--	49	46	49	52	54	52	--	55	56	--	57	--	--	--	--	--	56	--	49	--	--
April	--	--	53	--	51	--	51	--	--	50	--	55	--	55	--	--	51	--	48	--	52	--	--	54	--	54	--	55	--	--	--	--
May	--	60	--	--	--	--	--	--	--	50	--	--	--	--	--	--	51	--	48	--	52	--	--	54	--	54	--	55	--	--	--	--
June	55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	72	--	--	--	--
August	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

COYOTE CREEK BASIN--Continued

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

Suspended sediment, water year October 1965 to September 1966
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Suspended sediment			Suspended sediment			Suspended sediment		
	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day
1..				0	--	0	7.6	--	T
2..				0	--	0	6.9	--	T
3..				0	--	0	6.1	--	T
4..				0	--	0	5.0	--	T
5..							4.6	--	T
6..				0	--	0	4.0	--	T
7..				0	--	0	3.7	--	T
8..				0	--	0	3.4	--	T
9..				0	--	0	3.1	--	T
10..				0	--	0	2.9	--	T
11..				0	--	0	3.1	--	T
12..				0	--	0	7.4	--	T
13..				0	--	0	6.9	--	T
14..				0	--	0	4.6	--	T
15..				0	--	0	4.0	--	T
16..				0	--	0	3.4	--	T
17..				0	--	0	2.9	--	T
18..				54	9	S 1.5	2.4	--	T
19..				28	6	K .4	2.2	--	T
20..				13	20	.7	2.2	--	T
21..				8.2	21	.5	2.4	--	T
22..				6.1	22	.4	2.2	--	T
23..				41	3	K .4	2.2	--	T
24..				179	40	S 28	2.2	--	T
25..				175	50	K 28	85	80	S 25
26..				68	4	.7	50	5	.7
27..				31	1	.1	27	2	.1
28..				18	--	T	279	280	K 972
29..				13	1	T	792	351	S 1050
30..				11	--	T	690	237	S 537
31..				--	--	--	555	48	S 74
Total	0	--	0	645.3	--	60.8	2573.4	--	2659.0
Day	JANUARY			FEBRUARY			MARCH		
	Suspended sediment			Suspended sediment			Suspended sediment		
	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day
1..	276	12	8.9	52	8	1.1	12	3	0.1
2..	130	5	1.8	41	4	.4	11	4	.1
3..	75	5	1.0	31	3	.3	11	4	.1
4..	53	5	.7	29	2	.2	11	4	.1
5..	43	5	.6	69	34	K 15	9.8	4	.1
6..	33	4	.4	185	26	13	9.8	5	.1
7..	29	4	.3	101	3	.8	9.8	5	.1
8..	24	4	.3	61	2	.3	9.2	6	.1
9..	22	4	.2	40	2	.2	8.7	6	.1
10..	20	4	.2	32	2	.2	9.8	6	.2
11..	18	3	.1	26	1	.1	9.8	8	.2
12..	16	3	.1	22	1	.1	9.2	10	.2
13..	14	3	.1	20	1	.1	8.7	10	.2
14..	12	3	.1	18	--	T	8.7	10	.2
15..	12	3	.1	16	--	T	8.7	10	.2
16..	11	2	.1	15	--	T	7.6	15	.3
17..	9.8	2	.1	14	--	T	7.6	15	.3
18..	9.8	2	.1	14	--	T	7.0	15	.3
19..	9.8	2	.1	16	--	T	6.5	15	.3
20..	9.2	--	T	17	--	T	6.5	15	.3
21..	8.7	--	T	14	--	T	6.0	20	.3
22..	8.7	--	T	13	--	T	6.0	20	.3
23..	8.7	--	T	12	--	T	5.5	20	.3
24..	8.2	--	T	14	--	T	5.5	20	.3
25..	8.2	--	T	14	--	T	5.5	20	.3
26..	8.2	--	T	20	5	.3	5.5	22	.3
27..	8.2	--	T	15	2	.1	5.5	22	.3
28..	7.6	--	T	13	2	.1	5.5	22	.3
29..	11	2	.1	--	--	--	5.0	25	.3
30..	112	15	S 4.7	--	--	--	5.0	25	.3
31..	69	12	2.2	--	--	--	4.6	25	.3
Total	1085.1	--	22.5	934	--	32.7	242.0	--	6.9

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

COYOTE CREEK BASIN--Continued

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

Suspended sediment, water year October 1965 to September 1966--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4.6	28	0.3	1.6	25	0.1	0.8		
2..	4.6	28	.3	1.6	20	.1	.7	12	
3..	4.6	28	.3	1.6	15	.1	.7		
4..	3.8	29	.3	1.6	--	T	.6		
5..	3.8	25	.3	1.6	7	T	.6		
6..	3.8	20	.2	1.6	--	T	.6		
7..	3.8	20	.2	1.8	--	T	.6		
8..	3.4	19	.2	1.8	--	T	.6		
9..	4.6	20	.2	1.8	--	T	.6		
10..	9.2	30	.7	1.8	--	T	.6		
11..	6.5	21	.4	1.8	--	T	.6		
12..	5.5	22	.3	1.8	--	T	.6		
13..	4.6	23	.3	1.8	11	.1	.6		
14..	3.8	18	.2	1.8	11	.1	.6		
15..	3.4	12	.1	2.1	12	.1	.6		
16..	3.1	15	.1	2.1	12	.1	.6		
17..	2.7	18	.1	2.1	12	.1	.6		
18..	2.7	20	.1	2.1	12	.1	.6		
19..	2.4	22	.1	1.8	12	.1	.6		
20..	2.1	26	.1	1.8	12	.1	.5		
21..	2.1	22	.1	1.6	12	.1	.5		
22..	2.1	17	.1	1.6	12	.1	.5		
23..	1.6	20	.1	1.4	--	T	.5		
24..	1.6	22	.1	1.2	--	T	.5		
25..	1.4	25	.1	1.0	--	T	.5		
26..	1.4	26	.1	1.0	--	T	.5		
27..	1.4	27	.1	1.0	--	T	.5		
28..	1.4	30	.1	.8	--	T	.5		
29..	1.4	35	.1	.7	--	T	.5		
30..	1.4	30	.1	.8	--	T	.6		
31..	--	--	--	.8	--	T	--		
Total	98.8	--	5.8	47.9	--	1.9	17.4	--	0.4
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.6								
2..	.6								
3..	.6								
4..	.6								
5..	.6								
6..	.6								
7..	.6								
8..	.6								
9..	.6								
10..	.6								
11..	.6								
12..	.5								
13..	.5								
14..	.5								
15..	.4								
16..	.4								
17..	.4								
18..	.4								
19..	.4								
20..	.3								
21..	.2								
22..	.2								
23..	.2								
24..	.1								
25..	.1								
26..	.1								
27..	.1								
28..	.1								
29..	.1								
30..	.1								
31..	.1								
Total	11.8	--	0.2	0	--	0	0	--	0
Total discharge for year (cfs-days).....									5655.7
Total load for year (tons).....									2790.2

T Less than 0.05 ton.

COYOTE CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..				0	--	0	8.7	1	T
2..				0	--	0	189	89	K 166
3..				0	--	0	174	28	S 21
4..				0	--	0	90	14	K 11
5..				0	--	0	692	228	S 455
6..				0	--	0	1210	1070	S 5010
7..				0	--	0	280	22	S 21
8..				0	--	0	110	6	1.8
9..				0	--	0	54	2	.3
10..				0	--	0	40	1	.1
11..				0	--	0	32	1	.1
12..				0	--	0	25	1	.1
13..				0	--	0	21	2	.1
14..				0	--	0	17	2	.1
15..				0	--	0	16	2	.1
16..				0	--	0	14	1	T
17..				0	--	0	12	1	T
18..				0	--	0	12	1	T
19..				0	--	0	10	1	T
20..				0	--	0	9.6	1	T
21..				.50	1	T	9.0	1	T
22..				53	21	S 3.5	7.4	1	T
23..				13	6	.2	7.0	1	T
24..				5.5	4	.1	6.5	2	T
25..				2.7	2	T	6.0	2	T
26..				1.6	1	T	6.0	2	T
27..				1.0	1	T	5.6	2	T
28..				1.4	1	T	5.2	2	T
29..				14	1	T	5.2	2	T
30..				14	1	T	5.2	1	T
31..				--	--	--	4.8	1	T
Total	0	--	0	106.70	--	3.9	3084.2	--	5687.1
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4.8	1	T	479	67	S 92	17	1	T
2..	4.5	1	T	286	12	9.3	17	2	0.1
3..	4.2	1	T	209	5	2.8	16	2	.1
4..	4.2	1	T	158	3	1.3	17	2	.1
5..	4.2	1	T	124	3	1.0	15	1	T
6..	4.2	1	T	100	2	.5	14	1	T
7..	3.8	1	T	83	2	.4	14	1	T
8..	3.8	1	T	70	1	.2	13	2	.1
9..	3.5	1	T	60	1	.2	13	2	.1
10..	3.5	1	T	54	2	.3	14	2	.1
11..	3.5	1	T	46	2	.2	52	9	K 1.7
12..	3.5	1	T	41	3	.3	205	66	K 90
13..	3.5	1	T	39	4	.4	614	168	S 309
14..	3.5	1	T	35	3	.3	501	92	S 152
15..	3.2	1	T	32	2	.2	249	12	8.1
16..	3.2	1	T	30	2	.2	2240	2060	S 16700
17..	2.9	1	T	27	1	.1	829	491	S 1250
18..	2.9	1	T	26	1	.1	408	73	K 85
19..	2.9	1	T	25	2	.1	256	11	7.6
20..	3.4	1	T	23	2	.1	180	8	3.9
21..	861	900	K 9550	22	2	.1	134	4	1.4
22..	1830	1690	S 16000	21	2	.1	104	2	.6
23..	280	40	S 38	20	2	.1	87	2	.5
24..	2180	1500	K 11900	20	2	.1	70	2	.4
25..	948	377	S 1250	25	8	.5	58	2	.3
26..	359	26	S 26	22	7	.4	52	2	.3
27..	198	11	5.9	19	6	.3	46	2	.2
28..	136	5	1.8	18	3	.1	41	4	.4
29..	950	570	K 2500	--	--	--	41	7	.8
30..	1800	1480	S 9950	--	--	--	108	21	K 19
31..	1030	509	S 1660	--	--	--	332	40	K 38
Total	10645.2	--	52881.9	2114	--	111.7	6757	--	18669.9

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

COYOTE CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	268	14	10	120	5	1.6	30	15	1.4
2..	180	7	3.4	107	5	1.4	36	8	.8
3..	146	2	.8	94	5	1.3	22	6	.4
4..	132	2	.7	85	5	1.1	17	5	.2
5..	118	2	.6	79	5	1.1	18	5	.2
6..	371	62	K	73	4	.8	18	5	.2
7..	542	38	K	68	4	.7	15	4	.2
8..	358	3	2.9	62	4	.7	13	4	.1
9..	256	3	2.1	60	4	.6	11	4	.1
10..	309	36	K	79	8	1.7	11	4	.1
11..	439	52	K	58	6	.9	10	4	.1
12..	320	7	S	54	5	.7	10	4	.1
13..	242	6	3.9	49	4	.5	9.6	4	.1
14..	199	5	2.7	46	4	.5	8.4	4	.1
15..	329	31	K	43	4	.5	8.0	4	.1
16..	236	18	11	40	4	.4	7.4	4	.1
17..	296	50	K	37	4	.4	7.4	4	.1
18..	616	63	K	35	4	.4	7.0	4	.1
19..	505	42	57	32	4	.3	7.0	4	.1
20..	416	15	17	30	4	.3	7.0	4	.1
21..	658	73	S	28	4	.3	6.5	4	.1
22..	735	80	K	27	4	.3	6.5	4	.1
23..	623	73	K	25	4	.3	6.5	4	.1
24..	544	50	73	23	4	.2	7.0	4	.1
25..	392	25	26	23	4	.2	7.0	4	.1
26..	301	13	11	21	4	.2	7.0	4	.1
27..	242	7	4.6	21	4	.2	7.0	4	.1
28..	204	4	2.2	21	4	.2	6.5	4	.1
29..	170	4	1.8	20	4	.2	6.0	4	.1
30..	141	4	1.5	19	4	.2	5.6	4	.1
31..	--	--	--	18	4	.2	--	--	--
Total	10288	--	1176.2	1497	--	18.4	338.4	--	5.7
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day
1..	5.2	4	0.1	.70	6	T	0.10	9	T
2..	4.8	4	.1	.60	6	T	.10	9	T
3..	4.8	4	.1	.50	6	T	.10	9	T
4..	4.5	4	T	.50	6	T	0	--	0
5..	4.5	4	T	.50	6	T	0	--	0
6..	4.2	4	T	.40	5	T	0	--	0
7..	3.8	4	T	.40	5	T	0	--	0
8..	3.5	4	T	.40	5	T	0	--	0
9..	3.5	4	T	.40	5	T	0	--	0
10..	3.2	4	T	.30	5	T	0	--	0
11..	3.2	4	T	.30	5	T	0	--	0
12..	2.9	4	T	.20	5	T	0	--	0
13..	3.2	4	T	.20	5	T	0	--	0
14..	3.2	4	T	.20	5	T	0	--	0
15..	2.6	4	T	.20	5	T	0	--	0
16..	2.9	5	T	.20	5	T	0	--	0
17..	2.9	5	T	.20	5	T	0	--	0
18..	2.9	5	T	.20	5	T	0	--	0
19..	2.9	5	T	.20	5	T	0	--	0
20..	2.9	5	T	.10	5	T	0	--	0
21..	2.1	6	T	.10	5	T	0	--	0
22..	2.1	6	T	.10	5	T	0	--	0
23..	1.9	6	T	.10	5	T	0	--	0
24..	1.7	8	T	.10	6	T	0	--	0
25..	1.3	8	T	.10	6	T	0	--	0
26..	1.3	8	T	.10	6	T	0	--	0
27..	1.2	10	T	.10	6	T	0	--	0
28..	1.0	10	T	.10	6	T	0	--	0
29..	1.0	10	T	.10	8	T	0	--	0
30..	.90	8	T	.10	8	T	0	--	0
31..	.80	8	T	.10	8	T	--	--	--
Total	86.90	--	1.2	7.80	--	0.1	.30	--	T

Total discharge for year (cfs-days)..... 34925.50
 Total load for year (tons)..... 78556.1

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

COYOTE CREEK BASIN--Continued

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

Particle-size analyses of suspended sediment, October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Nov. 24, 1965.....	1230	53		401	63		--	--	--	--	--	96	100	--	--	--	--	S
Dec. 25.....	0800	44		143	360		--	--	--	--	--	100	--	--	--	--	--	V
May 5, 1966.....	1000	67		1.6	7		--	--	--	--	--	91	99	100	--	--	--	S
Dec. 6.....	1125	52		2460	2630		21	29	35	52	63	71	82	89	94	98	100	VPWC
Dec. 6.....	1305	53		2020	1650		24	33	44	57	72	79	85	90	92	99	100	VPWC
Jan. 22, 1967.....	0920	45		1330	1340		27	37	48	60	72	80	88	92	97	100	--	VPWC
Jan. 30.....	1105	53		2950	3010		15	22	29	39	49	57	67	80	89	95	100	VPWC
Jan. 30.....	1645	53		2700	1990		--	26	--	47	--	69	79	89	95	100	--	VPWC
Jan. 30.....	1800	53		2300	1660		--	--	--	--	--	68	79	87	94	99	100	V
Mar. 14.....	1100	48		477	69		--	--	--	--	--	89	89	90	94	100	--	S
Mar. 16.....	0700	53		3360	3830		--	17	--	34	--	56	68	78	84	98	100	VPWC
Mar. 16.....	1630	55		2300	2000		--	--	--	--	--	68	80	88	98	100	--	V
Apr. 5.....	1700	51		111	--		--	--	--	--	--	77	81	88	100	--	--	V

Particle-size analyses of bed material, water year October 1965 to September 1966
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

1, pipet; 2, sieve; 3, visual accumulation tube; W, in distilled water)																			
Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Bed material												Method of analysis
							Percent finer than size indicated, in millimeters												
							0.062	0.125	0.250	0.500	1.000	2.000	4.000	8.000	16.000	32.000	64.000		
May 16, 1966.....	1300							1	1	2	5	15	24	39	67	100		S	

ALAMEDA CREEK BASIN

11-1765. ARROYO VALLE NEAR LIVERMORE, CALIF.

LOCATION.--Lat 37°37'24", long 121°45'28", temperature recorder at gaging station in Valle de San Jose Grant, 900 feet downstream from highway bridge, 1.1 miles upstream from Dry Creek, 4.1 miles south of Livermore, Alameda County, and 6.9 miles southeast of Pleasanton.

DRAINAGE AREA.--147 square miles.

RECORDS AVAILABLE.--Chemical analyses: December 1958 to July 1966.

Water temperatures: October 1959 to September 1961, October 1962 to September 1967.

Sediment records: October 1962 to September 1967 (discontinued).

EXTREMES, 1966-67.--Water temperatures: Maximum, 85°F July 11, 23, Aug. 14; minimum, 39°F Dec. 28.

Sediment concentrations: Maximum daily, 6,390 ppm Jan. 21; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 43,600 tons Jan. 22; minimum daily, 0 ton on many days.

EXTREMES, 1962-67.--Water temperatures (1963-67): Maximum, 87°F June 14, 1966; minimum, 39°F Jan. 2, Dec. 28, 1966.

Sediment concentrations: Maximum daily, 6,390 ppm Jan. 21, 1967; minimum daily, no flow on many days during 1962-67.

Sediment loads: Maximum daily, 45,900 tons Feb. 1, 1963; minimum daily, 0 ton on many days during 1962-67.

REMARKS.--No flow Oct. 1-26, Sept. 25-30. Sediment concentrations and loads are unusually high during many days due to the effects of upstream construction.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	60	60	63	63	62	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	57	55	55	54	54	--
November																																	
Maximum	60	61	61	63	58	57	58	59	57	59	58	62	58	57	58	59	60	60	57	57	58	56	56	55	55	55	51	54	55	55	--	57	
Minimum	54	54	55	57	56	55	55	53	50	52	55	54	55	54	57	57	55	54	55	56	54	52	50	49	48	48	48	51	54	53	--	53	
December																																	
Maximum	55	55	56	53	54	53	53	54	54	55	55	55	53	52	51	51	51	50	49	49	50	48	48	48	46	44	43	45	46	45	50		
Minimum	54	54	52	51	51	52	52	51	51	53	52	52	50	50	47	49	48	47	48	47	48	47	46	45	43	42	40	39	41	42	41	47	
January																																	
Maximum	44	44	44	44	47	45	46	46	47	49	50	52	52	52	52	50	49	50	50	52	51	48	47	47	49	52	53	54	54	53	49		
Minimum	41	41	41	42	44	41	41	42	43	45	46	48	47	48	47	47	45	44	46	49	50	48	46	45	45	47	49	51	52	53	52	46	
February																																	
Maximum	52	53	52	51	53	53	52	52	52	52	54	56	55	52	50	53	55	56	54	54	54	54	55	55	53	51	56	52	58	--	--	53	
Minimum	51	49	48	47	47	46	46	46	46	46	46	48	50	46	45	45	46	47	46	45	45	44	45	44	45	49	48	46	48	--	--	46	
March																																	
Maximum	58	59	55	56	57	58	58	60	58	54	54	52	49	50	54	53	56	54	57	57	58	58	60	61	56	60	63	56	58	52	50	56	
Minimum	48	49	47	48	46	47	48	48	52	50	49	47	46	44	44	52	51	52	48	52	52	52	54	49	48	50	51	52	47	49	47	49	
April																																	
Maximum	52	54	58	54	57	57	54	58	61	56	57	62	60	58	57	63	61	55	55	55	55	55	53	58	57	61	61	59	61	65	--	57	
Minimum	46	48	46	50	48	52	51	50	50	53	50	50	52	54	52	51	52	50	49	47	50	50	51	51	51	50	53	50	49	50	--	50	
May																																	
Maximum	63	64	64	64	64	67	69	70	60	62	57	62	66	70	72	74	76	73	72	75	78	77	74	70	70	68	68	64	66	64	66	68	
Minimum	51	48	48	50	51	52	54	56	55	54	52	50	52	54	56	58	52	60	58	61	62	64	62	58	58	58	56	54	54	53	55	55	
June																																	
Maximum	58	56	67	67	58	61	70	72	70	74	71	70	75	76	77	81	80	77	78	76	79	78	79	79	80	79	80	82	83	82	--	73	
Minimum	56	56	55	56	56	60	58	58	59	59	60	57	60	62	63	63	64	64	64	64	62	64	62	63	64	65	63	66	68	67	--	61	
July																																	
Maximum	80	81	82	82	80	78	78	76	78	80	85	84	83	83	84	83	81	80	80	81	82	80	77	80	80	82	80	85	84	83	80	81	
Minimum	65	66	65	67	67	67	63	65	65	64	67	72	70	70	70	70	71	66	66	67	68	68	69	67	66	66	70	73	73	71	69	67	
August																																	
Maximum	80	80	82	80	78	75	77	76	77	78	78	81	83	85	82	81	82	82	80	78	80	81	79	78	78	80	76	73	76	80	76	79	
Minimum	66	69	68	68	66	65	63	66	67	67	66	67	69	70	71	70	70	70	69	68	68	69	70	71	70	69	68	67	64	68	68	57	
September																						</											

ALAMEDA CREEK BASIN--Continued

11-1765, ARROYO VALLE NEAR LIVERMORE, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0	--	0	0.7	50	0.1	1.6	50	0.2
2..	0	--	0	.9	50	.1	1.8	50	.2
3..	0	--	0	.7	50	.1	2.3	10	.1
4..	0	--	0	.5	50	.1	2.0	10	.1
5..	0	--	0	.5	--	T	140	1520 S	641
6..	0	--	0	.7	--	T	553	2320 S	3720
7..	0	--	0	1.1	50	.1	315	570 S	523
8..	0	--	0	.5	50	.1	122	267 S	85
9..	0	--	0	.7	50	.1	61	200	33
10..	0	--	0	.8	50	.1	32	54	4.7
11..	0	--	0	.8	50	.1	32	25	2.2
12..	0	--	0	.8	--	T	27	75	5.5
13..	0	--	0	.7	--	T	21	20	1.1
14..	0	--	0	.5	50	.1	19	19	1.0
15..	0	--	0	.8	50	.1	17	12	.6
16..	0	--	0	.8	50	.1	15	19	.8
17..	0	--	0	.5	50	.1	12	12	.4
18..	0	--	0	.5	50	.1	9.9	16	.4
19..	0	--	0	.9	--	T	8.8	22	.5
20..	0	--	0	1.6	--	T	8.8	6	.1
21..	0	--	0	1.8	50	.2	8.2	7	.2
22..	0	--	0	1.8	50	.2	7.7	10	.2
23..	0	--	0	1.6	50	.2	6.9	7	.1
24..	0	--	0	1.3	50	.2	6.5	16	.3
25..	0	--	0	1.3	50	.2	6.1	16	.3
26..	0	--	0	1.3	--	T	5.7	16	.2
27..	.3	--	T	1.3	--	T	5.0	5	.1
28..	1.4	50	.2	1.8	50	.2	5.0	4	.1
29..	1.2	--	T	1.6	50	.2	5.0	4	.1
30..	.5	--	T	1.4	50	.2	5.0	4	.1
31..	1.2	50	.2	--	--	--	4.6	5	.1
Total	4.6	--	0.4	30.2	--	3.2	1466.9	--	5021.7
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4.2	--	T	366	137 S	143	14	15	0.6
2..	3.9	--	T	197	86	46	14	18	.7
3..	3.6	18	0.2	142	50	19	13	21	.7
4..	3.6	16	.2	111	26	7.8	14	8	.3
5..	3.9	6	.1	94	16	4.1	13	6	.2
6..	3.6	6	.1	80	325	70	12	6	.2
7..	3.6	4	T	68	405	74	12	8	.3
8..	3.3	--	T	60	235	38	11	9	.3
9..	3.3	4	T	51	200	28	9.9	10	.3
10..	3.3	10	.1	46	180	22	10	10	.3
11..	3.6	7	.1	39	20	2.1	26	43 K	2.8
12..	3.6	12	.1	37	20	2.0	147	160 K	138
13..	3.6	7	.1	35	160	15	396	340 K	368
14..	3.6	6	.1	32	47	4.1	415	280 K	330
15..	3.6	8	.1	28	120	9.1	218	71 K	43
16..	3.3	9	.1	26	90	6.3	1660	4100 K	28400
17..	3.0	22	.2	24	100	6.5	730	660 K	1610
18..	3.0	3	T	23	25	1.6	298	80 K	65
19..	3.0	5	T	22	15	.9	182	60	29
20..	3.6	8	.1	21	92	5.2	132	50	18
21..	859	6390 S	36600	19	12	.6	107	40	12
22..	2210	4800 K	43600	18	8	.4	86	30	7.0
23..	328	269 S	259	18	7	.3	77	25	5.2
24..	1070	3340 S	12700	18	19	.9	63	18	3.1
25..	776	883 S	2160	19	13	.7	55	12	1.8
26..	308	226	188	19	12	.6	50	8	1.1
27..	197	280	149	17	10	.5	46	6	.7
28..	142	60	23	15	14	.6	43	8	.9
29..	394	366 S	513	--	--	--	43	10	1.2
30..	1090	2710 S	10600	--	--	--	48	14 K	1.9
31..	879	795 S	2160	--	--	--	152	39 K	18
Total	8323.2	--	108953.8	1645	--	509.3	5096.9	--	31060.6

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

ALAMEDA CREEK BASIN--Continued

11-1765. ARROYO VALLE NEAR LIVERMORE, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	194	55	29	75	50	10	12	80	2.6
2..	134	36	13	66	50	8.9	14	80	3.0
3..	116	33	10	61	70	12	15	50	2.0
4..	107	31	9.0	57	110	17	14	25	.9
5..	100	29	7.8	46	95	12	13	95	3.3
6..	157	110	K	48	50	6.5	18	120	5.8
7..	266	250	180	44	25	3.0	15	160	6.5
8..	212	160	92	38	55	5.6	13	240	8.4
9..	155	82	34	32	85	7.3	12	310	10
10..	134	100	36	43	110	13	13	170	6.0
11..	188	180	91	39	80	8.4	10	100	2.7
12..	160	34	15	37	80	8.0	9.9	140	3.7
13..	125	21	7.1	35	50	4.7	9.9	130	3.5
14..	107	17	4.9	31	25	2.1	9.4	160	4.1
15..	107	15	4.3	28	50	3.8	15	220	8.9
16..	105	13	3.7	27	80	5.8	10	290	7.8
17..	95	11	K	23	80	5.0	9.4	170	4.3
18..	154	69	K	23	90	5.6	8.2	120	2.7
19..	185	120	60	22	110	6.5	6.9	150	2.8
20..	182	97	48	21	50	2.8	6.9	180	3.4
21..	286	420	K	20	25	1.4	6.9	200	3.7
22..	352	330	K	20	100	5.4	6.5	200	3.5
23..	245	140	93	20	90	4.9	5.7	200	3.1
24..	235	75	48	18	100	4.9	5.7	150	2.3
25..	177	30	14	17	100	4.6	5.0	100	1.4
26..	142	50	19	15	90	3.6	4.2	200	2.3
27..	122	50	16	15	50	2.0	4.2	190	2.2
28..	109	50	15	15	25	1.0	4.2	160	1.8
29..	98	20	5.3	15	50	2.0	3.9	140	1.5
30..	84	10	2.3	14	80	3.0	3.3	130	1.2
31..	--	--	--	12	100	3.2	--	--	--
Total	4833	--	1702.2	977	--	184.0	284.2	--	115.4
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	3.6	100	1.0	1.4	100	0.4	0.2		T
2..	3.6	100	1.0	1.3	100	.4	.1		T
3..	3.3	150	1.3	.9	100	.2	.1		T
4..	3.9	150	1.6	.8	100	.2	.1		T
5..	3.6	150	1.5	1.3	70	.2	.1		T
6..	3.3	150	1.3	1.1	40	.1	.2		T
7..	3.3	150	1.3	1.1	80	.2	.2		T
8..	2.7	100	.7	.9	80	.2	.2		T
9..	2.7	50	.4	.8	80	.2	.1		T
10..	2.7	150	1.1	.8	80	.2	.1		T
11..	2.3	150	.9	.8	80	.2	.1		T
12..	2.3	150	.9	.7	50	.1	.1		T
13..	2.3	150	.9	.8	30	.1	.1		T
14..	1.4	150	.6	.8	80	.2	.1		T
15..	1.8	100	.5	.5	80	.1	.1		T
16..	1.8	50	.2	.5	80	.1	.1		T
17..	2.0	150	.8	.7	80	.1	.1		T
18..	1.8	100	.5	.3	80	.1	.1		T
19..	1.4	100	.4	.4	--	T	.1		T
20..	1.4	100	.4	.4	--	T	.1		T
21..	1.6	100	.4	.5	70	.1	.1		T
22..	2.0	80	.4	.9	70	.2	.1		T
23..	2.3	50	.3	.5	70	.1	.1		T
24..	1.8	100	.5	.3	70	.1	.1		T
25..	1.8	100	.5	.2	--	T	0		0
26..	2.3	100	.6	.1	--	T	0		0
27..	1.8	100	.5	.1	--	T	0		0
28..	1.4	100	.4	.1	--	T	0		0
29..	1.6	80	.3	.1	--	T	0		0
30..	1.6	50	.2	.1	55	T	0		0
31..	1.4	100	.4	.1	--	T	--		--
Total	70.8	--	21.8	19.3	--	4.0	2.8	--	0.3
Total discharge for year (cfs-days).....								22753.9	
Total load for year (tons).....								147576.7	

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

ALAMEDA CREEK BASIN--Continued

11-1765. ARROYO VALLE NEAR LIVERMORE, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Dec. 5, 1966.....	0730	53		152	2590		41	56	70	88	97	100	--	--	--	--	--	VPWC
Dec. 6.....	1630	52		678	2370		--	42	--	73	--	94	99	100	--	--	--	VPWC
Jan. 21, 1967.....	1300	53		24	1650		57	72	86	93	97	98	99	99	100	--	--	VPWC
Jan. 21.....	1600	53		660	14200		--	51	--	81	--	97	99	100	--	--	--	VPWC
Jan. 24.....	1600	46		1930	3720		16	26	34	49	61	70	89	97	100	--	--	VPWC
Jan. 25.....	0730	43		848	990		--	--	--	--	--	81	88	94	99	100	--	V
Apr. 5.....	1630	56		98	29		--	--	--	--	--	81	87	94	98	100	--	S
May 1.....	1500	47		77	137		--	--	--	--	--	98	100	--	--	--	--	S

ALAMEDA CREEK BASIN--Continued

11-1790. ALAMEDA CREEK NEAR NILES, CALIF.

LOCATION.--Lat 37°35'14", long 121°57'35", at gaging station 0.3 mile downstream from railroad bridge, and 1.2 miles northeast of Niles, Alameda County.
DRAINAGE AREA.--633 square miles.

RECORDS AVAILABLE.--Chemical analyses: February 1952 to September 1967.

Water temperatures: July 1956 to September 1967.

Sediment records: January 1957 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 80°F July 3; minimum, 43°F Dec. 28, Jan. 9.

Sediment concentrations: Maximum daily, 5,050 ppm Jan. 22; minimum daily, 5 ppm Oct. 2, 24.

Sediment loads: Maximum daily, 111,000 tons Jan. 22; minimum daily, 0.1 ton Aug. 14.

EXTREMES, 1956-67.--Water temperatures: Maximum (1956-62, 1964-67), 88°F June 1, 1960; minimum, 37°F Jan. 5, 1961, Jan. 14, 1963.

Sediment concentrations (1957-67): Maximum daily, 5,340 ppm Apr. 3, 1958; minimum daily, no flow on many days during 1957, 1959-61.

Sediment loads (1957-67): Maximum daily, 285,000 tons Apr. 3, 1958; minimum daily, 0 ton on many days during 1957, 1959-61.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 27, 1966....	31			33	18	72	3.0	125	8		101			0.3				156			666	8.5
Nov. 16.....	29			41	22	86	4.0	112	39		110			.4				193			800	8.5
Dec. 20.....	7.5			64	32	72	3.4	262	4		88			.6				291			860	8.4
Jan. 26, 1967....	655			26	12	18	2.1	121	0		14			.2				114			304	8.1
Feb. 20.....	30			68	34	64	3.6	252	10		69			.6				310			823	8.5
Mar. 29.....	100			41	20	37	2.1	178	3		34			.4				185			498	8.3
Apr. 25.....	A 929			33	15	21	1.7	160	0		14			.2				144			357	8.2
May 9.....	87	13		63	33	60	3.1	288	0	90	66		5.8	.5	500			292			752	8.0
June 14.....	20			72	38	72	3.6	296	8		80			.5				336			915	8.4
July 5.....	8.4			--	--	87	--	332	14		106			1.0				394			1120	8.6
Aug. 17.....	16			--	--	65	--	206	0		79			.5				224			740	8.1
Sept. 7.....	23			--	--	60	--	158	0		78			.4				175			652	8.1

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	70	70	70	70	70	70	73	70	75	73	68	68	65	65	--	67	60	--	60	60	60	58	60	60	58	60	58	60	60	67	70	60	65
November	60	60	60	60	60	58	57	57	57	57	57	55	55	57	57	57	57	55	50	55	55	54	50	--	48	48	51	50	50	51	--	55	
December	50	50	50	48	50	50	47	47	50	50	50	50	50	50	50	47	50	54	50	46	49	48	48	48	48	44	43	45	45	44	48		
January	46	48	45	44	46	44	45	44	43	46	47	46	44	50	47	50	48	48	47	47	45	45	45	45	45	45	50	50	50	50	46		
February	50	50	50	50	50	50	50	50	50	50	50	51	52	55	50	50	50	50	50	50	50	50	50	50	50	--	50	--	--	--	50		
March	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	55	56	50	50	50	50	50	50	50	52	52	50	50	50		
April	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	60	50	50	53	50	50	50	50	50	50		
May	50	50	50	60	58	60	63	70	64	55	60	60	60	65	70	72	73	73	66	65	77	74	71	60	65	67	64	61	62	60	62		
June	60	59	63	65	60	60	--	66	--	68	--	60	--	69	--	68	--	60	--	70	70	--	68	--	72	--	72	--	76	75	--	--	
July	71	--	80	--	73	--	72	--	75	--	72	--	78	--	76	--	75	--	75	--	68	--	70	--	74	--	73	--	76	--	72	--	
August	--	75	--	72	--	68	--	70	--	75	--	70	--	75	--	73	--	74	--	70	--	72	--	74	--	70	--	70	--	75	--	--	
September	68	--	71	--	70	--	71	--	70	--	70	--	70	--	69	--	69	--	70	--	70	--	70	--	69	--	68	--	68	--	--	--	

A Daily mean discharge.

ALAMEDA CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	30	21	1.7	29	10	0.8	43	78	9.1
2..	31	5	.4	30	11	.9	40	43	4.6
3..	31	11	.9	31	9	.8	61	242	S 42
4..	30	7	.6	31	13	1.1	19	218	11
5..	30	12	1.0	32	13	1.1	48	152	S 20
6..	30	10	.8	35	18	1.7	123	219	S 77
7..	31	9	.8	51	46	S 7.0	620	507	S 888
8..	31	9	.8	44	71	S 8.7	207	285	159
9..	31	8	.7	33	26	2.3	110	165	49
10..	31	11	.9	32	14	1.2	128	124	43
11..	31	16	1.3	32	17	1.5	99	91	24
12..	30	12	1.0	32	11	1.0	68	50	S 9.3
13..	31	12	1.0	32	6	.5	55	42	S 6.3
14..	31	8	.7	32	10	.9	47	29	3.7
15..	30	11	.9	24	28	S 1.8	27	17	1.2
16..	30	9	.7	40	170	K 30	14	11	.4
17..	30	7	.6	33	303	S 29	9.9	6	.2
18..	30	9	.7	9.9	160	4.3	8.5	11	.3
19..	30	9	.7	6.5	75	1.3	7.6	10	.2
20..	30	10	.8	10	102	S 4.7	8.1	14	S .4
21..	30	12	1.0	65	582	S 104	22	25	1.5
22..	30	14	1.1	35	420	40	22	20	1.2
23..	31	11	.9	17	240	11	36	38	3.7
24..	30	5	.4	7.9	132	2.8	42	31	3.5
25..	26	7	.5	12	130	K 7.0	41	22	2.4
26..	30	12	1.0	42	90	10	41	18	2.0
27..	31	11	.9	42	45	5.1	41	13	1.4
28..	31	9	.8	40	30	3.2	41	15	1.7
29..	31	11	.9	27	93	K 7.5	42	15	1.7
30..	31	11	.9	18	110	K 7.7	41	16	1.8
31..	31	12	1.0	--	--	--	41	16	1.8
Total	941	--	26.4	905.3	--	298.9	2153.1	--	1371.4
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	41	15	1.7	918	607	S 1530	21	13	0.7
2..	41	13	1.4	483	350	456	18	18	.9
3..	41	13	1.4	311	200	168	25	23	S 2.1
4..	41	10	1.1	230	115	71	62	52	S 9.0
5..	41	9	1.0	179	90	43	68	63	12
6..	41	10	1.1	141	78	30	68	32	5.9
7..	42	9	1.0	122	78	26	58	29	4.5
8..	42	9	1.0	111	64	19	48	36	4.7
9..	42	8	.9	117	44	14	51	19	2.6
10..	42	6	.7	101	36	9.8	42	24	S 2.7
11..	37	12	1.2	71	33	6.3	114	269	S 109
12..	41	12	1.3	61	26	4.3	399	390	S 718
13..	41	13	1.4	57	23	3.5	916	1100	2720
14..	40	11	1.2	52	24	3.4	924	870	2170
15..	41	13	1.4	53	65	S 11	417	200	225
16..	42	11	1.2	54	26	3.8	1960	1800	K 14800
17..	41	8	.9	38	10	1.0	1610	1470	S 7250
18..	40	8	.9	34	14	1.3	579	610	954
19..	40	26	2.8	32	12	1.0	335	285	258
20..	42	26	2.9	30	15	1.2	240	160	104
21..	3820	2390	S 41800	28	7	.5	180	129	63
22..	6700	5050	S 111000	26	6	.4	142	170	65
23..	1020	1300	3600	24	8	.5	142	140	54
24..	2080	2560	S 17800	25	20	1.4	102	120	33
25..	2440	2210	S 18100	32	11	1.0	82	160	35
26..	686	359	S 721	28	8	.6	74	215	43
27..	377	220	224	26	7	.5	66	150	27
28..	309	577	S 555	25	10	.7	77	110	23
29..	1480	1380	S 6240	--	--	--	100	160	43
30..	3030	1310	S 11600	--	--	--	163	360	K 325
31..	2510	873	S 5700	--	--	--	429	990	1150
Total	25271	--	217366.5	3409	--	2409.2	9512	--	31214.1

S Computed by subdividing day.

K Computed from estimated-concentration graph and subdividing day.

ALAMEDA CREEK BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	388	360	377	262	49	35	23	23	1.4
2..	252	160	109	210	59	33	27	25	1.8
3..	202	90	49	173	42	20	36	36	3.5
4..	189	90	46	151	29	12	35	26	2.5
5..	178	90	43	128	23	7.9	32	28	2.4
6..	471	771	S 1380	111	34	10	30	24	1.9
7..	1270	1100	S 4000	107	33	9.5	31	27	2.3
8..	1120	670	K 2370	91	30	7.4	29	28	2.2
9..	812	210	460	87	22	5.2	27	26	1.9
10..	689	300	K 713	96	50	13	23	24	1.5
11..	1170	520	1640	92	60	15	23	16	1.0
12..	892	210	506	89	59	14	22	9	.5
13..	796	150	322	80	65	14	22	10	.6
14..	628	145	246	71	110	21	20	12	.6
15..	670	219	S 440	64	55	9.5	18	12	.6
16..	588	185	294	58	26	4.1	17	12	.6
17..	543	160	K 337	53	37	5.3	18	15	.7
18..	1140	837	S 2580	50	31	4.2	21	17	1.0
19..	1340	780	S 2850	44	41	4.9	20	18	1.0
20..	976	290	764	42	39	4.4	19	15	.8
21..	1490	1080	S 5600	43	48	5.6	18	13	.6
22..	1800	1050	5100	40	32	3.5	15	15	.6
23..	1340	580	2100	35	27	2.6	16	17	.7
24..	1410	290	1100	34	23	2.1	15	22	.9
25..	929	148	371	32	26	2.2	14	26	1.0
26..	697	109	205	32	18	1.6	13	20	.7
27..	572	81	125	31	22	1.8	9.0	13	.3
28..	467	73	92	32	34	2.9	13	22	.8
29..	401	75	81	32	46	4.0	8.4	30	.7
30..	326	56	49	27	44	3.2	9.0	24	.6
31..	--	--	--	28	23	1.7	--	--	--
Total	23746	--	34349	2425	--	280.6	623.4	--	35.7
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	17	18	0.8	17	15	0.7	17	29	1.3
2..	9.9	19	.5	17	14	.6	10	25	.7
3..	9.4	20	.5	19	13	.7	23	28	1.7
4..	8.4	18	.4	18	12	.6	23	36	2.2
5..	8.4	17	.4	16	12	.5	24	46	3.0
6..	7.8	16	.3	16	11	.5	24	42	2.7
7..	6.9	15	.3	17	12	.6	23	38	2.4
8..	7.2	16	.3	16	13	.6	23	32	2.0
9..	8.1	17	.4	16	18	.8	23	25	1.6
10..	7.5	18	.4	16	25	1.1	24	24	1.6
11..	7.5	19	.4	15	18	.7	25	22	1.5
12..	10	31	S 1.0	15	11	.4	28	24	1.8
13..	17	31	1.4	11	10	.3	28	27	2.0
14..	17	23	1.1	5.2	10	.1	28	35	2.6
15..	18	16	.8	9.1	12	.3	28	43	3.3
16..	21	16	.9	15	13	.5	28	30	2.3
17..	19	17	.9	15	16	.6	29	18	1.4
18..	17	16	.7	14	18	.7	23	18	1.1
19..	20	15	.8	13	15	.5	14	18	.7
20..	19	15	.8	14	11	.4	13	22	.8
21..	18	15	.7	13	22	.8	15	26	1.1
22..	19	15	.8	13	41	1.4	30	25	2.0
23..	20	15	.8	12	62	2.0	30	23	1.9
24..	18	16	.8	12	63	2.0	30	25	2.0
25..	18	17	.8	12	37	1.2	29	25	2.0
26..	18	16	.8	14	19	.7	29	26	2.0
27..	18	16	.8	15	26	1.1	28	28	2.1
28..	18	16	.8	15	47	1.9	27	32	2.3
29..	18	17	.8	13	43	1.5	20	36	1.9
30..	18	17	.8	13	38	1.3	20	35	1.9
31..	17	17	.8	17	42	1.9	--	--	--
Total	456.1	--	21.8	443.3	--	27.0	716	--	55.9

Total discharge for year (cfs-days)..... 70601.2

Total load for year (tons)..... 287456.5

S Computed by subdividing day.

K Computed from estimated-concentration graph and subdividing day.

ALAMEDA CREEK BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Dec. 7, 1966.....	1600	47		586	489			--		--		99	99	100				S
Jan. 21, 1967.....	1730	45		9400	4220		40	54	64	78	86	92	99	100				VPWC
Jan. 22.....	1250	45		5960	4140			54		81		94	99	100				VPWC
Jan. 24.....	1730	45		3130	3680			61		87		99	100	--				VPWC
Mar. 12.....	1700	50		908	830			--		--		99	100	--				S
Apr. 3.....	1320	58		180	87			--		--		99	99	100				S

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

DRAINAGE AREA.--530 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

RECORDS AVAILABLE:--Water temperatures: October 1966 to September 1967.
EXTREMES, 1966-67.--Water temperatures: Maximum, 60°F Aug. 19-21, 30; minimum, 34°F Mar. 30 to Apr. 1 and sometime during period Apr. 16 to May 6.

EXTREMES, 1965-67.--Water temperatures: Maximum, 70°F July 26, 28, 1966; minimum, freezing point on several days during January and February 1966.

REMARKS.--Clock stopped Apr. 16 to May 6; temperature range, 34°F to 44°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	58	58	57	56	55	53	54	55	55	54	54	53	52	50	48	47	48	49	49	49	47	48	49	50	50	50	50	50	49	49	49	51
Minimum	53	55	55	50	49	50	50	50	50	49	49	49	48	45	44	43	43	43	44	46	43	43	44	46	46	46	46	46	45	45	45	47
November																																
Maximum	49	48	48	49	48	47	45	47	48	48	47	47	46	46	47	47	47	46	45	46	46	44	43	41	39	40	41	43	43	43	--	45
Minimum	45	44	46	45	44	43	45	45	46	45	44	44	43	44	46	45	44	42	41	45	44	42	40	38	37	37	38	41	42	41	--	42
December																																
Maximum	42	42	42	41	38	38	39	--	39	40	40	39	40	40	40	40	40	40	39	39	39	39	39	39	39	38	38	36	36	37	37	39
Minimum	41	42	41	36	36	35	36	--	38	37	38	39	39	39	39	39	39	39	39	39	39	39	38	38	38	38	36	36	36	36	35	37
January																																
Maximum	36	37	38	38	38	39	38	37	37	40	42	42	41	41	41	41	41	40	40	40	40	40	39	39	41	44	37	37	38	39	39	39
Minimum	36	36	36	37	38	38	37	36	36	37	37	39	39	38	38	38	38	38	38	38	40	39	38	37	37	36	35	36	38	39	37	37
February																																
Maximum	38	38	37	38	39	39	39	39	39	40	40	41	41	41	41	38	38	39	40	39	38	39	39	40	41	41	40	42	--	--	--	39
Minimum	37	36	36	36	37	37	37	38	38	38	39	39	40	41	38	37	37	38	38	37	36	36	38	39	40	38	37	38	--	--	--	37
March																																
Maximum	42	41	41	41	39	40	40	40	40	41	40	40	38	41	41	41	43	43	43	40	43	44	44	44	42	41	39	42	42	40	37	37
Minimum	39	38	39	39	37	37	36	37	38	38	39	38	37	36	38	41	40	40	39	40	40	40	40	40	38	37	37	40	37	34	34	38
April																																
Maximum	36	39	40	40	44	41	41	41	42	43	40	40	42	43	43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	34	35	36	38	36	38	39	37	38	39	36	35	38	39	38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May																																
Maximum	--	--	--	--	--	--	46	47	48	45	43	44	44	45	47	--	--	49	48	48	48	--	--	--	48	46	46	46	46	46	46	--
Minimum	--	--	--	--	--	--	41	44	45	43	42	41	41	41	43	--	--	47	47	47	46	--	--	--	46	42	45	45	46	46	46	--
June																																
Maximum	46	45	46	46	47	47	47	47	47	47	47	47	47	47	47	48	47	49	49	50	51	51	50	50	50	50	51	51	53	53	--	48
Minimum	45	44	45	45	46	46	46	47	47	47	47	46	46	46	46	45	45	46	44	45	46	44	45	46	46	46	46	46	48	48	--	45
July																																
Maximum	53	53	53	53	53	52	53	53	53	54	54	54	53	54	53	52	53	54	54	54	54	54	55	55	55	55	55	55	56	56	56	53
Minimum	48	49	48	49	50	50	50	49	50	50	51	52	52	52	52	51	50	52	52	52	52	52	53	53	54	53	55	53	55	53	55	51
August																																
Maximum	56	57	58	58	59	59	57	56	56	57	58	59	59	58	58	57	57	59	60	60	60	59	58	57	58	58	59	58	58	60	59	58
Minimum	55	56	56	57	57	57	55	54	54	56	57	57	58	57	57	56	57	56	57	58	56	57	57	57	56	56	54	55	57	57	56	56
September																																
Maximum	58	56	58	58	56	57	57	58	57	55	56	58	58	57	56	56	55	54	54	53	53	54	53	52	54	56	54	55	54	54	--	55
Minimum	56	56	56	56	54	54	55	55	53	53	52	54	54	54	52	52	52	51	52	51	51	51	51	51	51	51	54	54	52	51	--	52

BUENA VISTA LAKE BASIN--Continued

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

LOCATION.--Lat 35°54'20", long 118°28'00", temperature recorder located at gaging station 4 miles downstream from intake, and 12 miles north of Kernville, Kern County.

RECORDS AVAILABLE.--Water temperatures: October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 68°F Aug. 23.

EXTREMES, 1962-67.--Water temperatures: Maximum, 71°F on several days during July and August in 1964 and 1965; minimum (1962-66), freezing point on several days during December 1963, Nov. 19, 20, 1964, December 1965 and January 1966.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	62	63	63	61	60	58	58	58	57	57	57	56	56	56	52	50	49	49	49	48	48	48	48	48	49	49	49	49	49	49	49	53	
Minimum	60	61	59	59	58	57	57	56	56	56	56	55	54	51	49	46	47	47	47	48	46	46	46	46	45	44	49	49	49	48	48	51	
November																																	
Maximum	49	48	48	48	48	48	47	47	47	47	47	47	47	47	47	48	47	46	46	46	46	46	45	43	42	41	41	42	41	41	--	45	
Minimum	45	48	47	48	46	44	44	44	45	44	44	44	43	44	44	45	44	44	42	43	42	41	39	36	34	34	34	34	37	39	48	--	42
December																																	
Maximum	41	41	40	40	39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	38	38	38	37	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	39	38	38	37	37	38	38	40	40	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	36	34	34	35	35	36	38	38	37	--	
February																																	
Maximum	40	40	39	39	39	39	40	40	40	42	42	42	42	42	40	40	41	41	41	41	42	42	41	42	42	43	42	43	43	--	--	40	
Minimum	37	36	36	37	37	37	37	38	39	39	40	40	40	39	37	37	37	38	39	38	36	38	38	39	41	38	39	40	--	--	--	38	
March																																	
Maximum	43	45	46	43	43	43	43	43	43	43	43	43	42	42	43	43	45	45	45	45	46	49	48	46	45	44	47	47	47	45	43	42	44
Minimum	40	40	42	41	38	39	40	40	40	41	41	42	41	38	41	43	42	42	41	42	42	43	44	43	42	42	42	44	42	43	38	--	41
April																																	
Maximum	43	42	44	44	44	46	46	46	46	46	46	44	47	47	47	43	45	45	41	41	41	42	43	43	44	47	47	46	44	43	--	44	
Minimum	38	38	40	41	40	42	43	40	41	42	41	39	42	43	41	38	40	39	38	38	38	38	38	41	40	42	42	43	41	39	--	40	
May																																	
Maximum	46	48	47	47	50	50	51	52	54	50	48	48	49	50	53	54	54	54	54	54	54	54	58	57	53	53	58	52	53	52	54	51	
Minimum	40	43	43	44	46	44	45	47	48	46	45	43	44	45	47	48	48	49	50	50	50	50	50	50	48	48	48	49	49	49	45	46	
June																																	
Maximum	54	49	50	51	51	54	54	54	53	53	53	53	53	53	53	54	54	55	55	59	60	58	55	56	57	56	57	58	58	59	--	54	
Minimum	43	45	47	48	50	49	50	49	50	50	50	50	50	50	50	50	51	51	49	50	54	51	51	52	53	53	53	54	54	55	--	50	
July																																	
Maximum	59	55	58	57	64	61	56	56	56	56	57	58	57	58	58	60	58	58	59	66	60	60	61	61	61	62	62	62	62	63	63	59	
Minimum	54	53	52	53	53	54	53	53	53	54	56	55	55	55	55	56	58	56	56	57	58	58	58	58	58	59	58	59	59	60	59	55	
August																																	
Maximum	67	67	64	65	65	65	65	64	64	64	65	65	66	65	65	65	62	63	64	64	64	64	68	64	65	62	62	62	62	64	64	64	
Minimum	60	61	61	61	61	61	60	60	59	60	60	61	62	61	60	60	60	59	59	59	60	60	60	60	60	60	59	59	58	58	59	60	59
September																																	
Maximum	64	61	63	63	62	62	62	62	61	60	59	61	61	63	61	61	61	61	59	59	60	60	59	58	58	58	59	59	58	58	--	60	
Minimum	61	60	60	60	59	59	59	59	58	57	55	56	58	58	57	57	56	56	56	56	56	56	56	55	55	56	57	57	56	56	--	57	

BUENA VISTA LAKE BASIN--Continued

11-1870. KERN RIVER AT KERNVILLE, CALIF.

LOCATION (revised).--Lat 35°45'35", long 118°25'10", temperature recorder at gaging station on left bank 0.5 mile upstream from highway bridge at Kernville, Kern County, 1.7 miles upstream from Caldwell Creek, 9.5 miles upstream from Isabella Dam, and 42 miles northeast of Bakersfield.

DRAINAGE AREA.--1,009 square miles.

RECORDS AVAILABLE.--Water temperatures: June 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 71°F Oct. 1, 2; minimum, 38°F sometime during period Nov. 22 to Feb. 20.

EXTREMES, 1962-67.--Water temperatures: Maximum (1962-63, 1964-67), 80°F Aug. 5, 6, 8, 1966; minimum, 34°F Jan. 13, 14, 1963, Jan. 1, 1965, and on several days during January 1966.

REMARKS.--Gaging station moved Feb. 21, 1967 from site 0.6 mile downstream. Temperature record missing for period Nov. 22 to Feb. 20; estimated temperature range, 38°F to 50°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	71	71	69	66	63	64	64	65	65	63	64	63	62	59	57	56	56	56	56	55	56	55	56	58	58	57	58	54	57	57	57	60
Minimum	66	67	65	62	61	60	60	60	60	60	60	59	58	55	53	52	51	52	52	54	52	51	51	54	54	54	54	54	54	54	53	56
November																																
Maximum	57	55	54	54	54	52	50	51	51	51	51	51	51	51	52	51	52	50	48	50	50	--	--	--	--	--	--	--	--	--	--	--
Minimum	52	52	52	52	51	50	50	50	51	49	50	49	49	50	50	50	50	48	46	48	46	--	--	--	--	--	--	--	--	--	--	--
December																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
February																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	43	44	44	44	44	45	44	45	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	40	41	42	43	44	43	43	43	--	--	--	--
March																																
Maximum	45	45	46	45	44	44	46	47	47	47	47	46	46	45	47	47	48	48	48	49	50	51	49	48	48	47	49	48	47	44	44	46
Minimum	44	43	44	43	41	42	44	45	45	45	46	45	45	44	45	47	45	46	46	46	48	48	48	47	46	46	46	47	44	42	42	45
April																																
Maximum	43	44	46	45	46	47	46	46	47	47	46	45	47	47	46	44	46	46	44	46	45	44	47	47	48	50	49	49	46	47	--	46
Minimum	42	41	42	43	42	43	44	42	44	44	43	41	44	45	42	40	42	44	42	42	43	42	43	45	44	45	46	45	44	44	--	43
May																																
Maximum	48	50	50	50	51	51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	53	53	54	54	54	54	54	54	54	54	53	--
Minimum	45	47	48	48	49	49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51	51	51	52	52	52	53	52	53	52	50	--
June																																
Maximum	50	52	53	53	54	55	55	55	55	55	54	54	54	54	54	54	54	55	55	55	56	56	55	55	55	55	55	55	56	56	57	54
Minimum	48	50	52	52	53	53	54	54	54	54	54	53	53	53	54	53	53	54	53	53	55	55	55	55	55	55	55	55	55	56	--	53
July																																
Maximum	57	57	57	57	57	57	57	57	57	58	59	59	59	58	58	58	58	59	60	60	60	60	60	61	62	61	61	62	62	61	62	59
Minimum	56	56	56	56	56	56	57	57	57	57	57	58	58	58	58	57	57	58	58	58	58	58	58	59	60	60	60	60	60	61	60	57
August																																
Maximum	62	62	62	63	63	63	62	62	62	63	63	64	64	64	63	63	62	63	64	64	64	64	63	63	63	63	62	62	62	62	63	62
Minimum	60	60	60	60	61	61	60	59	59	60	61	61	62	61	61	61	60	60	61	61	61	61	61	61	61	60	60	59	60	61	62	60
September																																
Maximum	63	62	63	63	62	61	61	61	61	60	59	60	60	60	59	58	58	58	58	58	58	59	59	58	58	58	59	58	58	58	--	59
Minimum	62	61	61	62	60	59	59	59	59	58	57	59	59	59	58	58	58	57	57	57	57	57	57	57	57	56	56	58	58	57	--	58

BUENA VISTA LAKE BASIN--Continued

11-1870. KERN RIVER AT KERNVILLE, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis	
							Percent finer than size indicated, in millimeters												
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000		
Oct. 27, 1966.....	--	53		138	2	0.7													
Nov. 22.....	1115	46		231	9	5.6													
Nov. 22.....	1120	46		231	6	3.7													
June 20, 1967.....	1425	54		4200	1320	15000	2	2	5	6	8	18	28	49	74	99	100	VCBW	
June 22.....	1215	54		5790	1250	19500													
Aug. 22.....	0820	61		970	24	63													
Sept. 20.....	0800	57		747	15	30													

BUENA VISTA LAKE BASIN--Continued

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

LOCATION.--Lat 35°38'30", long 118°28'10", temperature recorder at gaging station on right bank, 500 feet downstream from Isabella Dam, Kern County, and 3 miles upstream from point where canal crosses Erskine Creek.
 RECORDS AVAILABLE.--Water temperatures: October 1958 to September 1967.
 EXTREMES, 1966-67.--Water temperatures: Maximum, 76°F Aug. 31; minimum, 40°F Nov. 26, 27.
 EXTREMES, 1958-67.--Water temperatures: Maximum, 80°F July 31 to Aug. 1, 1959; minimum, 33°F Jan. 17, 18, 1960.
 REMARKS.--No flow Jan. 30 to Feb. 14, Feb. 16-20.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	68	68	67	65	64	61	63	62	62	62	61	61	59	56	55	53	53	54	54	54	53	53	54	56	56	56	55	56	56	56	57	58
Minimum	66	66	64	62	60	59	59	58	58	58	58	57	55	52	50	49	49	49	50	49	49	49	49	51	52	52	52	53	52	52	52	54
November																																
Maximum	56	57	55	55	55	54	51	50	52	52	52	52	52	52	53	53	53	52	51	50	49	48	49	46	44	44	44	46	46	46	50	
Minimum	52	52	52	51	50	50	50	49	49	48	49	49	48	48	49	50	50	49	47	49	48	47	45	43	41	40	40	43	44	42	47	
December																																
Maximum	46	46	46	44	50	47	47	47	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46	45	46	
Minimum	44	45	44	42	42	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	45	45	
January																																
Maximum	45	45	45	45	45	44	44	44	43	43	43	43	43	43	43	43	44	44	44	44	44	44	44	44	44	44	44	44	44	44	43	
Minimum	45	45	45	45	44	44	44	43	43	43	43	43	43	43	43	43	43	44	44	44	44	44	44	44	44	44	44	44	44	44	43	
February																																
Maximum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	44	—	—	—	—	—	—	46	46	47	47	47	48	48	48	—	—	
Minimum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	44	—	—	—	—	—	—	46	46	46	47	47	47	48	48	—	—	
March																																
Maximum	48	47	47	47	47	47	47	48	48	47	47	47	48	48	49	49	49	49	49	49	51	52	52	51	51	51	52	52	52	52	49	
Minimum	47	47	47	47	47	47	47	47	47	47	47	47	48	48	48	49	49	49	49	49	49	50	51	51	51	51	52	52	52	52	48	
April																																
Maximum	52	53	53	53	52	52	52	52	51	51	51	51	51	51	51	51	52	52	52	52	52	52	52	51	50	50	50	50	50	50	51	
Minimum	52	52	52	52	51	51	52	51	51	51	51	51	51	51	51	51	51	52	52	52	52	52	52	51	50	50	50	50	50	50	51	
May																																
Maximum	50	50	50	50	50	52	53	52	53	53	53	53	54	55	57	58	59	58	58	60	60	59	60	61	61	58	56	57	58	58	55	
Minimum	50	50	50	50	50	50	52	52	52	53	53	53	53	54	55	55	56	55	55	55	56	58	58	58	58	56	56	56	57	57	54	
June																																
Maximum	58	58	60	60	59	58	58	58	59	59	59	59	59	60	60	60	61	61	61	61	61	61	60	61	61	61	61	62	64	61	60	
Minimum	58	58	58	59	57	57	57	58	58	59	59	59	59	59	59	60	60	60	60	60	60	60	59	59	60	60	59	60	60	59	59	
July																																
Maximum	62	64	65	64	64	64	64	64	64	65	64	66	63	63	64	63	63	64	64	66	66	65	65	64	66	67	68	66	67	68	64	
Minimum	59	60	60	60	60	60	62	62	61	62	61	62	62	62	62	62	62	62	62	62	62	62	62	63	62	62	62	63	64	65	64	
August																																
Maximum	67	68	69	68	69	68	69	69	68	69	70	69	69	70	70	69	71	70	69	70	71	71	71	72	73	72	73	75	75	75	76	70
Minimum	65	65	65	65	66	65	66	66	67	67	68	68	68	68	68	69	69	69	68	68	69	69	69	70	71	72	72	73	73	74	68	
September																																
Maximum	75	75	74	73	72	73	73	72	72	72	72	72	71	71	72	71	71	70	69	70	70	70	69	69	69	69	69	69	70	70	71	
Minimum	74	74	73	72	72	72	71	71	71	72	72	71	71	71	71	71	70	69	69	69	70	69	69	69	69	69	69	69	69	69	70	

MISCELLANEOUS ANALYSES OF STREAMS IN BUENA VISTA LAKE BASIN

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
11-1860. KERN RIVER NEAR KERNVILLE, CALIF. (Lat 35°56'00", long 118°29'10")																						
Oct. 3, 1966.....	80			15	1.4	17	2.0	74	0	10	7.2		0.6	0.2	114			44			172	8.1
Jan. 4, 1967.....	107			---	---	9.4	---	57	0	---	3.5		---	.0	---			36			118	7.9
May 11.....	1440			9.0	1.1	6.2	.5	42	0	3.1	1.3		.5	.0	49			27			83	7.5
July 25.....	1870			---	---	3.2	---	20	0	---	1.1		---	.0	---			13			45	7.3
Sept. --.....	---			8.6	1.5	7.2	1.0	40	0	3.4	2.6		1.7	.1	72			28			89	7.4

TULARE LAKE BASIN

11-2032. TULE RIVER NEAR SPRINGVILLE, CALIF.

LOCATION.--Lat 36°05'41", long 118°50'09", at gaging station 15 feet upstream from highway bridge, 2 miles southwest of Springville, Tulare County, and 4 miles downstream from North Fork.

DRAINAGE AREA.--225 square miles.

RECORDS AVAILABLE.--Chemical analyses: November 1963 to July 1966.

Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 86°F Aug. 19, 20, and sometime during period Aug. 21-31; minimum, 38°F Dec. 28.

EXTREMES, 1965-67.--Water temperatures: Maximum, 86°F Aug. 19, 20, and sometime during period Aug. 21-31, 1967; minimum (1966-67), 38°F Dec. 28, 1966.

REMARKS.--No record Oct. 8-16, May 31 to June 5, July 21 to Aug. 7, Aug. 21-31, Sept. 16-30; estimated temperature ranges, 53°F to 69°F, 48°F to 62°F, 66°F to 80°F, 70°F to 86°F, and 62°F to 77°F, respectively.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	71	71	69	69	69	70	69	--	--	--	--	--	--	--	--	--	59	59	60	59	57	58	58	60	60	60	60	60	60	60	60	--	
Minimum	66	67	64	64	63	65	64	--	--	--	--	--	--	--	--	--	53	53	53	56	53	53	53	54	55	56	56	56	55	55	55	--	
November																																	
Maximum	60	59	58	58	58	55	57	57	56	55	55	54	54	54	56	56	55	55	57	55	53	52	50	49	49	49	52	53	52	--	54		
Minimum	54	54	55	54	53	54	55	54	54	52	52	52	51	52	53	54	54	52	52	54	53	52	50	49	48	47	46	49	52	51	--	52	
December																																	
Maximum	52	52	51	49	52	52	48	48	48	46	45	46	45	47	48	48	46	47	48	49	47	48	48	48	45	43	45	45	44	44	45	47	
Minimum	51	52	49	48	48	48	47	46	45	46	45	46	45	45	45	43	44	45	45	45	46	44	43	43	42	42	41	38	40	40	39	44	
January																																	
Maximum	46	46	46	47	47	48	46	46	47	48	50	49	50	50	52	50	48	49	49	48	49	48	49	47	49	49	50	50	50	49	50	48	
Minimum	39	40	39	40	44	42	41	39	39	41	42	44	43	43	44	44	45	42	42	43	47	46	45	44	45	43	43	45	46	47	45	42	
February																																	
Maximum	50	48	50	49	48	50	49	51	50	48	52	54	53	51	48	48	50	51	49	51	51	52	51	51	53	51	54	55	--	--	50		
Minimum	46	46	43	43	45	45	43	45	46	45	46	45	46	43	40	43	40	42	44	43	42	42	43	45	47	41	43	45	--	--	43		
March																																	
Maximum	55	52	49	48	51	52	54	55	54	52	48	51	50	52	51	52	53	52	52	54	56	56	54	53	52	50	55	52	49	49	48	51	
Minimum	44	44	44	43	40	41	42	43	43	45	45	45	46	43	44	47	46	47	46	46	46	48	49	48	45	45	45	48	45	40	42	44	
April																																	
Maximum	48	53	54	50	54	56	51	50	55	50	48	46	53	52	48	52	54	49	47	52	48	51	54	50	52	52	52	48	51	48	--	50	
Minimum	41	42	43	44	43	45	46	45	44	45	43	42	43	45	42	40	44	44	44	42	42	43	44	43	45	43	45	45	44	41	40	--	43
May																																	
Maximum	55	57	57	53	52	59	59	61	54	53	51	50	56	58	60	60	60	62	61	62	63	63	64	63	62	60	62	58	56	57	--	58	
Minimum	41	46	47	48	47	46	49	51	50	48	46	44	44	47	49	50	50	53	52	53	53	54	55	55	53	53	54	53	52	51	--	49	
June																																	
Maximum	--	--	--	--	--	58	58	59	62	63	63	61	58	63	65	63	62	67	66	67	69	68	67	67	68	68	69	69	71	72	--	64	
Minimum	--	--	--	--	--	54	53	53	53	54	55	55	54	52	55	57	56	57	58	58	60	60	58	58	59	59	59	60	61	63	--	56	
July																																	
Maximum	73	73	73	73	69	72	73	73	73	74	74	76	76	76	72	78	76	76	76	77	77	--	--	--	--	--	--	--	--	--	--	--	
Minimum	64	63	64	65	64	62	63	62	63	63	64	66	67	66	66	66	66	66	65	65	65	--	--	--	--	--	--	--	--	--	--	--	
August																																	
Maximum	--	--	--	--	--	--	78	81	82	84	83	85	83	84	84	85	85	86	86	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	66	67	69	69	69	70	71	71	70	71	70	71	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September																																	

TULARE LAKE BASIN--Continued

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

LOCATION.--Lat 36°03'23", long 118°55'22", at gaging station 1,000 feet downstream from Success Dam, Tulare County, and 5 miles east of Porterville.

DRAINAGE AREA.--393 square miles.

RECORDS AVAILABLE.--Chemical analyses: December 1961 to September 1967.

Chemical analyses, in parts per million, August 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Aug. 2, 1966.....	10			33	4.7	13	--	150	0	--	6.1		--	0.1	--			102			256	8.0
Sept. 7.....	.6			44	5.8	16	2.8	188	4	1.6	7.6		--	.1	190			134			332	8.4
Oct. 4.....	.6			--	--	20	--	212	4	--	8.6		1.2	.1	--			167			363	8.5
Nov. 7.....	.6			--	--	21	--	235	0	--	7.2		--	.1	--			160			402	8.2
Dec. 21.....	690			12	2.9	4.2	--	43	0	--	1.2		--	.0	--			42			122	6.8
Jan. 13, 1967.....	408			--	--	5.5	--	71	0	--	2.9		--	.0	--			58			138	7.3
Feb. 7.....	450			--	--	7.7	--	82	0	--	5.3		--	.2	--			61			160	7.8
Mar. 6.....	583			--	--	8.4	--	95	0	--	4.6		--	.1	--			71			180	7.4
Apr. 5.....	3.5			--	--	16	--	163	4	--	6.2		--	.1	--			123			302	8.5
May 15.....	570			20	2.4	8.9	2.0	85	0	3.6	3.2		2.1	.0	133			60			164	7.5
June.....	--			--	--	7.5	--	70	0	--	3.4		--	.1	--			49			136	7.9
July 31.....	618			--	--	6.4	--	63	0	--	2.8		--	.0	--			45			122	7.3
Aug. 13.....	598			--	--	6.7	--	68	0	--	2.8		--	.0	--			51			127	7.3
Sept. 3.....	447			25	4.3	9.7	2.9	113	0	2.0	4.3		1.1	.0	106			80			204	7.6

TULARE LAKE BASIN--Continued

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

LOCATION.--Lat 36°31'10", long 118°48'10", temperature recorder at gaging station on left bank, 0.1 mile north of Potwisha Camp, Tulare County, and 0.3 mile upstream from confluence with Middle Fork Kaweah River.

DRAINAGE AREA.--51.4 square miles.

RECORDS AVAILABLE.--Water temperatures: January 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 69°F Aug. 31; minimum, 34°F Mar. 16.

EXTREMES, 1962-67.--Water temperatures: Maximum, 74°F July 30, 1964, Aug. 4, 17-19, 1966; minimum (1963-67), 34°F Jan. 1, 1965, Mar. 16, 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	64	66	64	65	63	63	62	61	63	63	61	61	59	57	55	55	54	54	55	56	55	54	55	56	59	57	57	57	56	56	56	58	
Minimum	62	62	62	60	59	60	60	58	58	58	59	58	56	54	52	51	51	51	52	54	51	51	52	54	55	55	56	54	54	54	54	55	
November																																	
Maximum	57	57	56	56	55	54	56	56	55	54	54	53	53	54	55	56	56	55	53	53	50	49	49	47	46	45	46	49	46	46	--	52	
Minimum	54	55	55	54	53	53	53	55	54	52	52	51	51	52	54	55	54	52	52	50	49	49	47	45	44	44	44	46	45	--	50		
December																																	
Maximum	46	47	47	44	45	45	45	43	45	46	45	45	44	44	44	44	44	44	44	44	43	42	42	41	40	39	38	37	38	38	42		
Minimum	46	46	44	42	44	45	43	41	43	44	44	44	43	42	43	44	43	44	43	43	41	41	41	41	40	39	38	36	36	37	37	41	
January																																	
Maximum	40	39	40	41	41	41	39	39	40	42	43	43	43	44	44	44	43	43	42	43	44	44	42	41	41	43	44	44	44	44	43	42	
Minimum	38	38	39	40	41	39	37	37	38	40	42	42	42	43	43	42	41	41	41	41	43	42	40	40	39	40	41	42	44	42	42	40	
February																																	
Maximum	43	43	44	44	45	45	45	44	44	45	46	46	45	45	41	41	43	44	43	43	43	43	43	43	43	43	45	46	--	--	--	43	
Minimum	42	41	41	42	42	43	43	42	42	43	44	44	44	39	39	39	39	41	41	41	40	40	41	41	42	41	40	41	43	--	--	41	
March																																	
Maximum	46	45	45	43	42	43	45	46	46	45	43	43	42	42	44	44	45	44	44	46	47	47	46	46	42	42	46	46	43	39	39	44	
Minimum	43	43	43	40	38	40	41	42	43	43	43	42	41	39	40	34	40	43	42	42	43	43	43	42	40	41	42	43	41	42	37	40	
April																																	
Maximum	39	41	43	42	41	45	44	40	45	44	43	39	43	44	43	42	43	43	39	40	39	40	43	41	43	44	43	43	40	41	--	42	
Minimum	37	38	40	39	39	41	40	38	40	41	36	37	39	42	38	36	40	38	37	37	38	38	38	39	39	41	42	37	37	38	--	38	
May																																	
Maximum	45	46	47	45	44	49	50	51	47	45	45	45	48	50	51	52	53	53	53	53	53	54	54	54	53	52	51	48	50	49	48	49	
Minimum	39	42	43	44	44	43	44	45	45	43	44	43	43	44	45	45	45	45	45	45	45	45	46	46	46	46	47	47	47	48	43	44	
June																																	
Maximum	46	50	53	53	51	49	53	52	53	53	53	50	49	54	55	53	55	57	52	58	58	56	56	57	57	57	58	58	58	59	--	54	
Minimum	42	44	45	48	47	46	47	47	48	47	47	48	47	47	48	49	49	49	49	48	49	47	47	48	49	49	49	50	51	--	47		
July																																	
Maximum	59	60	60	59	55	59	58	58	58	59	60	58	60	60	59	61	61	62	62	61	62	62	63	64	64	64	62	64	66	66	65	61	
Minimum	51	51	50	50	51	51	51	49	50	49	51	53	55	54	55	55	54	54	55	54	55	54	56	58	58	58	57	59	59	61	61	54	
August																																	
Maximum	65	65	65	66	66	64	63	62	65	66	65	66	67	67	68	67	67	68	67	66	66	67	66	66	66	66	67	66	67	68	69	66	
Minimum	61	61	61	61	62	60	59	59	60	62	61	62	63	63	64	63	64	63	63	65	63	63	63	63	63	63	61	63	60	61	63	64	
September																																	
Maximum	66	64	66	63	66	66	66	65	64	61	63	65	65	65	65	65	63	63	63	65	64	65	65	65	65	65	67	68	67	67	--	64	
Minimum	64	63	63	62	61	60	61	61	59	59	58	60	61	61	61	61	61	60	59	61	62	64	63	63	63	63	63	65	65	65	64	--	61

TULARE LAKE BASIN--Continued

11-2099. KAWEAH RIVER AT THREE RIVERS, CALIF.

LOCATION.--Lat 36°26'38", long 118°54'09", at gaging station opposite schoolhouse in Three Rivers, Tulare County, and 0.25 mile downstream from North Fork Kaweah River.

DRAINAGE AREA.--418 square miles.

RECORDS AVAILABLE.--Chemical analyses: November 1963 to July 1966.

Water temperatures: October 1965 to September 1967.

EXTREMES, 1965-66.--Water temperatures: Maximum, 83°F Aug. 18, 1966; minimum, 39°F on several days during winter months.

REMARKS.--Thermograph destroyed by flood Dec. 6; to be replaced during 1968 water year.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	76	74	72	72	72	72	70	71	72	71	71	69	67	65	64	63	63	63	63	60	61	62	63	64	65	64	64	64	64	64	63	66
Minimum	66	68	67	65	64	65	64	63	63	63	64	62	60	58	56	55	54	55	55	54	53	54	55	56	57	58	58	57	57	56	56	59
November																																
Maximum	64	62	63	62	61	58	59	58	60	59	60	59	59	59	60	60	61	60	59	58	55	54	53	52	51	51	50	52	51	51	--	57
Minimum	56	57	57	56	55	56	56	56	56	54	55	53	53	54	55	57	56	54	53	55	52	51	49	48	46	46	46	50	49	48	--	52
December																																
Maximum	52	51	51	48	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	49	50	48	47	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TULARE LAKE BASIN--Continued

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

LOCATION.--Lat 36°24'51", long 119°00'42", at gaging station 0.6 mile downstream from Terminus Dam, Tulare County, and 2.2 miles northeast of Lemoncove.

DRAINAGE AREA.--561 square miles.

RECORDS AVAILABLE.--Chemical analyses: December 1961 to September 1967.

Chemical analyses, in parts per million, August 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Aug. 9, 1966.....	40			9.7	0.9	3.2	--	38	0	--	2.0		--	0.0	--			28			76	7.2
Sept. 19.....	--			13	2.8	4.5	1.6	53	0	2.6	4.7		1.2	.0	70			44			107	7.0
Oct. 17.....	.1			--	--	5.2	--	63	0	--	5.9		--	.0	--			59			126	7.8
Nov. 17.....	.2			--	--	7.5	--	65	0	--	6.9		--	.1	--			48			139	7.5
Dec. 12.....	3870			--	--	3.4	--	17	0	--	2.8		--	.2	--			20			65	6.5
Jan. 9, 1967.....	1400			--	--	5.8	--	30	0	--	2.3		--	.0	--			28			73	7.0
Feb. 6.....	739			--	--	3.8	--	51	0	--	2.4		--	.0	--			39			97	7.1
Mar. 9.....	510			--	--	4.0	--	42	0	--	2.0		--	.0	--			31			82	7.2
Apr. 12.....	.1			--	--	4.2	--	43	0	--	2.1		--	.0	--			32			87	7.4
May 16.....	2890			12	.7	3.9	1.7	47	0	3.3	1.4		.7	.0	64			33			94	7.8
June 15.....	1760			--	--	2.2	--	32	0	--	2.1		--	.1	--			25			66	7.1
July.....	--			--	--	1.5	--	16	0	--	.9		--	.0	--			14			36	7.3
Aug. 2.....	1940			--	--	2.4	--	23	0	--	1.0		--	.0	--			20			46	6.9
Sept. 11.....	1160			9.5	1.2	2.9	1.2	36	0	1.6	1.7		.5	.0	26			28			71	7.8

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

DRAINAGE AREA.--952 square miles.

RECORDS AVAILABLE.--Water temperatures: December 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 35°F Dec. 28.

REMARKS.--Clock stopped June 10-28; temperature range, 46°F to 50°F. Temperature for Aug. 23-25, 28, 29, is estimated.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average		
	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			
October																																		
Maximum	68	69	67	67	66	66	64	64	65	64	65	63	62	59	57	56	56	56	57	56	54	55	55	57	58	57	58	58	57	57	57	60		
Minimum	64	65	65	62	62	63	61	60	60	60	61	60	58	55	53	51	51	52	53	52	49	50	51	53	54	55	55	55	54	54	54	56		
November																																		
Maximum	56	55	55	55	54	53	54	55	55	55	55	54	53	54	54	55	56	54	53	54	52	50	49	46	46	45	45	45	48	46	--	52		
Minimum	53	53	53	53	52	51	51	54	53	52	53	52	51	51	52	53	54	52	50	52	50	49	46	44	43	42	42	45	46	44	--	49		
December																																		
Maximum	46	48	48	46	49	47	47	45	46	46	45	45	45	45	45	45	45	45	45	44	44	42	42	41	41	41	39	38	39	40	39	44		
Minimum	44	46	46	44	45	47	45	43	43	45	44	44	44	44	44	44	44	44	43	43	42	41	40	40	40	40	39	36	35	36	38	37	42	
January																																		
Maximum	40	40	40	41	43	44	42	40	40	42	43	45	44	44	45	44	44	43	44	44	45	44	45	44	44	42	42	43	46	47	48	47	48	43
Minimum	37	38	37	38	40	41	39	37	37	38	40	42	42	41	41	41	41	40	42	40	42	44	44	42	40	39	41	43	45	47	46	46	40	
February																																		
Maximum	46	46	45	46	47	46	46	47	47	47	48	48	47	47	44	44	44	46	46	45	45	46	46	45	46	46	46	48	--	--	--	--	46	
Minimum	45	44	42	42	44	42	44	44	44	44	45	46	45	43	41	41	40	42	43	43	41	42	43	43	44	42	41	43	--	--	--	--	42	
March																																		
Maximum	48	48	47	45	45	46	47	48	49	46	45	45	44	44	44	46	46	48	46	48	49	49	48	49	46	46	46	48	46	42	42	46	46	
Minimum	43	44	44	42	40	42	43	43	44	43	44	43	43	41	42	44	43	47	44	44	45	45	46	46	44	45	45	46	41	39	39	43	43	
April																																		
Maximum	44	46	45	45	47	49	48	46	50	48	47	45	49	49	48	46	48	48	44	43	46	44	45	47	48	49	51	48	47	46	47	--	46	
Minimum	40	41	42	44	41	44	44	42	44	45	42	41	43	46	41	40	43	42	40	41	42	41	42	44	42	46	46	43	42	41	--	42	42	
May																																		
Maximum	50	52	52	49	52	54	54	55	51	48	50	48	50	52	53	53	53	52	53	53	52	52	52	52	52	52	51	50	51	56	49	51	51	
Minimum	43	46	46	48	48	48	49	50	48	46	46	45	45	47	48	48	47	46	46	46	46	46	46	46	46	45	46	47	46	45	43	46	46	
June																																		
Maximum	46	50	51	50	50	52	53	52	52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	55	56	--	--	
Minimum	42	44	46	47	48	46	47	47	47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	48	48	--	--	
July																																		
Maximum	56	56	55	56	54	56	56	55	56	56	57	56	56	57	56	57	57	58	58	58	59	59	59	60	60	60	58	59	60	60	61	57	57	
Minimum	49	49	49	49	50	51	51	50	51	51	51	52	53	53	53	53	52	53	54	53	54	55	56	56	56	57	55	57	56	57	57	53	53	
August																																		
Maximum	61	61	61	62	62	61	61	61	62	63	63	63	65	63	64	64	64	60	65	66	66	66	66	66	66	66	66	66	67	67	68	63	63	
Minimum	58	58	58	58	59	59	58	58	59	60	59	60	61	60	60	60	62	64	61	63	63	63	63	63	63	63	63	63	63	63	64	60	60	
September																																		
Maximum	67	64	67	66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	64	63	63	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

TULARE LAKE BASIN--Continued

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

LOCATION.--Lat 36°53'04", long 119°09'07", temperature recorder 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, Fresno County.

DRAINAGE AREA.--1,342 square miles, upstream from gaging station.

RECORDS AVAILABLE.--Chemical analyses: October 1955 to July 1963.

Water temperatures: October 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 68°F Oct. 9; minimum, freezing point on several days in December and January.

REMARKS.--Temperature subject to fluctuation because of powerplant operation upstream.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	--	--	--	--	--	--	57	58	68	59	59	58	57	57	57	57	57	58	58	54	54	55	56	56	56	56	57	57	57	57	57	57
Minimum	--	--	--	--	--	--	53	54	53	55	54	53	52	51	50	48	48	49	50	49	46	47	48	49	50	50	53	52	51	51	51	50
November																																
Maximum	58	56	56	56	56	52	53	53	53	54	54	54	54	54	53	54	56	56	58	56	54	51	51	50	49	49	47	48	48	49	--	53
Minimum	52	52	52	52	52	52	51	51	51	51	51	50	49	49	51	52	52	51	50	52	50	49	47	45	44	43	43	44	47	46	--	49
December																																
Maximum	46	47	47	44	47	47	46	45	45	46	46	45	43	42	43	43	45	43	43	41	41	41	40	38	38	38	37	37	37	34	35	36
Minimum	44	45	44	43	44	47	43	42	42	43	43	43	41	41	39	40	40	40	40	40	39	39	38	37	38	37	35	33	32	32	32	39
January																																
Maximum	36	36	36	37	36	36	37	36	37	38	38	39	40	40	40	40	40	40	40	38	38	40	41	39	39	39	40	39	39	39	40	38
Minimum	32	33	32	33	34	34	34	33	32	33	35	37	37	37	37	37	37	36	36	37	37	38	39	37	36	36	36	37	37	38	38	35
February																																
Maximum	40	40	40	41	42	43	43	43	43	42	44	44	44	44	44	44	44	45	44	45	46	45	45	45	45	45	46	46	47	--	--	43
Minimum	38	38	37	37	40	40	40	40	40	40	40	41	41	42	42	41	41	41	41	42	41	42	41	43	43	43	43	43	43	--	--	40
March																																
Maximum	47	46	46	45	47	47	46	47	47	45	44	44	44	44	45	45	46	46	44	45	46	46	45	46	45	45	45	44	44	46	44	45
Minimum	43	43	44	44	43	43	43	43	43	43	44	44	44	44	43	43	43	43	43	42	42	43	44	44	43	43	43	43	43	43	44	43
April																																
Maximum	45	45	45	44	46	46	45	46	46	45	45	44	45	44	44	45	45	44	44	44	44	44	44	44	44	44	44	44	44	44	--	44
Minimum	43	43	43	43	44	44	44	44	44	44	44	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	--	43
May																																
Maximum	45	45	45	45	46	47	47	47	47	47	47	47	47	48	48	48	49	49	49	49	50	50	50	49	49	49	49	49	48	48	48	47
Minimum	43	43	44	44	44	45	45	45	46	46	46	45	45	45	45	45	45	46	46	46	47	47	47	47	47	48	48	47	47	47	47	45
June																																
Maximum	48	48	48	48	48	49	49	49	49	49	49	48	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	--	48
Minimum	47	47	47	47	47	47	47	47	47	47	47	48	48	48	47	47	47	47	48	48	47	47	47	47	47	47	47	48	48	48	47	--
July																																
Maximum	49	49	49	50	51	51	51	51	51	52	52	52	53	53	54	54	54	54	54	54	56	56	56	56	56	56	57	57	57	57	58	57
Minimum	48	48	47	49	49	49	49	49	49	50	50	50	51	51	53	51	53	53	53	54	54	54	54	55	55	55	55	56	56	56	57	56
August																																
Maximum	56	55	54	53	53	53	53	53	53	53	53	52	52	52	52	52	52	52	52	53	53	53	53	53	51	52	53	53	53	53	53	52
Minimum	55	54	53	52	51	51	52	52	52	52	52	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	50	50	50	50	50	50
September																																
Maximum	53	52	53	53	53	53	53	53	53	52	53	53	53	53	53	53	52	51	50	52	53	52	52	52	53	53	53	53	51	52	52	--
Minimum	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	49	49	49	49	49	50	50	50	50	50	50	50	49	49	49	--	49

TULARE LAKE BASIN--Continued

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

LOCATION.--Lat 36°29'06", long 119°32'22", approximately 0.2 mile downstream from gaging station located on diversion weir, 2 miles south of Kingsburg, Fresno County, and approximately 12 miles northeast of Hanford.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Chemical analyses, in parts per million, July 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
July 11, 1966....				3.8	0.1	1.8	--	14	0	--	0.5		--	0.0	--			10			30	7.0
Sept. 12.....				3.3	.7	2.0	0.5	17	0	2.0	.7		1.0	.1	35			11			38	7.0
Oct. 10.....				--	--	3.6	--	36	0	--	2.0		--	.0	--			28			69	7.7
Nov. 14.....				16	4.4	10	--	80	0	--	5.9		--	.0	--			58			163	7.9
Dec. 12.....				--	--	12	--	79	0	--	8.2		--	.1	--			69			208	7.4
Jan. 9, 1967....				--	--	9.8	--	89	0	--	5.9		--	.0	--			80			191	7.8
Feb. 20.....				--	--	4.0	--	28	0	--	3.1		--	.0	--			20			64	8.1
Mar. 13.....				--	--	3.6	--	32	0	--	2.2		--	.0	--			26			68	8.2
Apr. 10.....				--	--	6.2	--	56	0	--	3.8		--	.0	--			45			119	7.6
May 8.....				6.4	.7	2.2	.9	26	0	3.0	.6		2.0	.0	--			19			56	7.5
June 12.....				--	--	2.5	--	24	0	--	1.9		--	.1	--			20			54	7.0
July 10.....				--	--	1.2	--	11	0	--	1.2		--	--	--			8			27	6.7
Sept. 15.....				4.0	1.0	2.5	.9	20	0	2.1	1.6		.6	.1	34			14			43	6.7

SAN JOAQUIN RIVER BASIN

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

LOCATION.--Lat 37°13'10", long 119°12'50", temperature recorder at gaging station on right bank 1,200 feet upstream from Grouse Creek, and 1 mile downstream from Huntington Lake, Fresno County.

DRAINAGE AREA.--81.1 square miles.

RECORDS AVAILABLE.--Water temperatures: July 1961 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 63°F Aug. 10, 11; minimum, freezing point Mar. 14-16.

EXTREMES, 1961-67.--Water temperatures: Maximum, 63°F Aug. 10, 11, 1967; minimum (1961-63, 1965-67), freezing point on several days in December 1965, January 1966 and Mar. 14-16, 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	58	58	57	57	57	57	56	57	57	57	56	55	54	53	52	52	53	53	54	53	52	52	53	53	53	53	52	52	52	52	52	54	
Minimum	55	55	55	53	53	53	53	53	53	53	53	53	51	50	50	49	49	50	50	51	49	49	50	50	50	50	50	49	49	49	48	51	
November																																	
Maximum	52	52	52	51	50	49	49	49	48	48	49	49	48	49	49	49	48	48	48	47	46	45	44	44	43	44	45	44	45	45	--	47	
Minimum	49	49	49	48	48	47	47	46	46	47	48	47	46	46	48	48	47	46	46	45	44	44	43	42	42	43	44	44	43	--	45		
December																																	
Maximum	44	44	42	42	39	39	40	40	41	41	41	40	40	39	39	39	39	38	38	38	38	37	37	37	36	36	36	34	35	35	38		
Minimum	43	39	40	39	36	38	39	39	39	40	40	39	39	38	38	38	38	38	37	37	37	37	36	36	36	36	34	33	34	35	34	37	
January																																	
Maximum	36	35	35	36	36	36	35	35	35	36	37	37	37	37	37	37	36	37	37	37	37	35	34	35	35	33	33	35	36	36	35	35	
Minimum	35	34	35	35	36	34	34	34	34	35	36	36	36	36	36	36	35	36	35	34	33	34	33	34	33	33	33	33	35	34	34	34	
February																																	
Maximum	36	36	36	36	37	36	36	36	36	37	36	37	37	36	34	35	35	36	36	36	35	36	36	36	36	36	35	35	38	--	--	35	
Minimum	35	35	35	35	36	34	35	35	35	35	35	36	36	34	34	34	34	35	34	34	34	34	34	35	34	34	34	35	--	--	--	34	
March																																	
Maximum	37	38	38	36	36	37	37	38	38	38	36	33	33	33	32	33	35	36	38	38	38	38	38	39	38	39	40	39	35	36	35	36	
Minimum	35	36	36	34	34	35	35	36	36	36	33	33	33	32	32	33	35	36	36	37	37	37	37	37	36	37	38	34	34	35	34	34	
April																																	
Maximum	37	36	36	36	36	37	35	35	37	38	35	37	38	37	37	37	38	37	34	35	35	36	36	35	37	38	37	35	35	36	--	36	
Minimum	34	36	35	33	33	35	33	34	35	35	33	35	35	36	34	34	35	33	33	34	34	34	34	35	35	35	35	34	33	34	34	--	34
May																																	
Maximum	38	38	40	38	38	41	40	40	38	38	39	40	41	41	42	40	40	40	40	40	40	40	40	40	41	41	41	41	41	41	38	39	
Minimum	35	36	37	36	37	37	37	37	36	36	37	37	37	37	38	38	37	37	37	36	36	36	36	37	37	37	37	37	37	37	36	36	
June																																	
Maximum	39	43	43	42	39	43	41	44	44	45	44	42	40	46	47	43	47	48	46	49	49	48	48	49	49	49	49	50	50	51	--	45	
Minimum	37	37	37	38	37	38	38	38	38	38	39	39	38	38	39	39	39	40	41	40	41	40	40	40	41	41	41	41	42	42	43	--	39
July																																	
Maximum	51	51	50	50	48	50	50	49	49	49	50	47	50	50	48	51	51	51	51	51	51	51	51	52	52	53	53	53	53	54	54	50	
Minimum	43	43	43	44	44	44	44	43	43	43	44	44	45	45	46	46	46	46	45	45	45	46	47	48	48	48	48	48	49	49	49	45	
August																																	
Maximum	54	53	54	54	54	62	62	62	59	63	63	59	57	57	58	57	57	57	57	57	57	56	55	56	55	56	56	55	56	57	56	57	
Minimum	49	49	49	49	49	51	57	57	54	56	59	54	53	53	53	53	53	53	52	53	52	53	53	53	53	52	52	52	52	53	53	52	
September																																	
Maximum	55	54	57	56	57	57	57	57	55	55	56	57	57	57	56	56	56	56	56	56	55	54	55	55	56	57	57	56	57	--	--	56	
Minimum	53	53	53	53	54	54	54	54	53	52	52	53	53	53	53	53	53	52	53	52	52	53	53	53	53	54	54	54	55	53	--	53	

SAN JOAQUIN RIVER BASIN--Continued

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

LOCATION.--Lat 37°09'10", long 119°27'30", temperature recorder at gaging station on left bank, 40 feet upstream from bridge, 0.4 mile upstream from mouth, 1.3 miles downstream from Whiskey Creek, and 4.3 miles northeast of Auberry, Fresno County.

DRAINAGE AREA.--130 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1960 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 78°F on several days in August; minimum, 36°F on several days in December and January.

EXTREMES, 1960-67.--Water temperatures: Maximum (1960-63, 1964-67), 91°F Aug. 5, 1966; minimum, 36°F Jan. 3, 4, 1961, Jan. 1, 1965, and on several days in December 1966 and January 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	73	72	69	69	70	69	65	68	68	68	68	66	64	62	61	60	60	61	62	58	58	59	59	61	62	60	61	60	60	60	60	63	
Minimum	64	65	65	62	63	63	62	60	60	61	61	60	58	55	54	54	53	53	53	55	52	52	52	54	55	55	55	54	54	54	53	57	
November																																	
Maximum	59	58	60	58	58	54	54	55	54	54	55	54	53	53	52	54	54	53	53	54	53	51	48	45	44	44	44	48	50	50	--	52	
Minimum	52	53	54	53	52	52	52	54	52	51	52	51	50	51	52	52	52	51	51	52	51	48	45	43	43	43	44	48	48	--	49		
December																																	
Maximum	49	48	48	45	47	47	46	44	44	44	45	44	44	43	43	43	43	43	44	44	44	43	42	41	41	40	40	39	38	38	38	43	
Minimum	48	48	45	43	44	46	44	41	42	44	43	42	40	42	41	41	42	42	42	42	43	41	40	41	40	39	38	36	36	36	36	41	
January																																	
Maximum	38	38	38	41	43	42	40	39	38	40	42	43	43	42	43	43	43	43	43	42	42	43	43	43	42	42	43	44	44	45	45	42	
Minimum	36	37	36	38	41	39	38	36	36	37	39	42	41	41	41	42	42	41	40	41	42	43	42	42	40	41	41	43	44	43	42	40	
February																																	
Maximum	44	44	43	44	44	44	44	45	45	45	46	47	47	46	43	42	43	44	44	44	44	45	44	45	45	44	45	48	--	--	--	44	
Minimum	41	41	41	41	43	41	41	42	42	42	42	45	45	43	40	40	40	41	42	40	41	41	42	43	43	41	42	44	--	--	--	41	
March																																	
Maximum	47	48	47	43	43	44	46	47	47	46	45	45	45	46	48	48	46	47	47	47	49	49	49	48	46	48	50	49	46	42	41	46	
Minimum	43	44	43	41	39	40	42	43	43	45	44	44	43	42	43	43	43	44	42	44	44	45	46	45	44	45	46	46	41	39	39	43	
April																																	
Maximum	43	45	45	45	47	49	49	45	51	50	47	45	51	49	48	48	49	48	48	44	46	46	45	48	48	50	51	50	47	46	49	--	47
Minimum	39	41	42	42	42	45	45	44	45	46	43	43	45	48	42	42	44	43	43	41	42	43	42	43	44	43	45	47	45	44	43	--	43
May																																	
Maximum	52	54	54	51	49	55	56	55	53	49	49	49	52	53	54	55	56	56	57	58	59	60	59	58	57	55	53	52	51	51	50	53	
Minimum	42	47	47	49	47	46	48	48	47	46	45	44	45	46	47	46	47	47	49	50	50	50	52	52	50	51	49	49	48	47	45	47	
June																																	
Maximum	46	51	53	53	52	50	54	54	55	52	54	53	52	54	57	57	58	59	59	61	61	61	59	60	61	61	62	62	65	66	--	56	
Minimum	44	46	47	48	50	47	48	50	50	49	50	51	49	49	52	54	54	56	57	55	59	58	57	58	59	60	60	61	64	--	--	53	
July																																	
Maximum	68	70	71	69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	74	75	73	75	77	77	--	
Minimum	65	65	64	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	66	66	66	66	68	69	69	--
August																																	
Maximum	76	76	76	76	75	74	73	72	74	75	76	76	77	77	78	78	78	78	78	77	76	77	77	78	75	77	76	75	76	77	77	76	
Minimum	68	68	68	68	67	66	65	64	65	66	67	68	68	70	70	70	70	70	70	71	69	68	69	70	71	71	68	68	66	68	69	68	
September																																	
Maximum	76	73	77	74	75	75	75	74	70	70	72	73	72	72	72	71	69	67	68	69	69	68	67	68	67	69	70	71	69	72	70	--	71
Minimum	69	68	70	68	67	67	67	67	65	64	64	65	65	64	63	65	65	62	63	63	63	65	63	62	63	64	65	66	66	65	--	65	

SAN JOAQUIN RIVER BASIN--Continued

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

LOCATION.--Lat 37°04'45", long 119°33'35", temperature recorder at gaging station on left bank, 1.1 miles downstream from Kerckhoff powerhouse, Fresno County, 1.4 miles downstream from Big Sandy Creek, and 3.8 miles southeast of Prather.

DRAINAGE AREA.--1,481 square miles.

RECORDS AVAILABLE.--Water temperatures: November 1960 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 41°F on many days in January, Mar. 8.

EXTREMES, 1960-67.--Water temperatures: Maximum (1960-66), 73°F Aug. 22, 1961; minimum, 38°F several days in January 1961.

REMARKS.--Sensing unit destroyed by high water of May 21.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	66	66	65	65	65	65	65	65	64	64	64	64	64	63	62	62	62	61	61	61	61	61	60	60	60	60	60	60	60	60	60	62	
Minimum	64	65	65	64	64	65	65	64	64	64	64	64	63	62	62	62	61	61	61	61	61	60	60	60	60	60	60	60	60	60	60	62	
November																																	
Maximum	60	60	59	59	59	59	58	58	58	58	58	58	58	57	57	58	58	57	57	57	57	57	57	56	55	55	54	54	54	54	57		
Minimum	60	59	59	59	59	58	58	58	58	58	58	58	57	57	57	57	57	57	57	57	57	57	56	55	54	54	54	54	54	53	56		
December																																	
Maximum	54	54	53	52	52	52	51	50	48	49	49	49	49	49	49	48	48	48	48	48	49	49	47	48	48	48	48	47	46	46	49		
Minimum	53	53	52	51	51	51	50	48	48	48	49	49	49	49	47	47	47	48	48	48	48	47	47	47	47	47	46	46	46	45	48		
January																																	
Maximum	45	45	45	43	43	43	43	43	42	41	41	41	41	41	41	41	42	42	42	41	41	41	41	41	41	41	41	41	42	44	42		
Minimum	45	44	42	42	43	43	43	42	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	42	43		
February																																	
Maximum	43	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	--	--	42		
Minimum	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	--	--	--		
March																																	
Maximum	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	43	43	43	43	43	43	43	43	43	44	43	43	44	44	44	43	42	
Minimum	42	42	42	42	42	42	42	41	42	42	42	42	42	42	42	42	42	43	43	43	43	43	43	43	43	43	43	43	44	43	43	42	
April																																	
Maximum	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	44	44	44	43	44	43	44	44	44	44	44	44	43	--	43	
Minimum	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	44	43	43	43	43	43	43	43	43	43	44	43	43	43	
May																																	
Maximum	43	44	44	44	45	45	45	46	46	45	45	45	45	45	46	47	48	48	49	49	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	43	43	44	44	45	44	45	45	45	45	45	45	45	45	45	45	47	47	48	48	--	--	--	--	--	--	--	--	--	--	--	--	
June																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
July																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
August																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
September																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

SAN JOAQUIN RIVER BASIN--Continued

11-2645. MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.
(Hydrologic bench-mark station)

LOCATION.--Lat 37°43'54", long 119°33'28", temperature recorder at gaging station on right bank, 10 feet downstream from foot-bridge at Happy Isles, Mariposa County, 0.4 mile downstream from Illilouette Creek, and 2.0 miles southeast of Yosemite National Park headquarters.

DRAINAGE AREA.--181 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 62°F on several days in August; minimum, freezing point on many days during winter months.

EXTREMES, 1965-67.--Water temperatures: Maximum (1966-67), 62°F on several days during August 1967; minimum, freezing point on many days during winter months.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1966 to September 1967																																		
Month	Day																															Average		
	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			
October																																		
Maximum	53	53	53	52	51	51	51	51	52	51	51	50	49	48	48	47	46	47	47	47	47	47	49	48	49	48	48	47	47	47	47	49		
Minimum	51	52	52	51	50	51	50	49	49	50	50	48	46	45	44	44	44	44	45	46	44	44	46	46	47	46	46	46	45	45	45	47		
November																																		
Maximum	47	47	48	47	47	46	48	48	47	46	47	47	46	46	45	45	45	44	44	44	42	40	39	37	37	38	38	41	43	41	--	44		
Minimum	45	45	46	46	46	46	46	47	46	46	46	46	45	45	45	45	44	42	42	42	40	39	36	36	36	36	37	38	40	38	--	42		
December																																		
Maximum	41	41	39	37	38	40	39	39	39	39	39	38	39	37	38	38	37	38	38	37	36	35	34	34	33	32	32	32	32	32	32	36		
Minimum	39	39	37	35	36	39	36	35	36	38	37	36	36	35	36	36	35	36	36	35	34	33	33	33	32	32	32	32	32	32	32	35		
January																																		
Maximum	32	32	33	34	34	33	33	33	34	35	36	37	37	36	33	33	36	39	37	37	36	35	35	34	34	35	37	37	37	37	36	35		
Minimum	32	32	32	33	33	32	32	33	33	34	35	36	36	32	32	32	33	35	34	35	35	33	33	33	33	34	35	36	36	36	35	33		
February																																		
Maximum	34	34	36	38	39	39	39	39	40	40	40	40	40	39	37	36	35	36	38	35	36	38	38	38	37	36	39	40	--	--	--	37		
Minimum	32	32	34	33	36	36	36	36	37	37	37	38	38	35	35	34	33	33	34	33	33	34	34	36	33	33	34	36	--	--	--	34		
March																																		
Maximum	40	40	37	36	35	38	40	40	39	38	36	34	33	33	36	37	39	38	39	40	42	42	41	40	40	40	43	42	34	33	33	38		
Minimum	35	35	33	33	33	33	34	35	35	35	32	32	32	32	32	35	35	34	33	37	36	36	38	36	36	38	39	33	33	32	32	34		
April																																		
Maximum	35	35	37	38	39	39	36	39	41	38	38	39	42	41	38	35	40	38	33	34	34	35	37	38	39	41	39	35	34	37	--	37		
Minimum	32	33	33	36	35	36	35	34	36	37	34	34	36	38	33	33	35	33	33	33	33	34	34	35	34	35	35	33	33	33	--	34		
May																																		
Maximum	40	42	42	41	43	45	46	46	42	41	41	43	44	45	46	46	45	45	45	47	46	46	46	47	47	47	46	45	46	44	40	44		
Minimum	33	37	37	39	39	38	38	40	39	37	36	35	36	37	39	39	39	38	38	39	40	40	40	40	41	41	41	40	39	39	38	38		
June																																		
Maximum	41	45	48	46	43	49	49	49	48	49	48	47	47	49	49	48	51	52	50	53	52	51	50	50	50	51	51	52	52	53	--	49		
Minimum	37	38	39	40	42	41	42	41	42	41	42	42	42	42	42	43	44	45	45	45	46	44	44	44	44	44	45	45	46	47	--	42		
July																																		
Maximum	53	54	53	54	54	55	55	55	55	55	56	57	56	55	55	55	55	56	56	56	57	57	58	58	58	59	58	59	60	60	59	56		
Minimum	48	48	48	49	51	51	50	50	49	48	49	51	53	53	53	52	52	51	50	51	53	54	54	56	56	56	56	57	58	58	55	52		
August																																		
Maximum	60	60	60	60	60	59	59	59	60	61	61	61	61	62	62	61	62	62	62	62	61	61	60	60	59	59	58	58	59	59	58	60		
Minimum	57	57	58	57	57	54	53	54	54	57	56	58	59	60	60	58	60	60	59	60	60	60	60	58	59	57	58	56	55	54	55	57		
September																																		
Maximum	58	58	60	60	57	58	57	56	55	55	54	55	56	56	56	55	54	54	54	54	55	55	55	55	54	54	55	55	55	55	--	55		
Minimum	57	56	58	57	56	56	56	54	51	51	51	51	54	54	53	51	52	54	52	52	52	54	54	52	52	54	55	54	54	51	--	53		

SAN JOAQUIN RIVER BASIN--Continued

11-2831. LILY CREEK NEAR PINECREST, CALIF.

LOCATION.--Lat 38°08'40", long 119°54'05", temperature recorder at gaging station on left bank 1500 feet downstream from Mud Lake, and 5.7 miles southeast of Pinecrest, Tuolumne County.

DRAINAGE AREA.--11.9 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 67°F Aug. 18; minimum, freezing point on many days during winter months.

EXTREMES, 1964-67.--Water temperatures: Maximum, 77°F Aug. 17, 1966; minimum, freezing point on many days during winter months.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	62	61	60	59	59	58	55	58	59	59	58	55	54	51	50	50	50	48	49	49	49	50	50	52	48	49	48	47	48	48	48	52	
Minimum	57	57	55	55	55	53	53	53	53	54	53	53	50	48	47	46	46	45	46	47	46	45	47	47	48	48	45	45	45	44	44	49	
November																																	
Maximum	47	48	47	47	46	45	42	42	41	42	42	43	43	43	43	43	43	42	42	40	39	38	38	38	38	38	38	38	40	40	--	41	
Minimum	44	44	45	44	43	42	42	41	41	41	41	42	42	42	43	39	40	41	40	39	39	38	38	38	38	38	38	38	38	39	--	40	
December																																	
Maximum	40	39	38	38	38	38	38	38	38	38	38	38	38	38	37	37	37	37	37	36	36	36	36	35	35	35	35	35	34	34	34	36	
Minimum	39	38	38	38	38	38	38	38	38	38	38	38	38	38	37	37	37	37	36	36	36	36	35	35	35	35	35	34	34	34	34	36	
January																																	
Maximum	34	33	33	33	33	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	
Minimum	33	33	33	33	33	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	
February																																	
Maximum	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	--	--	--	32	
Minimum	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	--	--	--	32	
March																																	
Maximum	32	32	32	32	32	32	33	34	35	34	33	32	32	32	32	32	32	32	32	32	32	32	32	32	32	33	35	35	32	32	32	32	
Minimum	32	32	32	32	32	32	32	32	33	33	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	33	32	32	32	32	32	
April																																	
Maximum	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	--	--	32	
Minimum	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	--	--	32	
May																																	
Maximum	32	32	32	32	32	32	32	32	32	32	34	36	36	36	35	34	34	34	38	36	36	36	36	36	36	37	37	36	37	36	36	34	
Minimum	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	33	35	35	35	35	35	36	36	36	35	35	35	33	
June																																	
Maximum	36	41	37	35	39	40	39	39	39	39	39	39	40	41	42	41	41	40	41	43	43	44	45	49	47	49	48	50	49	50	--	42	
Minimum	34	35	35	35	35	35	36	37	37	37	37	37	38	38	38	38	38	38	39	39	38	39	39	40	41	41	42	43	42	44	--	38	
July																																	
Maximum	52	53	53	53	54	54	54	55	55	57	57	57	57	58	56	55	54	58	58	59	59	60	60	61	63	63	63	64	64	65	66	57	
Minimum	44	45	46	47	48	48	49	48	48	49	50	50	51	52	52	50	51	52	52	52	53	54	55	56	56	57	57	58	58	58	51	51	
August																																	
Maximum	66	65	65	65	65	64	62	61	61	63	63	64	65	66	66	64	66	66	66	66	66	66	66	65	62	62	62	62	61	64	65	64	
Minimum	58	59	60	60	59	58	57	58	59	60	61	62	63	64	63	62	63	63	62	62	62	62	62	63	62	59	59	59	59	60	61	60	
September																																	
Maximum	65	64	62	63	63	62	62	62	62	61	60	62	63	63	63	63	61	58	61	63	62	60	59	56	56	58	60	60	59	57	--	61	
Minimum	62	61	61	61	60	58	59	59	58	56	56	56	57	57	57	57	58	57	56	57	58	56	54	53	54	55	56	57	55	--	57	57	

SAN JOAQUIN RIVER BASIN--Continued

11-2900. TUOLUMNE RIVER AT MODESTO, CALIF.

LOCATION.--Lat 37°37'38", long 120°59'20", temperature recorder at gaging station on left bank at bridge on U.S. Highway 99 in Modesto, Stanislaus County, and 0.2 mile downstream from Dry Creek.

DRAINAGE AREA.--1,884 square miles.

RECORDS AVAILABLE.--Water temperatures: July 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 84°F Aug. 15; minimum, 48°F on several days during December to February.

EXTREMES, 1965-67.--Water temperatures: Maximum, 84°F Aug. 7, 1966, Aug. 15, 1967; minimum, 46°F on several days during January to March 1966.

REMARKS.--Clock stopped July 3-26; temperature range, 62°F to 74°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	--	--	--	--	72	71	69	70	71	71	69	69	67	65	63	63	63	64	64	64	64	63	63	64	65	64	64	64	63	63	63	63	65
Minimum	--	--	--	--	68	67	67	67	68	68	67	67	64	62	61	60	60	61	62	63	62	61	61	61	62	62	62	62	61	61	61	61	63
November																																	
Maximum	63	63	63	62	62	62	61	61	61	60	60	60	61	61	61	61	61	62	61	62	62	61	60	59	57	57	56	59	59	60	--	60	
Minimum	61	61	62	61	61	60	60	60	59	59	59	59	60	60	60	60	60	60	60	60	59	60	59	57	55	55	54	56	58	58	--	59	
December																																	
Maximum	59	59	58	58	57	57	56	55	55	54	54	54	53	52	52	52	51	51	51	51	51	51	51	51	51	51	50	50	49	49	49	52	
Minimum	58	58	57	57	57	56	55	54	54	54	54	53	52	52	51	51	51	51	51	51	51	51	51	51	51	51	50	49	49	49	49	52	
January																																	
Maximum	49	49	49	49	49	49	49	49	50	50	50	50	50	50	50	51	51	51	51	50	50	51	52	52	52	51	51	52	52	53	54	53	50
Minimum	48	48	49	48	48	48	48	48	48	48	48	49	50	49	49	50	50	50	50	50	50	50	51	50	50	49	50	51	52	52	53	52	49
February																																	
Maximum	52	51	49	50	50	49	50	50	50	49	49	50	50	50	49	50	50	51	51	50	50	51	51	51	50	50	51	51	51	--	--	--	50
Minimum	50	49	49	49	49	49	49	49	49	49	49	49	49	49	48	48	49	49	51	50	50	50	50	50	50	49	49	49	50	--	--	--	49
March																																	
Maximum	52	52	52	52	52	54	55	55	56	55	54	52	53	52	52	52	52	52	52	52	52	52	53	53	53	53	54	54	54	52	52	52	52
Minimum	50	50	50	50	50	51	52	52	53	54	52	51	51	51	50	51	51	51	51	51	51	51	51	52	52	52	52	53	52	53	52	51	51
April																																	
Maximum	51	52	52	53	53	54	52	52	52	53	52	53	53	53	53	53	55	54	53	53	54	52	53	53	53	54	54	53	53	54	--	52	
Minimum	50	51	52	52	52	52	52	51	52	52	51	52	52	52	52	52	52	52	53	52	52	52	52	52	52	52	52	53	52	52	52	--	51
May																																	
Maximum	55	56	57	57	56	57	58	58	57	55	54	54	58	60	60	60	59	59	59	59	59	61	60	60	60	60	61	60	59	58	58	58	
Minimum	53	53	55	55	54	54	55	55	55	54	53	53	53	57	57	56	56	56	56	56	56	57	58	58	58	57	58	58	57	57	56	55	
June																																	
Maximum	57	56	58	59	58	56	58	60	60	58	58	58	58	60	64	65	61	59	59	60	60	60	60	62	62	62	62	62	63	63	--	59	
Minimum	56	56	56	57	56	55	56	58	58	57	57	57	57	57	59	61	58	58	58	58	58	58	58	60	60	61	61	61	61	61	--	58	
July																																	
Maximum	63	63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	75	78	80	81	81	--
Minimum	61	61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	73	73	74	75	75	--
August																																	
Maximum	82	81	82	83	83	81	81	81	82	81	81	82	82	83	84	83	83	83	83	83	82	82	83	83	82	80	83	82	79	80	81	80	81
Minimum	75	76	76	77	76	76	75	76	76	75	75	76	77	78	77	76	76	76	77	76	76	76	77	77	76	76	76	75	73	74	74	75	75
September																																	
Maximum	79	79	79	77	78	79	78	77	78	78	77	78	77	77	77	76	76	76	77	77	76	77	75	76	76	76	77	77	75	74	--	76	
Minimum	73	74	75	74	73	73	74	72	73	72	72	72	72	72	72	72	72	71	72	73	73	73	73	73	72	71	72	73	72	73	71	--	72

SAN JOAQUIN RIVER BASIN--Continued

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

LOCATION.--Lat 38°14'49", long 120°01'51", temperature recorder at gaging station on left bank 200 feet upstream from Donnell powerhouse, 800 feet downstream from Hells Half Acre Bridge, 1.1 miles upstream from Cow Creek, and 4.7 miles northwest of Pinecrest, Tuolumne County.

DRAINAGE AREA.--287 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 70°F sometime during period Aug. 3-15; minimum, freezing point on several days in December, January, and March.

EXTREMES, 1965-67.--Water temperatures: Maximum (1966-67), 70°F sometime during period Aug. 3-15, 1967; minimum, freezing point on several days in December 1965, January and December 1966, and January and March 1967.

REMARKS.--Clock stopped Nov. 25-29, Dec. 31 to Jan. 2, Apr. 20-24, July 11-30, Aug. 3-15; temperature ranges, 38°F to 45°F, 33°F to 37°F, 35°F to 41°F, 52°F to 62°F, and 56°F to 70°F, respectively.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	64	63	62	61	60	60	59	60	60	60	59	59	57	54	53	53	53	53	53	52	51	52	53	54	55	52	53	53	53	53	53	56	
Minimum	59	57	56	55	55	55	55	54	55	55	54	55	52	48	48	47	47	47	48	47	47	46	48	49	50	48	48	48	48	48	48	50	
November																																	
Maximum	52	52	52	53	51	50	49	51	48	49	48	49	49	48	48	48	49	49	48	48	46	42	42	41	--	--	--	--	--	--	--	48	
Minimum	49	48	49	48	47	47	47	47	45	45	47	46	47	45	47	47	47	46	45	46	41	41	40	38	--	--	--	--	--	--	--	45	
December																																	
Maximum	42	42	42	41	41	40	40	39	40	39	40	42	41	40	40	40	41	--	--	--	41	41	40	39	38	34	34	35	35	36	37	--	39
Minimum	41	41	40	40	37	39	39	37	38	40	39	39	39	38	38	38	38	--	--	--	40	39	38	37	34	32	32	33	33	34	33	--	37
January																																	
Maximum	--	37	37	38	39	35	36	36	36	36	39	40	40	41	41	41	40	39	39	38	38	37	36	35	35	37	38	39	39	39	40	38	
Minimum	--	33	36	36	35	33	33	33	34	36	37	38	38	38	39	38	38	36	36	37	35	35	34	32	32	35	36	37	38	38	38	35	
February																																	
Maximum	39	40	42	42	43	42	43	43	43	44	43	44	43	42	37	39	41	42	--	--	41	41	41	41	41	41	42	43	--	--	--	41	
Minimum	38	36	38	38	39	38	39	39	39	40	40	40	41	38	34	35	38	39	--	--	38	36	37	39	38	36	38	38	--	--	--	38	
March																																	
Maximum	42	43	41	39	40	41	43	43	43	42	39	34	33	37	38	--	--	--	--	43	45	44	41	43	42	42	44	42	39	37	35	40	
Minimum	38	38	35	35	33	35	37	37	38	39	33	32	32	32	33	--	--	--	--	39	39	39	38	38	38	40	40	34	34	34	34	36	
April																																	
Maximum	38	38	41	39	40	41	38	41	44	40	39	41	45	41	37	40	42	37	39	--	--	--	--	--	43	44	41	40	38	41	--	40	
Minimum	34	35	35	36	35	35	34	37	37	36	35	36	38	37	36	34	37	34	35	--	--	--	--	--	37	38	37	35	35	35	--	35	
May																																	
Maximum	45	47	46	44	45	49	49	49	43	43	43	43	45	47	49	50	49	49	48	49	50	50	49	49	50	48	47	47	46	46	42	47	
Minimum	36	39	39	40	40	40	41	41	41	38	38	37	39	39	40	40	40	40	40	41	41	41	41	41	41	42	43	43	42	42	41	40	
June																																	
Maximum	42	45	49	48	45	49	49	49	48	49	48	48	48	49	49	49	50	49	49	49	49	49	50	50	51	51	51	53	53	53	--	49	
Minimum	41	41	42	43	43	43	43	43	43	43	44	43	43	44	45	46	46	46	46	46	45	45	46	47	47	48	48	48	49	49	--	44	
July																																	
Maximum	53	54	53	54	55	56	56	57	57	58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	49	49	48	49	50	50	50	50	51	51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
August																																	
Maximum	65	68	--	--	--	--	--	--	--	--	--	--	--	--	--	69	69	69	69	69	68	68	68	68	64	66	66	66	66	65	--	--	
Minimum	61	62	--	--	--	--	--	--	--	--	--	--	--	--	--	62	62	62	62	62	61	61	62	62	62	60	60	60	59	59	--	--	
September																																	
Maximum	65	64	65	64	65	64	64	64	63	62	62	62	63	62	62	62	62	60	61	62	61	61	61	59	62	63	64	64	63	62	--	62	
Minimum	59	59	60	60	59	59	58	58	58	56	55	55	56	57	56	56	56	57	57	56	57	57	57	57	56	56	57	58	59	59	57	--	57

SAN JOAQUIN RIVER BASIN--Continued

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

LOCATION.--Lat 37°51'01", long 120°38'13", 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, Stanislaus County.

DRAINAGE AREA.--986 square miles.

RECORDS AVAILABLE.--Water temperatures: February 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 71°F on several days in October and August and sometime during period Aug. 17 to Sept. 30; minimum, 46°F on several days in December and January.

REMARKS.--Clock stopped Aug. 17 to Sept. 30; temperature range, 68°F to 71°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	71	71	71	71	71	70	70	70	70	69	69	69	68	67	66	65	64	64	63	63	63	63	63	64	64	64	64	64	64	63	62	66
Minimum	71	71	70	70	70	69	69	69	68	68	68	68	67	66	65	64	63	63	62	62	62	62	62	63	64	64	64	63	62	61	65	
November																																
Maximum	62	61	61	61	61	61	61	61	61	61	60	60	60	59	59	59	59	59	60	60	60	60	59	59	58	58	58	58	58	--	59	
Minimum	60	60	60	60	60	61	61	61	61	60	60	60	59	59	59	59	59	59	59	60	60	60	59	58	58	58	57	57	58	--	59	
December																																
Maximum	58	58	58	58	58	57	56	56	56	56	54	53	51	51	50	50	49	49	49	49	49	49	49	49	49	49	48	47	47	46	51	
Minimum	57	57	57	57	57	56	56	56	56	54	53	51	51	50	50	49	49	49	49	49	49	49	49	49	49	49	48	47	46	46	51	
January																																
Maximum	46	46	47	47	48	48	48	47	47	47	47	47	47	46	46	46	47	47	47	47	47	47	47	47	47	47	47	47	--	--	46	
Minimum	46	46	46	47	47	47	47	47	47	46	46	46	46	46	46	46	46	47	47	47	47	47	47	47	47	47	47	47	--	--	46	
February																																
Maximum	48	48	48	48	48	48	48	48	48	48	48	48	48	48	47	47	47	47	48	48	48	48	48	48	48	48	48	48	48	--	--	47
Minimum	47	48	48	48	48	48	48	48	48	48	48	48	47	47	47	47	47	47	47	47	47	47	47	48	48	48	47	47	--	--	47	
March																																
Maximum	49	49	49	49	49	49	50	50	52	52	51	50	49	50	49	51	52	52	52	52	52	52	52	52	52	51	51	51	51	51	50	50
Minimum	48	48	48	48	48	49	49	49	50	51	50	49	49	49	49	49	50	51	51	51	51	51	51	51	51	51	50	51	50	50	50	49
April																																
Maximum	51	51	51	51	51	52	52	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	52	51	52	52	51	51	51	51	--	51
Minimum	50	50	50	50	50	50	51	51	51	51	51	51	51	50	50	50	50	50	51	51	51	51	51	51	51	51	51	51	50	50	--	50
May																																
Maximum	51	52	52	52	53	53	53	54	54	54	54	55	55	55	55	55	55	55	55	55	55	56	56	56	57	57	57	56	56	56	56	54
Minimum	50	50	51	51	52	52	53	53	54	54	54	54	54	54	54	54	54	54	55	55	55	55	56	56	56	56	55	55	55	55	53	
June																																
Maximum	56	55	55	55	56	56	56	56	56	56	56	56	56	57	57	57	57	57	58	58	58	58	59	59	59	59	59	59	60	60	--	57
Minimum	55	55	54	54	55	55	55	55	55	55	55	55	56	56	56	56	56	56	56	56	57	57	57	58	58	58	58	58	58	59	--	56
July																																
Maximum	60	61	61	62	62	63	63	63	62	62	62	62	66	66	62	62	63	65	63	64	64	67	67	67	68	68	68	68	69	69	70	64
Minimum	59	60	60	61	62	62	62	60	60	60	60	62	62	62	60	60	62	63	62	62	62	65	65	65	66	66	66	66	66	67	67	62
August																																
Maximum	70	70	71	71	70	70	70	69	70	70	70	70	70	70	70	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	68	69	69	69	68	68	68	68	68	69	68	68	69	69	69	68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SAN JOAQUIN RIVER BASIN--Continued

11-3035. SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.
(International hydrological decade station)

LOCATION.--Lat 37°40'34", long 121°15'55", at gaging station in El Pescadero Grant, 80 feet upstream from Durham Ferry highway bridge, 2.6 miles downstream from Stanislaus River, and 3.2 miles northeast of Vernalis, San Joaquin County.

DRAINAGE AREA.--13,540 square miles.

RECORDS AVAILABLE.--Chemical analyses: March 1951 to September 1967.

Water temperatures: March 1951 to September 1967.

Sediment records: November 1956 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 83°F Aug. 14, 16; minimum, 44°F Dec. 29, Jan. 3, 14, 17, 19.

Sediment concentrations: Maximum daily, 291 ppm Jan. 23; minimum daily, 20 ppm May 4.

Sediment loads: Maximum daily, 7,330 tons July 1; minimum daily, 98 tons Nov. 1.

EXTREMES, 1951-67.--Water temperatures: Maximum, 85°F June 14, Aug. 9, Sept. 2, 1966; minimum, 37°F Jan. 24, 1962.

Sediment concentrations (1956-67): Maximum daily, 1,590 ppm Dec. 25, 1964; minimum daily, 9 ppm Jan. 4, 1960, Nov. 18, 1961.

Sediment loads (1956-67): Maximum daily, 54,100 tons Dec. 25, 1964; minimum daily, 2 tons Aug. 10, 1961.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 5, 1966.....	940	26	0.00	50	24	120	5.0	184	0	84	178	0.3	6.6	0.20	586			224			1010	8.1
Nov. 9.....	1440	20	.00	34	17	79	2.8	126	0	59	112	.1	4.1	.20	390			155			691	8.2
Dec. 7.....	3150	16	.01	25	11	52	4.8	93	0	50	62	.1	3.7	.20	271			108			475	7.6
Jan. 4, 1967.....	2400	16	.04	34	18	88	2.2	115	0	97	106	.2	3.3	.50	423			159			733	8.0
Feb. 1.....	8070	14	.10	14	7.2	25	2.4	70	0	26	25	.1	2.8	.10	151			64			253	7.9
Mar. 2.....	3750	14	.01	24	12	56	1.5	73	0	62	70	.1	1.8	.20	278			110			495	7.5
Apr. 5.....	7620	14	.02	17	7.4	32	1.5	66	0	29	38	.1	2.5	.10	175			73			300	7.7
May 3.....	23600	14	—	12	4.6	13	1.9	58	0	12	12	.1	1.0	.00	100			49			168	7.6
June 6.....	20100	12	.09	9.4	3.1	10	1.3	40	0	9.0	9.5	.1	1.4	.00	76			36			124	7.2
July 25.....	3470	17	.01	25	17	57	2.5	102	0	53	78	.1	3.1	.10	303			132			555	7.8
Aug. 9.....	2130	19	.02	41	16	70	3.0	133	0	75	104	.1	3.8	.30	398			168			704	8.1
Sept. 11.....	1990	31	.02	38	16	72	3.8	138	2	55	101	.2	13	.20	400			161			668	8.3

Date of collection	Strontium (Sr)	Lithium (Li)	Total phosphate (PO ₄)	Dissolved oxygen (DO) (mg/l)
Oct. 5, 1966.....	0.40	0.01	0.67	—
Nov. 9.....	.20	.02	.48	8.9
Dec. 7.....	.13	.02	.84	9.1
Jan. 4, 1967.....	.32	.01	.36	10.4
Feb. 1.....	.16	.01	.55	9.9
Mar. 2.....	.20	.01	.21	10.0
Apr. 5.....	.20	.01	.21	—
May 3.....	.11	.01	.32	8.1
June 6.....	.10	.01	.30	8.4
July 25.....	.25	.01	.49	—
Aug. 9.....	.10	.02	.53	9.4
Sept. 11.....	.30	.01	.36	9.8

SAN JOAQUIN RIVER BASIN--Continued

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

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	72	70	70	69	72	72	70	69	72	71	72	70	64	69	64	70	72	69	69	65	63	64	65	60	62	65	64	64	64	64	64	67
November	64	60	65	64	63	62	58	60	65	62	64	64	63	64	60	62	60	58	60	57	58	58	55	54	55	50	50	55	56	60	--	59
December	58	56	54	53	52	53	51	52	50	52	50	52	49	51	52	49	49	49	48	54	47	49	46	49	45	47	45	47	44	45	45	49
January	46	45	44	45	--	45	46	48	45	49	49	46	49	44	45	46	44	45	44	47	50	49	48	47	49	49	48	50	52	53	54	47
February	53	53	55	55	55	56	53	53	54	52	53	54	54	55	55	57	53	56	54	57	53	50	51	52	55	52	52	--	--	--	--	53
March	53	55	53	53	53	53	53	53	53	56	56	52	53	52	54	54	55	57	53	56	53	52	52	52	55	54	57	55	53	52	50	53
April	52	54	52	52	55	53	54	54	55	53	52	53	56	53	52	53	55	53	53	52	52	54	54	52	--	55	55	54	54	54	--	53
May	55	53	60	52	52	60	62	65	62	63	59	62	60	60	62	64	66	65	65	68	68	67	66	68	64	64	63	52	62	62	60	61
June	58	60	58	61	62	62	59	60	62	64	62	62	62	65	65	67	68	68	65	65	64	65	66	65	66	64	68	66	68	68	--	63
July	69	58	68	58	67	68	67	68	67	68	72	71	73	76	76	74	73	73	65	73	70	73	73	74	78	71	--	77	77	79	76	71
August	78	78	76	63	74	74	77	78	73	76	77	78	80	83	80	83	80	78	81	78	78	80	78	78	77	75	80	78	76	68	78	77
September	79	78	82	80	82	81	80	74	77	80	77	79	75	75	75	76	74	73	73	76	76	74	73	73	77	76	76	77	74	--	74	76

SAN JOAQUIN RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	780	76	160	1040	35	98	1450	73	286
2..	785	67	142	1040	42	118	1510	58	236
3..	857	75	174	1200	48	156	1620	55	241
4..	906	64	157	1340	50	181	1680	61	277
5..	940	67	170	1340	39	141	1730	71	332
6..	955	68	175	1350	48	175	1820	111	545
7..	995	68	183	1420	43	165	3150	181	1540
8..	955	63	162	1440	48	187	5660	230	3510
9..	1000	65	176	1440	51	198	6660	129	2320
10..	1000	58	157	1450	58	227	7510	196	3970
11..	945	60	153	1450	55	215	8470	120	2740
12..	1060	59	169	1430	50	193	8170	102	2250
13..	1150	63	196	1440	47	183	6960	80	1500
14..	1180	59	188	1420	44	169	5860	72	1140
15..	1220	55	181	1390	48	180	5170	68	949
16..	1260	47	160	1460	46	181	4900	54	714
17..	1300	46	161	1500	50	203	4760	56	720
18..	1260	49	167	1490	47	189	4630	61	763
19..	1220	50	165	1470	45	179	4540	55	674
20..	1260	58	197	1410	39	148	4470	46	555
21..	1280	54	187	1200	41	133	4440	63	755
22..	1290	52	181	1100	40	119	4420	55	656
23..	1320	55	196	1220	50	165	4400	44	523
24..	1320	59	210	1430	46	178	4400	46	546
25..	1190	45	145	1460	36	142	4300	82	952
26..	1100	43	128	1240	32	107	4200	47	533
27..	1100	41	122	1200	36	117	4160	48	539
28..	1120	43	130	1190	54	174	4100	47	520
29..	1140	43	132	1110	53	159	3670	34	337
30..	1120	42	127	1220	75	247	3430	44	407
31..	1130	40	122	--	--	--	3400	37	340
Total	34138	--	5073	39890	--	5027	135640	--	31370
	JANUARY			FEBRUARY			MARCH		
1..	3100	25	209	8070	171	3730	4040	34	371
2..	2710	30	220	7880	124	2640	3750	38	385
3..	2490	23	155	8260	146	3260	3590	46	446
4..	2400	22	143	8270	123	2750	3420	54	499
5..	2610	24	169	7930	100	2140	3240	69	604
6..	2590	27	189	7600	102	2090	2790	44	331
7..	2600	27	190	7370	118	2350	2480	50	335
8..	2560	25	173	7410	135	2700	2510	43	291
9..	2440	30	198	7610	128	2630	2350	47	298
10..	2390	34	219	7740	108	2260	2240	48	290
11..	2470	34	227	7770	99	2080	2340	41	259
12..	2340	42	265	7480	94	1900	3420	53	489
13..	2200	42	249	6830	89	1640	2520	46	313
14..	2150	41	238	6300	74	1260	3210	87	754
15..	2050	34	188	5880	73	1160	4130	61	680
16..	1940	32	168	5800	58	908	5500	94	1400
17..	1900	32	164	5740	46	713	8630	173	4030
18..	1910	36	186	5530	50	747	12100	206	6730
19..	1920	44	228	5300	54	773	14600	164	6460
20..	1940	45	236	5130	55	762	15900	94	4040
21..	1980	47	251	5110	58	800	16300	67	2950
22..	2320	78	489	4990	46	620	15500	66	2760
23..	3920	291 S	3370	4990	46	620	13600	76	2790
24..	4590	148 S	1900	5180	50	699	10500	86	2440
25..	4720	230 S	3070	5010	45	609	8390	82	1860
26..	5650	267 S	4090	4630	47	588	7380	65	1300
27..	4950	102	1360	4260	50	575	6660	76	1370
28..	5660	138	2110	4100	54	598	6050	70	1140
29..	6230	142	2390	--	--	--	5450	66	971
30..	5960	127	2040	--	--	--	4990	55	741
31..	6760	169	3080	--	--	--	5050	58	791
Total	99450	--	28164	178170	--	43602	202630	--	48118

S Computed by subdividing day.

SAN JOAQUIN RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	5910	66	1050	24900	31	2080	22500	40	2430
2..	7930	78	1670	24200	22	1440	23100	44	2740
3..	8830	68	1620	23600	23	1470	23200	48	3010
4..	8920	60	1450	23200	20	1250	22000	46	2730
5..	7620	62	1280	22800	22	1350	20300	53	2900
6..	6740	70	1270	22300	26	1570	20100	57	3090
7..	7490	58 A	1170	21800	30	1770	21500	54	3130
8..	10300	66 B	1840	21200	33	1890	21700	51	2990
9..	12700	83 A	2850	20600	36	2000	20500	53	2930
10..	13700	92	3400	20200	37	2020	20200	51	2780
11..	13900	76	2850	20500	35	1940	20600	53	2950
12..	14000	83	3140	21500	34	1970	21400	58	3350
13..	13800	63	2350	21700	32	1870	22200	60	3600
14..	13900	68	2550	19800	36	1920	22000	60	3560
15..	14000	68	2570	18500	43	2150	19800	68	3640
16..	13000	70	2460	18300	41	2030	17700	83	3970
17..	12100	69	2250	18500	37	1850	16200	92	4020
18..	11500	69	2140	18500	36	1800	16100	93	4040
19..	11800	76	2420	18000	37	1800	16800	85	3860
20..	14100	80	3050	17400	39	1830	17800	75	3600
21..	15400	68	2830	16900	35	1600	18600	66	3310
22..	15800	68	2900	16300	38	1670	18700	61	3080
23..	17000	76	3490	16600	39	1750	18300	65	3210
24..	18400	63	3130	17800	38	1830	18000	60	2920
25..	20400	55	3030	19300	39	2030	18400	60	2980
26..	23700	68	4350	21000	35	1980	19200	58	3010
27..	25000	47	3170	21000	34	1930	20200	58	3160
28..	25200	43	2930	20700	41	2290	20900	68	3840
29..	25800	38	2650	21000	42	2380	21200	69	3950
30..	25900	31	2170	21300	40	2300	20800	87	4890
31..	--	--	--	21900	40	2370	--	--	--
Total	434840	--	74030	631300	--	58130	600000	--	99670
	JULY			AUGUST			SEPTEMBER		
1..	20400	133	7330	2360	104	660	1910	97	500
2..	20800	113	6350	2250	106	640	1980	100	535
3..	21100	90	5130	2340	109	690	2060	106	590
4..	21000	89	5050	2310	111	690	2100	105	595
5..	20300	85	4660	2130	114	660	2010	109	592
6..	19400	86	4500	2100	116	660	1910	104	536
7..	18900	87	4440	2130	119	680	1880	106	538
8..	17900	82	3960	2180	121	710	1870	111	560
9..	16900	80	3650	2130	124	710	1800	103	501
10..	15800	98	4180	2100	126 B	714	1890	100	510
11..	14400	113	4390	2040	126 B	694	1990	88	473
12..	13600	112	4110	2080	116 B	651	1990	89	478
13..	11900	135	4340	2110	103	987	1890	87	444
14..	10300	139	3870	2090	93	525	1870	92	465
15..	8270	137	3060	1980	105 B	561	1830	88	435
16..	6600	153	2730	1930	91 B	474	1910	87	449
17..	7030	144	2730	1890	82 B	418	1990	74	398
18..	7540	107	2180	1850	81 B	405	2040	66	364
19..	7190	94	1820	1830	79 B	390	2100	63	357
20..	6520	106	1870	1870	73 B	369	2040	60	330
21..	5520	122	1820	1930	68	354	1970	67	356
22..	4660	123	1550	1940	84	440	2030	70	384
23..	4240	126	1440	1860	83	417	2100	63	357
24..	3750	121	1230	1860	67	336	2160	57	332
25..	3470	130	1220	1890	78	398	2230	68	409
26..	3500	117	1100	1860	90	452	2220	62	372
27..	2970	101	810	1850	107	534	2190	61	361
28..	2620	88	623	1930	111	578	2140	61	352
29..	2440	86	567	1950	110	579	2290	61	377
30..	2460	99	660	1910	104	536	2470	56	373
31..	2460	101	670	1960	97	513	--	--	--
Total	323940	--	92040	62640	--	17025	60860	--	13323
Total discharge for year (cfs-days).....								2803498	
Total load for year (tons).....								515572	

A Computed from partly estimated-concentration graph.

B Computed from estimated-concentration graph.

SAN JOAQUIN RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Oct. 10, 1966.....	1330	71		1020	48		--	--	--	--	--	94	100	--	--			S
Nov. 15.....	1537	60		1380	46		--	--	--	--	--	92	100	--	--			S
Dec. 19.....	1550	48		4520	51		--	--	--	--	--	57	71	96	100			V
Jan. 25, 1967.....	1400	49		4840	246		--	--	--	--	--	90	93	98	100			V
Mar. 20.....	1505	56		16070	89		--	--	--	--	--	94	75	90	100			V
Apr. 26.....	1334	55		23860	101		--	--	--	--	--	39	47	60	98	100		V
July 24.....	1058	74		3730	101		12	28	48	60	69	97	99	99	100			SCBW
Aug. 10.....	1212	76		2120	160		9	25	43	54	63	88	98	100	--			SCBW

SAN JOAQUIN RIVER BASIN--Continued

11-3112. STOCKTON SHIP CHANNEL NEAR RINDGE PUMP ON RINDGE TRACT, CALIF.

LOCATION.--Lat 37°58'15", long 121°25'15", at boat landing at ship channel downstream from confluence with Fourteen Mile Slough, downstream from tidal gaging station, and approximately 9.6 miles northwest of Stockton, San Joaquin County.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

REMARKS.--No discharge records available.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 10, 1966....						79		150	0		101			0.3				137			650	7.8
Nov. 2.....						84		158	0		117			.3				150			733	7.8
Dec. 5.....						76		123	0		109			.2				151			699	8.1
Jan. 11, 1967....						65		82	0		102			.2				172			680	7.1
Feb. 7.....						28		73	0		33			.0				80			301	7.5
Mar. 27.....						28		66	0		33			.2				74			297	7.8
Apr. 17.....						15		53	0		18			.0				56			183	7.4
May 23.....						14		54	0		17			.1				50			182	7.9
June 22.....						12		38	0		14			.1				34			140	6.7
Aug. 24.....						48		95	0		65			.1				102			445	8.1
Sept. 12.....						64		130	0		85			.3				135			604	7.9

SAN JOAQUIN RIVER BASIN--Continued

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

LOCATION.--Lat 37°48'45", long 121°34'40", at Byron Road bridge, 1.1 miles upstream from Tracy Pumping Plant, Alameda-Contra Costa County line, and 9.2 miles northwest of Tracy, San Joaquin County.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

REMARKS.--No appreciable inflow between sampling point and gaging station.

Chemical analyses, in parts per million, July 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
July 14, 1966....	4160			20	12	52	--	86	0	--	86		--	0.1	--			98			487	7.7
Aug. 4.....	4180			18	13	64	--	80	0	--	104		--	.1	--			99			556	7.5
Sept. 7.....	2500			23	16	56	3.2	94	2	34	94		1.5	.2	299			125			541	8.4
Oct. 5.....	1880			--	--	103	--	169	0	--	148		--	.3	--			185			921	8.1
Nov. 10.....	865			54	23	119	--	166	0	--	179		--	.6	--			229			1060	7.8
Dec. 6.....	251			--	--	124	--	170	0	--	174		--	.6	--			228			1090	7.7
Jan. 3, 1967.....	861			--	--	78	--	101	0	--	108		--	.5	--			160			745	7.7
Feb. 2.....	215			--	--	80	--	96	0	--	101		--	.5	--			149			696	8.2
Mar. 2.....	1340			--	--	80	--	108	0	--	109		--	.5	--			171			760	7.9
Apr. 4.....	1170			--	--	12	--	54	0	--	15		--	.2	--			71			280	7.8
May 3.....	1200			16	4.1	15	1.5	63	0	13	18		.9	.1	144			57			198	8.1
June 6.....	1450			--	--	17	--	47	0	--	23		--	.1	--			50			195	7.1
July 6.....	1360			--	--	8.3	--	31	0	--	12		--	.1	--			28			116	7.3
Sept. 11.....	2290			40	21	92	4.2	145	0	85	125		3.7	.4	478			187			838	7.7

SAN JOAQUIN RIVER BASIN--Continued

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

LOCATION.--Lat 37°46'25", long 121°34'50", approximately 1 mile upstream from control gates into Mendota Pool and 2 miles north of Mendota, Fresno County.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

REMARKS.--No discharge records available.

Chemical analyses, in parts per million, July 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Cal- cium (Ca)	Mag- ne- sium (Mg)	Sodium (Na)	Po- tas- sium (K)	Bi- car- bon- ate (HCO ₃)	Car- bon- ate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluo- ride (F)	Ni- trate (NO ₃)	Bo- ron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		So- dium ad- sorp- tion ratio	Specific con- duct- ance (micro- mhos at 25°C)	pH
															Parts per million	Tons per acre- foot	Tons per day	Cal- cium, Mag- ne- sium	Non- car- bon- ate			
July 11, 1966....				23	15	50	--	97	0	--	75		--	0.1	--			119			492	8.0
Sept. 12.....				18	13	54	2.5	88	0	--	82		2.0	.2	295			97			505	7.5
Oct. 10.....				--	--	43	--	107	0	--	55		--	.2	--			107			444	8.1
Nov. 16.....				38	20	92	--	131	0	--	133		--	.4	--			177			811	8.2
Dec. 12.....				--	--	99	--	134	0	--	139		--	.5	--			187			903	8.0
Jan. 19, 1967....				--	--	135	--	150	0	--	168		--	.6	--			256			1220	8.0
Feb. 20.....				--	--	66	--	87	0	--	81		--	.4	--			143			605	7.7
Mar. 16.....				--	--	80	--	93	0	--	105		--	.5	--			169			761	8.1
Apr. 25.....				--	--	31	--	59	0	--	39		--	.2	--			80			326	8.1
May 8.....				22	4.4	32	1.6	59	0	40	38		15	.2	190			73			328	7.5
June 8.....				--	--	47	--	69	0	--	48		--	.3	--			110			475	7.2
July 7.....				--	--	2.2	--	25	0	--	2.2		--	.0	--			17			47	6.1
Sept. 14.....				17	10	34	2.2	78	0	35	39		1.2	.2	198			84			335	7.7

SAN JOAQUIN RIVER BASIN--Continued

11-3195. MOKELUMNE RIVER NEAR MOKELUMNE HILL, CALIF.

LOCATION.--Lat 38°18'46", long 120°43'09", temperature recorder at gaging station on downstream side of bridge, 1.2 miles northwest of Mokelumne Hill, Calaveras County, and 8 miles downstream from confluence of North and South Forks.

DRAINAGE AREA.--544 square miles.

RECORDS AVAILABLE.--Water temperatures: February 1961 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 76°F Aug. 5; minimum, 37°F on several days in January.

EXTREMES, 1961-67.--Water temperatures: Maximum, 76°F Aug. 5, 1967; minimum (1961-65, 1966-67), 37°F on several days in January 1967.

REMARKS.--Clock stopped July 4-12; temperature range, 54°F to 63°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	61	61	60	60	60	60	60	60	61	60	60	60	59	59	58	59	58	59	59	59	59	59	58	59	59	59	59	59	58	56	58	59	
Minimum	59	59	58	56	58	58	58	58	58	59	58	58	58	58	54	55	53	55	57	57	58	56	57	56	56	57	55	56	56	56	53	53	56
November																																	
Maximum	57	57	57	58	57	57	58	58	56	56	56	56	58	56	56	56	56	55	54	54	54	54	52	50	50	49	49	50	51	50	--	54	
Minimum	54	56	55	56	56	57	57	56	54	54	54	54	57	54	54	55	53	54	54	54	54	53	51	49	48	48	47	49	50	50	--	53	
December																																	
Maximum	52	49	48	50	48	49	47	47	46	46	46	46	46	46	46	45	44	44	44	44	44	43	43	43	42	42	42	41	40	39	39	40	44
Minimum	50	49	47	49	48	48	46	46	46	46	45	45	46	45	44	44	44	43	43	43	43	43	42	43	42	42	41	40	39	38	39	39	44
January																																	
Maximum	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	41	40	40	42	43	44	45	42	42	42	42	41	42	46	44	44	44	41
Minimum	38	38	38	38	39	38	38	38	37	37	37	37	38	37	38	38	37	37	38	38	40	42	41	41	40	40	40	40	41	42	42	43	39
February																																	
Maximum	45	45	45	45	46	45	46	46	47	47	46	47	47	47	48	44	43	44	44	44	44	45	43	44	44	45	45	45	--	--	--	45	
Minimum	44	44	44	44	45	44	45	45	45	45	45	45	46	45	44	43	42	43	43	43	43	44	42	42	43	44	43	43	43	--	--	--	43
March																																	
Maximum	44	48	47	47	46	47	47	48	49	48	47	46	44	44	45	49	47	48	48	48	50	49	49	48	47	48	48	48	47	45	44	47	
Minimum	44	45	45	44	44	44	45	46	46	47	45	44	43	42	42	44	44	46	46	46	47	48	47	46	46	46	46	46	45	44	41	44	
April																																	
Maximum	44	44	46	46	47	48	48	48	49	49	48	48	48	48	48	46	46	47	46	46	46	46	47	48	48	48	48	49	48	47	48	--	47
Minimum	40	43	43	45	45	46	46	46	47	47	45	45	47	47	45	44	45	44	45	44	44	45	45	46	46	46	47	47	46	45	46	--	45
May																																	
Maximum	49	50	51	51	51	53	55	54	52	51	51	51	52	53	55	56	55	55	56	56	55	55	55	55	55	55	55	54	55	52	50	53	
Minimum	47	48	49	49	48	50	51	51	49	48	48	49	50	51	53	53	52	52	53	54	54	53	53	53	52	52	52	51	51	49	48	50	
June																																	
Maximum	50	50	52	55	53	53	56	55	55	55	55	55	54	56	57	57	58	57	57	59	58	57	58	58	58	58	58	59	60	61	--	56	
Minimum	48	46	48	51	51	51	52	54	54	53	53	53	52	53	54	54	54	54	54	53	54	55	54	54	55	55	55	55	54	55	57	--	53
July																																	
Maximum	62	62	61	--	--	--	--	--	--	--	--	--	--	64	64	64	64	62	62	60	60	60	60	60	60	60	60	60	60	62	61	--	
Minimum	57	57	58	--	--	--	--	--	--	--	--	--	--	60	60	60	60	60	59	58	58	58	58	58	57	57	57	56	57	58	58	--	
August																																	
Maximum	61	61	61	61	76	75	63	61	60	58	59	59	59	59	59	58	60	60	59	59	59	59	58	58	58	60	59	58	58	57	57	60	
Minimum	58	58	58	58	58	60	59	57	57	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	55	55	55	55	56	
September																																	
Maximum	60	58	58	57	57	58	57	57	57	57	57	56	56	56	56	68	59	58	57	56	56	56	56	56	56	56	57	57	58	58	--	57	
Minimum	55	54	55	55	55	55	55	54	54	54	54	54	54	54	54	54	55	54	54	54	54	54	54	54	54	54	54	54	54	54	--	54	

SAN JOAQUIN RIVER BASIN--Continued

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

LOCATION.--Lat 38°13'15", long 121°02'20", temperature recorder at gaging station on left bank 0.7 mile downstream from Murphy Creek, and 3.4 miles northeast of Clements, San Joaquin County.

DRAINAGE AREA.--627 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1961 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 61°F on several days in October; minimum, 50°F on many days in January, April, and May.

EXTREMES, 1961-63, 1964-67.--Water temperatures: Maximum (1961-63, 1964-65, 1966-67), 64°F Oct. 14-16, 1961; minimum (1961-63, 1965-67), 45°F Jan. 22-26, 1962.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	61	61	61	61	61	61	61	61	61	61	61	61	61	61	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Minimum	61	61	61	61	61	61	61	61	61	61	61	61	61	61	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
November																																
Maximum	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	58	58	58	58	58	58	--	58
Minimum	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	58	58	58	58	58	58	--	58
December																																
Maximum	58	58	58	58	58	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	56	56	56	56	56	56	55	55	55	56
Minimum	57	58	58	58	57	57	57	56	56	56	57	57	57	57	57	57	56	56	56	56	56	56	56	56	55	55	55	55	55	55	55	56
January																																
Maximum	55	55	55	55	54	54	54	54	54	53	53	53	53	54	54	53	53	53	54	54	53	52	52	51	51	50	50	53	53	53	52	53
Minimum	55	55	55	54	54	54	54	54	53	53	53	53	53	53	53	53	53	53	54	53	54	52	52	51	51	50	50	50	53	52	51	52
February																																
Maximum	51	52	52	52	52	52	52	52	52	52	51	51	51	51	52	52	52	52	52	52	52	52	52	52	52	52	52	52	--	--	--	51
Minimum	51	52	52	52	52	52	52	52	52	52	51	51	51	51	51	52	52	52	52	52	52	52	52	52	52	52	52	52	--	--	--	51
March																																
Maximum	52	52	52	52	52	52	52	52	53	53	52	51	52	52	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	53
Minimum	52	52	52	52	52	52	52	52	53	52	51	51	52	52	52	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	52
April																																
Maximum	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	--	50	
Minimum	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	--	50	
May																																
Maximum	50	50	50	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	52	52	52	52	51
Minimum	50	50	50	50	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	52	52	52	52	52	51
June																																
Maximum	52	52	52	53	53	53	52	53	53	53	53	53	53	53	53	53	53	53	54	54	54	54	54	54	54	54	54	54	54	54	--	53
Minimum	52	52	52	52	53	53	52	52	52	53	53	53	53	53	53	53	53	53	53	53	53	53	53	54	53	54	54	54	54	54	--	53
July																																
Maximum	54	54	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	56	56	56	56	56	56	55
Minimum	54	54	54	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	56	56	56	56	56	56	55
August																																
Maximum	56	56	56	56	56	56	56	56	56	56	56	56	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	58	58	58	56
Minimum	56	56	56	56	56	56	56	56	56	56	56	56	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	58	58	58	56	
September																																

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

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

S, B, bottom withdrawal tube; C, chemically dispersed; D, decantation; P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

[illegible]

SAN JOAQUIN RIVER BASIN--Continued

11-3255. MOKELUMNE RIVER AT WOODBRIDGE, CALIF.

LOCATION.--Lat 38°09'30", long 121°18'10", temperature recorder at gaging station on left bank at Woodbridge, San Joaquin County, 0.3 mile downstream from county highway bridge, and 0.4 mile downstream from dam and canal intake of Woodbridge Irrigation District. DRAINAGE AREA.--661 square miles.

RECORDS AVAILABLE.--Chemical analyses: March 1951 to September 1963.

Water temperatures: March 1951 to September 1958, November 1960 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 67°F Oct. 1; minimum, 42°F Jan. 2-5.

EXTREMES, 1951-58, 1960-67.--Water temperatures: Maximum (1951-54, 1956-58, 1960-67), 83°F July 9, 1951; minimum (1951-55, 1956-58, 1961-67), 35°F Jan. 29, 30, 1954.

REMARKS.--Clock stopped Apr. 13 to May 3; temperature range, 52°F to 54°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	67	66	65	65	65	64	64	64	64	64	64	64	64	62	62	60	59	59	59	60	60	60	60	60	60	61	61	61	61	61	61	62	
Minimum	66	65	64	64	64	64	64	64	64	64	64	64	62	60	60	59	59	59	59	59	60	60	60	60	60	60	60	61	61	61	61	60	
November																																	
Maximum	60	60	60	60	59	59	57	57	57	55	55	56	56	56	55	56	57	57	58	58	57	56	55	52	51	50	50	50	52	55	56	---	
Minimum	60	60	60	59	59	57	57	57	55	54	55	55	56	55	55	55	56	57	57	57	56	55	52	51	50	50	50	50	52	55	---	55	
December																																	
Maximum	56	56	54	53	51	51	51	51	51	51	52	53	53	53	53	53	53	53	52	50	49	48	48	48	48	48	48	47	45	43	43	50	
Minimum	55	54	53	51	51	51	51	51	51	51	51	52	53	53	53	53	53	52	50	49	48	48	48	48	48	47	45	44	43	43	43	49	
January																																	
Maximum	43	43	42	42	43	43	43	43	44	44	45	47	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	49	50	51	52	46	
Minimum	43	42	42	42	42	43	43	43	43	44	44	45	47	48	48	48	48	48	48	48	48	48	48	48	48	48	47	47	49	50	51	52	46
February																																	
Maximum	52	51	51	51	51	50	49	49	48	48	48	48	49	49	49	49	49	50	50	50	50	50	50	50	50	50	51	52	54	---	---	49	
Minimum	51	51	51	50	50	49	49	48	48	48	48	48	48	49	49	48	48	49	50	50	50	50	50	50	50	50	50	51	52	---	---	49	
March																																	
Maximum	56	56	56	55	54	54	55	57	58	58	56	55	53	51	52	55	58	61	61	61	61	61	62	61	60	59	59	59	58	57	57	57	
Minimum	54	55	55	54	54	53	53	54	56	56	55	53	51	50	51	52	55	58	59	60	60	60	60	60	60	59	58	57	57	56	55	55	
April																																	
Maximum	55	53	53	53	53	53	53	53	53	53	53	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Minimum	53	53	53	53	53	53	53	53	53	53	53	52	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
May																																	
Maximum	---	---	---	52	52	52	52	52	52	52	52	52	52	52	52	52	52	53	53	53	53	53	53	53	53	53	53	53	53	54	54	52	
Minimum	---	---	---	52	51	51	52	52	52	52	52	52	52	52	52	52	52	53	53	53	53	53	53	53	53	53	53	53	53	54	54	52	
June																																	
Maximum	54	54	54	54	54	54	54	54	54	54	54	54	54	55	55	56	58	58	58	59	59	60	60	60	60	60	60	60	60	60	---	56	
Minimum	54	54	54	54	54	54	54	54	54	54	54	54	54	54	55	56	58	58	58	59	59	60	60	60	60	60	60	60	60	60	---	56	
July																																	
Maximum	60	60	60	60	60	59	59	59	59	59	60	60	61	62	63	62	61	61	61	61	62	63	64	65	65	65	64	64	64	65	65	61	
Minimum	60	60	60	60	59	59	59	59	59	59	60	60	61	62	62	62	61	61	61	61	61	61	63	64	64	64	63	63	64	64	65	61	
August																																	
Maximum	65	65	66	66	66	65	64	64	64	64	63	63	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	
Minimum	65	65	65	66	65	64	64	64	64	64	63	63	63	63	64	63	64	64	64	64	64	64	63	63	64	64	64	64	64	63	63	63	
September																																	
Maximum	64	63	63	63	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	---	62	
Minimum	63	63	63	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	61	61	61	61	61	---	61	

SAN JOAQUIN RIVER BASIN--Continued

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

LOCATION.--Lat 38°30'00", long 121°02'45", at gaging station on downstream side of midstream pier of highway bridge at Michigan Bar, Sacramento County, 5.5 miles southwest of Lathrop, and 12 miles downstream from confluence of North and Middle Forks.

DRAINAGE AREA.--536 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1963.

Water temperatures: October 1962 to September 1967.

Sediment records: October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 86°F Aug. 26, 27; minimum, 36°F Jan. 8.

Sediment concentrations: Maximum daily, 896 ppm Jan. 22; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 26,800 tons Jan. 22; minimum daily, less than 0.05 ton on many days in October and November.

EXTREMES, 1962-67.--Water temperatures: Maximum (1965-67), 86°F Aug. 26, 27, 1967; minimum (1963-67), 35°F Dec. 19, 20, 23, 24, 1965.

Sediment concentrations: Maximum daily, 3,070 ppm Feb. 1, 1963; minimum daily, 1 ppm on many days during 1962-67.

Sediment loads: Maximum daily, 245,000 tons Feb. 1, 1963; minimum daily, less than 0.05 ton on many days during 1962-67.

Chemical analyses, in parts per million, July 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
July 5, 1966.....	43			7.4	1.3	2.7	1.1	31	0	0.8	1.0		0.6	0.0				22			58	7.4
Sept. 16.....	5.8					3.0		32	0		.8			.0				24			61	7.6
Nov. 4.....	9.1					4.9		51	0		3.0			.1				40			102	7.3
Jan. 13, 1967....	105					3.2		48	0		3.7			.0				42			96	7.6
Mar. 27.....	1450					3.0		32	0		1.7			.0				25			64	7.7
May 29.....	1650					2.2		22	0		.0			.0				15			44	7.2
Sept. 11.....	34					5.9		39	0		2.6			.0				30			79	7.7

SAN JOAQUIN RIVER BASIN--Continued

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

Temperature (°E) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	73	74	74	73	73	73	70	69	70	71	71	70	65	65	64	62	62	62	60	62	61	62	61	61	62	62	62	61	61	60	60	65	
Minimum	67	68	70	65	64	64	64	63	64	64	64	64	59	55	56	56	55	55	55	58	55	54	56	56	57	57	56	56	56	56	56	59	
November																																	
Maximum	59	60	60	60	59	58	60	60	58	57	57	58	58	58	57	58	58	58	57	58	58	56	54	51	49	49	47	50	53	54	--	56	
Minimum	55	55	56	56	54	56	56	56	55	54	55	56	56	55	56	57	58	57	56	57	55	53	50	49	47	47	46	47	50	53	--	53	
December																																	
Maximum	54	54	53	50	52	51	50	48	48	48	49	49	48	47	48	48	47	45	45	45	44	44	44	43	43	43	42	41	39	38	38	46	
Minimum	53	53	49	48	49	50	48	47	47	47	47	47	47	47	47	47	45	45	45	44	44	43	42	42	42	41	39	37	38	37	44		
January																																	
Maximum	37	37	37	40	40	40	39	39	39	40	41	42	43	43	43	43	42	42	42	43	47	47	45	44	44	44	46	47	47	48	50	49	42
Minimum	37	37	37	38	39	37	37	36	37	38	39	40	40	40	41	41	40	40	42	42	43	44	42	43	42	44	46	47	47	48	47	48	41
February																																	
Maximum	48	47	46	46	47	46	46	46	46	47	47	48	50	50	49	45	46	48	48	48	47	47	47	47	47	49	49	50	--	--	--	47	
Minimum	46	44	44	46	46	45	45	45	45	45	46	46	47	48	45	43	43	44	46	45	43	43	44	46	48	46	47	47	--	--	--	45	
March																																	
Maximum	51	52	52	50	50	50	50	52	52	52	50	48	47	48	50	52	49	49	50	51	53	52	52	51	50	50	52	52	49	48	46	50	
Minimum	49	49	50	48	46	46	47	48	50	50	48	47	46	44	46	48	46	48	47	49	49	49	51	47	46	48	47	49	46	46	45	47	
April																																	
Maximum	47	48	49	49	49	49	49	52	53	53	49	52	52	52	50	50	51	51	48	49	50	50	50	50	51	52	52	51	51	52	--	50	
Minimum	43	46	45	47	47	48	48	48	49	49	46	47	50	50	48	45	49	47	46	46	48	48	48	49	49	48	50	47	47	48	--	47	
May																																	
Maximum	54	56	56	57	57	56	58	58	58	52	52	54	55	56	58	58	58	57	58	58	58	58	58	58	58	58	59	59	58	58	58	56	
Minimum	48	52	52	53	52	50	54	55	52	50	48	49	50	52	53	55	54	53	54	55	55	55	55	56	55	55	55	56	55	54	54	53	
June																																	
Maximum	54	53	58	61	61	57	62	63	63	63	63	63	63	66	67	68	69	69	68	68	69	71	70	70	71	72	72	73	75	77	--	65	
Minimum	51	51	52	56	55	55	52	58	59	59	59	59	59	61	62	63	64	65	62	64	65	66	65	65	67	68	69	69	70	73	--	61	
July																																	
Maximum	78	78	78	78	78	78	77	76	77	78	79	81	81	81	81	82	81	80	80	80	81	82	80	80	81	82	82	83	83	84	84	80	
Minimum	74	74	74	74	75	75	74	73	73	74	76	76	78	78	78	79	78	78	76	76	77	78	77	77	76	77	78	78	79	80	80	76	
August																																	
Maximum	84	84	84	84	83	82	81	81	81	81	81	82	83	83	84	84	84	85	84	84	83	84	84	85	84	86	86	82	81	82	82	83	
Minimum	79	79	80	80	79	78	77	78	77	78	78	78	79	80	81	80	80	80	80	79	78	79	79	80	80	80	80	77	76	77	76	78	
September																																	
Maximum	82	80	82	82	80	80	81	80	80	79	80	79	78	78	78	79	78	79	78	77	78	78	76	78	77	77	77	77	77	76	--	78	
Minimum	76	76	78	77	76	75	75	73	74	72	73	73	72	72	72	72	73	73	72	72	72	73	73	73	72	72	72	71	71	71	--	73	

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

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	6.2	2	T	9.7	1	T	201	6	3.3
2..	5.5	2	T	9.1	2	T	590	25 S	67
3..	6.2	2	T	9.1	1	T	1310	132 S	478
4..	6.2	1	T	9.1	1	T	576	30 S	53
5..	6.8	2	T	9.1	1	T	1410	64 S	422
6..	7.0	2	T	13	2	.1	3750	239 S	3360
7..	9.1	2	T	17	2	.1	2490	128 S	1120
8..	11	2	.1	20	1	.1	1170	18	57
9..	8.8	2	T	30	1	.1	762	8	16
10..	8.2	2	T	23	1	.1	634	5	8.6
11..	8.2	2	T	21	1	.1	538	6	8.7
12..	8.2	2	T	20	1	.1	442	5	6.0
13..	8.2	2	T	19	1	.1	390	1	1.1
14..	7.9	3	.1	19	1	.1	355	2	1.9
15..	7.0	3	.1	19	1	.1	318	2	1.7
16..	7.9	3	.1	35	1	.1	290	1	.8
17..	8.2	3	.1	134	5	1.8	274	1	.7
18..	8.5	4	.1	93	7	1.8	258	2	1.4
19..	8.5	6	.1	68	10	1.8	243	1	.7
20..	8.8	5	.1	120	15	4.9	236	3	1.9
21..	8.5	3	.1	267	14	10	226	5	3.1
22..	8.8	2	T	240	14	9.1	215	3	1.7
23..	8.8	1	T	161	9	3.9	204	1	.6
24..	8.8	1	T	95	7	1.8	190	1	.5
25..	9.7	1	T	68	5	.9	184	1	.5
26..	9.1	2	T	54	2	.3	177	1	.5
27..	9.7	2	.1	47	1	.1	168	1	.5
28..	9.7	2	.1	61	2	.3	152	1	.4
29..	9.7	2	.1	129	6	2.1	155	1	.4
30..	9.7	2	.1	252	18	12	155	1	.4
31..	9.1	1	T	--	--	--	146	1	.4
Total	258.0	--	1.9	2071.1	--	52.0	18209	--	5618.8
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	139	1	0.4	3380	81 S	807	335	2	1.8
2..	133	2	.7	2200	30	178	330	2	1.8
3..	128	1	.3	1650	14	62	322	1	.9
4..	123	1	.3	1320	10	36	340	2	1.8
5..	123	2	.7	1100	9	27	345	3	2.8
6..	126	1	.3	970	7	18	340	3	2.8
7..	113	1	.3	887	5	12	335	3	2.7
8..	113	1	.3	824	7	16	330	2	1.8
9..	113	1	.3	779	8	17	330	2	1.8
10..	107	1	.3	762	4	8.2	326	4	3.5
11..	105	1	.3	730	3	5.9	557	14	21
12..	105	1	.3	714	3	5.8	1240	46 S	203
13..	105	1	.3	706	3	5.7	2980	97	780
14..	102	1	.3	730	3	5.9	2310	33	206
15..	100	2	.5	676	3	5.5	1330	12	43
16..	100	1	.3	655	2	3.5	5000	414 S	8250
17..	97	2	.5	578	2	3.1	6700	575 S	11500
18..	97	1	.3	538	3	4.4	4100	143	1580
19..	93	7	1.8	514	4	5.6	3040	54	443
20..	102	1	.3	478	4	5.2	2440	34	224
21..	3630	329 S	6540	442	3	3.6	2090	24	135
22..	6860	896 S	26800	415	3	3.4	1910	18	93
23..	1480	64 S	288	395	2	2.1	1980	16	86
24..	2120	137 S	1070	390	3	3.2	2010	15	81
25..	2550	70 S	605	425	5	5.7	1760	11	52
26..	1610	27 S	142	420	7	7.9	1580	10	43
27..	2390	53 S	366	370	3	3.0	1450	9	35
28..	1660	15	67	355	2	1.9	1360	10	37
29..	4520	258 S	3870	--	--	--	1550	19	80
30..	4220	122	1390	--	--	--	1360	13	48
31..	5860	340 S	5980	--	--	--	1850	26	130
Total	39124	--	47126.8	23403	--	1262.6	51930	--	24091.7

S Computed by subdividing day.
T Less than 0.05 ton.

SAN JOAQUIN RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	1830	22	109	1260	6	20	1320	10	36
2..	1460	12	47	1220	6	20	1180	8	25
3..	1320	9	32	1230	6	20	1070	9	26
4..	1280	10	35	1280	7	24	1020	10	28
5..	1600	28	121	1360	8	29	1180	10	32
6..	2190	96 S	895	1480	21	84	1270	9	31
7..	5630	327 S	5890	1530	19	78	1140	6	18
8..	2770	65	486	1800	27	131	1090	5	15
9..	2020	25	136	2230	44	265	1070	5	14
10..	1980	28	150	3140	124 S	1100	1070	5	14
11..	2770	62	464	2800	48	363	1020	5	14
12..	2170	24	141	2350	34	216	990	5	13
13..	1770	15	72	2090	21	119	950	5	13
14..	1600	11	48	1930	38	198	914	5	12
15..	1760	16	76	1990	21	113	887	5	12
16..	1630	11	48	2300	48	298	896	5	12
17..	1590	30	129	2690	61	443	960	5	13
18..	3360	163 S	1790	2960	64	511	960	5	13
19..	2890	36	281	2870	41	318	932	5	13
20..	2280	20	123	2800	41	310	887	5	12
21..	2500	29	196	2950	45	358	851	7	16
22..	2600	29	204	3060	52	430	824	7	16
23..	2420	27	176	2950	60	478	770	6	12
24..	2640	34	242	2710	59	432	714	5	9.6
25..	2250	30	182	2480	38	254	698	4	7.5
26..	1860	14	70	2180	25	147	690	4	7.5
27..	1770	10	48	1980	25	134	648	3	5.2
28..	1720	11	51	1820	21	103	613	3	5.0
29..	1520	8	33	1650	17	76	571	3	4.6
30..	1380	6	22	1510	13	53	544	3	4.4
31..	--	--	--	1380	12	45	--	--	--
Total	64560	--	12297	65980	--	7170	27729	--	453.8
	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	550	3	4.5	84	1	0.2	46	1	0.1
2..	514	3	4.2	79	1	.2	50	1	.1
3..	490	3	4.0	77	2	.4	46	1	.1
4..	425	4	4.6	75	2	.4	42	1	.1
5..	390	5	5.3	75	2	.4	43	2	.2
6..	355	4	3.8	73	1	.2	44	3	.4
7..	322	3	2.6	68	1	.2	44	3	.4
8..	302	3	2.4	68	1	.2	39	2	.2
9..	282	2	1.5	66	1	.2	39	2	.2
10..	266	2	1.4	64	1	.2	39	2	.2
11..	246	2	1.3	64	1	.2	34	2	.2
12..	229	1	.6	61	1	.2	34	2	.2
13..	215	1	.6	59	1	.2	36	2	.2
14..	204	2	1.1	57	1	.2	32	2	.2
15..	187	2	1.0	56	1	.2	35	2	.2
16..	177	1	.5	53	1	.1	29	3	.2
17..	174	1	.5	50	1	.1	29	3	.2
18..	161	1	.4	50	1	.1	29	3	.2
19..	158	1	.4	47	1	.1	30	2	.2
20..	149	1	.4	46	1	.1	39	1	.1
21..	139	1	.4	46	1	.1	36	1	.1
22..	131	1	.4	44	1	.1	35	2	.2
23..	126	1	.3	46	1	.1	30	2	.2
24..	120	1	.3	44	1	.1	30	2	.2
25..	113	1	.3	44	1	.1	33	1	.1
26..	110	1	.3	43	1	.1	34	1	.1
27..	105	1	.3	43	1	.1	31	2	.2
28..	97	1	.3	50	1	.1	31	2	.2
29..	95	1	.3	47	1	.1	30	2	.2
30..	95	1	.3	44	1	.1	30	2	.2
31..	90	1	.2	42	1	.1	--	--	--
Total	7017	--	44.5	1765	--	5.2	1079	--	5.6

Total discharge for year (cfs-days)..... 303125.1
 Total load for year (tons)..... 98129.1

S Computed by subdividing day.

SAN JOAQUIN RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Dec. 7, 1966.....	1000	47		2330	87							79	86	92	100			S
Jan. 30, 1967.....	1035	48		4320	144							30	40	67	99	100		V
Apr. 7.....	0550	47		7820	666							40	52	72	98			V
June 1.....	1000	49		1360	7							78	84	90	100			S

SAN JOAQUIN RIVER BASIN--Continued

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

LOCATION.--Lat 38°01'14", long 121°48'06", at tidal gaging station at Antioch, Contra Costa County, and 4.5 miles from mouth.

RECORDS AVAILABLE (revised).--Chemical analyses: October 1962 to September 1967.

REMARKS.--No discharge records available.

Chemical analyses, in parts per million, July 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Cal- cium (Ca)	Mag- ne- sium (Mg)	Sodium (Na)	Po- tas- sium (K)	Bi- car- bon- ate (HCO ₃)	Car- bon- ate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluo- ride (F)	Ni- trate (NO ₃)	Bo- ron (B)	Dissolved solids			Hardness as CaCO ₃		So- dium ad- sorp- tion ratio	Specific con- duct- ance (micro- mhos at 25°C)	pH
															Parts per million	Tons per acre- foot	Tons per day	Cal- cium, Mag- ne- sium	Non- car- bon- ate			
July 12, 1966....						664		90	0		1270			0.0				484			4400	7.9
Aug. 12.....						397		83	0		755			.0				301			2690	7.9
Sept. 14.....						128		96	0		217			.1				137			961	7.8
Oct. 18.....						206		100	0		359			.2				181			1470	8.2
Nov. 18.....						119		74	0		214			.2				134			933	8.0
Dec. 22.....						32		78	0		41			.2				93			346	7.7
Jan. 10, 1967....						30		136	0		41			.2				93			322	6.9
Feb. 2.....						23		65	0		20			.0				90			313	6.8
Mar. 9.....						28		81	0		36			.0				94			324	8.2
Apr. 6.....						20		61	0		24			.2				67			233	7.8
May 22.....						12		52	0		16			.0				48			168	7.4
June 27.....						16		46	0		17			.1				37			167	7.9
July 26.....						18		53	0		21			.0				47			186	8.0
Aug. 1.....						20		58	0		25			.1				57			210	8.2
Sept. 12.....						20		78	0		20			.1				68			233	7.3

MISCELLANEOUS ANALYSES OF STREAMS IN SAN JOAQUIN RIVER BASIN

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
11-2555. PANOCHÉ CREEK BELOW SILVER CREEK, NEAR PANOCHÉ, CALIF. (Lat 36°37'08", long 120°40'22")																		
Dec. 8, 1966.....	0845	49		3.4	1310	12	69	89	97	99	99							VPCW
Jan. 24, 1967.....	1310	49		108	38100	11100	64	79	94	99								VPCW
11-3360. COSUMNES RIVER AT MCCONNELL, CALIF. (Lat 38°21'29", long 121°20'34")																		
Nov. 21, 1966.....	1401	54		168	225	102						97	99	99	100	---		S
Nov. 22.....	1513	54		450	264	321						84	93	98	100	---		V
Dec. 3.....	1030	49		1770	418	2000						64	79	98	100	---		V
Dec. 3.....	1410	49		2020	330	1800						---	---	---	---	---		
Dec. 6.....	1355	49		3410	544	5010						---	---	---	---	---		
Jan. 5, 1967.....	1355	43		114	4	1.2						---	---	---	---	---		
Jan. 23.....	1045	44		3860	255	2660						74	90	97	99	100		V
Mar. 9.....	0840	49		332	13	12						79	92	99	100	---		V
Mar. 16.....	1135	55		1950	89	469						69	96	100	---	---		V
Apr. 7.....	1105	51		6350	729	12500						46	56	75	99	100		V
May 8.....	0930	58		1630	42	185						---	---	---	---	---		
May 17.....	0920	61		2440	147	968						36	49	76	99	100		V
May 26.....	0910	59		2240	138	835						---	---	---	---	---		
June 2.....	0930	54		1180	81	258						46	63	90	100	---		V
June 16.....	1245	68		758	58	119						---	---	---	---	---		
Aug. 3.....	0930	75		24	5	0.3						---	---	---	---	---		

SACRAMENTO RIVER BASIN

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

LOCATION.--Lat 41°15'56", long 122°18'32", temperature recorder at gaging station on left bank 200 feet upstream from Stink Creek, 0.3 mile upstream from Southern Pacific Railroad bridge, and 3.3 miles south of Mount Shasta, Siskiyou County.

DRAINAGE AREA.--134 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 60°F June 28, July 12, 13, 21, Aug. 21.

EXTREMES, 1965-67.--Water temperatures: Maximum (1966-67), 60°F June 28, July 12, 13, 21, Aug. 21, 1967; minimum (1965-66), 36°F Dec. 24, 1965.

REMARKS.--Clock stopped Nov. 17-21, June 14-19; temperature ranges, 42°F to 52°F and 52°F to 56°F, respectively.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	53	53	53	53	53	53	53	53	52	52	52	51	49	50	50	50	50	49	49	50	49	50	51	50	50	50	49	49	49	49	49	50	
Minimum	51	51	50	49	50	50	51	50	50	49	49	48	48	47	47	47	47	46	47	48	48	48	49	47	47	48	47	46	47	47	47	48	
November																																	
Maximum	49	49	49	49	49	48	48	48	48	48	48	49	48	48	48	48	48	--	--	--	--	--	43	42	42	42	43	43	42	43	44	--	46
Minimum	47	46	46	46	47	47	46	46	46	47	48	48	48	48	48	47	--	--	--	--	--	42	42	41	41	42	42	42	42	42	--	45	
December																																	
Maximum	43	42	42	42	41	42	42	41	41	40	41	42	41	40	41	41	41	42	42	42	41	41	41	41	41	40	39	39	39	40	40	41	
Minimum	42	42	42	41	41	41	41	40	40	40	40	40	40	40	40	41	40	41	41	41	41	41	40	41	40	39	39	39	39	39	39	40	
January																																	
Maximum	40	41	42	42	41	42	42	42	42	42	42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	39	39	40	41	40	40	40	40	40	41	39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
February																																	
Maximum	--	--	--	40	41	40	41	41	41	41	41	41	40	39	39	40	41	41	40	40	41	41	41	41	40	41	41	41	41	--	--	40	
Minimum	--	--	--	39	39	39	39	39	40	40	39	39	38	38	38	38	40	39	38	38	38	38	39	39	40	39	38	39	39	--	--	38	
March																																	
Maximum	41	40	40	40	41	42	42	42	42	40	39	40	40	38	39	39	40	41	40	42	42	43	43	43	42	43	43	42	41	40	42	41	
Minimum	39	38	38	38	38	38	39	39	39	36	37	38	38	37	38	37	39	39	39	40	40	40	41	41	41	41	41	40	39	39	40	39	
April																																	
Maximum	43	44	44	45	44	42	45	47	46	44	45	46	45	46	46	44	43	45	45	45	45	47	47	47	49	48	48	48	48	49	--	45	
Minimum	41	41	42	42	41	40	43	43	43	42	42	43	43	43	43	43	41	43	43	44	45	46	46	46	45	45	45	46	46	46	--	43	
May																																	
Maximum	50	50	51	51	50	51	51	50	48	47	47	49	50	51	51	51	50	50	50	51	51	51	51	51	51	51	51	50	49	48	51	50	
Minimum	46	46	46	47	47	47	48	47	46	45	46	45	46	47	48	47	47	47	47	47	48	48	47	47	48	48	49	47	47	48	48	47	
June																																	
Maximum	52	52	52	53	53	54	54	54	54	54	54	55	54	--	--	--	--	--	--	56	56	55	56	56	57	59	58	60	58	59	--	55	
Minimum	48	49	49	50	50	50	50	50	51	50	51	52	52	--	--	--	--	--	--	52	53	52	52	52	53	54	55	56	56	55	--	51	
July																																	
Maximum	59	59	59	59	58	59	59	58	59	59	59	60	60	59	59	58	59	59	59	59	59	60	59	59	58	59	59	57	58	58	58	58	
Minimum	55	55	55	55	55	55	55	54	54	55	55	55	56	55	55	56	55	55	55	55	55	56	55	56	55	55	54	54	54	54	55	54	
August																																	
Maximum	59	59	58	59	58	58	58	59	59	59	58	58	58	58	58	58	58	58	58	58	60	59	59	58	58	58	57	57	57	56	56	58	
Minimum	55	54	55	55	55	55	54	54	56	56	55	54	54	55	54	54	55	54	55	55	55	56	55	56	55	55	56	54	55	54	53	54	
September																																	
Maximum	56	55	55	55	55	55	55	55	54	54	54	54	54	54	54	52	51	53	54	54	54	54	54	53	53	53	53	53	52	52	--	53	
Minimum	53	52	52	52	53	53	53	52	51	52	52	50	50	50	50	49	50	50	51	51	52	51	52	51	50	51	50	50	51	50	--	51	

SACRAMENTO RIVER BASIN--Continued

11-3420. SACRAMENTO RIVER AT DELTA, CALIF.

LOCATION.--Lat 40°56'20", long 122°24'55", at gaging station 0.2 mile downstream from Dog Creek, 0.6 mile southeast of Delta, Shasta County, and 2.8 miles south of Lamoline.

DRAINAGE AREA.--425 square miles.

RECORDS AVAILABLE.--Chemical analyses: December 1953 to September 1967.

Water temperatures: June to September 1951, October 1953 to September 1957, October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 77°F Aug. 18, 19, 21, 22; minimum, freezing point Jan. 20.

EXTREMES, 1951, 1953-57, 1962-67.--Water temperatures: Maximum (1951, 1953-57, 1963-67), 80°F Aug. 10, 1966; minimum, freezing point Dec. 18, 19, 1964, Jan. 20, 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (microhmhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 3, 1966.....	178			8.5	7.7	11	1.2	81	0	--	7.3		--	0.2	--			52			156	8.1
Oct. 31.....	197			8.8	7.8	12	1.4	80	0	--	7.8		--	.2	--			54			155	8.0
Dec. 6.....	4580			4.4	4.8	2.1	.3	38	0	--	1.0		--	.0	--			30			70	7.7
Jan. 4, 1967.....	657			6.1	6.7	5.4	.5	59	0	--	3.1		--	.1	--			42			109	8.1
Feb. 14.....	1870			4.9	6.1	2.9	.3	48	0	--	1.2		--	.0	--			37			86	8.0
Mar. 10.....	2160			5.0	5.6	3.2	.3	44	0	--	1.3		--	.0	--			36			83	7.9
Apr. 5.....	1790			5.6	5.6	3.4	.2	46	0	--	1.4		--	.0	--			37			84	7.9
May 3.....	1710	17		5.4	5.6	3.4	.4	48	0	2.0	1.2		0.6	.1	62			36			87	7.6
June 13.....	1650			3.5	5.5	2.2	.3	40	0	--	.8		--	.0	--			31			68	7.7
July 5.....	602			--	--	5.2	--	60	0	--	3.3		--	.1	--			480			112	8.0
Aug. 1.....	336			--	--	9.3	--	71	0	--	5.4		--	.1	--			500			140	8.2
Sept. 5.....	250			8.1	7.3	9.8	1.1	74	0	4.8	6.5		.7	.2	105			50			144	8.2

SACRAMENTO RIVER BASIN--Continued

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

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	69	66	64	63	62	62	64	64	64	63	53	57	54	53	52	53	54	54	49	53	50	50	56	59	55	55	54	55	55	56	58	57	
Minimum	59	59	56	54	63	53	55	55	56	54	59	51	47	44	43	44	44	44	44	46	45	44	46	58	49	48	47	46	47	47	50	50	
November																																	
Maximum	--	54	55	55	50	48	49	47	44	44	45	47	49	49	50	49	47	48	50	50	47	45	44	43	43	44	44	44	46	45	--	47	
Minimum	--	48	48	48	46	46	43	42	40	41	44	44	47	48	49	46	46	47	49	47	45	42	41	40	39	41	40	44	44	46	--	44	
December																																	
Maximum	47	46	45	46	46	46	46	44	44	43	45	46	47	47	46	45	45	46	45	45	44	43	41	39	40	39	39	40	40	42	42	43	
Minimum	46	44	43	45	45	45	44	43	42	41	43	45	46	44	43	42	42	43	42	43	42	39	41	42	39	36	36	36	38	38	39	41	
January																																	
Maximum	43	43	43	43	43	40	40	43	43	45	46	46	48	48	46	45	44	44	41	37	38	41	38	38	39	38	39	41	45	44	48	42	
Minimum	40	38	40	41	40	37	37	38	40	42	44	42	44	44	43	41	40	40	37	32	33	37	37	35	36	34	36	39	41	43	43	39	
February																																	
Maximum	46	48	49	49	50	50	50	49	50	50	49	51	49	45	43	45	43	46	48	49	48	49	48	46	47	47	47	49	--	--	--	48	
Minimum	44	42	43	44	44	44	43	43	43	45	43	45	43	41	40	40	44	43	42	41	40	42	42	43	42	42	42	44	--	--	--	42	
March																																	
Maximum	47	48	48	47	49	50	52	52	50	49	42	42	41	41	42	48	47	50	47	46	51	50	51	52	48	52	50	49	44	44	43	47	
Minimum	45	43	43	40	40	43	44	44	46	41	38	39	40	40	40	42	44	44	42	45	46	47	47	43	44	42	44	44	40	38	38	42	
April																																	
Maximum	46	51	51	49	48	44	50	52	51	48	48	54	51	48	50	47	45	46	46	46	50	48	49	51	52	50	48	50	49	52	--	49	
Minimum	41	42	45	43	42	41	44	45	48	44	43	43	46	43	42	43	40	40	42	44	42	44	46	45	45	47	44	44	42	43	43	--	43
May																																	
Maximum	55	55	56	56	55	59	61	58	55	46	45	52	56	58	59	58	58	59	58	59	59	59	59	56	57	58	58	55	55	53	50	56	
Minimum	44	46	47	47	49	47	49	49	46	42	42	40	43	46	47	47	47	47	47	47	46	47	48	48	47	46	47	47	51	46	47	45	
June																																	
Maximum	48	52	60	58	56	56	60	60	60	59	60	59	61	63	64	65	66	66	66	66	66	64	65	67	68	68	69	71	73	73	--	62	
Minimum	45	44	47	51	51	50	51	51	52	51	52	52	50	52	53	54	56	56	58	58	58	56	55	57	59	61	61	62	64	63	--	54	
July																																	
Maximum	73	73	73	71	70	70	70	67	68	70	73	73	74	74	73	72	70	72	70	71	73	72	70	70	72	72	72	68	73	76	76	71	
Minimum	65	65	67	64	64	62	63	60	60	62	63	65	66	66	65	66	62	64	62	62	64	65	63	61	62	63	63	63	62	66	66	63	
August																																	
Maximum	75	74	74	74	74	72	71	72	72	72	72	72	73	74	74	74	75	77	77	75	77	77	77	76	72	73	73	74	75	74	73	72	
Minimum	65	64	64	64	64	62	61	63	62	62	62	62	61	61	62	64	64	65	66	65	65	66	67	66	65	65	64	65	63	62	62	63	
September																								</									

SACRAMENTO RIVER BASIN--Continued

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

LOCATION.--Lat 41°13'51", long 120°26'10", at gaging station, 100 feet downstream from highway bridge, 1.4 miles downstream from West Valley Creek, and 3.5 miles east of Likely, Modoc County.

DRAINAGE AREA.--248 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 3, 1966.....	17			13	5.9	10	4.4	94	0	--	2.1			0.0	--			57			170	7.8
Nov. 1.....	18			9.8	3.7	5.5	2.6	62	0	--	.4			.0	--			40			103	7.5
Dec. 7.....	11			11	4.5	6.8	2.7	71	0	--	.9			.0	--			46			120	8.1
Jan. 5, 1967.....	31			10	3.9	5.7	2.1	63	0	--	.6			.0	--			41			106	7.8
Feb. 18.....	A 26			11	4.2	7.8	2.3	71	0	--	1.0			.0	--			45			122	8.0
Mar. 8.....	14			10	4.0	6.4	2.3	66	0	--	.6			.0	--			42			108	8.1
Apr. 3.....	A 5.4			11	4.5	7.3	2.7	71	0	--	1.0			.0	--			46			120	7.9
May 1.....	13	30		11	4.5	7.4	2.5	69	0	2.0	1.1	2.1		.1	115			46			119	7.8
June 12.....	452			8.7	3.3	4.8	1.9	51	0	--	.5			.3	--			35			91	7.9
July 6.....	89			--	--	5.4	--	59	0	--	1.4			.1	--			42			104	7.9
Aug. 2.....	88			--	--	8.3	--	74	0	--	2.5			.0	--			50			106	8.0
Sept. 7.....	23			13	5.7	7.5	4.5	83	0	4.0	1.7		1.8	.1	137			56			146	7.8

A Daily mean discharge.

SACRAMENTO RIVER BASIN--Continued

11-3485. PIT RIVER NEAR CANBY, CALIF.

LOCATION.--Lat 41°24'22", long 120°55'36", at gaging station at lower end of Warm Spring Valley, and 4 miles southwest of Canby, Modoc County.

DRAINAGE AREA.--1,431 square miles, excluding Goose Lake basin.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1967.

Water temperatures: March 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 81°F July 12, but could have been higher during period of missing record.

EXTREMES, 1965-66.--Water temperatures: Maximum, 81°F July 12, 1967; minimum (1965-66), freezing point on several days during February 1966.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 3, 1966.....	14			22	11	29	5.4	173	0	---	8.2			0.1	---			100			325	7.9
Nov. 1.....	9.5			20	9.8	25	4.6	165	0	---	6.0			.1	---			90			289	8.1
Dec. 7.....	385			12	5.5	16	2.9	82	0	---	3.5			.0	---			52			171	7.8
Jan. 5, 1967.....	A 56			19	8.4	30	4.5	148	0	---	7.2			.1	---			82			286	8.1
Feb. 15.....	274			16	6.8	23	3.0	104	0	---	7.0			.1	---			68			228	8.1
Mar. 8.....	127			18	7.6	24	3.5	121	1	---	7.5			.1	---			76			251	8.3
Apr. 3.....	154			17	7.1	20	2.8	111	0	---	6.4			.0	---			72			224	7.9
May 1.....	553	24		14	5.8	17	2.8	94	0	13	3.5		1.7	.0	152			64			190	7.6
June 12.....	880			15	6.1	15	2.8	102	0	---	2.4			.1	---			62			186	7.4
July 6.....	190			---	---	16	---	110	0	---	3.6			.2	---			69			205	7.9
Aug. 3.....	18			---	---	17	---	119	0	---	4.2			.0	---			75			217	7.8
Sept. 7.....	56			19	8.8	18	4.7	134	0	9.4	4.8	1.8		.2	163			84			244	8.2

A Daily mean discharge.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	63	62	59	60	60	59	59	58	57	56	54	55	49	46	46	47	48	46	46	49	48	47	55	57	56	54	52	52	52	51	52	53	
Minimum	56	57	55	53	54	55	56	54	53	52	52	52	40	46	44	43	42	42	42	46	45	46	47	50	50	51	49	48	48	46	47	48	
November																																	
Maximum	52	51	51	49	47	46	44	44	40	40	40	40	42	42	42	42	42	42	42	42	41	40	39	--	--	--	--	--	--	--	--	--	
Minimum	47	47	47	45	46	42	43	34	39	39	40	40	40	41	41	42	42	42	42	42	41	39	38	37	--	--	--	--	--	--	--	--	
December																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
January																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
February																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
March																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
April																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
May																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
June																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
July																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	81	79	78	80	77	76	75	75	75	76	77	76	75	75	75	78	71	78	78	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	70	69	68	68	70	66	65	64	64	66	66	65	64	64	64	66	68	69	69	--
August																																	
Maximum	77	79	79	79	78	77	77	77	77	76	73	75	76	77	79	81	80	80	79	78	78	78	78	77	78	74	74	74	73	75	74	77	
Minimum	68	73	65	62	66	66	64	63	66	67	66	67	67	67	67	68	70	68	73	73	71	72	72	72	72	71	68	69	67	68	68	67	
September																																	
Maximum	74	74	73	68	70	70	71	68	67	64	64	64	63	64	65	65	62	63	63	66	66	67	67	67	67	66	67	66	62	--	--	66	
Minimum	66	64	64	64	64	61	62	62	59	60	59	58	58	58	58	59	59	58	59	60	63	63	63	63	62	61	62	62	62	59	--	61	

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

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

[illegible]

SACRAMENTO RIVER BASIN--Continued

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

LOCATION.--Lat 40°50'36" (revised), long 122°00'58", 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, Shasta County.

DRAINAGE AREA.--4,951 square miles, approximately, excluding Goose Lake basin.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1967.

Water temperatures: June to September 1951, October 1953 to September 1957, October 1958 to August 1959.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 3, 1966.....	2410			9.6	5.6	9.2	1.8	79	0	--	2.5		--	0.0	--			47			137	8.2
Nov. 1.....	3310			9.8	5.9	9.3	1.8	81	0	--	2.7		--	.0	--			49			138	8.1
Dec. 7.....	8010			12	3.8	5.6	1.2	60	0	--	1.2		--	.0	--			46			110	7.9
Jan. 5, 1967.....	4770			10	5.4	8.5	1.5	75	0	--	2.2		--	.0	--			47			132	8.1
Feb. 15.....	7910			11	4.9	8.0	1.8	70	0	--	2.2		--	.1	--			48			129	8.0
Mar. 8.....	4910			11	5.6	9.8	1.9	78	0	--	2.5		--	.0	--			50			139	8.0
Apr. 3.....	6890			11	4.6	7.3	1.4	66	0	--	1.6		--	.0	--			46			120	8.0
May 1.....	7580	26		11	5.1	8.1	1.6	72	0	4.0	2.1		0.8	.1	105			48			129	8.0
June 12.....	6990			9.5	4.6	7.7	1.6	67	0	--	1.4		--	.0	--			42			118	7.9
July 7.....	4830			--	--	7.7	--	74	0	--	2.8		--	.1	--			45			124	8.0
Aug. 3.....	4950			--	--	10	--	75	0	--	3.0		--	.1	--			48			137	8.1
Sept. 8.....	2910			10	5.9	9.8	2.0	80	0	4.1	3.0		1.1	.1	79			49			143	7.9

SACRAMENTO RIVER BASIN--Continued

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

LOCATION.--Lat 40°57'30", long 122°13'05", at gaging station just upstream from Shasta Lake, Shasta County, 0.2 mile downstream from Big Bollibokka Creek, and 11.3 miles east of La Moine.

DRAINAGE AREA.--604 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1967.

Water temperatures: June to September 1951, October 1953 to September 1959.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 4, 1966.....	273			11	3.5	5.1	1.0	63	0	--	0.8		--	0.0	--			42			109	8.1
Oct. 31.....	285			11	3.6	5.4	1.2	61	0	--	1.0		--	0	--			42			107	7.8
Dec. 6.....	4650			10	1.7	2.2	.3	39	0	--	.3		--	0	--			32			74	7.9
Jan. 4, 1967.....	495			15	2.8	3.8	.5	64	0	--	.8		--	0	--			49			114	7.9
Feb. 14.....	1070			14	2.3	3.1	.3	56	0	--	.6		--	0	--			44			100	8.0
Mar. 10.....	1470			13	2.4	3.2	.3	51	0	--	.6		--	0	--			42			95	7.8
Apr. 5.....	1230			14	2.3	3.1	.2	53	0	--	.6		--	0	--			44			98	7.9
May 3.....	1030	15		15	2.6	3.4	.5	61	0	3.0	1.1		0.9	0	82			48			108	7.6
June 13.....	564			15	2.7	3.5	.5	62	0	--	.6		--	.2	--			48			109	7.8
July 5.....	480			--	--	3.8	--	59	0	--	1.4		--	0	--			45			103	8.0
Aug. 1.....	352			--	--	5.6	--	60	0	--	1.9		--	0	--			45			114	8.0
Sept. 5.....	321			12	3.3	5.0	.9	61	0	1.3	1.3		.3	0	A 54			44			108	7.6

A Calculated from sum of determined constituents.

SACRAMENTO RIVER BASIN--Continued

11-3705. SACRAMENTO RIVER AT KESWICK, CALIF.

LOCATION.--Lat 40°36'05", long 122°26'35", at gaging station 0.4 mile upstream from Middle Creek, 0.8 mile downstream from Keswick Dam, 1.6 miles downstream from Keswick, Shasta County, and 10 miles downstream from Shasta Dam.

DRAINAGE AREA.--6,468 square miles, excluding Goose Lake basin.

RECORDS AVAILABLE.--Chemical analyses: December 1953 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 4, 1966.....	7690			8.0	5.4	4.3	0.7	58	0	2.0	1.4		--	0.0	--			44			104	7.8
Nov. 2.....	7690			8.8	5.1	4.9	.9	59	0	4.0	1.3		--	.0	--			43			106	8.0
Dec. 6.....	42900			9.5	4.7	6.3	1.2	58	0	8.0	1.9		--	.0	--			43			115	8.0
Jan. 4, 1967.....	6530			10	4.8	6.1	1.2	61	0	5.0	1.5		--	.0	--			44			115	8.1
Feb. 17.....	12300			9.9	4.6	6.6	1.2	61	0	7.0	1.8		--	.0	--			44			117	8.0
Mar. 6.....	6400			10	4.5	5.9	1.2	58	0	6.0	1.4		--	.0	--			44			113	8.0
Apr. 5.....	5220			8.7	4.6	5.0	.9	50	0	8.0	1.4		--	.0	--			40			102	7.5
May 4.....	14200	21		11	4.4	6.3	1.2	60	0	6.0	1.4		0.9	.0	98			46			118	7.3
May 31.....	15600			10	4.3	5.6	1.2	57	0	5.0	1.4		--	.0	--			42			107	7.7
July 5.....	13000			--	--	4.9	--	52	0	4.0	2.0		--	.0	--			44			109	7.4
Aug. 4.....	12900			--	--	5.0	--	54	0	5.1	1.9		--	.0	--			42			104	7.3
Sept. 6.....	12400			8.5	4.6	4.7	.7	53	0	6.9	1.6		.5	.1	50			40			102	7.7

11-3720. CLEAR CREEK NEAR IGO, CALIF.

DRAINAGE AREA.--228 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1966.

Water temperatures: March 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 70°F July 1; minimum, 37°F Jan. 6, 7.

EXTREMES, 1965-67.--Water temperatures: Maximum, 70°F July 1, 1967; minimum, 37°F Jan. 6, 7, 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October	62	62	--	54	55	55	56	56	56	55	55	54	51	50	51	50	51	51	51	52	52	53	54	54	53	52	51	52	52	51	52	53	
Maximum	61	60	--	52	54	54	55	55	54	53	54	51	49	49	47	48	48	48	48	49	49	49	51	51	50	49	49	48	49	49	49	51	
Minimum	51	50	51	51	50	51	51	50	50	51	50	51	50	52	54	53	51	50	54	54	52	50	49	48	49	50	49	49	50	49	--	50	
November	48	47	48	47	48	49	48	48	47	48	49	50	50	50	52	50	50	50	50	52	50	48	46	46	46	48	46	48	48	48	--	48	
Maximum	52	52	50	52	52	50	49	48	47	48	49	49	48	46	46	46	45	46	46	45	45	45	44	43	43	43	42	43	42	43	42	46	
Minimum	49	50	50	49	50	49	47	47	46	47	47	48	48	46	44	44	43	44	44	44	43	42	41	42	41	40	40	40	40	40	39	44	
December	41	41	41	42	42	40	40	41	42	42	43	43	44	44	44	42	42	43	42	44	47	45	44	40	45	45	46	48	51	50	51	43	
Maximum	39	38	39	39	40	37	37	38	39	40	41	40	41	41	40	40	38	41	41	41	44	42	42	40	44	43	46	46	48	49	49	41	
Minimum	49	48	49	48	48	49	48	49	48	49	48	49	46	45	45	47	47	47	45	46	47	48	48	47	48	48	49	49	--	--	--	47	
January	47	45	45	46	45	44	43	44	45	45	43	46	44	42	42	43	43	43	42	42	41	43	43	45	45	43	44	45	--	--	--	43	
Maximum	48	48	48	47	49	50	50	50	50	46	46	46	46	46	47	51	51	51	49	49	52	52	51	50	49	51	50	47	47	47	46	48	
Minimum	45	44	44	42	42	44	44	44	45	46	44	43	44	44	45	47	46	48	44	49	47	48	48	49	44	45	47	43	39	41	44		
February	50	52	52	52	48	48	52	53	52	50	50	54	50	51	51	49	48	50	49	50	51	50	50	50	52	--	52	52	53	--	50		
Maximum	44	45	46	46	47	48	48	49	50	48	46	46	48	46	46	45	46	46	46	47	46	48	48	47	47	--	47	44	45	46	--	46	
Minimum	55	56	57	58	56	58	60	61	59	52	52	56	58	59	61	62	61	62	62	63	63	62	61	60	60	60	60	59	58	56	58	58	
May	46	47	48	49	51	49	50	52	47	48	48	47	48	49	51	51	53	53	53	54	53	52	51	52	51	52	51	53	51	50	54	50	
June	53	54	60	60	60	62	63	64	64	63	62	63	64	65	65	66	66	67	67	66	67	65	66	66	66	67	68	68	69	69	--	63	
Maximum	51	51	50	53	54	53	54	54	56	55	55	55	54	55	55	56	57	58	60	59	57	57	56	56	57	59	58	59	60	60	--	55	
Minimum	70	69	69	68	67	68	68	67	67	68	69	68	69	68	68	68	68	66	66	67	68	67	66	66	66	66	66	66	67	66	67	67	
July	60	61	61	60	60	60	59	60	59	60	60	60	60	60	60	60	60	59	58	59	58	59	58	58	58	58	57	58	59	58	59	59	
August	66	66	66	66	66	65	65	66	65	65	65	65	65	65	65	64	64	65	64	64	64	65	64	64	64	64	64	63	63	62	62	64	
Maximum	58	58	57	58	58	58	58	57	58	57	57	57	57	56	57	57	56	57	57	57	56	56	57	58	57	58	59	57	57	55	55	57	
Minimum	62	62	62	62	62	63	63	62	61	61	61	60	60	59	59	60	60	60	60	60	60	60	60	59	60	59	59	59	59	59	58	60	
September	55	54	56	55	56	56	55	54	55	55	54	53	53	52	53	52	50	54	54	54	54	54	54	54	54	53	53	54	54	53	--	54	

SACRAMENTO RIVER BASIN--Continued

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

LOCATION.--Lat 40°32'55", long 122°05'30", temperature recorder at gaging station on left bank 2.5 miles upstream from Old Cow Creek, and 4.4 miles east of Millville, Shasta County.

DRAINAGE AREA.--77.3 square miles.

RECORDS AVAILABLE.--Water temperatures: December 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 84°F July 30.

EXTREMES, 1965-67.--Water temperatures: Maximum, 88°F Aug. 6, 7, 1966; minimum (1965-66), 33°F Dec. 17, 19, 20, 1965.

REMARKS.--Clock stopped Jan. 17-22, Feb. 2 to Mar. 17, Aug. 7-14; temperature ranges, 39°F to 45°F, 43°F to 53°F, and 70°F to 82°F, respectively.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	71	69	67	67	--	68	68	67	67	67	65	63	59	59	57	59	59	59	58	60	58	61	62	63	62	61	60	60	60	60	61	62	
Minimum	64	64	61	59	--	60	62	60	60	60	53	60	56	55	52	52	53	52	52	53	55	54	52	53	55	54	55	55	54	54	53	53	56
November																																	
Maximum	60	60	58	58	57	57	56	54	54	53	53	54	56	56	57	55	53	54	55	55	51	49	46	44	45	47	46	48	49	48	--	52	
Minimum	53	53	53	51	54	54	52	50	48	50	52	53	54	55	55	52	52	52	52	50	49	46	42	40	39	45	42	44	48	46	--	49	
December																																	
Maximum	50	49	48	46	46	46	46	45	45	45	46	46	47	47	46	43	43	44	44	44	44	43	43	42	41	40	40	42	42	42	43	44	
Minimum	48	48	46	46	45	44	45	45	44	45	44	44	45	45	43	42	41	41	43	44	44	41	43	41	39	40	37	37	39	39	36	42	
January																																	
Maximum	44	44	44	45	45	43	42	43	44	46	47	47	47	47	47	46	--	--	--	--	--	--	--	--	38	38	--	--	--	--	--	--	
Minimum	39	39	41	43	43	38	37	38	40	42	44	42	42	42	42	41	--	--	--	--	--	--	--	--	35	36	--	--	--	--	--	--	
February																																	
Maximum	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
March																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	51	51	54	54	53	50	50	51	52	52	52	51	53	54	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51	47	50	51	52	50	46	48	49	49	49	46	49	47	--	
April																																	
Maximum	55	56	57	56	56	58	57	57	54	53	52	52	53	52	51	52	51	50	50	50	49	49	50	50	51	52	52	51	49	51	--	52	
Minimum	48	49	51	53	49	50	51	51	52	52	49	48	52	49	48	50	48	46	48	45	46	48	48	49	49	50	45	45	45	45	48	--	48
May																																	
Maximum	48	48	51	52	51	51	50	51	52	51	49	52	55	57	58	58	59	59	58	59	59	60	60	60	60	59	59	60	59	59	57	55	
Minimum	45	45	46	49	48	50	49	49	51	48	44	46	49	50	51	51	52	53	52	52	53	53	53	53	53	54	54	57	55	54	53	50	
June																																	
Maximum	53	54	57	60	60	61	62	64	65	64	64	64	63	64	65	66	67	67	69	69	70	69	70	72	73	73	73	76	77	78	--	66	
Minimum	53	52	52	57	56	55	59	58	61	58	60	60	58	58	59	60	61	63	64	64	65	63	62	63	65	66	66	66	68	69	--	60	
July																																	
Maximum	78	79	79	78	76	78	78	76	77	78	79	79	80	81	80	81	80	80	80	80	80	80	79	79	79	80	80	76	82	84	83	79	
Minimum	70	70	72	70	69	68	69	67	67	68	68	70	71	70	70	72	71	71	69	68	70	71	70	69	70	70	70	72	71	73	73	69	
August																																	
Maximum	81	82	82	82	81	79	--	--	--	--	--	--	--	--	82	83	83	83	83	82	82	82	82	81	82	82	82	80	79	79	78	--	
Minimum	71	71	72	73	72	70	--	--	--	--	--	--	--	--	70	71	70	71	72	71	70	70	72	73	74	75	72	71	70	68	68	--	
September																																	
Maximum	77	77	78	77	77	77	76	74	73	72	72	71	71	72	72	72	66	71	72	74	74	73	72	72	72	72	72	72	69	69	--	72	
Minimum	67	65	68	67	68	67	67	65	64	64	65	63	62	60	60	62	62	63	63	62	63	65	65	63	64	64	62	63	64	63	--	64	

SACRAMENTO RIVER BASIN--Continued

11-3740. COW CREEK NEAR MILLVILLE, CALIF.

LOCATION.--Lat 40°30'20", long 122°13'55", at gaging station 4.2 miles southwest of Millville, Shasta County, and 4.3 miles downstream from Little Cow Creek.

DRAINAGE AREA.--425 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1966.

Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 89°F Aug. 13, 19, 22, 23, 27; minimum, 41°F Dec. 28, 30.

EXTREMES, 1965-67.--Water temperatures: Maximum, 90°F Aug. 3, 4, 7, 1966; minimum, 35°F Dec. 19, 20, 1965.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1966 to September 1967																																	
Month	Day																															Average	
	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		
October																																	
Maximum	75	73	72	70	71	71	72	71	70	71	70	68	65	63	62	61	61	61	61	61	60	60	62	63	63	62	62	61	60	60	60	65	
Minimum	71	70	67	66	65	67	68	66	66	65	66	65	60	57	57	56	56	56	57	57	57	56	58	59	59	59	58	57	57	56	55	60	
November																																	
Maximum	60	60	59	58	57	57	55	55	52	50	53	54	55	56	57	57	57	56	57	57	54	53	51	49	48	50	50	51	53	53	--	54	
Minimum	56	56	54	54	56	55	52	52	50	52	53	54	54	55	56	56	54	54	56	54	53	51	48	46	45	47	48	49	51	51	--	52	
December																																	
Maximum	54	54	52	52	52	52	52	52	52	50	51	51	51	52	53	51	50	50	50	50	50	49	49	48	46	45	45	44	44	44	45	49	
Minimum	52	52	51	51	52	49	52	50	51	51	51	52	53	51	50	50	48	50	50	50	48	47	48	45	45	43	42	41	43	41	42	48	
January																																	
Maximum	45	46	46	46	47	47	45	45	45	47	48	49	49	50	50	49	47	47	46	47	49	49	48	48	47	47	48	49	51	50	50	47	
Minimum	43	43	43	46	46	43	42	42	44	44	47	47	46	46	48	47	45	45	44	44	46	45	46	44	44	44	46	48	49	50	47	45	
February																																	
Maximum	50	51	50	50	50	50	50	51	51	51	52	53	54	50	49	48	50	50	51	49	49	49	50	50	51	51	52	52	--	--	--	50	
Minimum	47	46	47	48	47	46	46	48	49	47	48	49	50	46	45	44	46	47	46	44	44	45	46	44	44	44	46	48	49	50	--	46	
March																																	
Maximum	54	54	54	52	54	55	56	57	57	56	53	52	49	50	52	57	57	56	56	54	58	58	57	56	56	57	57	56	54	50	54	54	
Minimum	50	52	50	49	49	51	52	52	54	53	50	49	48	46	49	52	52	54	51	54	54	56	56	50	52	51	52	54	48	50	48	51	
April																																	
Maximum	52	56	58	57	55	53	56	59	59	58	55	57	57	56	55	56	54	54	54	54	55	55	56	58	57	57	57	57	57	59	--	56	
Minimum	48	50	53	51	53	52	52	54	56	55	52	50	56	50	51	53	50	47	51	52	51	53	52	54	54	54	51	50	52	52	--	51	
May																																	
Maximum	62	63	66	65	65	65	67	67	66	66	58	56	60	63	65	66	66	66	66	66	66	66	66	65	65	66	66	66	66	64	64	64	
Minimum	54	55	56	57	59	56	57	60	58	53	52	52	55	56	58	60	59	60	58	57	59	59	60	60	58	59	59	62	60	60	58	57	
June																																	
Maximum	59	59	67	69	69	68	70	72	71	72	73	73	72	73	74	75	77	77	77	77	78	77	76	77	78	78	79	80	81	82	--	73	
Minimum	57	55	55	61	61	59	64	63	65	64	65	67	65	65	66	68	70	72	71	73	73	72	70	71	73	75	75	76	77	79	--	67	
July																																	
Maximum	84	84	84	84	83	82	82	80	80	81	83	85	85	85	85	85	84	84	84	85	85	86	85	84	85	85	85	84	86	88	88	84	
Minimum	80	81	81	80	79	78	79	77	76	76	79	81	82	82	82	83	81	81	79	77	79	80	78	79	79	80	81	81	81	83	83	79	
August																																	
Maximum	87	87	87	88	87	86	84	85	85	86	85	86	85	87	88	88	88	89	89	88	87	89	89	88	88	88	89	88	86	86	86	87	
Minimum	81	80	81	82	82	81	80	78	79	80	79	79	78	77	78	80	82	82	82	82	81	81	81	83	84	85	82	83	81	80	80	79	80
September																																	
Maximum	85	84	85	84	85	86	85	83	83	82	82	80	80	80	80	81	78	78	79	82	82	81	81	82	81	81	80	80	80	79	78	--	81
Minimum	77	77	79	79	79	79	78	77	78	78	76	74	72	72	74	74	74	74	75	75	78	77	75	77	77	75	74	76	76	74	--	76	

SACRAMENTO RIVER BASIN--Continued

11-3760. COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'10", long 122°14'15", at gaging station 2 miles east of Cottonwood, Shasta County, and 2.4 miles upstream from mouth.

DRAINAGE AREA.--922 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Water temperatures: October 1962 to September 1967.

Sediment records: October 1962 to September 1967(discontinued).

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 3,600 ppm Jan. 29; minimum daily, 1 ppm July 29, 30.

Sediment loads: Maximum daily, 158,000 tons Jan. 29; minimum daily, 0.3 ton July 29, 30.

EXTREMES, 1962-67.--Water temperatures (1962-63, 1964-66): Maximum (1964-66), 84°F on several days during July 1965; minimum, freezing point on several days during 1963-64.

Sediment concentrations: Maximum daily, 4,520 ppm Dec. 22, 1964; minimum daily, 1 ppm on many days during 1963-65, July 29, 30, 1967.

Sediment loads: Maximum daily, 597,000 tons Dec. 22, 1964; minimum daily, 0.1 ton Sept. 30, Oct. 1, 6, 1964.

REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 4, 1966.....	60			17	9.9	9.7	1.2	109	0	--	3.4		--	0.0	--			83			197	8.2
Nov. 2.....	96			12	7.2	5.8	.9	78	0	--	2.9		--	.0	--			60			141	7.9
Dec. 6.....	3080			17	7.7	6.3	1.1	82	0	--	4.5		--	.0	--			74			175	8.1
Jan. 3, 1967.....	350			25	12	9.0	.8	118	4	--	9.8		--	.1	--			112			253	8.5
Feb. 17.....	1150			24	11	7.6	.9	122	0	--	4.2		--	.0	--			105			232	8.2
Mar. 6.....	540			26	13	8.9	.8	130	2	--	6.6		--	.0	--			118			258	8.4
Apr. 5.....	1380			24	11	8.7	.8	122	2	--	4.2		--	.0	--			105			241	8.3
May 4.....	1250	16		26	12	8.4	.9	136	0	15	3.0		1.2	.0	153			114			251	8.0
May 31.....	780			21	8.4	6.0	.9	106	0	--	2.9		--	.0	--			87			190	8.1
July 5.....	240			--	--	7.9	--	124	0	--	5.7		--	.0	--			106			231	8.1
Aug. 4.....	91			--	--	8.8	--	137	0	--	6.3		--	.0	--			111			251	8.1
Sept. 6.....	55			19	12	8.6	1.5	124	0	9.0	5.2		2.5	.1	134			102			229	8.2

11-3760. COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.--Continued

Month	Day																															Average		
	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			
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Maximum	08	68	66	66	67	66	67	66	66	67	66	64	62	62	62	63	63	63	62	63	60	63	64	63	63	63	63	62	61	61	62	63		
Minimum	64	64	62	62	62	62	64	62	62	61	62	61	56	56	56	56	56	57	58	60	57	56	58	57	57	59	57	57	57	56	57	59		
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Maximum	61	60	60	61	60	60	59	56	59	60	60	59	59	58	56	55	55	57	57	56	54	52	51	51	51	52	52	52	52	52	--	56		
Minimum	56	55	56	55	58	57	56	53	54	57	58	58	58	56	55	53	52	55	56	54	51	50	50	50	50	51	50	52	52	52	--	54		
December	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Maximum	54	54	52	50	49	49	50	49	49	49	51	51	51	48	48	48	50	48	46	48	48	48	47	--	46	45	45	45	45	42	--	--		
Minimum	52	52	50	49	49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	44	--		
January	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	42	--		
Maximum	45	45	45	45	46	45	45	46	46	48	50	50	51	50	49	48	45	45	44	44	41	42	42	42	42	42	42	42	42	49	49	47	--	
Minimum	44	42	44	44	45	42	43	43	44	47	48	48	48	48	48	45	43	42	44	38	40	40	40	38	40	40	--	--	--	--	--	43	--	
February	50	50	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	--	--	--	--	50	49	49	50	51	52	52	51	51	53	50	49	48	49	50	50	49	49	49	49	49	51	51	51	--	--	--	50	--	
Minimum	--	--	--	--	48	46	47	47	48	49	49	49	49	50	46	47	45	46	46	47	45	43	44	45	48	47	45	47	48	--	--	--	46	--
March	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	52	52	51	49	51	53	54	55	55	53	50	50	47	49	48	54	54	52	52	50	54	54	54	53	52	52	53	53	50	50	47	51	--	
Minimum	49	48	47	44	46	48	49	50	51	50	47	47	46	46	46	48	48	50	48	49	50	51	52	48	48	47	49	50	46	46	42	47	--	
April	--	--	53	--	--	--	--	--																										

SACRAMENTO RIVER BASIN--Continued

11-3760. COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	64	5	0.9	123	--	2.3	1050	--	850
2..	79	5	1.1	136	--	2.6	2850	--	10000
3..	75	5	1.0	126	--	2.4	2850	650 B	5000
4..	64	5	.9	85	--	1.4	2290	--	6800
5..	60	5	.8	70	--	1.1	7910	1900	40600
6..	60	5	.8	87	--	1.4	3350	650	5880
7..	60	5	.8	98	8	2.1	2120	245	1400
8..	64	5	.9	77	7	1.5	1620	135	590
9..	54	5	.7	66	6	1.1	1340	105	380
10..	64	5	.9	60	5	.8	1830	325	1610
11..	75	5	1.0	60	3	.5	1570	130	551
12..	72	6	1.2	75	3	.6	1390	82	308
13..	79	6	1.3	91	4	1.0	1560	105	442
14..	91	5	1.2	117	8	2.5	1900	120	616
15..	89	5	1.2	442	23 B	27	1480	86	344
16..	85	5	1.1	754	43 B	88	1230	65	216
17..	85	5	1.1	538	38 B	55	1100	50	149
18..	66	5	.9	288	29	23	994	34	91
19..	58	4	.6	276	24	18	906	26	64
20..	54	4	.6	1660	790 B	3540	842	20	45
21..	70	5	.9	1880	1000 B	5080	778	17	36
22..	89	6	1.4	1410	300 B	1140	714	16	31
23..	87	6	1.4	874	65	153	658	14	25
24..	92	6	1.5	634	37	63	602	11	18
25..	81	5	1.1	506	19	26	554	8	12
26..	72	5	1.0	426	12	14	514	7	9.7
27..	83	5	1.1	386	10	10	490	6	7.9
28..	81	5	1.1	418	90	102	450	6	7.3
29..	89	--	1.4	930	250	628	434	5	5.9
30..	98	--	1.6	890	100	240	418	5	5.6
31..	106	--	1.7	--	--	--	402	5	5.4
Total	2346	--	33.2	13583	--	11228.3	46196	--	76099.8
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	378	5	5.1	6620	1010	18100	588	9	14
2..	362	5	4.9	4540	600	7350	588	8	13
3..	354	5	4.8	3440	350	3250	570	8	12
4..	340	5	4.6	2900	250	1960	564	8	12
5..	335	4	3.6	2620	198	1400	546	8	12
6..	326	4	3.5	2380	153	983	540	8	12
7..	314	3	2.5	2200	119	707	528	7	10.0
8..	306	3	2.5	2060	95	528	522	7	9.9
9..	302	3	2.4	1920	91	472	510	6	8.3
10..	298	3	2.4	1800	86	418	558	--	30
11..	286	3	2.3	1680	78	354	906	--	120
12..	280	3	2.3	1600	62	268	866	--	70
13..	280	3	2.3	1550	54	226	954	--	100
14..	276	4	3.0	1460	51	201	906	45	110
15..	276	4	3.0	1320	50	178	775	20	42
16..	272	4	2.9	1230	49	163	2000	230 K	1390
17..	269	4	2.9	1150	47	146	2100	199	1130
18..	262	3	2.1	1080	36	105	1640	116	514
19..	258	2	1.4	1020	28	77	1420	89	341
20..	1110	344 S	2350	938	24	61	1400	115	435
21..	8470	3000 K	74200	882	20	48	1550	195	816
22..	4710	1540 S	22100	834	18	41	1470	114	452
23..	2110	360	2050	789	16	34	1460	88	347
24..	5810	1030 S	18200	747	15	30	1400	70	265
25..	3420	408 S	3980	733	14	28	1300	51	179
26..	9700	1800 K	56800	681	13	24	1230	35	116
27..	5850	890 K	14500	649	12	21	1160	31	97
28..	9880	2000 K	54900	621	11	18	1110	29	87
29..	15600	3600 K	158000	--	--	--	1070	26	75
30..	11200	2600 K	81900	--	--	--	1060	--	160
31..	13100	2700 K	103000	--	--	--	1480	460 K	1890
Total	96734	--	592038.5	49444	--	37191	32771	--	8869.2

S Computed by subdividing day.

B Computed from estimated-concentration graph.

K Computed from estimated-concentration graph and subdividing day.

SACRAMENTO RIVER BASIN--Continued

11-3760, COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2620	780	K 5760	1380	58	B 216	842	18	41
2..	1600	350	1510	1320	55	B 196	1320	77	K 291
3..	1440	90	350	1300	30	B 105	1220	95	B 313
4..	1400	52	197	1320	37	132	1020	61	B 168
5..	1380	37	138	1390	37	139	1000	40	B 108
6..	1990	450	K 3090	1460	100	B 394	1020	37	102
7..	2620	575	4070	1510	110	B 448	926	31	78
8..	2010	245	1330	1700	120	B 551	860	26	B 60
9..	1850	585	2920	1850	176	879	812	22	B 48
10..	1780	510	2450	1950	180	948	770	18	37
11..	2390	465	3000	1590	124	B 532	715	14	27
12..	1960	--	3200	1470	82	B 325	675	12	22
13..	1750	--	2200	1390	46	B 173	710	12	23
14..	1650	--	1200	1330	36	129	625	11	19
15..	1610	--	870	1330	40	144	575	9	14
16..	1480	--	400	1430	51	197	545	9	13
17..	1820	--	3400	1510	72	294	535	9	B 13
18..	2310	--	6900	1530	96	397	530	10	B 14
19..	1940	--	3400	1450	106	415	530	11	B 16
20..	1940	--	3100	1390	135	507	520	11	B 15
21..	1730	--	1400	1370	144	533	500	11	B 15
22..	1640	150	664	1350	107	390	470	11	B 14
23..	2010	360	K 1970	1320	60	214	430	11	B 13
24..	2060	360	2000	1250	32	108	410	11	B 12
25..	2000	169	913	1140	26	80	390	11	B 12
26..	1850	150	B 749	1040	23	65	380	11	B 11
27..	1930	--	830	986	24	64	370	10	B 10.0
28..	1710	--	460	932	28	70	360	10	B 9.7
29..	1600	85	B 367	890	27	65	340	10	B 9.2
30..	1470	60	B 238	842	23	52	320	10	B 8.6
31..	--	--	--	794	20	43	--	--	--
Total	55540	--	59076	41514	--	8805	19720	--	1536.5
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day
1..	310	9	7.5	98	2	0.5	60	8	1.3
2..	300	9	7.3	96	3	.8	58	8	1.3
3..	290	9	7.0	92	3	.7	56	10	1.5
4..	270	5	3.6	90	4	1.0	55	11	1.6
5..	250	8	5.4	88	4	1.0	55	12	1.8
6..	230	12	7.5	86	4	.9	55	14	2.1
7..	217	9	5.3	84	5	1.1	55	16	2.4
8..	206	5	2.8	83	5	1.1	55	14	2.1
9..	205	4	2.2	83	5	1.1	55	8	1.2
10..	200	4	2.2	82	5	1.1	56	5	.8
11..	195	4	2.1	82	5	1.1	66	6	1.1
12..	190	4	2.1	81	6	1.3	68	4	.7
13..	180	4	1.9	80	6	1.3	70	2	.4
14..	170	4	1.8	75	6	1.2	70	5	.9
15..	165	4	1.8	72	6	1.2	70	9	1.7
16..	160	5	2.2	70	6	1.1	70	2	.4
17..	155	6	2.5	68	6	1.1	70	2	.4
18..	150	6	2.4	65	7	1.2	70	3	.6
19..	145	6	2.3	63	7	1.2	70	3	.6
20..	140	5	1.9	61	7	1.2	70	4	.8
21..	135	5	1.8	58	7	1.1	72	4	.8
22..	130	5	1.8	56	7	1.1	70	4	.8
23..	125	5	1.7	56	8	1.2	74	4	.8
24..	120	4	1.3	60	8	1.3	80	4	.9
25..	115	4	1.2	64	8	1.4	74	2	.4
26..	110	3	.9	66	8	1.4	77	2	.4
27..	108	2	.6	68	8	1.5	91	2	.5
28..	106	2	.6	68	8	1.5	82	2	.4
29..	104	1	.3	68	8	1.5	88	2	.5
30..	102	1	.3	66	8	1.4	78	2	.4
31..	100	2	.5	62	8	1.3	--	--	--
Total	5383	--	82.8	2291	--	35.9	2040	--	29.6
Total discharge for year (cfs-days).....								367562.0	
Total load for year (tons).....								795025.8	

B Computed from estimated-concentration graph.

K Computed from estimated-concentration graph and subdividing day.

SACRAMENTO RIVER BASIN--Continued

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

LOCATION.--Lat 40°23'55", long 122°08'45", at gaging station on right bank 3.7 miles downstream from Spring Branch, 5.7 miles upstream from mouth, and 7.0 miles east of Cottonwood, Shasta County.

DRAINAGE AREA.--358 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1961 to September 1966.

Water temperatures: December 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 70°F July 31, Aug. 1; minimum, 43°F Dec. 31, Jan. 1.

EXTREMES, 1965-67.--Water temperatures: Maximum, 70°F July 31, Aug. 1, 1967; minimum, 41°F Dec. 17, 1965.

REMARKS.--Clock stopped May 12-14; temperature range, 50°F to 53°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	60	60	59	59	59	59	59	59	60	60	59	58	57	53	53	54	55	55	55	55	55	55	57	58	57	57	57	56	55	55	57	57	
Minimum	58	57	56	56	56	57	57	57	57	57	57	56	53	51	51	51	52	52	53	54	53	52	54	55	55	55	54	53	53	53	54	54	
November																																	
Maximum	55	55	54	54	54	53	53	52	51	52	52	54	54	54	55	55	52	53	56	55	51	50	48	47	48	50	50	51	51	50	--	52	
Minimum	54	52	52	52	52	52	50	48	50	52	52	54	53	53	52	51	52	52	51	49	48	46	46	46	48	48	49	50	49	--	50	--	
December																																	
Maximum	52	52	52	52	51	51	50	50	50	50	49	48	48	48	48	47	47	48	48	48	47	47	47	47	46	45	45	45	45	45	44	48	
Minimum	50	52	51	51	51	50	50	50	50	49	48	48	48	48	47	47	47	48	47	46	46	46	46	46	45	45	45	45	45	44	43	47	
January																																	
Maximum	44	44	44	44	44	44	44	44	44	44	44	44	45	45	45	45	45	45	45	45	46	46	47	47	47	47	47	47	46	46	46	45	
Minimum	43	44	44	44	44	44	44	44	44	44	44	44	45	45	45	45	45	45	45	45	46	46	47	47	47	47	47	46	46	46	46	45	
February																																	
Maximum	48	48	48	48	48	48	48	48	48	48	48	50	50	50	50	49	49	49	49	49	49	49	49	49	49	49	49	49	--	--	--	48	
Minimum	46	48	48	48	48	48	48	48	48	48	48	48	50	50	49	49	49	49	49	49	49	49	49	49	49	49	49	49	--	--	--	48	
March																																	
Maximum	49	49	49	49	49	49	48	49	49	49	49	47	46	46	46	46	49	49	48	49	49	49	49	49	49	49	48	48	48	48	48	48	
Minimum	49	49	49	49	49	49	48	49	49	49	49	47	46	46	46	46	48	48	48	49	49	49	49	49	49	49	48	48	48	48	48	48	
April																																	
Maximum	48	48	50	50	50	50	49	50	50	50	50	50	49	49	49	49	49	49	49	49	49	49	48	48	48	48	48	48	48	49	--	48	
Minimum	48	48	48	50	50	49	49	49	50	50	50	49	49	49	49	49	49	49	49	49	49	48	48	48	48	48	48	48	48	48	--	48	
May																																	
Maximum	55	55	56	57	57	57	59	59	59	60	53	--	--	--	59	59	59	58	58	58	58	59	59	59	57	57	58	58	57	56	55	57	
Minimum	49	53	54	54	56	54	56	58	55	53	52	--	--	--	55	58	57	57	56	56	56	56	56	56	55	56	57	57	55	54	52	55	
June																																	
Maximum	52	51	55	54	55	56	57	56	58	58	59	59	58	58	59	59	60	60	61	61	60	60	60	61	62	62	63	64	64	65	--	58	
Minimum	51	51	51	52	53	53	56	53	55	57	58	58	56	56	56	57	58	59	60	60	60	60	58	56	59	60	61	61	61	63	63	--	57
July																																	
Maximum	65	65	65	65	65	65	65	65	64	64	66	66	66	66	67	67	67	67	66	65	66	66	66	66	66	66	67	67	67	68	70	66	
Minimum	64	64	63	63	64	64	64	63	63	63	64	64	65	65	65	65	65	65	65	63	65	65	65	65	65	64	65	66	66	66	68	69	64
August																																	
Maximum	70	69	69	68	68	68	67	67	67	67	67	67	67	67	67	67	68	68	68	67	68	68	67	67	67	67	68	67	66	65	66	67	
Minimum	68	68	67	66	66	65	65	65	65	65	65	65	65	65	65	65	66	66	66	67	65	65	66	66	66	66	66	65	64	63	64	65	
September																																	
Maximum	65	64	65	65	65	65	65	64	63	63	62	62	62	62	61	62	62	62	62	62	63	62	62	62	62	62	62	62	62	61	--	62	
Minimum	64	62	63	63	64	63	62	62	62	62	61	61	61	60	60	61	61	60	61	62	61	61	61	61	61	61	61	61	61	60	--	61	

SACRAMENTO RIVER BASIN--Continued

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

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
Oct. 3, 1966.....	1520	58		217	5	2.9					--	--	--	--	--		S
Nov. 1.....	1530	54		233	5	3.1					--	--	--	--	--		
Dec. 2.....	1050	51		632	9	15					84	91	94	94	100		
Dec. 6.....	1510	46		710	10	19					--	--	--	--	--		
Jan. 3, 1967.....	1040	44		290	5	3.9					--	--	--	--	--		V
Feb. 1.....	1025	48		1260	37	126					56	68	85	96	100		
Mar. 1.....	1115	50		410	6	6.6					--	--	--	--	--		
Apr. 3.....	1145	49		590	9	14					--	--	--	--	--		

SACRAMENTO RIVER BASIN--Continued

11-3772. SACRAMENTO RIVER AT BEND, CALIF.

LOCATION.--Lat 40°16'10", long 122°13'40", at highway bridge at Bend, Tehama County, 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 square miles, excluding Goose Lake basin, upstream from gaging station.

RECORDS AVAILABLE.--Chemical analyses: May 1955 to September 1967.

Water temperatures: May 1955 to September 1967.

Sediment records: October 1957 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 40°F Jan. 26.

Sediment concentrations: Maximum daily, 2,130 ppm Dec. 5; minimum daily, 1 ppm July 12.

Sediment loads: Maximum daily, 291,000 tons Jan. 31; minimum daily, 36 tons July 12.

EXTREMES, 1955-67.--Water temperatures: Maximum (1955-66), 66°F June 1, 1960; minimum, 38°F Jan. 22, 1962.

Sediment concentrations (1957-67): Maximum daily, 2,920 ppm Dec. 24, 1964; minimum daily, 1 ppm on many days in 1964, July 12, 1967.

Sediment loads (1957-67): Maximum daily, 876,000 tons Dec. 22, 1964; minimum daily, 12 tons Dec. 8-10, 14, 15, 1964.

REMARKS.--Sediment daily station formerly reported as 11-3785. Sacramento River at Red Bluff, was moved Dec. 15, 1966. Temperature and sediment data from Oct. 1 to Dec. 14 are from the site at Red Bluff. Extremes for the period of record have been revised to include water temperature data for the period May 1955 to June 1963 during which time station 11-3772. was a daily chemical quality station. 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 parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 4, 1966.....	7670			8.4	5.9	5.1	0.8	61	0	--	1.7		0.8	0.0	--			46			113	8.1
Nov. 2.....	8000			10	5.2	5.9	1.0	64	0	--	2.0		1.5	.0	--			46			118	7.8
Dec. 6.....	47280			10	5.0	6.2	1.2	56	0	--	2.2		1.2	.0	--			46			119	8.0
Jan. 4, 1967.....	8048			11	5.4	7.7	1.2	68	0	--	2.8		.6	.1	--			50			132	8.2
Feb. 17.....	13480			11	5.3	6.7	1.1	64	0	--	2.3		.8	.0	--			50			128	8.0
Mar. 6.....	8370			11	5.4	6.9	1.1	61	0	--	2.5		.8	.0	--			50			131	8.0
Apr. 6.....	9440			11	5.5	6.3	.8	62	0	--	2.7		.9	.0	--			50			127	8.0
May 4.....	15760	20		12	5.0	6.6	1.1	63	0	9.0	2.0		.6	.0	100			50			127	7.6
May 31.....	16000			9.3	4.2	5.0	.9	56	0	--	1.3		.7	.0	--			40			103	7.7
July 5.....	12350			--	--	5.4	--	57	0	--	2.1		--	.0	--			44			119	7.6
Aug. 4.....	11540			--	--	5.7	--	57	0	3.6	2.5		--	.0	--			45			113	7.8
Sept. 6.....	11710			8.5	5.1	4.9	.8	56	0	6.6	1.8		.5	.1	62			42			106	7.5

SACRAMENTO RIVER BASIN--Continued

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

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	--	--	59	--	59	--	59	--	--	59	--	59	--	59	--	--	55	--	55	--	55	--	--	55	--	55	--	55	--	--	55	--
November	55	--	55	--	55	55	--	55	55	55	55	55	54	55	55	55	55	55	54	55	49	49	49	49	50	51	51	50	51	51	--	51
December	52	52	50	50	50	52	52	52	52	52	51	51	--	51	--	--	--	--	--	--	51	49	47	--	46	48	48	49	49	50	52	--
January	52	51	50	47	49	49	47	48	49	49	49	49	50	52	49	50	46	48	44	--	45	46	43	44	44	40	44	48	49	49	50	47
February	49	48	49	49	50	48	50	52	49	53	48	51	48	50	45	48	50	49	48	47	48	49	48	48	50	50	51	51	--	--	--	49
March	53	48	49	46	51	50	50	54	51	48	50	48	--	46	49	53	55	52	--	50	53	56	51	55	51	55	55	53	54	48	46	51
April	46	50	52	53	49	48	50	51	51	54	48	48	48	49	50	49	50	46	48	48	48	50	48	48	52	51	50	48	50	48	--	49
May	52	52	52	50	52	50	58	55	53	51	50	50	52	56	55	55	55	60	56	57	59	58	56	54	58	58	57	58	52	52	50	54
June	49	49	--	--	58	52	--	58	--	54	--	52	--	56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	57	--	57	--	50	--	--
August	54	--	67	--	63	--	60	--	61	--	61	--	61	--	64	--	62	--	61	--	62	--	61	--	59	--	60	--	61	--	61	--
September	--	--	--	60	--	56	--	60	--	60	--	60	--	61	--	60	--	62	--	60	--	59	--	61	--	59	--	53	--	--	--	--

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

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	7780	5	105	8000	4	86	18500	64	S 3560
2..	7750	4	84	8000	4	86	28200	1880	S 227000
3..	7750	4	84	8100	4	87	36500	1440	S 208000
4..	7670	5	104	8130	4	88	22300	200	12000
5..	7700	5	104	8020	4	87	39500	2130	S 240000
6..	7730	6	125	8370	6	136	44700	400	48300
7..	7730	6	125	8590	6	139	49000	270	35700
8..	7750	5	105	8320	5	112	52500	253	35900
9..	7750	5	105	8160	4	88	53000	174	24900
10..	7730	4	83	8130	5	110	49100	117	15500
11..	7750	4	84	8160	5	110	26300	49	S 3930
12..	7780	4	84	8460	7	160	20700	18	1010
13..	7780	4	84	8540	7	161	20200	54	2950
14..	7810	5	105	8460	5	114	21900	74	4380
15..	7750	5	105	9090	14	344	19300	28	1460
16..	7780	6	126	11300	52	1590	18300	30	1480
17..	7780	6	126	9430	42	1070	17800	28	1350
18..	7730	5	104	8700	19	446	17600	25	1190
19..	7750	5	105	9380	23	S 686	17300	25	1170
20..	7780	4	84	19000	350	S 19000	17200	29	1350
21..	7810	5	105	13500	120	4370	17000	23	1060
22..	7780	5	105	15000	79	3200	16900	18	821
23..	7810	5	105	12900	28	975	16700	20	902
24..	7780	5	105	14700	36	1430	16000	18	778
25..	7750	4	84	14500	32	1250	15400	17	707
26..	7780	4	84	14500	25	979	15300	16	661
27..	7780	4	84	14300	28	1080	15200	17	698
28..	7780	3	63	15600	24	1010	14300	13	502
29..	7810	3	63	20400	120	6610	12500	12	405
30..	7860	3	64	16400	38	1680	11700	12	379
31..	7920	4	86	--	--	--	10100	11	300
Total	240890	--	2979	334140	--	47284	751000	--	878343
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	9750	11	290	58600	270	42700	9690	12	314
2..	9660	12	313	51800	132	18500	9350	11	278
3..	9600	13	337	48600	111	14600	9230	12	299
4..	8670	13	304	47200	88	11200	8700	11	258
5..	7620	14	288	46200	72	8980	8620	10	233
6..	6670	12	216	44800	53	6410	8560	10	231
7..	6540	11	194	38600	37	3860	7730	9	188
8..	6540	11	194	28300	55	4200	7590	9	184
9..	6520	12	211	21800	52	3060	7190	10	194
10..	6050	13	212	19400	39	2040	6770	16	292
11..	5860	11	174	18400	30	1490	9720	60	1570
12..	5370	11	159	18200	28	1380	9350	22	555
13..	5300	12	172	18100	25	1220	9690	34	890
14..	5320	9	129	16900	22	1000	10800	46	1340
15..	5300	8	114	16300	23	1010	9200	17	422
16..	5300	7	100	15400	24	998	16600	226	S 11200
17..	5280	7	100	15000	20	810	15300	150	6200
18..	5280	6	86	14100	18	685	13300	83	2980
19..	5280	6	86	13900	20	751	11600	44	1380
20..	9460	147	S 6890	13500	19	693	10700	31	896
21..	53800	1300	S 206000	12300	18	598	11200	33	998
22..	29000	512	S 48600	10800	14	408	10300	28	779
23..	12400	120	4020	10300	12	334	10200	23	633
24..	17700	461	S 25600	10300	13	362	10200	26	716
25..	16300	332	S 17500	10700	14	404	9520	21	540
26..	25500	1070	S 101000	10400	15	421	9070	16	392
27..	23700	422	S 28200	10200	15	413	8700	16	376
28..	31900	473	S 42100	10000	14	378	8540	24	553
29..	55400	1120	168000	--	--	--	8560	38	878
30..	56000	1050	159000	--	--	--	8470	49	1120
31..	77400	1350	S 291000	--	--	--	11900	63	2020
Total	534470	--	1101589	650100	--	128905	306350	--	38909

S Computed by subdividing day.

SACRAMENTO RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	16300	231	S 10600	19900	21	1130	16900	9	411
2..	12000	33	1070	18500	19	949	17200	9	418
3..	10700	18	520	18300	17	840	17300	9	420
4..	9950	14	376	18000	18	875	16700	9	406
5..	9580	11	285	17000	16	734	16700	9	406
6..	12000	32	S 1110	16200	17	744	16700	13	586
7..	18000	137	6660	16000	16	691	16400	13	576
8..	18200	62	3050	15500	17	711	15400	12	499
9..	17500	34	1610	15900	29	1240	15700	10	424
10..	17200	30	1390	19300	30	1560	15500	7	293
11..	18200	67	3290	19300	23	1200	15300	7	289
12..	16400	34	1510	19200	24	1240	15300	7	289
13..	18800	44	2230	20300	22	1210	15300	8	330
14..	20100	49	2660	19800	16	855	15000	8	324
15..	19600	42	2220	19600	16	847	14900	8	322
16..	19100	30	1550	19900	19	1020	14900	8	322
17..	19500	54	2840	20500	24	1330	14800	8	320
18..	28100	140	10600	20500	28	1550	14900	7	282
19..	27200	80	5880	20500	26	1440	14800	10	400
20..	25600	40	2760	22000	24	1430	14700	12	476
21..	24000	40	2590	22900	28	1730	14700	12	476
22..	22900	29	1790	23000	33	2050	14600	11	434
23..	24600	41	2720	23000	35	2170	14400	10	389
24..	26500	48	3430	23300	28	1760	14400	9	350
25..	25800	53	3690	22900	21	1300	14300	9	347
26..	23800	29	S 1860	21900	14	828	14300	9	347
27..	26700	162	S 12700	20600	10	556	14200	6	230
28..	22800	39	2400	19300	10	521	14100	4	152
29..	21300	23	1320	18700	10	505	14100	4	152
30..	20500	22	1220	18100	10	489	14100	3	114
31..	--	--	--	17700	9	430	--	--	--
Total	592930	--	95931	607600	--	33935	457600	--	10784
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	14000	5	189	13000	6	211	12000	10	324
2..	13900	6	225	13000	6	211	12000	10	324
3..	14200	6	230	13000	6	211	12000	11	356
4..	13800	4	149	12900	6	209	12000	11	356
5..	13800	4	149	12900	6	209	12000	12	389
6..	13800	3	112	12900	7	244	11900	12	386
7..	13500	3	109	12900	8	279	11900	11	353
8..	13300	3	108	12800	8	276	11600	10	313
9..	13300	2	72	12800	9	311	11400	9	277
10..	13300	2	72	12800	9	311	11400	7	215
11..	13200	2	71	12800	9	311	11400	8	246
12..	13200	1	36	12800	9	311	11400	10	308
13..	13200	2	71	12800	8	276	11400	10	308
14..	13100	3	106	12700	7	240	11200	9	272
15..	13200	3	107	12700	7	240	11000	8	238
16..	13100	3	106	12700	8	274	11000	9	267
17..	13200	3	107	12600	11	374	11000	9	267
18..	13200	4	143	12600	11	374	11000	10	297
19..	13100	4	141	12500	8	270	10700	9	260
20..	13100	4	141	12600	8	272	10400	8	225
21..	13100	4	141	12600	8	272	10400	8	225
22..	13100	5	177	12600	9	306	10400	8	225
23..	13100	5	177	12500	10	338	10400	8	225
24..	13100	4	141	12500	10	338	10400	8	225
25..	13100	5	177	12500	10	338	10400	11	309
26..	13100	5	177	12500	10	338	10400	19	534
27..	13000	5	176	12500	8	270	10300	21	584
28..	13000	6	211	12500	8	270	9980	22	593
29..	13100	6	212	12200	8	264	9980	22	593
30..	13100	6	212	12100	9	294	9750	22	579
31..	13000	6	211	12000	10	324	--	--	--
Total	412300	--	4456	392300	--	8766	331110	--	10073

Total discharge for year (cfs-days)..... 5610790

Total load for year (tons)..... 2361954

S Computed by subdividing day.

SACRAMENTO RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
Feb. 2, 1967.....	0900	48		52800	135	19250					45	55	70	87	100		V
Apr. 27.....	1230	50		33100	232	20730					73	86	98	100			V

SACRAMENTO RIVER BASIN--Continued

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

LOCATION.--Lat 40°13'55", long 122°10'50", 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, Tehama County.

DRAINAGE AREA.--9,022 square miles.

RECORDS AVAILABLE.--Water temperatures: November 1960 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 55°F on many days in October, and June to August; minimum, 42°F Jan. 24-27.

EXTREMES, 1960-67.--Water temperatures: Maximum (1961-63, 1964-67), 60°F Oct. 3-7, 1961; minimum, 39°F Jan. 22, 23, 1962.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	55	55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	52	52	52	52	52	52	52	52	52	52	52	52	52	--	
Minimum	54	54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	52	52	52	52	52	52	52	52	52	52	52	52	52	--	
November																																	
Maximum	52	52	52	52	53	53	52	52	52	52	52	53	53	53	53	54	54	53	54	54	53	52	51	51	51	51	51	51	51	51	--	52	
Minimum	52	52	52	52	52	52	52	52	52	52	52	52	53	53	53	53	53	53	53	53	52	51	51	51	51	51	51	51	51	51	--	51	
December																																	
Maximum	51	51	51	50	49	50	50	50	50	50	50	50	49	49	49	49	49	49	49	49	49	49	49	49	48	48	47	47	47	47	47	49	
Minimum	51	51	50	49	49	49	50	50	50	50	50	49	49	49	49	49	49	49	49	49	49	49	49	49	48	48	47	47	47	47	47	48	
January																																	
Maximum	47	47	47	47	47	47	47	46	46	46	46	46	46	46	45	45	45	45	45	45	45	45	45	45	44	42	42	42	43	45	47	48	45
Minimum	47	47	47	47	47	47	46	46	46	46	46	46	46	45	45	45	45	45	45	45	45	45	45	44	42	42	42	42	43	45	47	48	45
February																																	
Maximum	48	48	47	47	47	47	47	47	47	47	47	47	47	47	47	46	46	46	46	47	47	47	47	47	47	47	47	48	48	--	--	--	46
Minimum	48	47	47	47	47	47	47	47	47	47	47	47	47	47	46	46	46	46	46	46	47	47	47	47	47	47	47	47	48	48	--	--	47
March																																	
Maximum	48	48	48	46	46	46	46	46	46	46	47	48	48	48	47	47	47	49	49	50	50	50	51	51	51	51	50	50	51	51	51	50	48
Minimum	48	48	46	46	46	46	46	46	46	46	47	48	47	47	47	47	47	49	50	50	49	50	50	51	51	51	50	50	51	51	50	49	48
April																																	
Maximum	49	52	53	53	52	51	51	50	50	50	50	49	50	50	50	50	50	49	48	48	48	48	48	48	49	51	51	51	51	50	50	--	50
Minimum	48	49	52	52	51	51	50	50	50	50	49	49	49	50	50	50	49	47	47	48	48	48	48	48	48	49	51	51	51	50	50	--	49
May																																	
Maximum	51	51	51	51	52	52	53	54	54	53	51	49	50	51	52	52	52	52	52	52	52	52	51	51	51	51	51	51	51	51	51	51	51
Minimum	50	51	51	51	51	51	52	53	53	51	49	49	49	50	51	52	52	52	52	52	52	51	51	51	51	51	51	51	51	51	51	51	51
June																																	
Maximum	51	50	53	53	53	53	54	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	54	54	54	54	54	54	55	55	--	54
Minimum	50	50	50	53	53	52	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	53	53	53	53	53	53	54	54	--	53
July																																	
Maximum	55	54	54	54	54	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	54
Minimum	54	53	53	53	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	53
August																																	
Maximum	55	55	55	55	55	55	55	55	55	55	55	54	54	54	54	54	54	54	54	53	53	53	53	53	53	53	53	53	53	53	53	53	53
Minimum	54	54	54	54	54	54	54	54	54	54	54	53	53	53	53	53	53	53	53	52	52	52	52	52	53	53	53	52	52	52	52	52	53
September																																	
Maximum	53	53	53	53	53	53	54	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	52	--	--	53	
Minimum	52	52	53	53	53	53	53	53	53	53	53	53	53	53	53	53	52	52	52	53	53	53	53	53	53	53	53	52	52	--	--	52	

SACRAMENTO RIVER BASIN--Continued

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

LOCATION.--Lat 40°05'34", long 122°05'57", 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, Tehama County.

DRAINAGE AREA.--131 square miles upstream from gaging station.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Nov. 10, 1966....	91			15	6.3	24	3.2	61	0	--	31		--	0.7	--			64			259	7.9
Dec. 5.....	1240			6.3	2.8	5.0	1.0	35	0	--	2.7		--	.1	--			27			84	7.7
Jan. 3, 1967....	141			12	5.0	16	2.1	54	0	--	17		--	.5	--			50			186	7.9
Feb. 17.....	279			9.8	4.1	11	1.5	45	0	--	11		--	.3	--			42			138	7.8
Mar. 7.....	201			11	4.6	13	2.0	51	0	--	14		--	.3	--			46			160	8.0
Apr. 7.....	1480			7.2	3.5	5.2	1.0	41	0	--	2.8		--	.0	--			32			89	7.7
May 5.....	460	31		9.2	4.0	9.3	1.5	50	0	10	8.6		0.6	.2	A 99			40			128	7.9
May 31.....	865			6.3	2.2	5.6	1.3	25	0	--	3.5		--	.2	--			24			84	7.4
July 6.....	393			--	--	7.3	--	27	0	--	5.8		--	.1	--			29			109	7.5
Aug. 4.....	167			--	--	12	--	45	0	--	11		--	.3	--			43			152	7.8
Sept. 7.....	125			12	5.7	14	2.6	58	0	16	15		.8	.1	119			54			184	7.8

A Calculated from sum of determined constituents.

SACRAMENTO RIVER BASIN--Continued

11-3820. THOMES CREEK AT PASKENTA, CALIF.

LOCATION (revised).--Lat 39°52'57", long 122°33'03", at gaging station 0.25 mile upstream from Digger Creek, and 0.3 mile upstream from highway bridge at Paskenta, Tehama County.

DRAINAGE AREA.--194 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1967.

Water temperatures: October 1961 to September 1967.

Sediment records: October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 94°F Aug. 18, 23; minimum, freezing point Dec. 27, 28, Jan. 6.

Sediment concentrations: Maximum daily, 16,100 ppm Jan. 29; minimum daily, 1 ppm on several days.

Sediment loads: Maximum daily, 273,000 tons Jan. 29; minimum daily, less than 0.05 ton on many days.

EXTREMES, 1961-67.--Water temperatures: Maximum, 94°F Aug. 18, 23, 1967; minimum, freezing point on several days in December and January of most years.

Sediment concentrations (1962-67): Maximum daily, 57,900 ppm Dec. 22, 1964; minimum daily, no flow Oct. 4, 1964.

Sediment loads (1962-67): Maximum daily, 5,070,000 tons Dec. 22, 1964; minimum daily, 0 ton Oct. 4, 1964.

REMARKS.--Clock stopped Apr. 4-12; temperature range, 38°F to 53°F.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 4, 1966.....	A 4.2			52	17	13	1.2	119	3	--	24		1.1	0.0	--			200			459	8.5
Nov. 2.....	4.9			52	19	15	1.1	123	4	--	27		1.1	.1	--			208			482	8.5
Dec. 5.....	3150			26	3.5	2.7	1.1	76	0	--	.8		.6	.0	--			80			166	8.0
Jan. 9, 1967.....	100			31	7.8	5.4	.7	111	2	--	3.4		.1	.1	--			110			240	8.4
Feb. 17.....	485			23	6.3	3.8	.8	88	0	--	1.3		.6	.0	--			84			181	8.2
Mar. 14.....	215			31	9.7	5.0	.7	120	0	--	2.6		.8	.0	--			118			242	8.2
Apr. 6.....	385			26	8.3	4.4	.6	105	0	--	1.6		.3	.0	--			99			209	8.2
May 5.....	660	10		24	6.7	4.2	1.2	96	0	15	1.2		.8	.0	113			88			188	8.0
May 31.....	430			21	5.0	3.2	.6	77	0	--	1.0		.4	.0	--			73			153	8.1
July 6.....	60			--	--	5.5	--	126	0	--	3.6		.1	.0	--			1290			263	8.2
Aug. 4.....	20			--	--	8.8	--	123	2		8.1		--	.1	--			148			323	8.6
Sept. 7.....	A 9.4			49	16	11	1.2	154	0	64	13		.5	.1	262			188			425	8.2

A Daily mean discharge.

SACRAMENTO RIVER BASIN--Continued

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

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	78	77	74	76	75	75	74	74	73	74	70	68	60	64	62	63	67	67	61	63	61	66	69	71	68	68	65	67	68	68	70	68
Minimum	62	61	59	56	57	58	60	58	58	57	56	55	48	46	46	48	49	49	49	51	48	48	52	53	53	54	52	51	51	51	54	53
November																																
Maximum	68	66	66	65	59	58	63	56	56	56	54	54	53	51	52	51	52	54	52	50	46	46	46	46	46	46	46	44	47	45	--	53
Minimum	54	50	52	51	48	50	50	46	44	46	50	52	51	50	50	45	44	47	50	44	40	38	37	36	36	38	38	43	41	42	--	45
December																																
Maximum	45	44	45	44	43	47	47	46	45	45	47	46	46	46	46	46	47	45	46	44	47	44	42	44	38	42	41	42	40	44	46	44
Minimum	43	40	40	43	43	43	42	39	42	42	41	44	44	40	39	39	39	40	41	41	39	38	38	38	36	36	34	32	32	34	35	34
January																																
Maximum	44	46	45	42	42	43	44	45	44	45	44	48	51	51	47	44	46	46	38	40	42	42	41	39	41	39	40	42	44	44	46	43
Minimum	34	35	34	35	35	32	33	34	35	38	39	37	38	39	38	36	33	35	34	38	39	36	36	33	34	38	38	40	41	40	40	36
February																																
Maximum	44	46	48	47	49	48	49	48	49	50	50	52	49	46	42	46	49	50	48	49	50	50	48	45	49	50	51	52	--	--	--	48
Minimum	41	39	40	40	41	39	40	42	40	41	40	44	42	37	36	36	38	39	39	37	36	36	37	40	41	38	39	41	--	--	--	39
March																																
Maximum	52	53	50	50	54	55	56	56	55	47	44	42	46	43	45	50	46	48	47	44	52	48	52	50	47	52	52	47	47	39	46	48
Minimum	40	38	41	38	36	38	39	40	40	42	38	34	34	36	38	40	38	39	37	41	42	42	40	37	39	40	39	39	36	37	36	38
April																																
Maximum	51	53	44	--	--	--	--	--	--	--	--	--	49	49	50	50	48	47	43	49	48	49	49	53	58	52	53	54	54	56	--	--
Minimum	37	36	37	--	--	--	--	--	--	--	--	--	43	41	40	39	42	40	39	39	42	40	44	45	44	43	42	39	40	41	--	--
May																																
Maximum	59	61	61	61	56	62	63	61	51	53	51	57	60	63	65	64	64	63	65	66	67	67	67	64	64	65	66	64	62	62	58	61
Minimum	41	43	45	45	46	45	47	49	47	44	43	42	44	47	49	50	51	51	51	53	53	54	55	52	50	52	52	53	50	49	47	48
June																																
Maximum	50	52	65	66	56	61	66	68	66	68	66	61	68	70	73	74	74	74	75	74	74	74	76	79	80	81	83	84	86	87	--	71
Minimum	49	48	47	50	53	51	51	53	52	53	54	53	51	53	55	56	56	58	59	59	58	58	59	59	62	64	65	65	67	67	--	50
July																																
Maximum	88	87	89	88	87	89	87	86	87	90	93	--	89	90	90	86	88	88	87	89	89	89	89	90	90	90	90	92	93	92	89	89
Minimum	69	69	71	70	68	68	68	68	68	70	71	--	70	68	71	72	70	69	68	69	70	71	70	71	71	70	72	73	73	75	73	70
August																																
Maximum	92	92	92	92	91	90	90	89	90	90	89	91	92	92	92	92	93	94	92	92	92	92	94	87	91	92	92	89	90	88	88	91
Minimum	73	72	72	72	72	70	69	70	71	70	70	71	72	73	73	72	74	73	72	73	72	73	74	76	77	75	74	73	70	69	69	72
September													</																			

SACRAMENTO RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4.7	2		4.2	2	T	1200	2430 S	10700
2..	4.7	2		4.7	2	T	1400	2220 S	10100
3..	4.7	2		4.2	3	T	900	980	2380
4..	4.2	2		4.2	3	T	1820	3780 S	40900
5..	4.2	2		4.7	3	T	2820	7680 S	71300
6..	4.7	2		12	4	0.1	706	2650	5050
7..	4.2	3		24	5	.3	512	1370	1890
8..	3.7	3		14	2	.1	465	810	1020
9..	3.7	2		11	2	.1	465	610	766
10..	3.3	2		9.8	2	.1	676	1480	2700
11..	3.3	2		10	2	.1	640	810	1400
12..	3.3	2		44	9 S	3.0	832	2030	4560
13..	3.3	2		152	29	12	984	2320 S	6610
14..	3.3	2		308	625 S	798	952	2270	5830
15..	3.7	2		410	504	558	724	1100	2150
16..	3.7	2		853	1660 S	5040	694	820	1540
17..	4.2	2		320	116	100	652	648	1140
18..	3.7	2		209	41	23	634	562	962
19..	4.2	2		455	515 S	1610	616	490	815
20..	3.7	2		1520	2830 S	12800	592	398	636
21..	4.2	2		612	408 S	723	544	308	452
22..	4.2	2		382	168	173	490	230	304
23..	3.7	2		295	73	58	440	176	209
24..	3.7	2		246	50	33	386	114	119
25..	4.2	2		223	39	23	342	101	93
26..	4.2	2		205	22	12	306	84	69
27..	4.2	2		201	21	11	272	72	53
28..	4.2	2		481	416 S	841	247	63	42
29..	4.7	2		970	864 S	2450	237	55	35
30..	4.7	2		620	320	536	228	49	30
31..	4.2	2		--	--	--	198	44	24
Total	124.7	--	0.7	8608.8	--	25804.9	21974	--	173879
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	178	39	19	1400	4030	15200	232	118	74
2..	170	35	16	1060	2950	8440	230	129	80
3..	158	32	14	928	2140	5360	230	104	65
4..	150	30	12	904	1890	4610	222	71	43
5..	145	27	11	828	1900	4250	212	59	34
6..	130	22	7.7	880	1790	4250	208	57	32
7..	122	18	5.9	880	1700	4040	202	49	27
8..	108	14	4.1	840	1530	3470	202	58	32
9..	106	12	3.4	780	1210	2550	210	61	35
10..	102	10	2.8	820	1200	2660	240	136 S	93
11..	101	10	2.7	730	1060	2090	252	141	96
12..	107	13	3.8	790	1050	2240	250	108	73
13..	114	14	4.3	780	1010	2130	235	85	54
14..	140	28	11	640	790	1370	220	51	30
15..	162	45	20	532	570	819	232	189 S	169
16..	170	38	17	470	460	584	991	2270	6070
17..	170	35	16	422	390	444	730	1140 S	2480
18..	165	34	15	386	352	367	556	630	946
19..	160	34	15	356	300	288	508	470	645
20..	726	2570 S	10100	325	242	212	548	530	784
21..	4080	10800 S	124000	298	205	165	670	630	1140
22..	1090	5170 S	17100	275	184	137	690	710	1320
23..	458	2550	3150	262	170	120	790	1000	2130
24..	730	2210 S	4570	255	164	113	640	530	916
25..	446	1300	1570	252	154	105	540	417	608
26..	1210	2600 S	9380	250	139	94	476	348	447
27..	1340	3600	13000	245	130	86	434	317	371
28..	2930	7200 S	59200	238	123	79	416	299	336
29..	5700	16100 S	273000	--	--	--	386	251	262
30..	2640	7900	56300	--	--	--	380	295	303
31..	2160	5660	33000	--	--	--	352	256	243
Total	26168	--	604570.7	16926	--	66273	12484	--	19938

S Computed by subdividing day.

T Less than 0.05 ton.

SACRAMENTO RIVER BASIN--Continued

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

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	322	203	176	340	84	77	428	320	370
2..	307	251	208	364	104	102	1160	1040 S	3390
3..	322	230	200	422	230	262	556	280	420
4..	316	165	141	540	600	875	452	220	268
5..	316	155	132	610	700	1150	564	286 S	459
6..	352	270	257	630	710	1210	650	360	632
7..	410	473	524	1040	1680 S	4970	540	235	343
8..	360	326	317	1620	2720	11900	488	157	207
9..	368	244	242	1490	2430	9780	482	122	159
10..	410	262	290	1130	1390	4240	434	116	136
11..	392	223	236	850	945	2170	434	111	130
12..	360	176	171	770	620	1290	428	114	132
13..	364	167	164	770	505	1050	364	103	101
14..	364	169	166	850	580	1330	334	102	92
15..	352	135	128	1160	940	2940	331	97	87
16..	331	138	123	1400	1440	5440	328	81	72
17..	348	170	160	1480	1550	6190	328	74	66
18..	334	117	106	1320	1120	3990	319	71	61
19..	422	241	275	1170	870	2750	319		88
20..	344	128	119	1220	950	3130	295	89	71
21..	410	261 S	308	1250	930	3140	275	76	56
22..	410	271 S	321	1220	820	2700	235	47	30
23..	434	321 S	381	1140	770	2370	192	42	22
24..	416	156	175	1000	580	1570	185	40	20
25..	404	151	165	790	400	853	174	41	19
26..	386	138	144	740	310	619	172	50	23
27..	380	142	146	710	310	594	164	43	19
28..	368	108	107	670	270	488	140	37	14
29..	352	109	104	572	250	386	136	21	7.7
30..	344	88	82	488	200	264	130	11	3.9
31..	--	--	--	434	180	211	--	--	--
Total	10998	--	6068	28190	--	78041	11037	--	7498.6
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	116	9	2.8	20	2	0.1	11	2	0.1
2..	106	10	2.9	20	2	.1	10	2	.1
3..	100	10	2.7	20	1	.1	10	1	T
4..	93	10	2.5	20	1	.1	10	1	T
5..	86	10	2.3	20	2	.1	10	3	.1
6..	82	9	2.0	19	4	.2	10	2	.1
7..	78	8	1.7	20	6	.3	9.4	2	.1
8..	73	7	1.4	20	5	.3	9.4	3	.1
9..	70	6	1.1	20	4	.2	9.4	3	.1
10..	66	5	.9	19	4	.2	8.8	2	T
11..	62	3	.5	19	4	.2	8.3	2	T
12..	59	2	.3	18	2	.1	7.8	2	T
13..	56	2	.3	18	1	T	7.2	2	T
14..	52	1	.1	17	1	T	6.6	2	T
15..	50	1	.1	17	2	.1	6.6	2	T
16..	48	2	.3	16	3	.1	6.1	2	T
17..	47	2	.3	16	3	.1	6.6	2	T
18..	44	2	.2	15	3	.1	8.3	2	T
19..	43	1	.1	14	2	.1	8.3	2	T
20..	42	1	.1	14	2	.1	8.8	2	T
21..	38	1	.1	14	2	.1	9.4	3	.1
22..	36	1	.1	14	2	.1	9.4	4	.1
23..	35	2	.2	12	2	.1	9.4	4	.1
24..	32	2	.2	11	2	.1	9.4	4	.1
25..	30	2	.2	12	3	.1	9.4	3	.1
26..	28	2	.2	15	2	.1	9.4	3	.1
27..	26	2	.1	16	2	.1	8.3	4	.1
28..	25	2	.1	15	2	.1	7.8	4	.1
29..	24	2	.1	14	2	.1	7.8	5	.1
30..	22	2	.1	14	2	.1	7.2	4	.1
31..	22	2	.1	12	2	.1	--	--	--
Total	1691	--	24.1	511	--	3.8	260.1	--	2.2
Total discharge for year (cfs-days).....								138972.6	
Total load for year (tons).....								982104.0	

S Computed by subdividing day.

T Less than 0.05 ton.

SACRAMENTO RIVER BASIN--Continued

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

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

F, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)																		
Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 5, 1966.....	1235	44		2290	6050		16	26	37	48	56	64	79	89	93	97		VPWC
Dec. 8.....	1415	45		470	747		--	41	--	69	--	86	89	96	100	--		VPWC
Jan. 26, 1967.....	1400	41		1300	2420		--	18	--	39	--	55	67	83	93	99		VPWC
Feb. 8.....	1515	48		820	1390		12	23	32	45	55	62	73	86	96	99		VPWC
Feb. 28.....	1245	46		238	122		--	--	--	--	--	42	46	57	97	100		V
Mar. 16.....	1220	56		892	2410		13	17	26	37	51	62	83	94	99	100		VPWC
Apr. 19.....	1440	43		482	341		--	--	--	--	--	52	64	81	99	100		V

SACRAMENTO RIVER BASIN--Continued

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

LOCATION.--Lat 39°45'06", long 121°59'40", at gaging station on State Highway 32 bridge, 1.3 miles northeast of Hamilton City, Glenn County, and 2.4 miles upstream from Pine Creek.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 5, 1966.....	6969			9.1	5.9	5.3	0.9	63	0	--	2.1		--	0.0	--			47			119	8.0
Nov. 3.....	7467			9.7	5.7	6.2	1.0	65	0	--	2.7		--	.0	--			48			122	7.7
Dec. 5.....	57900			11	5.0	4.8	1.4	56	0	--	1.9		--	.0	--			48			114	7.8
Jan. 9, 1967.....	7134			13	6.4	8.1	1.3	73	0	--	3.8		--	.1	--			59			151	8.2
Feb. 20.....	15170			12	6.0	6.8	1.1	68	0	--	2.7		--	.1	--			54			141	8.1
Mar. 14.....	12250			12	5.7	6.8	1.0	64	0	--	3.4		--	.0	--			54			131	7.9
Apr. 10.....	18780	19		12	5.6	6.4	1.0	62	0	--	2.4		--	.0	--			53			130	7.8
May 16.....	20220			11	4.8	5.8	1.0	59	0	8.0	1.7		0.5	.0	89			47			119	7.6
June 6.....	17050			11	5.0	5.7	1.0	62	0	--	1.6		--	.0	--			48			116	7.9
July 11.....	11260			--	--	5.9	--	59	0	--	2.7		--	.1	--			47			119	7.9
Aug. 10.....	11030			--	--	5.8	--	59	0	--	2.6		--	--	--			45			116	7.9
Sept. 12.....	10990			9.0	5.1	5.1	.7	56	0	1.8	2.2		.5	.0	81			44			115	7.8

SACRAMENTO RIVER BASIN--Continued

11-3840. BIG CHICO CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°46'35", long 121°15'10", 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, Butte County.

DRAINAGE AREA.--72.2 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 5, 1966.....	21			16	8.7	16	1.0	105	3	--	12		--	0.1	--			76			220	8.4
Nov. 3.....	22			17	8.9	16	1.1	113	0	--	11		--	.1	--			79			220	8.2
Dec. 5.....	1870			5.0	2.5	2.4	.5	18	0	--	1.0		--	.0	--			23			60	7.7
Jan. 9, 1967.....	47			14	7.4	11	.8	88	0	--	8.6		--	.1	--			66			175	8.2
Feb. 20.....	112			11	5.7	6.7	.7	66	0	--	3.8		--	.0	--			51			123	8.0
Mar. 14.....	265			8.6	4.3	4.8	.5	52	0	--	2.1		--	.0	--			39			94	7.9
Apr. 10.....	452	28		7.5	3.7	3.7	.4	45	0	--	1.4		--	.0	--			34			84	7.9
May 16.....	270			8.4	4.2	4.2	.6	50	0	3.0	1.9		0.1	.0	80			38			92	7.8
June 6.....	95			11	5.8	6.7	.7	72	0	--	3.1		--	.2	--			52			130	8.1
July 11.....	37			--	--	11	--	95	0	--	7.3		--	.1	--			69			179	8.2
Aug. 10.....	27			--	--	13	--	100	0	--	9.2		--	.1	--			70			195	8.2
Sept. 12.....	23			15	8.6	14	1.1	103	0	.6	9.9		.3	.2	138			74			236	7.9

SACRAMENTO RIVER BASIN--Continued

11-3846. LITTLE STONY CREEK ABOVE EAST PARK RESERVOIR, NEAR LODOGA, CALIF.

LOCATION.--Lat 39°17'48", long 122°32'22", temperature recorder at gaging station on left bank 1.1 miles upstream from county bridge on Lodoga-Stonyford road, 1.4 miles downstream from Frenzel Creek, and 2.8 miles southwest of Lodoga, Colusa County.

DRAINAGE AREA.--45.6 square miles.

RECORDS AVAILABLE.--Water temperatures: May to September 1967.

EXTREMES, May to September 1967.--Water temperatures: Maximum, 84°F July 31, Aug. 1.

REMARKS.--Clock stopped Sept. 25-27; temperature range, 63°F to 74°F.

Temperature (°F) of water, May to September 1967																																	
Month	Day																															Average	
	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		
October																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
December																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
February																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
April																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May																																	
Maximum	--	--	--	--	--	--	--	--	--	56	53	57	59	61	63	64	65	65	65	65	66	68	68	66	65	65	65	63	62	63	59	--	--
Minimum	--	--	--	--	--	--	--	--	--	46	45	43	45	47	49	51	53	53	53	55	56	57	58	56	54	55	54	56	52	52	51	--	--
June																																	
Maximum	55	52	60	62	60	59	62	63	65	66	65	63	65	66	67	69	71	72	73	73	73	72	73	75	75	76	77	77	78	--	67	67	
Minimum	51	50	50	53	55	54	54	55	57	58	59	58	56	58	59	61	63	66	67	67	66	66	65	65	68	69	70	70	70	71	--	61	61
July																																	
Maximum	79	79	79	79	79	79	79	79	79	80	81	82	82	81	81	81	80	79	80	81	80	80	81	80	80	80	80	81	82	84	83	80	80
Minimum	73	72	72	72	72	72	71	71	72	72	72	74	74	72	72	73	72	71	70	71	72	71	71	71	70	72	77	73	73	74	73	72	72
August																																	
Maximum	84	83	83	83	82	82	82	80	81	81	79	80	81	82	82	82	82	83	82	82	82	83	83	82	81	83	82	81	79	79	78	81	81
Minimum	71	70	70	69	70	68	69	67	67	68	66	66	67	69	69	70	69	70	68	69	70	71	71	73	73	73	72	70	66	67	67	69	69
September																																	
Maximum	77	77	79	78	78	78	78	76	76	75	74	75	74	73	73	73	69	72	73	74	74	74	73	74	--	--	--	74	71	70	--	74	74
Minimum	65	65	69	68	68	68	68	66	66	65	64	64	63	62	62	62	64	63	63	64	64	66	65	65	--	--	--	65	66	63	--	64	64

SACRAMENTO RIVER BASIN--Continued

11-3880. STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.

LOCATION.--Lat 39°49'00", long 122°19'25", at gaging station on left bank 200 feet downstream from road bridge, 0.6 mile downstream from Black Butte Dam, and 8.1 miles northwest of Orland, Glenn County.

DRAINAGE AREA.--741 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1957 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 4, 1966.....	144			32	16	15	1.1	169	7	--	14		1.5	0.2	--			146			341	8.6
Nov. 3.....	104			35	17	16	1.2	177	10	--	14		2.3	.2	--			158			364	8.6
Dec. 5.....	40			36	15	16	1.2	154	6	--	18		1.8	.2	--			152			355	8.6
Jan. 9, 1967.....	28			31	12	14	1.2	128	3	--	18		1.2	.2	--			127			308	8.5
Feb. 17.....	394			24	9.3	9.8	1.1	112	0	--	9.4		1.6	.1	--			98			232	8.2
Apr. 10.....	53			26	12	12	.9	131	0	--	12		1.1	.0	--			114			271	8.1
May 16.....	605	9.5		28	11	13	.9	136	0	18	11		.7	.1	160			115			276	8.2
June 6.....	535			29	11	12	.9	130	2	--	11		--	.1	--			118			265	8.3
July 11.....	630			--	--	11	--	134	0	--	11		.3	.2	--			122			281	8.1
Aug. 10.....	635			--	--	12	--	146	0	--	12		.5	.1	--			125			292	8.2
Sept. 12.....	589			31	15	14	1.1	148	4	9.2	13		.3	.2	171			138			318	8.4

SACRAMENTO RIVER BASIN--Continued

11-3890. SACRAMENTO RIVER AT BUTTE CITY, CALIF.

LOCATION.--Lat 39°27'35", long 121°59'35", at gaging station 100 feet upstream from highway bridge, 0.5 mile south of Butte City, Glenn County, and at mile 115.8 upstream from Sacramento.

DRAINAGE AREA.--12,096 square miles.

RECORDS AVAILABLE.--Chemical analyses: May 1955 to September 1966.

Water temperatures: May 1955 to September 1958, October 1959 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 66°F June 30 to July 4; minimum, 44°F Jan. 25-28.

EXTREMES, 1955-58, 1959-67.--Water temperatures: Maximum, 75°F June 2, 3, 5, 7, 1960; minimum (1955-57, 1959-62, 1963-67), freezing point Jan. 2-5, 1960.

Temperature (°F) of water, water year October 1966 to September 1967																																			
Month	Day																															Average			
	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				
October																																			
Maximum	63	62	61	60	60	59	58	58	59	59	59	59	57	55	55	54	55	55	55	55	54	53	54	55	56	56	55	55	55	55	55	55	56		
Minimum	62	61	59	58	58	58	57	57	57	57	57	57	55	53	53	53	53	53	53	54	53	52	53	54	55	55	55	54	54	54	54	54	55		
November																																			
Maximum	56	56	56	55	55	54	54	54	52	52	52	53	53	54	54	54	54	54	53	53	53	52	50	50	50	50	51	51	52	52	--	--	52		
Minimum	55	55	55	54	54	54	54	52	51	52	52	52	53	53	54	54	54	53	53	53	52	50	49	49	50	50	50	51	51	52	--	--	52		
December																																			
Maximum	52	52	52	52	51	50	51	52	52	52	52	52	52	52	51	51	51	50	50	50	50	49	49	49	49	48	48	48	48	48	48	50			
Minimum	52	52	52	51	50	50	50	51	52	52	52	52	52	51	51	51	50	50	50	50	49	49	49	49	48	48	48	48	48	47	47	50			
January																																			
Maximum	48	48	48	48	48	48	48	47	47	48	48	48	49	50	50	50	49	48	48	48	48	47	46	46	46	45	44	45	46	48	49	47			
Minimum	48	48	48	48	48	48	47	47	47	48	48	48	48	49	49	49	47	48	48	48	47	46	46	45	44	44	44	46	48	49	48	47			
February																																			
Maximum	49	48	48	48	48	48	48	48	48	48	48	48	48	48	48	47	48	49	49	49	49	49	49	49	49	50	50	--	--	--	48				
Minimum	48	48	48	48	48	48	48	48	48	48	48	48	48	48	47	47	47	48	49	48	48	49	49	49	49	49	49	50	--	--	--	48			
March																																			
Maximum	50	50	50	50	49	50	51	52	52	52	51	50	48	47	48	50	51	51	51	51	51	51	52	52	51	51	51	51	51	50	48	50			
Minimum	50	50	50	48	48	49	50	51	52	51	50	48	47	46	47	48	50	51	51	51	50	51	51	51	51	50	50	50	50	50	48	47	49		
April																																			
Maximum	47	47	51	51	51	50	49	49	50	50	48	47	48	49	49	49	49	48	47	47	47	48	48	49	49	50	50	50	50	51	--	48			
Minimum	47	47	47	51	50	49	48	48	49	48	47	46	47	48	49	49	49	48	47	47	47	47	48	48	48	49	49	50	50	50	--	48			
May																																			
Maximum	52	52	53	53	53	53	55	56	56	55	53	51	52	53	54	56	57	58	58	58	57	57	58	58	57	56	56	57	57	57	56	55			
Minimum	51	52	52	52	52	52	53	55	55	53	51	50	50	52	53	54	56	57	58	57	57	57	57	57	56	56	56	56	57	56	55	54			
June																																			
Maximum	55	53	53	55	56	55	56	58	59	60	60	59	60	61	62	62	63	63	63	63	63	62	62	62	63	64	64	64	65	66	--	60			
Minimum	53	52	52	53	55	54	55	56	57	58	59	58	58	59	60	61	61	62	61	61	61	61	60	60	61	62	62	62	62	63	--	58			
July																																			
Maximum	66	66	66	66	65	65	64	64	64	64	63	64	64	64	64	63	62	63	63	63	63	62	63	62	63	63	63	63	63	63	64	63			
Minimum	63	63	64	64	63	63	62	62	62	62	61	61	61	61	61	60	60	60	60	60	60	60	60	60	61	61	61	61	61	61	62	61			
August																																			
Maximum	64	63	63	63	64	63	63	63	62	62	61	62	63	63	63	63	63	64	64	64	64	64	64	64	64	64	64	64	63	63	63	63	63		
Minimum	62	61	60	61	61	61	61	60	60	59	59	59	60	60	60	61	61	61	62	62	62	62	62	62	62	62	62	62	61	60	60	60	60		
September																																			
Maximum	62	63	63	63	64	63	63	62	62	61	61	61	61	61	61	60	60	60	60	60	62	62	62	62	62	62	62	62	61	61	--	61			
Minimum	60	60	60	60	61	61	61	60	60	60	60	60	59	59	59	59	59	58	58	60	60	60	60	60	60	60	60	60	60	60	--	59			

SACRAMENTO RIVER BASIN--Continued

11-3900. BUTTE CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°43'34", long 121°42'28", at gaging station 0.7 mile downstream from Little Butte Creek, and 7.5 miles east of Chico, Butte County.

DRAINAGE AREA.--147 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Water temperatures: November 1961 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 73°F on several days in July; minimum, 37°F on several days in December and January.

EXTREMES, 1961-67.--Water temperatures: Maximum (1961-64, 1965-67), 79°F July 21, 22, 1966; minimum, 35°F Jan. 23, 24, 1962, Jan. 13, 14, 1963, Jan. 15, 1964.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 5, 1966.....	114			12	4.8	3.4	0.9	69	0	--	0.6		--	0.0	--			50			113	8.1
Nov. 3.....	80			13	5.5	4.7	1.0	74	0	--	.8		--	.0	--			55			123	7.8
Dec. 5.....	2390			5.6	2.8	2.0	.5	24	0	--	.4		--	.0	--			26			63	7.9
Jan. 9, 1967.....	180			9.5	4.1	3.3	.7	54	0	--	.7		--	.0	--			40			94	8.0
Feb. 20.....	458			7.5	3.5	2.8	.6	46	0	--	.6		--	.0	--			33			74	7.9
Mar. 14.....	628			8.2	4.0	2.8	.4	47	0	--	.7		--	.0	--			37			82	7.9
Apr. 5.....	923			7.5	3.6	2.6	.4	42	0	--	.6		--	.0	--			34			76	7.8
May 16.....	1200	15		5.3	2.4	2.0	.5	30	0	1.0	.7		0.3	.0	48			23			55	7.5
June 6.....	666			6.0	2.5	2.2	.5	34	0	--	.4		--	.1	--			26			60	7.7
July 11.....	266			--	--	3.0	--	50	0	--	1.0		--	.0	--			36			84	7.9
Aug. 10.....	175			--	--	3.6	--	58	0	--	1.2		--	.0	--			42			96	7.8
Sept. 12.....	176			11	4.3	3.4	.9	58	0	.6	1.6		.0	.0	73			45			111	7.9

SACRAMENTO RIVER BASIN--Continued

11-3900. BUTTE CREEK NEAR CHICO, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	63	62	61	60	59	59	58	58	58	58	58	56	53	52	52	52	52	52	51	51	52	52	53	54	54	55	53	52	52	52	52	55	
Minimum	59	58	57	55	54	54	54	54	54	54	54	52	49	48	47	47	47	48	49	48	48	48	50	50	51	49	48	48	47	48	51		
November																																	
Maximum	53	52	52	52	51	51	52	51	50	50	51	53	53	53	54	54	52	52	54	54	51	48	47	45	44	45	45	46	50	50	--	50	
Minimum	50	49	49	48	49	50	49	48	47	48	50	51	52	52	52	52	52	51	51	51	48	47	45	43	43	43	45	46	49	--	48		
December																																	
Maximum	50	51	50	50	50	50	49	49	49	49	49	49	49	48	46	45	45	45	45	45	44	44	43	43	42	41	39	38	38	39	39	45	
Minimum	49	50	49	49	50	49	49	48	48	48	48	48	48	46	45	45	44	45	44	44	43	43	43	42	41	38	37	37	37	37	37	44	
January																																	
Maximum	40	39	39	40	41	41	39	39	40	41	42	42	42	43	43	42	41	41	40	44	46	46	44	43	43	44	45	46	47	47	47	42	
Minimum	38	37	38	39	40	38	37	38	38	39	41	41	40	41	41	40	39	40	40	40	44	44	43	42	42	43	44	45	46	46	46	40	
February																																	
Maximum	47	47	47	47	46	46	46	46	46	46	46	48	48	46	44	43	45	45	45	45	44	43	44	44	43	44	44	46	--	--	--	45	
Minimum	46	44	45	46	44	45	45	45	45	44	45	46	46	44	42	41	42	43	42	41	41	41	41	42	43	41	42	43	--	--	--	43	
March																																	
Maximum	46	46	45	45	44	45	46	46	47	47	46	44	43	44	45	46	46	47	47	47	48	48	48	48	47	47	47	47	47	45	44	46	
Minimum	44	43	44	42	41	42	43	43	44	44	46	44	42	42	42	45	45	46	46	47	46	47	47	47	45	45	44	46	44	44	43	44	
April																																	
Maximum	45	45	46	46	46	46	47	47	47	47	47	46	46	46	46	45	44	44	44	44	45	45	44	44	44	44	44	44	44	45	--	45	
Minimum	43	43	44	45	45	45	46	45	46	47	45	43	46	45	45	44	44	43	43	43	43	44	44	43	43	43	43	42	42	43	--	44	
May																																	
Maximum	46	47	47	48	48	48	49	49	50	48	46	46	46	47	48	49	51	51	51	51	51	51	52	52	51	51	51	50	50	50	49	46	
Minimum	43	44	45	45	46	45	46	46	48	46	44	44	44	45	46	47	47	48	48	48	48	49	49	49	48	49	48	49	49	48	49	49	
June																																	
Maximum	49	49	51	53	53	52	53	55	56	56	56	56	54	56	57	58	58	59	60	62	62	62	61	62	63	64	64	64	65	66	--	57	
Minimum	48	48	48	50	51	50	51	52	54	54	54	54	52	53	54	55	56	57	58	58	59	58	58	59	58	58	61	61	60	62	63	--	55
July																																	
Maximum	67	69	69	69	68	69	69	70	69	71	73	73	73	73	72	71	73	72	71	72	72	72	72	71	71	71	71	71	73	73	73	71	
Minimum	64	66	66	65	65	65	66	66	66	66	65	67	68	69	68	68	69	68	68	68	66	67	66	66	66	66	66	67	68	68	69	66	
August																																	
Maximum	72	70	71	71	70	70	69	68	69	69	69	68	68	68	68	69	69	69	70	69	69	68	68	68	69	70	69	68	66	66	66	68	
Minimum	67	67	66	67	66	65	65	64	64	65	65	64	64	63	64	65	65	65	66	65	64	63	64	65	65	65	65	64	63	62	62	64	
September																																	
Maximum	66	65	66	66	66	65	65	65	64	63	63	63	62	62	62	62	61	62	63	63	63	63	64	64	64	64	63	64	64	63	62	--	63
Minimum	62	61	62	62	63	62	62	61	60	60	60	60	59	59	58	58	59	60	60	59	59	60	61	61	61	61	60	60	60	61	60	--	60

SACRAMENTO RIVER BASIN--Continued

11-3905. SACRAMENTO RIVER BELOW WILKINS SLOUGH, NEAR GRIMES, CALIF.

LOCATION.--Lat 39°00'36", long 121°49'25", temperature recorder at gaging station on right bank, 1,200 feet downstream from Wilkins Slough, 5.8 miles southeast of Grimes, Colusa County, and at mile 62.9 upstream from Sacramento.

DRAINAGE AREA.--12,940 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 68°F on several days in July; minimum, 43°F Jan. 25-29.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	66	65	65	65	64	64	63	63	62	62	62	62	61	59	56	56	56	56	56	56	57	56	56	57	57	58	58	58	57	57	58	59
Minimum	65	65	65	64	64	63	63	61	61	61	61	61	59	56	55	55	55	55	56	56	56	55	55	56	57	57	58	57	56	56	57	58
November																																
Maximum	59	59	59	59	59	58	58	58	57	55	56	57	57	57	57	57	57	57	57	57	57	55	53	51	50	51	52	52	52	53	--	55
Minimum	58	58	58	58	58	57	57	55	55	55	56	57	57	56	56	57	57	57	57	57	55	53	51	50	50	50	51	51	52	52	--	55
December																																
Maximum	53	53	53	52	52	51	51	52	53	53	53	52	52	52	52	51	51	51	51	51	51	50	50	50	49	49	47	47	46	46	47	50
Minimum	52	52	52	51	51	50	51	52	53	53	53	52	52	51	51	51	51	51	51	51	50	50	50	49	49	47	47	46	46	46	46	50
January																																
Maximum	47	47	48	48	49	48	48	48	48	48	48	48	49	49	50	50	50	49	48	48	48	48	48	47	46	45	43	43	43	46	48	47
Minimum	47	47	47	48	47	48	48	47	47	47	48	48	48	49	49	49	49	48	48	48	48	48	47	46	45	43	43	43	43	46	48	46
February																																
Maximum	48	48	48	47	48	48	48	50	50	50	50	50	50	50	49	48	48	49	50	49	49	49	50	51	50	49	50	51	--	--	--	49
Minimum	47	47	47	47	47	48	48	48	50	49	49	49	49	49	48	47	47	47	49	49	49	49	49	49	49	49	49	50	--	--	--	48
March																																
Maximum	52	52	52	52	51	50	51	52	53	54	53	52	51	49	48	50	52	53	54	54	54	54	54	55	55	54	53	54	53	52	51	52
Minimum	51	51	51	51	49	49	50	51	52	53	52	51	49	47	47	48	50	52	53	53	53	53	54	54	54	53	52	53	52	51	50	51
April																																
Maximum	50	50	50	53	53	53	52	52	53	54	54	51	50	52	52	51	51	51	51	50	50	50	51	51	51	52	53	53	54	52	--	51
Minimum	49	49	49	50	53	52	52	51	51	53	51	50	50	50	51	51	51	51	50	50	49	49	50	51	51	51	52	52	52	51	--	50
May																																
Maximum	53	54	55	56	57	57	57	59	61	59	58	55	54	55	57	58	59	61	61	61	61	61	61	61	61	61	61	61	61	61	61	58
Minimum	50	53	54	55	56	56	56	57	59	57	55	54	53	53	55	57	58	60	60	60	60	60	60	60	60	60	60	60	60	60	60	57
June																																
Maximum	60	57	55	58	60	60	60	61	63	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	57	55	55	55	58	59	59	59	61	62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July																																
Maximum	--	--	--	--	--	--	--	--	67	67	67	67	67	68	68	68	68	68	67	68	67	68	67	67	67	66	66	66	66	66	66	--
Minimum	--	--	--	--	--	--	--	--	66	66	66	66	66	67	67	67	67	66	66	67	66	67	67	66	66	65	65	65	65	65	65	--
August																																
Maximum	67	66	66	66	66	66	66	66	67	67	67	67	67	--	--	--	--	--	67	67	67	66	66	66	66	66	66	66	65	65	66	66
Minimum	66	65	65	65	65	65	65	65	65	66	66	66	66	--	--	--	--	--	66	66	65	65	65	65	65	65	65	65	64	64	64	65
September																																

SACRAMENTO RIVER BASIN--Continued

11-3906.5. SACRAMENTO RIVER ABOVE COLUSA TROUGH, AT KNIGHTS LANDING, CALIF.

LOCATION.--Lat 38°48'18", long 121°43'22", approximately 200 yards upstream from State Highway 24 bridge at Knights Landing, Yolo County, and approximately 0.3 mile upstream from gaging station.

RECORDS AVAILABLE.--Chemical analyses: July 1960 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 5, 1966.....	7820			10	6.3	8.8	0.9	68	0	--	2.4		--	0.0	--			51			129	8.1
Nov. 3.....	7970			10	5.9	6.8	1.0	69	0	--	3.0		--	0	--			50			128	8.0
Dec. 14.....	24400			12	6.0	8.2	1.2	68	0	--	3.2		--	0	--			54			142	8.1
Jan. 10, 1967....	9670			15	8.6	13	1.2	91	0	--	7.2		--	0	--			73			200	8.2
Feb. 20.....	18500			14	7.0	9.1	1.3	80	0	--	4.8		--	0	--			64			166	8.1
Mar. 14.....	14700			12	5.8	7.3	1.0	64	0	--	3.9		--	0	--			54			133	8.1
Apr. 11.....	21200	20		11	5.7	6.3	.9	63	0	--	2.7		--	0	--			51			129	7.9
May 17.....	17400			12	5.4	6.9	1.1	67	0	9.0	2.7		0.6	0	100			52			133	7.7
June 7.....	17000			12	6.0	7.5	1.0	69	0	--	3.0		--	0	--			54			141	7.7
July 12.....	9520			--	--	7.4	--	65	0	--	3.6		--	0	--			53			138	7.7
Aug. 11.....	9540			--	--	9.4	--	72	0	--	4.6		--	0	--			56			149	7.8
Sept. 13.....	11700			11	7.1	10	.9	76	0	12	5.1		1.1	.1	116			56			159	8.0

SACRAMENTO RIVER BASIN--Continued

11-3907. COLUSA TROUGH NEAR COLUSA, CALIF.

LOCATION.--Lat 39°11'43", long 122°03'34", at gaging station 3 miles west of Colusa, Colusa County, on State Highway 20, and 6 miles northeast of Williams.
 RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 5, 1966.....	126	16		30	22	60	2.0	216	0	73	31	--	2.0	0.2	344			166			574	7.6
Nov. 3.....	197	21		30	23	68	3.2	220	2	76	33	0.3	2.7	.2	378			170			606	8.4
Dec. 14.....	546	16		40	32	118	2.7	265	0	162	60	--	2.0	.3	620			232			937	8.0
Jan. 9, 1967.....	154	13		49	44	159	1.7	326	0	225	87	.4	1.6	.3	772			304			1190	8.2
Feb. 20.....	288	12		55	7.0	166	1.7	328	8	115	105	--	1.5	.4	796			166			1280	8.4
Mar. 14.....	218	13		58	46	189	2.3	316	6	277	132	--	2.6	.4	881			334			1370	8.3
Apr. 11.....	416	18		38	27	98	1.4	198	8	141	60	--	1.0	.2	490			206			797	8.5
May 17.....	66	15		35	28	97	2.2	175	0	174	60	--	5.4	.3	504			202			815	7.5
June 7.....	2459	11		21	15	46	1.9	151	0	57	16	--	1.8	.1	254			114			421	7.4
July 12.....	529	--		28	22	70	1.2	213	0	84	34	--	1.4	.4	404			162			635	8.1
Aug. 11.....	738	--		34	20	55	.7	222	0	59	25	--	2.0	.3	282			166			546	7.6
Sept. 13.....	1250	--		30	20	49	1.3	210	4	48	22	--	2.3	.2	288			157			520	8.4

SACRAMENTO RIVER BASIN--Continued

11-3915. BIG GRIZZLY CREEK NEAR PORTOLA, CALIF.

LOCATION (revised).--Lat 39°52'00", long 120°27'20", temperature recorder at gaging station on left bank 500 feet upstream from small tributary, 1.4 miles downstream from Grizzly Valley Dam, 4.3 miles upstream from mouth, and 4.5 miles north of Portola, Plumas County.

DRAINAGE AREA.--45.5 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 79°F Aug. 19; minimum, freezing point on several days in March and April.

EXTREMES, 1962-67.--Water temperatures: Maximum, 79°F Aug. 19, 1967; minimum, freezing point on many days during winter months.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	63	64	62	61	60	61	58	62	62	61	60	59	51	---	---	---	61	61	56	61	59	56	63	62	62	59	55	56	56	54	56	59	
Minimum	50	52	49	46	45	46	46	46	48	47	47	49	43	---	---	---	48	47	47	51	50	45	50	48	49	48	46	43	43	42	43	46	
November																																	
Maximum	57	53	49	51	47	45	46	45	42	43	44	48	45	45	44	44	43	44	42	42	39	37	34	34	35	36	36	37	41	40	---	42	
Minimum	45	42	42	40	38	42	40	38	34	38	41	42	42	41	42	41	42	40	39	36	34	34	34	34	35	35	35	36	37	37	---	38	
December																																	
Maximum	38	37	37	36	35	36	38	38	36	38	36	37	35	36	35	35	36	34	34	34	34	34	34	34	34	34	34	34	34	34	34	35	
Minimum	37	34	35	34	34	35	35	34	34	35	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	
January																																	
Maximum	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	33	34	34	34	34	34	34	34	34	34	34	34	34	33	
Minimum	34	34	33	34	34	34	34	34	34	34	34	34	34	34	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	33	
February																																	
Maximum	36	36	37	37	38	37	37	36	38	38	38	39	40	38	35	37	40	39	38	37	35	37	37	40	39	40	41	42	---	---	---	37	
Minimum	34	34	35	34	34	34	34	34	34	34	34	36	35	34	34	34	35	34	34	34	34	34	34	34	36	34	34	35	---	---	---	34	
March																																	
Maximum	41	42	36	40	42	42	44	43	43	37	36	33	33	33	33	34	41	41	41	41	45	42	41	44	40	38	45	37	42	37	40	39	
Minimum	35	34	34	34	34	34	34	34	35	35	34	33	33	33	33	33	34	35	35	35	36	34	34	32	32	33	33	32	32	33	32	33	
April																																	
Maximum	40	39	46	37	43	37	42	45	48	42	37	49	49	45	42	45	43	45	45	48	40	43	45	42	44	46	48	42	42	50	---	43	
Minimum	32	32	34	33	34	34	34	36	32	35	35	35	35	35	34	33	33	33	34	33	34	34	36	36	36	35	34	34	34	35	---	34	
May																																	
Maximum	51	49	50	49	48	54	54	54	50	46	45	51	55	57	57	58	57	57	60	61	62	64	60	60	59	57	59	51	50	55	42	54	
Minimum	33	34	34	35	36	36	36	38	39	36	38	37	37	38	39	39	40	40	42	43	44	44	44	44	43	43	43	43	42	40	36	39	
June																																	
Maximum	47	46	61	55	46	56	58	60	58	61	53	48	57	60	59	59	64	66	62	65	62	60	61	62	62	62	62	63	64	65	---	58	
Minimum	37	40	41	43	43	43	43	42	44	42	44	44	43	44	44	44	46	46	46	46	46	43	42	44	44	44	44	44	45	45	46	---	43
July																																	
Maximum	69	69	68	67	66	68	68	67	68	70	72	72	72	71	69	60	71	69	70	71	65	63	64	64	63	64	63	62	63	64	65	67	
Minimum	46	49	48	46	47	48	47	47	46	47	47	49	52	51	48	51	53	50	49	49	50	49	48	49	47	48	48	51	51	50	50	48	
August																																	
Maximum	65	76	78	78	77	75	77	72	76	78	74	77	77	76	77	76	78	78	79	78	78	75	74	72	73	75	72	74	74	75	74	75	
Minimum	51	62	64	62	60	59	58	55	56	61	56	60	59	59	62	62	62	63	64	62	62	62	58	59	60	58	58	56	57	54	56	55	59
September																																	
Maximum	75	75	74	62	70	71	72	70	70	68	68	70	67	67	68	69	59	65	68	68	69	67	65	66	69	69	70	70	67	65	---	68	
Minimum	56	56	59	57	55	55	55	53	55	51	53	50	50	53	53	55	56	57	55	56	54	58	57	55	58	55	54	54	55	55	---	54	

SACRAMENTO RIVER BASIN--Continued

11-3925. MIDDLE FORK FEATHER RIVER NEAR CLIO, CALIF.

LOCATION.--Lat 39°45'10", long 120°35'40", temperature recorder at gaging station 0.6 mile upstream from Frazier Creek, 1.0 mile northwest of Clio, Plumas County, and 2.2 miles southeast of Blairsden.

DRAINAGE AREA.--686 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1963 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 77°F July 2.

EXTREMES, 1963-67.--Water temperatures: Maximum, 79°F Aug. 3, 1966; minimum (1963-66), freezing point on several days in December 1963.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	57	58	57	53	53	53	53	54	53	54	54	53	51	47	46	45	46	46	46	46	46	47	49	49	48	48	48	46	46	46	46	49	
Minimum	49	52	49	47	46	48	48	48	48	48	48	49	47	41	40	40	40	40	40	44	41	40	42	42	43	43	42	40	40	40	41	44	
November																																	
Maximum	47	47	46	46	44	44	46	46	43	44	45	46	45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Minimum	42	42	43	41	41	43	43	43	41	43	44	45	43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
December																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
January																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
February																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
March																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
April																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
May																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
June																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
July																																	
Maximum	76	77	75	74	73	73	73	72	72	71	73	74	74	73	73	72	73	70	69	68	69	68	69	69	69	67	68	66	71	72	71	71	
Minimum	71	72	71	68	70	69	66	66	65	64	65	67	68	67	67	69	67	63	62	62	62	61	62	61	61	59	60	62	61	63	63	64	
August																																	
Maximum	70	70	70	70	68	68	68	68	69	70	70	70	69	70	71	71	70	71	71	71	70	71	71	70	68	70	69	68	68	68	68	69	
Minimum	61	60	60	61	59	57	57	58	59	61	60	61	60	60	61	61	61	62	62	62	61	62	64	66	65	65	61	61	57	59	60	60	
September																																	
Maximum	68	68	67	66	66	66	65	65	64	63	64	63	62	62	62	62	61	59	62	62	63	63	61	61	62	62	63	64	62	61	---	63	
Minimum	60	60	62	60	60	59	59	57	56	56	57	55	55	53	52	54	54	56	54	54	54	57	56	55	57	56	55	56	58	57	---	56	

SACRAMENTO RIVER BASIN--Continued

11-3945. MIDDLE FORK FEATHER RIVER NEAR MERRIMAC, CALIF.

LOCATION.--Lat 39°42'30", long 121°16'10", at gaging station 400 feet downstream from bridge on Milsap Bar Road, 500 feet downstream from Little North Fork, 4.5 miles southeast of Merrimac, Butte County, and 20 miles northeast of Oroville.

DRAINAGE AREA.--1,062 square miles.

RECORDS AVAILABLE.--Chemical analyses: July 1963 to June 1966.

Water temperatures: October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 71°F July 31, Aug. 19, 20; minimum, 35°F Jan. 7.

EXTREMES, 1962-67.--Water temperatures: Maximum (1964-67), 75°F Aug. 3, 1966; minimum (1962-64, 1965-67), 33°F Jan. 26, 27, 1966.

REMARKS.--Clock stopped Oct. 1-18; temperature range, 48°F to 61°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	50	52	52	51	52	53	53	52	51	51	50	49	49	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	49	49	50	49	49	51	51	51	50	50	48	48	47	--	
November																																	
Maximum	50	50	49	49	47	47	46	45	45	45	46	47	47	47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	48	48	48	47	46	46	45	44	44	44	45	46	47	46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
December																																	
Maximum	--	--	--	--	--	--	43	43	42	42	42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	42	42	42	42	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
January																																	
Maximum	--	--	--	37	39	38	36	37	37	38	39	39	39	39	39	38	38	37	37	37	40	39	38	37	37	38	40	40	41	40	40	38	
Minimum	--	--	--	36	37	36	35	36	36	37	38	38	38	38	38	38	37	36	36	37	37	38	37	36	36	37	38	40	40	39	38	37	
February																																	
Maximum	40	39	40	40	40	40	40	40	41	41	42	45	45	44	41	40	42	43	43	41	41	41	42	42	43	44	44	44	--	--	--	41	
Minimum	39	38	38	40	40	40	40	40	40	41	41	42	44	41	39	39	40	42	41	40	40	40	41	41	42	43	43	43	--	--	--	40	
March																																	
Maximum	46	46	46	44	44	45	45	46	47	47	45	41	39	38	41	42	43	43	46	48	48	49	49	47	45	45	46	47	44	43	40	44	
Minimum	43	45	44	43	42	43	44	45	46	45	41	39	36	36	38	41	41	42	46	47	48	47	48	47	45	44	44	43	41	39	42		
April																																	
Maximum	42	42	44	44	44	43	45	47	47	47	44	46	46	45	45	45	45	43	44	46	45	46	45	44	45	46	46	45	44	46	--	44	
Minimum	39	42	42	44	43	43	43	45	46	44	44	43	45	44	44	44	42	41	43	43	44	44	44	44	44	45	45	44	44	43	--	43	
May																																	
Maximum	48	50	50	51	51	50	51	51	51	51	49	46	46	47	49	51	52	52	52	52	52	53	53	53	53	53	53	52	52	51	51		
Minimum	45	47	48	49	48	48	49	50	49	49	46	45	47	49	50	50	50	50	49	49	50	50	50	50	50	50	51	51	51	49	48	48	
June																																	
Maximum	48	49	53	53	53	53	54	54	54	54	54	54	52	53	55	56	58	58	58	58	58	58	58	58	59	60	61	60	61	63	64	--	56
Minimum	46	47	49	53	51	51	52	53	53	52	52	51	49	51	53	55	56	55	55	55	56	57	56	56	58	59	60	59	60	61	63	--	54
July																																	
Maximum	65	66	66	65	65	66	66	65	64	65	67	67	68	68	68	68	68	68	67	66	67	67	67	67	67	67	67	67	68	69	70	71	66
Minimum	64	64	65	64	63	64	64	64	62	63	64	65	65	66	66	68	67	66	65	64	65	66	66	65	65	65	65	65	66	67	68	69	65
August																																	
Maximum	70	69	69	69	69	68	67	66	67	68	68	68	68	69	69	70	70	70	71	71	70	70	70	70	70	70	69	69	68	67	67	68	
Minimum	68	67	67	67	67	66	65	65	65	66	66	67	66	66	67	67	68	68	68	68	68	67	67	68	68	68	69	67	66	65	65	66	
September																																	
Maximum	67	67	68	66	66	66	66	65	64	64	64	63	62	62	62	62	61	62	62	62	62	63	63	63	63	63	63	63	63	63	--	63	
Minimum	65	65	66	65	65	64	65	64	62	62	62	61	60	60	60	60	60	60	60	60	60	61	62	62	61	61	61	61	62	62	61	--	62

SACRAMENTO RIVER BASIN--Continued

11-3963.5. SOUTH FORK FEATHER RIVER BELOW PONDEROSA DAM, CALIF.

LOCATION.--Lat 39°33'05", long 121°18'30", at gaging station 1,000 feet upstream from Sucker Run, 1,800 feet downstream from Ponderosa Dam, Butte County, and 2.8 miles northwest of Forbestown.

DRAINAGE AREA.--108 square miles.

RECORDS AVAILABLE.--Chemical analyses: July 1963 to June 1966.

Water temperatures: October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 37°F Jan. 6, 18, 19.

EXTREMES, 1963-65, 1966-67.--Water temperatures: Maximum (1963-65), 87°F July 5, 16, 1965; minimum, 36°F Jan. 1, 2, 1965.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November																													50	50	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	48	47	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
December																																
Maximum	50	49	50	48	49	50	49	49	48	50	49	49	46	48	47	47	47	46	46	44	48	45	44	45	43	45	43	43	42	44	43	46
Minimum	48	48	48	47	47	47	47	46	47	45	45	45	45	44	43	43	43	43	43	43	43	42	42	42	41	40	39	39	39	38	38	43
January																																
Maximum	43	43	43	41	42	42	43	43	44	43	41	44	44	44	44	44	42	41	41	43	45	43	--	--	--	43	43	46	47	49	49	43
Minimum	38	38	38	38	39	37	38	38	38	39	39	38	38	38	38	38	37	37	39	41	41	39	--	--	--	41	42	43	45	46	39	39
February																																
Maximum	48	49	48	49	50	49	49	48	48	50	49	49	48	46	44	47	48	48	46	48	49	49	48	44	44	47	47	49	--	--	--	47
Minimum	46	44	44	43	43	42	42	42	42	42	42	43	43	42	42	40	41	41	40	41	40	40	40	41	42	40	41	40	--	--	--	41
March																																
Maximum	47	48	44	48	48	49	50	50	50	46	44	42	42	45	47	45	49	49	48	47	51	49	48	50	48	47	49	46	47	43	43	47
Minimum	40	40	42	40	40	40	40	41	42	43	41	41	41	41	40	43	44	44	44	45	45	44	45	43	43	43	42	42	42	42	40	42
April																																
Maximum	46	44	47	44	43	43	45	48	48	47	46	49	46	47	47	47	44	45	44	46	45	44	44	45	47	47	47	48	47	48	--	45
Minimum	40	39	40	41	42	42	41	43	43	43	43	42	43	44	43	42	42	42	42	42	42	42	42	43	43	43	43	42	41	41	--	42
May																																
Maximum	49	50	51	51	50	53	54	55	50	49	49	51	53	54	56	57	58	58	58	60	61	62	61	58	57	56	55	56	54	54	52	54
Minimum	41	41	43	44	45	44	46	48	47	46	44	44	44	45	47	48	50	51	50	51	52	54	54	53	51	51	49	50	49	48	46	47
June																																
Maximum	46	47	51	52	48	50	52	53	53	54	54	49	52	54	55	57	57	55	55	56	57	57	58	57	57	56	57	59	59	59	--	54
Minimum	44	44	42	45	46	45	44	47	48	46	49	47	45	47	48	49	50	50	48	49	50	51	50	49	51	50	50	50	50	52	--	47
July																																
Maximum	59	59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	52	52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
August																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SACRAMENTO RIVER BASIN--Continued

11-4011.8. LITTLE GRIZZLY CREEK NEAR GENESEE, CALIF.

LOCATION.--Lat 40°00'55", long 120°45'10", temperature recorder at gaging station on right bank, 2.5 miles upstream from Indian Creek, and 2 miles south of Genesee, Plumas County.

DRAINAGE AREA.--29.6 square miles.

RECORDS AVAILABLE.--Water temperatures: August 1964 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 64°F Aug. 19, 23, 24, Sept. 3; minimum, freezing point on several days in December and January.

EXTREMES, 1964-67.--Water temperatures: Maximum, 67°F Aug. 2, 3, 1966; minimum, freezing point on several days in December 1966 and January 1967.

REMARKS.--Clock stopped Oct. 1-20, Oct. 23 to Nov. 4; temperature ranges, 40°F to 56°F and 40°F to 46°F, respectively.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (° F) of water, water year October 1966 to September 1967																																	
Month	Day																																Average
	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		
October																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	44	45	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	40	40	--	--	--	--	--	--	--	--	--	--	
November																																	
Maximum	--	--	--	--	42	42	43	43	40	41	42	42	43	43	44	43	43	43	44	43	38	37	36	35	36	36	36	37	39	39	--	40	
Minimum	--	--	--	--	39	40	41	39	37	39	40	40	41	41	42	41	42	42	42	38	34	35	34	34	34	35	35	35	37	38	--	38	
December																																	
Maximum	40	40	40	40	41	40	40	39	39	40	39	38	38	39	39	37	37	37	36	37	36	35	36	36	34	34	34	33	33	33	33	37	
Minimum	39	37	39	39	38	36	39	38	37	39	37	37	37	38	37	36	36	36	35	36	35	34	33	34	33	33	32	32	32	32	32	35	
January																																	
Maximum	33	32	33	35	35	33	33	33	33	35	34	34	34	33	33	33	33	33	34	34	38	39	38	38	38	39	39	40	40	40	40	35	
Minimum	32	32	32	33	33	33	33	33	33	33	33	33	32	32	32	32	32	32	32	33	34	37	36	34	36	37	38	38	38	39	38	34	
February																																	
Maximum	40	39	40	40	40	39	39	40	40	39	40	40	40	38	38	39	40	40	38	38	38	39	40	40	40	40	41	40	--	--	--	39	
Minimum	38	38	38	38	38	37	37	37	38	38	37	39	38	36	36	36	38	37	37	36	36	36	36	38	39	37	37	37	--	--	--	37	
March																																	
Maximum	40	39	38	37	38	39	39	39	40	39	36	35	34	35	37	38	40	40	41	41	42	42	41	41	42	41	42	40	39	38	38	39	
Minimum	37	37	37	34	35	35	36	36	37	36	34	34	34	34	34	35	38	39	39	39	40	39	40	38	39	39	38	36	35	36	34	36	
April																																	
Maximum	38	39	41	40	41	40	42	43	44	41	39	43	43	40	40	41	40	39	40	42	39	41	41	41	41	42	41	40	39	44	--	40	
Minimum	36	35	37	37	38	39	39	40	39	39	38	38	39	38	37	37	34	35	37	37	37	37	37	38	38	39	38	38	36	37	47	--	
May																																	
Maximum	45	43	45	43	43	45	46	46	43	42	42	45	46	47	46	45	45	45	46	46	46	46	46	47	47	47	48	49	46	47	49	45	
Minimum	38	39	39	39	40	39	40	41	40	39	37	38	39	40	40	40	41	41	41	42	42	42	42	42	42	42	42	43	43	42	40	40	
June																																	
Maximum	45	47	52	49	46	50	51	52	51	53	51	48	51	51	52	53	53	54	55	56	55	55	56	57	58	58	58	60	60	61	--	53	
Minimum	40	42	43	44	44	44	44	44	45	45	45	45	44	45	45	46	47	47	47	48	48	47	47	48	49	49	49	50	51	52	--	46	
July																																	
Maximum	61	62	60	60	60	60	60	60	60	62	61	62	62	62	63	62	62	60	60	61	61	61	62	61	62	61	59	60	61	63	63	61	
Minimum	53	54	54	52	53	53	53	52	52	54	54	54	55	56	57	59	57	54	53	53	54	55	54	54	54	54	54	57	58	58	58	54	
August																																	
Maximum	62	62	61	58	60	59	59	60	61	62	62	61	61	61	62	63	63	63	64	63	63	63	64	64	63	63	62	62	60	61	61	61	
Minimum	57	56	57	56	56	55	55	54	56	57	56	56	55	55	57	57	57	58	59	58	57	58	59	60	60	60	60	58	55	56	56	56	
September																																	
Maximum	61	61	64	63	61	60	60	58	57	57	57	56	55	54	55	55	54	55	56	56	57	57	57	57	56	56	55	55	56	56	55	--	
Minimum	56	56	58	57	56	54	54	54	53	53	54	52	51	49	49	51	52	54	52	53	53	53	55	54	52	53	52	52	53	52	--	57	

SACRAMENTO RIVER BASIN--Continued

11-4015. INDIAN CREEK NEAR CRESCENT MILLS, CALIF.

LOCATION.--Lat 40°04'20", long 120°55'35", temperature recorder at gaging station on left bank 0.8 mile upstream from Dixie Creek, and 1.5 miles south of town of Crescent Mills, Plumas County.

DRAINAGE AREA.--739 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1963.

Water temperatures: October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 78°F July 29-31, Aug. 17, 18; minimum, freezing point Dec. 28, Jan. 2, Feb. 15.

EXTREMES, 1962-65, 1966-67.--Water temperatures: Maximum, 82°F July 26-28, 1963; minimum (1962-64, 1966-67), freezing point on several days in December and January 1963, Jan. 22, 1964, Dec. 28, 1966, Jan. 2, Feb. 15, 1967.

REMARKS.--Clock stopped Aug. 21 to Sept. 13; temperature range, 54°F to 76°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	59	60	59	59	58	59	59	60	59	58	57	57	55	55	55	55	54	54	54	54	52	53	54	54	53	53	52	52	52	51	51	55	
Minimum	55	56	54	54	54	55	55	55	55	55	55	55	52	51	51	51	51	52	52	53	49	48	49	50	51	51	50	49	49	49	49	52	
November																																	
Maximum	52	51	50	50	50	49	49	50	49	49	49	49	48	49	48	49	49	49	49	49	41	42	42	40	40	42	42	41	44	41	--	46	
Minimum	49	49	48	47	48	47	48	48	47	48	49	48	48	48	48	48	48	48	48	48	41	37	36	37	35	38	39	40	41	39	--	44	
December																																	
Maximum	42	41	40	39	39	37	39	42	40	41	41	42	40	40	39	38	38	37	38	38	38	38	38	40	38	38	36	36	35	37	38	36	
Minimum	40	36	36	38	35	34	36	37	38	39	40	39	39	38	36	36	36	35	36	35	34	34	35	38	36	34	33	32	33	33	33	35	
January																																	
Maximum	38	38	38	38	39	38	37	38	39	39	39	40	40	42	40	40	39	39	38	38	42	42	36	37	36	38	38	37	41	38	37	38	36
Minimum	35	32	33	34	36	33	33	33	33	36	35	35	35	35	35	35	33	33	34	34	38	34	34	34	33	33	35	36	36	35	35	35	34
February																																	
Maximum	41	40	41	41	40	40	40	39	41	40	40	42	40	38	35	39	41	41	40	40	40	41	41	42	42	42	43	44	--	--	--	40	
Minimum	37	36	35	36	35	34	34	35	35	36	35	38	37	35	32	35	36	38	36	36	36	36	37	37	39	38	38	39	--	--	--	36	
March																																	
Maximum	42	43	42	42	43	44	45	45	45	44	41	42	40	42	43	41	42	42	44	44	44	47	45	44	46	44	44	46	46	44	42	42	43
Minimum	39	38	39	37	37	37	36	38	39	41	38	38	38	38	39	37	38	39	41	42	43	42	42	41	41	40	40	42	38	38	37	39	
April																																	
Maximum	43	46	48	46	45	44	45	49	50	47	44	49	49	47	45	46	44	47	47	49	45	45	46	47	47	47	46	49	45	51	52	46	
Minimum	38	39	42	41	41	42	41	43	43	44	41	39	43	43	41	40	40	38	41	41	41	41	41	41	42	43	43	42	41	40	40	42	41
May																																	
Maximum	54	53	52	50	53	54	53	51	48	47	50	52	54	54	54	53	53	54	55	56	56	56	56	56	--	--	57	57	54	54	54	50	53
Minimum	44	45	46	45	45	49	50	48	45	45	44	46	47	49	50	50	49	49	50	50	50	50	50	51	--	--	51	50	50	48	47	47	47
June																																	
Maximum	44	49	55	54	51	53	56	57	54	56	56	53	54	57	59	60	60	63	60	62	62	61	62	63	65	64	64	67	68	69	--	58	
Minimum	40	44	47	51	48	48	50	50	51	49	51	50	49	50	51	52	54	54	55	54	56	55	55	57	58	59	58	60	61	62	--	52	
July																																	
Maximum	70	70	70	69	70	71	71	70	70	71	74	74	73	74	75	70	71	71	71	--	--	--	--	--	--	--	75	76	72	78	78	78	72
Minimum	63	64	64	61	62	62	62	61	59	59	61	62	62	62	62	62	63	61	60	--	--	--	--	--	--	--	61	62	63	64	64	65	62
August																																	
Maximum	77	77	77	77	75	73	75	75	76	76	75	76	76	76	77	77	78	78	77	75	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	64	63	63	63	62	60	59	61	62	63	63	62	61	61	62	63	62	64	63	62	--	--	--	--	--	--	--	--	--	--	--	--	--
September																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	67	66	67	60	65	67	69	68	66	66	67	68	67	67	67	63	62	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	54	54	56	56	56	57	57	57	59	58	56	56	56	56	57	58	55	--

SACRAMENTO RIVER BASIN--Continued

11-4045. NORTH FORK FEATHER RIVER AT PULGA, CALIF.

LOCATION.--Lat 39°47'40", long 121°27'00", temperature recorder at gaging station on left bank between railroad and highway bridges, 0.5 mile downstream from Flea Valley Creek and Pulga, Butte County, and 1.5 miles downstream from Poe Dam.

DRAINAGE AREA.--1,953 square miles.

RECORDS AVAILABLE.--Chemical analyses: July 1963 to June 1966.

Water temperatures: October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 38°F on several days in December and January.

EXTREMES, 1963-67.--Water temperatures: Maximum (1963-64, 1965-66), 73°F July 28-30, 1963; minimum (1963-65, 1966-67), 34°F Jan. 12, 13, 1963.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1966 to September 1967																																	
Month	Day																																Average
	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		
October																																	
Maximum	64	63	62	62	62	62	62	62	61	61	60	60	57	57	56	55	55	54	54	54	54	55	55	55	55	55	54	54	54	54	54	57	
Minimum	59	60	58	58	58	58	58	58	57	57	57	57	54	52	53	52	52	51	51	52	51	51	52	52	52	52	51	51	50	50	50	54	
November																																	
Maximum	54	54	53	53	52	52	53	51	51	51	51	52	52	52	52	53	51	51	51	51	48	48	46	45	45	46	45	47	47	49	--	50	
Minimum	50	51	51	50	50	50	50	49	48	50	50	50	51	50	51	49	50	49	50	48	47	46	44	43	43	44	44	45	45	45	--	48	
December																																	
Maximum	48	48	45	46	48	44	45	46	46	47	46	46	46	45	45	45	44	44	44	44	42	43	44	44	42	44	43	42	41	42	42	44	
Minimum	45	45	44	44	44	42	42	44	44	45	46	45	45	44	44	43	42	42	42	42	42	43	41	41	41	41	39	38	38	39	38	42	
January																																	
Maximum	42	41	42	43	43	40	41	41	41	41	42	42	42	42	42	42	41	41	42	45	44	41	41	42	44	43	45	46	43	42	42	42	
Minimum	39	38	39	41	41	38	38	38	39	40	41	41	40	40	40	39	39	40	39	40	41	39	40	40	42	43	43	43	42	42	41	40	
February																																	
Maximum	43	43	43	43	44	44	45	45	45	45	45	47	46	46	43	44	45	46	45	45	45	45	45	44	45	46	47	47	--	--	--	44	
Minimum	41	42	42	42	42	42	43	43	43	43	43	45	44	42	41	41	42	43	43	41	41	42	42	43	44	43	43	44	--	--	--	42	
March																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	46	44	43	44	44	46	46	46	46	45	45	45	45	45	45	44	43	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	42	41	41	43	43	44	44	46	45	44	44	44	43	44	43	41	39	--	
April																																	
Maximum	44	46	49	46	46	46	49	50	50	48	47	50	47	48	47	48	46	47	46	48	48	47	47	48	48	49	49	49	48	49	--	47	
Minimum	40	42	45	45	45	44	46	47	47	45	45	44	46	46	45	45	45	44	44	44	45	46	46	46	46	46	45	45	44	44	--	44	
May																																	
Maximum	50	52	52	52	51	54	50	51	51	49	47	46	48	50	51	51	51	51	51	52	52	53	53	54	53	54	53	53	52	51	51	51	
Minimum	44	45	46	46	47	46	47	49	49	47	46	46	46	48	49	50	50	50	50	50	51	51	52	52	53	52	52	52	51	51	50	49	
June																																	
Maximum	50	46	48	52	52	51	52	53	54	54	53	53	52	52	54	54	55	57	57	58	58	58	59	60	61	61	63	65	66	66	--	55	
Minimum	46	44	45	48	51	50	50	52	53	52	52	52	51	51	52	53	54	55	56	56	56	56	56	56	57	58	57	58	58	60	--	53	
July																																	
Maximum	68	68	68	68	68	68	67	67	67	67	68	68	68	68	68	66	69	68	68	67	68	68	68	68	68	68	68	68	66	69	--	67	
Minimum	60	61	61	60	60	60	61	60	59	60	60	61	61	61	61	63	62	62	61	60	60	60	60	60	61	61	61	61	62	62	--	60	
August																																	
Maximum	--	69	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	63	63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
September																																	
Maximum	--	--	--	68	68	69	69	68	67	66	--	--	--	64	--	--	62	64	65	65	65	65	65	65	66	66	65	66	66	--	--	--	
Minimum	--	--	--	63	64	63	63	63	62	61	--	--	--	58	--	--	60	59	59	60	60	61	61	61	61	60	61	61	62	--	--	--	

SACRAMENTO RIVER BASIN--Continued

11-4053. WEST BRANCH FEATHER RIVER NEAR PARADISE, CALIF.

LOCATION.--Lat 39°47'15", long 121°33'40", temperature recorder at gaging station on left bank 0.6 mile upstream from Griffin Gulch, and 4.0 miles northeast of Paradise, Butte County.

DRAINAGE AREA.--113 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 87°F Aug. 18; minimum, 37°F Dec. 28, Jan. 7.

EXTREMES, 1962-67.--Water temperatures: Maximum (1962-63, 1964-67), 87°F Aug. 18, 1967; minimum, 35°F Jan. 12-14, 1963.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	71	70	68	67	67	66	66	67	68	66	66	65	63	60	60	59	59	58	58	58	57	56	59	60	59	59	59	58	57	57	57	61	
Minimum	67	66	65	62	62	63	62	62	63	62	63	63	59	57	57	57	56	56	56	57	55	54	56	57	57	57	56	56	55	55	56	59	
November																																	
Maximum	59	59	56	55	55	54	51	51	50	51	51	51	51	51	51	51	49	48	50	48	46	45	43	42	40	40	43	43	45	46	46	49	
Minimum	57	56	55	54	54	51	51	49	49	50	51	51	51	51	51	49	48	48	48	46	45	43	42	40	40	40	43	43	45	46	46	48	
December																																	
Maximum	47	46	46	46	45	44	44	45	45	44	45	44	42	43	42	42	42	42	42	43	43	43	42	42	42	42	41	39	38	39	40	42	
Minimum	46	46	45	45	44	43	44	44	43	43	43	42	42	42	42	42	42	42	42	42	42	42	42	42	41	39	38	37	38	39	40	42	
January																																	
Maximum	40	40	40	40	41	41	38	39	40	41	41	41	41	41	42	41	41	40	40	43	43	42	42	42	42	42	42	43	43	44	44	45	41
Minimum	40	40	40	40	40	38	37	38	39	40	40	41	41	41	42	41	41	39	39	40	40	42	42	42	42	42	42	42	43	43	44	40	
February																																	
Maximum	45	45	45	45	45	44	44	44	44	44	45	46	46	45	43	41	43	43	43	42	42	42	42	42	42	42	42	44	44	--	--	43	
Minimum	45	43	44	44	44	43	43	43	43	44	44	45	45	43	41	41	41	43	42	41	41	41	42	42	42	42	42	44	--	--	--	42	
March																																	
Maximum	44	44	44	44	43	44	46	46	46	46	46	46	42	41	42	45	45	45	45	45	47	47	47	45	45	46	48	48	44	42	44		
Minimum	44	44	44	42	41	43	44	45	45	45	45	42	41	41	42	43	43	45	44	45	45	45	45	43	44	45	45	44	44	42	41	43	
April																																	
Maximum	44	45	45	45	44	43	45	46	46	46	43	45	45	44	44	43	43	42	42	43	44	45	45	45	46	46	46	46	47	48	--	44	
Minimum	41	44	44	44	42	42	43	45	46	43	42	42	44	44	43	43	42	41	42	42	43	44	45	45	45	45	45	44	45	46	--	43	
May																																	
Maximum	48	49	49	50	49	50	51	51	50	46	44	46	48	49	50	49	49	48	49	49	50	50	50	49	49	51	51	51	49	49	49	49	
Minimum	46	47	47	47	47	46	46	46	46	44	44	42	43	44	44	44	44	44	44	43	44	44	44	44	44	44	45	46	47	47	46	45	44
June																																	
Maximum	45	46	51	51	51	49	50	52	52	52	52	51	50	51	53	54	54	54	54	54	54	54	55	56	57	57	57	59	61	62	--	53	
Minimum	44	44	46	48	47	47	47	47	49	48	49	48	46	48	49	49	50	50	50	50	50	50	51	52	54	54	54	56	57	58	--	49	
July																																	
Maximum	63	64	64	64	64	66	66	65	65	65	68	69	70	71	72	71	72	72	71	71	72	73	73	74	75	77	77	77	77	78	78	70	
Minimum	60	61	62	60	61	62	62	61	60	60	62	64	65	66	67	69	68	68	67	66	67	68	68	67	67	68	68	71	70	71	72	65	
August																																	
Maximum	78	79	80	79	80	79	81	79	81	82	81	83	84	85	85	83	86	87	86	83	83	83	85	83	86	86	85	82	82	82	77	82	
Minimum	70	71	71	71	71	70	71	71	71	72	73	73	73	74	76	77	76	76	76	75	75	75	75	78	77	79	76	74	72	73	72	73	
September																																	
Maximum	76	78	79	78	78	79	77	75	75	74	75	76	75	77	75	76	75	74	75	77	76	76	74	76	75	74	74	73	71	68	--	75	
Minimum	70	70	72	71	72	71	71	70	69	69	70	68	69	70	69	70	72	72	70	70	70	71	70	70	69	67	68	68	68	64	--	69	

SACRAMENTO RIVER BASIN--Continued

11-4070. FEATHER RIVER AT OROVILLE, CALIF.

LOCATION.--Lat 39°31'13", long 121°32'48", at gaging station 300 feet upstream from fish barrier dam on Feather River, and 0.6 mile northeast of Oroville, Butte County, business district.

DRAINAGE AREA.--3,624 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Water temperatures: October 1953 to September 1954, November 1956 to September 1967.

Sediment records: November 1956 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 73°F Aug. 26-30; minimum, 39°F on many days in December and January.

Sediment concentrations: Maximum daily, 420 ppm Jan. 21; minimum daily, 2 ppm Jan. 3-5.

Sediment loads: Maximum daily, 50,500 tons Jan. 29; minimum daily, 7.6 tons Oct. 26.

EXTREMES, 1953-54, 1956-67.--Water temperatures: Maximum, 81°F Sept. 10, 12, 1959; minimum, 35°F Dec. 27, 1959, Jan. 23-25, 1962.

Sediment concentrations (1956-67): Maximum daily, 4,100 ppm Feb. 1, 1963; minimum daily, 1 ppm on several days in 1961-62, 1964.

Sediment loads (1956-67): Maximum daily, 1,500,000 tons Feb. 1, 1963; minimum daily, 3 tons Jan. 16, 17, 1962.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 14, 1966....	1100					4.9		70	0		1.5			0.2				50			121	7.6
Dec. 7.....	11400					2.3		38	0		1.2			.0				31			75	7.6
Jan. 12, 1967....	4060					3.8		48	0		1.0			.0				41			102	7.3
Feb. 22.....	6730					3.8		51	0		1.6			.0				38			93	8.0
Mar. 24.....	17900					2.8		40	0		1.5			.1				30			74	7.8
Apr. 25.....	9060					3.8		49	0		1.7			.0				42			93	7.5
May 27.....	19800					1.4		31	0		1.2			.1				26			58	6.8
June 19.....	12400					2.5		33	0		.9			.1				23			62	7.0
Sept. 28.....	3140					4.4		60	0		1.6			.0				43			108	7.7

SACRAMENTO RIVER BASIN--Continued

11-4070. FEATHER RIVER AT OROVILLE, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average		
	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			
October																																		
Maximum	67	67	67	66	65	64	64	64	64	64	64	63	62	61	60	59	59	57	57	58	58	58	58	57	57	57	57	57	57	56	56	60		
Minimum	67	67	66	65	64	64	64	64	64	64	63	62	61	60	59	59	57	57	57	57	58	58	57	57	57	57	57	57	56	56	60			
November																																		
Maximum	56	56	56	56	55	54	54	53	53	52	53	53	53	53	53	54	54	53	53	53	53	51	50	48	47	47	47	47	49	49	--	52		
Minimum	56	56	56	55	54	54	53	53	52	52	52	53	53	53	53	53	53	53	53	53	51	50	48	47	46	47	47	47	47	49	--	51		
December																																		
Maximum	49	49	49	48	48	48	47	47	46	46	46	45	45	45	45	45	45	45	45	45	44	44	43	43	43	43	43	42	41	40	40	39	44	
Minimum	49	49	48	48	48	47	47	46	46	46	46	45	45	45	45	45	45	45	45	45	44	43	43	43	43	43	43	42	41	40	40	39	44	
January																																		
Maximum	39	39	39	39	39	39	39	39	39	40	39	39	39	39	39	39	39	39	39	39	39	43	44	43	42	41	41	42	44	46	46	46	40	
Minimum	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	43	42	41	41	41	41	42	44	46	46	40	
February																																		
Maximum	46	45	45	44	44	44	44	44	44	44	45	45	45	46	45	44	43	43	44	44	44	44	43	43	43	43	43	44	45	--	--	--	44	
Minimum	45	45	44	44	44	44	44	44	44	44	45	45	45	45	45	44	43	42	43	43	44	43	43	43	43	43	43	43	44	--	--	--	43	
March																																		
Maximum	45	45	45	45	45	45	45	45	46	46	46	46	46	45	44	43	43	45	45	44	45	46	47	47	47	47	46	46	46	47	47	47	46	45
Minimum	45	45	45	45	44	44	45	45	45	45	45	45	44	43	43	43	43	44	44	44	45	46	47	47	47	46	46	46	46	47	46	45	45	
April																																		
Maximum	45	45	46	46	46	46	46	47	47	48	48	47	47	46	47	46	46	46	46	46	45	45	46	46	47	47	47	47	48	48	48	--	46	
Minimum	44	44	45	46	46	46	45	45	47	47	47	47	46	46	46	46	46	46	46	45	45	45	45	46	46	46	46	47	47	48	48	48	--	46
May																																		
Maximum	48	50	50	51	52	52	52	54	54	53	51	49	51	52	54	55	55	55	55	56	56	56	56	56	56	56	56	56	56	56	56	55	53	
Minimum	48	48	50	50	51	51	52	52	53	51	49	49	49	51	52	54	55	55	54	54	55	56	56	56	56	56	56	56	56	56	55	54	52	
June																																		
Maximum	54	51	52	55	55	55	54	56	57	57	57	56	56	56	58	59	60	60	61	61	62	61	61	62	63	63	64	64	65	66	--	58		
Minimum	51	50	50	52	54	54	54	54	56	57	56	56	55	55	56	58	59	59	60	61	61	61	61	61	62	63	63	64	64	65	--	57		
July																																		
Maximum	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	69	69	69	69	68	68	68	68	68	68	68	68	68	68	69	71	68	
Minimum	66	67	68	68	68	68	68	68	67	67	67	67	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	69	67	
August																																		
Maximum	71	70	70	70	71	71	70	70	69	69	70	71	72	72	72	72	72	72	72	72	72	72	72	72	72	72	73	73	73	73	73	72	71	
Minimum	70	69	69	69	70	70	69	69	69	69	69	70	71	71	72	72	72	72	72	72	72	72	72	72	72	72	73	73	73	73	72	71	70	
September																																		
Maximum	71	70	70	70	70	70	70	70	69	69	68	68	68	67	67	67	67	67	67	67	67	67	67	66	67	67	67	67	67	67	67	--	68	
Minimum	70	70	70	70	70	70	70	69	69	68	67	67	67	67	66	66	66	67	67	67	67	67	66	66	66	66	67	67	67	67	67	--	67	

SACRAMENTO RIVER BASIN--Continued

11-4070. FEATHER RIVER AT OROVILLE, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	1260	12	41	1020	5	14	9020	21	511
2..	1250	10	34	1260	5	17	14300	110 K	6060
3..	1290	9	31	1310	5	18	17800	130 K	7560
4..	1260	9	31	1230	5	17	11800	98 K	3650
5..	1030	9	25	1330	5	18	22700	180 K	10100
6..	1040	7	20	1230	12 B	40	16800	47	2130
7..	1140	6	18	1760	23 B	109	11400	24	739
8..	1180	5	16	1360	20	73	9410	13	330
9..	1210	4	13	1390	26	98	8170	10	221
10..	1250	4	14	1410	14	53	7960	9	193
11..	1180	4	13	1420	6	23	7510	7	142
12..	1040	5	14	1720	8	37	6820	5	92
13..	1060	5	14	1630	10	44	6530	7 B	123
14..	1100	5	15	1560	11	46	5920	17 B	272
15..	1140	4	12	2820	29 B	221	6000	7	113
16..	1150	4	12	8880	220 K	6010	4930	5	67
17..	1120	3	9.1	2990	72	581	4880	4	53
18..	1080	3	8.7	1880	23	117	4160	3	34
19..	986	4	11	2910	32 K	381	4230	3	34
20..	930	4	10	14600	290 K	11100	4730	4	51
21..	930	5	13	8900	47	1130	5610	4	61
22..	944	5	13	5910	37	590	5480	4	59
23..	958	5	13	4110	25	277	5320	4	57
24..	958	5	13	3720	18	181	5270	5	71
25..	847	5	11	2490	10	67	4730	4	51
26..	704	4	7.6	1960	8	42	4370	3	35
27..	1060	5	14	1940	7	37	4300	4	46
28..	1040	5	14	2540	24 K	265	4730	5	64
29..	986	5	13	15500	170 K	7450	4880	5	66
30..	1000	5	14	7840	32	677	4730	4	51
31..	1020	5	14	--	--	--	4520	4	49
Total	33163	--	501.4	108620	--	29694	239010	--	33085
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4880	4	53	31700	156	13400	6450	6	104
2..	4640	3	38	20200	72	3930	6390	6	104
3..	4570	2	25	15500	43	1800	6420	6	104
4..	4640	2	25	12800	28	968	6000	7	113
5..	4470	2	24	11400	21	646	5950	8	129
6..	4400	3	36	10400	18	505	5810	9	141
7..	4640	6	75	9350	16	404	5830	8	126
8..	4540	6	74	9220	15	373	6000	8	130
9..	4420	4	48	8870	14	335	5950	8	129
10..	4300	4	46	8170	12	265	6230	9	151
11..	4210	3	34	8420	10	227	8290	54 B	1210
12..	4060	4	44	8020	9	195	7870	19	404
13..	4300	5	58	8390	10	227	7030	17	323
14..	4470	5	60	8970	11	266	6230	13	219
15..	4280	4	46	8330	12	270	6140	54	895
16..	4350	4	47	7900	14	299	21600	390 K	31800
17..	4110	3	33	7570	13	266	38000	210 K	22600
18..	3920	4	42	7390	11	219	31300	380 B	32100
19..	3580	5	48	7030	10	190	28300	290	22200
20..	4940	27 S	669	7000	8	151	20900	136	7670
21..	29800	420 K	41200	6850	9	166	17500	69	3260
22..	42800	360 K	45100	6730	9	164	16400	40	1770
23..	15900	120	5150	6620	9	161	18700	66 B	3330
24..	13700	72	2660	6530	8	141	17900	42	2030
25..	10900	40	1180	6760	9	164	15300	34	1400
26..	8450	25	570	6620	9	161	13400	26	941
27..	8930	19	458	6450	8	139	11800	21	669
28..	15000	95 K	3840	6310	7	119	11100	17	509
29..	43100	410 K	50500	--	--	--	10900	16	471
30..	48300	320 K	42200	--	--	--	10300	14	389
31..	46800	230	29100	--	--	--	11600	52	1630
Total	371400	--	223483	269500	--	26151	391590	--	137051

S Computed by subdividing day.

B Computed from estimated-concentration graph.

K Computed from estimated-concentration graph and subdividing day.

SACRAMENTO RIVER BASIN--Continued

11-4070, FEATHER RIVER AT OROVILLE, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	10700	17	491	7990	9	194	14200	19	728
2..	9860	11	293	8080	8	175	12900	16	557
3..	9350	12	303	8170	7	154	11900	14	450
4..	9000	12	292	8490	7	160	12200	14	461
5..	9410	12	305	8840	8	191	12700	13	446
6..	14200	130	5130	8810	9	214	13000	13	456
7..	12100	23	751	10500	12	340	12900	13	453
8..	10400	12	337	13600	21	771	12600	13	442
9..	9860	10	266	17200	97	4500	12600	13	442
10..	9730	14	368	10500	79	3950	12600	12	408
11..	9930	24	643	16200	44	1920	12400	12	402
12..	8810	13	309	14600	30	1180	12300	34	1130
13..	8840	10	239	13700	22	814	12600	54	1840
14..	9030	10	244	13400	17	615	12100	25	817
15..	8710	9	212	14700	18	714	11800	14	446
16..	8110	9	197	17200	26	1210	11700	12	379
17..	8740	15	354	19600	37	1960	11900	11	353
18..	9640	20	521	21000	46	2610	12000	11	356
19..	9450	11	281	21500	54	3130	12400	12	402
20..	9570	9	233	22700	62	3800	12200	13	428
21..	9450	8	204	24300	70	4590	11400	13	400
22..	8810	10	238	25300	76	5190	10900	11	324
23..	8870	13	311	25500	78	5370	9990	8	216
24..	9450	20	510	26500	75	5370	9220	6	149
25..	9060	18	440	25200	68	4630	9220	7	174
26..	8710	12	282	22100	57	3400	9090	8	196
27..	9130	12	296	19800	43	2300	8520	8	184
28..	8870	11	263	18500	33	1650	7870	7	149
29..	8550	9	208	16800	28	1270	7600	6	123
30..	8610	9	209	15700	23	975	7210	6	117
31..	--	--	--	14600	21	828	--	--	--
Total	284950	--	14730	519080	--	64175	340020	--	13428
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	7210	6	117	3970	3	32	3170	7	60
2..	7060	6	114	3740	4	40	3210	7	61
3..	6790	5	92	3830	5	52	3190	6	52
4..	6230	4	67	3580	5	48	2950	4	32
5..	6110	3	49	3410	5	46	2950	4	32
6..	5970	3	48	3060	5	41	2950	6	48
7..	5720	3	46	3120	3	25	3120	8	67
8..	4350	4	47	3410	3	28	2910	9	71
9..	4160	4	45	3250	3	26	2810	9	68
10..	4540	3	37	3210	4	35	2930	6	47
11..	5220	3	42	3190	4	34	2850	4	31
12..	5170	3	42	3080	4	33	2610	5	35
13..	5090	4	55	2970	4	32	2650	10	72
14..	4990	6	81	3030	4	33	2650	8	57
15..	4250	7	80	3100	4	33	2730	7	52
16..	3800	5	51	3280	4	35	2930	7	55
17..	4180	3	34	3390	4	37	3190	6	52
18..	4860	3	39	3300	4	36	3210	6	52
19..	4520	3	37	3430	4	37	2970	6	48
20..	4830	4	52	3500	5	47	2850	9	69
21..	4570	5	62	3390	5	46	3140	12	102
22..	3670	8	79	3230	5	44	3170	13	111
23..	3360	10	91	3280	5	44	2910	12	94
24..	3760	10	102	3030	5	41	2790	9	68
25..	4610	8	100	2650	6	43	2970	5	40
26..	4470	7	84	2870	4	31	2950	7	56
27..	4160	6	67	2930	3	24	2990	10	81
28..	4230	5	57	3190	3	26	3140	9	76
29..	3610	4	39	3410	3	28	2250	7	43
30..	3280	3	27	3210	5	43	1340	6	22
31..	3500	3	28	3170	7	60	--	--	--
Total	148270	--	1911	101210	--	1160	86480	--	1754

Total discharge for year (cfs-days)..... 2893293
 Total load for year (tons)..... 547123.4

B Computed from estimated-concentration graph.

K Computed from estimated-concentration graph and subdividing day.

SACRAMENTO RIVER BASIN--Continued

11-4070. FEATHER RIVER AT OROVILLE, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Feb. 3, 1967.....	0850	45		16000	44							96	97	99	100	100		S
Mar 19.....	0925	47		29400	297							98	100	100				S

SACRAMENTO RIVER BASIN--Continued

11-4071.5. FEATHER RIVER NEAR GRIDLEY, CALIF.

LOCATION (revised).--Lat 39°22'00", long 121°38'46", 300 feet upstream from new highway bridge, and 2.7 miles east of Gridley, Butte County.

DRAINAGE AREA.--3,676 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1967.

Sediment records: October 1964 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 39°F Dec. 30, Jan. 3.

Sediment concentrations: Maximum daily, 487 ppm Jan. 21; minimum daily, 3 ppm Jan. 3, 4.

Sediment loads: Maximum daily, 52,500 tons Jan. 22; minimum daily, 1.4 tons Oct. 27.

EXTREMES, 1964-67.--Water temperatures: Minimum (revised), 39°F Jan. 1, 2, Dec. 21, 1965, Dec. 30, 1966, Jan. 3, 1967.

Sediment concentrations: Maximum daily, 1,340 ppm Dec. 25, 1964; minimum daily, 3 ppm Oct. 6, Dec. 17, 18, 1964, Dec. 19,

20, 1965, Jan. 3, 4, 1967.

Sediment loads: Maximum daily, 527,000 tons Dec. 23, 1964; minimum daily, 1.4 tons Oct. 27, 1966.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Aver- age	
	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		
October	68	--	69	--	67	--	67	--	67	--	66	62	62	--	61	--	60	--	60	--	61	--	61	--	62	--	63	--	60	--	60	--	--
November	--	59	--	58	--	--	55	--	54	--	54	56	55	54	54	54	54	53	54	52	50	49	48	42	46	43	46	--	48	49	--	--	
December	49	49	49	48	--	46	45	46	41	48	48	47	48	49	47	45	45	45	44	44	45	45	43	43	42	42	42	42	40	39	41	44	
January	42	42	39	40	42	41	42	41	42	42	41	42	49	48	48	49	43	41	40	41	47	44	42	42	43	43	44	45	48	47	46	43	
February	46	47	46	45	46	44	44	45	44	49	49	48	50	47	45	48	49	46	48	49	49	49	48	48	47	46	48	50	--	--	--	47	
March	47	50	48	48	49	49	49	50	49	48	47	45	44	44	--	48	49	48	46	49	50	50	49	49	48	48	48	47	48	43	44	47	
April	45	48	48	46	47	47	48	50	52	48	48	52	51	50	50	48	48	47	47	47	47	47	47	49	49	50	50	47	48	51	--	48	
May	52	53	53	52	56	58	59	60	55	50	49	52	55	--	57	59	58	58	58	59	59	59	59	59	58	58	57	57	58	56	54	56	
June	54	55	51	55	54	55	57	59	59	59	59	56	58	58	60	59	61	63	64	65	66	62	63	64	65	66	66	68	69	71	--	60	
July	--	72	--	72	--	72	--	72	--	73	--	73	--	72	--	72	--	73	--	73	--	74	--	74	--	73	--	73	--	75	--	--	
August	76	--	76	--	75	--	75	--	75	--	78	--	78	--	--	74	--	71	--	71	--	74	--	75	--	74	--	75	--	74	--	--	
September	--	71	--	72	--	70	--	70	--	70	--	70	--	69	--	69	--	71	--	71	--	70	--	69	--	69	--	69	--	68	--	--	

SACRAMENTO RIVER BASIN--Continued

11-4071.5, FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	742	8	16	454	6	7.4	7610	40	S 865
2..	756	6	12	547	7	10	11800	82	S 2740
3..	756	4	8.2	741	7	14	19100	264	S 14400
4..	761	6	12	679	7	13	12600	56	1910
5..	673	7	13	732	8	16	20000	206	S 11500
6..	488	6	7.9	910	10	25	20000	100	5400
7..	586	6	9.5	1200	12	39	13400	53	1920
8..	628	6	10	1090	14	41	10200	37	1020
9..	660	6	11	1140	17	52	8790	36	854
10..	683	7	13	1150	18	56	8380	34	769
11..	709	8	15	1260	18	61	8060	21	457
12..	549	5	7.4	1390	12	45	7340	20	396
13..	470	6	7.6	1360	11	40	7100	19	364
14..	526	6	8.5	1190	14	45	6190	16	267
15..	557	6	9.0	1780	15	72	6350	17	291
16..	575	6	9.3	7610	291	S 7330	5610	11	167
17..	601	6	9.7	4280	114	S 1550	5160	11	153
18..	515	6	8.3	1890	38	194	4530	8	98
19..	497	6	8.1	1820	28	S 145	4400	7	83
20..	394	5	5.3	11900	343	S 12200	4680	13	164
21..	265	4	2.9	10100	105	2860	5720	21	324
22..	219	4	2.4	7080	122	2330	5790	17	266
23..	210	5	2.8	4720	46	586	5580	9	136
24..	202	4	2.2	4090	19	210	5520	8	119
25..	202	4	2.2	3010	12	98	5190	7	98
26..	147	4	1.6	2010	11	60	4580	5	62
27..	133	4	1.4	1760	8	38	4460	5	60
28..	311	5	4.2	1950	8	42	4820	7	91
29..	383	6	6.2	11600	196	S 7810	5060	6	82
30..	395	6	6.4	9780	64	S 1860	5000	5	68
31..	430	5	5.8	--	--	--	4620	4	50
Total	15023	--	238.9	99223	--	37849.4	247640	--	45174
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	5170	5	70	37100	180	18000	6670	31	558
2..	4910	4	53	24400	125	8240	6560	15	266
3..	4620	3	37	18100	95	4640	6610	24	428
4..	4780	3	39	14900	105	4220	6360	23	395
5..	4670	5	63	12900	90	3130	6090	10	164
6..	4600	15	186	11500	75	2330	6000	20	324
7..	4680	5	63	10500	68	1930	6050	18	294
8..	4630	4	50	9800	63	1670	6080	13	213
9..	4580	4	49	9450	48	1220	6080	11	181
10..	4430	5	60	8690	48	1130	6240	45	758
11..	4390	12	142	8840	30	716	8120	51	1120
12..	4270	6	69	8370	24	542	7870	36	765
13..	4330	6	70	8670	30	702	7570	30	613
14..	4600	5	62	9060	31	758	6520	28	493
15..	4430	4	48	8730	22	519	6310	28	477
16..	4360	5	59	8250	29	646	13800	207	S 11500
17..	4310	4	47	7910	26	555	34400	312	S 28500
18..	4070	4	44	7740	21	439	30700	210	17400
19..	3810	5	51	7440	20	402	29500	250	19900
20..	4080	10	S 132	7260	21	412	23100	180	11200
21..	18700	487	S 30000	7110	20	384	18700	125	6310
22..	41400	470	S 52500	6980	18	339	17000	88	4040
23..	20900	216	S 12900	6910	18	336	17700	62	2960
24..	14200	120	S 4600	6760	18	329	18600	48	2410
25..	12400	100	S 3350	7040	17	323	16100	54	2350
26..	9170	108	2670	6830	12	221	14000	53	2000
27..	9580	110	2850	6610	23	410	12300	36	1200
28..	13200	95	3390	6480	36	630	11100	41	1230
29..	31500	133	S 11900	--	--	--	11000	39	1160
30..	45000	333	S 40600	--	--	--	10200	51	1400
31..	44400	240	28800	--	--	--	11300	70	2140
Total	350170	--	194954	294330	--	55173	388630	--	122749

S Computed by subdividing day.

SACRAMENTO RIVER BASIN--Continued

11-4071.5. FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	10800	37	1080	8010	17	368	12400	24	804
2..	9930	26	697	7880	18	383	11500	26	807
3..	9300	30	753	7740	19	397	10400	25	702
4..	8860	24	574	7920	14	299	10300	22	612
5..	8940	20	483	8140	18	396	10800	20	583
6..	12700	104	3840	8110	27	591	11000	24	713
7..	12600	50	1700	9000	27	656	11100	21	629
8..	10500	16	454	11000	56	1660	10600	19	544
9..	9900	16	428	15000	88	3560	10600	21	601
10..	9770	24	633	17000	73	3350	10600	20	572
11..	10000	35	945	16000	52	2250	10400	20	562
12..	9240	26	649	14000	41	1550	10200	40	1100
13..	8800	19	451	12700	26	892	10400	42	1180
14..	9010	16	389	11900	23	739	10100	20	545
15..	8840	21	501	12700	34	1170	9670	23	601
16..	8390	20	453	14700	39	1550	9590	21	544
17..	8340	18	405	16800	61	2770	9710	22	577
18..	9690	21	549	18100	92	4500	9760	24	632
19..	9340	22	555	18800	100	5080	10100	20	545
20..	9550	28	722	19500	89	4690	10000	24	648
21..	9440	21	535	20900	109	6150	9370	18	455
22..	8950	14	338	22100	105	6270	8710	18	423
23..	8790	13	309	22300	84	5060	7870	18	382
24..	9370	14	354	23300	90	5660	7170	14	271
25..	9070	15	367	22900	71	4390	6970	16	301
26..	8840	16	382	20600	56	3110	6790	20	367
27..	8970	16	388	18200	40	1970	6300	17	289
28..	8930	33	796	16900	43	1960	5580	17	256
29..	8700	27	634	15300	35	1450	5230	23	325
30..	8550	14	323	14300	35	1350	4800	24	311
31..	--	--	--	13000	35	1230	--	--	--
Total	284110	--	20687	464800	--	75451	278020	--	16881
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4800	20	259	1450	7	27	1320	5	18
2..	4620	16	200	1400	7	26	1410	4	15
3..	4380	15	177	1250	7	24	1420	4	15
4..	4020	14	152	1210	6	20	1170	5	16
5..	3640	15	147	1200	6	19	1270	8	27
6..	3560	16	154	773	6	13	1260	11	37
7..	3350	14	127	790	5	11	1340	10	36
8..	2130	11	63	959	5	13	1660	10	45
9..	1720	10	46	1060	5	14	1280	8	28
10..	1770	10	48	934	6	15	1570	6	25
11..	2660	12	86	930	6	15	1550	6	25
12..	2560	13	90	901	6	15	1460	6	24
13..	2530	15	102	819	5	11	1460	11	43
14..	2460	17	113	832	6	13	1540	16	67
15..	2120	14	80	935	7	18	1690	16	73
16..	1400	10	38	938	7	18	2000	16	86
17..	1380	14	52	1130	8	24	2310	13	81
18..	2290	19	117	1160	8	25	2470	11	73
19..	2070	18	101	1230	8	27	2380	12	77
20..	2120	17	97	1250	6	20	2140	12	69
21..	2080	14	79	1390	5	19	2430	12	79
22..	1600	11	48	1260	5	17	2550	12	83
23..	990	10	27	1290	5	17	2400	12	78
24..	978	9	24	1150	6	19	2170	13	76
25..	1900	8	41	791	7	15	2310	22	137
26..	1890	7	36	853	7	16	2380	30	193
27..	1670	8	36	985	7	19	2410	29	189
28..	1630	8	35	1080	6	17	2650	28	200
29..	1330	7	25	1330	5	18	2060	25	139
30..	838	6	14	1360	6	22	1140	22	68
31..	823	6	13	1340	6	22	--	--	--
Total	71309	--	2627	33980	--	569	55200	--	2122
Total discharge for year (cfs-days).....								2582435.0	
Total load for year (tons).....								574475.3	

S Computed by subdividing day.

SACRAMENTO RIVER BASIN--Continued

11-4071.5. FEATHER RIVER NEAR GRIDLEY, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 13, 1966.....	1005	46		7290	17							75	82	88	99	100		V

SACRAMENTO RIVER BASIN--Continued

11-4077. FEATHER RIVER AT YUBA CITY, CALIF.

LOCATION.--Lat 39°08'20", long 121°36'17", at gaging station on left bank, at Sacramento Northern railroad bridge in Yuba City, Sutter County, and 0.7 mile upstream from confluence with Yuba River.

DRAINAGE AREA.--3,974 square miles.

RECORDS AVAILABLE.--Water temperatures: July 1964 to September 1967.

Sediment records: October 1964 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 83°F Aug. 26.

Sediment concentrations: Maximum daily, 550 ppm Nov. 20; minimum daily, 8 ppm July 24.

Sediment loads: Maximum daily, 42,800 tons Jan. 22; minimum daily, 12 tons Oct. 27.

EXTREMES, 1964-67.--Water temperatures: Maximum, 89°F July 29, 1964; minimum (1964-65), 38°F on several days in January 1965.

Sediment concentrations: Maximum daily, 786 ppm Dec. 24, 1964; minimum daily, 8 ppm July 24, 1967.

Sediment loads: Maximum daily, 334,000 tons Dec. 24, 1964; minimum daily, 12 tons Oct. 27, 1966.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	--	--	63	--	67	--	--	64	--	66	--	65	60	--	56	--	60	--	60	--	58	--	--	65	--	61	--	60	--	--	62	--	--
November	--	61	--	--	57	--	56	--	53	--	50	--	--	55	--	56	55	55	54	--	51	50	45	--	44	45	--	48	48	50	--	--	
December	50	50	51	--	49	49	48	49	47	48	--	48	47	47	46	46	45	--	44	44	44	44	--	--	--	--	43	42	42	40	40	45	
January	--	--	40	--	40	42	40	--	42	41	41	41	40	42	--	40	42	44	43	--	--	48	45	44	43	44	46	47	51	50	43	43	
February	48	49	47	47	46	46	44	44	46	49	46	46	47	46	46	44	47	45	45	47	45	45	45	45	45	45	46	47	--	--	46		
March	49	48	47	46	46	47	49	47	48	--	47	46	44	44	45	50	47	50	50	49	53	52	52	51	50	--	51	--	47	--	46	48	
April	44	46	47	47	48	48	47	48	50	49	48	47	49	49	50	50	48	47	48	47	47	47	49	50	50	49	51	51	50	--	--	48	
May	--	52	55	56	54	56	56	56	55	55	53	54	--	53	54	68	63	62	63	60	58	64	55	61	57	57	57	60	59	58	--	57	
June	55	53	54	55	55	58	56	--	--	--	--	--	60	63	59	67	65	60	62	67	67	64	65	68	66	65	66	67	70	71	--	62	
July	72	72	72	--	75	74	74	70	69	70	73	74	72	72	79	78	76	76	76	78	71	72	76	73	77	78	73	73	74	77	71	73	
August	74	74	74	75	75	77	73	74	76	73	76	72	73	74	71	72	71	78	81	76	77	74	73	75	76	83	79	75	79	74	72	75	
September	74	73	74	74	71	71	72	67	71	70	69	68	69	69	68	69	68	65	67	69	74	77	68	66	67	67	68	68	65	--	69		

SACRAMENTO RIVER BASIN--Continued

11-4077, FEATHER RIVER AT YUBA CITY, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	796	20	43	668	14	25	9270	125	3130
2..	796	21	45	689	14	26	13400	180	6510
3..	836	21	47	850	16	37	22900	425	26300
4..	844	21	48	954	18	46	17600	272	12900
5..	836	21	47	922	18	45	19400	379	19900
6..	668	20	36	1070	22	64	25700	380	26400
7..	616	19	32	1690	32	146	20500	210	11600
8..	675	19	35	1800	33	160	13400	215	7780
9..	703	20	38	1560	28	118	10500	203	5760
10..	731	21	41	1540	30	125	9400	168	4260
11..	773	19	40	1560	32	135	9030	130	3170
12..	759	17	35	1570	33	140	8360	1	2690
13..	610	18	30	1740	31	146	7780	110	2310
14..	598	15	24	1640	25	111	7130	94	1810
15..	634	13	22	1810	60	293	7060	106	2020
16..	640	13	22	5260	520 S	10000	6680	87	1570
17..	682	14	26	6880	519 S	10800	5920	72	1150
18..	675	15	27	3290	99	879	5660	59	902
19..	654	15	26	2620	80	566	5100	50	689
20..	616	15	25	7720	550 K	14700	5100	48	661
21..	520	14	20	11300	540	16500	5680	122	1870
22..	440	14	17	8940	251	6060	6040	98	1600
23..	405	14	15	6490	133	2330	5900	89 B	1420
24..	415	12	13	5300	70	1000	5740	85 B	1320
25..	400	12	13	4590	49	607	5620	80 B	1210
26..	405	12	13	3400	28	257	5010	77 B	1040
27..	354	13	12	2860	22	170	4790	72	931
28..	405	14	15	2880	21	163	4830	58	756
29..	538	14	20	8000	300 S	10400	5020	57	773
30..	586	14	22	14400	360	14000	5070	54	739
31..	610	14	23	--	--	--	4880	43	567
Total	19220	--	872	113993	--	90049	288470	--	153738
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4900	46	609	42700	168	19400	6660	124	2230
2..	5000	52	702	30000	207	16800	6710	110	1990
3..	4720	54	688	21600	260	15200	6630	101	1810
4..	4780	52	671	16400	278	12300	6580	89	1580
5..	4830	42	548	13800	270	10100	6320	91	1550
6..	4690	31	393	12400	239	8000	6120	87	1440
7..	4690	28	355	11400	226	6960	6080	71	1170
8..	4660	30	377	10500	235	6660	6150	86	1430
9..	4720	38	484	10200	170	4680	6140	84	1390
10..	4500	50	608	9630	166	4320	6150	88	1460
11..	4430	36	431	9340	174	4390	7420	166	3330
12..	4300	35	406	9130	180	4440	8390	189	4280
13..	4190	37	419	9060	157	3840	9260	163	4080
14..	4410	42	500	9320	164	4130	8200	107	2370
15..	4430	47	562	9290	154	3860	7240	108	2110
16..	4300	52	604	8710	157	3690	13600	91	3340
17..	4330	53	620	8330	134	3010	32100	271	23500
18..	4160	46	517	8100	153	3350	32600	249	21900
19..	3940	40	426	7900	157	3350	28800	319	24800
20..	3800	50	513	7640	135	2780	25300	313	21500
21..	14900	150 K	7110	7530	116	2360	20500	310	17200
22..	41700	380	42800	7320	120	2370	17800	260	12500
23..	33400	355	32000	7180	107	2070	17200	248	11500
24..	19100	415	21400	7000	120	2270	19300	285	14900
25..	15800	334	14200	7110	147	2820	17200	252	11700
26..	12100	280	9150	7080	112	2140	14900	230	9250
27..	12300	300	9960	6870	105	1950	13200	248	8840
28..	14800	210	8390	6680	129	2330	12000	200	6480
29..	28700	259	20100	--	--	--	11700	213	6730
30..	46400	240	30100	--	--	--	11000	173	5140
31..	50800	245	33600	--	--	--	12200	246	8100
Total	379780	--	239243	322220	--	159570	403450	--	239600

S Computed by subdividing day.

B Computed from estimated-concentration graph.

K Computed from estimated-concentration graph and subdividing day.

SACRAMENTO RIVER BASIN--Continued

11-4077. FEATHER RIVER AT YUBA CITY, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	13200	300	10700	8840	113	2700	14400	160	6220
2..	11500	196	6090	8660	111	2600	13100	194	6860
3..	10600	192	5500	8460	110	2510	11700	182	5750
4..	10100	176	4800	8680	111	2600	11200	160	4840
5..	9830	160	4250	8980	109	2640	10800	160	4670
6..	12900	257	9640	9110	108	2660	11500	159	4940
7..	17100	315	14500	9370	128	3240	11600	133	4170
8..	13400	194	7020	11400	212	6530	11300	114	3480
9..	11600	169	5290	14000	241	9110	11100	104	3120
10..	11000	164	4870	16300	247	10900	11200	93	2810
11..	11700	182	5750	16200	332	14500	11200	84	2540
12..	11100	200	5990	13800	269	10000	13200	76	2710
13..	10000	174	4700	12300	236	7840	11200	73	2210
14..	9930	196	5250	11400	190	5850	11100	89	2670
15..	9930	188	5040	11700	201	6350	10600	84	2400
16..	9630	177	4600	13500	184	6710	10300	80	2220
17..	9190	162	4020	16000	182	7860	10300	74	2060
18..	11400	187	5760	17600	240	11400	10400	55	1540
19..	10900	160	4710	18400	250	12400	10500	58	1640
20..	11200	183	5530	19000	212	10900	10700	70	2020
21..	10600	204	5840	20300	209	11500	9910	71	1900
22..	10200	165	4540	21700	215	12600	8930	71	1710
23..	9730	167	4390	22400	218	13200	8380	72	1630
24..	10600	169	4840	22800	205	12600	7430	105	2110
25..	10800	181	5280	23200	171	10700	6870	84	1560
26..	10100	155	4230	22400	175	10600	6650	68	1220
27..	9800	140	3700	20900	160	9030	6420	54	936
28..	9970	146	3930	19200	138	7150	5700	58	893
29..	9530	138	3550	17700	131	6260	5160	66	920
30..	9190	120	2980	16300	156	6870	4740	78	998
31..	--	--	--	15100	156	6360	--	--	--
Total	326730	--	167290	475700	--	246170	297590	--	82747
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4590	87	1080	1430	26	100	1700	17	78
2..	4510	82	999	1720	21	98	1690	17	78
3..	4250	82	941	1490	20	80	1860	18	90
4..	4140	76	850	1520	22	90	1750	19	90
5..	3730	59	594	1380	19	71	1720	18	84
6..	3470	52	487	1190	20	64	1700	16	73
7..	3290	62	551	956	19	49	1690	15	68
8..	3130	56	473	968	19	50	1950	21	111
9..	2140	40	231	1240	19	64	1770	17	81
10..	1970	35	186	1110	18	54	1800	18	87
11..	2690	74	537	997	17	46	1920	21	109
12..	3030	60	491	978	14	37	1830	19	94
13..	3040	57	468	1040	15	42	1760	20	95
14..	2960	59	472	960	16	41	1800	19	92
15..	2740	51	377	1030	15	42	1920	24	124
16..	2040	30	165	1080	15	44	2110	33	188
17..	1760	31	147	1260	20	68	2490	42	282
18..	2230	62	373	1400	23	87	2680	56	405
19..	2660	66	474	1430	21	81	2830	52	397
20..	2420	62	405	1580	17	73	2590	37	259
21..	2640	58	413	1660	17	76	2640	39	278
22..	2330	49	308	1570	18	76	2900	44	345
23..	1570	41	174	1480	16	64	2900	35	274
24..	1350	8	29	1500	15	61	2660	38	273
25..	1700	19	87	1220	16	53	2600	32	225
26..	2300	59	366	914	18	44	2750	33	245
27..	2220	56	336	1110	18	54	2930	32	253
28..	1990	32	172	1200	16	52	3070	40	332
29..	1930	22	115	1490	19	76	2740	35	259
30..	1360	19	70	1760	20	95	1880	23	117
31..	1170	20	63	1700	16	73	--	--	--
Total	81350	--	12434	40363	--	2005	66630	--	5486

Total discharge for year (cfs-days)..... 2815496

Total load for year (tons)..... 1399204

S Computed by subdividing day.

B Computed from estimated-concentration graph.

SACRAMENTO RIVER BASIN--Continued

11-4077. FEATHER RIVER AT YUBA CITY, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Mar. 7, 1967.....	0900	46		6100	58							86	98	99	100			V
Apr. 10.....	1015	47		11000	93							42	60	91	100			V
May 5.....	0930	59		8920	41							80	96	99	100			V
June 5.....	0840	56		12800	135							47	60	80	99	100		V
July 14.....	0920	75		3950	50							90	97	100	--	--		S

SACRAMENTO RIVER BASIN--Continued

11-4090. MIDDLE YUBA RIVER ABOVE OREGON CREEK, NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°23'35", long 121°04'50", temperature recorder at gaging station on left bank 1,000 feet upstream from Oregon Creek, and 2 miles northeast of North San Juan, Nevada County.

DRAINAGE AREA.--162 square miles.

RECORDS AVAILABLE.--Water temperatures: February 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 78°F on several days in July and August; minimum, 34°F Dec. 28, 31.

EXTREMES, 1965-67.--Water temperatures: Maximum, 79°F July 16, 18, Aug. 5, 6, 1965; minimum, freezing point Dec. 17, 18, 1966.

REMARKS.--Clock stopped Oct. 11-18; temperature range, 50°F to 56°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	58	58	57	56	56	56	56	55	55	55	--	--	--	--	--	--	--	--	49	50	50	49	50	50	49	49	48	48	48	48	--	--	
Minimum	56	56	55	54	54	54	54	54	54	54	--	--	--	--	--	--	--	--	47	49	48	48	48	48	48	48	47	46	46	46	--	--	
November																																	
Maximum	48	48	49	49	49	49	49	48	49	49	49	49	49	49	49	49	51	51	51	50	48	46	45	43	43	43	42	44	45	44	--	47	
Minimum	46	47	48	47	47	49	48	48	47	47	49	49	49	49	48	49	49	49	50	50	48	46	45	43	41	41	42	41	42	44	43	--	46
December																																	
Maximum	45	45	46	46	45	45	44	44	44	44	45	44	43	43	43	42	41	41	41	41	42	42	40	40	40	40	39	36	35	36	36	41	
Minimum	43	44	45	45	45	43	43	43	43	44	42	42	42	42	40	40	40	40	41	41	40	39	39	39	38	36	35	34	35	36	34	40	
January																																	
Maximum	36	36	37	39	40	38	37	37	36	38	39	39	39	38	38	38	37	39	40	42	44	46	46	46	46	46	46	46	46	45	45	45	40
Minimum	36	35	36	36	38	36	36	36	36	36	38	38	38	37	38	37	36	36	38	40	42	44	45	46	46	46	46	45	45	45	45	39	
February																																	
Maximum	45	46	45	45	44	44	44	44	44	44	45	46	46	45	42	41	43	44	44	42	42	42	42	43	43	43	44	44	--	--	--	43	
Minimum	45	45	44	44	43	43	43	44	44	44	43	43	44	44	42	41	40	41	42	42	40	41	41	41	42	43	42	42	42	--	--	--	42
March																																	
Maximum	44	44	44	43	43	44	45	45	46	46	45	45	43	40	41	43	44	45	45	45	46	46	46	45	45	44	44	43	42	41	42	42	43
Minimum	42	43	43	42	40	41	42	43	44	45	42	40	39	38	40	42	44	44	44	44	45	45	45	45	44	43	42	40	41	41	41	41	42
April																																	
Maximum	42	42	42	43	43	43	43	44	44	44	44	44	44	43	43	43	43	43	43	42	43	43	43	43	43	43	43	44	44	45	--	43	
Minimum	41	41	42	42	43	42	42	43	44	43	43	42	43	43	43	42	43	41	42	42	42	43	43	43	43	43	43	43	43	43	43	--	42
May																																	
Maximum	45	46	46	47	46	47	--	--	--	--	--	--	--	--	--	--	55	54	55	56	56	54	52	52	51	50	50	50	50	49	--	--	
Minimum	43	44	45	45	45	44	--	--	--	--	--	--	--	--	--	--	48	47	48	48	48	48	48	48	48	48	47	47	47	46	45	--	
June																																	
Maximum	45	47	54	54	51	53	54	54	53	54	54	52	50	52	54	55	55	56	58	59	57	58	59	60	60	61	62	63	64	--	55		
Minimum	44	45	46	50	47	47	48	48	47	48	48	48	46	48	48	50	51	51	52	52	52	52	52	53	55	56	56	56	58	--	50		
July																																	
Maximum	64	65	65	69	69	70	70	70	70	71	73	73	75	75	75	75	74	75	74	73	73	74	74	74	74	74	74	75	77	78	78	72	
Minimum	59	60	60	61	63	63	63	62	63	64	65	66	66	66	66	68	67	66	66	66	64	65	66	66	66	66	66	66	68	69	70	64	
August																																	
Maximum	77	76	77	76	75	74	74	74	74	75	75	76	77	77	77	77	78	78	78	77	77	77	77	77	78	78	76	75	74	74	73	76	
Minimum	69	68	69	69	68	67	66	67	67	68	68	68	69	69	70	71	71	71	72	71	71	70	71	72	73	73	71	70	68	69	69	69	
September																																	
Maximum	73	73	75	73	74	73	74	73	71	70	70	70	69	69	68	68	68	66	69	68	69	69	68	66	68	69	68	67	67	65	--	69	
Minimum	68	68	71	70	69	68	68	67	66	66	66	65	64	64	64	64	64	65	64	64	64	65	66	64	63	65	64	63	64	64	62	65	

SACRAMENTO RIVER BASIN--Continued

11-4090. MIDDLE YUBA RIVER ABOVE OREGON CREEK, NEAR NORTH SAN JUAN, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Nov. 17, 1966.....	1425	51		132	13	4.6												
Nov. 21.....	1105	48		489	47	62					85	90	94	96	100		S	
Dec. 2.....	1145	46		930	101	254					75	80	86	94	99	100	S	
Dec. 3.....	1450	47		1110	89	267												
Jan. 18, 1967.....	1050	36		106	11	3.1												
Mar. 16.....	1830	42		5150	1710	23800					32	46	64	81	96	100	V	
May 16.....	1155	48		1110	13	39												
June 22.....	1355	52		1770	31	148												
July 19.....	1340	69		141	2	.8												
Aug. 2.....	0640	67		88	6	1.4												
Sept. 21.....	1310	66		54	8	1.2												

SACRAMENTO RIVER BASIN--Continued

11-4095. OREGON CREEK NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°24'10", long 121°04'35", temperature recorder at gaging station on right bank 0.7 mile upstream from mouth, and 2.7 miles northeast of North San Juan, Nevada County.

DRAINAGE AREA.--34.4 square miles.

RECORDS AVAILABLE.--Water temperatures: February 1965 to September 1967.

EXTREMES, 1965-67.--Water temperatures: Maximum, 78°F July 30; minimum, 35°F Dec. 29, Jan. 7.

EXTREMES, 1965-67.--Water temperatures: Maximum, 80°F Aug. 17, 18, 1966; minimum, 33°F Dec. 16-18, 1965.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	66	65	64	62	63	63	62	63	63	63	62	61	58	52	51	51	51	51	52	54	53	53	55	55	54	54	53	51	51	51	52	56	
Minimum	58	60	58	56	57	57	57	57	57	57	57	58	48	46	46	46	46	46	46	50	48	47	49	49	49	49	47	47	47	47	51		
November																																	
Maximum	52	51	52	51	51	51	52	52	51	52	53	54	53	53	52	52	52	52	52	50	48	46	44	44	44	44	44	46	49	48	--	50	
Minimum	47	47	48	46	47	49	48	47	47	48	51	50	50	48	50	50	50	50	50	48	46	44	42	41	42	41	43	46	44	--	47		
December																																	
Maximum	47	47	47	45	47	47	47	48	48	48	48	46	46	46	44	44	44	44	44	45	46	44	43	44	44	41	40	39	38	40	39	40	44
Minimum	46	47	45	45	44	45	46	46	46	47	45	45	45	44	42	43	42	42	43	44	42	41	41	41	40	37	36	36	35	37	36	42	
January																																	
Maximum	40	40	41	41	43	39	40	41	41	42	42	43	43	44	44	43	41	41	42	44	45	44	44	44	43	44	46	46	46	46	46	42	
Minimum	37	36	36	38	38	36	35	37	36	38	39	39	39	39	39	39	37	37	37	42	42	42	41	40	40	43	44	44	44	45	44	39	
February																																	
Maximum	46	46	47	47	47	47	46	46	47	47	47	49	48	46	41	42	44	46	44	42	43	44	44	44	44	44	46	47	46	--	--	45	
Minimum	44	43	44	44	44	43	43	43	44	44	43	46	45	41	39	39	41	42	41	41	40	40	40	40	42	42	40	42	42	--	--	42	
March																																	
Maximum	47	47	45	44	45	46	48	48	49	46	45	41	38	42	44	44	44	44	43	46	46	45	45	46	47	46	48	48	44	43	40	44	
Minimum	42	42	42	39	38	40	42	42	43	45	40	38	36	36	39	42	40	39	42	42	43	43	43	44	45	44	43	41	40	38	38	41	
April																																	
Maximum	43	44	47	45	44	44	47	48	49	48	45	49	48	46	44	46	47	46	48	47	50	50	49	47	47	47	47	45	46	48	--	46	
Minimum	38	40	41	43	42	43	43	45	45	42	41	42	45	44	42	42	44	44	44	45	46	45	46	42	43	44	44	42	41	42	--	43	
May																																	
Maximum	49	51	51	52	50	54	55	54	51	47	48	50	52	54	56	56	56	55	57	59	59	59	59	59	58	58	58	58	57	57	56	54	
Minimum	42	44	44	45	44	44	46	47	47	45	43	43	44	45	47	48	48	48	50	51	51	51	52	52	52	52	52	53	52	50	48	47	
June																																	
Maximum	48	49	57	59	55	54	58	60	60	60	61	57	56	59	62	63	64	66	67	68	68	67	66	68	69	69	69	71	73	74	--	62	
Minimum	46	47	48	53	50	50	53	53	54	53	55	51	49	53	54	56	57	59	59	60	60	58	56	50	59	59	58	59	61	63	--	54	
July																																	
Maximum	75	75	74	74	72	73	72	71	71	72	73	73	75	75	75	74	75	73	74	74	74	74	74	74	75	74	76	76	74	77	78	77	74
Minimum	63	64	63	61	61	62	61	60	59	59	60	61	63	63	64	65	64	62	61	62	62	62	62	64	66	66	67	64	64	65	66	66	62
August																																	
Maximum	76	76	76	76	75	74	73	73	74	72	74	74	75	75	75	75	75	76	74	74	74	74	74	75	74	74	74	74	73	73	72	74	
Minimum	64	64	65	64	63	62	62	62	62	63	63	62	62	62	63	64	64	64	63	62	62	62	62	62	62	62	62	62	64	61	62	62	62
September																																	
Maximum	72	72	72	70	72	72	70	68	68	68	68	68	68	66	67	67	64	68	68	68	69	67	65	69	69	68	68	68	67	67	64	--	59
Minimum	62	61	65	62	63	62	62	60	59	59	59	58	58	56	57	58	59	61	58	58	59	62	60	60	61	59	59	61	61	57	--	58	

SACRAMENTO RIVER BASIN--Continued

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", 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 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 76°F Aug. 26; minimum, 38°F Jan. 2, 3, 21.

REMARKS.--Clock stopped Nov. 3-28; temperature range, 46°F to 54°F.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	67	67	65	64	64	64	64	64	64	64	63	61	59	59	58	57	57	57	56	57	55	56	56	57	57	56	54	55	55	54	54	59	
Minimum	62	62	60	58	58	57	57	57	57	57	57	57	55	54	52	51	50	50	50	52	50	49	51	52	51	51	51	50	49	51	51	53	
November																																	
Maximum	55	55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	47	46	—	—	
Minimum	50	49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	45	45	—	—	
December																																	
Maximum	46	46	46	46	46	46	45	46	46	46	45	45	44	44	44	44	44	44	44	44	44	44	44	44	42	43	42	41	40	41	41	44	
Minimum	46	46	46	46	46	45	45	44	44	44	44	44	44	44	43	43	43	43	43	43	43	42	42	42	42	41	40	40	40	39	43	43	
January																																	
Maximum	40	40	40	42	41	41	42	42	42	42	40	42	42	42	42	40	41	41	40	40	41	41	42	42	41	42	42	42	42	43	44	41	
Minimum	39	38	38	41	40	40	40	40	40	40	40	40	40	40	40	40	40	39	39	39	40	38	40	40	41	41	41	42	42	42	43	43	40
February																																	
Maximum	44	45	45	46	46	46	46	46	46	46	46	45	46	45	45	45	44	44	44	45	45	44	44	43	42	44	44	45	—	—	—	44	
Minimum	43	43	44	44	44	44	44	43	44	43	43	44	43	43	44	42	42	42	42	42	42	42	42	41	42	42	41	42	42	—	—	—	42
March																																	
Maximum	45	45	45	45	46	45	46	46	46	46	43	44	44	43	44	44	42	43	43	45	45	44	45	44	44	45	45	46	44	45	44	43	44
Minimum	42	42	42	42	42	42	42	43	43	42	41	43	42	42	41	41	41	42	43	43	43	42	44	44	43	43	44	43	44	43	42	42	42
April																																	
Maximum	44	43	43	42	42	42	44	44	46	46	46	47	44	46	46	46	45	46	44	44	44	46	47	46	48	46	45	45	46	46	46	—	45
Minimum	41	40	40	40	42	42	42	42	43	43	43	44	44	44	44	44	44	44	43	43	43	44	44	45	45	44	44	44	44	44	43	—	43
May																																	
Maximum	47	48	50	51	51	50	51	52	51	49	48	48	49	49	49	49	51	52	52	52	51	52	52	51	51	51	51	51	51	51	50	50	
Minimum	44	45	46	47	48	48	48	49	49	49	47	45	45	46	46	47	49	49	48	48	48	49	49	49	49	48	48	49	48	48	48	47	
June																																	
Maximum	48	47	48	50	50	50	51	52	53	53	53	52	52	51	52	53	54	54	54	55	54	56	55	56	57	58	58	58	59	60	—	53	
Minimum	47	46	46	46	50	48	48	49	50	51	51	50	48	48	49	50	51	51	52	52	53	53	53	53	54	54	55	55	56	57	—	50	
July																																	
Maximum	61	62	62	63	62	64	64	64	65	65	66	66	67	68	68	68	68	68	69	67	67	67	68	68	68	68	68	68	70	70	70	66	
Minimum	58	58	59	60	60	60	61	61	61	62	62	63	64	64	65	66	66	65	64	64	64	64	64	64	64	64	64	65	65	66	66	63	
August																																	
Maximum	71	71	72	72	72	72	72	72	72	72	72	73	73	74	74	74	74	74	74	74	74	74	74	74	74	74	76	75	75	74	74	74	73
Minimum	66	67	67	67	67	67	67	67	67	68	68	68	68	68	68	68	69	68	69	69	69	69	69	69	70	70	70	70	69	69	69	68	
September																																	
Maximum	74	73	74	73	74	73	73	72	71	70	70	70	70	70	69	69	66	68	69	70	71	68	67	69	69	70	70	71	69	68	—	70	
Minimum	68	68	70	69	70	69	69	68	67	68	68	66	66	64	64	65	65	65	65	65	64	64	65	64	64	64	64	64	64	63	—	65	

SACRAMENTO RIVER BASIN--Continued

11-4175. SOUTH YUBA RIVER AT JONES BAR, NEAR GRASS VALLEY, CALIF.

LOCATION.--Lat 39°17'32", long 121°06'13", temperature recorder at gaging station on left bank at Jones Bar, 100 feet upstream from Rush Creek, 0.9 mile downstream from bridge on State Highway 49, and 5 miles northwest of Grass Valley, Nevada County.

DRAINAGE AREA.--308 square miles.

RECORDS AVAILABLE.--Water temperatures: February 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 79°F Aug. 26; minimum, 34°F Dec. 28, 29.

EXTREMES, 1965-67.--Water temperatures: Maximum, 80°F Aug. 2-4, 1966; minimum, freezing point on several days in December 1965.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	65	65	63	61	61	61	61	60	60	60	59	59	57	52	50	51	50	50	50	53	52	51	52	53	53	53	52	51	50	50	50	55	
Minimum	60	61	59	58	57	57	57	56	57	57	57	57	52	50	48	48	48	48	48	50	50	48	50	51	51	51	50	49	48	48	48	52	
November																																	
Maximum	50	50	51	50	49	49	50	50	48	48	49	52	52	50	52	52	52	52	52	50	48	45	45	42	41	42	42	47	49	49	--	48	
Minimum	48	48	49	48	48	49	48	48	45	46	48	49	50	49	50	51	51	50	50	50	48	45	42	40	39	40	40	42	46	46	--	46	
December																																	
Maximum	48	48	48	47	47	46	47	46	46	46	48	47	45	45	44	43	43	43	43	42	42	41	41	41	40	40	37	35	36	36	43		
Minimum	46	47	46	46	45	45	46	46	46	46	46	45	44	44	44	42	42	42	41	42	42	41	39	39	39	38	37	35	34	34	36	41	
January																																	
Maximum	36	36	37	39	40	38	37	36	37	39	40	40	40	40	40	40	39	38	39	43	45	44	43	42	43	44	45	45	45	46	45	40	
Minimum	35	35	35	36	38	36	36	36	35	36	38	40	39	39	39	38	37	36	37	39	43	42	42	42	42	43	44	44	44	44	44	39	
February																																	
Maximum	45	44	45	45	45	44	45	45	45	45	45	48	47	46	42	42	43	45	44	43	43	43	43	44	44	45	46	46	--	--	--	44	
Minimum	44	42	42	44	44	43	43	43	43	43	44	45	46	42	40	39	40	42	41	40	40	40	40	40	42	43	42	43	43	--	--	42	
March																																	
Maximum	47	47	46	44	44	45	47	47	48	47	46	42	39	41	45	45	44	45	46	46	48	48	48	46	46	46	47	47	--	44	40	45	
Minimum	44	44	44	42	40	41	42	43	44	46	42	39	38	37	40	42	42	43	43	45	45	46	46	43	44	44	43	44	--	42	39	42	
April																																	
Maximum	44	44	46	45	45	45	46	48	48	48	48	48	47	45	46	46	46	44	44	46	46	45	45	46	48	48	47	47	47	46	49	46	
Minimum	39	41	42	44	44	44	44	46	46	44	43	43	47	45	43	43	44	42	43	42	45	44	44	45	45	45	45	45	43	43	44	--	43
May																																	
Maximum	50	52	52	52	50	53	54	54	54	50	48	50	52	54	56	56	56	56	56	57	58	57	56	58	59	57	55	53	53	52	51	53	
Minimum	45	47	48	49	47	46	50	50	50	50	47	45	45	47	49	51	51	51	51	50	50	53	50	48	51	53	50	48	49	48	47	48	
June																																	
Maximum	47	49	54	57	55	54	54	55	54	54	55	54	52	54	57	56	55	54	56	55	56	56	56	56	56	58	58	59	60	61	--	55	
Minimum	46	46	48	54	49	48	49	49	49	48	49	49	47	50	50	50	50	50	49	52	52	51	52	52	52	51	50	50	53	54	--	49	
July																																	
Maximum	61	61	62	62	62	63	62	66	64	64	68	70	72	72	71	71	72	72	72	72	72	72	72	73	73	73	73	74	77	78	78	69	
Minimum	54	54	54	54	56	57	56	61	61	61	62	64	66	67	65	67	66	66	66	68	66	66	66	66	66	66	66	68	70	72	72	63	
August																																	
Maximum	77	77	77	77	76	74	74	73	74	75	75	76	76	77	77	77	77	78	78	77	76	76	78	78	78	79	77	76	75	76	75	76	
Minimum	71	71	71	70	69	68	67	67	67	69	69	69	69	73	72	71	71	71	71	73	71	69	69	72	73	72	74	72	70	69	69	70	
September																																	
Maximum	74	74	75	74	74	74	73	71	70	69	70	69	69	68	68	68	66	70	69	69	69	68	66	68	70	69	69	70	68	67	--	69	
Minimum	68	68	70	69	68	68	68	66	65	64	64	64	63	62	62	63	64	64	64	64	64	66	64	64	65	65	65	66	66	64	--	65	

SACRAMENTO RIVER BASIN--Continued

11-4175. SOUTH YUBA RIVER AT JONES BAR, NEAR GRASS VALLEY, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Nov. 17, 1966.....	1110	51		146	54	21						99	100	--	--	--	S	
Dec. 2.....	1200	47		1320	77	274						58	64	74	86	97	100	S
Jan. 27, 1967.....	1500	44		1060	52	149						73	80	90	100	--	--	V
Jan. 31.....	1230	46		3860	435	4530						33	42	52	72	90	100	V
Feb. 20.....	1515	41		328	9	8.0						--	--	--	--	--	--	
Mar. 29.....	1530	44		654	15	26						--	--	--	--	--	--	
May 16.....	1645	55		975	14	37						--	--	--	--	--	--	
July 26.....	1400	72		98	2	.5						--	--	--	--	--	--	

SACRAMENTO RIVER BASIN--Continued

11-4215. YUBA RIVER AT MARYSVILLE, CALIF.

LOCATION.--Lat 39°08'40", long 121°34'35", temperature recorder at Simpson Lane Bridge in Marysville, Yuba County, 4.2 miles downstream from gaging station near Marysville, and approximately 2 miles upstream from mouth.

DRAINAGE AREA.--1,340 square miles, upstream from gaging station.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1963.

Water temperatures: October 1963 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 80°F Aug. 26, 27; minimum, 44°F Jan. 17, 23.

EXTREMES, 1963-67.--Water temperatures: Maximum, 85°F July 24, 25, 1964, Aug. 3, 4, 6, 17, 1966; minimum, 40°F Feb. 17, 1966.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1966 to September 1967																																	
Month	Day																															Average	
	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		
October																																	
Maximum	74	72	71	72	72	71	70	71	72	72	70	68	65	62	64	63	65	66	65	66	63	63	66	67	67	67	65	65	65	65	65	67	
Minimum	70	69	67	68	68	68	68	69	69	68	67	65	60	60	60	60	60	61	61	60	63	64	64	64	64	65	64	62	62	62	62	64	
November																																	
Maximum	64	64	64	63	64	60	62	61	58	59	61	63	62	60	60	59	59	59	58	57	55	54	54	54	53	53	53	52	53	52	--	58	
Minimum	62	62	63	62	60	59	59	58	56	57	59	60	60	59	59	58	57	57	55	54	52	52	52	51	52	52	52	52	51	--	56		
December																																	
Maximum	52	51	51	49	49	49	50	51	50	51	50	50	50	50	49	49	48	48	48	48	48	48	48	48	47	47	46	46	45	45	46	48	
Minimum	51	51	48	48	48	48	49	49	50	50	50	50	49	49	49	48	48	48	48	48	48	48	47	47	47	46	45	45	45	45	46	47	
January																																	
Maximum	46	46	47	47	47	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46	47	46	46	46	46	46	46	46	47	48	47	46	
Minimum	45	46	46	46	46	46	45	45	45	45	45	45	45	45	45	45	44	45	45	46	45	45	44	45	45	45	46	46	46	46	47	45	
February																																	
Maximum	48	48	48	48	49	48	47	48	47	49	47	49	50	49	47	49	50	50	50	50	50	50	49	48	50	50	51	--	--	--	48		
Minimum	47	47	47	47	47	47	47	46	47	47	46	47	46	46	46	45	46	47	47	46	46	46	46	47	47	47	46	46	46	46	46	46	
March																																	
Maximum	51	51	51	51	51	52	52	52	53	49	49	47	47	50	51	49	48	48	48	48	50	49	49	49	49	49	48	49	48	49	47	48	
Minimum	47	46	47	46	46	46	46	47	47	48	47	46	46	46	46	46	46	46	46	47	47	48	47	47	47	47	47	46	46	46	46	46	
April																																	
Maximum	48	50	52	48	49	48	49	49	50	48	48	51	49	50	49	51	48	49	50	52	50	52	50	50	52	53	53	53	54	--	50		
Minimum	46	46	46	46	46	46	46	47	47	46	46	46	47	47	47	47	47	46	48	48	48	48	48	48	48	47	48	47	48	48	--	46	
May																																	
Maximum	55	56	56	57	56	58	58	58	54	54	55	57	56	57	57	57	58	59	59	59	59	59	59	59	58	58	58	57	57	58	56	57	
Minimum	48	49	49	50	51	51	53	53	53	52	52	51	51	52	51	53	54	55	55	55	56	56	56	55	55	54	54	54	54	54	53	52	
June																																	
Maximum	54	54	57	56	54	55	56	57	57	58	57	57	58	58	58	58	59	59	60	59	61	61	61	61	61	62	63	63	64	65	--	58	
Minimum	53	53	52	52	53	53	53	53	53	54	54	54	54	53	54	54	55	55	56	56	56	57	57	57	57	57	58	58	59	59	60	--	55
July																																	
Maximum	66	67	67	68	68	70	69	70	71	71	73	73	73	73	74	72	74	74	74	75	74	74	75	74	74	75	75	76	75	77	77	76	72
Minimum	61	62	62	62	62	63	62	62	63	63	64	64	65	65	65	66	66	66	66	65	66	66	67	66	66	67	68	68	69	70	71	70	65
August																																	
Maximum	76	76	77	77	76	76	76	76	76	76	76	77	77	77	77	77	78	78	78	78	78	79	79	78	79	80	80	78	79	79	78	77	
Minimum	70	70	71	71	71	70	71	71	71	71	71	71	71	69	69	69	69	70	70	70	70	72	72	73	73	74	73	72	72	73	72	70	
September																																	

SACRAMENTO RIVER BASIN--Continued

11-4240. BEAR RIVER NEAR WHEATLAND, CALIF.

LOCATION.--Lat 39°00'00", long 121°24'20", near gaging station at bridge on U.S. Highway 99E, 1 mile southeast of Wheatland, Yuba County, and 6.5 miles downstream from Rock Creek.

DRAINAGE AREA.--292 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Chemical analyses, in parts per million, July 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
July 14, 1966....	21					4.4		90	0		6.1			0.0				84			185	7.9
Aug. 11.....	15					6.2		92	0		7.9			.0				91			202	7.8
Sept. 15.....	13					5.8		101	0		6.8			.0				92			224	8.1
Oct. 14.....	5.6					6.2		99	0		8.4			.0				94			219	8.2
Nov. 17.....	28					5.6		75	0		7.1			.1				72			176	7.3
Dec. 7.....	54					4.2		56	0		3.6			.0				58			140	7.8
Jan. 12, 1967....	271					3.4		38	0		3.7			.0				45			108	7.0
Feb. 10.....	616					2.3		33	0		1.8			.0				31			76	7.2
Mar. 17.....	7030					2.6		31	0		2.6			.1				27			74	7.7
Apr. 25.....	1920					2.9		36	0		3.0			.0				33			81	7.4
May 11.....	1450					2.7		33	0		2.2			.0				31			83	7.3
June 29.....	50					3.9		54	0		3.8			.1				48			123	7.7
Sept. 25.....	9.4					6.2		78	0		8.1			.0				68			186	7.8

SACRAMENTO RIVER BASIN--Continued

11-4250. FEATHER RIVER AT NICOLAUS, CALIF.

LOCATION.--Lat 38°54'00", long 121°35'00", temperature recorder at gaging station on left bank at highway bridge at Nicolaus, Sutter County, and 2.9 miles downstream from Bear River.

DRAINAGE AREA.--5,921 square miles.

RECORDS AVAILABLE.--Chemical analyses: March 1951 to June 1966.

Water temperatures: March 1951 to September 1958, November 1959 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 83°F Aug. 14.

EXTREMES, 1951-58, 1959-67.--Water temperatures: Maximum, 94°F July 21, 1961; minimum (1951-58, 1959-66), freezing point Jan. 3-6, 1961.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	72	70	70	70	70	70	70	70	70	72	70	67	64	60	60	60	60	61	61	62	61	60	62	63	64	64	64	64	64	62	62	65
Minimum	70	68	68	68	68	68	68	67	68	69	67	65	60	57	57	57	57	58	59	60	59	58	58	60	61	62	62	61	61	61	61	62
November																																
Maximum	62	62	61	60	59	57	56	56	55	54	54	56	56	56	56	55	55	54	54	54	53	51	50	49	48	47	47	48	49	49	--	54
Minimum	61	60	60	58	57	54	54	54	53	53	53	54	55	55	55	55	53	52	53	53	50	49	48	47	46	45	46	47	47	47	--	52
December																																
Maximum	50	50	50	50	49	49	48	48	48	48	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	49	49	49	48	48	48	48	48	47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January																																
Maximum	--	--	--	--	--	--	--	--	43	43	43	43	44	44	44	44	44	43	43	44	46	47	47	45	45	45	46	48	49	49	49	--
Minimum	--	--	--	--	--	--	--	--	41	41	42	41	42	43	42	42	42	42	42	43	44	46	46	44	44	45	45	46	48	48	48	--
February																																
Maximum	48	48	48	48	49	49	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	47	47	47	47	48	48	47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
March																																
Maximum	--	--	--	52	52	52	52	53	54	53	52	51	50	49	50	53	51	51	51	50	53	53	53	53	52	51	51	52	50	49	47	51
Minimum	--	--	--	50	49	49	50	50	51	52	50	50	47	47	48	50	49	50	50	50	51	52	52	52	51	50	50	50	48	47	46	49
April																																
Maximum	48	49	50	51	50	49	50	52	53	52	50	52	52	52	51	51	51	49	50	50	51	51	51	51	51	52	52	53	52	53	53	51
Minimum	46	47	48	49	47	48	48	49	50	50	49	49	50	50	50	49	50	48	48	48	49	49	49	50	49	50	50	51	50	51	50	49
May																																
Maximum	53	55	56	57	56	58	59	59	58	55	55	53	54	55	57	58	59	59	59	59	59	60	60	60	60	59	58	58	58	58	57	57
Minimum	50	51	52	54	55	54	54	57	55	54	53	52	52	54	55	56	58	58	58	58	58	59	59	59	59	58	58	57	57	56	56	55
June																																
Maximum	56	54	55	56	56	57	58	59	60	60	60	60	59	59	60	61	62	62	62	62	64	64	65	65	66	66	67	68	69	70	--	61
Minimum	54	53	52	55	55	55	56	57	58	59	59	58	57	58	59	59	61	60	60	61	62	63	63	63	63	64	64	65	66	67	--	59
July																																
Maximum	70	71	71	71	72	72	--	--	--	--	78	79	78	79	79	78	77	78	79	79	80	78	77	79	80	81	80	80	81	82	81	77
Minimum	68	68	68	69	70	71	--	--	--	--	72	74	73	73	74	73	72	72	73	74	74	74	74	74	75	76	76	77	78	77	78	73
August																																
Maximum	82	82	82	81	80	78	80	81	80	79	79	81	82	83	82	81	82	81	79	79	79	79	79	80	79	79	79	80	77	78	79	80
Minimum	77	78	78	77	76	74	75	77	76	75	74	76	79	79	79	79	77	77	78	77	75	75	76	75	77	76	76	77	75	74	75	76
September																																
Maximum	76	76	76	75	75	77	75	74	73	72	74	74	74	74	74	74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	73	73	73	73	72	73	73	72	68	68	70	72	71	71	71	71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

11-4270. NORTH FORK AMERICAN RIVER AT NORTH FORK DAM, CALIF.

DRAINAGE AREA.--342 square miles.

RECORDS AVAILABLE.--Water temperatures: November 1959 to September 1967.

EXTREMES, 1966-67.—Water temperatures: Maximum, 80°F on several days in July and August; minimum, 40°F Jan. 21.

EXTREMES, 1959-67.--Water temperatures: Maximum, 80°F on several days in July and August of most years; minimum, 40°F Jan. 21, 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	70	70	70	69	69	69	69	69	68	68	68	68	67	66	66	65	65	64	64	63	63	63	62	62	62	62	62	61	61	61	61	65
Minimum	70	70	69	69	69	69	69	68	68	68	68	67	66	66	66	65	64	64	63	63	63	62	62	62	62	62	61	61	61	61	61	65
November																																
Maximum	61	61	61	61	60	60	59	59	59	59	58	58	58	57	57	56	56	56	56	55	54	53	52	51	51	50	50	50	50	50	49	56
Minimum	61	61	61	60	60	59	59	59	59	58	58	58	57	57	56	56	56	56	55	54	53	52	51	51	50	50	50	50	50	49	55	
December																																
Maximum	49	49	49	49	49	48	47	47	47	47	47	47	47	47	47	46	46	46	46	46	45	44	44	44	44	43	43	43	43	42	42	46
Minimum	49	49	49	49	49	48	47	47	47	47	47	47	47	47	47	46	46	46	46	45	44	44	44	44	43	43	43	43	42	42	41	45
January																																
Maximum	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	42	44	45	45	45	45	45	45	46	46	46	42
Minimum	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	40	42	44	45	45	45	45	45	46	46	46	42
February																																
Maximum	47	47	47	47	47	47	47	46	46	46	46	46	47	47	47	48	48	47	47	47	47	47	47	47	47	47	48	48	49	—	—	47
Minimum	46	46	47	46	46	47	46	46	46	46	46	46	47	47	47	47	47	46	47	46	47	47	47	47	47	47	47	48	48	48	—	46
March																																
Maximum	49	50	50	50	50	50	50	50	50	50	50	49	49	49	49	48	48	48	49	50	50	51	51	51	51	51	51	51	51	51	51	50
Minimum	49	49	50	50	50	49	49	50	50	50	50	49	49	49	49	48	48	47	48	49	49	50	51	51	51	51	51	50	51	51	51	49
April																																
Maximum	50	49	49	49	50	50	50	51	52	52	52	51	51	51	51	51	50	50	50	49	50	50	50	50	50	50	50	51	51	51	—	50
Minimum	49	49	49	49	49	50	49	50	51	52	51	50	51	51	51	50	50	50	50	49	49	49	50	50	50	50	50	50	51	51	—	49
May																																
Maximum	51	52	53	53	54	54	54	54	53	51	51	51	51	52	53	53	53	53	52	53	53	53	52	53	53	53	53	53	53	53	52	
Minimum	51	51	52	53	53	53	53	53	51	51	50	51	51	51	52	53	53	53	52	52	52	52	52	52	52	52	53	53	53	53	52	
June																																
Maximum	53	52	51	53	55	55	53	54	54	55	55	55	55	55	55	56	57	57	57	57	58	59	59	60	60	61	61	62	63	—	56	
Minimum	52	51	50	50	54	53	52	53	54	54	55	55	54	54	55	55	56	56	56	56	57	58	58	58	58	60	60	60	61	62	—	55
July																																
Maximum	65	66	67	67	67	68	68	68	69	70	71	72	73	74	74	75	75	76	76	76	76	76	76	76	77	78	79	79	79	80	80	73
Minimum	63	65	66	66	66	66	67	68	69	70	71	72	73	74	74	74	74	74	76	76	76	76	76	76	76	76	77	78	78	79	79	72
August																																
Maximum	80	80	80	80	80	80	80	79	78	78	79	79	79	79	79	78	79	79	79	80	79	79	80	80	79	79	79	79	79	79	78	79
Minimum	79	80	80	80	80	80	80	79	78	78	78	78	78	79	78	78	78	78	79	79	79	79	79	79	79	79	78	78	78	78	78	78
September																																
Maximum	78	78	78	78	78	77	77	76	76	76	76	75	75	75	75	75	75	75	75	75	75	74	74	74	74	74	74	73	72	72	72	75
Minimum	78	78	78	78	77	77	76	76	76	76	75	75	75	75	75	75	75	75	75	75	75	74	74	74	74	74	73	72	72	72	—	75

SACRAMENTO RIVER BASIN--Continued

11-4334. CANYON CREEK NEAR GEORGETOWN, CALIF.

LOCATION.--Lat 38°56'03", long 120°52'21", temperature recorder at gaging station on right bank 0.7 mile downstream from West Canyon, and 2.6 miles northwest of Georgetown, El Dorado County.

DRAINAGE AREA.--12.5 square miles.

RECORDS AVAILABLE.--Water temperatures: July 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 68°F Aug. 26; minimum, 37°F Dec. 31, Jan. 2.

EXTREMES, July 1966 to September 1967.--Water temperatures: Maximum, 74°F July 22, 1966; minimum, 37°F Dec. 31, 1966, Jan. 2, 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	59	58	58	58	57	56	56	56	56	55	55	52	52	51	51	51	51	51	52	52	51	51	52	52	52	52	51	50	50	50	50	53	
Minimum	56	55	53	53	53	52	52	51	52	52	51	51	48	46	46	46	46	46	46	46	46	47	46	48	48	47	48	47	46	46	46	46	49
November																																	
Maximum	49	50	51	49	49	49	51	50	49	50	50	50	50	50	50	50	50	50	50	50	50	49	47	45	44	44	44	46	48	47	—	48	
Minimum	45	45	47	46	46	49	49	46	45	46	48	47	47	46	49	50	49	48	48	49	49	47	45	44	43	42	42	44	46	46	—	46	
December																																	
Maximum	48	49	48	48	48	49	49	48	48	48	47	46	46	46	44	43	42	42	42	44	43	42	42	42	42	41	39	38	39	39	38	44	
Minimum	47	48	47	48	47	48	49	47	47	47	46	44	44	45	43	42	42	41	42	42	42	41	41	41	40	39	38	38	38	38	37	43	
January																																	
Maximum	38	38	39	40	41	40	40	39	39	40	41	41	40	40	40	40	40	41	41	43	46	46	45	44	45	46	47	47	48	48	48	42	
Minimum	38	37	38	38	40	38	38	38	38	38	39	40	39	39	39	38	38	38	38	41	44	45	44	43	44	44	46	47	48	47	40		
February																																	
Maximum	48	47	47	46	46	46	46	46	45	45	45	46	46	46	44	44	44	44	44	44	43	43	44	44	44	45	45	45	—	—	—	45	
Minimum	46	46	45	45	45	45	44	44	44	44	44	45	45	43	42	42	42	42	42	43	41	41	41	41	42	43	42	42	—	—	—	43	
March																																	
Maximum	45	45	45	44	44	45	45	46	46	45	45	43	43	45	45	46	48	47	48	48	49	48	48	48	47	47	48	48	45	45	45	46	
Minimum	43	43	43	42	41	41	42	43	43	45	41	41	41	42	42	45	46	46	45	46	46	46	48	45	44	44	45	45	43	42	42	43	
April																																	
Maximum	45	45	46	45	46	46	46	47	48	48	46	48	47	46	46	47	46	46	46	46	46	46	46	46	46	46	46	47	46	47	—	46	
Minimum	40	42	42	44	44	44	44	46	46	45	43	44	45	45	43	43	44	43	43	44	44	44	44	44	45	45	45	46	44	43	44	—	43
May																																	
Maximum	49	50	50	50	50	52	52	53	52	51	50	52	52	52	54	55	55	55	56	57	58	58	58	58	58	58	57	56	56	55	54	53	
Minimum	44	45	46	47	47	47	48	49	50	48	48	47	47	48	50	51	52	52	52	54	55	56	56	56	56	55	54	54	54	53	51	50	
June																																	
Maximum	53	53	55	55	55	54	56	57	57	57	57	57	57	58	58	59	60	60	61	62	62	62	62	62	62	63	63	63	64	64	—	58	
Minimum	51	51	51	53	53	53	54	54	55	55	55	55	54	55	55	56	58	58	58	60	60	60	60	59	59	60	60	60	61	62	—	56	
July																																	
Maximum	65	66	66	66	66	66	66	65	64	64	64	65	65	65	65	66	65	64	64	63	64	64	64	64	64	64	64	64	65	66	66	64	
Minimum	63	63	62	62	62	62	62	61	60	60	60	61	62	60	62	63	61	60	59	59	59	59	60	60	60	60	59	60	61	62	62	60	
August																																	
Maximum	66	66	66	66	66	65	64	64	64	65	65	65	66	66	66	66	66	66	66	66	66	66	66	66	67	67	68	67	66	66	66	65	
Minimum	62	62	62	62	61	61	60	60	60	61	62	62	61	61	62	63	63	63	63	63	63	63	63	63	64	65	65	66	64	64	62	62	62
September																																	

SACRAMENTO RIVER BASIN--Continued

11-4395. SOUTH FORK AMERICAN RIVER NEAR KYBURZ, CALIF..

LOCATION.--Lat 38°45'49", long 120°19'39", 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, El Dorado County.

DRAINAGE AREA.--193 square miles.

RECORDS AVAILABLE.--Water temperatures: August 1966 to September 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	61	60	59	59	58	58	57	57	58	57	56	55	53	51	50	50	49	49	49	50	48	49	52	52	52	51	50	50	50	50	50	53	
Minimum	57	57	55	53	52	52	52	51	52	53	52	52	48	47	45	46	44	44	45	48	46	45	48	49	49	49	48	47	47	47	48	49	
November																																	
Maximum	50	50	52	51	50	49	50	50	48	49	49	49	49	49	49	49	49	48	48	45	44	43	40	39	40	41	43	43	43	---	---	46	
Minimum	48	48	49	49	48	48	48	48	45	46	48	48	47	46	48	48	48	47	46	44	43	43	40	39	38	39	39	40	42	42	---	45	
December																																	
Maximum	43	43	42	42	42	41	42	42	42	42	42	41	41	41	41	41	41	41	42	42	42	42	41	41	40	40	39	39	38	38	38	41	
Minimum	42	41	40	40	39	40	41	41	41	42	41	41	41	41	40	41	40	41	41	41	41	41	40	40	39	39	39	38	38	37	38	40	
January																																	
Maximum	39	39	39	40	40	39	40	39	39	40	40	40	40	40	40	40	40	40	40	41	41	39	39	39	39	39	39	39	39	41	---	39	
Minimum	38	38	38	39	39	39	39	39	39	39	39	40	40	40	40	39	39	39	39	40	38	38	39	39	39	39	38	38	39	39	---	38	
February																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
March																																	
Maximum	43	44	43	42	42	43	44	44	44	43	43	39	38	38	38	38	41	43	43	44	45	44	44	43	43	43	44	44	41	40	39	42	
Minimum	41	41	42	40	39	40	41	41	42	43	39	38	38	38	38	38	38	41	42	43	43	43	43	41	42	43	42	39	39	39	38	40	
April																																	
Maximum	41	40	43	42	43	43	42	47	45	44	42	46	46	45	42	43	43	40	40	42	41	42	43	44	44	45	44	41	42	46	---	43	
Minimum	38	39	39	41	41	39	39	41	42	41	40	40	42	42	40	39	38	37	39	39	41	40	41	42	42	42	40	39	38	40	---	40	
May																																	
Maximum	46	48	46	45	44	50	49	48	45	44	43	46	48	49	48	47	48	47	48	48	48	48	48	48	48	48	48	46	47	46	---	47	
Minimum	40	43	43	44	43	44	44	43	43	41	42	42	43	44	44	44	43	42	42	42	42	42	42	42	42	43	43	43	44	40	---	42	
June																																	
Maximum	45	44	49	47	45	48	49	49	49	49	48	47	48	49	49	50	49	48	51	51	51	51	51	52	53	53	53	---	---	---	---	49	
Minimum	42	43	44	44	45	44	45	44	44	44	44	44	44	44	44	45	45	45	46	46	46	46	46	46	47	47	48	---	---	---	---	44	
July																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
August																																	
Maximum	66	66	66	67	66	66	65	68	70	70	69	70	70	70	70	70	71	70	71	70	70	68	70	68	64	67	69	67	67	68	68	68	
Minimum	61	62	62	62	60	60	59	60	61	62	62	62	62	62	62	62	63	63	63	62	62	62	63	63	62	62	62	60	61	62	61	61	
September																																	

SACRAMENTO RIVER BASIN--Continued

11-4455. SOUTH FORK AMERICAN RIVER NEAR LOTUS, CALIF.

LOCATION.--Lat 38°49'05", long 120°56'45", temperature recorder at gaging station on left bank 0.4 mile downstream from Greenwood Creek, 2.4 miles northwest of Lotus, El Dorado County, and 3.3 miles northwest of Coloma.

DRAINAGE AREA.--673 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1963.

Water temperatures: December 1959 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 73°F July 30, Aug. 1; minimum, 38°F Jan. 9, 10.

EXTREMES, 1959-67.--Water temperatures: Maximum, 85°F July 20, 1960; minimum, 34°F Jan. 2-6, 1960, Dec. 28-31, 1962.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	67	66	65	65	65	65	63	64	65	65	64	62	60	58	57	57	57	56	56	56	54	54	54	55	56	56	56	55	54	54	54	59
Minimum	64	64	62	62	62	62	60	61	61	61	60	58	56	56	55	55	54	54	54	54	52	52	52	52	54	54	54	54	54	54	54	57
November																																
Maximum	54	54	54	54	54	51	53	52	51	49	50	51	51	50	50	52	51	50	50	51	51	50	49	48	46	46	46	46	45	45	---	50
Minimum	52	53	54	53	50	50	50	49	49	49	50	50	49	49	50	50	49	50	50	50	49	49	48	46	45	44	44	44	44	44	---	48
December																																
Maximum	45	46	46	46	46	46	46	44	44	44	44	44	44	44	44	44	43	43	43	43	42	42	42	42	41	41	41	41	41	41	41	43
Minimum	45	45	46	46	46	46	44	44	44	44	44	44	44	44	44	44	43	43	43	43	42	42	42	41	41	41	41	41	41	41	41	43
January																																
Maximum	41	41	41	41	41	41	40	40	40	39	40	41	41	41	41	41	41	41	41	40	40	40	42	42	41	40	42	41	42	43	43	41
Minimum	41	41	41	41	41	40	40	40	38	38	39	40	41	41	41	41	41	40	40	40	40	40	41	40	40	40	40	41	42	43	43	40
February																																
Maximum	43	43	43	42	42	42	42	42	42	42	42	42	44	45	43	43	42	42	43	43	43	43	43	42	43	44	45	46	---	---	---	42
Minimum	43	43	42	42	42	42	42	42	42	41	42	42	42	44	43	41	40	40	40	41	41	40	41	42	42	42	43	44	---	---	---	41
March																																
Maximum	46	47	46	47	47	47	47	47	47	47	45	45	45	44	45	47	47	45	46	46	48	48	47	47	47	46	46	48	48	47	44	46
Minimum	44	44	45	45	44	44	44	44	44	44	45	45	44	42	42	44	44	44	45	46	46	47	47	47	46	46	46	47	47	44	44	44
April																																
Maximum	45	44	47	47	45	45	45	46	48	48	48	48	48	47	47	48	46	46	44	45	45	45	45	45	46	48	47	47	47	47	---	46
Minimum	42	42	44	44	44	45	45	45	46	47	47	46	46	47	46	45	45	44	44	44	44	44	44	44	44	45	45	46	46	45	---	44
May																																
Maximum	49	50	51	51	50	49	52	52	50	50	49	49	49	50	51	52	53	52	52	52	52	52	52	52	52	53	52	52	52	50	49	51
Minimum	45	46	48	48	48	48	49	50	49	49	49	49	49	49	50	51	51	50	50	50	50	50	51	51	51	51	51	51	49	49	48	49
June																																
Maximum	49	48	50	52	51	50	52	54	54	54	54	54	54	55	57	57	57	57	57	57	59	59	58	59	59	60	61	61	63	64	---	55
Minimum	48	48	48	49	50	50	52	52	52	52	52	52	53	54	55	55	55	55	55	55	56	56	56	56	57	57	58	59	59	60	---	53
July																																
Maximum	63	63	62	62	62	62	62	62	62	62	64	64	66	66	65	64	65	65	64	67	66	66	68	69	69	69	67	70	70	73	72	65
Minimum	61	60	60	59	59	59	59	59	59	59	59	59	60	60	61	61	61	61	60	59	59	60	60	61	63	63	63	63	63	63	65	60
August																																
Maximum	73	71	70	70	69	68	67	66	66	66	66	67	67	67	67	67	67	68	68	68	67	65	68	65	65	65	65	63	64	63	62	66
Minimum	67	65	64	64	63	61	61	61	60	60	60	60	60	60	61	61	61	61	61	61	62	62	61	61	61	61	61	60	59	58	57	61
September																																

SACRAMENTO RIVER BASIN--Continued

11-4465. AMERICAN RIVER AT FAIR OAKS, CALIF.

LOCATION.--Lat 38°38'08", long 121°13'36", temperature recorder at gaging station on right bank 2,100 feet downstream from Nimbus Dam, 2.4 miles east of Fair Oaks, Sacramento County, 8.1 miles downstream from South Fork, and at mile 22.2.

DRAINAGE AREA.--1,888 square miles.

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 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 69°F Oct. 1; minimum, 46°F on several days in January.

EXTREMES, 1951-58, 1959-67.--Water temperatures: Maximum (1951-58, 1959-64, 1965-67), 81°F July 27, Aug. 3, 1954; minimum, freezing point Nov. 25, 26, 1957, Nov. 25-29, 1958.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	69	68	68	68	68	68	68	68	68	67	67	67	66	66	63	62	61	60	60	59	58	59	59	58	58	58	59	59	58	58	56	62
Minimum	66	66	66	66	65	65	65	66	65	65	65	65	64	63	60	59	58	57	57	56	55	56	55	55	55	55	55	55	54	54	55	60
November																																
Maximum	56	56	56	56	56	55	55	56	56	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	---	55
Minimum	55	55	55	54	54	54	54	54	54	53	53	54	54	54	54	54	54	55	55	55	54	54	55	55	55	55	55	55	55	55	---	54
December																																
Maximum	55	55	54	54	54	53	55	55	54	51	51	51	51	51	51	51	51	51	51	51	51	50	50	50	50	50	49	49	49	49	49	51
Minimum	55	54	54	53	53	53	54	51	51	51	51	51	51	51	51	51	51	51	51	51	50	50	50	50	50	49	49	49	49	48	48	51
January																																
Maximum	49	49	48	48	48	47	47	48	48	48	48	48	48	48	47	47	47	46	46	46	46	47	47	47	47	47	47	47	47	47	48	47
Minimum	48	48	48	48	48	47	47	47	47	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	46	46	47	47	47	47	47	46
February																																
Maximum	48	48	48	48	49	48	48	48	48	48	48	48	48	48	48	48	48	49	49	48	49	49	49	49	49	48	48	48	48	---	---	48
Minimum	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	---	---	48
March																																
Maximum	49	49	49	49	49	49	50	51	50	50	50	50	49	49	49	50	50	49	49	49	50	50	50	50	50	50	49	49	48	48	48	49
Minimum	49	49	49	48	48	48	49	49	49	50	50	49	48	48	48	49	49	49	48	49	49	49	49	48	49	49	48	48	47	48	48	48
April																																
Maximum	49	50	50	50	49	49	50	50	50	50	49	50	50	49	49	49	50	50	49	50	50	50	50	50	50	50	50	50	50	50	---	49
Minimum	48	49	49	49	49	48	49	49	49	48	48	49	49	48	48	49	49	49	48	49	49	49	49	49	48	49	49	48	48	47	48	48
May																																
Maximum	51	51	51	51	51	52	52	52	52	50	51	52	52	53	53	54	53	52	52	53	53	54	54	54	54	54	54	55	56	57	55	53
Minimum	50	50	50	50	50	50	51	51	50	51	50	51	51	51	51	52	52	52	53	53	53	53	53	53	53	53	53	53	53	53	53	51
June																																
Maximum	55	55	54	58	58	56	56	56	56	58	57	56	55	55	55	55	56	56	56	56	56	56	56	56	56	56	57	57	57	57	---	56
Minimum	53	53	53	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	55	55	55	55	55	55	55	55	55	55	55	56	---	54
July																																
Maximum	57	56	56	56	56	57	57	57	58	58	58	58	58	58	58	58	58	58	59	59	60	59	59	59	60	60	60	60	60	60	60	59
Minimum	55	55	55	55	55	55	56	57	57	57	57	57	57	57	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	59	59	57
August																																
Maximum	62	62	63	62	63	63	62	62	63	63	63	63	63	63	63	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	63
Minimum	60	61	61	62	62	62	62	61	61	62	62	62	62	62	62	62	63	63	63	63	62	63	63	63	63	63	63	63	63	63	63	62
September																																

SACRAMENTO RIVER BASIN--Continued

11-4475. SACRAMENTO RIVER AT SACRAMENTO, CALIF.

(International hydrological decade station)

LOCATION.--Lat 38°35'20", long 121°30'15", at gaging station 1,000 feet upstream from I Street Bridge, in city of Sacramento, Sacramento County, and 0.5 mile downstream from American River.

DRAINAGE AREA.--23,530 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1952 to May 1960.

Water temperatures: May 1955 to September 1967.

Sediment records: October 1956 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 44°F Dec. 31, Jan. 2.

Sediment concentrations: Maximum daily, 530 ppm Jan. 22; minimum daily, 17 ppm Nov. 5.

Sediment loads: Maximum daily, 77,300 tons Jan. 23; minimum daily, 491 tons Nov. 3, 5.

EXTREMES, 1955-67.--Water temperatures: Maximum (1955-62, 1963-66), 80°F June 15, 16, 1961; minimum, 39°F Jan. 30, 31, Feb. 1, 1957.

Sediment concentrations (1956-67): Maximum daily, 1,960 ppm Dec. 24, 1964; minimum daily, (estimated) 11 ppm Nov. 30, 1959.

Sediment loads (1956-67): Maximum daily, 525,000 tons Dec. 24, 1964; minimum daily, (estimated) 200 tons 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 (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	--	66	66	67	--	66	--	66	66	65	65	64	67	65	--	--	57	59	60	61	57	60	--	61	60	60	--	--	--	--	51	--
November	60	60	60	58	57	55	56	55	55	55	57	55	--	55	57	--	57	--	55	55	53	52	52	49	51	50	51	54	54	--	54	
December	54	--	53	51	--	50	51	51	--	51	51	51	51	52	52	52	49	49	49	49	48	48	--	--	48	45	46	46	46	47	44	49
January	45	44	45	45	45	45	45	46	47	--	--	50	--	--	47	--	46	45	45	47	47	52	46	46	46	46	47	48	49	50	50	46
February	49	49	48	42	48	48	47	46	47	48	48	50	51	50	48	48	--	51	49	51	51	52	50	51	49	49	50	51	--	--	--	48
March	52	52	--	--	55	50	50	49	53	--	52	52	49	49	49	51	53	50	51	52	52	53	--	53	52	52	50	--	50	49	48	51
April	50	50	51	50	50	49	50	52	49	51	49	51	52	54	50	50	51	50	49	51	48	51	50	54	49	52	53	53	--	54	--	50
May	54	56	56	56	56	60	61	60	56	56	55	56	58	60	60	61	61	64	69	65	65	66	65	65	65	63	62	60	61	60	60	60
June	58	58	58	58	56	60	61	62	61	63	63	62	65	72	67	71	65	65	64	68	65	66	66	67	70	66	67	72	72	73	--	64
July	--	69	71	--	69	70	70	70	70	70	74	72	74	73	71	73	71	71	--	73	73	69	70	71	68	71	73	74	--	74	72	71
August	72	70	--	--	--	--	70	71	70	59	70	--	74	73	75	--	72	74	73	72	74	72	71	74	72	75	--	70	70	72	70	71
September	--	--	--	--	--	--	68	--	69	--	67	68	67	67	69	--	--	66	69	69	68	67	67	--	--	67	67	67	--	--	--	--

SACRAMENTO RIVER BASIN--Continued

11-4475. SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean dis-charge (cfs)	Suspended sediment		Mean dis-charge (cfs)	Suspended sediment		Mean dis-charge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	9330	37	932	10000	23	621	39700	216	23200
2..	9420	45	1140	10200	19	523	40900	184	20300
3..	9060	34	832	10100	18	491	48100	201	26100
4..	9490	31	794	10300	18	501	55300	221	33000
5..	9570	31	801	10700	17	491	59400	225	36100
6..	9720	31	814	11500	18	559	66400	200	35900
7..	9290	36	903	11300	37	1130	73000	100	19700
8..	9190	34	844	12300	46	1530	77300	77	16100
9..	9540	37	953	12900	53	1850	76000	83	17000
10..	9300	50	1260	12600	55	1870	68800	88	16300
11..	9380	53	1340	12300	44	1460	65200	93	16400
12..	9500	45	1150	12100	33	1080	63200	101	17200
13..	9050	33	806	12100	32	1050	60900	103	16900
14..	9080	30	735	11900	33	1060	58200	122	19200
15..	9100	29	713	12700	30	1030	54500	148	21800
16..	9070	28	686	14100	55	2090	50800	147	20200
17..	9110	25	615	18600	190	9540	46700	151	19000
18..	9090	21	515	20000	163	8800	42000	143	16200
19..	9040	26	635	18600	105	5270	37800	130	13300
20..	9080	25	613	18900	110	5610	34500	135	12600
21..	9000	49	1190	26300	290	20600	32800	152	13500
22..	9140	40	987	35200	420	39900	31000	117	9790
23..	8890	22	528	35900	258	25000	30600	101	8340
24..	8850	30	717	32500	180	15800	31700	107	9160
25..	8720	46	1080	29800	140	11300	30800	99	8230
26..	8800	38	903	27100	87	6370	29700	126	10100
27..	8800	44	1050	25400	81	5550	28300	121	9250
28..	8710	24	564	24800	68	4550	27100	107	7830
29..	8610	28	651	25400	66	4530	26800	88	6370
30..	8690	35	821	32300	192	16700	26300	78	5540
31..	9290	33	828	--	--	--	25400	67	4590
Total	282910	--	26400	557900	--	196856	1439200	--	509200
Day	JANUARY			FEBRUARY			MARCH		
	Mean dis-charge (cfs)	Suspended sediment		Mean dis-charge (cfs)	Suspended sediment		Mean dis-charge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	24000	57	3690	90100	139	33800	27100	57	4170
2..	23500	53	3360	81900	125	27600	27000	55	4010
3..	22700	54	3310	76400	140	28900	26300	54	3830
4..	21900	50	2960	72800	196	38500	25500	58	3990
5..	21600	40	2330	70800	181	34600	25100	72	4880
6..	21100	45	2560	69100	146	27200	24000	65	4210
7..	20400	43	2370	67800	119	21800	22500	53	3220
8..	19300	43	2240	66300	109	19500	22200	50	3000
9..	18800	38	1930	64500	130	22600	22000	52	3090
10..	18000	37	1800	62900	115	19500	21400	49	2830
11..	17700	38	1820	60800	114	18700	21300	49	2820
12..	17200	37	1720	58400	134	21100	24500	58	3840
13..	16700	37	1670	55700	135	20300	27100	87	6370
14..	16500	34	1510	52600	144	20500	32400	97	8490
15..	16500	32	1430	49500	132	17600	35800	72	6960
16..	16400	32	1420	45800	138	17100	37700	73	7430
17..	16400	32	1420	42700	143	16500	57100	198	30500
18..	16100	28	1220	39800	141	15200	76700	261	54100
19..	16100	24	1040	37800	125	12800	76300	118	24300
20..	15600	70	2950	36000	122	11900	75000	153	31000
21..	22000	310	18400	34300	121	11200	71100	141	27100
22..	48700	530	69700	33700	111	10100	63800	130	22400
23..	66600	430	77300	31400	93	7880	60500	125	20400
24..	70300	280	53100	30800	92	7650	58300	119	18700
25..	70200	224	42500	29800	74	5950	57200	96	14800
26..	68200	192	35400	29800	87	7000	55200	95	14200
27..	67300	192	34900	28900	68	5310	51700	81	11300
28..	73300	165	32700	28200	55	4190	47100	77	9790
29..	79300	163	34900	--	--	--	43400	78	9140
30..	86100	189	43900	--	--	--	41000	77	8520
31..	90700	145	35500	--	--	--	39500	91	9710
Total	1119200	--	521050	1448600	--	504980	1295800	--	379100

SACRAMENTO RIVER BASIN--Continued

11-4475. SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	40100	86	9310	55600	81	12200	54800	80	11800
2..	42100	86	9780	53700	71	10300	52500	80	11300
3..	42700	100	11500	51500	76	10600	50100	83	11200
4..	41700	108	12200	49000	73	9660	47900	84	10900
5..	39900	135	14500	46800	67	8470	46600	86	10800
6..	39200	83	8780	45100	66	8040	46100	83	10300
7..	44200	89	10600	43400	78	9140	46100	66	8220
8..	50100	103	13900	42500	74	8490	46300	56	7000
9..	52000	108	15200	43400	66	7730	46100	63	7840
10..	51600	107	14900	45600	73	8990	45300	61	7460
11..	51500	92	12800	48200	95	12400	44900	68	8240
12..	51600	81	11300	49900	117	15800	44500	60	7210
13..	51000	86	11800	49200	128	17000	44300	54	6460
14..	49500	87	11600	46900	107	13500	44700	79	9530
15..	48500	72	9430	44800	77	9310	44200	56	6680
16..	48100	88	11400	44100	82	9760	43400	48	5620
17..	47800	74	9550	45300	72	8810	43300	61	7130
18..	47900	72	9310	47500	73	9360	43700	61	7200
19..	50200	81	11000	50100	85	11500	43800	53	6270
20..	52600	97	13800	52000	113	15900	43700	49	5780
21..	54700	126	18600	53700	100	14500	43300	51	5960
22..	56300	118	17900	55700	108	16200	41800	53	5980
23..	56500	108	16500	57800	103	16100	40600	59	6470
24..	56500	79	12100	59900	106	17100	38900	97	10200
25..	56800	98	15000	61500	112	18600	36400	97	9530
26..	57500	83	12900	62700	95	16100	34700	84	7870
27..	57800	84	13100	63000	101	17200	34100	65	5980
28..	57700	86	13400	62500	75	12700	33200	58	5200
29..	57600	88	13700	61400	72	11900	33400	58	5230
30..	57000	89	13700	59700	67	10800	32000	66	5700
31..	--	--	--	57400	65	10100	--	--	--
Total	1510700	--	379560	1609900	--	378260	1290700	--	235060
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	31200	67	5640	14700	32	1270	16400	38 B	1680
2..	30700	58	4810	14800	33	1320	16600	38 B	1700
3..	29900	57	4600	14700	33 B	1310	16700	39 B	1760
4..	29000	49	3840	14400	32 B	1240	17000	40 B	1840
5..	27900	42	3160	14900	31 B	1250	17300	41 B	1920
6..	25500	44	3030	15000	31 B	1260	17400	42 B	1970
7..	23600	53	3380	14900	31	1250	18000	43	2090
8..	21700	64	3750	15000	32	1300	19800	43	2250
9..	20000	71	3830	14900	28	1130	20300	40	2190
10..	18600	53	2660	14900	25	1010	20400	40	2200
11..	17900	40	1930	14500	31	1210	20500	40	2210
12..	18200	38	1870	14600	34	1340	21200	38	2180
13..	18100	40	1950	14900	36	1450	21600	41	2390
14..	18000	39	1900	14900	39	1570	21100	64	3650
15..	17800	40	1920	15000	36	1460	20700	48	2680
16..	17600	41	1950	14700	33	1310	19600	44	2330
17..	16700	39	1760	14600	32	1260	19400	48	2510
18..	16200	40	1750	14500	34	1330	19600	52	2750
19..	16700	41	1850	14600	33	1300	19700	57	3030
20..	16400	45	1990	14700	40	1590	18800	49	2490
21..	16100	41	1780	15000	32	1300	17900	44	2130
22..	16200	35	1530	15000	31	1260	18400	43	2140
23..	16200	38	1660	15200	27	1110	18200	33	1620
24..	15500	40	1670	15100	31	1260	17900	33	1590
25..	15300	34	1400	15200	32	1310	17700	37	1770
26..	15200	36	1480	15600	37	1560	17400	40	1880
27..	15900	33	1420	15600	42	1770	17100	39	1800
28..	15800	33	1410	16000	42	1810	17000	40	1840
29..	15800	35	1490	16100	41	1780	17000	42	1930
30..	15500	35	1460	16300	40	1760	16500	42	1870
31..	15000	32	1300	16300	38	1670	--	--	--
Total	604200	--	74170	466600	--	42750	557200	--	64390
Total discharge for year (cfs-days).....								12182910	
Total load for year (tons).....								3311776	

B Computed from estimated-concentration graph.

SACRAMENTO RIVER BASIN--Continued

11-4475. SACRAMENTO RIVER AT SACRAMENTO, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Mean discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Oct. 4, 1966.....	1130	65		9490	29		31	37	45	61	84	97	99	100	--	--		VPWC
Dec. 6.....	1400	51		66400	288		25	27	36	38	46	55	78	100	--	--		VPWC
Mar. 10, 1967.....	1030	52		21400	48		--	--	--	--	--	84	93	99	100	--		V
Mar. 24.....	1430	50		58300	115		--	--	--	--	--	57	71	98	100	--		V
Apr. 25.....	1330	--		56800	102		--	--	--	--	--	48	64	87	98	100		V
May 25.....	1320	61		61500	103		8	17	25	32	34	62	78	92	100	--		VCBW
July 25.....	0940	68		15300	32		--	--	--	--	--	96	99	99	100	--		S
Aug. 29.....	0800	69		16100	42		7	18	31	41	47	83	97	99	99	100		SCBW
Sept. 22.....	0900	67		18400	40		27	38	49	58	62	89	98	100	--	--		SCBW

Particle-size analyses of bed material, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Mean discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Bed material												Method of analysis
							Percent finer than size indicated, in millimeters												
							0.062	0.125	0.250	0.500	1.000	2.000	4.000	8.000	16.000	32.000	64.000		
Mar. 10, 1967.....	1300	52		21400			4	9	27	94	99	100	--	--				S	
Mar. 24.....	1600	50		58300			--	2	24	89	93	95	97	99				S	
July 25.....	1010	68		15300			1	2	9	75	96	99	100	--				S	

SACRAMENTO RIVER BASIN--Continued

11-4476.5. SACRAMENTO RIVER AT FREEPORT, CALIF.

LOCATION (revised).--Lat 38°27'20", long 121°30'07", at drawbridge at Freeport, Sacramento County, approximately 11 miles south of Sacramento.

RECORDS AVAILABLE.--Chemical analyses: June 1960 to September 1967.

Water temperatures: June 1960 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 69°F on many days in July and August; minimum, 44°F on many days in December and January.

EXTREMES, 1960-67.--Water temperatures: Maximum, 76°F June 16, 17, 1961; minimum, 41°F Jan. 24-27, 1962.

REMARKS.--Records of discharge data given for Sacramento River at Sacramento. No appreciable inflow between sampling point and gaging station.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (microhmhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 14, 1966....	9080	18	0.00	12	7.3	10	1.3	78	0	9.0	5.7	0.2	1.9	0.00	104			60			165	7.9
Nov. 16.....	14100	18	.00	12	6.6	9.1	1.4	69	0	8.0	9.4	.0	2.5	.00	101			57			147	7.4
Dec. 15.....	54500	19	.03	11	5.6	7.1	1.2	63	0	9.0	3.0	.0	.0	.00	87			50			134	7.7
Jan. 16, 1967....	16400	18	.07	14	7.4	12	1.2	80	0	12	8.8	.0	1.3	.00	114			66			184	8.1
Feb. 28.....	28200	18	.07	13	6.1	7.4	.8	70	0	8.0	3.9	.1	1.6	.10	93			58			143	8.1
Mar. 31.....	39500	16	.00	11	5.0	5.8	.9	59	0	7.0	3.4	.1	.5	.00	79			48			118	7.7
Apr. 26.....	57500	18	.10	11	5.2	6.1	.9	60	0	6.0	3.5	.0	.4	.10	81			49			118	7.7
May 25.....	61500	15	.09	8.0	3.5	4.3	.9	42	0	5.0	2.4	.0	.8	.00	61			34			89	7.6
June 16.....	43400	15	.03	9.4	4.4	5.7	1.0	50	0	5.0	3.1	.1	1.3	.00	70			42			107	7.7
July 25.....	15300	18	.06	11	6.4	8.5	1.0	69	0	9.0	4.5	.1	.6	.20	93			54			150	7.8
Sept. 27.....	17100	17	.02	12	6.9	8.6	1.0	73	0	7.0	5.9	.1	1.3	.00	96			58			150	8.0

Date of collection	Strontium (Sr)	Lithium (Li)	Total phosphate (PO ₄)	Dissolved oxygen (DO) (mg/l)
Oct. 14, 1966.....	0.06	0.01	0.49	
Nov. 16.....	.04	.02	.58	
Dec. 15.....	.04	.02	.15	
Jan. 16, 1967.....	.02	.01	.39	
Feb. 28.....	.10	.01	.24	
Mar. 31.....	.09	.01	.23	
Apr. 26.....	.09	.01	.12	
May 25.....	.07	.01	.17	
June 16.....	.10	.01	.19	
July 25.....	.10	.01	.40	
Sept. 27.....	.10	.01	.67	

SACRAMENTO RIVER BASIN--Continued

11-4476.5. SACRAMENTO RIVER AT FREEPORT, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	64	64	64	64	64	64	64	64	64	64	64	64	64	63	61	61	60	59	59	59	59	59	58	58	58	58	58	58	58	58	58	61	
Minimum	63	64	64	64	64	64	64	64	64	64	64	64	63	61	61	60	59	59	59	59	59	58	58	58	58	58	58	58	58	58	60		
November																																	
Maximum	58	58	57	57	56	55	54	54	53	52	52	52	52	52	52	52	52	52	52	52	52	51	51	51	50	50	50	50	50	—	52		
Minimum	58	57	57	56	56	55	54	54	53	52	52	52	52	52	52	52	52	52	52	52	52	51	51	51	50	50	50	50	50	—	52		
December																																	
Maximum	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	49	49	49	48	48	47	46	45	45	44	49		
Minimum	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	49	49	49	48	48	47	46	45	44	44	48		
January																																	
Maximum	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	45	45	45	46	46	46	46	46	46	47	47	44	
Minimum	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	45	45	45	46	46	46	46	46	46	47	44	
February																																	
Maximum	47	47	47	47	48	48	48	48	48	48	48	48	48	48	48	48	47	47	47	48	48	48	48	49	49	49	49	50	—	—	—	48	
Minimum	47	47	47	47	47	48	48	48	48	48	48	48	48	48	48	47	47	47	47	48	48	48	48	49	49	49	49	49	—	—	—	47	
March																																	
Maximum	50	50	50	50	51	51	51	51	51	51	51	51	51	51	50	50	51	51	51	51	50	51	51	51	51	51	51	50	50	50	50	50	
Minimum	50	50	50	50	50	50	50	51	51	51	51	51	51	50	50	50	50	51	51	50	50	50	51	51	51	51	51	50	50	50	50	50	
April																																	
Maximum	50	50	49	49	49	49	49	49	49	49	49	49	49	49	50	50	50	50	50	50	50	50	50	50	50	50	51	51	52	52	—	49	
Minimum	50	49	49	49	49	49	49	49	49	49	49	49	49	49	49	50	50	50	50	50	50	50	50	50	50	50	51	51	52	52	—	49	
May																																	
Maximum	53	53	54	55	56	56	57	58	58	58	57	57	56	57	58	59	60	60	61	61	61	61	61	60	60	60	60	60	60	60	60	58	
Minimum	52	53	53	54	55	56	56	57	58	57	57	56	56	56	57	58	59	60	60	60	61	61	61	60	60	60	60	60	60	60	60	57	
June																																	
Maximum	60	59	58	57	57	57	58	58	58	59	60	60	60	60	61	62	62	62	62	62	62	62	63	64	64	64	64	65	65	65	—	61	
Minimum	59	58	57	57	57	57	58	58	58	59	60	60	60	60	60	61	62	62	62	62	62	62	63	64	64	64	64	64	65	65	—	60	
July																																	
Maximum	65	66	66	66	66	66	67	67	67	67	67	67	68	68	68	68	68	69	69	69	69	68	68	68	68	68	68	69	69	69	69	67	
Minimum	65	66	66	66	66	66	66	67	67	67	67	67	68	68	68	68	68	69	69	69	69	68	68	68	68	68	68	69	69	69	69	67	
August																																	
Maximum	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	68	68	68	68	68	68	68	68	68	68	68	68	
Minimum	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	68	68	68	68	68	68	68	68	68	68	68	68	
September																																	
Maximum	68	68	68	68	68	68	68	67	67	67	67	67	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	65	65	65	—	66	
Minimum	68	68	68	68	68	68	67	67	67	67	67	67	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	65	65	65	—	66	

SACRAMENTO RIVER BASIN--Continued

11-4490.1. HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°56'54", long 122°54'03", at outlet of Highland Creek Dam, 600 feet upstream from gaging station, and 4.0 miles southwest of Kelseyville, Lake County.

DRAINAGE AREA.--14.2 square miles.

RECORDS AVAILABLE.--Water temperatures: November 1966 to September 1967.

Sediment records: December 1965 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 152 ppm Jan. 22; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 193 tons Jan. 22; minimum daily, 0 ton on many days.

EXTREMES, 1965-67.--Sediment concentrations: Maximum daily, 182 ppm Jan. 5, 1966; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 270 tons Jan. 5, 1966; minimum daily, 0 ton on many days.

REMARKS.--No flow May 12 to June 30.

Temperature (°F) of water, water year October 1966 to September 1967

[illegible]

SACRAMENTO RIVER BASIN--Continued

11-4490.1, HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.47	--	T	0.96	--	T	24	10	0.6
2..	.90	--	T	1.1	--	T	281	46	K 59
3..	1.1	20	0.1	1.1	--	T	225	117	S 80
4..	1.2	20	.1	1.2	--	T	345	98	91
5..	1.4	20	.1	1.2	--	T	525	132	187
6..	1.6	20	.1	1.9	--	T	310	89	S 81
7..	1.9	20	.1	1.9	--	T	86	20	4.6
8..	2.1	20	.1	2.1	--	T	55	20	3.0
9..	1.9	20	.1	2.1	2	T	40	19	2.1
10..	1.0	--	T	2.1	--	T	32	19	1.6
11..	.60	--	T	2.1	--	T	27	19	1.4
12..	.53	--	T	2.1	--	T	22	18	1.1
13..	.60	--	T	2.1	--	T	20	18	1.0
14..	.57	--	T	2.1	--	T	18	18	.9
15..	.53	--	T	2.1	--	T	16	17	.7
16..	.60	--	T	2.1	--	T	14	16	.6
17..	.96	--	T	2.1	--	T	13	16	.6
18..	.96	--	T	1.9	--	T	11	16	.5
19..	.96	--	T	24	2	0.1	9.5	15	.4
20..	.96	--	T	166	32	K 14	9.0	15	.4
21..	.90	--	T	68	27	5.0	7.0	14	.3
22..	.84	--	T	49	16	2.1	7.0	14	.3
23..	.96	--	T	21	11	.6	7.0	14	.3
24..	.96	--	T	14	7	.3	6.6	13	.2
25..	1.0	--	T	7.5	6	.1	6.3	13	.2
26..	1.0	--	T	5.6	5	.1	5.9	13	.2
27..	.96	--	T	4.5	5	.1	4.8	12	.2
28..	.90	--	T	14	5	.2	4.8	12	.2
29..	.96	--	T	41	13	1.4	4.8	11	.1
30..	1.0	--	T	21	11	.6	4.8	11	.1
31..	1.0	--	T	--	--	--	4.8	10	.1
Total	31.32	--	1.2	467.86	--	24.8	2146.3	--	519.7
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4.1	10	0.1	120	46	15	5.9	17	0.3
2..	3.4	10	.1	63	39	6.6	5.9	17	.3
3..	3.2	9	.1	46	38	4.7	5.9	17	.3
4..	3.2	9	.1	36	37	3.6	5.9	16	.3
5..	3.2	9	.1	29	36	2.8	5.9	16	.3
6..	3.4	8	.1	24	34	2.2	5.9	16	.3
7..	3.4	8	.1	21	33	1.9	5.6	15	.2
8..	3.0	7	.1	19	32	1.6	5.9	15	.2
9..	2.5	--	T	18	31	1.5	5.9	15	.2
10..	2.5	--	T	16	30	1.3	34	14	S 1.6
11..	3.0	6	T	15	29	1.2	129	89	S 33
12..	3.2	6	.1	14	28	1.1	174	20	S 10
13..	2.5	--	T	14	27	1.0	150	37	S 15
14..	2.3	--	T	12	25	.8	100	34	9.2
15..	2.3	--	T	11	24	.7	109	32	S 9.7
16..	2.3	--	T	11	22	.7	510	52	72
17..	2.3	--	T	10	21	.6	198	53	28
18..	2.1	--	T	9.5	19	.5	75	48	9.7
19..	1.9	--	T	9.5	18	.5	49	43	5.7
20..	81	14	3.1	8.5	17	.4	41	39	4.3
21..	490	99	131	6.6	16	.3	33	32	2.9
22..	470	152	193	6.6	15	.3	28	27	2.0
23..	94	134	S 35	6.6	14	.2	36	24	2.3
24..	177	88	42	7.0	13	.2	28	26	2.0
25..	149	75	30	11	20	.6	24	26	1.7
26..	94	48	12	8.5	19	.4	22	21	1.2
27..	118	46	15	6.6	18	.3	21	19	1.1
28..	186	45	23	6.3	18	.3	21	19	1.1
29..	407	77	85	--	--	--	21	18	1.0
30..	261	83	58	--	--	--	80	18	3.9
31..	303	60	49	--	--	--	110	25	7.4
Total	2883.8	--	677.3	565.7	--	51.3	2045.8	--	227.2

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

SACRAMENTO RIVER BASIN--Continued

11-4490.1. HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	68	36	6.6	21	11	0.6			
2..	50	29	3.9	19	10	.5			
3..	41	25	2.8	18	10	.5			
4..	36	23	2.2	17	10	.5			
5..	36	18	1.7	17	10	.5			
6..	70	22	4.3	16	10	.4			
7..	56	19	2.9	15	9	.4			
8..	47	15	1.9	14	9	.3			
9..	40	12	1.3	62	9	1.5			
10..	54	14	2.2	32	20	1.7			
11..	59	14	2.2	.06	--	T			
12..	46	13	1.6	0	--	0			
13..	39	12	1.3	0	--	0			
14..	36	12	1.2	0	--	0			
15..	44	12	1.4	0	--	0			
16..	46	12	1.5	0	--	0			
17..	98	12	3.2	0	--	0			
18..	125	21	7.1	0	--	0			
19..	154	19	7.9	0	--	0			
20..	112	23	7.0	0	--	0			
21..	88	22	5.2	0	--	0			
22..	66	21	3.7	0	--	0			
23..	77	17	3.5	0	--	0			
24..	62	16	2.7	0	--	0			
25..	48	16	2.1	0	--	0			
26..	40	15	1.6	0	--	0			
27..	36	14	1.4	0	--	0			
28..	32	13	1.1	0	--	0			
29..	28	12	.9	0	--	0			
30..	24	12	.8	0	--	0			
31..	--	--	--	0	--	0			
Total	1758	--	87.2	231.06	--	6.9	0	--	0
	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.05			0.42			0.52	--	T
2..	.42			.42			.52	--	T
3..	.43			.41			.52	23	T
4..	.43			.41			.52	--	T
5..	.44			.41			.52	--	T
6..	.44			.41			.52	--	T
7..	.44			.41			1.5	25	0.1
8..	.45			.40			1.6	25	.1
9..	.45			.40			1.6	26	.1
10..	.45			.40			1.6	28	.1
11..	.46			.40			1.6	29	.1
12..	.47			.40			1.6	29	.1
13..	.47			.39			1.6	29	.1
14..	.50			.39			1.6	29	.1
15..	.46			.39			1.6	29	.1
16..	.45			.39			1.6	29	.1
17..	.45			.39			1.6	29	.1
18..	.45			.38	10		1.6	29	.1
19..	.45			.38			1.6	29	.1
20..	.45			.38			1.6	29	.1
21..	.44			.38			1.6	29	.1
22..	.44			.52			1.6	29	.1
23..	.44			.52			1.6	29	.1
24..	.44			.52			1.6	29	.1
25..	.44			.52			1.6	29	.1
26..	.43			.52			1.6	29	.1
27..	.43			.52			1.6	29	.1
28..	.43			.52			1.6	29	.1
29..	.43			.52			1.6	29	.1
30..	.42			.52			1.6	29	.1
31..	.42			.52			--	--	--
Total	13.37	--	0.3	13.56	--	0.5	41.42	--	2.6
Total discharge for year (cfs-days).....									10198.19
Total load for year (tons).....									1599.0

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

SACRAMENTO RIVER BASIN--Continued

11-4490.1. HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 4, 1966.....	0930	51		299	99		69	83	93	96	99	100	--					SPN
Dec. 5.....	0935	50		530	165		53	70	88	94	99	100	--					SPN
Dec. 5.....	0935	50		530	165		70	77	84	91	96	100	--					SPWC
Jan. 21, 1967.....	1000	48		520	91		--	--	--	--	--	99	100					S
Jan. 21.....	1700	46		530	120		--	--	--	--	--	99	100					S
Jan. 24.....	0700	--		106	96		--	--	--	--	--	100	--					S
Jan. 24.....	1130	--		193	75		--	--	--	--	--	100	--					S
Jan. 26.....	1000	--		80	47		--	--	--	--	--	99	100					S
Jan. 26.....	1700	--		110	50		--	--	--	--	--	100	--					S

SACRAMENTO RIVER BASIN--Continued

11-4517.6. CACHE CREEK ABOVE RUMSEY, CALIF.

LOCATION.--Lat 38°54'47", long 122°16'14", at gaging station, 0.4 mile downstream from highway bridge, and 2.5 miles northwest of Rumsey, Yolo County.

DRAINAGE AREA.--955 square miles.

RECORDS AVAILABLE.--Water temperatures: January 1960 to September 1967.

Sediment records: January 1960 to September 1963, June 1965 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 9,160 ppm Jan. 29; minimum daily, 2 ppm Mar. 4, 5.

Sediment loads: Maximum daily, 322,000 tons Jan. 29; minimum daily, 0.1 ton Nov. 11-14.

EXTREMES, 1960-67.--Water temperatures (1964-66): Minimum, 34°F Dec. 17, 1965.

Sediment concentrations (1960-63, 1965-67): Maximum daily, 9,160 ppm Jan. 29, 1967; minimum daily, 1 ppm on several days during 1960-62, Dec. 21, 1965.

Sediment loads (1960-63, 1965-67): Maximum daily, 363,000 tons Jan. 31, 1963; minimum daily, less than 0.05 ton on many days during 1960-61.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Aver- age	
	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		
October	69	--	--	70	71	--	70	--	--	70	--	68	59	--	--	--	63	--	--	63	--	--	--	70	--	--	--	--	--	--	--	--	--
November	--	55	--	--	--	56	--	--	--	--	--	--	--	--	61	--	57	--	59	59	51	50	49	58	--	45	47	47	50	50	55	--	
December	55	45	--	--	52	51	50	51	50	51	51	53	52	51	48	48	46	46	46	47	--	48	47	47	--	--	45	43	--	39	--	43	48
January	--	44	--	43	--	43	43	--	--	46	--	43	--	47	--	43	--	42	--	42	51	--	45	44	45	44	46	51	53	51	52	--	--
February	50	47	52	43	48	47	47	47	47	48	52	54	45	45	49	46	47	49	51	56	51	--	51	--	48	--	50	--	--	--	--	--	48
March	51	--	49	48	--	--	50	--	--	--	49	48	45	48	49	53	50	51	53	52	53	51	51	51	50	52	49	53	48	49	46	49	
April	49	50	51	50	49	51	51	51	52	52	49	50	50	53	51	49	52	47	50	49	45	49	50	50	50	50	51	53	50	50	--	50	
May	56	54	55	56	54	56	60	62	63	55	51	53	55	55	61	--	68	67	69	--	--	72	--	70	--	--	--	--	--	--	--	--	--
June	70	57	59	63	--	63	--	72	--	--	--	67	--	--	--	70	--	--	--	--	74	--	74	--	72	--	74	--	75	--	76	--	--
July	--	--	75	--	--	76	--	--	--	74	--	--	74	--	--	--	--	--	--	74	78	--	--	77	--	--	--	--	--	--	75	--	--
August	--	76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	--	--	--	--	--	--	75	68	--	--	--	--	--	--	62	--	--	--	--	--	--	69	--	--	--	--	--	--	70	--	--	--	--

SACRAMENTO RIVER BASIN--Continued

11-4517.6. CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	146	21	8.3	43	7	0.8	180	18	8.7
2..	124	21	7.0	43	7	.8	2310	1380	S 24200
3..	97	20	5.2	39	7	.7	2200	1340	S 11000
4..	94	19	4.8	33	7	.6	2510	1790	S 24200
5..	92	14	3.5	28	7	.5	5490	3860	S 79700
6..	92	16	4.0	18	7	.3	1980	1250	S 7080
7..	92	18	4.5	15	7	.3	1500	358	1450
8..	91	21	5.2	12	7	.2	1050	152	431
9..	88	24	5.7	10	7	.2	767	82	170
10..	88	27	6.4	8.5	7	.2	805	88	191
11..	88	25	5.9	7.9	7	.1	692	58	108
12..	89	23	5.5	7.2	7	.1	576	36	56
13..	76	19	3.9	7.2	7	.1	509	28	38
14..	70	17	3.2	7.5	7	.1	497	34	46
15..	62	15	2.5	10	7	.2	421	20	23
16..	57	13	2.0	28	7	.5	371	32	32
17..	57	12	1.8	110	11	3.3	333	24	22
18..	50	11	1.5	123	12	4.0	300	16	13
19..	44	10	1.2	182	18	8.8	275	15	11
20..	43	9	1.0	2000	2840	15000	255	8	5.5
21..	44	9	1.1	903	300	730	236	7	4.5
22..	42	10	1.1	599	170	270	216	6	3.5
23..	42	10	1.1	351	56	53	202	7	3.8
24..	42	10	1.1	196	32	17	190	7	3.6
25..	43	10	1.2	133	8	2.9	179	6	2.9
26..	45	10	1.2	102	9	2.5	167	5	2.3
27..	45	9	1.1	84	6	1.4	155	9	3.8
28..	45	9	1.1	105	16	4.5	146	8	3.2
29..	44	8	1.0	349	259	244	141	6	2.3
30..	43	8	.9	249	44	30	138	6	2.2
31..	44	7	.8	--	--	--	130	5	1.8
Total	2119	--	94.8	5803.3	--	16377.1	24921	--	148819.1
	JANUARY			FEBRUARY			MARCH		
1..	124	4	1.3	5570	1090	16400	241	3	2.0
2..	118	3	1.0	4630	774	9680	240	3	1.9
3..	113	3	.9	4200	558	6330	236	3	1.9
4..	110	3	.9	3900	471	4960	233	2	1.3
5..	107	4	1.2	3670	449	4450	220	2	1.2
6..	101	4	1.1	3440	383	3560	209	3	1.7
7..	98	4	1.1	3260	404	3560	206	4	2.2
8..	94	4	1.0	1090	145	427	198	4	2.1
9..	92	3	.7	899	53	129	194	4	2.1
10..	90	3	.7	842	38	86	204	23	S 17
11..	86	3	.7	784	30	64	687	459	S 915
12..	87	4	.9	749	25	51	814	217	S 575
13..	85	4	.9	716	24	46	1510	454	S 3690
14..	82	3	.7	683	24	44	3290	860	7640
15..	80	3	.6	651	19	33	3230	625	S 5880
16..	76	3	.6	635	18	31	7360	3110	S 67100
17..	74	3	.6	603	18	29	4500	880	10700
18..	73	3	.6	396	18	19	4000	500	5400
19..	72	3	.6	364	9	8.8	3750	466	4720
20..	354	153	S 965	337	7	6.4	3660	399	3940
21..	17800	5770	S 289000	316	6	5.1	3650	388	3820
22..	4650	1590	S 24000	307	6	5.0	3480	362	3400
23..	2040	700	S 3860	297	5	4.0	3480	364	3420
24..	3340	1980	S 19200	292	5	3.9	3040	302	S 2590
25..	2350	796	S 5890	309	5	4.2	788	80	170
26..	3430	892	S 12500	282	4	3.0	764	38	78
27..	5160	1550	S 21600	260	3	2.1	717	32	62
28..	6790	2790	S 52800	248	3	2.0	696	25	47
29..	11700	9160	S 322000	--	--	--	674	22	40
30..	8440	2200	S 50100	--	--	--	875	158	S 535
31..	7640	1900	S 39200	--	--	--	2020	270	1470
Total	75456	--	841131.1	39730	--	49943.5	55166	--	126225.4

S Computed by subdividing day.

SACRAMENTO RIVER BASIN--Continued

11-4517.6. CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2100	256	1450	1850	108	540	450	24	29
2..	2130	191	1100	706	46	88	519	25	35
3..	2080	180	1010	658	34	60	509	77	110
4..	2060	90	501	626	19	32	343	40	37
5..	2070	130	727	601	22	36	329	35	31
6..	2850	464	5	561	21	32	289	30	23
7..	3630	560	5490	526	14	20	236	30	19
8..	3360	406	3680	501	14	19	207	30	17
9..	3270	390	3440	476	9	12	232	24	15
10..	3290	382	3390	484	9	12	231	18	11
11..	2770	366	2740	449	12	15	251	18	12
12..	715	52	100	421	5	5.7	253	18	12
13..	629	38	65	390	7	7.4	294	17	13
14..	597	20	32	364	9	8.8	279	15	11
15..	589	20	32	343	6	5.6	270	13	9.5
16..	595	22	35	325	6	5.3	263	12	8.5
17..	1660	201	5	311	10	8.4	320	19	16
18..	3870	600	6270	290	7	5.5	417	27	30
19..	3710	468	4690	282	15	11	472	35	45
20..	3190	294	2530	464	15	19	505	42	57
21..	3820	402	4150	456	14	17	512	40	55
22..	3700	412	4120	512	12	17	508	38	52
23..	3780	398	3140	539	35	51	501	39	53
24..	4210	575	6500	570	42	65	502	40	54
25..	3830	339	3500	558	40	60	545	47	69
26..	3380	294	2700	546	35	52	589	54	86
27..	2720	226	1700	533	30	43	627	55	93
28..	2470	144	960	496	25	33	624	55	93
29..	2390	136	880	444	24	29	622	52	87
30..	2320	122	760	436	24	28	631	48	82
31..	--	--	--	430	24	28	--	--	--
Total	77785	--	71622	16148	--	1365.7	12330	--	1265.0
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	625	42	71	513		41	385	--	22
2..	623	36	61	508	27	37	369	--	20
3..	593	30	48	481		32	331	--	17
4..	590	31	49	535		50	363	--	20
5..	572	33	51	529		45	320	--	16
6..	568	34	52	491		34	341	--	18
7..	568	34	52	485		32	355	20	19
8..	585	35	55	462		30	308	18	15
9..	565	35	53	463		30	277	--	14
10..	536	35	51	455		29	225	--	12
11..	506	32	44	409		24	221	--	12
12..	503	29	39	409		24	218	--	12
13..	500	26	35	407		24	216	--	12
14..	520	28	39	408		24	215	--	12
15..	521	28	39	422		25	213	20	12
16..	547	30	44	400		23	214	--	12
17..	532	30	43	379		22	216	--	12
18..	540	33	48	408		24	216	--	12
19..	594	36	58	465		30	202	--	12
20..	605	39	64	474		31	200	--	12
21..	571	38	59	475		31	178	22	11
22..	544	37	54	481		32	181	--	11
23..	484	36	47	480		32	200	--	12
24..	474	36	46	472		31	199	--	12
25..	511	36	50	435		27	171	--	11
26..	528	35	50	367		20	168	--	11
27..	527	35	50	344		18	166	--	11
28..	524	35	50	382		22	165	--	12
29..	520	34	48	392		23	164	32	14
30..	518	34	48	379		22	142	--	10
31..	518	32	45	390		23	--	--	--
Total	16912	--	1543	13700	--	892	7139	--	408

Total discharge for year (cfs-days)..... 347209.3

Total load for year (tons)..... 1259686.7

S Computed by subdividing day.

SACRAMENTO RIVER BASIN--Continued

11-4517.6. CACHE CREEK ABOVE RUMSEY, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Nov. 22, 1966.....	1500	49		749	156			--		--		99	100	--	--	--	--	S
Dec. 5.....	0750	51		6370	4910			--		--		62	78	93	99	100	--	VPWC
Jan. 27, 1967.....	1120	46		4460	1370		23	32	43	54	64	72	84	93	97	100	--	VPWC
Jan. 31.....	1530	52		7160	1530			24		44		61	72	86	93	99	100	VPWC
Mar. 17.....	1430	50		4320	530			--		--		74	82	93	100	--	--	V
Mar. 18.....	0855	51		4020	572			--		--		59	72	88	100	--	--	V
Apr. 6.....	1340	51		2640	291			--		--		69	78	87	94	96	100	S
May 1.....	1130	56		2270	104			--		--		68	74	81	88	93	100	S

SACRAMENTO RIVER BASIN--Continued

11-4520. CACHE CREEK NEAR CAPAY, CALIF.

LOCATION.--Lat 38°43'40", long 122°06'15", at gaging station in Canada de Capay Grant, 1.8 miles upstream from Clear Lake Water Company's diversion dam, 3.2 miles northwest of Capay, Yolo County, and 5.4 miles northwest of Esparto.

DRAINAGE AREA.--1,044 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1952 to September 1967.

Chemical analyses, in parts per million, July 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
July 15, 1966....	373					15		181	0		11			0.1				139			316	8.0
Aug. 9.....	373					15		176	0		12			.1				135			318	8.2
Sept. 20.....	262					21		198	0		18			1.1				153			387	7.9
Oct. 10.....	79					32		219	0		30			1.6				164			461	8.0
Nov. 28.....	146					51		224	0		81			2.9				214			663	8.1
Dec. 19.....	369					41		226	0		48			1.8				200			578	7.9
Jan. 13, 1967....	79					60		245	0		79			2.4				286			753	8.0
Feb. 10.....	974					29		239	0		27			.9				203			527	8.2
Mar. 29.....	736					29		196	13		24			1.0				195			495	8.6
Apr. 28.....	2800					19		188	0		15			.7				160			400	8.2
May 31.....	423					28		244	0		29			1.3				206			535	7.7
July 22.....	494					22		180	3		22			1.0				151			391	8.4
Aug. 31.....	325					17		163	6		14			1.0				139			354	8.6

11-4525. CACHE CREEK AT YOLO, CALIF.

DRAINAGE AREA (revised).--1,139 square miles.

RECORDS AVAILABLE.--Water temperatures: Octo

Sediment records: October 1958 to September 1965, November 1966 to February 1967 (discontinued).

EXTREMES, November 1966 to February 1967.--Sediment concentrations: Maximum daily, 5,900 ppm Jan.

several days.

Sediment loads: Maximum daily, 243,000 tons Jan. 22; minimum daily, 0 ton on several days.

EXTREMES, 1958-65, November 1966 to February 1967.--Sediment concentrations: Maximum daily, 7,520 ppm Jan. 6, 1965; minimum daily, no flow on many days each year.
Sediment loads: Maximum daily, 593 000 tons Jan. 6, 1965; minimum daily, 0 ton on many days each year.

REMARKS:--No flow Nov. 1-19.

REMARKS.--NO TLOW NOV. 1-15.

Temperature (°F) of water, water year October 1966 to September 1967

[illegible]

SACRAMENTO RIVER BASIN--Continued

11-4525. CACHE CREEK AT YOLO, CALIF.--Continued

Suspended sediment, November 1966 to February 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Suspended sediment			Suspended sediment			Suspended sediment		
	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day
1..				0	--	0	124	650	B 218
2..				0	--	0	122	921	S 350
3..				0	--	0	3460	5120	S 54300
4..				0	--	0	1170	2410	S 7870
5..				0	--	0	7030	3800	S 78000
6..				0	--	0	3450	2450	S 23700
7..				0	--	0	1840	1230	S 6400
8..				0	--	0	1160	540	1690
9..				0	--	0	800	280	605
10..				0	--	0	666	200	360
11..				0	--	0	674	160	291
12..				0	--	0	538	130	189
13..				0	--	0	450	110	134
14..				0	--	0	395	100	107
15..				0	--	0	364	95	B 93
16..				0	--	0	290	90	B 70
17..				0	--	0	224	86	B 52
18..				0	--	0	197	83	B 44
19..				0	--	0	167	80	B 36
20..				498	894	S 4190	146	77	B 30
21..				1120	2030	S 6440	130	73	B 26
22..				642	830	1440	115	70	B 22
23..				428	640	740	101	66	18
24..				208	280	157	88	63	B 15
25..				106	95	27	79	60	B 13
26..				57	55	B 8.5	65	57	B 10
27..				28	60	B 4.5	57	53	B 8.2
28..				21	130	B 7.4	83	42	B 9.4
29..				59	300	B 48	83	37	B 8.3
30..				161	480	209	76	33	B 6.8
31..				--	--	--	70	30	B 5.7
Total				3328	--	13271.4	24214	--	174681.4
Day	JANUARY			FEBRUARY			MARCH		
	Suspended sediment			Suspended sediment			Suspended sediment		
	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day	Mean discharge (cfs)	Mean concentration (ppm)	Tons per day
1..	66	26	B 4.6	6630	3280	58700			
2..	62	22	B 3.7	5360	3160	45700			
3..	59	19	B 3.0	4630	2600	B 32500			
4..	55	16	B 2.4	4200	1800	B 20400			
5..	51	13	B 1.8	3890	1280	B 13400			
6..	47	11	B 1.4	3600	1160	11300			
7..	44	9	B 1.1	3370	1450	13200			
8..	41	7	B .8	2280	1150	7080			
9..	38	5	.5	1110	400	B 1200			
10..	36	5	B .5	977	350	B 923			
11..	35	5	B .5	--	--	--			
12..	33	5	B .4	--	--	--			
13..	31	5	B .4	--	--	--			
14..	28	5	B .4	--	--	--			
15..	26	5	B .4	--	--	--			
16..	24	5	B .3	--	--	--			
17..	22	5	B .3	--	--	--			
18..	20	5	B .3	--	--	--			
19..	18	5	B .2	--	--	--			
20..	24	5	B .3	--	--	--			
21..	9270	3100	K 155000	--	--	--			
22..	13600	5900	K 243000	--	--	--			
23..	3140	2250	S 20700	--	--	--			
24..	4280	4300	K 56600	--	--	--			
25..	4020	4300	S 49700	--	--	--			
26..	2300	1260	S 8270	--	--	--			
27..	5340	2940	S 43100	--	--	--			
28..	6500	3600	K 64900	--	--	--			
29..	11600	4420	S 143000	--	--	--			
30..	10600	3650	104000	--	--	--			
31..	9740	3350	88100	--	--	--			
Total	81150	--	976393.3	36047	--	204403			

Total discharge for period Nov. 1, 1966 to February 10, 1967 (cfs-days)..... 144739
 Total load for period Nov. 1, 1966 to February 10, 1967 (tons)..... 1368749.1

S Computed by subdividing day.

K Computed from estimated-concentration graph and subdividing day.

B Computed from estimated-concentration graph.

SACRAMENTO RIVER BASIN--Continued

11-4525. CACHE CREEK AT YOLO, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Nov. 21, 1966.....	1010	51		1030	2200	--	--	53	--	71	--	82	92	100	--			VPWC
Dec. 3.....	1040	50		5650	6410	--	45	55	69	84	91	95	98	99	100			VPWC
Dec. 5.....	1518	49		10100	4390	--	40	46	57	74	84	92	98	99	100			VPWC
Jan. 23, 1967.....	1225	47		2960	1950	--	25	33	40	52	64	76	98	100	--			VPWC
Jan. 31.....	1030	51		9490	2730	--	23	32	37	54	66	78	97	100	--			VPWC
Mar. 6.....	1650	60		183	135	67	--	--	--	--	--	84	94	99	100			V
Mar. 17.....	1015	51		5710	2200	33900	--	21	--	39	--	60	88	99	100			VPWC
Apr. 4.....	1010	51		2200	560	3330	--	--	--	--	--	44	60	94	100			V
Apr. 4.....	1030	51		2200	596	3540	--	--	--	--	--	--	--	--	--			
May 2.....	1030	59		1200	343	1110	--	--	--	--	--	62	82	100	--			V
May 2.....	1045	59		1200	382	1240	--	--	--	--	--	--	--	--	--			
May 17.....	1415	78		36	114	11	--	--	--	--	--	--	--	--	--			

SACRAMENTO RIVER BASIN--Continued

11-4535. PUTAH CREEK NEAR GUENOC, CALIF.

LOCATION.--Lat 38°46'45", long 122°31'00", temperature recorder at gaging station in Guenoc Grant, 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, Lake County.

DRAINAGE AREA (revised).--113 square miles.

RECORDS AVAILABLE.--Water temperatures: March 1960 to September 1967.

Sediment records: October 1962 to September 1965.

EXTREMES, 1966-67.--Water temperatures: Maximum, 85°F July 28, 30; minimum, 42°F Jan. 24.

EXTREMES, 1960-67.--Water temperatures: Maximum, 86°F July 20, 1960; minimum (1960-65, 1966-67), 41°F Jan. 22, 23, 1962.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	74	71	72	72	72	71	72	72	73	70	68	67	65	66	62	64	67	67	64	64	63	66	68	67	65	66	64	63	64	64	64	67
Minimum	67	67	65	65	65	64	65	65	65	64	64	64	61	59	59	59	58	59	59	60	60	59	51	51	51	51	50	59	58	57	57	59
November																																
Maximum	64	62	62	63	61	58	61	58	57	58	56	58	59	58	57	55	55	56	56	54	52	52	51	51	51	52	51	51	52	53	--	56
Minimum	57	57	58	57	56	56	56	55	54	54	55	56	57	57	55	53	52	53	54	52	50	49	48	48	48	49	49	50	50	52	--	53
December																																
Maximum	53	52	51	51	51	52	52	52	51	52	52	54	53	52	51	51	51	51	52	50	53	51	51	51	49	48	49	48	49	48	50	51
Minimum	52	50	50	50	50	50	50	50	50	50	50	52	52	50	48	48	48	49	49	48	49	48	50	48	48	46	46	45	47	47	46	48
January																																
Maximum	51	51	51	50	50	49	50	50	50	51	50	51	53	54	53	53	51	51	50	50	50	50	49	46	49	49	50	51	53	52	54	50
Minimum	47	47	47	47	47	45	46	46	46	47	48	48	48	48	48	48	47	47	47	48	48	47	46	42	46	48	48	50	51	50	50	47
February																																
Maximum	53	53	52	54	54	53	53	53	54	54	54	55	55	52	50	52	54	55	53	54	54	53	53	51	52	54	55	56	--	--	--	53
Minimum	50	49	50	49	50	49	49	49	50	50	50	52	51	48	48	47	49	50	49	48	48	48	49	50	50	49	50	50	--	--	--	49
March																																
Maximum	58	58	54	55	55	58	59	59	59	55	51	50	49	50	52	55	56	56	55	53	58	55	56	56	55	56	58	56	55	53	52	55
Minimum	50	52	50	50	52	51	52	52	52	51	48	48	46	46	48	51	50	49	49	52	53	52	52	50	50	51	50	52	49	48	46	50
April																																
Maximum	53	53	57	55	52	50	54	55	57	54	53	57	55	56	54	53	52	48	52	52	50	53	52	53	56	56	54	57	55	48	--	53
Minimum	47	48	48	50	49	48	48	48	49	48	46	48	46	46	50	49	48	47	46	46	48	47	48	48	48	50	47	47	45	--	--	47
May																																
Maximum	58	60	61	62	59	61	64	65	58	60	57	61	63	65	68	70	70	71	71	73	74	75	75	72	72	72	71	66	68	68	64	66
Minimum	48	51	52	53	52	50	54	56	55	52	52	51	53	55	56	59	60	60	60	61	62	63	63	61	61	60	60	60	58	58	56	56
June																																
Maximum	60	56	64	67	62	62	67	70	70	70	70	69	69	72	74	75	77	75	75	77	77	77	78	78	79	79	80	81	82	83	--	72
Minimum	56	53	52	58	58	57	57	58	59	59	60	59	59	61	61	63	65	65	65	65	65	67	66	67	68	69	69	70	70	71	--	62
July																																
Maximum	83	83	82	80	80	80	79	80	80	82	83	83	82	82	83	82	82	80	80	82	82	82	81	82	82	82	83	85	84	85	84	81
Minimum	71	72	71	70	66	70	68	69	70	70	70	72	73	71	72	73	71	70	70	71	72	72	72	72	72	72	74	76	76	77	73	71
August																																
Maximum	84	83	84	84	83	82	83	81	82	82	80	81	83	83	83	83	84	84	83	83	83	83	84	81	82	84	83	82	82	82	80	82
Minimum	76	76	76	75	75	74	74	74	73	73	72	72	72	74	74	74	74	74	74	74	74	74	75	76	75	76	75	74	72	72	72	74
September																																
Maximum	78	76	78	77	78	78	78	76	76	76	76	77	77	76	76	76	74	74	75	77	76	76	75	76	76	77	76	76	73	74	--	76
Minimum	71	69	70	70	70	69	69	68	68	68	68	68	68	68	67	67	68	68	67	68	68	68	68	68	68	68	68	68	69	68	--	68

SACRAMENTO RIVER BASIN--Continued

11-4535. PUTAH CREEK NEAR GUENOC, CALIF.--Continued

Periodic determinations of suspended-sediment discharge, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

F, pipet, S, sieve, V, visual accumulation tube, W, in distilled water)																	
Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
Oct. 3, 1966.....	1000	65		0.4	1	T											
Oct. 28.....	1230	60		.5	1	T											
Dec. 21.....	1515	53		136	4	1.5											
Jan. 13, 1967.....	1100	48		55	3	.5											
Jan. 31.....	1610	55		1200	61	198											
Mar. 1.....	1520	56		106	1												
Apr. 4.....	1135	50		340	5	.5											
May 5.....	0900	52		238	2	1.3											
June 7.....	1145	58		92	3	3.5											
July 5.....	1530	78		20	3	T											
July 31.....	1300	81		6.5	2	T											
Aug. 17.....	1300	80		4.4	1	T											
Sept. 1.....	1445	78		3.4	1	T											

T Less than 0.05 ton.

SACRAMENTO RIVER BASIN--Continued

11-4540. PUTAH CREEK NEAR WINTERS, CALIF.

LOCATION.--Lat 38°30'55", long 122°04'50", at gaging station 1.3 miles downstream from Monticello Dam, 6 miles west of Winters, Yolo County, and 8 miles downstream from Capell Creek.

DRAINAGE AREA.--574 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1952 to September 1966.
Water temperatures: November 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 72°F May 21; minimum, 47°F Jan. 24.

EXTREMES, 1965-67.--Water temperatures: Maximum, 72°F May 21, 1967; minimum (1966-67), 47°F on many days in December 1965 to February 1966, Jan. 24, 1967.

REMARKS.--Clock stopped Feb. 4 to Mar. 6; temperature range, 51°F to 54°F.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1966 to September 1967																																	
Month	Day																																Average
	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		
October																																	
Maximum	52	52	52	52	52	52	53	53	52	52	52	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	54	54	54	54	54	52	
Minimum	51	51	51	51	51	51	51	51	51	51	51	52	51	51	51	51	51	52	52	52	52	52	52	52	52	52	53	53	53	53	53	53	
November																																	
Maximum	54	54	54	54	54	54	55	55	54	54	54	54	54	54	54	55	55	55	55	55	54	54	54	54	53	54	53	53	54	54	--	54	
Minimum	53	53	53	53	53	53	53	53	52	52	52	53	53	53	54	54	53	54	54	54	53	52	52	52	52	52	52	53	53	53	--	52	
December																																	
Maximum	54	54	54	53	54	54	53	52	53	53	53	53	52	53	52	52	51	51	51	51	52	51	51	51	51	51	51	50	50	50	50	52	
Minimum	53	53	53	52	53	53	52	51	52	52	52	52	52	52	51	51	50	50	50	50	51	51	51	51	50	50	50	50	49	49	49	51	
January																																	
Maximum	50	50	50	50	51	50	50	50	50	50	50	51	51	50	50	50	51	51	51	51	51	51	49	51	51	51	51	51	51	51	51	50	
Minimum	49	49	49	50	49	49	50	50	49	50	50	50	50	50	50	49	50	50	50	51	50	49	48	47	51	51	51	51	51	51	51	49	
February																																	
Maximum	51	52	52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	51	51	51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
March																																	
Maximum	--	--	--	--	--	--	54	54	55	55	54	53	53	53	53	53	53	53	54	54	54	55	55	55	55	55	55	55	55	54	54	54	
Minimum	--	--	--	--	--	--	52	53	53	53	53	52	52	52	52	52	52	53	53	54	54	54	54	54	54	54	54	54	54	54	54	53	
April																																	
Maximum	54	54	54	54	54	54	54	55	55	55	54	55	54	55	55	55	55	54	54	54	54	54	54	54	54	54	54	54	54	54	--	54	
Minimum	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	53	53	54	53	54	54	54	54	54	54	53	53	
May																																	
Maximum	54	55	55	55	55	55	55	59	61	61	61	62	62	63	65	66	68	69	71	71	72	69	67	66	62	60	60	58	57	57	55	61	
Minimum	54	54	54	55	55	54	54	55	58	60	59	59	59	59	60	61	65	66	67	68	69	67	65	62	59	58	58	56	56	55	54	59	
June																																	
Maximum	57	60	65	66	64	61	62	62	61	61	59	59	57	58	57	56	56	56	55	55	55	54	54	54	54	54	54	54	54	54	--	57	
Minimum	54	56	60	63	61	60	60	59	59	58	57	56	56	56	55	54	54	54	53	53	53	53	53	53	53	53	53	53	52	52	--	55	
July																																	
Maximum	54	54	54	54	54	54	54	54	54	55	54	54	54	54	54	54	54	54	54	54	55	55	55	55	55	55	54	54	54	55	55	54	
Minimum	52	52	52	52	53	53	53	53	53	53	53	53	53	53	52	52	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	52	
August																																	
Maximum	54	54	54	55	55	55	55	55	55	55	55	55	55	55	55	55	55	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	
Minimum	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	52	52	52	52	52	52	52	52	52	52	52	52	
September																																	
Maximum	54	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	55	55	55	55	55	54	55	54	54	54	54	54	54	--	54	
Minimum	52	52	52	52	52	52	52	52	52	52	52	52	52	51	52	52	52	52	52	52	52	52	53	53	52	52	52	52	52	52	--	52	

SACRAMENTO RIVER BASIN--Continued

11-4554. SACRAMENTO RIVER NEAR RIO VISTA, CALIF.

LOCATION.--Lat 38°08'54", long 121°41'27", at pier, 1,500 feet upstream from tidal gaging station, 1 mile south of Rio Vista, Solano County, and approximately 3.1 miles downstream from Steamboat Slough.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Chemical analyses, in parts per million, July 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
July 12, 1966....						15		75	0		16			0.0				66			195	7.9
Aug. 12.....						15		85	0		9.8			.0				64			183	7.7
Sept. 12.....						21		108	0		13			.1				87			262	7.4
Oct. 13.....						12		87	0		8.7			.1				79			185	8.0
Nov. 21.....						11		76	0		7.8			.0				60			170	7.6
Dec. 21.....						12		77	0		8.2			.1				66			188	7.9
Jan. 10, 1967....						14		75	0		11			.0				86			205	7.7
Feb. 8.....						11		84	0		6.7			.0				70			194	7.8
Mar. 13.....						14		91	0		11			.0				80			223	7.8
Apr. 6.....						12		78	0		9.9			.2				68			191	8.0
May 22.....						6.4		56	0		6.1			.1				46			136	7.3
June 27.....						6.0		51	0		3.6			.0				37			110	7.7
Sept. 11.....						13		81	0		9.1			.1				62			185	7.6

MISCELLANEOUS ANALYSES OF STREAMS IN SACRAMENTO RIVER BASIN

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
11-4500. CLEAR LAKE AT LAKEPORT, CALIF. (Lat 39°02'40", long 122°54'45")																						
Nov. 1, 1966.....				25	17	11	2.3	153	5		5.3			0.7				132			291	8.5
Jan. 4, 1967.....				22	15	10	1.9	144	3		5.4			.6				116			261	8.4
May 10.....		20		19	12	8.4	1.5	125	0	9.0	4.1		2.3	.4	163			97			223	7.9
11-4510. CACHE CREEK NEAR LOWER LAKE, CALIF. (Lat 38°55'27", long 122°33'53")																						
Nov. 2, 1966.....	30			26	17	12	2.3	166	5		5.4			0.9				135			306	8.4
Jan. 4, 1967.....	2.8			44	25	22	2.8	174	5		22			1.1				213			390	8.4
May 10.....	6.4	21		24	16	12	1.8	153	0	17	5.7		2.0	.7	188			126			288	8.0

MISCELLANEOUS ANALYSES OF STREAMS IN SACRAMENTO RIVER BASIN--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment con- cen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	

11-3710. CLEAR CREEK AT FRENCH GULCH, CALIF. (Lat 40°41'40", long 122°38'10")																	
Oct. 3, 1966.....	1150	46		12	5	0.2											
Nov. 1.....	1225	57		15	5	.2											
Nov. 15.....	1130	--		273	23	17											
Nov. 16.....	1400	--		343	8	7.4											
Nov. 19.....	0930	52		88	6	1.4											
Nov. 20.....	0900	50		1210	120	392											
Nov. 20.....	1200	51		1340	138	499											
Nov. 20.....	1500	51		1300	103	362											
Nov. 20.....	1800	51		1130	86	262											
Nov. 21.....	0920	48		602	11	18											
Nov. 24.....	1000	42		200	4	2.2											
Nov. 28.....	0900	46		115	3	.9											
Nov. 28.....	1720	46		122	2	.7											
Nov. 29.....	1200	48		152	2	.8											
Dec. 1.....	1130	49		262	6	4.2											
Dec. 2.....	1120	48		508	10	14											
Dec. 3.....	0930	46		695	9	17											
Dec. 3.....	1630	48		629	6	10											
Dec. 4.....	1015	47		695	19	36											
Dec. 5.....	1105	48		2000	222	1200				69	78	90	99	100			V
Dec. 7.....	1330	48		575	9	14											
Dec. 7.....	1330	48		575	10	16											
Dec. 8.....	1555	46		395	9	9.6											
Dec. 9.....	1555	46		339	23	21											
Dec. 10.....	0835	45		379	6	6.1											
Dec. 10.....	1600	46		375	5	5.1											
Dec. 11.....	1000	46		371	4	4.0											
Dec. 11.....	1620	48		355	7	6.7											
Dec. 12.....	1620	50		371	9	9.0											
Dec. 13.....	1615	48		530	15	21											
Dec. 14.....	1615	47		485	13	17											
Dec. 15.....	1630	46		387	10	10											
Dec. 16.....	1615	47		315	8	6.8											
Dec. 17.....	0930	46		276	7	5.2											
Dec. 17.....	1710	46		266	7	5.0											
Dec. 18.....	0900	44		242	8	5.2											
Dec. 18, 1966.....	1650	46		230	5	3.1											
Dec. 19.....	1610	47		206	3	1.7											
Dec. 20.....	1545	47		188	3	1.5											
Dec. 21.....	1550	45		170	3	1.4											
Dec. 22.....	1605	49		158	3	1.3											
Dec. 23.....	1505	44		148	2	.8											
Dec. 24.....	1045	45		138	3	1.1											
Dec. 24.....	1715	41		135	4	1.5											
Dec. 25.....	0845	41		130	3	1.1											
Dec. 25.....	1700	42		128	4	1.4											
Dec. 26.....	1050	38		122	3	1.0											
Dec. 27.....	1050	37		112	2	.6											

Dec. 28.....	1010	38	106	6	1.7													
Dec. 29.....	0940	39	103	2	.6													
Dec. 30.....	1440	42	99	2	.5													
Dec. 31.....	1000	38	95	2	.5													
Dec. 31.....	1615	42	92	6	1.5													
Jan. 5, 1967.....	1300	41	96	2	.5													
Jan. 5.....	1645	42	80	1	.2													
Jan. 20.....	1615	39	132	4	1.4													
Jan. 21.....	0930	40	418	26	29													
Jan. 21.....	1630	43	387	11	11													
Jan. 24.....	1630	40	206	6	3.3													
Jan. 25.....	1640	42	172	9	4.2													
Jan. 26.....	1625	40	218	10	5.9													
Jan. 27.....	1605	42	294	31	25													
Jan. 28.....	1435	43	1560	144	607													
Jan. 29.....	1045	44	2710	248	1810													
Jan. 30.....	1155	44	1670	82	370													
Jan. 30.....	1625	45	1930	93	485	74	81	90	98	100								
Jan. 31.....	1620	46	2020	74	404													
Feb. 1.....	1610	46	1360	39	143													
Feb. 2.....	1645	45	985	22	59													
Feb. 3.....	1725	43	825	13	29													
Feb. 5.....	0855	42	765	14	29													
Feb. 15.....	1630	41	395	16	17													
Feb. 25.....	0830	40	245	8	5.3													
Feb. 27.....	1005	43	194	2	1.0													
Mar. 6.....	1650	48	175	13	6.1													
Mar. 8.....	1605	49	168	4	1.8													
Mar. 10.....	1600	43	301	31	25													
Mar. 11.....	1510	40	245	20	13													
Mar. 11.....	2055	40	252	19	13													
Mar. 12.....	0920	38	245	9	6.0													
Mar. 13.....	1550	42	245	11	7.3													
Mar. 14.....	1630	41	280	6	4.5													
Mar. 15.....	1620	42	252	4	2.7													
Mar. 16.....	1210	49	2150	250	1450													
Mar. 16.....	1620	48	2180	150	883	62	72	82	93	100								
Mar. 17.....	0635	44	1520	60	246													
Mar. 17.....	1655	46	1230	37	123													
Mar. 18.....	0715	45	1000	19	51													
Mar. 18.....	1720	49	880	23	55													
Mar. 19.....	0810	42	765	10	21													
Mar. 20.....	0840	47	835	13	29													
Mar. 20.....	1640	46	865	18	42													
Mar. 21.....	0955	47	840	14	32													
Mar. 21.....	1655	47	800	9	19													
Mar. 22.....	1540	46	725	13	25													
Apr. 5.....	1315	46	458	3	3.7													
Apr. 5.....	1640	45	485	16	21													
Apr. 6.....	1620	44	1460	61	240													
Apr. 7.....	1620	49	1180	20	64													
Apr. 8.....	0845	45	985	12	32													
Apr. 9.....	0845	47	865	13	30													
Apr. 10.....	1605	58	1020	22	61													
Apr. 13.....	1615	48	925	6	15													
Apr. 14.....	1720	44	815	6	13													
Apr. 18.....	1740	49	665	4	7.2													
Apr. 19.....	1640	46	620	4	6.7													
Apr. 20.....	1655	47	598	5	8.1													
Apr. 21.....	1630	48	552	4	6.0													

V

V

MISCELLANEOUS ANALYSES OF STREAMS IN SACRAMENTO RIVER BASIN--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967--Continued
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment con- cen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
11-3710. CLEAR CREEK AT FRENCH GULCH, CALIF.--Continued																		
Apr. 22, 1967.....	0825	45		566	8	12												
Apr. 24.....	1550	48		598	3	4.8					--	--	--	--	--	--	--	
Apr. 25.....	1640	48		575	3	4.7					--	--	--	--	--	--	--	
Apr. 26.....	1610	46		570	4	6.2					--	--	--	--	--	--	--	
May 3.....	0750	45		422	2	2.3					--	--	--	--	--	--	--	
May 5.....	1545	49		498	2	2.7					--	--	--	--	--	--	--	
May 8.....	1550	52		642	8	14					--	--	--	--	--	--	--	
May 10.....	1615	49		588	3	4.8					--	--	--	--	--	--	--	
May 11.....	1550	53		526	1	1.4					--	--	--	--	--	--	--	
May 15.....	1550	57		400	2	2.2					--	--	--	--	--	--	--	
May 17.....	1605	53		422	15	17					--	--	--	--	--	--	--	
May 19.....	1615	57		387	2	2.1					--	--	--	--	--	--	--	
May 22.....	1610	59		327	4	3.5					--	--	--	--	--	--	--	
May 24.....	1635	60		287	4	3.1					--	--	--	--	--	--	--	
May 26.....	1535	59		259	1	.7					--	--	--	--	--	--	--	
May 29.....	1705	59		221	1	.6					--	--	--	--	--	--	--	
June 1.....	1540	56		230	1	.6					--	--	--	--	--	--	--	
June 5.....	1715	56		185	1	.5					--	--	--	--	--	--	--	
June 7.....	1605	60		168	1	.5					--	--	--	--	--	--	--	
June 20.....	1610	62		110	2	.6					--	--	--	--	--	--	--	
July 31.....	0845	67		32	3	.3					--	--	--	--	--	--	--	
Sept. 1.....	1040	70		16	4	.2					--	--	--	--	--	--	--	

11-3744. MIDDLE FORK COTTONWOOD CREEK NEAR ONO, CALIF. (Lat 40°23'25", long 122°31'15")

Oct. 6.....	1315	67	6.5	3	0.1														
Nov. 7.....	1310	58	25	6	.4														
Nov. 20.....	1440	54	480	265	343														
Nov. 30.....	1645	49	181	11	5.4														
Dec. 1.....	1300	52	237	16	10														
Dec. 2.....	1330	50	538	107	155														
Dec. 11.....	---	51	452	74	90														
Dec. 17.....	1620	44	318	37	32														
Jan. 12, 1967.....	0950	42	76	9	1.8														
Jan. 21.....	1630	42	2160	1420	8280	20	31	41	49	61	68	78	90	99	100			VPWC	
Jan. 22.....	1030	38	912	528	1300						65	74	84	98	100			V	
Jan. 22.....	1700	42	701	346	655														
Jan. 24.....	1530	35	920	426	1060														
Jan. 31.....	1730	48	2460	1030	6840						65	78	93	100				V	
Feb. 1.....	1735	48	1840	794	3940						63	75	91	100				V	
Feb. 3.....	1145	43	1110	1420	4260														
Feb. 3.....	1730	54	1050	464	1320														
Feb. 4.....	1100	44	980	305	807														
Feb. 5.....	1630	49	928	270	677														
Feb. 6.....	1715	49	853	218	502														
Feb. 10.....	1120	45	656	123	218						62	68	84	99	100			V	
Mar. 11.....	1645	50	253	45	31														
Mar. 12.....	1300	44	302	23	19														
Mar. 13.....	1800	46	284	19	15														
Mar. 14.....	1510	47	264	18	13														
Mar. 16.....	1330	53	888	241	578														
Mar. 16.....	1730	58	842	226	514														
Mar. 17.....	1330	50	755	160	326														
Mar. 20.....	1215	59	608	96	158														
Apr. 5.....	1630	48	420	26	29														
Apr. 6.....	1040	46	595	73	117														
Apr. 6.....	1100	42	598	74	119														
Apr. 6.....	1730	45	932	392	986														
Apr. 7.....	1200	49	964	223	580														
May 4.....	1315	55	522	28	39														
May 11.....	1315	49	525	42	60														
June 7.....	1100	60	257	15	10														
July 6.....	1400	81	67	2	.4														
July 31.....	1250	83	29	2	.2														
Aug. 31.....	1330	82	15	3	.1														

MISCELLANEOUS ANALYSES OF STREAMS IN SACRAMENTO RIVER BASIN--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967--Continued
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concent- ration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
11-3758.2. SOUTH FORK COTTONWOOD CREEK NEAR COTTONWOOD, CALIF. (Lat 40°18'59", long 122°26'52")																		
Nov. 16, 1966.....	0630	50		109	823	242	--	--	--	--	--	--	--	--	--	--	--	
Nov. 16.....	1730	51		533	306	440	--	--	--	--	--	--	--	--	--	--	--	
Nov. 17.....	0630	50		229	870	538	--	--	--	--	--	--	--	--	--	--	--	
Nov. 17.....	1730	51		120	788	255	--	--	--	--	--	--	--	--	--	--	--	
Nov. 18.....	0630	49		80	786	170	--	--	--	--	--	--	--	--	--	--	--	
Nov. 18.....	1715	50		62	791	132	--	--	--	--	--	--	--	--	--	--	--	
Nov. 19.....	0630	50		30	816	66	--	--	--	--	--	--	--	--	--	--	--	
Nov. 19.....	1700	50		62	847	142	--	--	--	--	--	--	--	--	--	--	--	
Nov. 20.....	0630	--		635	927	1590	--	--	--	--	--	--	--	--	--	--	--	
Nov. 20.....	1230	--		896	780	1890	--	--	--	--	--	--	--	--	--	--	--	
Nov. 20.....	1730	51		805	791	1720	--	--	--	--	--	--	--	--	--	--	--	
Nov. 21.....	0635	50		649	303	531	--	--	--	--	--	--	--	--	--	--	--	
Nov. 21.....	1730	50		439	374	443	--	--	--	--	--	--	--	--	--	--	--	
Nov. 22.....	0615	49		365	282	278	--	--	--	--	--	--	--	--	--	--	--	
Nov. 22.....	1735	49		179	292	141	--	--	--	--	--	--	--	--	--	--	--	
Nov. 24.....	1730	50		26	214	15	--	--	--	--	--	--	--	--	--	--	--	
Nov. 26.....	1705	49		9.0	278	6.8	--	--	--	--	--	--	--	--	--	--	--	
Nov. 28.....	1700	49		14	289	11	--	--	--	--	--	--	--	--	--	--	--	
Dec. 2.....	0950	49		662	1200	2140	--	--	--	--	--	38	40	48	60	78	100	V
Dec. 2.....	1320	49		1070	2560	7400	16	25	35	48	59	67	77	87	98	99	100	VPWC
Dec. 14.....	1100	46		509	344	473	--	--	--	--	--	81	87	98	100	--	--	V
Jan. 11, 1967.....	1310	49		54	2	.3	--	--	--	--	--	--	--	--	--	--	--	
Jan. 12.....	0705	45		54	134	20	--	--	--	--	--	--	--	--	--	--	--	
Jan. 14.....	0700	46		51	178	25	--	--	--	--	--	--	--	--	--	--	--	
Jan. 21.....	0935	48		2160	4420	25800	--	--	--	--	--	--	--	--	--	--	--	
Jan. 22.....	0700	46		1960	5480	29000	--	--	--	--	--	--	--	--	--	--	--	
Jan. 23.....	1705	45		748	4510	9110	--	--	--	--	--	--	--	--	--	--	--	
Jan. 24.....	0700	42		1650	4350	19400	--	--	--	--	--	--	--	--	--	--	--	
Jan. 24.....	1715	44		1390	5940	22300	--	--	--	--	--	--	--	--	--	--	--	
Jan. 25.....	0700	43		790	5180	11000	--	--	--	--	--	--	--	--	--	--	--	
Jan. 25.....	1730	49		616	4710	7830	--	--	--	--	--	--	--	--	--	--	--	
Jan. 26.....	0650	43		1030	4860	13500	--	--	--	--	--	--	--	--	--	--	--	
Jan. 26.....	0655	44		1040	4980	14000	18	27	36	53	65	75	91	100	--	--	VPWC	
Jan. 27.....	0700	44		1250	4260	14400	--	--	--	--	--	--	--	--	--	--	--	
Jan. 27.....	1720	48		1070	4400	12700	--	--	--	--	--	--	--	--	--	--	--	
Jan. 28.....	0130	45		2100	4620	26200	--	--	--	--	--	--	--	--	--	--	--	

Jan. 28	2030	43		3040	4240	34800	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan. 28	2235	44		2900	5200	40700	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan. 29	0900	45		4250	4760	54600	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan. 29	1100	45		5250	4860	68900	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan. 29	1435	46		4890	4880	64400	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb. 7	1300	47		503	172	234	--	--	--	--	--	62	67	77	100	--	--	--	V
Mar. 2	1345	53		129	4	1.4	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 6	1730	50		115	1980	615	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 7	1715	50	D	110	1350	401	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 8	1800	52	D	110	1000	297	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 9	0915	48	D	105	2180	618	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 9	1535	49	D	105	1140	323	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 10	1620	48	D	110	700	208	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 11	1505	49	D	190	2580	1320	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 12	1100	47	D	180	966	469	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 12	1430	49	D	180	1360	661	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 14	0930	48	D	160	378	163	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 14	1740	48	D	160	1110	480	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 15	1730	50	D	150	53	21	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 16	1430	50	D	700	840	1590	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 19	1625	51		250	872	589	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 20	1335	52	D	360	2580	2510	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 23	1710	55	D	290	2920	2290	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 26	1740	54	D	250	1320	891	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 28	1400	55	D	220	240	143	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 29	1600	54	D	210	455	258	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 30	0915	57	D	210	442	251	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr. 6	1245	47		365	151	149	--	--	--	--	--	--	--	--	--	--	--	--	--
May 4	0907	53		259	37	26	--	--	--	--	--	--	--	--	--	--	--	--	--
May 8	1410	58		742	489	980	--	--	--	--	--	--	--	--	--	--	--	--	--
May 8	1745	56		735	473	939	--	--	--	--	--	--	--	--	--	--	--	--	--
May 9	1430	--		805	473	1030	--	--	--	--	--	--	--	--	--	--	--	--	--
June 7	1345	67		248	25	17	--	--	--	--	--	--	--	--	--	--	--	--	--
July 17	1255	87		33	11	1.0	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug. 4	1115	85		10	8	.2	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept. 15	--	82		.3	3	T	--	--	--	--	--	--	--	--	--	--	--	--	--

T Less than 0.05 ton.
D Daily mean discharge.

MISCELLANEOUS ANALYSES OF STREAMS IN SACRAMENTO RIVER BASIN--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967--Continued
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment con- cen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
11-3788.6. RED BANK CREEK AT RAWSON ROAD BRIDGE, NEAR RED BLUFF, CALIF. (Lat 40°08'20", long 122°14'20")																		
Dec. 8, 1966.....	0745	47		50	17	2.3	--	--	--	--	--	--	--	--	--	--	VPWC V	
Jan. 10, 1967.....	--	49		3.7	1	T	--	--	--	--	--	--	--	--	--	--		
Jan. 21.....	0930	50		1490	5850	23500	15	20	26	36	46	54	76	90	98	100		
Jan. 21.....	2000	50		1430	1900	7340	--	--	--	--	--	74	86	96	99	100		
Jan. 22.....	1130	50		300	209	169	--	--	--	--	--	--	--	--	--	--		
Jan. 22.....	2000	50		174	24	11	--	--	--	--	--	--	--	--	--	--	VPWC VPWC	
Jan. 23.....	1930	50		105	34	9.6	--	--	--	--	--	--	--	--	--	--		
Jan. 24.....	0530	50		1280	3200	11100	--	--	--	--	--	--	--	--	--	--		
Jan. 24.....	2000	50		1910	2260	11700	17	27	34	48	58	68	84	97	99	100		
Jan. 31.....	0530	50		2840	2140	16400	31	41	46	55	65	76	87	94	98	100		
Jan. 31.....	2000	50		1120	682	2060	--	--	--	--	--	--	--	--	--	--		
Feb. 8.....	0830	49		88	14	3.3	--	--	--	--	--	--	--	--	--	--		
Mar. 20.....	1315	54		55	12	1.8	--	--	--	--	--	--	--	--	--	--		
Apr. 24.....	1500	59		189	54	28	--	--	--	--	--	--	--	--	--	--		
Apr. 26.....	1300	59		143	32	12	--	--	--	--	--	--	--	--	--	--		
May 22.....	1415	88		11	3	.1	--	--	--	--	--	--	--	--	--	--		
11-3795. ELDER CREEK NEAR PASKENTA, CALIF. (Lat 40°01'30", long 122°30'35")																		
Oct. 7, 1966.....	0830	60		2.4	7	T	--	--	--	--	--	--	--	--	--	--	V	
Nov. 3.....	0810	56		2.8	1	T	--	--	--	--	--	--	--	--	--	--		
Nov. 20.....	1110	52		357	306	295	--	--	--	--	--	--	--	--	--	--		
Nov. 20.....	1255	52		1360	2840	10400	--	--	--	--	--	--	--	--	--	--		
Nov. 20.....	1332	52		1250	2110	7120	--	--	--	--	--	55	61	71	88	97		
Nov. 20.....	1355	52		1240	1680	5620	--	--	--	--	--	--	--	--	--	--	VPWC	
Nov. 20.....	1515	52		1150	1340	4160	--	--	--	--	--	--	--	--	--	--		
Nov. 20.....	1520	52		1150	1490	4630	20	27	37	47	55	62	69	78	89	100		
Dec. 8.....	1015	42		156	22	9.3	--	--	--	--	--	--	--	--	--	--		
Jan. 10, 1967.....	0910	40		28	1	.1	--	--	--	--	--	--	--	--	--	--		
Feb. 8.....	1100	44		267	20	14	--	--	--	--	--	--	--	--	--	--	V	
Mar. 16.....	1550	56		516	155	216	--	--	--	--	--	65	73	81	94	100		
Mar. 20.....	1045	46		170	9	4.1	--	--	--	--	--	--	--	--	--	--		
Apr. 26.....	1045	48		273	14	10	--	--	--	--	--	--	--	--	--	--		
June 5.....	1017	54		202	25	14	--	--	--	--	--	--	--	--	--	--		
July 17.....	1040	73		24	17	1.1	--	--	--	--	--	--	--	--	--	--		
Aug. 29.....	1030	72		7.4	4	.1	--	--	--	--	--	--	--	--	--	--		

11-3906.72. STONE CORRAL CREEK NEAR SITES, CALIF. (Lat 39°17'18", long 122°18'00")

Nov. 20, 1966.....	1450	54	0.40	160	0.2	--	--	--	--	--	--	--	--	--	--	--	--	SPWC
Nov. 21.....	0950	50	.20	59	7	--	--	--	--	--	--	--	--	--	--	--	--	
Dec. 2.....	1610	52	4.3	280	3.3	--	--	--	--	--	--	--	--	--	--	--	--	
Dec. 3.....	0805	49	9.4	986	25	--	--	--	--	--	--	--	--	--	--	--	--	
Dec. 3.....	0845	50	7.8	955	20	82	97	100	--	--	--	--	--	--	--	--	--	
Dec. 3.....	0915	50	6.8	834	15	--	--	--	--	--	--	--	--	--	--	--	--	
Dec. 4.....	0830	49	.70	221	.4	--	--	--	--	--	--	--	--	--	--	--	--	
Dec. 5.....	0810	49	60	990	160	--	--	--	--	--	--	--	--	--	--	--	--	
Dec. 5.....	1150	49	36	654	64	--	--	--	--	--	--	--	--	--	--	--	--	
Dec. 6.....	0825	49	20	126	6.8	--	--	--	--	--	--	--	--	--	--	--	--	
Dec. 7.....	0840	49	6.8	56	1.0	--	--	--	--	--	--	--	--	--	--	--	--	
Dec. 23.....	0910	41	.50	10	T	--	--	--	--	--	--	--	--	--	--	--	--	
Jan. 20, 1967.....	1625	48	1.4	50	.2	--	--	--	--	--	--	--	--	--	--	--	--	
Jan. 21.....	1045	49	771	3880	8080	46	57	71	81	91	98	100	--	--	--	--	--	VPWC
Jan. 21.....	1605	51	852	2880	6630	--	--	--	--	--	--	--	--	--	--	--	--	
Jan. 22.....	1350	46	34	211	19	--	--	--	--	--	--	--	--	--	--	--	--	
Jan. 24.....	0815	42	797	2460	5290	40	49	57	68	78	89	98	100	--	--	--	--	VPWC
Jan. 24.....	1800	48	129	540	188	--	--	--	--	--	--	--	--	--	--	--	--	
Jan. 26.....	0825	47	42	104	12	--	--	--	--	--	--	--	--	--	--	--	--	
Jan. 26.....	1750	47	200	647	349	--	--	--	--	--	--	--	--	--	--	--	--	
Jan. 27.....	0815	46	109	324	95	--	--	--	--	--	--	--	--	--	--	--	--	
Jan. 28.....	1645	52	63	190	32	--	--	--	--	--	--	--	--	--	--	--	--	
Jan. 29.....	1230	55	151	570	232	--	--	--	--	--	--	--	--	--	--	--	--	
Jan. 30.....	0830	52	109	239	70	--	--	--	--	--	95	99	100	--	--	--	--	VPWC
Feb. 1.....	0905	53	48	58	7.5	--	--	--	--	--	--	--	--	--	--	--	--	
Feb. 1.....	0915	53	48	62	8.0	--	--	--	--	--	--	--	--	--	--	--	--	
Feb. 3.....	0830	49	22	114	6.8	--	--	--	--	--	--	--	--	--	--	--	--	
Feb. 6.....	0830	47	12	84	2.7	--	--	--	--	--	--	--	--	--	--	--	--	
Feb. 7.....	0830	51	11	54	1.6	--	--	--	--	--	--	--	--	--	--	--	--	
Feb. 25.....	1000	50	5.5	21	.3	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 1.....	0847	55	2.7	36	.3	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 1.....	0842	55	2.7	60	.4	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 2.....	1830	57	2.5	16	.1	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 3.....	1745	52	2.5	19	.1	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 4.....	1500	54	2.2	9	.1	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 7.....	1815	57	2.1	11	.1	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 10, 1967.....	1650	53	2.1	24	0.1	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 11.....	0810	49	3.6	25	.2	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 12.....	0810	47	6.2	28	.5	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 12.....	1300	49	12	34	1.1	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 13.....	0830	46	6.6	42	.8	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 13.....	1800	49	5.5	35	.5	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 14.....	1800	51	3.6	37	.4	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 16.....	0830	54	62	471	79	--	--	--	--	--	99	100	--	--	--	--	--	S
Mar. 17.....	1445	49	9.9	76	2.0	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 18.....	1830	57	7.3	26	.5	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 22.....	0915	56	6.2	16	.3	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 23.....	0830	56	6.2	19	.3	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 27.....	0830	52	5.1	8	.1	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 29.....	0815	48	5.1	10	.1	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 30.....	1230	47	7.3	60	1.2	--	--	--	--	--	--	--	--	--	--	--	--	
Mar. 30.....	1730	49	18	85	4.1	--	--	--	--	--	--	--	--	--	--	--	--	
Apr. 3.....	1000	55	5.1	23	.3	--	--	--	--	--	--	--	--	--	--	--	--	
Apr. 3.....	1010	55	5.1	18	.2	--	--	--	--	--	--	--	--	--	--	--	--	

T Less than 0.05 ton.

MISCELLANEOUS ANALYSES OF STREAMS IN SACRAMENTO RIVER BASIN--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967--Continued

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concent- ration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
11-3906.72. STONE CORRAL CREEK NEAR SITES, CALIF.--Continued																		
Apr. 4.....	0830	53		5.1	22	.3	--	--	--	--	--	--	--					VPWC V
Apr. 5.....	1200	52		5.3	8	.1	--	--	--	--	--	--	--					
Apr. 6.....	1630	53		14	30	1.1	--	--	--	--	--	--	--					
Apr. 11.....	0830	50		6.8	4	.1	--	--	--	--	--	--	--					
Apr. 16.....	1220	55		14	11	.4	--	--	--	--	--	--	--					
Apr. 19.....	1800	51		20	11	.6	--	--	--	--	--	--	--					
Apr. 20.....	0830	47		20	72	3.9	--	--	--	--	--	--	--					
Apr. 21.....	0830	47		598	2590	4180	51	58	69	79	88	95	99	100				
Apr. 21.....	1510	47		204	571	315	--	--	--	--	--	99	100	--				
Apr. 21.....	1100	51		39	152	16	--	--	--	--	--	--	--	--				
Apr. 22.....	1215	50		84	208	47	--	--	--	--	--	--	--	--				
Apr. 23.....	0815	48		272	541	397	--	--	--	--	--	98	100	--				
Apr. 27.....	0830	55		14	40	1.5	--	--	--	--	--	--	--	--				
May 1.....	1805	64		4.9	11	.1	--	--	--	--	--	--	--	--				
May 2.....	0818	58		4.5	16	.2	--	--	--	--	--	--	--	--				
May 2.....	0832	58		4.5	13	.2	--	--	--	--	--	--	--	--				
May 5.....	2010	59		4.2	9	.1	--	--	--	--	--	--	--	--				
May 9.....	1715	68		4.2	5	.1	--	--	--	--	--	--	--	--				
May 16, 1966.....	1715	77		1.3	8	T	--	--	--	--	--	--	--	--				
May 19.....	1700	80		.20	10	T	--	--	--	--	--	--	--	--				
May 29.....	1500	70		.10	20	T	--	--	--	--	--	--	--	--				
May 31.....	0845	64		.10	40	T	--	--	--	--	--	--	--	--				
June 6.....	1830	68		.80	11	T	--	--	--	--	--	--	--	--				
June 13.....	1900	74		2.7	45	0.3	--	--	--	--	--	--	--	--				
11-4230. BEAR RIVER NEAR AUBURN, CALIF. (Lat 39°01'00", long 121°06'21")																		
Oct. 4, 1966.....	0840	59		11	3	0.1								--				S
Nov. 7.....	1110	53		16	7	.3								--				
Nov. 22.....	1500	51		546	45	66							100					
Nov. 29.....	1500	51		706	22	42												
Dec. 2.....	1620	53		1590	21	90												S
Jan. 9, 1967.....	1010	37		29	5	.4										100		
Feb. 7.....	1015	45		740	38	76								--				
Mar. 16.....	1205	49		4580	33	408								--				
Apr. 17.....	0950	46		930	13	33							100					S
May 2.....	0910	49		905	11	27								--				
June 19.....	0910	64		452	6	7.3								--				
July 21.....	1025	71		258	4	2.8								--				
Sept. 20.....	1410	67		59	3	.5								--				

11-4335. MIDDLE FORK AMERICAN RIVER NEAR AUBURN, CALIF. (Lat 38°55'05", long 121°00'45")

Oct. 4, 1966.....	1050	67	106	2	0.6						--	--	--	--	--		
Nov. 7.....	1350	54	170	2	.9						--	--	--	--	--		
Nov. 22.....	1220	49	948	66	169						96	98	99	100	--	S	
Nov. 29.....	1245	47	1990	218	1170						67	76	90	100	--	V	
Jan. 9, 1967.....	1240	42	983	3	8.0						--	--	--	--	--		
Feb. 7.....	1310	49	2450	50	331						--	--	--	--	--		
Mar. 16.....	0945	52	6040	1080	17600						19	25	46	95	100	V	
Mar. 16.....	1515	49	12200	1500	49400						24	35	60	97	100	V	
Mar. 29.....	1140	44	2950	30	239						--	--	--	--	--		
May 2.....	1245	47	2500	30	202						--	--	--	--	--		
June 19.....	1200	58	4210	72	818						--	--	--	--	--		
Aug. 29.....	1130	58	1120	6	18						--	--	--	--	--		
Sept. 27.....	1045	64	89	2	.5						--	--	--	--	--		

11-4517.2. BEAR CREEK NEAR RUMSEY, CALIF. (Lat 39°56'36", long 122°20'40")

Oct. 13, 1966.....	1150	59		1.2	23	0.1												
Nov. 6.....	1045	54		2.4	12	.1												
Nov. 21.....	1415	50		81	142	31					100							S
Jan. 4, 1967.....	1000	39		14	1	T												
Jan. 27.....	1440	47		504	292	397					92	94	96	99	100			V
Jan. 31.....	1630	51		500	266	359					93	96	98	100				V
Mar. 7.....	1340	55		30	5	.4												
Apr. 6.....	1430	51		200	166	90					92	95	96	96	98	100		S
May 1.....	1240	59		99	15	4.0												
June 2.....	1130	58		65	99	17												
July 21.....	1345	86		3.1	20	.2												
Aug. 2.....	0725	75		2.3	24	.2												
Sept. 7.....	0920	42		.8	24	.1												

T Less than 0.05 ton.

NAPA RIVER BASIN

11-4560. NAPA RIVER NEAR ST. HELENA, CALIF.

LOCATION.—Lat 38°29'40", long 122°25'50", at gaging station 0.2 mile upstream from highway bridge, 1.3 miles northeast of Zinfandel, and 2.5 miles east of St. Helena, Napa County.

DRAINAGE AREA.—81.4 square miles.

RECORDS AVAILABLE.—Chemical analyses: October 1953 to September 1966.

Water temperatures: October 1957 to September 1967.

Sediment records: December 1956 to June 1962.

EXTREMES, 1966-67.—Water temperatures: Maximum, 81°F June 30; minimum, 47°F Nov. 25, Dec. 27.

EXTREMES, 1961-63, 1964-67.—Water temperatures: Maximum (1961-63, 1964-65, 1966-67), 82°F June 17, 1963; minimum (1961-63, 1965-67), 41°F Jan. 22, 1962.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	64	63	63	62	62	61	60	60	60	59	61	59	58	57	55	54	54	54	54	54	54	53	53	54	54	54	54	54	54	53	53	56
Minimum	63	63	62	61	60	60	59	59	58	58	59	58	56	55	54	54	54	53	53	54	54	53	52	53	54	54	54	54	52	52	53	56
November																																
Maximum	53	53	54	55	55	54	55	54	53	52	53	54	54	54	55	56	55	55	56	56	54	53	51	50	49	49	49	51	53	54	--	53
Minimum	53	53	53	54	54	54	54	53	52	52	52	53	54	54	54	55	54	54	55	54	53	51	49	48	47	48	48	49	51	53	--	52
December																																
Maximum	54	54	54	54	54	54	54	54	53	54	54	54	54	54	54	53	52	53	52	52	53	53	52	53	52	51	49	49	50	51	52	51
Minimum	53	53	54	54	53	54	54	53	53	53	53	54	54	54	53	52	52	51	52	51	51	51	51	51	52	50	49	47	48	49	50	52
January																																
Maximum	52	52	52	52	53	52	53	54	53	55	56	56	57	57	57	56	56	56	56	56	57	57	55	55	55	54	56	56	57	--	--	54
Minimum	50	50	50	51	51	49	49	51	51	52	55	55	54	55	54	54	53	53	54	55	56	54	54	52	53	54	55	56	56	--	--	52
February																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	56	57	57	56	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	55	54	53	52	--	--	--	--	--	--	--	--	--
March																																
Maximum	58	60	57	57	58	60	59	61	61	59	56	54	53	54	57	58	57	56	57	55	59	57	59	59	57	57	61	55	56	53	52	57
Minimum	54	54	54	52	52	54	55	55	56	55	53	52	51	51	52	55	54	54	53	55	55	55	55	56	53	53	53	53	50	49	51	53
April																																
Maximum	53	55	56	53	53	53	54	57	58	53	55	59	55	57	57	56	54	51	52	53	52	53	52	56	56	58	58	59	58	58	--	55
Minimum	49	50	51	52	52	52	52	51	52	52	51	51	52	52	52	50	50	50	50	49	51	50	52	51	51	50	52	50	50	51	--	50
May																																
Maximum	61	60	62	64	58	65	67	68	61	62	61	63	66	68	69	70	72	71	70	71	73	74	74	71	70	69	70	70	68	70	64	67
Minimum	52	53	54	54	55	53	56	58	58	53	53	52	54	56	58	60	61	61	60	61	62	63	60	60	60	59	60	60	60	58	58	57
June																																
Maximum	61	59	66	68	63	62	68	70	69	71	71	71	73	74	74	76	76	73	76	77	78	79	78	78	75	76	78	80	80	81	--	72
Minimum	60	57	57	57	60	58	59	61	61	61	62	62	64	64	64	66	65	66	66	67	68	67	68	68	69	69	70	71	71	--	--	64
July																																
Maximum	80	79	79	79	76	77	75	74	75	73	79	80	79	79	79	77	77	77	77	76	77	76	75	76	76	78	76	76	77	74	75	76
Minimum	70	70	70	71	71	69	68	68	68	68	68	73	72	71	71	70	70	69	68	69	70	71	71	70	68	68	69	70	72	71	70	69
August																																
Maximum	73	73	73	72	72	72	72	72	71	70	70	72	73	74	74	72	72	72	71	70	70	70	71	70	70	70	70	68	69	69	69	71
Minimum	69	68	67	67	66	67	66	68	67	66	66	66	68	69	69	67	68	68	67	66	65	66	67	67	68	67	66	65	63	64	65	66
September																																
Maximum	70	70	71	71	70	70	70	67	67	68	68	69	68	67	66	67	67	66	66	67	66	67	66	65	66	65	65	64	64	63	--	67
Minimum	65	66	68	67	66	65	67	64	63	63	65	64	65	63	63	63	63	64	63	64	64	65	64	64	64	63	64	62	61	63	--	64

BOLINAS LAGOON BASIN

11-4601.7. PINE CREEK AT BOLINAS, CALIF.

LOCATION.--Lat 37°55'07", long 122°41'31", at gaging station, 100 feet upstream from highway bridge, 0.4 mile upstream from mouth, and 0.9 mile north of Bolinas, Marin County.

DRAINAGE AREA.--7.83 square miles.

RECORDS AVAILABLE.--Water temperatures: May to September 1967.

Sediment records: June to September 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Aver- age
	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		
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
December	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
January	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
February	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
March	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
April	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
June	--	53	56	55	55	--	--	--	54	--	--	55	--	60	55	--	64	--	55	--	--	58	--	55	--	56	--	57	--	54	--	--	
July	--	--	59	--	--	61	60	--	--	58	--	60	--	--	--	59	--	--	59	--	--	--	--	59	--	64	--	--	--	64	--	--	
August	--	--	62	--	--	60	60	--	--	59	57	--	--	60	--	59	--	--	--	61	--	--	59	--	--	--	63	--	--	61	--	--	
September	--	--	--	62	--	59	61	--	--	--	61	--	--	61	--	--	63	--	--	62	--	--	--	61	--	--	59	--	--	--	--	--	

BOLINAS LAGOON BASIN--Continued

11-4601.7, PINE CREEK AT BOLINAS, CALIF.--Continued

Suspended sediment, June to September 1967--Continued
(Where no concentrations are reported, loads are estimated)

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..							4.2	5	0.1
2..							50	172	28
3..							40	60	7.2
4..							21	16	.9
5..							15	10	.4
6..							12	7	.2
7..							10	6	.2
8..							9.6	5	.1
9..							8.7	4	.1
10..							8.2	4	.1
11..							7.3	5	.1
12..							6.9	6	.1
13..							6.4	6	.1
14..							6.0	4	.1
15..							6.0	4	.1
16..							6.0	3	T
17..							5.2	--	T
18..							5.2	4	.1
19..							5.2	4	.1
20..							5.0	--	T
21..							4.7	--	T
22..							4.6	2	T
23..							4.4	--	T
24..							4.2	--	T
25..							4.0	--	T
26..							3.8	2	T
27..							3.6	--	T
28..							3.4	--	T
29..							3.2	3	T
30..							3.0	--	T
31..							--	--	--
Total							276.8	--	38.3
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2.8	--		1.4	--		1.0	--	
2..	2.6	--		1.6	--		1.0	--	
3..	2.5	3		1.8	3		1.1	--	
4..	2.4	--		1.7	--		1.2	1	
5..	2.8	--		1.4	--		1.1	--	
6..	2.9	6		1.7	--		1.1	1	
7..	2.9	4		1.7	2		1.0	1	
8..	2.6	--		1.8	--		1.0	--	
9..	2.9	--		2.1	--		1.0	--	
10..	2.6	6		2.0	2		1.0	--	
11..	1.5	--		1.9	5		.9	1	
12..	1.4	4		1.8	--		.8	--	
13..	1.4	--		1.4	--		.9	--	
14..	1.6	--		1.5	8		1.0	1	
15..	1.6	--		1.7	--		1.0	--	
16..	1.7	--		1.6	--		.9	--	
17..	1.8	6		1.5	2		1.1	--	
18..	1.8	--		1.3	--		1.1	1	
19..	1.6	--		1.4	--		1.0	--	
20..	1.3	5		1.5	--		.9	--	
21..	1.3	--		1.3	2		1.0	1	
22..	1.3	--		1.3	--		1.0	--	
23..	1.4	--		1.4	--		1.0	--	
24..	1.4	6		1.4	2		1.1	--	
25..	1.4	--		1.2	--		1.0	1	
26..	1.4	--		1.3	--		1.0	--	
27..	1.6	7		1.3	--		1.0	--	
28..	1.5	--		1.3	1		1.0	1	
29..	1.5	--		1.2	--		1.1	--	
30..	1.5	--		1.2	--		1.0	--	
31..	1.5	2		1.0	1		--	--	
Total	58.5	--	0.7	46.7	--	0.3	3.3	--	T
Total discharge for period June 1 to Sept. 30, 1967 (cfs-days).....									412.3
Total load for period June 1 to Sept. 30, 1967 (tons).....									39.3

S Computed by subdividing day.
T Less than 0.05 ton.

MISCELLANEOUS ANALYSES OF STREAMS IN BOLINAS LAGOON BASIN

Periodic determinations of suspended-sediment discharge, May to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concent- ration (ppm)	Sediment discharge (tons per day)	Percent finer than size indicated, in millimeters										Method of analysis
11-4601.6. MORSES CREEK AT BOLINAS, CALIF. (Lat 37°55'09", long 122°40'09")																	
May 18, 1967.....	1455	63		0.07	11	T											
June 2.....	1000	53		1.3	47	0.2											
June 3.....	1130	56		1.2	12	T											
June 4.....	1100	55		.84	3	T											
June 15.....	1100	55		.03	3	T											
July 7.....	0945	58		.02	10	T											
Aug. 10.....	1235	70		.01	4	T											

T Less than 0.05 ton.

MISCELLANEOUS ANALYSES OF STREAMS IN BOLINAS LAGOON BASIN--Continued

Periodic determinations of suspended-sediment discharge, May to September 1967--Continued
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concent- ration (ppm)	Sediment discharge (tons per day)	Percent finer than size indicated, in millimeters										Method of analysis
11-4601.65. AUDUBON CREEK NEAR BOLINAS, CALIF. (Lat 37°55'47", long 122°40'51")																	
May 18, 1967.....	1440	63		0.43	1	T											
June 15.....	1130	55		.38	1	T											
July 7.....	1045	57		.25	2	T											
Aug. 10.....	1245	71		.08	2	T											
Sept. 6.....	1215	60		.05	1	T											

T Less than 0.05 ton.

SALMON CREEK BASIN

11-4609.2. SALMON CREEK AT BODEGA, CALIF.

LOCATION.--Lat 38°20'54", long 122°58'45", temperature recorder at gaging station in Estero Americano Grant, on left bank 100 feet upstream from private road bridge, 0.3 mile upstream from unnamed tributary, and 0.4 mile northwest of Bodega, Sonoma County.
DRAINAGE AREA.--15.7 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 72°F May 15, 16, 21, 22.

EXTREMES, 1964-67.--Water temperatures: Maximum, 74°F Apr. 26, 1965; minimum (1964-66), freezing point on several days in December 1965.

REMARKS.--No flow Oct. 1 to Nov. 5.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November																																
Maximum	--	--	--	--	--	53	57	52	49	49	49	53	54	54	55	58	50	56	55	55	52	52	50	47	46	48	45	47	52	52	--	51
Minimum	--	--	--	--	--	48	47	45	40	42	45	49	52	53	54	50	43	50	54	52	48	43	40	37	37	38	39	43	47	45	--	45
December																																
Maximum	53	51	53	51	52	52	49	49	49	50	54	49	52	47	47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	50	49	49	50	48	48	44	43	44	46	47	47	46	47	46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	49	49	49	48	45	44	41	48	50	48	46	49	46	46	49	50	54	52	52
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	38	38	40	39	34	34	37	40	45	39	39	40	38	43	46	48	50	48	47	--
February																																
Maximum	50	53	50	52	55	53	51	50	49	55	51	52	51	47	46	47	52	52	52	53	51	50	49	46	50	51	53	54	--	--	--	50
Minimum	43	42	40	42	43	41	42	42	42	42	40	44	44	41	38	37	40	42	42	41	42	37	37	37	42	42	40	40	40	42	--	40
March																																
Maximum	52	53	49	49	49	53	54	55	55	52	49	46	45	49	52	57	56	56	55	51	58	53	57	54	50	53	56	50	52	47	51	52
Minimum	43	44	42	37	38	46	44	42	41	43	42	42	39	39	42	50	45	47	43	48	49	47	49	41	41	43	40	44	38	42	41	43
April																																
Maximum	51	54	55	51	55	52	53	56	55	48	53	55	51	55	55	53	49	50	52	50	49	54	50	56	55	55	56	52	54	57	--	53
Minimum	38	39	41	44	45	46	47	46	50	44	40	40	43	43	44	40	41	40	40	39	43	41	45	44	42	42	44	40	39	40	--	42
May																																
Maximum	56	59	59	60	59	62	70	64	57	61	60	61	64	68	72	72	70	64	65	69	72	72	69	65	64	63	62	62	62	61	64	
Minimum	41	44	45	46	46	46	51	54	50	48	48	46	46	50	53	56	59	59	57	58	59	59	58	57	54	56	55	56	54	53	53	52
June																																
Maximum	60	56	64	63	57	63	65	65	64	66	63	62	63	62	61	66	63	62	63	64	70	67	66	64	64	63	65	68	71	71	--	64
Minimum	54	54	51	53	54	54	53	55	56	56	56	55	56	57	57	56	58	58	58	58	56	58	57	60	59	58	58	58	60	62	--	56
July																																
Maximum	66	64	68	67	64	64	63	65	66	68	70	69	67	66	64	65	65	66	64	66	67	65	64	64	65	68	68	68	67	66	66	65
Minimum	62	60	60	62	61	57	58	59	59	60	60	62	61	60	59	60	60	58	56	58	58	58	59	58	57	57	56	57	60	61	60	57
August																																
Maximum	65	65	65	66	66	64	63	62	60	62	64	65	66	66	63	64	64	65	64	61	65	61	64	62	62	63	62	62	64	62	59	63
Minimum	59	60	59	58	56	56	55	57	58	57	57	56	57	57	57	57	57	57	56	56	56	53	54	56	56	56	56	58	54	53	54	56
September																																
Maximum	60	61	62	62	62	62	61	60	61	59	60	62	60	59	59	60	61	63	66	64	61	63	64	58	62	64	59	59	60	61	--	61
Minimum	54	53	56	54	54	53	53	54	53	51	51	51	53	54	54	54	56	56	54	54	56	58	57	57	56	56	56	56	56	56	--	54

RUSSIAN RIVER BASIN

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.

LOCATION.--Lat 39°12'07", long 123°11'55", at gaging station in Yokayo Rancho Grant, 200 feet downstream from York Creek, 0.7 mile upstream from East Fork, and 3.6 miles north of Ukiah, Mendocino County.

DRAINAGE AREA.--99.7 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1967.

Sediment records: January 1964 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 2,160 ppm Jan. 26; minimum daily, 1 ppm on several days in October and July.

Sediment loads: Maximum daily, 21,500 tons Jan. 21; minimum daily, less than 0.05 ton on many days.

EXTREMES, 1964-67.--Sediment concentrations: Maximum daily, 9,480 ppm 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.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	--	--	70	--	68	--	67	--	--	70	--	69	--	68	--	--	67	--	66	--	65	--	--	66	--	67	--	68	--	--	66	--
November	--	66	--	67	--	--	60	--	60	--	60	--	--	59	59	55	55	56	55	55	54	54	53	48	54	--	--	52	--	54	--	
December	54	53	52	52	51	51	51	--	52	52	52	--	52	--	51	--	--	51	--	52	--	52	--	50	--	--	--	44	43	--	42	--
January	--	43	--	42	--	43	--	--	44	--	44	--	46	--	--	44	--	46	--	45	48	49	48	47	45	48	49	52	54	52	50	--
February	53	53	49	--	--	55	--	54	--	56	--	--	51	--	47	--	48	--	--	52	--	52	--	52	--	--	52	--	--	52	--	--
March	50	--	--	--	--	55	--	53	--	48	--	--	48	--	49	--	49	--	--	52	--	54	--	50	--	--	49	--	46	--	47	--
April	--	--	45	--	50	--	51	--	--	49	--	49	--	49	--	--	48	--	51	--	51	--	--	50	--	53	--	54	--	--	--	--
May	59	--	65	--	64	--	--	67	59	59	65	--	--	--	70	--	78	--	--	78	--	--	78	--	66	--	72	--	--	70	--	75
June	--	57	--	--	--	66	--	--	--	--	--	--	--	79	--	--	--	--	--	--	72	--	--	--	--	--	--	--	78	--	--	--
July	--	--	--	--	71	--	--	--	--	--	72	88	--	--	--	--	--	--	73	--	--	--	--	--	--	--	85	--	--	--	--	--
August	--	78	--	--	--	--	--	65	85	--	--	--	--	--	--	85	--	--	--	--	--	--	80	--	--	--	--	--	--	76	--	--
September	50	--	--	--	--	85	--	--	--	--	--	70	74	--	--	--	--	--	--	--	80	--	--	--	--	--	--	81	--	--	--	--

RUSSIAN RIVER BASIN--Continued

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.2	--		0.1	--	T	270	179	S 163
2..	.2	--		.2	3	T	1810	1470	S 13000
3..	.2	1		.2	--	T	1070	964	S 2920
4..	.1	--		.5	2	T	1510	603	S 3300
5..	.1	2		1.0	--	T	1870	645	S 3950
6..	.1	--		3.0	--	T	678	140	256
7..	.1	1		5.7	4	.1	470	50	63
8..	.1	--		6.2	--	T	345	37	34
9..	.1	--		6.2	2	T	306	40	33
10..	.1	1		6.2	--	T	534	105	S 168
11..	.1	--		7.1	3	.1	312	25	21
12..	.1	1		11	3	.1	253	29	20
13..	.1	--		16	3	.1	308	40	33
14..	.1	1		50	24	S 4.5	264	25	18
15..	.1	--		126	58	S 20	204	13	7.2
16..	.1	--		268	156	S 142	174	9	4.2
17..	.1	2		57	20	3.1	150	6	2.4
18..	.1	--		29	6	.5	128	5	1.7
19..	.1	1		244	510	S 482	113	5	1.5
20..	.1	--		985	1940	S 5920	103	5	1.4
21..	.1	1		1030	1070	S 3330	90	5	1.2
22..	.1	--		562	468	S 984	79	5	1.1
23..	.1	--		176	33	16	75	4	.8
24..	.1	6		99	15	3.5	69	4	.7
25..	.1	--		72	6	1.2	62	5	.8
26..	.1	2		56	4	.6	57	5	.8
27..	.1	--		47	3	.4	51	6	.8
28..	.1	3		72	25	4.9	47	4	.5
29..	.1	--		82	41	9.1	43	2	.2
30..	.1	--		60	45	7.3	42	2	.2
31..	.1	3		--	--	--	40	2	.2
Total	3.4	--	0.0	4078.4	--	11129.6	11527	--	24004.7
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	39	2	0.2	755	260	330	46	10	1.2
2..	39	1	.1	510	128	183	44	9	1.1
3..	38	1	.1	408	133	147	43	9	1.0
4..	37	2	.2	320	100	86	41	8	.9
5..	37	3	.3	260	83	58	40	7	.8
6..	36	3	.3	208	70	39	39	7	.7
7..	36	3	.3	176	54	26	38	10	1.0
8..	34	3	.3	149	38	15	37	50	3.0
9..	34	130	12	135	18	6.6	36	40	3.9
10..	33	170	15	123	7	2.3	324	281	S 870
11..	33	70	6.2	109	7	2.1	634	628	S 1348
12..	32	33	2.9	101	7	1.9	643	335	580
13..	31	7	.6	95	81	21	752	270	548
14..	30	3	.2	90	90	22	570	180	280
15..	29	5	.4	91	94	23	568	74	S 159
16..	29	9	.7	88	50	12	1470	498	S 1920
17..	29	6	.5	79	18	3.8	708	100	189
18..	27	2	.1	73	9	1.8	515	63	88
19..	28	2	.2	68	6	1.1	380	47	48
20..	2580	1440	S 18100	62	3	.5	820	79	S 204
21..	3890	1820	S 21500	58	3	.5	555	28	42
22..	1030	620	1720	56	2	.3	415	23	26
23..	520	250	351	55	2	.3	492	33	44
24..	1150	1980	S 6460	55	3	.4	356	21	20
25..	831	575	S 1410	65	3	.5	284	14	11
26..	2680	2160	S 20100	54	2	.3	232	10	6.3
27..	1840	1170	S 6220	50	2	.3	191	6	3.1
28..	1810	1540	S 7830	48	2	.3	191	7	3.6
29..	2370	1760	S 12400	--	--	--	176	7	3.3
30..	1430	918	S 3790	--	--	--	423	100	K 176
31..	1360	787	S 3220	--	--	--	822	190	422
Total	22122	--	103141.6	4561	--	1185.0	11877	--	7818.9

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

RUSSIAN RIVER BASIN--Continued

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	635	100	170	146	13	5.1	28	6	0.5
2..	480	48	62	133	13	4.7	91	90	22
3..	432	32	37	123	13	4.3	60	35	5.7
4..	372	30	30	113	13	4.0	42	5	.6
5..	340	27	25	107	14	4.0	36	5	.5
6..	745	210	K 440	99	11	2.9	33	3	.3
7..	645	150	261	88	7	1.7	29	4	.3
8..	452	62	76	86	6	1.4	26	6	.4
9..	352	28	27	81	7	1.5	24	7	.5
10..	434	78	S 116	91	6	1.5	22	8	.5
11..	456	85	100	82	5	1.1	22	8	.5
12..	340	55	50	76	4	.8	20	7	.4
13..	288	54	42	70	4	.8	19	8	.4
14..	300	90	73	64	5	.9	17	10	.5
15..	260	40	28	57	6	.9	16	9	.4
16..	216	25	15	55	6	.9	16	8	.3
17..	549	198	S 370	51	6	.8	17	7	.3
18..	590	170	270	47	6	.8	15	6	.2
19..	456	90	111	45	5	.6	15	5	.2
20..	368	50	50	43	5	.6	14	4	.2
21..	344	30	28	40	5	.5	13	3	.1
22..	336	32	29	39	5	.5	14	3	.1
23..	485	110	140	36	5	.5	12	4	.1
24..	380	40	41	34	5	.5	12	4	.1
25..	304	20	16	30	5	.4	11	5	.1
26..	256	15	10	29	3	.2	11	6	.2
27..	248	15	10	28	3	.2	10	6	.2
28..	212	16	9.2	27	3	.2	9.1	7	.2
29..	191	14	7.2	27	3	.2	8.1	8	.2
30..	164	14	6.2	27	5	.4	8.1	8	.2
31..	--	--	--	26	5	.4	--	--	--
Total	11630	--	2649.6	2000	--	43.3	670.3	--	36.2
	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	6.7	7	0.1	1.4	--	--	0.4	--	--
2..	6.2	6	.1	1.4	2	.3	.3	--	--
3..	5.8	5	.1	1.4	--	.3	.3	--	--
4..	5.2	4	.1	1.4	--	.2	.2	--	--
5..	4.1	3	T	1.4	--	.2	.2	--	--
6..	4.1	--	T	1.4	--	.2	.2	7	.7
7..	3.8	--	T	1.2	--	.2	.2	--	--
8..	3.8	--	T	1.2	2	.2	.2	--	--
9..	3.0	--	T	1.2	--	.1	.1	--	--
10..	2.7	--	T	1.2	--	.1	.1	--	--
11..	2.4	1	T	1.1	--	.1	.1	--	--
12..	2.2	6	T	1.1	--	.1	.1	6	.6
13..	2.2	--	T	1.1	--	.1	.1	4	.4
14..	2.1	--	T	1.0	--	.1	.1	--	--
15..	2.0	--	T	1.0	--	.1	.1	--	--
16..	2.0	--	T	.9	7	.2	.2	--	--
17..	2.1	--	T	.9	--	.2	.2	--	--
18..	2.0	--	T	.8	--	.2	.2	--	--
19..	2.0	6	T	.8	--	.2	.2	--	--
20..	1.8	--	T	.7	--	.2	.2	--	--
21..	1.8	--	T	.7	--	.3	.3	5	.5
22..	2.0	--	T	.7	--	.3	.3	--	--
23..	1.8	--	T	.6	3	.3	.3	--	--
24..	1.8	--	T	.6	--	.4	.4	--	--
25..	1.8	--	T	.6	--	.4	.4	--	--
26..	1.6	--	T	.6	--	.5	.5	--	--
27..	1.5	6	T	.6	--	.5	.5	--	--
28..	1.5	--	T	.5	--	.5	.5	5	.5
29..	1.6	--	T	.5	--	.6	.6	--	--
30..	1.5	--	T	.4	5	.6	.6	--	--
31..	1.6	--	T	.4	--	--	--	--	--
Total	84.7	--	1.1	28.8	--	0.2	8.1	--	0.1

Total discharge for year (cfs-days)..... 68390.7
 Total load for year (tons)..... 149210.3

S Computed by subdividing day.
 T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

RUSSIAN RIVER BASIN--Continued

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (° F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Dec. 3, 1966.....	1045	52		1010	1040		--	--	--	--	--	56	72	92	100			V
Jan. 20, 1967.....	0900	45		1640	715		--	--	--	--	--	92	98	100	--			V
Jan. 21.....	1025	48		4730	1940		23	32	43	53	69	83	98	100	--			VPWC
Jan. 21.....	1430	48		3210	1920		22	31	41	52	65	79	96	100	--			VPWC
Jan. 22.....	1640	--		884	536		--	--	--	--	--	54	73	96	100			V
Jan. 24.....	1715	47		1410	1940		--	--	--	--	--	44	60	86	99	100		V
Jan. 26.....	1710	48		2850	2360		--	--	--	--	--	43	64	90	100			V

RUSSIAN RIVER BASIN--Continued

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, February 1964 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 6, 1964.....	5	4	MAY 27, 1964.....	10	7
FEB. 19.....	3	3	JUNE 1.....	5	7
FEB. 20.....	2	4	JUNE 3.....	5	7
FEB. 21.....	5	4	JUNE 5.....	29	5
FEB. 22.....	3	2.5	JUNE 8.....	5	5
FEB. 23.....	3	2.5	JUNE 10.....	6	5
FEB. 24.....	3	2	JUNE 12.....	6	7
FEB. 25.....	4	2.5	JUNE 15.....	10	6
FEB. 26.....	5	2.5	JUNE 17.....	4	5
FEB. 27.....	2	2.5	JUNE 19.....	4	5
FEB. 28.....	6	4	JUNE 22.....	3	5
FEB. 29.....	4	3.5	JUNE 24.....	8	7
FEB. 29.....	4	3.5	JUNE 26.....	8	5
MAR. 1.....	16	9.5	JUNE 29.....	5	5
MAR. 2.....	19	14	JULY 1.....	4	5
MAR. 3.....	5	10	JULY 3.....	4	5
MAR. 4.....	7	7	JULY 6.....	5	5
MAR. 5.....	6	5.5	JULY 8.....	4	5
MAR. 6.....	8	5.5	JULY 10.....	4	5
MAR. 7.....	2	2.5	JULY 13.....	4	5
MAR. 8.....	2	3	JULY 15.....	4	5
MAR. 9.....	5	2.5	JULY 17.....	3	3
MAR. 10.....	3	2	JULY 20.....	3	3
MAR. 11.....	48	3	JULY 21.....	9	5
MAR. 12.....	50	63	JULY 22.....	5	5
MAR. 13.....	28	37	JULY 24.....	5	5
MAR. 14.....	11	7	JULY 29.....	5	5
MAR. 16.....	8	3	JULY 31.....	6	6
MAR. 17.....	23	17	AUG. 3.....	11	6
MAR. 18.....	39	39	AUG. 5.....	7	3
MAR. 19.....	6	0	AUG. 7.....	8	3
MAR. 20.....	4	0	AUG. 24.....	11	6
MAR. 21.....	2	0	AUG. 26.....	10	8
MAR. 22.....	21	20	AUG. 28.....	13	5
MAR. 23.....	18	21	AUG. 31.....	10	9
MAR. 24.....	20	18	NOV. 9.....	472	476
MAR. 25.....	7	7	NOV. 10.....	858	412
MAR. 26.....	6	0	NOV. 11.....	664	219
MAR. 27.....	3	0	NOV. 12.....	194	150
MAR. 28.....	11	4	NOV. 13.....	60	40
MAR. 29.....	3	0	NOV. 14.....	17	15
MAR. 30.....	3	0	NOV. 15.....	4	7
MAR. 31.....	2	0	NOV. 16.....	5	3
APR. 1.....	4	0	NOV. 17.....	107	87
APR. 2.....	3	0	NOV. 18.....	228	128
APR. 3.....	3	0	NOV. 19.....	2	3
APR. 4.....	3	0	NOV. 20.....	54	58
APR. 5.....	2	0	NOV. 21.....	55	47
APR. 6.....	4	0	NOV. 22.....	53	48
APR. 7.....	4	0	NOV. 23.....	227	204
APR. 8.....	11	3	NOV. 24.....	6	10
APR. 14.....	3	0	NOV. 25.....	29	24
APR. 15.....	2	0	NOV. 26.....	8	12
APR. 17.....	2	0	NOV. 27.....	32	15
APR. 20.....	4	0	NOV. 28.....	2100	504
APR. 22.....	4	0	NOV. 29.....	95	58
APR. 24.....	2	0	NOV. 30.....	34	19
APR. 27.....	22	20	DEC. 1.....	190	132
APR. 29.....	5	0	DEC. 2.....	179	112
MAY 1.....	40	33	DEC. 3.....	40	24
MAY 4.....	42	35	DEC. 4.....	18	13
MAY 6.....	12	7	DEC. 5.....	11	13
MAY 8.....	7	0	DEC. 6.....	41	30
MAY 11.....	4	5	DEC. 7.....	40	28
MAY 13.....	4	5	DEC. 8.....	72	123
MAY 15.....	12	11	DEC. 9.....	102	180
MAY 19.....	7	0	DEC. 10.....	97	108
MAY 20.....	7	7	DEC. 11.....	59	32
MAY 22.....	14	7			
MAY 25.....	4	5			

RUSSIAN RIVER BASIN--Continued

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
DEC. 12, 1964.....	18	12	FEB. 23, 1965.....	4	2
DEC. 13.....	10	9	FEB. 24.....	131	38
DEC. 14.....	9	9	FEB. 25.....	6	2
DEC. 15.....	24	18	FEB. 26.....	6	2.5
DEC. 16.....	7	8	FEB. 27.....	63	33
DEC. 17.....	5	8	FEB. 28.....	8	4.5
DEC. 18.....	4	7	MAR. 1.....	9	4.5
DEC. 19.....	234	192	MAR. 2.....	6	4.5
DEC. 20.....	230	168	MAR. 3.....	21	19
DEC. 21.....	5770	1310	MAR. 4.....	12	12
DEC. 22.....	10600	2260	MAR. 5.....	13	5
DEC. 24.....	2130	602	MAR. 6.....	4	3
DEC. 26.....	2400	868	MAR. 7.....	4	2
DEC. 27.....	588	300	MAR. 8.....	4	2.5
DEC. 28.....	799	300	MAR. 9.....	10	6.8
DEC. 29.....	1440	353	MAR. 10.....	5	2
DEC. 30.....	718	330	MAR. 11.....	10	5
DEC. 31.....	815	168	MAR. 12.....	14	10
JAN. 1, 1965.....	256	90	MAR. 13.....	9	7.4
JAN. 2.....	336	110	MAR. 14.....	10	10
JAN. 3.....	1300	260	MAR. 15.....	69	32
JAN. 4.....	2480	360	MAR. 16.....	15	13
JAN. 6.....	2240	540	MAR. 17.....	161	66
JAN. 7.....	772	252	MAR. 18.....	16	11
JAN. 8.....	382	138	MAR. 19.....	8	8.6
JAN. 9.....	200	92	MAR. 20.....	14	7
JAN. 10.....	300	80	MAR. 21.....	5	5.5
JAN. 11.....	400	87	MAR. 22.....	7	9
JAN. 12.....	118	44	MAR. 23.....	5	8.7
JAN. 13.....	44	33	MAR. 24.....	8	8
JAN. 14.....	167	37	MAR. 25.....	5	5
JAN. 15.....	46	21	MAR. 26.....	23	11
JAN. 16.....	40	18	MAR. 27.....	723	300
JAN. 17.....	43	13	MAR. 29.....	19	15
JAN. 18.....	52	16	MAR. 30.....	54	72
JAN. 19.....	212	90	MAR. 31.....	13	12
JAN. 20.....	193	84	APR. 1.....	19	15
JAN. 21.....	182	112	APR. 2.....	9	5
JAN. 22.....	263	105	APR. 3.....	4	3.6
JAN. 23.....	4660	450	APR. 4.....	8	6.5
JAN. 24.....	723	210	APR. 5.....	9	7
JAN. 25.....	245	54	APR. 6.....	5	3
JAN. 26.....	145	36	APR. 7.....	167	105
JAN. 27.....	170	104	APR. 8.....	170	105
JAN. 28.....	155	100	APR. 9.....	1150	300
JAN. 29.....	111	60	APR. 10.....	380	200
JAN. 30.....	37	10	APR. 11.....	51	22
JAN. 31.....	27	8.5	APR. 12.....	48	22
FEB. 1.....	21	9.5	APR. 13.....	30	17
FEB. 2.....	230	100	APR. 14.....	36	20
FEB. 3.....	179	104	APR. 16.....	210	74
FEB. 4.....	26	6	APR. 17.....	65	25
FEB. 5.....	98	76	APR. 18.....	648	240
FEB. 6.....	26	10	APR. 19.....	39	60
FEB. 7.....	13	6	APR. 20.....	42	48
FEB. 8.....	41	21	APR. 21.....	92	50
FEB. 9.....	20	10	APR. 22.....	84	48
FEB. 10.....	13	7	APR. 23.....	38	25
FEB. 11.....	32	13	APR. 26.....	30	23
FEB. 12.....	17	8.5	APR. 27.....	16	20
FEB. 13.....	10	6	APR. 28.....	13	7
FEB. 14.....	7	5	APR. 29.....	43	27
FEB. 15.....	8	3.5	APR. 30.....	7	5
FEB. 16.....	6	3.5	MAY 1.....	6	5
FEB. 17.....	9	5	MAY 3.....	5	5
FEB. 18.....	10	5.5	MAY 4.....	3	1
FEB. 19.....	11	6.5	MAY 5.....	4	2.75
FEB. 20.....	5	3.5	MAY 6.....	15	26
FEB. 21.....	5	2	MAY 7.....	20	30
FEB. 22.....	6	3.5	MAY 8.....	6	2.75

RUSSIAN RIVER BASIN--Continued

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
MAY 9, 1965.....	6	2	NOV. 16, 1965.....	8	10
MAY 10.....	7	3.2	NOV. 17.....	23	14
MAY 11.....	13	7.5	NOV. 18.....	23	25
MAY 12.....	7	2.2	NOV. 19.....	47	40
MAY 13.....	11	12	NOV. 20.....	46	35
MAY 14.....	187	80	NOV. 21.....	14	12
MAY 15.....	7	1.6	NOV. 22.....	10	11
MAY 16.....	11	1.8	NOV. 24.....	257	180
MAY 17.....	13	5	NOV. 25.....	39	30
MAY 19.....	10	7.5	NOV. 26.....	34	45
MAY 21.....	7	4	NOV. 27.....	9	10
MAY 24.....	6	2.6	NOV. 28.....	14	10
MAY 27.....	9	1	NOV. 29.....	24	12
MAY 28.....	7	4	NOV. 30.....	13	12
MAY 31.....	11	2	DEC. 1.....	7	10
JUNE 2.....	4	1.2	DEC. 2.....	10	6
JUNE 3.....	12	2.7	DEC. 3.....	3	8
JUNE 7.....	3	1.1	DEC. 4.....	6	6
JUNE 9.....	7	1.1	DEC. 5.....	3	2
JUNE 14.....	2	.5	DEC. 6.....	5	4
JUNE 16.....	6	1	DEC. 7.....	5	5
JUNE 21.....	5	1	DEC. 8.....	13	20
JUNE 23.....	4	1.5	DEC. 11.....	13	20
JUNE 24.....	49	2	DEC. 12.....	17	15
JUNE 25.....	1	1.5	DEC. 13.....	10	20
JUNE 28.....	1	1.5	DEC. 14.....	5	2
JUNE 30.....	1	--	DEC. 15.....	8	2
JULY 2.....	17	5	DEC. 16.....	3	1
JULY 5.....	2	1.5	DEC. 17.....	3	1
JULY 7.....	2	2	DEC. 18.....	3	1
JULY 12.....	3	2.3	DEC. 19.....	2	1
JULY 19.....	2	2	DEC. 22.....	9	6
JULY 21.....	5	2	DEC. 29.....	218	134
JULY 26.....	5	5	DEC. 30.....	185	126
JULY 27.....	2	2	DEC. 31.....	192	147
JULY 28.....	6	3	JAN. 1, 1966.....	67	44
JULY 30.....	4	2	JAN. 2.....	493	189
AUG. 3.....	4	3	JAN. 3.....	638	225
AUG. 6.....	2	2	JAN. 4.....	1130	620
AUG. 10.....	2	2	JAN. 5.....	1160	630
AUG. 13.....	1	3	JAN. 6.....	648	200
AUG. 17.....	1	1	JAN. 7.....	163	90
AUG. 20.....	1	3.5	JAN. 8.....	48	44
AUG. 24.....	9	3	JAN. 9.....	48	42
AUG. 27.....	3	4	JAN. 10.....	36	40
AUG. 31.....	2	2	JAN. 11.....	30	32
SEPT. 3.....	3	4	JAN. 12.....	34	35
SEPT. 7.....	3	9	JAN. 13.....	22	30
SEPT. 10.....	3	7	JAN. 14.....	11	25
SEPT. 14.....	4	7	JAN. 15.....	12	25
SEPT. 17.....	3	10	JAN. 16.....	12	19
SEPT. 21.....	3	10	JAN. 17.....	10	15
SEPT. 24.....	4	7	JAN. 18.....	14	22
SEPT. 28.....	1	.3	JAN. 19.....	32	37
OCT. 1.....	1	.3	JAN. 20.....	10	12
OCT. 5.....	0	.6	JAN. 21.....	9	14
OCT. 8.....	3	4	JAN. 22.....	9	14
OCT. 12.....	3	2.5	JAN. 23.....	21	30
OCT. 15.....	4	3	JAN. 24.....	22	26
OCT. 19.....	1	.6	JAN. 25.....	17	15
OCT. 22.....	1	.6	JAN. 26.....	127	75
OCT. 26.....	1	.6	JAN. 27.....	127	108
OCT. 29.....	1	.3	JAN. 28.....	19	30
NOV. 2.....	1	.6	JAN. 29.....	128	104
NOV. 5.....	1	.3	JAN. 30.....	131	100
NOV. 9.....	2	4	JAN. 31.....	62	50
NOV. 12.....	39	40	FEB. 1.....	218	140
NOV. 13.....	37	40	FEB. 2.....	35	42
NOV. 14.....	111	100	FEB. 3.....	181	100
NOV. 15.....	132	110	FEB. 4.....	174	65

RUSSIAN RIVER BASIN--Continued

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 5, 1966.....	186	80	APR. 16, 1966.....	7	5
FEB. 6.....	144	110	APR. 17.....	4	4
FEB. 7.....	138	75	APR. 18.....	4	5
FEB. 8.....	34	38	APR. 19.....	3	2
FEB. 9.....	48	47	APR. 21.....	4	3
FEB. 10.....	46	49	APR. 22.....	2	2
FEB. 11.....	49	13	APR. 23.....	2	2
FEB. 12.....	63	26	APR. 25.....	2	3
FEB. 13.....	10	26	APR. 26.....	2	2
FEB. 14.....	12	15	APR. 27.....	2	2
FEB. 15.....	14	20	APR. 28.....	2	2
FEB. 16.....	15	16	APR. 29.....	2	2
FEB. 17.....	7	8	MAY 2.....	3	1
FEB. 18.....	8	20	MAY 4.....	6	8
FEB. 19.....	9	15	MAY 6.....	6	4
FEB. 20.....	9	12	MAY 9.....	1	2
FEB. 21.....	10	25	MAY 11.....	2	1
FEB. 22.....	4	11	MAY 13.....	1	1
FEB. 23.....	104	55	MAY 16.....	1	2
FEB. 24.....	106	70	MAY 18.....	2	1
FEB. 25.....	14	20	MAY 20.....	3	1
FEB. 26.....	15	25	MAY 23.....	4	2
FEB. 27.....	14	25	MAY 25.....	1	1
FEB. 28.....	15	25	MAY 27.....	2	1
MAR. 1.....	8	20	MAY 30.....	1	1
MAR. 2.....	7	20	JUNE 1.....	1	1
MAR. 3.....	7	15	JUNE 3.....	2	1
MAR. 4.....	7	29	JUNE 6.....	1	1
MAR. 5.....	9	20	JUNE 8.....	2	1
MAR. 6.....	9	29	JUNE 10.....	2	1
MAR. 7.....	5	15	JUNE 13.....	3	1
MAR. 8.....	5	11	JUNE 15.....	3	1
MAR. 9.....	248	225	JUNE 17.....	2	1
MAR. 10.....	140	110	JUNE 20.....	1	1
MAR. 11.....	36	30	JUNE 22.....	1	1
MAR. 12.....	14	20	JUNE 24.....	1	0
MAR. 13.....	18	25	JUNE 27.....	2	1
MAR. 14.....	37	40	JUNE 29.....	3	1
MAR. 15.....	28	35	JULY 1.....	3	1
MAR. 16.....	30	30	JULY 4.....	1	0
MAR. 17.....	15	35	JULY 6.....	1	1
MAR. 18.....	20	19	JULY 8.....	1	0
MAR. 19.....	9	15	JULY 11.....	7	5
MAR. 20.....	8	11	JULY 13.....	1	0
MAR. 21.....	75	57	JULY 15.....	1	0
MAR. 22.....	13	15	JULY 18.....	1	1
MAR. 23.....	11	10	JULY 20.....	2	2
MAR. 24.....	10	12	JULY 22.....	5	2
MAR. 25.....	8	11	JULY 25.....	4	5
MAR. 26.....	5	5	JULY 27.....	6	1
MAR. 27.....	7	11	JULY 29.....	3	1
MAR. 28.....	9	10	AUG. 1.....	3	2.0
MAR. 29.....	16	12	AUG. 3.....	3	1.0
MAR. 30.....	18	15	AUG. 5.....	4	2.0
MAR. 31.....	3	2	AUG. 8.....	3	2.0
APR. 1.....	3	1	AUG. 10.....	3	1
APR. 2.....	5	3	AUG. 12.....	7	3
APR. 3.....	5	3	AUG. 15.....	6	2
APR. 4.....	2	3	AUG. 17.....	10	3
APR. 5.....	3	1	AUG. 19.....	11	14
APR. 6.....	3	2	AUG. 22.....	8	4.5
APR. 7.....	3	2	AUG. 24.....	17	6.6
APR. 8.....	3	2	AUG. 26.....	3	2.8
APR. 9.....	2	2	AUG. 29.....	2	2.7
APR. 10.....	44	47	AUG. 31.....	5	3.9
APR. 11.....	44	50	SEPT. 2.....	1	1.0
APR. 12.....	50	43	SEPT. 5.....	4	2.6
APR. 13.....	19	16	SEPT. 7.....	3	1.9
APR. 14.....	68	50	SEPT. 9.....	2	1.2
APR. 15.....	6	7	SEPT. 12.....	1	1.8

RUSSIAN RIVER BASIN--Continued

11-4610. RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
SEPT. 14, 1966.....	4	1.8	JAN. 30, 1967.....	890	270
SEPT. 16.....	2	2.1	FEB. 1.....	220	110
SEPT. 19.....	4	2.1	FEB. 2.....	126	65
SEPT. 21.....	2	3.4	FEB. 3.....	139	86
SEPT. 23.....	3	3.2	FEB. 6.....	67	74
SEPT. 26.....	10	6.6			
SEPT. 28.....	3	4.0	FEB. 8.....	33	33
SEPT. 30.....	4	2.6	FEB. 10.....	6	8
OCT. 3.....	1	1	FEB. 13.....	81	83
OCT. 5.....	2	1	FEB. 15.....	94	88
OCT. 7.....	1	1	FEB. 17.....	18	10
OCT. 10.....	1	1	FEB. 20.....	3	2
OCT. 12.....	1	1	FEB. 22.....	2	1
OCT. 14.....	1	1	FEB. 24.....	3	1
OCT. 17.....	2	1	FEB. 27.....	2	1
OCT. 19.....	1	1	MAR. 1.....	10	1.4
OCT. 21.....	1	1	MAR. 6.....	7	12
OCT. 24.....	6	1	MAR. 8.....	50	66
OCT. 26.....	2	1	MAR. 10.....	189	170
OCT. 28.....	3	1	MAR. 13.....	220	114
OCT. 31.....	3	3	MAR. 15.....	52	60
NOV. 2.....	3	3	MAR. 17.....	94	95
NOV. 4.....	2	3	MAR. 20.....	48	54
NOV. 7.....	4	3	MAR. 22.....	22	28
NOV. 9.....	2	3	MAR. 24.....	18	22
NOV. 11.....	3	6	MAR. 27.....	6	10
NOV. 14.....	42	46	MAR. 29.....	7	10
NOV. 15.....	46	51	MAR. 31.....	144	100
NOV. 16.....	165	195	APR. 3.....	36	37
NOV. 17.....	12	16	APR. 5.....	28	20
NOV. 18.....	2	4	APR. 7.....	119	83
NOV. 19.....	890	800	APR. 10.....	19	12
NOV. 20.....	2900	1920	APR. 12.....	54	43
NOV. 21.....	424	375	APR. 14.....	92	86
NOV. 22.....	71	87	APR. 17.....	267	172
NOV. 23.....	26	35	APR. 19.....	76	60
NOV. 24.....	13	22	APR. 21.....	20	16
NOV. 25.....	6	11	APR. 24.....	40	30
NOV. 28.....	26	36	APR. 26.....	15	10
NOV. 30.....	218	249	APR. 28.....	16	8.2
DEC. 1.....	220	283	MAY 1.....	13	7.5
DEC. 2.....	283	245	MAY 3.....	40	28
DEC. 3.....	1040	360	MAY 5.....	14	9.7
DEC. 4.....	396	261	MAY 8.....	6	4.6
DEC. 5.....	387	320	MAY 9.....	8	7.5
DEC. 6.....	103	83	MAY 10.....	6	3.4
DEC. 7.....	38	45	MAY 12.....	4	2.2
DEC. 8.....	40	44	MAY 15.....	6	3.4
DEC. 9.....	56	80	MAY 17.....	6	2.5
DEC. 10.....	56	63	MAY 19.....	57	54
DEC. 11.....	22	30	MAY 22.....	5	2.5
DEC. 12.....	33	30	MAY 24.....	5	2.4
DEC. 14.....	20	24	MAY 26.....	3	1.6
DEC. 16.....	9	15	MAY 29.....	4	2.0
DEC. 19.....	5	9	MAY 31.....	6	2.2
DEC. 21.....	5	8.3	JUNE 2.....	107	175
DEC. 23.....	3	3.8	JUNE 5.....	5	3.4
DEC. 27.....	6	4.5	JUNE 7.....	6	3.4
DEC. 28.....	2	3.0	JUNE 14.....	10	3
DEC. 30.....	2	5.2	JUNE 21.....	3	2
JAN. 2, 1967.....	1	3.8	JUNE 29.....	8	10
JAN. 4.....	2	1	JULY 5.....	3	2
JAN. 6.....	3	1	JULY 12.....	6	5
JAN. 9.....	172	200	JULY 19.....	6	2
JAN. 11.....	57	50	JULY 27.....	6	4
JAN. 13.....	3	1	AUG. 2.....	2	1
JAN. 18.....	2	1	AUG. 8.....	2	2
JAN. 20.....	767	520	AUG. 9.....	27	19
JAN. 21.....	1940	875	AUG. 16.....	7	1
JAN. 22.....	396	252	AUG. 23.....	3	1
JAN. 23.....	197	70	AUG. 30.....	5	1
JAN. 24.....	1940	440	SEPT. 6.....	7	0
JAN. 26.....	2360	630	SEPT. 12.....	6	1
JAN. 27.....	912	350			
JAN. 28.....	1180	340			
JAN. 29.....	1560	405			

RUSSIAN RIVER BASIN--Continued

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.

LOCATION.--Lat 39°14'48", long 123°07'45", temperature recorder at gaging station on left bank, 0.1 mile downstream from Cold Creek, and 3.9 miles east of Calpella, Mendocino County.

DRAINAGE AREA.--92.2 square miles.

RECORDS AVAILABLE.--Water temperatures: March 1964 to September 1967.

Sediment records: March to September 1964, October 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 41°F Nov. 25.

Sediment concentrations: Maximum daily, 1,490 ppm Jan. 20; minimum daily, 6 ppm Sept. 17.

Sediment loads: Maximum daily, 16,900 tons Jan. 20; minimum daily, 5.4 tons Sept. 17.

EXTREMES, 1965-67.--Water temperatures: Maximum (1965-66), 75°F June 15, 1966; minimum 39°F Dec. 16-20.

Sediment concentrations (1966-67): Maximum daily, 1,490 ppm Jan. 20, 1967; minimum daily, 6 ppm Sept. 17, 1967.

Sediment loads (1966-67): Maximum daily, 16,900 tons Jan. 20; minimum daily, 5.4 tons Sept. 17, 1967.

REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	68	68	68	66	67	67	66	66	66	66	65	64	63	62	62	62	62	61	60	61	61	60	61	62	61	61	60	60	60	59	63	
Minimum	66	66	66	65	65	65	65	65	65	65	64	63	62	61	60	61	61	60	60	60	60	59	60	60	60	60	60	59	58	58	58	61
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	59	59	58	56	56	56	55	54	53	53	53	53	54	54	54	54	51	51	52	51	48	46	45	44	42	44	43	43	45	45	51	
Minimum	58	58	56	54	54	54	53	52	51	52	53	52	53	53	53	51	50	49	50	48	46	45	43	42	41	42	42	42	44	45	49	
December	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	46	46	46	46	--	50	50	50	50	49	49	49	49	49	49	49	47	47	47	47	47	46	46	45	45	45	44	44	42	--	47	
Minimum	45	45	45	45	--	49	50	50	50	49	49	49	49	49	49	49	47	47	47	47	47	46	46	45	45	45	44	44	42	--	46	
January	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
February	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	49	49	49	49	50	50	50	50	50	50	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	48	48	--	--	49	
Minimum	48	49	49	49	49	50	50	50	49	49	48	48	48	49	49	49	48	48	48	48	48	49	49	49	49	48	48	48	--	--	48	
March	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	48	47	47	47	47	47	47	46	45	45	45	45	43	43	44	45	46	46	46	46	46	46	46	46	46	46	46	46	45	45	46	
Minimum	47	46	46	47	47	47	47	46	45	45	45	45	43	43	43	43	43	43	45	46	45	46	46	46	46	46	46	46	44	42	45	
April	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	43	43	44	45	46	46	45	45	46	47	47	47	47	47	47	47	47	47	47	47	48	48	48	48	48	48	48	49	49	--	46	
Minimum	42	43	43	44	45	44	44	44	45	46	47	47	47	47	47	47	46	47	47	47	47	48	48	48	48	48	48	49	49	--	46	
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	49	49	49	49	50	50	50	50	51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	49	49	49	49	49	50	50	50	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	57	58	58	57	58	58	58	58	58	58	58	58	58	58	59	59	59	59	59	59	59	59	59	59	59	58
Minimum	--	--	--	--	--	--	57	57	57	57	57	58	57	57	57	57	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	57
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	59	59	59	60	60	60	60	60	60	60	62	62	62	62	62	62	62	63	63	64	63	64	64	64	64	64	64	63	63	63	64	
Minimum	58	59	59	59	60	60	60	60	60	60	60	62	62	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	61	
August	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	64	64	64	64	64	64	64	65	--	--	--	--	73	--	--	71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	63	63	63	63	64	64	64	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

RUSSIAN RIVER BASIN--Continued
11-4615, EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	249	14	9.4						
2..	263	13	9.2						
3..	286	12	9.3						
4..	279	13	9.8						
5..	299	12	9.7						
6..	309	12	10						
7..	333	12	11						
8..	362	12	12						
9..	343	11	10						
10..	328	11	9.7						
11..	325	12	11						
12..	354	13	12						
13..	369	13	13						
14..	382	14	14						
15..	370	12	12						
16..	365	10	9.9						
17..	370	8	8.0						
18..	359	8	7.8						
19..	375	11	11						
20..	364	17	17						
21..	338	22	20						
22..	315	21	18						
23..	315	17	14						
24..	320	12	10						
25..	318	12	10						
26..	323	11	9.6						
27..	325	13	11						
28..	325	18	16						
29..	328	17	15						
30..	325	14	12						
31..	328	13	12						
Total	10244	--	363.4						
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	338	80	73	825	144	321	341	65	60
2..	336	80	73	625	120	203	309	65	54
3..	323	80	70	543	105	154	341	65	60
4..	333	80	72	499	100	130	338	65	59
5..	323	85	74	476	95	120	298	65	52
6..	333	88	79	453	86	105	325	65	57
7..	333	90	81	434	82	96	330	78	69
8..	336	91	83	419	79	89	336	88	80
9..	336	89	81	403	74	81	336	95	86
10..	336	89	81	395	66	70	446	145	S 222
11..	333	90	81	385	66	69	635	273	S 520
12..	336	100	91	380	69	71	845	193	S 475
13..	336	107	97	377	70	71	812	115	252
14..	336	102	93	372	70	70	629	80	140
15..	336	90	82	369	72	72	599	118	S 315
16..	336	82	74	369	71	71	1430	549	S 2500
17..	336	80	73	364	70	69	695	110	206
18..	333	79	71	367	71	70	605	52	85
19..	333	78	70	367	73	72	499	38	51
20..	3120	1490	S 16900	362	74	72	900	90	S 258
21..	3680	663	S 7750	362	95	93	576	41	64
22..	916	500	1240	356	135	130	508	55	75
23..	591	250	399	341	115	110	649	98	S 185
24..	1670	892	S 4120	346	75	70	482	48	62
25..	931	230	578	359	65	63	450	50	61
26..	2840	1200	S 11700	349	65	61	434	51	60
27..	1800	422	S 2140	341	65	60	419	53	60
28..	1700	500	2300	341	65	60	416	50	56
29..	2300	510	3170	--	--	--	403	45	49
30..	1500	610	2470	--	--	--	520	80	110
31..	1310	300	1060	--	--	--	700	100	189
Total	28700	--	55326	11579	--	2723	16606	--	6572

S Computed by subdividing day.

RUSSIAN RIVER BASIN--Continued

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	670	47	85	455	16	20	315	15	13
2..	590	43	68	442	16	19	370	33	34
3..	540	40	58	429	16	19	183	27	13
4..	505	40	55	421	16	18	349	24	23
5..	485	45	59	414	17	19	346	22	21
6..	918	78	199	406	17	19	343	22	20
7..	740	58	116	395	17	18	336	19	17
8..	576	36	56	388	16	17	333	19	17
9..	515	30	42	380	17	17	330	19	17
10..	601	49	88	388	23	24	346	19	18
11..	591	46	73	382	24	25	333	19	17
12..	511	31	43	377	23	23	330	19	17
13..	482	29	38	367	22	22	313	19	16
14..	485	28	37	364	21	21	311	24	20
15..	476	27	35	362	20	20	290	27	21
16..	471	25	32	349	20	19	302	25	20
17..	895	127	387	354	20	19	281	23	17
18..	812	135	300	354	21	20	295	21	17
19..	923	110	274	351	22	21	290	19	15
20..	681	62	110	351	22	21	281	17	13
21..	617	39	65	328	20	18	279	15	11
22..	576	31	48	330	17	15	267	16	12
23..	748	55	110	341	16	15	281	15	11
24..	637	39	67	341	17	16	283	16	12
25..	563	27	41	309	16	13	283	17	13
26..	531	21	30	302	14	11	286	17	13
27..	576	19	30	281	13	9.9	276	18	13
28..	502	18	24	306	15	12	281	20	15
29..	534	17	25	306	18	15	267	24	17
30..	493	17	23	297	17	14	269	25	18
31..	--	--	--	302	15	12	--	--	--
Total	18244	--	2618	11172	--	551.9	9049	--	501
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	279	24	18	309	14	12	260	18	13
2..	281	23	17	311	13	11	249	19	13
3..	274	22	16	309	11	9.2	249	20	13
4..	272	21	15	295	10	8.0	260	20	14
5..	244	21	14	313	9	7.6	272	21	15
6..	244	21	14	323	9	7.8	272	21	15
7..	260	20	14	299	9	7.3	260	21	15
8..	256	20	14	272	9	6.6	242	19	12
9..	256	19	13	249	11	7.4	246	17	11
10..	260	19	13	249	12	8.1	237	14	9.0
11..	263	19	13	256	11	7.6	258	12	8.4
12..	242	22	14	253	11	7.5	313	10	8.5
13..	258	20	14	244	11	7.2	313	9	7.6
14..	258	18	13	256	11	7.6	323	8	7.0
15..	276	18	13	276	11	8.2	325	7	6.1
16..	292	17	13	279	11	8.3	333	7	6.3
17..	274	16	12	265	11	7.9	336	6	5.4
18..	283	16	12	267	11	7.9	343	7	6.5
19..	283	16	12	246	11	7.3	338	7	6.4
20..	288	16	12	246	12	8.0	338	7	6.4
21..	295	16	13	251	13	8.8	328	8	7.1
22..	295	16	13	256	14	9.7	311	8	6.7
23..	297	17	14	260	16	11	309	9	7.5
24..	297	17	14	258	16	11	330	10	8.9
25..	276	17	13	253	16	11	333	10	9.0
26..	267	17	12	237	16	10	318	10	8.6
27..	263	17	12	237	16	10	309	11	9.2
28..	281	17	13	265	16	11	302	11	9.0
29..	292	16	13	269	16	12	309	11	9.2
30..	304	16	13	272	16	12	313	11	9.3
31..	309	15	13	281	17	13	--	--	--
Total	8519	--	419	8356	--	282.0	8929	--	283.1

Total discharge for periods Oct. 1-31, 1966, Jan. 1 to Sept. 30, 1967 (cfs-days)..... 131398

Total load for periods Oct. 1-31, 1966, Jan. 1 to Sept. 30, 1967 (tons)..... 69639.4

S Computed by subdividing day.

RUSSIAN RIVER BASIN--Continued

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

F, pipet, S, sieve, V, visual accumulation tube, W, in distilled water)																		
Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Nov. 3, 1966.....	1130	56		269	10	7.3					--	--	--	--				
Dec. 6.....	1305	50		753	197	401					90	95	98	100			V	
Jan. 20, 1967.....	1010	46		2090	852	--					91	98	100	--			V	
Jan. 29.....	1100	52		D 2300	993	--					50	68	88	100			V	
Jan. 31.....	1130	49	D	1310	360	--					68	76	86	96	98	100	V	

D Daily mean discharge.

RUSSIAN RIVER BASIN--Continued

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 7, 1964.....	27	27	MAY 27, 1964.....	27	14
FEB. 20.....	21	23	MAY 29.....	14	17
FEB. 21.....	26	13	JUNE 1.....	13	9
FEB. 22.....	34	15	JUNE 3.....	7	9
FEB. 23.....	25	15	JUNE 5.....	7	7
FEB. 24.....	30	35	JUNE 8.....	22	12
FEB. 25.....	24	21	JUNE 10.....	13	16
FEB. 26.....	24	17	JUNE 12.....	6	5
FEB. 27.....	18	16	JUNE 15.....	6	5
FEB. 28.....	26	19	JUNE 16.....	6	8
FEB. 29.....	23	18	JUNE 17.....	7	5
MAR. 1.....	25	16	JUNE 19.....	7	5
MAR. 2.....	27	14	JUNE 22.....	10	5
MAR. 3.....	27	14	JUNE 24.....	4	5
MAR. 4.....	27	15	JUNE 26.....	6	5
MAR. 5.....	25	16	JUNE 28.....	9	7
MAR. 6.....	42	15	JULY 1.....	8	5
MAR. 7.....	22	15	JULY 3.....	4	5
MAR. 8.....	27	12	JULY 8.....	17	7
MAR. 9.....	29	20	JULY 10.....	17	7
MAR. 10.....	22	15	JULY 15.....	19	7
MAR. 11.....	31	31	JULY 16.....	16	12
MAR. 12.....	27	30	JULY 17.....	20	12
MAR. 13.....	29	33	JULY 18.....	19	14
MAR. 14.....	24	27	JULY 19.....	20	14
MAR. 15.....	20	48	JULY 20.....	16	10
MAR. 16.....	21	19	JULY 21.....	14	10
MAR. 17.....	19	16	JULY 22.....	19	14
MAR. 18.....	18	18	JULY 23.....	21	6
MAR. 19.....	15	17	JULY 24.....	20	5
MAR. 20.....	12	8	JULY 28.....	15	7
MAR. 21.....	17	12	JULY 29.....	22	7
MAR. 22.....	27	8	JULY 30.....	14	14
MAR. 23.....	15	17	JULY 31.....	17	5
MAR. 24.....	17	13	AUG. 1.....	22	7
MAR. 25.....	13	10	AUG. 2.....	20	10
MAR. 26.....	11	5	AUG. 3.....	13	7
MAR. 27.....	10	7	AUG. 4.....	11	6
MAR. 28.....	12	6	AUG. 5.....	8	4
MAR. 29.....	10	4	AUG. 6.....	11	6
MAR. 30.....	10	9	AUG. 7.....	14	7
MAR. 31.....	11	2	AUG. 9.....	17	6
APR. 1.....	13	8	AUG. 10.....	8	5
APR. 2.....	69	8	AUG. 11.....	8	6
APR. 3.....	10	4	AUG. 12.....	9	9
APR. 6.....	7	3	AUG. 13.....	9	5
APR. 7.....	7	7	AUG. 16.....	36	12
APR. 8.....	8	6	AUG. 18.....	10	4
APR. 9.....	7	1	AUG. 21.....	27	7
APR. 10.....	7	2	AUG. 22.....	15	7
APR. 11.....	6	0	AUG. 23.....	12	7
APR. 12.....	6	1	AUG. 24.....	10	20
APR. 14.....	5	5	AUG. 25.....	10	7
APR. 15.....	3	0	SEPT. 1.....	11	7
APR. 17.....	3	1	SEPT. 3.....	9	6
APR. 20.....	3	1	SEPT. 4.....	7	7
APR. 22.....	3	1	SEPT. 5.....	8	6
APR. 27.....	4	0	SEPT. 6.....	12	7
APR. 29.....	2	1	SEPT. 8.....	13	9
MAY 2.....	23	20	SEPT. 9.....	10	7
MAY 4.....	4	1	SEPT. 10.....	10	10
MAY 6.....	4	1	SEPT. 11.....	13	7
MAY 8.....	7	5	SEPT. 12.....	14	7
MAY 11.....	7	2	SEPT. 13.....	11	8
MAY 13.....	4	1	SEPT. 14.....	10	10
MAY 15.....	9	8	SEPT. 16.....	9	7
MAY 18.....	11	6	SEPT. 17.....	8	7
MAY 19.....	8	7	SEPT. 18.....	9	8
MAY 20.....	11	5	SEPT. 19.....	11	7
MAY 25.....	29	10	SEPT. 20.....	12	7

RUSSIAN RIVER BASIN--Continued

11-4615, EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
SEPT. 21, 1964.....	9	4	FEB. 4, 1965.....	129	130
SEPT. 22.....	10	5	FEB. 5.....	75	84
SEPT. 23.....	9	6	FEB. 6.....	26	72
SEPT. 24.....	10	6	FEB. 7.....	64	84
SEPT. 25.....	13	7	FEB. 8.....	104	112
SEPT. 26.....	13	8	FEB. 9.....	107	68
SEPT. 27.....	10	5	FEB. 10.....	108	100
SEPT. 28.....	9	5	FEB. 11.....	114	72
SEPT. 29.....	10	5	FEB. 12.....	358	152
SEPT. 30.....	9	6	FEB. 13.....	937	88
OCT. 1.....	10	3	FEB. 14.....	627	85
OCT. 2.....	7	3	FEB. 15.....	120	116
OCT. 3.....	8	3	FEB. 16.....	92	180
OCT. 4.....	10	5	FEB. 17.....	106	84
OCT. 5.....	11	4	FEB. 18.....	121	68
OCT. 8.....	30	14	FEB. 19.....	107	95
OCT. 13.....	13	6	FEB. 20.....	124	148
OCT. 16.....	10	4	FEB. 21.....	116	160
OCT. 19.....	10	7	FEB. 23.....	169	96
OCT. 27.....	13	10	FEB. 24.....	112	136
OCT. 28.....	45	15	MAR. 1.....	219	120
OCT. 29.....	14	5	MAR. 2.....	74	100
OCT. 30.....	16	7	MAR. 7.....	84	88
OCT. 31.....	11	6	MAR. 8.....	100	100
NOV. 1.....	17	7	MAR. 9.....	99	90
NOV. 2.....	12	6	MAR. 10.....	91	108
NOV. 3.....	15	7	MAR. 11.....	79	80
NOV. 4.....	12	5	MAR. 12.....	26	20
NOV. 5.....	11	5	MAR. 13.....	69	80
NOV. 6.....	21	6	MAR. 14.....	68	100
NOV. 7.....	9	5	MAR. 15.....	70	92
NOV. 8.....	31	5	MAR. 16.....	73	116
NOV. 9.....	120	88	MAR. 17.....	68	80
NOV. 10.....	248	148	MAR. 18.....	69	69
NOV. 11.....	64	50	MAR. 19.....	63	83
NOV. 12.....	98	74	MAR. 20.....	54	63
NOV. 13.....	42	32	MAR. 21.....	63	90
NOV. 14.....	39	21	MAR. 22.....	51	75
NOV. 15.....	44	32	MAR. 23.....	61	81
NOV. 16.....	34	40	MAR. 24.....	29	45
NOV. 17.....	28	22	MAR. 25.....	41	40
NOV. 18.....	24	19	MAR. 27.....	184	168
NOV. 19.....	22	15	MAR. 28.....	45	50
NOV. 22.....	21	15	MAR. 29.....	49	43
NOV. 23.....	15	16	MAR. 30.....	111	120
NOV. 24.....	15	12	MAR. 31.....	85	87
NOV. 25.....	32	23	APR. 1.....	119	100
NOV. 26.....	6	12	APR. 2.....	100	100
NOV. 27.....	17	15	APR. 3.....	75	160
NOV. 28.....	736	250	APR. 4.....	98	92
NOV. 30.....	22	15	APR. 5.....	111	124
DEC. 1.....	51	42	APR. 6.....	84	90
DEC. 2.....	56	36	APR. 8.....	823	380
DEC. 3.....	17	16	APR. 9.....	1060	380
DEC. 4.....	16	16	APR. 10.....	86	45
DEC. 5.....	14	10	APR. 11.....	73	42
DEC. 6.....	21	21	APR. 12.....	48	48
DEC. 8.....	18	21	APR. 13.....	47	47
DEC. 9.....	20	12	APR. 14.....	238	84
DEC. 11.....	15	11	APR. 15.....	190	76
DEC. 12.....	15	9	APR. 16.....	127	45
DEC. 13.....	--	11	APR. 17.....	132	43
DEC. 14.....	13	9	APR. 18.....	97	45
DEC. 27.....	964	348	APR. 21.....	149	45
DEC. 28.....	745	260	APR. 23.....	98	94
DEC. 29.....	1090	272	MAY 1.....	39	33
JAN. 13, 1965.....	242	195	MAY 2.....	364	47
FEB. 1.....	109	108	MAY 3.....	313	46
FEB. 2.....	106	130	MAY 4.....	43	38
FEB. 3.....	83	150	MAY 5.....	41	42

RUSSIAN RIVER BASIN--Continued

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
MAY 6, 1965.....	36	30	JULY 24, 1965.....	14	19
MAY 7.....	37	30	JULY 25.....	15	22
MAY 8.....	44	42	JULY 28.....	16	20
MAY 9.....	48	40	AUG. 3.....	23	22
MAY 10.....	58	53	AUG. 6.....	23	22
MAY 11.....	62	47	AUG. 11.....	23	15
MAY 12.....	37	30	AUG. 13.....	18	19
MAY 13.....	40	32	AUG. 17.....	25	14
MAY 14.....	47	28	AUG. 20.....	36	14
MAY 17.....	29	37	AUG. 31.....	18	15
MAY 18.....	27	25	SEPT. 1.....	13	15
MAY 19.....	30	27	SEPT. 29.....	18	15
MAY 20.....	36	25	NOV. 10.....	10	10
MAY 22.....	34	27	NOV. 12.....	23	15
MAY 23.....	42	30	NOV. 15.....	309	200
MAY 24.....	28	28	NOV. 17.....	105	65
MAY 25.....	33	27	NOV. 19.....	95	60
MAY 26.....	31	28	NOV. 22.....	135	70
MAY 27.....	31	25	NOV. 24.....	611	260
MAY 28.....	45	37	NOV. 26.....	80	60
MAY 29.....	37	32	NOV. 29.....	56	40
MAY 30.....	22	18	DEC. 1.....	34	35
MAY 31.....	52	20	DEC. 2.....	35	35
JUNE 1.....	24	20	DEC. 3.....	32	35
JUNE 2.....	32	27	DEC. 4.....	26	30
JUNE 3.....	29	22	DEC. 5.....	35	40
JUNE 4.....	26	25	DEC. 6.....	27	25
JUNE 5.....	69	22	DEC. 7.....	26	35
JUNE 6.....	23	22	DEC. 8.....	25	25
JUNE 7.....	26	22	DEC. 9.....	27	25
JUNE 8.....	22	20	DEC. 10.....	24	40
JUNE 9.....	23	17	DEC. 11.....	27	35
JUNE 10.....	26	20	DEC. 12.....	35	25
JUNE 11.....	26	20	DEC. 13.....	18	30
JUNE 12.....	19	20	DEC. 14.....	19	25
JUNE 14.....	35	18	DEC. 15.....	16	20
JUNE 15.....	17	18	DEC. 17.....	17	25
JUNE 16.....	22	25	DEC. 20.....	31	30
JUNE 17.....	20	24	DEC. 22.....	27	29
JUNE 18.....	22	22	DEC. 24.....	24	30
JUNE 19.....	21	20	DEC. 29.....	294	126
JUNE 20.....	28	22	DEC. 30.....	63	50
JUNE 23.....	18	24	DEC. 31.....	58	50
JUNE 24.....	24	30	JAN. 2, 1966.....	68	63
JUNE 25.....	23	29	JAN. 3.....	169	106
JUNE 26.....	29	28	JAN. 4.....	122	150
JUNE 27.....	22	28	JAN. 6.....	123	106
JUNE 28.....	23	22	JAN. 7.....	319	270
JUNE 29.....	22	27	JAN. 10.....	110	120
JULY 1.....	37	30	JAN. 17.....	110	126
JULY 2.....	38	25	JAN. 20.....	127	136
JULY 3.....	26	22	JAN. 21.....	111	130
JULY 4.....	28	22	JAN. 24.....	118	124
JULY 5.....	63	30	JAN. 28.....	73	94
JULY 6.....	29	20	JAN. 31.....	79	70
JULY 7.....	36	20	FEB. 1.....	73	65
JULY 8.....	43	45	FEB. 5.....	74	75
JULY 9.....	43	45	FEB. 9.....	52	50
JULY 11.....	28	24	FEB. 12.....	49	55
JULY 12.....	31	25	FEB. 14.....	59	65
JULY 13.....	22	20	FEB. 16.....	76	75
JULY 14.....	63	58	FEB. 19.....	53	45
JULY 16.....	22	20	FEB. 22.....	59	60
JULY 17.....	35	18	FEB. 23.....	60	55
JULY 18.....	17	20	FEB. 24.....	57	50
JULY 19.....	18	15	MAR. 5.....	57	55
JULY 20.....	17	18	MAR. 6.....	74	50
JULY 21.....	18	22	MAR. 16.....	42	24
JULY 22.....	18	23	MAR. 18.....	35	36
JULY 23.....	15	15	MAR. 29.....	45	57

RUSSIAN RIVER BASIN--Continued

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 9, 1966.....	25	34	OCT. 14, 1966.....	14	10
APR. 11.....	27	40	OCT. 17.....	8	8
APR. 20.....	35	33	OCT. 19.....	10	7
APR. 22.....	28	31	OCT. 21.....	54	19
APR. 25.....	27	38	OCT. 24.....	12	30
APR. 27.....	29	36	OCT. 26.....	11	9
APR. 29.....	28	35	OCT. 28.....	18	10
MAY 2.....	25	34	OCT. 31.....	12	12
MAY 4.....	28	20	NOV. 3.....	10	10
MAY 6.....	28	23	DEC. 6.....	197	190
MAY 9.....	28	33	JAN. 4, 1967.....	79	120
MAY 11.....	12	17	JAN. 6.....	85	120
MAY 13.....	20	33	JAN. 9.....	88	120
MAY 16.....	20	20	JAN. 11.....	88	120
MAY 18.....	20	28	JAN. 18.....	79	110
MAY 20.....	12	14	JAN. 20.....	852	480
MAY 23.....	10	15	JAN. 21.....	303	260
MAY 25.....	12	15	JAN. 22.....	541	400
MAY 27.....	22	20	JAN. 23.....	147	400
JUNE 1.....	19	20	JAN. 24.....	562	500
JUNE 6.....	26	23	JAN. 25.....	131	200
JUNE 8.....	53	28	JAN. 26.....	1070	600
JUNE 13.....	30	18	JAN. 27.....	396	225
JUNE 15.....	9	13	JAN. 28.....	402	210
JUNE 17.....	34	17	JAN. 29.....	537	310
JUNE 21.....	29	18	JAN. 30.....	643	240
JUNE 24.....	81	30	JAN. 31.....	360	225
JUNE 27.....	65	20	FEB. 1.....	144	155
JUNE 29.....	24	25	FEB. 2.....	119	135
JULY 1.....	66	28	FEB. 3.....	108	130
JULY 19.....	14	15	FEB. 6.....	87	112
JULY 27.....	36	25	FEB. 8.....	76	100
JULY 29.....	14	13	FEB. 10.....	66	105
AUG. 3.....	11	12	FEB. 13.....	69	105
AUG. 5.....	23	11	FEB. 15.....	73	105
AUG. 8.....	11	15	FEB. 17.....	69	110
AUG. 10.....	9	6	FEB. 20.....	76	75
AUG. 13.....	16	10	FEB. 22.....	147	210
AUG. 15.....	19	9	FEB. 24.....	67	170
AUG. 17.....	9	9	FEB. 27.....	62	170
AUG. 19.....	27	11	MAR. 1.....	64	106
AUG. 22.....	21	9	MAR. 3.....	62	94
AUG. 25.....	15	7.8	MAR. 6.....	63	92
AUG. 29.....	53	64	MAR. 8.....	94	103
AUG. 31.....	15	7.2	MAR. 10.....	145	138
SEPT. 2.....	28	9	MAR. 13.....	78	78
SEPT. 5.....	16	16	MAR. 15.....	50	68
SEPT. 7.....	23	8.3	MAR. 17.....	104	175
SEPT. 9.....	24	10	MAR. 20.....	59	76
SEPT. 12.....	20	14	MAR. 22.....	59	73
SEPT. 14.....	19	8.6	MAR. 24.....	48	66
SEPT. 16.....	22	9.2	MAR. 27.....	53	78
SEPT. 19.....	16	7.8	MAR. 29.....	44	62
SEPT. 28.....	17	7.3	MAR. 31.....	82	74
OCT. 3.....	12	10	APR. 3.....	38	42
OCT. 4.....	13	7.8	APR. 5.....	46	40
OCT. 5.....	12	12	APR. 7.....	48	34
OCT. 7.....	12	10	APR. 10.....	29	19
OCT. 10.....	11	10	APR. 12.....	31	32
OCT. 12.....	13	10	APR. 14.....	28	34

RUSSIAN RIVER BASIN--Continued

11-4615. EAST FORK RUSSIAN RIVER NEAR CALPELLA, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
'February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 17, 1967.....	170	138			
APR. 19.....	96	82			
APR. 21.....	36	23			
APR. 24.....	41	44			
APR. 26.....	21	17			
APR. 28.....	18	20			
MAY 1.....	46	66			
MAY 3.....	16	23			
MAY 5.....	17	23			
MAY 8.....	16	19			
MAY 9.....	17	22			
MAY 10.....	25	28			
MAY 12.....	23	23			
MAY 15.....	19	19			
MAY 17.....	20	21			
MAY 19.....	22	21			
MAY 22.....	17	16			
MAY 24.....	18	19			
MAY 26.....	13	10			
MAY 29.....	21	18			
MAY 31.....	15	15			
JUNE 2.....	36	32			
JUNE 5.....	22	21			
JUNE 7.....	18	13			
JUNE 14.....	26	10			
JUNE 21.....	15	7			
JUNE 29.....	25	7			
JULY 5.....	21	12			
JULY 11.....	19	14			
JULY 12.....	25	15			
JULY 19.....	16	14			
JULY 27.....	17	10			
AUG. 2.....	14	8			
AUG. 9.....	13	7			
AUG. 16.....	11	8			
AUG. 23.....	16	20			
AUG. 30.....	17	10			
SEPT. 6.....	22	14			
SEPT. 17.....	6	6			

RUSSIAN RIVER BASIN--Continued

11-4618. LAKE MENDOCINO NEAR UKIAH, CALIF.

LOCATION.--Lat 39°11'53", long 123°10'50", temperature recorder at gaging station in Yokayo Rancho Grant, in intake tower 30 feet upstream from Coyote Dam on East Fork Russian River, and 3.6 miles northeast of Ukiah, Mendocino County.

DRAINAGE AREA.--105 square miles.

RECORDS AVAILABLE.--Water temperatures: December 1965 to September 1967.

Sediment records: February 1964 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 84°F July 1.

EXTREMES, 1965-67.--Water temperatures: Maximum, 84°F July 1, 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	75	76	74	74	74	73	72	74	74	73	73	72	72	71	70	71	71	71	70	68	68	68	68	69	68	67	67	67	66	67	66	66	70
Minimum	74	74	74	73	73	73	72	72	72	73	72	72	71	70	70	70	70	70	68	68	68	68	67	68	67	67	67	66	66	66	65	69	
November																																	
Maximum	65	64	63	62	61	60	60	60	59	59	59	58	58	58	58	58	57	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Minimum	64	63	62	61	60	60	60	59	59	59	58	58	58	58	58	57	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
December																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
January																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50	48	48	47	47	47	47	47	46	46	46	46	46	46	47	47	47	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	48	47	47	47	47	46	46	46	46	46	46	46	46	46	47	47	47	---
February																																	
Maximum	48	49	49	48	50	50	48	48	48	50	50	50	49	49	49	49	49	49	50	50	50	50	50	50	48	49	52	50	---	---	---	49	
Minimum	47	48	48	48	48	48	48	48	48	48	50	49	49	49	49	49	49	49	49	50	49	48	49	48	48	48	48	49	---	---	---	48	
March																																	
Maximum	50	51	51	50	52	52	51	52	51	52	51	51	49	49	49	49	50	50	52	51	53	52	52	52	52	55	53	53	52	52	52	51	51
Minimum	49	50	50	49	49	50	50	50	51	48	48	49	49	49	49	49	49	49	49	50	51	51	51	51	51	52	51	52	52	52	52	51	50
April																																	
Maximum	53	52	52	52	51	51	52	53	54	54	52	52	52	53	53	53	52	52	51	51	51	51	51	51	51	51	52	52	52	53	56	---	52
Minimum	51	51	51	51	51	51	51	52	52	52	52	52	52	52	52	52	52	52	51	51	51	51	51	51	51	51	52	52	52	51	51	---	51
May																																	
Maximum	55	55	57	57	59	60	62	63	59	58	58	59	62	63	66	68	70	70	73	74	76	74	74	72	71	71	69	68	67	67	66	65	
Minimum	52	53	54	55	55	54	59	57	56	56	58	58	59	62	65	67	68	68	70	73	74	72	70	69	69	68	67	67	66	66	66	62	
June																																	
Maximum	66	64	65	66	66	65	66	67	67	69	68	67	68	70	72	74	77	76	75	76	77	74	77	77	79	77	78	78	79	80	---	72	
Minimum	64	63	63	63	65	64	65	65	67	67	66	66	67	67	70	70	73	70	70	73	74	73	72	73	75	74	75	76	77	77	---	69	
July																																	
Maximum	84	83	83	81	78	79	79	79	80	79	82	80	81	82	82	80	78	78	78	79	78	79	79	79	79	79	78	78	78	80	81	78	79
Minimum	80	79	79	78	77	77	76	76	76	76	77	79	78	79	79	76	76	76	76	76	76	76	76	76	75	75	75	75	75	77	77	77	76
August																																	
Maximum	81	79	81	80	80	79	78	79	77	79	77	78	79	76	78	78	78	79	80	78	78	78	80	79	77	79	78	77	78	78	78	78	
Minimum	77	77	77	77	76	76	75	75	75	75	75	74	74	75	75	75	75	76	76	76	75	76	76	76	76	76	75	75	75	75	74	75	75
September																																	
Maximum	78	77	76	78	75	75	76	74	74	73	73	75	75	74	74	74	73	73	73	73	73	73	72	74	75	73	73	73	72	72	---	74	
Minimum	74	74	74	74	74	73	73	73	72	71	71	71	72	72	72	72	71	71	71	71	72	72	72	72	72	72	72	72	72	71	---	72	

RUSSIAN RIVER BASIN--Continued

11-4618. LAKE MENDOCINO NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentrations and turbidity, October 1963 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 6, 1964.....	14	16	JUNE 1, 1964.....	5	4
FEB. 19.....	12	10	JUNE 3.....	6	5
FEB. 20.....	10	13	JUNE 5.....	21	5
FEB. 22.....	16	9.5	JUNE 8.....	6	6
FEB. 23.....	14	10	JUNE 10.....	1	7
FEB. 24.....	14	15	JUNE 15.....	5	12
FEB. 25.....	9	12	JUNE 17.....	3	5
FEB. 26.....	15	12	JUNE 19.....	3	5
FEB. 27.....	14	15	JUNE 22.....	5	7
FEB. 28.....	24	14	JUNE 24.....	6	4
FEB. 29.....	13	13	JUNE 26.....	8	5
MAR. 1.....	13	13	JUNE 28.....	4	4
MAR. 2.....	10	12	JULY 1.....	4	5
MAR. 3.....	11	11	JULY 3.....	5	7.5
MAR. 4.....	12	12	JULY 6.....	5	7
MAR. 5.....	12	11	JULY 8.....	5	6
MAR. 6.....	13	12	JULY 10.....	4	6
MAR. 7.....	13	11	JULY 13.....	4	10
MAR. 8.....	13	12	JULY 15.....	4	7
MAR. 9.....	13	11	JULY 17.....	4	6
MAR. 10.....	13	16	JULY 20.....	6	4
MAR. 11.....	14	20	JULY 22.....	3	7
MAR. 12.....	14	17	JULY 24.....	6	5
MAR. 13.....	12	18	JULY 27.....	5	5
MAR. 14.....	11	14	JULY 29.....	6	5
MAR. 16.....	12	10	JULY 31.....	8	5
MAR. 17.....	12	10	AUG. 3.....	6	5
MAR. 18.....	9	8	AUG. 5.....	14	5
MAR. 19.....	10	7	AUG. 7.....	8	5
MAR. 20.....	7	9	AUG. 24.....	28	12
MAR. 21.....	11	19	AUG. 26.....	10	10
MAR. 22.....	11	23	AUG. 28.....	11	10
MAR. 23.....	10	15	AUG. 31.....	11	7
MAR. 24.....	8	9	SEPT. 2.....	7	5
MAR. 25.....	8	17	SEPT. 4.....	12	10
MAR. 26.....	6	10	SEPT. 7.....	17	14
MAR. 27.....	5	8	SEPT. 9.....	17	11
MAR. 28.....	11	1	SEPT. 11.....	18	10
MAR. 29.....	9	8	SEPT. 14.....	15	9
MAR. 30.....	5	15	SEPT. 16.....	9	8
MAR. 31.....	6	15	SEPT. 18.....	9	10
APR. 1.....	7	14	SEPT. 21.....	10	7
APR. 2.....	8	5	SEPT. 23.....	8	10
APR. 3.....	8	3	SEPT. 25.....	11	7
APR. 4.....	10	9	SEPT. 28.....	7	5
APR. 5.....	6	2	SEPT. 30.....	6	7
APR. 6.....	6	10	OCT. 2.....	5	6
APR. 7.....	7	10	OCT. 5.....	5	5
APR. 8.....	6	10	OCT. 7.....	4	7
APR. 14.....	3	1	OCT. 8.....	--	5
APR. 15.....	5	6	OCT. 9.....	7	7
APR. 17.....	5	3	OCT. 12.....	6	4
APR. 20.....	4	4	OCT. 14.....	6	6
APR. 22.....	5	5	OCT. 16.....	6	5
APR. 24.....	5	9	OCT. 19.....	6	
APR. 27.....	5	7	OCT. 21.....	6	7
APR. 29.....	4	7	OCT. 23.....	6	7
MAY 1.....	4	4	OCT. 26.....	7	7
MAY 4.....	5	5	OCT. 28.....	6	6
MAY 6.....	3	6	OCT. 29.....	6	7
MAY 8.....	5	1	OCT. 30.....	6	6
MAY 11.....	6	3	OCT. 31.....	6	7
MAY 13.....	5	2	NOV. 2.....	6	
MAY 15.....	13	7	NOV. 4.....	14	15
MAY 19.....	6	0	NOV. 6.....	15	15
MAY 20.....	7	10	NOV. 7.....	14	16
MAY 22.....	4	10	NOV. 8.....	11	13
MAY 25.....	8	11	NOV. 9.....	6	9
MAY 27.....	34	10	NOV. 10.....	9	9
MAY 29.....	9	5	NOV. 11.....	5	8

RUSSIAN RIVER BASIN--Continued

11-4618. LAKE MENDOCINO NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentrations and turbidity,
October 1963 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
NOV. 12, 1964.....	11	9	JAN. 25, 1965.....	159	216
NOV. 13.....	30	26	JAN. 26.....	162	240
NOV. 14.....	7	9	JAN. 27.....	164	175
NOV. 15.....	8	10	JAN. 28.....	123	192
NOV. 16.....	10	9	JAN. 29.....	174	250
NOV. 17.....	10	10	JAN. 30.....	120	120
NOV. 18.....	13	16	JAN. 31.....	151	210
NOV. 19.....	13	21	FEB. 1.....	136	150
NOV. 20.....	10	17	FEB. 2.....	118	180
NOV. 21.....	11	15	FEB. 3.....	128	240
NOV. 22.....	10	13	FEB. 4.....	155	140
NOV. 23.....	10	15	FEB. 5.....	142	170
NOV. 24.....	9	15	FEB. 6.....	125	150
NOV. 25.....	9	13	FEB. 7.....	101	180
NOV. 26.....	8	15	FEB. 8.....	112	140
NOV. 27.....	13	11	FEB. 9.....	104	100
NOV. 28.....	12	6	FEB. 10.....	101	170
NOV. 29.....	10	8	FEB. 11.....	88	130
NOV. 30.....	8	10	FEB. 12.....	114	120
DEC. 1.....	5	8	FEB. 13.....	126	160
DEC. 2.....	6	11	FEB. 14.....	122	150
DEC. 3.....	5	16	FEB. 15.....	101	160
DEC. 4.....	10	6	FEB. 16.....	84	150
DEC. 5.....	9	10	FEB. 17.....	116	150
DEC. 6.....	16	10	FEB. 18.....	112	170
DEC. 7.....	14	13	FEB. 19.....	121	150
DEC. 8.....	6	9	FEB. 20.....	43	180
DEC. 9.....	12	12	FEB. 21.....	122	130
DEC. 10.....	11	7	FEB. 22.....	112	150
DEC. 11.....	11	11	FEB. 23.....	110	150
DEC. 12.....	9	9	FEB. 24.....	89	100
DEC. 13.....	6	4	FEB. 25.....	90	100
DEC. 14.....	10	10	FEB. 26.....	83	160
DEC. 15.....	8	9	FEB. 27.....	109	160
DEC. 16.....	10	12	FEB. 28.....	106	190
DEC. 17.....	10	7	MAR. 1.....	73	90
DEC. 18.....	8	8	MAR. 2.....	73	120
DEC. 19.....	9	15	MAR. 3.....	90	130
DEC. 20.....	8	7	MAR. 4.....	100	130
DEC. 21.....	12	12	MAR. 5.....	88	130
DEC. 22.....	11	11	MAR. 6.....	81	110
DEC. 24.....	86	84	MAR. 7.....	90	150
DEC. 26.....	67	78	MAR. 8.....	86	110
DEC. 27.....	86	84	MAR. 9.....	80	120
DEC. 28.....	204	210	MAR. 10.....	68	120
DEC. 29.....	193	198	MAR. 11.....	96	128
DEC. 30.....	164	192	MAR. 12.....	102	144
DEC. 31.....	167	240	MAR. 13.....	84	132
JAN. 1, 1965.....	142	180	MAR. 14.....	89	120
JAN. 2.....	297	216	MAR. 15.....	70	140
JAN. 3.....	119	186	MAR. 16.....	77	132
JAN. 4.....	312	192	MAR. 17.....	87	120
JAN. 6.....	146	162	MAR. 18.....	86	128
JAN. 7.....	142	180	MAR. 19.....	74	112
JAN. 8.....	143	168	MAR. 20.....	83	120
JAN. 9.....	112	156	MAR. 21.....	40	128
JAN. 10.....	117	168	MAR. 22.....	59	116
JAN. 11.....	115	108	MAR. 23.....	82	100
JAN. 13.....	156	192	MAR. 24.....	63	132
JAN. 14.....	129	180	MAR. 25.....	77	160
JAN. 15.....	135	192	MAR. 26.....	72	100
JAN. 16.....	93	168	MAR. 27.....	78	120
JAN. 17.....	384	423	MAR. 29.....	63	128
JAN. 18.....	361	336	MAR. 30.....	43	116
JAN. 19.....	357	336	MAR. 31.....	64	84
JAN. 20.....	313	360	APR. 1.....	41	68
JAN. 21.....	307	393	APR. 2.....	59	66
JAN. 22.....	293	312	APR. 3.....	62	90
JAN. 23.....	279	360	APR. 4.....	59	84
JAN. 24.....	193	193	APR. 5.....	61	84

RUSSIAN RIVER BASIN--Continued

11-4618, LAKE MENDOCINO NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentrations and turbidity,
October 1963 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 6, 1965.....	52	90	AUG. 3, 1965.....	16	7
APR. 7.....	56	96	AUG. 6.....	10	7.5
APR. 8.....	59	75	AUG. 13.....	2	3
APR. 9.....	74	81	AUG. 17.....	2	5
APR. 10.....	48	81	AUG. 20.....	4	2.5
APR. 11.....	66	81			
APR. 12.....	73	75	AUG. 24.....	3	3
APR. 13.....	56	84	AUG. 27.....	3	6
APR. 14.....	52	90	AUG. 31.....	6	7
APR. 15.....	81	81	SEPT. 1.....	4	3
APR. 16.....	50	72	OCT. 1.....	1	2
APR. 17.....	29	75			
APR. 18.....	46	72	OCT. 5.....	1	1
APR. 19.....	44	66	OCT. 8.....	2	4
APR. 20.....	39	66	OCT. 12.....	1	2
			OCT. 15.....	3	2
APR. 21.....	52	74	OCT. 19.....	2	1
APR. 22.....	20	33			
APR. 23.....	53	80	OCT. 22.....	4	1
APR. 26.....	41	90	OCT. 26.....	14	5
APR. 27.....	56	88	OCT. 29.....	17	7.5
			NOV. 2.....	1	1
APR. 28.....	45	74	NOV. 5.....	2	7.5
APR. 29.....	54	70			
APR. 30.....	55	74	NOV. 8.....	4	10
MAY 1.....	54	72	NOV. 9.....	1	2
MAY 3.....	43	53	NOV. 15.....	11	8
			NOV. 22.....	10	20
MAY 4.....	31	45	NOV. 29.....	33	30
MAY 5.....	13	26			
MAY 6.....	14	22	DEC. 6.....	23	35
MAY 7.....	18	30	DEC. 13.....	16	30
MAY 8.....	25	23	DEC. 17.....	7	40
			DEC. 20.....	19	22
MAY 9.....	38	25	DEC. 29.....	35	50
MAY 10.....	26	26			
MAY 11.....	22	23	JAN. 5, 1966.....	30	53
MAY 12.....	12	24	JAN. 7.....	27	52
MAY 13.....	10	22	JAN. 10.....	115	180
			JAN. 17.....	42	55
MAY 14.....	15	15	JAN. 18.....	45	75
MAY 15.....	14	19			
MAY 16.....	32	15	JAN. 24.....	45	65
MAY 17.....	17	22	JAN. 31.....	76	100
MAY 18.....	20	17	FEB. 7.....	64	100
			FEB. 14.....	33	58
MAY 19.....	20	15	FEB. 21.....	48	65
MAY 20.....	12	8.8			
MAY 21.....	12	11	FEB. 28.....	45	60
MAY 22.....	10	11	MAR. 7.....	37	75
MAY 24.....	8	13	MAR. 14.....	28	50
			MAR. 21.....	19	40
MAY 25.....	11	11	MAR. 28.....	26	44
MAY 27.....	9	7.5			
MAY 28.....	10	8.3	APR. 4.....	21	37
MAY 31.....	8	9.0	APR. 11.....	22	35
JUNE 1.....	7	7.5	APR. 18.....	17	29
			APR. 25.....	16	34
JUNE 2.....	7	8.5	MAY 2.....	21	23
JUNE 3.....	10	14			
JUNE 7.....	4	7.1	MAY 9.....	13	24
JUNE 9.....	5	7.1	MAY 16.....	16	20
JUNE 14.....	12	10	MAY 23.....	31	--
			MAY 24.....	--	34
JUNE 16.....	8	5	MAY 29.....	25	30
JUNE 18.....	5	5			
JUNE 21.....	8	10	JUNE 6.....	28	30
JUNE 23.....	8	7.5	JUNE 13.....	8	9
JUNE 25.....	7	5	JUNE 20.....	13	9
			JUNE 27.....	13	7
JUNE 28.....	14	7.5	JULY 4.....	13	6
JULY 2.....	28	38			
JULY 5.....	26	45	JULY 11.....	6	2
JULY 7.....	34	42			
JULY 12.....	26	38	JULY 18.....	13	6
			JULY 25.....	2	1
JULY 19.....	4	5	AUG. 1.....	4	4
JULY 21.....	6	5	AUG. 7.....	2	4
JULY 26.....	7	5			
JULY 28.....	2	2	AUG. 15.....	1	2
JULY 30.....	10	5	AUG. 22.....	11	8.7
			AUG. 28.....	6	4.5
			SEPT. 5.....	4	5.1
			SEPT. 12.....	4	6.0

RUSSIAN RIVER BASIN--Continued

11-4618. LAKE MENDOCINO NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentrations and turbidity,
October 1963 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
SEPT. 19, 1966.....	3	1.0			
SEPT. 26.....	2	4.4			
OCT. 3.....	8	10			
OCT. 10.....	8	10			
OCT. 17.....	3	2.6			
OCT. 24.....	5	7			
OCT. 31.....	7	8			
NOV. 7.....	8	8			
NOV. 14.....	6	8			
NOV. 17.....	3	4			
NOV. 21.....	90	130			
NOV. 28.....	59	93			
DEC. 5.....	290	470			
DEC. 12.....	122	164			
DEC. 19.....	63	94			
DEC. 21.....	32	58			
DEC. 27.....	33	63			
JAN. 2, 1967.....	61	34			
JAN. 10.....	59	60			
JAN. 16.....	23	48			
JAN. 23.....	30	40			
JAN. 30.....	75	110			
FEB. 6.....	69	122			
FEB. 13.....	55	125			
FEB. 20.....	57	120			
FEB. 28.....	56	120			
MAR. 6.....	53	82			
MAR. 13.....	37	65			
MAR. 15.....	29	67			
MAR. 16.....	31	70			
MAR. 21.....	38	80			
MAR. 27.....	29	80			
APR. 3.....	39	76			
APR. 10.....	38	50			
APR. 17.....	26	36			
APR. 24.....	29	34			
APR. 25.....	16	41			
MAY 1.....	16	37			
MAY 8.....	14	30			
MAY 12.....	12	19			
MAY 15.....	23	28			
MAY 22.....	30	45			
MAY 29.....	23	40			
JUNE 5.....	12	20			
JUNE 12.....	7	7.5			
JUNE 14.....	15	16			
JUNE 29.....	15	16			
JULY 5.....	12	10			
JULY 12.....	9	9			
JULY 13.....	6	5			
JULY 19.....	8	5			
JULY 27.....	2	5			
AUG. 2.....	1	2			
AUG. 9.....	12	1			
AUG. 14.....	4	8			
AUG. 16.....	11	1			
AUG. 23.....	6	1			
AUG. 30.....	4	1			
SEPT. 6.....	2	0			
SEPT. 13.....	3	1			
SEPT. 19.....	1	0			
SEPT. 21.....	5	1			
SEPT. 28.....	3	2			

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.

DRAINAGE AREA.--105 square miles.

RECORDS AVAILABLE.--Chemical analyses: December 1952 to March 1955.

Water temperatures: December 1952 to March 1955, October 1964 to September 1967.

Sediment records: December 1952 to March 1955, January 1964 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 410 ppm Dec. 3; minimum daily, 1 ppm on several days in July and August.

Sediment loads: Maximum daily, 1,020 tons Feb. 1: minimum daily, 0.6 ton July 27-30.

EXTREMES, 1964-67.--Sediment concentrations: Maximum daily, (estimated) 1,900 ppm Dec. 25, 1964; minimum daily, 1 ppm on several days in 1965 and 1967.

Sediment loads: Maximum daily, (estimated) 22,000 tons Dec. 25, 1964; minimum daily, 0.4 ton Nov. 29, 1964, Jan. 5, 1966.

REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	68	68	68	66	67	67	66	66	66	66	65	64	63	62	62	62	61	60	61	61	60	61	62	61	62	61	60	60	60	59	60	59	63
Minimum	66	66	66	65	65	65	65	65	65	65	64	63	62	61	60	61	61	60	60	60	60	59	60	60	60	60	60	59	59	58	58	58	61
November	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	59	59	58	56	56	55	54	53	53	53	53	53	54	54	54	54	51	51	52	51	48	46	45	44	42	44	43	43	45	45	—	51	
Minimum	58	58	56	54	54	53	52	51	52	53	52	53	53	53	53	51	50	49	50	48	46	45	43	42	41	42	42	42	44	45	—	49	
December	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	46	46	46	46	—	50	50	50	50	49	49	49	49	49	49	49	47	47	47	47	47	46	46	45	45	45	44	44	42	—	—	47	
Minimum	45	45	45	45	—	49	50	50	50	49	49	49	49	49	49	49	47	47	47	47	47	46	46	45	45	45	44	44	42	42	—	46	
January	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	49	49	49	49	50	50	50	50	50	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	48	48	48	48	—	49	
Minimum	48	49	49	49	49	50	50	50	49	49	48	48	48	49	49	49	48	48	48	48	49	49	49	49	49	49	48	48	48	48	—	48	
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	48	47	47	47	47	47	47	46	45	45	45	45	43	43	44	45	46	46	46	46	46	46	46	46	46	46	46	46	46	45	45	45	
Minimum	47	46	46	47	47	46	45	45	45	45	45	43	43	43	43	43	45	46	45	46	46	46	46	46	46	46	46	46	46	44	42	45	
March	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	43	43	44	45	46	45	45	46	47	47	47	47	47	47	47	47	47	47	47	48	48	48	48	48	48	48	48	49	49	49	—	46	
Minimum	42	43	43	44	45	44	44	44	45	46	47	47	47	47	47	47	47	47	47	48	48	48	48	48	48	48	48	49	49	49	—	46	
May	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	49	49	49	49	50	50	50	50	51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum	49	49	49	49	49	50	50	50	50	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
June	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
July	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	59	59	59	60	60	60	60	60	60	60	62	62	62	62	62	62	62	63	63	64	63	64	64	64	64	64	64	63	63	63	63	64	61
Minimum	58	59	59	59	59	60	60	60	60	60	60	62	62	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	64	61
August	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	64	64	64	64	64	64	64	65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum	63	63	63	63	64	64	64	64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
September	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

RUSSIAN RIVER BASIN--Continued

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	244	5	3.3	371	5	5.0	19	52	2.7
2..	244	7	4.6	468	7	8.8	20	342	18
3..	244	8	5.3	450	7	8.5	19	410	21
4..	243	5	3.3	450	7	8.5	20	318	17
5..	242	8	5.2	462	7	8.7	20	296	16
6..	241	8	5.2	456	7	8.6	1020	225	620
7..	241	7	4.6	474	7	9.0	2830	80	611
8..	241	7	4.6	486	7	9.2	2920	72	568
9..	237	7	4.5	486	7	9.2	1360	92	338
10..	238	7	4.5	486	7	9.2	19	100	5.1
11..	241	7	4.6	486	6	7.9	19	101	5.2
12..	241	8	5.2	480	6	7.8	18	114	5.5
13..	241	7	4.6	480	5	6.5	19	100	5.1
14..	237	7	4.5	480	5	6.5	19	75	3.8
15..	237	8	5.1	480	6	7.8	19	65	3.3
16..	237	8	5.1	552	5	7.5	19	62	3.2
17..	237	9	5.8	612	5	8.3	19	60	3.1
18..	237	9	5.8	612	30	50	19	61	3.1
19..	234	8	5.1	612	34	56	19	68	3.5
20..	234	8	5.1	334	62	S 36	19	69	3.5
21..	234	9	5.7	397	86	S 87	19	65	3.3
22..	236	7	4.5	1330	71	255	19	68	3.5
23..	237	5	3.2	1570	75	318	19	72	3.7
24..	283	4	3.1	1550	57	239	19	72	3.7
25..	355	5	4.8	924	48	120	19	71	3.6
26..	378	6	6.1	19	57	2.9	20	67	3.6
27..	378	5	5.1	19	58	3.0	1600	55	238
28..	373	4	4.0	19	57	2.9	2930	41	324
29..	373	4	4.0	19	55	2.8	1500	43	170
30..	373	4	4.0	19	54	2.8	19	54	2.8
31..	372	4	4.0	--	--	--	19	57	2.9
Total	8383	--	144.5	15583	--	1312.4	14619	--	3015.2
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	19	58	3.0	3980	95	1020	42	53	6.0
2..	19	59	3.0	3870	78	815	60	51	8.3
3..	19	61	3.1	3200	80	691	60	50	8.1
4..	19	63	3.2	2800	87	660	60	48	7.8
5..	19	62	3.2	2750	90	670	60	47	7.6
6..	19	60	3.1	1290	90	313	60	44	7.1
7..	19	60	3.1	19	90	4.6	183	41	20
8..	19	60	3.1	19	90	4.6	305	38	31
9..	19	59	3.0	19	88	4.5	305	35	29
10..	19	58	3.0	19	83	4.3	232	31	19
11..	19	57	2.9	19	82	4.2	135	45	1
12..	19	56	2.9	19	83	4.3	138	57	21
13..	19	55	2.8	19	85	4.4	630	49	83
14..	19	55	2.8	19	85	4.4	948	40	100
15..	601	51	83	19	84	4.3	696	37	70
16..	3030	37	303	19	80	4.1	864	36	84
17..	2960	37	300	19	76	3.9	1500	35	142
18..	2890	40	312	19	73	3.7	744	32	64
19..	1420	50	190	19	70	3.6	744	29	58
20..	29	60	4.7	19	69	3.5	894	27	65
21..	29	60	4.7	19	69	3.5	1000	28	76
22..	28	270	20	19	69	3.5	690	34	63
23..	246	301	S 187	19	66	3.4	528	36	51
24..	749	166	S 310	17	60	2.8	504	35	48
25..	1540	135	561	18	56	2.7	468	36	45
26..	663	105	S 194	18	55	2.7	468	38	48
27..	1110	161	S 453	18	55	2.7	426	39	45
28..	328	100	89	18	54	2.6	202	37	20
29..	4.7	82	1.0	--	--	--	202	35	19
30..	1060	68	195	--	--	--	280	34	26
31..	3650	100	986	--	--	--	432	33	38
Total	20603.7	--	4235.6	18302	--	4251.3	13860	--	1325.9

S Computed by subdividing day.

RUSSIAN RIVER BASIN--Continued

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	702	33	63	438	19	22	236	19	12
2..	702	34	64	408	17	19	179	17	8.2
3..	702	35	66	408	14	15	98	16	4.2
4..	702	39	74	366	12	12	98	15	4.0
5..	696	43	81	342	13	12	212	13	7.4
6..	882	44	100	348	14	13	396	13	14
7..	1000	43	116	348	14	13	480	12	16
8..	720	42	82	348	13	12	480	12	16
9..	720	42	82	414	12	13	480	13	17
10..	582	42	66	450	15	18	480	14	18
11..	480	40	52	450	18	22	480	15	19
12..	480	36	47	456	18	22	384	16	17
13..	480	33	43	456	17	21	224	18	11
14..	325	29	25	456	18	22	224	21	13
15..	248	28	19	190	21	11	224	21	13
16..	252	29	20	28	23	1.7	208	21	12
17..	252	33	22	23	23	1.4	197	21	11
18..	618	25	42	23	24	1.5	197	21	11
19..	852	20	46	24	27	1.7	197	21	11
20..	822	19	42	25	29	2.0	200	21	11
21..	672	22	40	25	29	2.0	200	21	11
22..	582	28	44	90	49	14	200	21	11
23..	582	29	46	66	46	8.2	200	20	11
24..	582	28	44	64	28	4.8	200	19	10
25..	606	27	44	118	22	7.0	204	18	9.9
26..	576	26	40	118	20	6.4	204	17	9.4
27..	552	25	37	118	20	6.4	204	16	8.8
28..	516	23	32	120	21	6.8	204	16	8.8
29..	492	21	28	120	23	7.5	204	15	8.3
30..	492	20	27	118	23	7.3	197	14	7.4
31..	--	--	--	186	21	11	--	--	--
Total	17869	--	1534	7144	--	336.7	7691	--	341.4
	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	208	13	7.3	264	1	0.7	320	2	1.7
2..	208	13	7.3	264	1	.7	320	2	1.7
3..	208	12	6.7	264	1	.7	320	2	1.7
4..	208	11	6.2	264	1	.7	320	2	1.7
5..	208	10	5.6	268	1	.7	320	2	1.7
6..	208	9	5.1	268	1	.7	320	2	1.7
7..	208	8	4.5	268	1	.7	320	2	1.7
8..	208	7	3.9	268	1	.7	320	2	1.7
9..	208	6	3.4	268	13	9.4	320	2	1.7
10..	208	5	2.8	268	13	9.4	315	3	2.6
11..	208	4	2.2	268	12	8.7	315	3	2.6
12..	208	10	5.6	268	12	8.7	315	3	2.6
13..	208	10	5.6	264	11	7.8	315	4	3.4
14..	208	9	5.1	264	11	7.8	315	4	3.4
15..	212	9	5.2	264	10	7.1	315	4	3.4
16..	208	9	5.1	264	10	7.1	315	3	2.6
17..	228	8	4.9	264	9	6.4	315	3	2.6
18..	240	8	5.2	280	8	6.0	315	2	1.7
19..	236	8	5.1	295	7	5.6	315	2	1.7
20..	236	7	4.5	295	6	4.8	315	2	1.7
21..	236	6	3.8	295	5	4.0	315	2	1.7
22..	240	5	3.2	290	4	3.1	315	2	1.7
23..	236	4	2.5	290	3	2.3	315	2	1.7
24..	236	3	1.9	315	3	2.6	315	2	1.7
25..	236	3	1.9	325	3	2.6	315	3	2.6
26..	236	2	1.3	325	3	2.6	315	3	2.6
27..	232	1	.6	325	2	1.8	315	3	2.6
28..	232	1	.6	325	2	1.8	315	3	2.6
29..	236	1	.6	325	2	1.8	315	3	2.6
30..	236	1	.6	325	2	1.8	315	3	2.6
31..	252	1	.7	325	2	1.8	--	--	--
Total	6880	--	119.0	8855	--	120.6	9495	--	66.0
Total discharge for year (cfs-days).....									149284.7
Total load for year (tons).....									16802.6

S Computed by subdividing day,

RUSSIAN RIVER BASIN--Continued

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Dec. 2, 1966.....	1330	53		23	400							100						S
Jan. 22, 1967.....	1250	48		28	299							100						S
Jan. 25.....	1645	47		1760	132							100						S
Feb. 1.....	1645	47		3950	90							100						S

RUSSIAN RIVER BASIN--Continued

11-4620, EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, February 1964 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 6, 1964.....	73	101	MAY 27, 1964.....	10	11
FEB. 19.....	10	25	MAY 29.....	6	7
FEB. 20.....	9	15	JUNE 1.....	5	10
FEB. 21.....	17	25	JUNE 3.....	6	7
FEB. 22.....	20	21	JUNE 5.....	5	7
FEB. 23.....	--	23	JUNE 8.....	6	7
FEB. 24.....	18	24	JUNE 10.....	4	7
FEB. 25.....	17	20	JUNE 15.....	7	13
FEB. 26.....	16	22	JUNE 17.....	4	7
FEB. 27.....	12	16	JUNE 19.....	4	7
FEB. 28.....	13	19	JUNE 22.....	3	10
FEB. 29.....	17	18	JUNE 24.....	6	7
MAR. 1.....	12	16	JUNE 26.....	5	10
MAR. 2.....	12	15	JUNE 29.....	9	7
MAR. 3.....	11	14	JULY 1.....	4	10
MAR. 4.....	12	14	JULY 3.....	4	7
MAR. 5.....	11	15	JULY 6.....	4	7
MAR. 6.....	11	15	JULY 8.....	4	7
MAR. 7.....	11	15	JULY 10.....	5	9
MAR. 8.....	11	14	JULY 13.....	4	9
MAR. 9.....	11	14	JULY 15.....	4	6
MAR. 10.....	13	28	JULY 17.....	3	3
MAR. 11.....	12	14	JULY 20.....	4	4
MAR. 12.....	13	20	JULY 22.....	4	8
MAR. 13.....	15	25	JULY 24.....	6	6
MAR. 14.....	14	20	JULY 27.....	6	8.5
MAR. 16.....	12	24	JULY 29.....	5	5
MAR. 17.....	12	19	JULY 31.....	8	5
MAR. 18.....	13	13	AUG. 3.....	7	5
MAR. 19.....	11	16	AUG. 5.....	8	4
MAR. 20.....	12	15	AUG. 7.....	10	5
MAR. 21.....	12	17	AUG. 24.....	12	11
MAR. 22.....	13	16	AUG. 26.....	13	7
MAR. 23.....	12	11	AUG. 28.....	11	5
MAR. 24.....	9	12	AUG. 31.....	14	14
MAR. 25.....	9	15	SEPT. 2.....	14	8
MAR. 26.....	8	11	SEPT. 4.....	14	12
MAR. 27.....	8	10	SEPT. 7.....	13	11
MAR. 28.....	7	12	SEPT. 9.....	15	12
MAR. 29.....	6	11	SEPT. 11.....	17	8
MAR. 30.....	9	13	SEPT. 14.....	16	10
MAR. 31.....	8	11	SEPT. 16.....	9	7
APR. 1.....	6	8	SEPT. 18.....	10	10
APR. 2.....	6	7	SEPT. 21.....	9	10
APR. 3.....	6	3	SEPT. 23.....	9	5
APR. 4.....	6	2	SEPT. 25.....	8	6
APR. 5.....	6	3	SEPT. 28.....	8	8
APR. 6.....	6	2	SEPT. 30.....	9	8
APR. 7.....	7	2	OCT. 2.....	4	8
APR. 8.....	6	3	OCT. 5.....	7	7
APR. 14.....	5	3	OCT. 7.....	5	5
APR. 15.....	4	3	OCT. 8.....	4	6
APR. 17.....	5	4	OCT. 9.....	6	7
APR. 20.....	4	0	OCT. 12.....	6	6
APR. 22.....	4	0	OCT. 14.....	6	5
APR. 24.....	4	0	OCT. 16.....	5	5
APR. 27.....	4	6	OCT. 19.....	10	4
APR. 29.....	3	--	OCT. 21.....	5	7
APR. 30.....	--	3	OCT. 23.....	5	4
MAY 1.....	4	2	OCT. 26.....	6	7
MAY 4.....	5	0	OCT. 28.....	6	5
MAY 6.....	4	2	OCT. 29.....	6	6
MAY 8.....	4	2	OCT. 30.....	5	7
MAY 11.....	5	6	OCT. 31.....	5	6
MAY 13.....	4	1	NOV. 2.....	6	7
MAY 15.....	11	10	NOV. 4.....	16	9
MAY 19.....	4	3	NOV. 6.....	16	13
MAY 20.....	7	8.4	NOV. 7.....	15	12
MAY 22.....	7	8.5	NOV. 8.....	15	16
MAY 25.....	9	3.5	NOV. 9.....	27	9

RUSSIAN RIVER BASIN--Continued

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
NOV. 10, 1964.....	10	11	JAN. 23, 1965	288	520
NOV. 11.....	60	55	JAN. 24.....	206	300
NOV. 12.....	59	87	JAN. 25.....	160	330
NOV. 13.....	50	48	JAN. 26.....	171	400
NOV. 14.....	51	61	JAN. 27.....	158	330
NOV. 15.....	30	38	JAN. 28.....	184	190
NOV. 16.....	23	23	JAN. 29.....	161	190
NOV. 17.....	18	24	JAN. 30.....	163	220
NOV. 18.....	14	19	JAN. 31.....	164	130
NOV. 19.....	13	19	FEB. 1.....	146	180
NOV. 20.....	9	15	FEB. 2.....	140	180
NOV. 21.....	11	13	FEB. 3.....	132	160
NOV. 22.....	10	13	FEB. 4.....	133	140
NOV. 23.....	9	18	FEB. 5.....	137	140
NOV. 24.....	9	13	FEB. 6.....	129	130
NOV. 25.....	8	14	FEB. 7.....	127	170
NOV. 26.....	7	7	FEB. 8.....	126	130
NOV. 27.....	9	8	FEB. 9.....	130	120
NOV. 28.....	50	78	FEB. 10.....	112	160
NOV. 29.....	7	8	FEB. 11.....	133	160
NOV. 30.....	8	10	FEB. 12.....	116	170
DEC. 1.....	6	8	FEB. 13.....	142	130
DEC. 2.....	7	9	FEB. 14.....	124	190
DEC. 3.....	7	8	FEB. 15.....	113	150
DEC. 4.....	8	10	FEB. 16.....	111	180
DEC. 5.....	8	10	FEB. 17.....	123	180
DEC. 6.....	14	11	FEB. 18.....	124	190
DEC. 7.....	16	10	FEB. 19.....	123	400
DEC. 8.....	9	12	FEB. 20.....	103	190
DEC. 9.....	14	12	FEB. 21.....	99	190
DEC. 10.....	10	13	FEB. 22.....	126	180
DEC. 11.....	10	13	FEB. 23.....	119	120
DEC. 12.....	9	10	FEB. 24.....	109	190
DEC. 13.....	9	9	FEB. 25.....	121	170
DEC. 14.....	9	9	FEB. 26.....	116	176
DEC. 15.....	8	10	FEB. 27.....	114	150
DEC. 16.....	13	10	FEB. 28.....	110	110
DEC. 17.....	11	10	MAR. 1.....	100	130
DEC. 18.....	8	6	MAR. 2.....	107	130
DEC. 19.....	6	9	MAR. 3.....	97	150
DEC. 20.....	8	8	MAR. 4.....	86	120
DEC. 21.....	187	210	MAR. 5.....	94	100
DEC. 22.....	197	186	MAR. 6.....	91	140
DEC. 24.....	1960	1347	MAR. 7.....	97	140
DEC. 26.....	1050	975	MAR. 8.....	101	120
DEC. 27.....	912	864	MAR. 9.....	81	152
DEC. 29.....	776	520	MAR. 10.....	114	132
DEC. 30.....	299	348	MAR. 11.....	95	92
DEC. 31.....	324	330	MAR. 12.....	130	110
JAN. 1, 1965.....	211	312	MAR. 13.....	92	112
JAN. 2.....	243	252	MAR. 14.....	82	120
JAN. 3.....	196	240	MAR. 15.....	94	130
JAN. 4.....	188	252	MAR. 16.....	85	100
JAN. 6.....	1040	754	MAR. 17.....	95	120
JAN. 7.....	429	585	MAR. 18.....	81	132
JAN. 8.....	403	416	MAR. 19.....	83	92
JAN. 9.....	334	390	MAR. 20.....	86	108
JAN. 10.....	277	416	MAR. 21.....	84	128
JAN. 11.....	268	390	MAR. 22.....	79	100
JAN. 12.....	243	273	MAR. 23.....	93	120
JAN. 13.....	247	260	MAR. 24.....	85	120
JAN. 14.....	416	520	MAR. 25.....	66	108
JAN. 15.....	458	330	MAR. 26.....	62	108
JAN. 16.....	398	440	MAR. 27.....	94	108
JAN. 17.....	406	564	MAR. 29.....	51	92
JAN. 18.....	373	564	MAR. 30.....	53	92
JAN. 19.....	336	600	MAR. 31.....	69	84
JAN. 20.....	356	550	APR. 1.....	63	85
JAN. 21.....	325	640	APR. 2.....	71	87
JAN. 22.....	302	420	APR. 3.....	71	90

RUSSIAN RIVER BASIN--Continued

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 4, 1965	64	99	JULY 21, 1965.....	23	33
APR. 5.....	59	99	JULY 26.....	11	18
APR. 6.....	67	96	JULY 27.....	20	37
APR. 7.....	60	112	JULY 28.....	35	7.5
APR. 8.....	57	116	JULY 30.....	20	30
APR. 9.....	50	132	AUG. 3.....	25	30
APR. 10.....	54	96	AUG. 6.....	16	30
APR. 11.....	69	100	AUG. 10.....	18	28
APR. 12.....	66	88	AUG. 13.....	18	22
APR. 13.....	62	112	AUG. 17.....	28	24
APR. 14.....	53	100	AUG. 20.....	17	15
APR. 15.....	82	116	AUG. 24.....	11	15
APR. 16.....	47	88	AUG. 27.....	16	7
APR. 17.....	51	80	AUG. 31.....	3	7
APR. 18.....	50	68	SEPT. 1.....	11	13
APR. 19.....	52	72	SEPT. 3.....	1	2
APR. 20.....	35	51	SEPT. 7.....	1	2
APR. 21.....	31	60	SEPT. 10.....	6	10
APR. 22.....	57	89	SEPT. 17.....	3	3
APR. 23.....	63	67	SEPT. 21.....	3	2
APR. 26.....	56	84	SEPT. 24.....	3	1
APR. 27.....	62	84	SEPT. 28.....	3	5
APR. 28.....	51	60	OCT. 1.....	10	7.5
APR. 29.....	42	59	OCT. 5.....	5	5
APR. 30.....	56	67	OCT. 8.....	7	8
MAY 1.....	55	60	OCT. 12.....	7	10
MAY 3.....	59	80	OCT. 15.....	7	10
MAY 4.....	251	25	OCT. 19.....	11	11
MAY 5.....	13	22	OCT. 22.....	9	12
MAY 6.....	13	30	OCT. 26.....	6	9
MAY 7.....	19	25	OCT. 29.....	6	10
MAY 8.....	39	50	NOV. 11.....	5	10
MAY 9.....	43	48	NOV. 5.....	4	3
MAY 10.....	41	55	NOV. 9.....	5	8
MAY 11.....	38	46	NOV. 12.....	6	9
MAY 12.....	42	48	NOV. 13.....	6	14
MAY 13.....	44	55	NOV. 14.....	8	9
MAY 14.....	16	17	NOV. 15.....	12	25
MAY 15.....	54	48	NOV. 16.....	13	14
MAY 16.....	42	45	NOV. 17.....	14	30
MAY 17.....	42	47	NOV. 18.....	13	30
MAY 18.....	52	47	NOV. 19.....	20	25
MAY 19.....	59	52	NOV. 20.....	20	25
MAY 20.....	14	17	NOV. 22.....	52	70
MAY 21.....	13	15	NOV. 23.....	57	40
MAY 22.....	11	15	NOV. 24.....	44	55
MAY 24.....	37	47	NOV. 25.....	57	60
MAY 25.....	35	38	NOV. 26.....	58	65
MAY 27.....	36	41	NOV. 27.....	38	50
MAY 28.....	11	15	NOV. 28.....	40	40
MAY 31.....	31	35	NOV. 29.....	32	35
JUNE 1.....	28	35	NOV. 30.....	28	35
JUNE 2.....	33	25	DEC. 1.....	27	35
JUNE 3.....	28	40	DEC. 2.....	26	30
JUNE 7.....	28	30	DEC. 3.....	22	35
JUNE 9.....	5	5	DEC. 4.....	23	30
JUNE 14.....	19	11	DEC. 5.....	23	30
JUNE 16.....	26	37	DEC. 6.....	18	30
JUNE 18.....	32	40	DEC. 7.....	19	35
JUNE 21.....	7	11	DEC. 8.....	13	25
JUNE 23.....	8	7.5	DEC. 11.....	14	20
JUNE 24.....	26	38	DEC. 12.....	13	25
JUNE 25.....	30	37	DEC. 13.....	13	25
JUNE 28.....	33	38	DEC. 14.....	9	32
JUNE 30.....	27	40	DEC. 15.....	13	20
JULY 2.....	32	37	DEC. 16.....	10	15
JULY 5.....	20	40	DEC. 17.....	13	25
JULY 7.....	30	40	DEC. 18.....	11	20
JULY 12.....	31	34	DEC. 19.....	12	20
JULY 19.....	24	30	DEC. 22.....	8	18

RUSSIAN RIVER BASIN--Continued

11-4620, EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
DEC. 29, 1965.....	42	48	MAR. 9, 1966.....	39	55
DEC. 30.....	71	96	MAR. 10.....	33	40
DEC. 31.....	66	75	MAR. 11.....	30	40
JAN. 1, 1966.....	66	110	MAR. 12.....	33	50
JAN. 2.....	151	105	MAR. 13.....	34	45
JAN. 3.....	61	72	MAR. 14.....	31	40
JAN. 4.....	45	65	MAR. 15.....	30	45
JAN. 5.....	44	61	MAR. 16.....	30	40
JAN. 6.....	204	249	MAR. 17.....	25	40
JAN. 7.....	194	420	MAR. 18.....	26	35
JAN. 8.....	131	171	MAR. 19.....	28	40
JAN. 9.....	130	171	MAR. 20.....	23	40
JAN. 10.....	125	180	MAR. 21.....	30	50
JAN. 11.....	284	420	MAR. 22.....	27	42
JAN. 12.....	284	450	MAR. 23.....	27	40
JAN. 13.....	284	490	MAR. 24.....	29	42
JAN. 14.....	253	380	MAR. 25.....	29	40
JAN. 15.....	247	312	MAR. 26.....	27	43
JAN. 16.....	201	249	MAR. 27.....	26	50
JAN. 17.....	194	280	MAR. 28.....	28	45
JAN. 18.....	167	300	MAR. 29.....	27	42
JAN. 19.....	131	200	MAR. 30.....	32	40
JAN. 20.....	83	124	MAR. 31.....	28	47
JAN. 21.....	83	120	APR. 1.....	29	45
JAN. 22.....	77	100	APR. 2.....	26	49
JAN. 23.....	81	100	APR. 3.....	25	38
JAN. 24.....	85	126	APR. 4.....	23	48
JAN. 25.....	81	106	APR. 5.....	26	45
JAN. 26.....	80	100	APR. 6.....	24	40
JAN. 27.....	76	100	APR. 7.....	24	43
JAN. 28.....	76	104	APR. 8.....	22	42
JAN. 29.....	69	84	APR. 9.....	20	45
JAN. 30.....	75	98	APR. 10.....	20	37
JAN. 31.....	78	106	APR. 11.....	21	38
FEB. 1.....	68	92	APR. 12.....	20	40
FEB. 2.....	71	110	APR. 13.....	20	33
FEB. 3.....	65	104	APR. 14.....	24	40
FEB. 4.....	68	100	APR. 15.....	20	33
FEB. 5.....	65	100	APR. 16.....	23	35
FEB. 6.....	62	98	APR. 17.....	19	30
FEB. 7.....	70	94	APR. 18.....	19	35
FEB. 8.....	49	94	APR. 19.....	21	38
FEB. 9.....	102	159	APR. 20.....	18	40
FEB. 10.....	96	132	APR. 21.....	22	33
FEB. 11.....	88	110	APR. 22.....	19	40
FEB. 12.....	93	159	APR. 23.....	19	34
FEB. 13.....	86	120	APR. 25.....	17	31
FEB. 14.....	89	134	APR. 26.....	21	31
FEB. 15.....	61	86	APR. 27.....	17	33
FEB. 16.....	58	94	APR. 28.....	17	32
FEB. 17.....	58	88	APR. 29.....	19	36
FEB. 18.....	51	100	MAY 2.....	19	30
FEB. 19.....	52	70	MAY 4.....	20	20
FEB. 20.....	53	60	MAY 6.....	12	18
FEB. 21.....	53	60	MAY 9.....	13	20
FEB. 22.....	49	50	MAY 11.....	15	20
FEB. 23.....	49	50	MAY 13.....	17	20
FEB. 24.....	50	60	MAY 16.....	16	24
FEB. 25.....	45	55	MAY 18.....	16	37
FEB. 26.....	44	70	MAY 20.....	17	34
FEB. 27.....	45	45	MAY 23.....	18	33
FEB. 28.....	47	60	MAY 25.....	22	33
MAR. 1.....	30	55	MAY 27.....	21	31
MAR. 2.....	28	50	MAY 30.....	20	31
MAR. 3.....	47	55	JUNE 1.....	16	30
MAR. 4.....	48	60	JUNE 3.....	15	30
MAR. 5.....	38	50	JUNE 6.....	9	35
MAR. 6.....	37	50	JUNE 8.....	18	35
MAR. 7.....	35	45	JUNE 10.....	23	34
MAR. 8.....	38	55	JUNE 13.....	19	35

RUSSIAN RIVER BASIN--Continued

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
JUNE 15, 1966.....	22	28	OCT. 26, 1966.....	6	9
JUNE 17.....	20	32	OCT. 28.....	4	8
JUNE 20.....	16	27	OCT. 31.....	4	9
JUNE 22.....	18	24	NOV. 1.....	5	8
JUNE 24.....	19	27	NOV. 2.....	7	8
			NOV. 4.....	7	9
JUNE 27.....	18	28	NOV. 7.....	7	8
JUNE 29.....	26	25	NOV. 9.....	7	8
JULY 1.....	20	27	NOV. 11.....	6	8
JULY 4.....	24	30	NOV. 14.....	5	8
JULY 6.....	18	30	NOV. 15.....	6	16
			NOV. 16.....	5	6
JULY 8.....	20	30	NOV. 17.....	5	8
JULY 11.....	14	24	NOV. 18.....	38	70
JULY 13.....	16	27	NOV. 19.....	33	58
JULY 15.....	19	30			
JULY 18.....	19	30	NOV. 20.....	42	73
			NOV. 21.....	88	115
JULY 19.....	20	24	NOV. 22.....	70	103
JULY 20.....	16	18	NOV. 23.....	73	133
JULY 22.....	14	20	NOV. 24.....	56	87
JULY 25.....	20	20			
JULY 27.....	12	10	NOV. 25.....	44	73
			NOV. 28.....	57	105
JULY 29.....	5	4	NOV. 30.....	54	97
AUG. 1.....	4	3	DEC. 1.....	52	92
AUG. 3.....	9	4	DEC. 2.....	400	675
AUG. 5.....	4	4			
AUG. 8.....	4	4	DEC. 3.....	417	621
			DEC. 4.....	303	621
AUG. 10.....	5	3	DEC. 5.....	298	600
AUG. 12.....	3	4	DEC. 6.....	127	190
AUG. 15.....	6	4	DEC. 7.....	80	118
AUG. 17.....	4	4			
AUG. 18.....	5	5	DEC. 8.....	78	80
			DEC. 9.....	97	120
AUG. 19.....	6	3.9	DEC. 10.....	99	114
AUG. 22.....	8	4.2	DEC. 11.....	91	143
AUG. 24.....	8	3.9	DEC. 12.....	119	140
AUG. 26.....	4	3.0			
AUG. 29.....	4	3.1	DEC. 14.....	71	104
			DEC. 16.....	63	94
AUG. 31.....	4	3.8	DEC. 19.....	66	94
SEPT. 2.....	3	4.8	DEC. 21.....	65	94
SEPT. 5.....	4	4.6	DEC. 23.....	72	96
SEPT. 7.....	4	6.8			
SEPT. 9.....	5	4.5	DEC. 27.....	61	85
			DEC. 28.....	41	71
SEPT. 12.....	3	3.9	DEC. 30.....	55	87
SEPT. 14.....	--	3.7	JAN. 2, 1967.....	59	87
SEPT. 16.....	6	3.7	JAN. 4.....	63	100
SEPT. 19.....	4	4.1			
SEPT. 21.....	4	4.6	JAN. 6.....	60	100
			JAN. 9.....	59	100
SEPT. 23.....	4	3.6	JAN. 11.....	57	100
SEPT. 26.....	6	7.1	JAN. 13.....	55	100
SEPT. 28.....	6	4.1	JAN. 16.....	36	75
SEPT. 30.....	4	3.9			
OCT. 3.....	8	12	JAN. 18.....	40	68
			JAN. 20.....	57	100
OCT. 4.....	5	4	JAN. 21.....	56	98
OCT. 5.....	8	11	JAN. 22.....	299	760
OCT. 7.....	7	12	JAN. 23.....	236	540
OCT. 10.....	7	12			
OCT. 12.....	8	10	JAN. 24.....	143	230
			JAN. 25.....	132	210
OCT. 14.....	7	10	JAN. 26.....	76	100
OCT. 17.....	9	14	JAN. 27.....	158	255
OCT. 19.....	8	12	JAN. 28.....	91	150
OCT. 21.....	9	14			
OCT. 24.....	4	8			

RUSSIAN RIVER BASIN--Continued

11-4620. EAST FORK RUSSIAN RIVER NEAR UKIAH, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
JAN. 29, 1967.....	80	135			
FEB. 1.....	90	170			
FEB. 2.....	75	150			
FEB. 3.....	80	160			
FEB. 6.....	92	110			
FEB. 8.....	91	180			
FEB. 10.....	80	170			
FEB. 13.....	85	175			
FEB. 15.....	84	160			
FEB. 17.....	77	155			
FEB. 20.....	69	135			
FEB. 22.....	69	135			
FEB. 24.....	58	120			
FEB. 27.....	56	110			
MAR. 3.....	50	100			
MAR. 6.....	44	116			
MAR. 8.....	38	110			
MAR. 10.....	30	90			
MAR. 13.....	50	96			
MAR. 15.....	37	88			
MAR. 17.....	35	86			
MAR. 20.....	26	83			
MAR. 22.....	35	90			
MAR. 24.....	35	90			
MAR. 27.....	39	90			
MAR. 29.....	35	76			
MAR. 31.....	33	80			
APR. 3.....	35	75			
APR. 5.....	44	58			
APR. 7.....	42	65			
APR. 10.....	42	60			
APR. 12.....	37	40			
APR. 14.....	29	49			
APR. 17.....	34	40			
APR. 19.....	19	26			
APR. 21.....	22	44			
APR. 24.....	28	24			
APR. 26.....	26	34			
APR. 28.....	23	35			
MAY 1.....	19	28			
MAY 3.....	13	37			
MAY 5.....	14	32			
MAY 8.....	13	30			
MAY 9.....	12	80			
MAY 10.....	26	30			
MAY 12.....	18	30			
MAY 15.....	22	26			
MAY 17.....	23	26			
MAY 19.....	28	30			
MAY 22.....	51	55			
MAY 24.....	28	46			
MAY 26.....	20	30			
MAY 29.....	24	39			
MAY 31.....	20	30			
JUNE 2.....	17	37			
JUNE 5.....	13	25			
JUNE 7.....	11	32			
JUNE 14.....	21	15			
JUNE 21.....	21	12			
JUNE 29.....	15	10			
JULY 5.....	10	12			
JULY 11.....	4	8			
JULY 12.....	10	9			
JULY 19.....	8	6			
AUG. 2.....	1	2			
AUG. 8.....	1	2			
AUG. 9.....	13	3			
AUG. 16.....	10	3			
AUG. 23.....	3	19			
AUG. 30.....	2	2			
SEPT. 12.....	3	0			

RUSSIAN RIVER BASIN--Continued

11-4625. RUSSIAN RIVER NEAR HOPLAND, CALIF.

LOCATION.--Lat 39°01'35", long 123°07'45", temperature recorder at gaging station, in Rancho de Sanel Grant, on right bank 0.2 mile downstream from McNab Creek, 4 miles north of Hopland, Mendocino County.

DRAINAGE AREA.--362 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1965.

Water temperatures: September 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 45°F Apr. 2.

EXTREMES, 1965-67.--Water temperatures: Maximum (1965-66), 72°F Aug. 20, Sept. 3, 4, 7, 8, 1966; minimum, 43°F Feb. 8, 9, 1966.

REMARKS.--Clock stopped Apr. 27 to May 9, May 16 to June 6, July 19 to Sept. 16; temperature ranges, 46°F to 57°F, 56°F to 69°F and 55°F to 67°F, respectively.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	70	70	70	70	70	68	67	67	68	67	66	64	63	63	63	63	63	63	61	62	60	62	64	63	62	62	62	62	62	62	62	64
Minimum	63	63	63	63	63	62	62	61	61	61	61	60	58	57	57	57	57	57	57	58	51	56	58	58	57	58	58	57	57	57	57	58
November																																
Maximum	62	62	61	62	60	60	61	60	60	60	59	60	59	58	59	58	58	58	58	56	54	54	56	56	56	55	55	54	55	56	--	58
Minimum	58	57	58	58	57	58	57	56	56	56	58	58	58	57	58	56	56	57	56	54	52	53	54	54	54	53	54	53	53	55	--	55
December																																
Maximum	56	54	56	54	54	55	55	54	54	55	55	54	55	55	55	55	55	56	55	55	55	55	54	55	54	54	53	52	51	50	50	54
Minimum	54	53	53	53	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	53	52	52	50	50	50	50	53
January																																
Maximum	50	50	50	50	52	51	52	52	51	52	48	50	52	52	51	48	48	48	48	49	51	51	51	51	50	49	50	50	52	51	50	50
Minimum	49	50	50	48	48	47	47	47	47	47	47	47	47	47	47	46	47	47	47	47	49	50	50	50	48	47	49	49	50	49	48	48
February																																
Maximum	50	49	49	49	49	52	53	54	54	55	55	56	55	53	52	53	55	56	55	54	55	54	55	55	56	57	56	57	--	--	--	53
Minimum	49	48	48	48	47	47	49	51	51	52	52	54	53	51	51	51	52	53	53	52	52	52	52	54	54	53	53	54	--	--	--	51
March																																
Maximum	59	58	54	54	53	55	56	55	55	55	51	50	49	49	50	52	50	51	51	51	52	53	52	53	52	53	53	53	51	51	50	52
Minimum	54	54	53	51	50	52	52	51	50	51	49	48	47	46	47	50	48	49	50	50	50	52	51	49	49	49	49	51	49	49	48	49
April																																
Maximum	48	48	48	50	49	52	50	52	52	50	50	53	50	50	52	50	48	48	48	49	50	50	49	53	53	52	--	--	--	--	--	50
Minimum	46	45	47	48	47	48	46	48	48	48	46	46	47	47	47	46	46	46	46	46	47	47	47	48	48	47	--	--	--	--	--	46
May																																
Maximum	--	--	--	--	--	--	--	--	--	--	56	56	60	61	62	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	50	53	53	55	56	57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June																																
Maximum	--	--	--	--	--	62	62	62	62	61	61	62	63	63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	56	55	55	54	54	54	55	56	56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July																																
Maximum	--	--	--	66	--	--	--	66	65	66	66	66	68	68	68	68	68	68	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	64	--	--	--	63	63	64	63	64	64	65	65	65	65	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--
August																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	68	70	--	--	69	70	70	--	70	70	--	--	70	68	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	63	64	--	--	63	65	64	--	64	65	--	--	65	64	--	--

RUSSIAN RIVER BASIN--Continued

11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.

LOCATION.--Lat 38°52'55", long 123°03'15", at gaging station at Lambert Ranch, 400 feet downstream from Cummysky Creek, and 5 miles northwest of Cloverdale, Sonoma County.

DRAINAGE AREA.--502 square miles.

RECORDS AVAILABLE.--Water temperatures: November 1963 to September 1967.

Sediment records: November 1963 to September 1966, January to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 73°F July 11, 12; minimum, 44°F on several days in January, February, and April.

Sediment concentrations: Maximum daily, 2,590 ppm Jan. 21; minimum daily, 3 ppm Jan. 13-15.

Sediment loads: Maximum daily, 118,000 tons Jan. 21; minimum daily, 0.9 ton Jan. 15.

EXTREMES, 1964-67.--Water temperatures (1966-67): Maximum, 73°F July 11, 12, 1967; minimum, 44°F on several days in January, February, and April 1967.

Sediment concentrations (1964-66, January to September 1967): Maximum daily, 4,600 ppm Dec. 23, 1964; minimum daily, 3 ppm Oct. 20-22, 1964, Jan. 13-15, 1967.

Sediment loads (1964-66, January to September 1967): 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 (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	68	67	67	66	66	66	67	67	67	67	66	65	61	61	61	62	58	62	61	62	62	62	64	64	63	63	62	62	63	62	62	63
Minimum	66	64	64	64	64	64	63	63	64	64	64	61	58	57	57	58	58	59	58	59	59	58	61	61	60	61	60	58	59	59	59	60
November	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	62	62	61	61	61	60	60	60	59	59	59	60	60	59	59	58	58	59	57	54	54	55	55	55	55	54	54	55	57	57	58	58
Minimum	59	59	60	59	58	58	56	56	56	58	59	59	58	58	58	56	56	57	54	52	53	53	53	53	53	52	53	54	53	54	54	56
December	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	56	54	55	53	55	56	55	56	52	52	52	53	53	53	51	50	51	51	50	51	50	51	51	51	50	49	48	49	49	50	51	51
Minimum	55	53	52	52	53	54	54	52	51	50	51	52	52	51	49	49	48	48	49	49	49	49	50	49	48	46	45	47	48	48	48	50
January	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	51	51	50	49	50	48	48	48	48	49	49	49	50	49	49	49	46	47	46	46	48	50	50	52	52	50	49	49	50	50	50	49
Minimum	48	48	48	44	48	46	46	46	46	47	47	47	47	47	47	47	44	45	44	45	46	48	49	50	50	49	49	49	48	50	48	47
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	50	49	49	46	46	46	46	48	47	47	47	49	50	50	50	48	47	49	50	50	50	50	50	49	51	51	54	53	53	53	49	49
Minimum	48	47	44	44	44	44	45	45	46	45	46	47	48	47	46	45	45	46	47	45	45	45	45	46	48	46	51	48	50	50	50	46
March	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	54	56	52	52	55	54	54	54	53	52	51	51	50	50	50	50	50	51	51	50	52	52	52	52	52	51	52	52	50	50	48	51
Minimum	50	50	48	45	45	48	50	50	50	50	50	50	50	48	48	48	49	50	50	50	50	50	50	50	50	49	49	50	48	48	48	49
April	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	48	49	49	50	50	49	50	51	51	52	50	52	52	50	50	50	50	50	47	48	50	48	50	50	52	52	51	52	50	52	52	50
Minimum	47	47	48	48	48	48	47	48	48	48	46	47	48	48	46	46	46	44	45	46	46	46	46	46	47	48	46	47	46	46	47	46
May	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	53	55	56	56	56	58	60	60	57	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Minimum	47	48	49	50	52	52	53	54	52	50	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
June	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	62	61	63	64	62	63	64	63	62	62	62	62	64	66	66	67	69	67	68	68	68	68	68	69	69	69	70	70	71	72	71	70
Minimum	56	56	56	56	56	56	56	56	56	56	56	55	57	60	61	62	63	62	62	62	62	62	62	63	63	63	64	64	65	66	65	64
July	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	72	71	70	70	70	69	68	70	70	71	73	73	72	72	72	72	72	70	70	70	71	70	70	70	70	70	70	70	72	72	71	70
Minimum	66	65	64	64	64	64	62	63	64	64	66	66	66	66	66	66	65	64	63	64	65	65	64	64	64	64	64	66	66	66	65	64
August	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	70	70	70	70	69	69	69	69	69	68	68	68	68	68	67	68	68	69	69	69	69	70	70	69	67	69	69	68	68	68	66	68
Minimum	65	65	65	64	64	64	64	64	64	64	64	64	64	64	63	64	66	65	65	64	64	65	66	66	63	63	65	64	66	65	64	64
September	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum	64	66	66	66	66	67	67	68	67	68	67	68	68	69	70	70	70	69	69	69	69	70	70	68	70	70	69	68	68	67	67	68
Minimum	62	61	63	64	62	63	64	63	63	64	64	62	64	64	65	65	65	64	65	65	66	66	66	66	66	66	66	66	65	62	63	64

RUSSIAN RIVER BASIN--Continued

11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.--Continued

Suspended sediment, January to September 1967

Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	273	35	26	7390	650	13000	203	4	2.2
2..	236	30	19	6240	455	7670	249	5	3.4
3..	215	25	15	5260	360	5110	249	8	5.4
4..	200	20	11	4240	255	2920	243	9	5.9
5..	188	15	7.6	3930	245	2600	226	9	5.5
6..	175	15	7.1	3060	220	1820	212	9	5.2
7..	167	12	5.4	990	90	241	210	9	5.1
8..	160	10	4.3	768	44	91	394	28	30
9..	152	8	3.3	640	31	54	424	47	54
10..	145	7	2.7	554	23	34	518	53	74
11..	139	6	2.3	494	18	24	1700	340	1600
12..	134	4	1.4	458	15	19	2700	430	3100
13..	129	3	1.0	420	13	15	2150	200	1160
14..	123	3	1.0	390	11	12	2500	320	2160
15..	116	3	.9	365	9	8.9	2480	240	1610
16..	2200	259	S 1690	355	9	8.6	7770	600	12600
17..	2950	215	1710	335	9	8.1	5050	340	4640
18..	3010	170	1380	315	8	6.8	3020	220	1800
19..	2550	160	1100	300	8	6.5	2520	160	1100
20..	3860	1590	S 26800	275	7	5.2	2850	200	1540
21..	16800	2590	S 118000	265	6	4.3	2780	220	1700
22..	5940	800	12800	255	6	4.1	2290	150	927
23..	3020	290	2360	245	6	4.0	2230	130	780
24..	5590	691	S 11100	236	7	4.5	1860	120	600
25..	5570	710	10700	265	7	5.0	1590	110	470
26..	7070	1330	S 29700	240	6	3.9	1450	110	430
27..	7070	900	17200	230	6	3.7	1280	110	380
28..	7890	800	17000	218	5	2.9	1190	110	350
29..	9980	1370	S 39500	--	--	--	1130	110	340
30..	6500	1110	S 21000	--	--	--	1940	180	940
31..	9120	1200	29500	--	--	--	2910	210	1700
Total	101672	--	341648.0	38733	--	33686.5	56318	--	40117.7
Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2840	190	1500	1230	35	116	386	23	24
2..	2380	140	900	1110	34	100	650	76	133
3..	2160	100	580	1060	32	92	479	52	67
4..	2020	80	440	1010	31	85	376	31	31
5..	1920	90	470	940	29	74	351	23	22
6..	2890	340	2700	880	28	67	509	60	82
7..	3190	310	2700	840	25	57	595	54	87
8..	2350	200	1300	808	22	48	604	52	85
9..	2070	110	610	808	21	46	604	50	82
10..	2160	80	467	897	37	90	594	44	71
11..	2240	70	420	864	42	98	592	39	62
12..	1860	65	326	830	36	81	590	34	54
13..	1660	60	270	807	31	68	434	29	34
14..	1600	55	238	783	28	59	396	25	27
15..	1500	50	200	717	26	50	383	25	26
16..	1290	50	170	425	23	26	367	27	27
17..	2310	240	1500	365	15	15	341	28	26
18..	3020	260	2100	330	12	11	327	30	26
19..	3010	160	1300	307	12	9.9	325	33	29
20..	2600	120	840	291	11	8.6	316	37	32
21..	2440	105	692	273	9	6.6	305	40	33
22..	2100	100	570	257	7	4.9	298	41	33
23..	2630	200	1400	330	9	8.0	288	38	30
24..	2380	110	707	257	14	9.7	283	33	25
25..	2070	63	350	302	19	15	283	29	22
26..	1900	58	298	318	22	19	278	23	17
27..	1810	49	240	315	21	18	270	19	14
28..	1620	41	179	314	19	16	265	15	11
29..	1450	37	140	312	17	14	257	13	9.0
30..	1330	36	130	306	14	12	248	13	8.7
31..	--	--	--	308	13	11	--	--	--
Total	64800	--	23737	18594	--	1335.7	11994	--	1229.7

S Computed by subdividing day.

RUSSIAN RIVER BASIN--Continued
11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.--Continued
Suspended sediment, January to September 1967--Continued

Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	243	13	8.5	281	18	14	351	17	16
2..	244	13	8.6	286	18	14	351	18	17
3..	245	14	9.3	290	16	13	352	19	18
4..	236	14	8.9	289	14	11	351	20	19
5..	237	14	9.0	289	14	11	350	21	20
6..	231	14	8.7	298	12	9.7	350	22	21
7..	224	14	8.5	298	10	8.0	350	23	22
8..	222	14	8.4	298	9	7.2	348	22	21
9..	219	14	8.3	298	9	7.2	343	22	20
10..	220	14	8.3	296	8	6.4	343	21	19
11..	214	14	8.1	293	8	6.3	345	21	20
12..	214	15	8.7	291	7	5.5	339	20	18
13..	209	15	8.5	298	7	5.6	338	19	17
14..	213	15	8.6	294	7	5.6	337	19	17
15..	212	14	8.0	289	7	5.5	335	18	16
16..	213	14	8.1	288	7	5.4	336	17	15
17..	224	13	7.9	290	7	5.5	339	16	15
18..	236	13	8.3	293	8	6.3	341	15	14
19..	241	13	8.5	313	9	7.6	337	14	13
20..	242	13	8.5	322	10	8.7	335	13	12
21..	241	13	8.5	323	10	8.7	328	12	11
22..	246	14	9.3	321	10	8.7	328	11	9.7
23..	254	16	11	319	11	9.5	328	10	8.9
24..	262	16	11	321	11	9.5	329	10	8.9
25..	256	16	11	342	12	11	333	10	9.0
26..	254	16	11	347	12	11	327	10	8.8
27..	255	16	11	351	13	12	327	10	8.8
28..	252	16	11	352	14	13	326	10	8.8
29..	255	16	11	351	14	13	326	10	8.8
30..	258	17	12	351	14	13	325	10	8.8
31..	261	17	12	349	15	14	--	--	--
Total	7333	--	288.5	9621	--	286.9	10146	--	441.5

Total discharge for period Jan. 1 to Sept. 30, 1967 (cfs-days)..... 319213
Total load for period Jan. 1 to Sept. 30, 1967 (tons)..... 442771.5

RUSSIAN RIVER BASIN--Continued

11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Oct. 6, 1966.....	1245	64		240	15	9.7	--	--	--	--	--	--	--	--	--	--	--	
Nov. 3.....	1500	60		D 465	20	25	--	--	--	--	--	--	--	--	--	--	--	
Jan. 20, 1967.....	0800	47		1020	649	--	--	--	--	--	--	96	100	--	--	--	--	V
Jan. 21.....	1015	50		20200	1920	--	31	40	56	68	81	90	98	100	--	--	--	VPWC
Jan. 21.....	1340	50		19400	2030	--	--	34	--	53	--	72	85	96	100	--	--	VPWC
Jan. 22.....	0930	44		6100	751	--	--	--	--	--	--	85	95	100	--	--	--	V
Jan. 27.....	0800	47		7610	1060	--	--	--	--	--	--	78	92	100	--	--	--	V
Jan. 28.....	0900	49		9320	771	--	--	--	--	--	--	81	94	100	--	--	--	V
Jan. 29.....	1115	52		12300	1980	--	20	25	37	47	59	69	86	99	100	--	--	VPWC
Jan. 31.....	0830	48		9580	1230	--	--	--	--	--	--	48	66	83	96	100	--	V
Feb. 1.....	0820	47		7560	674	--	--	--	--	--	--	48	64	80	94	98	100	V
Mar. 13.....	0800	43		2280	210	--	--	--	--	--	--	85	94	100	--	--	--	V
Apr. 7.....	0800	49		3640	340	--	--	--	--	--	--	60	73	87	100	--	--	V

D Daily mean discharge.

RUSSIAN RIVER BASIN--Continued

11-4630, RUSSIAN RIVER NEAR CLOVERDALE, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, November 1963 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 19, 1964.....	153	52	JULY 13, 1964.....	13	4
MAR. 11.....	20	68	JULY 15.....	8	4
MAR. 12.....	397	170	JULY 18.....	10	3
MAR. 13.....	63	50	JULY 20.....	7	4
MAR. 14.....	41	30	JULY 21.....	11	4
MAR. 15.....	26	18	JULY 22.....	9	6
MAR. 16.....	22	7	JULY 24.....	8	4
MAR. 17.....	20	8	JULY 27.....	7	5
MAR. 18.....	20	7	JULY 29.....	8	5
MAR. 19.....	22	7	JULY 31.....	8	8
MAR. 20.....	38	7	AUG. 5.....	7	4
MAR. 21.....	28	7	AUG. 7.....	--	4
MAR. 22.....	14	8	AUG. 8.....	7	--
MAR. 23.....	25	7	AUG. 10.....	8	6
MAR. 24.....	36	8	AUG. 12.....	7	4
MAR. 25.....	24	3	AUG. 15.....	8	5
MAR. 26.....	16	8	AUG. 17.....	9	4
MAR. 27.....	13	8	AUG. 19.....	6	3
MAR. 28.....	12	3	AUG. 21.....	6	4
MAR. 29.....	12	0	AUG. 24.....	6	3
MAR. 30.....	10	2	AUG. 26.....	6	3
MAR. 31.....	15	12	AUG. 28.....	4	3
APR. 1.....	12	5	AUG. 31.....	4	3
APR. 2.....	12	3	SEPT. 2.....	4	3
APR. 3.....	13	3	SEPT. 3.....	10	4
APR. 4.....	13	8	SEPT. 5.....	6	7
APR. 5.....	14	7	SEPT. 7.....	5	5
APR. 6.....	9	3	SEPT. 9.....	5	3
APR. 7.....	11	8	SEPT. 11.....	5	9
APR. 8.....	8	0	SEPT. 14.....	5	7
APR. 9.....	8	0	SEPT. 16.....	6	7
APR. 10.....	7	0	SEPT. 19.....	4	6
APR. 11.....	6	2	SEPT. 21.....	4	3
APR. 12.....	5	0	SEPT. 23.....	4	4
APR. 13.....	6	0	SEPT. 25.....	5	6
APR. 15.....	6	0	SEPT. 27.....	6	5
APR. 17.....	5	1	SEPT. 30.....	6	6
APR. 20.....	6	0	OCT. 3.....	7	5
APR. 22.....	10	0	OCT. 5.....	10	7
APR. 24.....	5	1	OCT. 7.....	15	10
APR. 27.....	5	0	OCT. 8.....	24	8
APR. 29.....	14	0	OCT. 9.....	4	7
MAY 1.....	10	0	OCT. 12.....	11	7
MAY 4.....	9	1	OCT. 14.....	4	7
MAY 8.....	19	6	OCT. 16.....	4	4
MAY 11.....	15	0	OCT. 19.....	4	6
MAY 13.....	13	1	OCT. 21.....	3	6
MAY 16.....	9	5	OCT. 23.....	4	5
MAY 18.....	20	2	OCT. 26.....	4	4
MAY 20.....	12	10	OCT. 28.....	10	7
MAY 22.....	2	7.5	OCT. 29.....	48	26
MAY 25.....	13	17	OCT. 31.....	8	10
MAY 27.....	8	15	NOV. 1.....	22	14
MAY 29.....	10	17	NOV. 2.....	13	8
JUNE 1.....	12	10	NOV. 4.....	4	4
JUNE 3.....	16	7.5	NOV. 6.....	4	6
JUNE 6.....	11	15	NOV. 9.....	487	620
JUNE 8.....	10	12	NOV. 10.....	917	448
JUNE 13.....	11	7	NOV. 11.....	190	83
JUNE 15.....	14	11	NOV. 12.....	188	84
JUNE 17.....	10	4	NOV. 13.....	65	30
JUNE 19.....	11	5	NOV. 16.....	10	9
JUNE 22.....	12	5	NOV. 18.....	9	10
JUNE 24.....	13	5	NOV. 20.....	6	8
JUNE 27.....	11	3	NOV. 23.....	9	10
JUNE 29.....	11	3	NOV. 25.....	12	10
JULY 4.....	14	3	NOV. 27.....	74	36
JULY 6.....	13	3	NOV. 30.....	75	45
JULY 8.....	15	4	DEC. 1.....	310	148
JULY 11.....	11	4	DEC. 2.....	124	58

RUSSIAN RIVER BASIN--Continued

11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
November 1963 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
DEC. 3, 1964.....	39	34	MAR. 12, 1965.....	70	72
DEC. 4.....	19	15	MAR. 15.....	55	22
DEC. 7.....	8	10	MAR. 17.....	76	60
DEC. 8.....	8	12	MAR. 20.....	69	43
DEC. 18.....	5	8	MAR. 22.....	58	40
DEC. 19.....	167	67	MAR. 24.....	59	33
DEC. 20.....	619	270	MAR. 27.....	80	42
DEC. 21.....	2430	510	MAR. 31.....	99	49
DEC. 22.....	3890	1320	APR. 2.....	81	40
DEC. 23.....	3850	1232	APR. 5.....	73	33
DEC. 26.....	1350	665	APR. 7.....	68	33
DEC. 27.....	1420	672	APR. 8.....	--	350
DEC. 28.....	1160	560	APR. 9.....	744	270
DEC. 29.....	888	462	APR. 10.....	353	200
DEC. 30.....	877	390	APR. 12.....	140	74
DEC. 31.....	765	390	APR. 14.....	86	60
JAN. 1, 1965.....	586	240	APR. 15.....	2930	110
JAN. 2.....	589	260	APR. 16.....	1040	380
JAN. 3.....	1500	550	APR. 17.....	261	100
JAN. 4.....	5720	1316	APR. 18.....	189	112
JAN. 5.....	3750	938	APR. 19.....	216	100
JAN. 6.....	2360	630	APR. 20.....	166	80
JAN. 7.....	1430	510	APR. 21.....	183	75
JAN. 8.....	823	480	APR. 22.....	127	42
JAN. 9.....	696	450	APR. 24.....	93	42
JAN. 10.....	546	330	APR. 27.....	67	37
JAN. 11.....	472	330	APR. 30.....	60	42
JAN. 12.....	381	255	MAY 3.....	53	42
JAN. 13.....	425	250	MAY 5.....	21	10
JAN. 14.....	562	230	MAY 10.....	48	32
JAN. 15.....	153	68	MAY 11.....	47	33
JAN. 16.....	140	80	MAY 12.....	32	38
JAN. 17.....	88	40	MAY 15.....	29	28
JAN. 18.....	64	48	MAY 17.....	13	10
JAN. 19.....	89	60	MAY 19.....	30	1.5
JAN. 20.....	88	68	MAY 24.....	48	28
JAN. 21.....	52	40	MAY 27.....	39	37
JAN. 23.....	1930	364	MAY 29.....	30	29
JAN. 24.....	2500	420	MAY 31.....	32	24
JAN. 25.....	382	130	JUNE 2.....	28	20
JAN. 26.....	246	160	JUNE 5.....	19	18
JAN. 27.....	216	130	JUNE 7.....	18	19
JAN. 28.....	181	150	JUNE 9.....	17	21
JAN. 29.....	123	60	JUNE 12.....	44	26
JAN. 30.....	89	24	JUNE 14.....	15	24
JAN. 31.....	50	19	JUNE 16.....	15	18
FEB. 1.....	46	17	JUNE 18.....	15	19
FEB. 2.....	523	160	JUNE 21.....	18	22
FEB. 3.....	211	190	JUNE 25.....	19	15
FEB. 4.....	111	64	JUNE 28.....	17	22
FEB. 5.....	123	56	JUNE 30.....	17	24
FEB. 6.....	77	48	JULY 2.....	17	26
FEB. 8.....	28	19	JULY 5.....	29	35
FEB. 9.....	43	26	JULY 7.....	29	32
FEB. 10.....	44	28	JULY 10.....	27	23
FEB. 11.....	42	26	JULY 12.....	32	25
FEB. 15.....	17	10	JULY 14.....	30	29
FEB. 16.....	258	180	JULY 17.....	36	32
FEB. 17.....	88	100	JULY 19.....	40	25
FEB. 18.....	23	18	JULY 21.....	33	27
FEB. 22.....	15	12	JULY 26.....	43	32
FEB. 24.....	221	140	JULY 27.....	34	29
FEB. 27.....	52	31	JULY 28.....	48	33
MAR. 1.....	18	15	JULY 30.....	43	25
MAR. 3.....	72	66	AUG. 4.....	36	30
MAR. 5.....	93	88	AUG. 6.....	39	25
MAR. 6.....	48	69	AUG. 9.....	40	25
MAR. 8.....	46	48	AUG. 11.....	43	37
MAR. 9.....	61	47	AUG. 13.....	31	25
MAR. 10.....	75	80	AUG. 16.....	22	24

RUSSIAN RIVER BASIN--Continued

11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
November 1963 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
AUG. 18, 1965.....	21	17	JAN. 7, 1966.....	1130	370
AUG. 20.....	40	42	JAN. 8.....	881	300
AUG. 23.....	40	42	JAN. 9.....	508	250
AUG. 25.....	35	25	JAN. 10.....	695	165
AUG. 28.....	41	17	JAN. 11.....	511	156
AUG. 30.....	35	17	JAN. 12.....	414	165
AUG. 31.....	25	17	JAN. 13.....	118	42
SEPT. 1.....	17	20	JAN. 14.....	51	38
SEPT. 3.....	16	30	JAN. 15.....	32	20
SEPT. 6.....	16	20	JAN. 16.....	16	15
SEPT. 8.....	18	26	JAN. 17.....	17	18
SEPT. 10.....	8	11	JAN. 18.....	16	23
SEPT. 13.....	8	11	JAN. 19.....	14	13
SEPT. 15.....	15	15	JAN. 20.....	12	15
SEPT. 17.....	11	14	JAN. 21.....	10	11
SEPT. 20.....	10	10	JAN. 22.....	10	13
SEPT. 22.....	12	15	JAN. 23.....	14	18
SEPT. 24.....	8	10	JAN. 24.....	15	10
SEPT. 27.....	11	10	JAN. 26.....	8	11
SEPT. 28.....	11	10	JAN. 28.....	11	15
SEPT. 29.....	1	10	JAN. 29.....	1920	696
OCT. 1.....	14	15	JAN. 30.....	701	420
OCT. 7.....	28	16	JAN. 31.....	225	63
OCT. 9.....	33	22	FEB. 1.....	896	510
OCT. 11.....	22	15	FEB. 2.....	203	130
OCT. 13.....	16	12	FEB. 3.....	317	146
OCT. 15.....	9	6	FEB. 4.....	754	330
OCT. 18.....	13	9.5	FEB. 5.....	609	132
OCT. 20.....	13	7.5	FEB. 6.....	589	123
OCT. 22.....	9	9.5	FEB. 7.....	229	141
OCT. 25.....	11	6	FEB. 8.....	268	100
OCT. 27.....	18	15	FEB. 9.....	213	102
OCT. 29.....	10	10	FEB. 10.....	83	37
NOV. 1.....	10	11	FEB. 11.....	44	26
NOV. 3.....	10	11	FEB. 13.....	23	15
NOV. 5.....	11	12	FEB. 14.....	17	25
NOV. 8.....	22	22	FEB. 15.....	10	10
NOV. 9.....	25	20	FEB. 16.....	17	25
NOV. 10.....	9	2	FEB. 17.....	16	11
NOV. 12.....	15	10	FEB. 18.....	26	10
NOV. 14.....	943	500	FEB. 19.....	684	200
NOV. 15.....	172	150	FEB. 20.....	60	45
NOV. 16.....	323	150	FEB. 21.....	19	25
NOV. 17.....	188	100	FEB. 22.....	29	30
NOV. 18.....	1180	200	FEB. 23.....	28	30
NOV. 20.....	72	70	FEB. 24.....	49	30
NOV. 22.....	41	30	FEB. 26.....	443	300
NOV. 24.....	440	275	FEB. 27.....	38	35
NOV. 29.....	49	20	FEB. 28.....	25	10
DEC. 1.....	9	19	MAR. 1.....	19	30
DEC. 3.....	6	10	MAR. 2.....	207	130
DEC. 6.....	6	12	MAR. 3.....	149	100
DEC. 8.....	11	14	MAR. 4.....	45	25
DEC. 9.....	53	40	MAR. 6.....	42	35
DEC. 11.....	27	30	MAR. 7.....	45	50
DEC. 12.....	55	30	MAR. 8.....	31	40
DEC. 13.....	22	20	MAR. 9.....	563	200
DEC. 15.....	20	20	MAR. 10.....	195	100
DEC. 17.....	15	25	MAR. 11.....	80	70
DEC. 18.....	17	20	MAR. 12.....	78	40
DEC. 20.....	11	11	MAR. 13.....	58	40
DEC. 22.....	12	15	MAR. 14.....	52	40
DEC. 24.....	25	25	MAR. 15.....	65	45
DEC. 26.....	32	20	MAR. 16.....	60	60
DEC. 27.....	32	20	MAR. 17.....	42	45
DEC. 28.....	2370	800	MAR. 18.....	38	35
DEC. 29.....	529	300	MAR. 19.....	36	23
DEC. 30.....	189	141	MAR. 21.....	30	30
DEC. 31.....	470	150	MAR. 22.....	33	30
JAN. 1, 1966.....	90	161	MAR. 23.....	27	28
JAN. 2.....	106	70	MAR. 24.....	31	25
JAN. 3.....	199	90	MAR. 25.....	24	30
JAN. 4.....	4190	742	MAR. 28.....	30	30
JAN. 5.....	3100	1040	MAR. 29.....	20	22
JAN. 6.....	760	400	MAR. 30.....	19	16
			MAR. 31.....	17	15

RUSSIAN RIVER BASIN--Continued

11-4630. RUSSIAN RIVER NEAR CLOVERDALE, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
November 1963 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 1, 1966.....	16	15	JAN. 30, 1967.....	513	225
APR. 2.....	20	15	JAN. 31.....	1230	370
APR. 3.....	16	15	FEB. 1.....	674	245
APR. 4.....	13	15	FEB. 2.....	412	210
APR. 5.....	19	12	FEB. 3.....	428	170
APR. 7.....	21	15	FEB. 4.....	248	170
APR. 9.....	15	15	FEB. 5.....	245	170
APR. 11.....	42	8	FEB. 6.....	252	170
APR. 12.....	213	126	FEB. 7.....	95	77
APR. 13.....	39	20	FEB. 8.....	43	32
APR. 14.....	34	22	FEB. 9.....	33	22
APR. 15.....	30	22	FEB. 11.....	19	23
APR. 16.....	23	18	FEB. 13.....	14	12
APR. 18.....	21	20	FEB. 15.....	9	10
APR. 19.....	18	15	FEB. 17.....	9	10
APR. 21.....	19	10	FEB. 20.....	7	7
APR. 22.....	16	14	FEB. 22.....	6	6
APR. 25.....	16	14	FEB. 24.....	6	6.6
APR. 28.....	35	17	FEB. 27.....	6	3.9
APR. 30.....	20	15	MAR. 1.....	4	3.4
MAY 2.....	20	17	MAR. 3.....	9	9.6
MAY 4.....	21	15	MAR. 6.....	9	9.4
MAY 6.....	23	15	MAR. 8.....	40	47
MAY 9.....	23	20	MAR. 10.....	54	58
MAY 11.....	27	15	MAR. 13.....	210	142
MAY 13.....	31	30	MAR. 15.....	118	97
MAY 16.....	20	25	MAR. 17.....	368	172
MAY 19.....	12	10	MAR. 20.....	150	90
MAY 21.....	8	9	MAR. 22.....	141	77
MAY 23.....	8	9	APR. 7.....	340	146
MAY 25.....	11	10	APR. 10.....	85	51
MAY 28.....	10	12	APR. 12.....	67	51
MAY 30.....	10	12	APR. 14.....	56	39
JUNE 1.....	23	22	APR. 17.....	190	85
JUNE 3.....	11	10	APR. 19.....	184	86
JUNE 6.....	11	10	APR. 21.....	103	68
JUNE 8.....	16	10	APR. 24.....	84	48
JUNE 10.....	11	10	APR. 26.....	56	34
JUNE 13.....	14	10	APR. 28.....	39	23
JUNE 15.....	13	11	MAY 1.....	35	19
JUNE 16.....	15	13	MAY 3.....	32	21
JUNE 17.....	17	17	MAY 6.....	28	23
JUNE 20.....	22	27	MAY 8.....	21	19
JUNE 22.....	30	27	MAY 10.....	43	23
JUNE 24.....	21	24	MAY 12.....	35	28
JUNE 27.....	24	25	MAY 15.....	26	14
JUNE 29.....	23	25	MAY 17.....	15	10
JULY 2.....	12	17	MAY 19.....	12	7
JULY 4.....	15	18	MAY 22.....	7	3.4
JULY 6.....	18	22	MAY 24.....	16	19
JULY 8.....	21	18	MAY 26.....	22	25
JULY 11.....	15	17	MAY 29.....	16	13
JULY 13.....	12	14	MAY 31.....	13	9
JULY 15.....	14	14	JUNE 2.....	99	73
JULY 18.....	14	13	JUNE 5.....	22	13
JULY 20.....	15	18	JUNE 6.....	59	34
JULY 22.....	13	15	JUNE 8.....	52	39
JULY 25.....	15	15	JUNE 14.....	25	19
JULY 27.....	14	15	JUNE 21.....	41	48
JULY 29.....	16	15	JUNE 28.....	14	12
OCT. 6.....	15	11	JULY 6.....	14	12
NOV. 3.....	20	52	JULY 10.....	14	1
JAN. 9, 1967.....	8	6	JULY 12.....	15	22
JAN. 11.....	6	7	JULY 19.....	12	14
JAN. 13.....	3	4	JULY 27.....	19	15
JAN. 16.....	269	140	AUG. 2.....	17	19
JAN. 19.....	173	110	AUG. 9.....	7	12
JAN. 20.....	649	400	AUG. 16.....	7	12
JAN. 21.....	1920	1200	AUG. 23.....	11	13
JAN. 22.....	751	400	SEPT. 13.....	21	19
JAN. 23.....	310	140			
JAN. 24.....	778	270			
JAN. 25.....	770	240			
JAN. 26.....	454	210			
JAN. 27.....	1060	525			
JAN. 28.....	771	360			
JAN. 29.....	1980	810			

RUSSIAN RIVER BASIN--Continued

11-4632. BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.

LOCATION.--Lat 38°49'21", long 122°59'07", at gaging station, 0.5 mile downstream from unnamed tributary, 1.9 miles upstream from mouth, and 2.0 miles northeast of Cloverdale, Mendocino County.

DRAINAGE AREA.--82.3 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1966 to September 1967.

Sediment records: October 1966 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 5,570 ppm Jan. 21; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 88,900 tons Jan. 21; minimum daily, less than 0.05 ton on many days.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	--	--	68	--	68	69	66	--	--	68	--	60	--	60	--	--	60	--	61	--	57	--	--	--	64	--	61	--	62	--	--	60	--
November	--	60	--	--	--	57	56	--	54	--	54	58	58	56	56	52	51	56	56	54	52	46	49	46	--	--	52	49	52	53	--	--	
December	53	52	52	52	52	54	51	50	50	52	53	53	53	52	47	50	50	--	50	46	50	48	49	48	--	42	40	44	46	47	--	49	
January	47	47	42	42	40	39	--	--	48	--	48	--	48	--	--	--	42	--	42	46	51	46	46	45	44	47	50	52	52	54	51	--	
February	50	47	48	--	50	--	46	--	47	--	--	--	54	--	47	--	47	--	--	52	--	--	--	--	47	--	51	--	--	--	--	--	
March	54	--	46	--	--	54	--	56	--	50	--	--	43	--	48	--	48	--	--	50	--	--	--	--	--	--	--	--	--	--	--	--	
April	--	--	--	--	--	--	47	--	--	48	--	48	--	48	--	--	48	--	50	--	48	--	--	--	54	--	52	--	50	--	--	--	
May	56	--	61	--	--	50	--	66	--	57	--	62	--	--	68	--	66	--	72	--	--	75	--	72	--	67	--	--	67	--	58	--	
June	--	52	--	--	59	59	--	72	--	--	--	--	--	74	--	--	--	--	--	--	75	--	--	--	--	--	--	--	80	--	--	--	
July	--	--	--	--	--	79	--	--	--	70	--	81	--	--	--	--	--	--	63	--	--	--	--	--	--	--	78	--	--	--	--	--	
August	--	77	--	--	--	--	80	--	70	--	--	--	--	--	--	64	--	--	--	--	--	--	--	--	--	--	--	--	--	77	--	--	
September	--	--	--	--	--	--	76	--	--	--	68	--	76	--	--	--	--	--	--	--	--	--	--	68	--	--	--	65	--	--	--	--	--

RUSSIAN RIVER BASIN--Continued

11-4632. BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.--Continued

 Suspended sediment, water year October 1966 to September 1967
 (Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	3.3	--	T	4.1	--	T	320	321	S 332
2..	3.6	--	T	3.8	1	T	3030	2400	S 27500
3..	4.4	1	T	4.1	--	T	1250	763	S 3090
4..	4.7	--	T	4.1	--	T	3830	2730	S 38300
5..	4.4	3	T	4.1	--	T	3400	1570	S 16100
6..	4.1	1	T	10	4	0.1	2030	532	S 2980
7..	4.4	2	T	12	1	T	1270	265	S 926
8..	4.4	--	T	7.3	--	T	876	118	279
9..	4.1	--	T	5.9	1	T	660	70	125
10..	3.8	1	T	5.2	--	T	590	50	80
11..	3.6	--	T	5.6	2	T	485	35	46
12..	4.4	1	T	18	9	.4	428	25	29
13..	4.4	--	T	43	12	1.4	393	22	23
14..	4.1	1	T	191	247	S 243	351	20	19
15..	3.8	--	T	792	880	S 3740	313	13	11
16..	4.1	--	T	690	464	S 1520	281	9	6.8
17..	4.7	5	.1	112	24	S 8.3	251	7	4.7
18..	4.4	--	T	48	6	.8	224	8	4.8
19..	3.6	2	T	1920	1720	S 21100	198	10	5.3
20..	3.6	--	T	2060	2230	S 13500	180	7	3.4
21..	3.6	1	T	906	421	S 1060	160	5	2.2
22..	4.1	--	T	500	183	247	141	5	1.9
23..	4.1	--	T	255	48	33	130	6	2.1
24..	4.1	2	T	150	48	19	114	5	1.5
25..	4.4	--	T	100	43	12	94	3	.8
26..	3.8	2	T	50	40	5.4	84	3	.7
27..	3.8	--	T	65	86	15	73	3	.6
28..	4.1	2	T	130	84	29	66	2	.4
29..	4.1	--	T	218	35	21	58	3	.5
30..	4.1	--	T	175	11	5.2	51	2	.3
31..	4.4	1	T	--	--	--	45	2	.2
Total	126.5	--	0.5	8489.2	--	41560.7	21376	--	89876.2
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	40	2	0.2	1190	284	S 931	84	3	0.7
2..	37	3	.3	786	150	318	81	3	.7
3..	32	2	.2	580	98	153	79	3	.6
4..	32	2	.2	472	61	78	76	3	.6
5..	30	2	.2	397	39	42	71	2	.4
6..	29	2	.2	351	29	27	68	1	.2
7..	28	2	.2	316	23	20	67	1	.2
8..	27	1	.1	288	18	14	64	1	.2
9..	26	1	.1	264	15	11	62	1	.2
10..	25	1	.1	245	12	7.9	242	161	S 295
11..	24	2	.1	227	10	6.1	520	360	510
12..	24	2	.1	215	8	4.6	650	360	630
13..	23	2	.1	200	7	3.8	500	260	351
14..	22	2	.1	190	6	3.1	420	145	160
15..	21	2	.1	178	6	2.9	1000	330	891
16..	20	2	.1	168	6	2.7	1900	660	3400
17..	19	3	.2	155	6	2.5	1100	350	1040
18..	19	2	.1	146	6	2.4	750	230	470
19..	18	3	.1	137	5	1.8	540	168	240
20..	1040	2900	S 16200	126	5	1.7	660	120	214
21..	5590	5570	S 88900	120	5	1.6	543	80	120
22..	1740	800	S 4300	114	5	1.5	432	45	52
23..	912	240	591	108	5	1.5	580	22	34
24..	1490	1130	S 4700	106	7	2.0	420	25	28
25..	828	240	537	132	16	5.7	369	23	23
26..	828	1580	S 3880	101	5	1.4	330	19	17
27..	900	300	729	93	2	.5	302	16	13
28..	1880	891	S 4480	88	2	.5	292	13	10
29..	3460	1300	S 14000	--	--	--	271	11	8.0
30..	2410	779	S 5280	--	--	--	464	179	S 206
31..	2260	774	S 5150	--	--	--	498	120	160
Total	23834	--	148749.8	7493	--	1648.2	13435	--	8875.8

S Computed by subdividing day.

T Less than 0.05 ton.

RUSSIAN RIVER BASIN--Continued

11-4632. BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	389	40	42	260	10	7.0	70	15	K 2.8
2..	358	21	20	243	9	5.9	248	272	S 192
3..	330	18	16	210	8	4.5	161	86	K 41
4..	316	15	13	195	8	4.2	103	15	4.2
5..	344	56	K 54	177	14	6.7	90	11	2.7
6..	765	220	K 480	167	18	8.1	85	15	3.4
7..	512	70	97	152	12	4.9	79	11	2.3
8..	412	32	36	142	10	3.8	75	7	1.4
9..	365	20	20	150	12	4.9	71	6	1.2
10..	485	196	S 340	178	23	11	69	5	.9
11..	448	160	K 197	136	11	4.0	66	5	.9
12..	383	30	31	129	11	3.8	63	4	.7
13..	344	23	21	118	11	3.5	61	3	.5
14..	327	23	20	111	11	3.3	59	3	.5
15..	320	23	20	107	11	3.2	56	3	.5
16..	285	22	17	103	10	2.8	55	3	.4
17..	675	255	S 600	99	7	1.9	52	3	.4
18..	705	220	420	94	6	1.5	51	4	.6
19..	530	90	129	91	5	1.2	51	4	.6
20..	440	85	100	88	5	1.2	49	4	.5
21..	464	100	125	85	6	1.4	47	4	.5
22..	412	102	110	82	7	1.5	44	4	.5
23..	750	260	530	79	7	1.5	43	4	.5
24..	660	170	303	76	7	1.4	41	4	.4
25..	570	50	77	74	6	1.2	40	4	.4
26..	490	23	30	72	6	1.2	39	4	.4
27..	420	18	20	70	8	1.5	38	4	.4
28..	355	16	15	69	9	1.7	36	4	.4
29..	315	13	13	69	11	2.0	34	4	.4
30..	295	13	10	66	13	2.3	33	4	.4
31..	--	--	--	65	13	2.3	--	--	--
Total	13464	--	3906	3757	--	105.4	2009	--	261.8
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	32	4	0.3	12	2	0.1	11	2	0.1
2..	31	4	.3	13	2	.1	12	2	.1
3..	28	3	.2	14	2	.1	11	2	.1
4..	27	3	.2	13	2	.1	10	2	.1
5..	27	2	.1	12	2	.1	9.5	2	.1
6..	26	2	.1	12	3	.1	9.5	2	.1
7..	24	2	.1	12	3	.1	9.5	2	.1
8..	25	2	.1	12	2	.1	8.8	--	T
9..	24	3	.2	12	2	.1	8.8	--	T
10..	24	3	.2	12	2	.1	8.8	--	T
11..	22	3	.2	13	2	.1	8.8	2	T
12..	23	3	.2	12	2	.1	8.8	--	T
13..	18	3	.1	12	2	.1	8.1	1	T
14..	16	3	.1	13	2	.1	7.4	--	T
15..	15	3	.1	14	2	.1	6.7	--	T
16..	15	3	.1	13	2	.1	6.7	2	T
17..	15	3	.1	12	2	.1	6.7	--	T
18..	14	3	.1	11	2	.1	6.7	--	T
19..	14	3	.1	11	2	.1	6.7	--	T
20..	12	3	.1	10	2	.1	5.4	--	T
21..	10	3	.1	10	2	.1	5.4	--	T
22..	9.5	2	.1	10	2	.1	5.4	--	T
23..	9.5	2	.1	10	2	.1	5.4	1	T
24..	8.8	--	T	10	2	.1	5.4	--	T
25..	6.7	--	T	11	2	.1	9.5	--	T
26..	6.7	2	T	12	2	.1	9.5	--	T
27..	6.0	--	T	12	2	.1	8.8	1	T
28..	4.8	--	T	12	2	.1	8.8	--	T
29..	4.2	--	T	13	2	.1	8.1	--	T
30..	4.2	--	T	12	2	.1	8.8	--	T
31..	5.4	--	T	13	2	.1	--	--	--
Total	507.8	--	3.5	370	--	3.1	246.0	--	1.3

 Total discharge for year (cfs-days)..... 95107.5
 Total load for year (tons)..... 294992.3

 S Computed by subdividing day.
 T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

RUSSIAN RIVER BASIN--Continued

11-4632. BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

F, pipet, S, Sieve, V, visual accumulation tube, W, in undisturbed water)																		
Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 2, 1966.....	1645	52		6660	7830		17	19	23	32	44	51	75	93	98	100	--	VPWC
Jan. 21, 1967.....	1100	51		9720	7710		20	26	34	44	56	64	85	96	99	100	--	VPWC
Jan. 21.....	1700	--		5850	3120		18	25	34	44	57	65	84	94	98	99	100	VPWC
Jan. 26.....	0845	47		695	3370		26	35	44	55	66	76	91	98	100	--	--	VPWC
Jan. 28.....	1000	52		2040	818		--	--	--	--	76	89	97	100	--	--	--	V
Jan. 29.....	0930	52		4020	1610		--	32	--	50	--	73	90	97	100	--	--	VPWC
Jan. 30.....	1315	54		2780	1470		20	22	31	39	50	59	72	84	92	99	100	VPWC
Apr. 10.....	1430	48		566	568		--	--	--	--	--	88	94	100	--	--	--	V
June 2.....	0900	52		278	390		--	--	--	--	--	98	99	100	--	--	--	V

RUSSIAN RIVER BASIN--Continued

11-4632. BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, October 1965 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
NOV. 8, 1965.....	63	53	NOV. 18, 1966	4	5
DEC. 18.....	9	3	NOV. 19.....	2880	1125
JAN. 22, 1966.....	4	5	NOV. 20.....	2090	1275
FEB. 18.....	6	7	NOV. 21.....	344	255
MAR. 24.....	4	8	NOV. 22.....	209	163
APR. 21.....	2	1	NOV. 23.....	48	46
MAY 19.....	3	1	NOV. 24.....	50	47
JUNE 16.....	2	1	NOV. 27.....	119	93
JULY 18.....	1	1	NOV. 28.....	113	96
AUG. 3.....	2	1	NOV. 29.....	43	39
AUG. 5.....	1	1	NOV. 30.....	12	12
AUG. 8.....	4	1	DEC. 1.....	429	215
AUG. 10.....	2	1	DEC. 2.....	5230	1500
AUG. 13.....	1	1	DEC. 3.....	568	620
AUG. 15.....	1	1	DEC. 4.....	2380	2040
AUG. 17.....	3	1	DEC. 5.....	1970	735
AUG. 19.....	1	1	DEC. 6.....	589	348
AUG. 20.....	4	2.3	DEC. 7.....	294	207
AUG. 22.....	3	1.1	DEC. 8.....	124	87
AUG. 24.....	3	1.8	DEC. 9.....	64	53
AUG. 27.....	2	1.8	DEC. 10.....	79	54
AUG. 29.....	1	1.8	DEC. 11.....	34	32
AUG. 31.....	2	2.2	DEC. 12.....	24	25
SEPT. 2.....	1	.9	DEC. 13.....	53	50
SEPT. 5.....	1	1.9	DEC. 14.....	20	20
SEPT. 7.....	1	.6	DEC. 15.....	13	7.2
SEPT. 9.....	3	1.5	DEC. 16.....	9	10
SEPT. 12.....	1	1.5	DEC. 17.....	6	10
SEPT. 14.....	1	1.9	DEC. 19.....	10	8
SEPT. 16.....	1	2.1	DEC. 20.....	7	7
SEPT. 19.....	1	1.5	DEC. 21.....	5	6
SEPT. 21.....	2	1.5	DEC. 22.....	5	4
SEPT. 23.....	2	1.9	DEC. 23.....	6	6
SEPT. 26.....	1	1.2	DEC. 24.....	4	3
SEPT. 28.....	2	1.5	DEC. 26.....	3	1
SEPT. 30.....	1	1.5	DEC. 27.....	3	1
OCT. 3.....	1	1.9	DEC. 28.....	2	1
OCT. 5.....	3	2.1	DEC. 29.....	3	1
OCT. 6.....	1	1.2	DEC. 30.....	2	1
OCT. 10.....	1	1	JAN. 1, 1967.....	2	1
OCT. 12.....	1	1	JAN. 2.....	3	4
OCT. 14.....	1	1	JAN. 3.....	2	1
OCT. 17.....	5	4	JAN. 4.....	2	1
OCT. 19.....	2	1	JAN. 5.....	2	1
OCT. 21.....	1	1	JAN. 6.....	2	1
OCT. 24.....	2	1	JAN. 9.....	1	1
OCT. 26.....	2	1	JAN. 11.....	2	1
OCT. 28.....	2	1	JAN. 13.....	2	1
OCT. 31.....	1	1	JAN. 17.....	3	1
NOV. 2.....	1	4	JAN. 19.....	3	1
NOV. 6.....	4	5	JAN. 20.....	966	525
NOV. 7.....	1	6	JAN. 21.....	7710	3200
NOV. 9.....	1	3	JAN. 22.....	666	360
NOV. 11.....	2	4	JAN. 23.....	265	175
NOV. 12.....	9	9	JAN. 24.....	1250	340
NOV. 13.....	12	18	JAN. 25.....	237	125
NOV. 14.....	676	420	JAN. 26.....	3370	1300
NOV. 15.....	217	210	JAN. 27.....	217	115
NOV. 16.....	461	345	JAN. 28.....	818	400
NOV. 17.....	25	29	JAN. 29.....	1610	760

RUSSIAN RIVER BASIN--Continued

11-4632. BIG SULPHUR CREEK NEAR CLOVERDALE, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1965 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
JAN. 30, 1967.....	1470	680			
JAN. 31.....	709	340			
FEB. 1.....	300	175			
FEB. 2.....	156	95			
FEB. 3.....	102	55			
FEB. 5.....	40	25			
FEB. 7.....	24	17			
FEB. 9.....	15	12			
FEB. 13.....	7	7			
FEB. 15.....	6	6			
FEB. 17.....	6	7			
FEB. 20.....	5	4			
FEB. 25.....	17	19			
FEB. 27.....	2	2			
MAR. 1.....	3	1			
MAR. 3.....	3	2			
MAR. 6.....	1	2			
MAR. 8.....	1	2			
MAR. 10.....	21	20			
MAR. 13.....	177	118			
MAR. 15.....	323	175			
MAR. 17.....	371	246			
MAR. 20.....	123	90			
APR. 7.....	74	60			
APR. 10.....	568	300			
APR. 12.....	28	20			
APR. 14.....	23	24			
APR. 17.....	152	90			
APR. 19.....	71	58			
APR. 21.....	101	83			
APR. 24.....	122	97			
APR. 26.....	22	19			
APR. 28.....	16	12			
MAY 1.....	10	9			
MAY 3.....	8	7			
MAY 6.....	19	23			
MAY 8.....	10	9			
MAY 10.....	16	19			
MAY 12.....	11	12			
MAY 15.....	11	7			
MAY 17.....	7	7.8			
MAY 19.....	5	6.2			
MAY 22.....	7	5.1			
MAY 24.....	6	4.5			
MAY 26.....	7	7.5			
MAY 29.....	12	11			
MAY 31.....	13	15			
JUNE 2.....	390	350			
JUNE 5.....	11	11			
JUNE 6.....	15	19			
JUNE 8.....	7	6			
JUNE 14.....	3	2			
JUNE 21.....	4	2			
JUNE 28.....	4	1			
JULY 6.....	2	1			
JULY 10.....	26	37			
JULY 12.....	3	1			
JULY 19.....	3	1			
JULY 26.....	2	1			
AUG. 2.....	2	1			
AUG. 7.....	3	1			
AUG. 9.....	2	1			
AUG. 16.....	2	0			
AUG. 23.....	2	0			
AUG. 30.....	2	1			
SEPT. 7.....	2	0			
SEPT. 11.....	2	0			

RUSSIAN RIVER BASIN--Continued

11-4640. RUSSIAN RIVER NEAR HEALDSBURG, CALIF.

LOCATION.--Lat 38°36'48", long 122°50'07", at gaging station in Sotoyome Grant, 2 miles east of Healdsburg, Sonoma County, and 3.5 miles upstream from Dry Creek.

DRAINAGE AREA.--793 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1965.

Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 75°F July 12, 13; minimum, 44°F Dec. 28.

EXTREMES, 1965-67.--Water temperatures: Maximum, 79°F June 19, Aug. 6, 7, 1966; minimum, 43°F Dec. 21-23, 1965, Jan. 26, 1966.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1966 to September 1967																																	
Month	Day																																Average
	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		
October																																	
Maximum	73	68	70	71	70	69	71	71	72	71	68	66	62	64	63	63	63	64	63	64	62	63	66	66	65	64	62	62	62	63	63	65	
Minimum	67	64	64	63	61	61	61	61	62	62	63	58	53	53	53	55	53	53	55	57	55	54	58	58	57	59	57	56	54	56	56	58	
November																																	
Maximum	63	62	63	62	59	59	60	59	57	58	58	60	60	60	59	59	57	59	59	59	56	54	54	54	53	54	53	55	56	57	--	57	
Minimum	56	56	58	58	57	56	55	54	52	53	56	57	58	58	58	57	56	59	56	54	52	52	51	51	51	51	51	53	55	56	--	55	
December																																	
Maximum	57	57	54	54	54	54	54	54	54	55	55	55	55	54	53	52	52	51	51	52	53	52	52	52	52	50	49	48	46	47	48	50	
Minimum	57	54	53	54	53	53	53	53	53	53	53	54	54	53	51	51	51	51	50	51	51	50	49	49	48	46	45	44	47	47	47	52	
January																																	
Maximum	50	50	50	49	49	48	49	49	49	50	50	50	51	52	52	51	48	47	47	49	52	51	49	49	48	49	51	53	54	54	53	50	
Minimum	47	47	46	47	46	45	45	45	46	46	47	46	47	48	46	46	45	45	46	47	49	48	47	47	47	48	48	51	53	53	52	47	
February																																	
Maximum	52	51	51	51	52	51	52	52	52	53	53	54	55	52	51	51	53	54	54	53	53	53	53	53	53	53	54	54	--	--	--	52	
Minimum	50	50	50	50	51	50	51	52	52	52	52	53	53	51	50	48	50	51	51	50	49	48	49	51	51	49	50	--	--	--	--	50	
March																																	
Maximum	55	55	53	52	53	55	56	56	56	53	51	48	47	47	51	52	52	54	53	53	55	55	56	54	54	54	56	55	53	52	50	53	
Minimum	49	52	49	47	47	51	52	51	53	51	48	47	46	46	47	51	50	51	50	52	53	54	54	52	52	52	52	52	50	50	48	50	
April																																	
Maximum	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	52	49	49	50	--	--	--	--	--	52	52	53	52	52	54	--	
Minimum	47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	49	49	47	47	48	--	--	--	--	--	51	50	51	50	49	50	--	
May																																	
Maximum	56	57	58	59	59	59	62	63	63	58	58	58	58	58	60	62	63	65	66	67	67	68	69	71	71	69	68	68	66	65	64	63	
Minimum	52	54	55	56	57	55	58	61	58	56	55	54	57	59	60	62	62	62	61	62	61	62	64	63	63	61	60	61	64	63	61	61	
June																																	
Maximum	63	59	62	64	64	63	65	66	66	66	66	65	66	66	67	68	69	67	67	68	70	71	71	71	71	70	69	70	72	73	74	--	
Minimum	61	58	58	62	62	61	62	64	64	64	64	63	64	64	64	65	65	65	64	65	65	67	67	66	66	65	66	68	69	69	--	64	
July																																	
Maximum	73	73	73	73	72	72	72	71	72	73	74	75	75	74	74	73	72	73	73	74	74	74	72	72	73	74	74	74	74	74	74	73	
Minimum	69	69	69	70	68	68	68	68	68	68	71	72	72	71	71	69	69	70	69	68	68	70	71	71	70	68	69	71	72	73	72	71	
August																																	
Maximum	72	72	72	72	72	72	72	71	71	70	71	71	72	72	72	71	72	72	72	72	72	72	72	72	72	71	71	71	70	70	71	71	
Minimum	70	70	69	70	70	69	70	70	68	68	68	68	68	69	70	69	69	70	69	68	68	70	69	70	69	70	69	68	68	67	67	68	
September																																	
Maximum	70	70	71	71	72	72	71	70	70	70	70	70	70	70	69	69	70	70	71	72	71	71	70	69	70	69	69	68	67	67	67	69	
Minimum	67	68	68	69	69	69	68	68	67	68	68	68	66	64	64	64	66	65	67	66	66	68	66	65	65	63	64	64	65	62	63	66	

RUSSIAN RIVER BASIN--Continued

11-4645. DRY CREEK NEAR CLOVERDALE, CALIF.

LOCATION.--Lat 38°44'59", long 123°05'28", temperature recorder at gaging station on left bank 500 feet downstream from Smith Creek, and 5 miles southwest of Cloverdale, Sonoma County.

DRAINAGE AREA.--87.8 square miles.

RECORDS AVAILABLE.--Water temperatures: May 1965 to September 1967.

EXTREMES, 1965-67.--Water temperatures: Minimum, 41°F Jan. 8, 17.

EXTREMES, 1965-67.--Water temperatures: Maximum (1965-66), 92°F Aug. 6, 7, 1966; minimum (1966-67), 41°F Jan. 8, 17, 1967.

REMARKS.--Clock stopped Oct. 1-3; temperature range, 55°F to 74°F.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1966 to September 1967																																	
Month	Day																																Average
	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		
October																																	
Maximum	—	—	—	72	71	72	73	74	73	72	70	67	66	65	65	64	62	64	61	65	62	65	67	65	62	64	62	62	62	62	64	66	
Minimum	—	—	—	61	60	58	59	59	58	56	61	55	53	49	50	50	50	50	55	53	51	55	53	52	54	54	52	51	51	51	51	53	
November																																	
Maximum	62	62	63	63	61	60	62	61	59	60	59	61	61	59	61	59	59	59	59	58	56	54	53	53	54	53	54	57	57	—	58		
Minimum	52	52	56	57	56	55	55	54	52	53	56	58	59	58	59	56	56	56	58	57	56	53	52	49	48	49	50	52	54	54	—	54	
December																																	
Maximum	57	56	57	56	57	56	57	56	55	55	55	56	54	54	52	51	51	51	51	52	51	51	51	50	50	48	46	47	47	48	48	52	
Minimum	56	55	56	56	56	55	54	54	52	53	53	54	54	52	51	50	49	48	49	48	48	48	47	46	44	44	42	42	42	43	43	49	
January																																	
Maximum	49	49	48	48	49	47	48	48	48	50	48	50	52	51	51	51	50	49	48	50	53	52	52	49	50	50	53	54	54	54	54	50	
Minimum	44	44	43	45	44	42	42	41	43	44	44	44	44	44	44	43	41	42	43	46	50	49	47	45	48	48	50	52	53	52	52	45	
February																																	
Maximum	53	54	54	54	54	54	54	54	54	55	54	56	55	52	52	53	55	55	54	53	53	53	52	51	52	55	55	56	—	—	—	53	
Minimum	50	50	50	50	49	48	49	50	49	49	49	50	50	46	47	46	47	48	47	45	44	45	45	48	48	47	47	47	48	—	—	—	47
March																																	
Maximum	56	57	51	55	56	58	59	60	58	53	52	50	49	50	52	52	53	54	54	53	57	56	56	57	55	56	58	54	56	49	51	54	
Minimum	48	48	46	44	44	48	47	48	49	50	48	47	47	46	47	50	51	50	49	51	52	52	50	48	48	49	48	50	46	46	46	48	
April																																	
Maximum	52	55	53	54	53	51	56	61	58	52	56	60	55	58	57	55	52	49	52	54	51	54	51	58	57	57	58	54	58	61	—	55	
Minimum	47	45	47	48	49	50	49	50	48	48	47	48	48	49	47	46	48	44	47	47	48	48	49	49	49	48	49	47	46	47	—	47	
May																																	
Maximum	60	64	64	66	66	68	70	72	60	65	62	67	70	72	74	76	76	76	76	78	80	79	77	75	76	74	74	74	72	72	71		
Minimum	48	50	50	52	54	53	55	57	56	54	54	52	53	55	57	59	60	60	60	61	62	63	62	58	59	60	58	60	58	57	56	56	
June																																	
Maximum	61	60	73	75	63	70	76	77	75	76	72	74	76	77	78	79	80	76	78	80	80	78	80	80	79	79	80	80	84	84	—	76	
Minimum	59	56	57	58	60	60	60	60	60	61	58	58	58	61	62	62	63	64	64	64	62	62	62	63	64	64	64	65	66	66	—	61	
July																																	
Maximum	83	82	82	82	81	82	82	84	86	86	89	88	86	86	86	84	84	83	83	84	83	82	83	86	83	86	84	84	86	85	84	84	
Minimum	66	66	66	65	66	64	67	68	68	68	70	71	70	70	70	68	69	67	66	68	68	68	69	68	68	68	69	72	71	70	70	68	
August																																	
Maximum	84	83	83	84	82	86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum	70	70	69	68	68	68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
September																																	
Maximum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

RUSSIAN RIVER BASIN--Continued

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.

LOCATION.--Lat 38°41'55", long 122°57'25", at gaging station in Tzabaco Grant, 0.3 mile downstream from Pena Creek, and 3 miles west of Geyersville, Sonoma County.

DRAINAGE AREA.--162 square miles.

RECORDS AVAILABLE.--Water temperatures: March 1964 to September 1967.

Sediment records: March 1964 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 75°F May 22.

Sediment concentrations: Maximum daily, 4,300 ppm Dec. 4; minimum daily, no flow on many days in October and November.

Sediment loads: Maximum daily, 145,000 tons Jan. 21; minimum daily, 0 ton on many days in October and November.

EXTREMES, 1964-67.--Water temperatures: Maximum, 77°F Sept. 15, 30, Oct. 6, 1965; minimum (1964-66), 43°F on several days during January and December 1965.

Sediment concentrations: Maximum daily, (estimated) 15,000 ppm Dec. 22, 1964; minimum daily, no flow on many days in 1964, 1966.

Sediment loads: Maximum daily, (estimated) 830,000 tons Dec. 22, 1964; minimum daily, 0 ton on many days in 1964, 1966.

REMARKS.--No flow Oct. 20 to Nov. 12. Where no maximum or minimum is shown, temperature is once-daily reading.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	58	59	57	55	52	53	53	48	--	54	54	56	58	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
December	57	55	54	55	54	53	54	--	54	52	52	53	53	53	52	52	52	52	54	54	54	55	50	49	50	48	47	47	47	49	49	--
Maximum	--	--	--	--	--	--	--	--	52	50	50	52	52	51	51	51	52	53	53	53	52	54	48	46	47	45	43	43	44	46	45	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January	50	50	51	50	--	47	48	48	48	49	48	50	51	51	51	50	49	49	48	48	50	51	50	48	49	49	51	52	52	53	53	49
Maximum	46	46	47	47	--	44	44	44	44	46	46	46	46	46	46	46	45	45	46	45	48	48	48	46	46	48	49	51	52	51	51	46
Minimum	52	52	52	52	--	53	53	53	54	54	56	55	53	51	53	55	55	55	54	53	53	53	53	50	53	54	54	56	--	--	--	53
February	51	49	49	50	--	50	50	50	51	50	51	50	51	48	48	47	49	50	49	47	47	47	48	49	46	48	48	--	--	--	--	48
Maximum	55	56	51	54	55	57	58	58	57	54	49	49	49	49	49	52	52	52	52	52	55	54	55	54	53	54	56	54	56	50	51	53
Minimum	48	48	46	45	45	49	49	49	49	51	49	47	45	45	45	46	50	50	50	50	51	51	52	52	49	49	49	50	46	47	47	48
April	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	52	54	54	54	55	52	56	60	58	55	55	59	54	57	55	54	52	49	52	52	52	54	52	56	56	56	57	55	56	57	--	54
Minimum	46	46	48	49	50	50	50	50	49	50	48	48	49	50	48	47	49	46	47	47	49	48	50	50	50	48	50	47	47	48	--	48
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	59	60	62	64	63	66	67	68	62	63	60	64	66	68	69	71	72	72	73	74	75	73	71	71	70	70	70	68	68	66	67	
Minimum	49	50	52	53	55	54	56	57	58	54	54	52	54	56	57	59	60	60	61	62	62	62	62	59	60	60	58	59	58	57	56	56
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	60	58	68	70	60	66	70	69	70	70	68	70	70	70	71	72	72	69	71	72	72	72	72	72	70	72	73	73	74	--	69	
Minimum	58	56	57	58	58	58	58	58	58	58	58	57	58	60	60	60	60	60	61	61	60	60	60	61	61	61	61	61	61	62	--	59
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	73	72	72	72	72	72	72	72	72	72	74	74	73	73	72	72	72	72	71	72	72	71	70	71	71	71	72	72	72	72	72	71
Minimum	62	62	62	61	61	58	62	61	62	61	62	62	62	62	62	62	63	61	61	61	61	62	61	61	61	61	61	62	64	62	62	61
August	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	71	70	72	71	70	70	--	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	68	68	70	68	70	--	--	69	--
Minimum	62	63	62	62	62	62	--	62	63	63	63	62	61	62	62	62	62	62	63	62	62	62	62	63	63	62	61	62	62	--	--	62
September	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	67	67	67	67	67	66	68	68	69	68	68	68	67	68	68	68	68	68	68	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	61	61	62	62	61	62	62	62	62	63	64	65	64	64	64	63	64	63	63	--	--

RUSSIAN RIVER BASIN--Continued

11-4652, DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	0.1		T	0	--	0	408	395	S 568
2..	.1		T	0	--	0	2790	2070	S 24700
3..	.1		T	0	--	0	2300	1400	8690
4..	.1		T	0	--	0	5000	4300	58100
5..	.1		T	0	--	0	4000	2200	23800
6..	.1		T	0	--	0	2600	900	6320
7..	.1		T	0	--	0	1600	600	2590
8..	.1		T	0	--	0	950	250	641
9..	.1		T	0	--	0	790	140	300
10..	.1		T	0	--	0	940	140	355
11..	.1		T	0	--	0	765	150	310
12..	.1		T	0	--	0	639	90	155
13..	.1		T	.3	--	T	589	80	127
14..	.1		T	60	30	4.9	513	75	104
15..	.1		T	600	60	97	418	70	79
16..	.1		T	300	40	32	356	50	48
17..	.1		T	124	20	6.7	318	30	26
18..	.1		T	66	5	.9	291	28	22
19..	.1		T	750	150	304	264	25	18
20..	0		0	2000	1100	5940	231	20	12
21..	0		0	1000	400	1080	216	20	12
22..	0		0	589	280	445	198	16	8.6
23..	0		0	318	100	86	195	10	5.3
24..	0		0	193	65	34	183	10	4.9
25..	0		0	146	45	18	170	9	4.1
26..	0		0	120	11	3.6	158	8	3.4
27..	0		0	96	10	2.6	146	8	3.2
28..	0		0	177	80	38	134	8	2.9
29..	0		0	200	70	38	128	7	2.4
30..	0		0	145	40	16	122	7	2.3
31..	0		0	--	--	--	118	7	2.2
Total	1.9	--	T	6884.3	--	8146.7	27530	--	127016.3
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	108	6	1.7	2000	700	3800	136	3	1.1
2..	102	5	1.4	1250	600	2000	130	3	1.1
3..	96	5	1.3	970	400	1000	126	2	.7
4..	91	4	1.0	810	250	550	122	2	.7
5..	91	4	1.0	660	120	214	120	3	1.0
6..	87	4	.9	558	110	166	116	6	1.9
7..	84	4	.9	486	100	131	114	6	1.8
8..	82	4	.9	422	70	80	114	6	1.8
9..	82	4	.9	370	50	50	114	7	2.2
10..	82	4	.9	328	40	35	164	30	S 21
11..	80	4	.9	307	45	37	613	190	K 331
12..	79	4	.9	282	33	25	875	200	K 552
13..	68	3	.6	264	23	16	880	220	523
14..	66	3	.5	237	15	9.6	735	130	258
15..	65	3	.5	216	11	6.4	763	100	S 263
16..	62	2	.3	213	10	5.8	3610	1800	K 17500
17..	60	2	.3	198	8	4.3	1730	450	2100
18..	59	2	.3	190	8	4.1	1130	240	732
19..	59	3	.5	180	5	2.4	838	150	339
20..	2340	2300	S 25500	173	5	2.3	964	315	820
21..	11900	4080	S 145000	173	5	2.3	946	210	536
22..	3780	1500	15300	158	4	1.7	780	120	253
23..	2070	900	5030	156	3	1.3	886	185	443
24..	3040	2750	22600	156	4	1.7	700	90	170
25..	2470	900	6000	158	4	1.7	612	70	120
26..	2530	1450	9900	150	3	1.2	535	60	87
27..	2720	880	6460	144	3	1.2	466	50	63
28..	3900	3940	S 43900	140	3	1.1	422	40	46
29..	6120	3180	S 54800	--	--	--	382	35	36
30..	5400	1750	25500	--	--	--	866	1440	S 5500
31..	3500	1000	9450	--	--	--	1130	450	1370
Total	51273	--	369455.7	11349	--	8151.1	21119	--	32075.3

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

RUSSIAN RIVER BASIN--Continued

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	868	150	350	446	28	34	79	6	1.3
2..	730	110	220	390	21	22	208	92	5.9
3..	639	85	147	356	16	15	160	30	1.3
4..	567	80	120	321	14	12	112	9	2.7
5..	553	85	127	294	9	7.1	87	4	.9
6..	750	200	405	270	8	5.8	79	4	.9
7..	680	100	184	252	7	4.8	71	6	1.2
8..	598	60	97	237	7	4.5	59	8	1.3
9..	526	50	71	228	14	8.6	53	11	1.6
10..	598	100	161	222	16	9.6	51	10	1.4
11..	685	120	220	210	15	8.5	50	9	1.2
12..	558	60	90	195	11	5.8	48	9	1.2
13..	482	45	59	178	11	5.3	48	9	1.2
14..	458	40	49	168	11	5.0	47	9	1.1
15..	508	85	120	160	11	4.8	44	9	1.1
16..	446	55	66	150	12	4.9	41	10	1.1
17..	679	317	733	142	12	4.6	40	6	.6
18..	1040	640	1800	136	11	4.0	40	6	.6
19..	1160	270	846	136	10	3.7	40	11	1.2
20..	952	130	334	132	9	3.2	38	11	1.1
21..	988	240	640	124	8	2.7	35	8	.8
22..	928	130	326	120	7	2.3	32	8	.7
23..	1050	250	709	114	8	2.5	28	13	1.0
24..	1210	210	686	104	10	2.8	29	15	1.2
25..	1020	120	330	102	9	2.5	26	9	.6
26..	874	92	217	96	8	2.1	25	7	.5
27..	770	80	166	104	19	5.3	25	5	.3
28..	680	70	129	86	10	2.3	25	4	.3
29..	594	54	87	86	6	1.4	24	3	.2
30..	513	40	55	80	6	1.3	24	3	.2
31..	--	--	--	79	6	1.3	--	--	--
Total	22104	--	9544	5718	--	199.7	1668	--	99.5
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	23	3	0.2	6.4	4	0.1	2.0	--	--
2..	23	3	.2	6.0	4	.1	2.0	--	--
3..	23	8	.5	5.8	4	.1	1.9	--	--
4..	23	10	.6	5.4	--	T	1.9	--	--
5..	23	10	.6	5.0	--	T	1.9	--	--
6..	23	7	.4	4.7	--	T	2.0	--	--
7..	23	4	.2	4.5	3	T	2.1	--	--
8..	24	3	.2	4.1	--	T	2.1	--	--
9..	23	3	.2	3.9	--	T	2.0	--	--
10..	21	4	.2	3.5	--	T	2.0	--	--
11..	20	5	.3	3.4	--	T	2.1	3	
12..	19	6	.3	3.2	--	T	2.1	--	--
13..	17	6	.3	3.0	--	T	2.2	6	
14..	14	7	.3	3.0	--	T	2.3	--	--
15..	19	8	.4	3.0	--	T	2.3	--	--
16..	17	6	.3	2.9	--	T	2.3	--	--
17..	16	5	.2	2.8	--	T	2.4	--	--
18..	15	5	.2	2.7	--	T	2.4	--	--
19..	14	5	.2	2.7	--	T	2.4	--	--
20..	14	5	.2	2.6	--	T	2.4	1	
21..	12	5	.2	2.5	--	T	2.5	--	--
22..	11	5	.1	2.5	--	T	2.5	--	--
23..	10	5	.1	2.4	--	T	2.5	--	--
24..	11	5	.1	2.4	--	T	2.5	--	--
25..	10	5	.1	2.3	--	T	2.5	--	--
26..	9.6	4	.1	2.3	--	T	2.5	--	--
27..	9.2	4	.1	2.2	--	T	2.5	2	
28..	9.0	4	.1	2.2	--	T	2.5	--	--
29..	8.4	4	.1	2.1	--	T	2.5	--	--
30..	8.0	4	.1	2.1	--	T	2.5	--	--
31..	7.1	4	.1	2.1	--	T	--	--	--
Total	499.3	--	7.2	103.7	--	1.0	67.8	--	0.4

Total discharge for year (cfs-days)..... 148318.0

Total load for year (tons)..... 554696.9

S Computed by subdividing day.

T Less than 0.05 ton.

RUSSIAN RIVER BASIN--Continued

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

F, pipet, S, sieve, V, visual accumulation tube, W, in distilled water)																		
Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 2, 1966.....	1615	55		7280	6150		22	25	36	47	60	71	88	96	99	100	--	VPWC
Dec. 4.....	1415	55		5000	4020		--	18	--	35	--	58	83	97	99	100	--	VPWC
Dec. 5.....	0915	54		4000	2500		--	26	--	44	--	65	84	97	100	--	--	VPWC
Jan. 21, 1967.....	1100	50		18900	7520		19	24	34	44	56	64	82	94	98	100	--	VPWC
Jan. 22.....	1220	50		3460	1250		17	19	29	39	46	54	74	95	100	--	--	VPWC
Jan. 28.....	0910	55		4660	6590		--	12	--	22	--	34	46	60	71	87	100	VPWC
Jan. 29.....	1030	58		7810	3500		--	20	--	36	--	58	82	95	99	100	--	VPWC
Mar. 16.....	0900	54		4290	2020		--	--	--	--	--	63	81	90	94	96	100	V

RUSSIAN RIVER BASIN--Continued

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

Periodic determinations of suspended-sediment concentrations and turbidity, October 1963 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 6, 1964.....	10	4	JUNE 12, 1964.....	14	2.9
FEB. 18.....	1	2	JUNE 15.....	3	3.7
FEB. 20.....	3	2.5	3CT. 30.....	55	13
FEB. 22.....	2	2	3CT. 31.....	50	4
FEB. 24.....	1	2	NOV. 1.....	66	9
FEB. 25.....	1	.5	NOV. 3.....	50	7
FEB. 26.....	2	1	NOV. 4.....	24	3
FEB. 28.....	1	2	NOV. 5.....	11	2
FEB. 29.....	1	1	NOV. 6.....	1	1
MAR. 1.....	2	2	NOV. 8.....	8	6
MAR. 3.....	3	3.5	NOV. 9.....	1890	500
MAR. 4.....	2	2	NOV. 10.....	2560	500
MAR. 5.....	3	2	NOV. 11.....	324	61
MAR. 6.....	2	2.5	NOV. 12.....	515	250
MAR. 8.....	2	3	NOV. 13.....	246	71
MAR. 9.....	1	0	NOV. 14.....	77	34
MAR. 11.....	5	0	NOV. 15.....	44	16
MAR. 13.....	24	10	NOV. 16.....	22	7
MAR. 14.....	7	0	NOV. 17.....	17	5
MAR. 15.....	10	0	NOV. 18.....	15	5
MAR. 16.....	6	0	NOV. 19.....	10	3
MAR. 17.....	4	0	NOV. 20.....	4	3
MAR. 18.....	3	0	NOV. 21.....	4	3
MAR. 19.....	3	0	NOV. 22.....	6	3
MAR. 20.....	2	0	NOV. 23.....	2	2
MAR. 21.....	3	0	NOV. 24.....	12	2
MAR. 22.....	3	0	NOV. 25.....	11	6
MAR. 23.....	8	3	NOV. 26.....	21	3
MAR. 24.....	7	0	NOV. 27.....	17	2
MAR. 25.....	2	0	NOV. 28.....	24	7
MAR. 26.....	8	0	NOV. 29.....	93	28
MAR. 27.....	2	0	NOV. 30.....	90	23
MAR. 28.....	3	0	DEC. 1.....	50	12
MAR. 29.....	5	0	DEC. 2.....	16	6
MAR. 30.....	5	0	DEC. 3.....	13	6
MAR. 31.....	5	0	DEC. 4.....	18	5
APR. 1.....	11	0	DEC. 5.....	5	2
APR. 2.....	11	0	DEC. 6.....	4	3
APR. 3.....	3	0	DEC. 7.....	3	2
APR. 5.....	2	0	DEC. 8.....	3	1
APR. 6.....	2	0	DEC. 9.....	10	1
APR. 7.....	2	0	DEC. 10.....	3	1
APR. 8.....	8	0	DEC. 11.....	2	1
APR. 9.....	12	0	DEC. 12.....	10	1
APR. 10.....	2	0	DEC. 13.....	4	2
APR. 11.....	3	0	DEC. 26.....	2720	728
APR. 12.....	3	0	DEC. 29.....	1000	330
APR. 13.....	2	3	JAN. 6, 1965.....	5160	470
APR. 14.....	2	0	JAN. 7.....	3520	400
APR. 15.....	5	0	JAN. 8.....	2200	320
APR. 17.....	2	0	JAN. 9.....	1170	280
APR. 20.....	3	0	JAN. 10.....	579	132
APR. 22.....	3	0	JAN. 11.....	491	114
APR. 24.....	2	0	JAN. 12.....	197	78
APR. 27.....	7	0	JAN. 13.....	336	64
MAY 1.....	5	0	JAN. 14.....	2	52
MAY 4.....	5	0	JAN. 15.....	214	38
MAY 6.....	2	0	JAN. 16.....	227	30
MAY 8.....	2	0	JAN. 17.....	181	28
MAY 11.....	8	1	JAN. 18.....	110	19
MAY 13.....	2	0	JAN. 19.....	81	17
MAY 15.....	3	4	JAN. 20.....	--	13
MAY 18.....	3	0	JAN. 21.....	25	11
MAY 20.....	2	2.6	JAN. 22.....	23	8.5
MAY 25.....	21	4.1	JAN. 23.....	90	9.5
MAY 27.....	3	2.3	JAN. 24.....	2280	350
MAY 29.....	6	5.3	JAN. 25.....	912	170
JUNE 1.....	14	6	JAN. 27.....	248	100
JUNE 5.....	10	--	FEB. 5.....	764	220
JUNE 8.....	51	8.4	FEB. 6.....	150	48

RUSSIAN RIVER BASIN--Continued

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

Periodic determinations of suspended-sediment concentrations and turbidity,
October 1963 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 7, 1965.....	86	26	APR. 24, 1965.....	208	66
FEB. 8.....	90	21	APR. 25.....	135	30
FEB. 9.....	46	19	APR. 26.....	120	37
FEB. 10.....	44	8.5	APR. 27.....	108	25
FEB. 11.....	27	7.5	APR. 28.....	36	14
FEB. 12.....	24	8.5	APR. 29.....	42	16
FEB. 13.....	18	6	APR. 30.....	30	16
FEB. 14.....	18	7	MAY 1.....	31	12
FEB. 15.....	13	7	MAY 2.....	32	15
FEB. 16.....	14	7	MAY 3.....	53	17
FEB. 17.....	48	5	MAY 5.....	23	6.1
FEB. 18.....	38	5	MAY 6.....	17	8.3
FEB. 19.....	13	3.5	MAY 7.....	22	6.2
FEB. 20.....	20	5	MAY 8.....	25	7.5
FEB. 21.....	10	4	MAY 9.....	6	1.2
FEB. 22.....	22	2.5	MAY 10.....	13	1.2
FEB. 23.....	2	3.5	MAY 11.....	5	1.2
FEB. 24.....	6	4	MAY 12.....	21	10
FEB. 25.....	17	3	MAY 13.....	14	.5
FEB. 26.....	8	2.5	MAY 15.....	9	1.8
FEB. 27.....	12	3.5	MAY 16.....	16	1.0
FEB. 28.....	36	7	MAY 17.....	10	.8
MAR. 1.....	53	8	MAY 19.....	27	1.8
MAR. 2.....	28	4	MAY 21.....	4	.9
MAR. 3.....	17	3.5	MAY 24.....	12	1.5
MAR. 4.....	12	3.5	MAY 26.....	17	1.2
MAR. 5.....	32	4	MAY 31.....	6	.3
MAR. 6.....	15	4	JUNE 2.....	3	1.0
MAR. 7.....	12	2.5	JUNE 4.....	6	.8
MAR. 8.....	16	3.5	JUNE 7.....	13	1
MAR. 9.....	8	2	JUNE 9.....	29	1.1
MAR. 10.....	9	8.7	JUNE 11.....	4	.8
MAR. 11.....	14	2	JUNE 14.....	5	.8
MAR. 12.....	10	6.8	JUNE 16.....	3	.5
MAR. 13.....	19	3	JUNE 18.....	5	.5
MAR. 14.....	14	6.2	JUNE 21.....	3	.5
MAR. 15.....	4	3.5	JUNE 23.....	1	.7
MAR. 16.....	11	3.6	JUNE 25.....	7	2
MAR. 17.....	16	3.2	JUNE 28.....	4	.8
MAR. 18.....	14	2.2	JUNE 30.....	21	2
MAR. 19.....	2	1.8	JULY 2.....	25	2
MAR. 20.....	4	2.2	JULY 4.....	6	.5
MAR. 21.....	5	3.6	JULY 7.....	5	.8
MAR. 22.....	7	4	JULY 9.....	3	.8
MAR. 23.....	30	3.6	JULY 12.....	6	1
MAR. 24.....	3	2.8	JULY 14.....	15	3
MAR. 25.....	12	2.4	JULY 16.....	17	7.5
MAR. 26.....	5	2.7	JULY 19.....	68	28
MAR. 27.....	10	1.8	JULY 21.....	40	7
MAR. 28.....	15	2.4	JULY 23.....	70	23
MAR. 29.....	4	2.4	JULY 26.....	16	6
MAR. 30.....	21	7.5	JULY 27.....	7	3.5
MAR. 31.....	35	9.1	JULY 28.....	36	10
APR. 1.....	92	13	JULY 30.....	25	8
APR. 2.....	74	20	AUG. 3.....	32	6
APR. 3.....	20	2.2	AUG. 8.....	32	10
APR. 4.....	4	1.3	AUG. 10.....	20	4
APR. 5.....	2	3	AUG. 13.....	10	4
APR. 6.....	5	1.2	AUG. 17.....	35	4
APR. 7.....	7	1.4	AUG. 20.....	12	10
APR. 10.....	2460	260	AUG. 24.....	30	5
APR. 11.....	1160	260	AUG. 27.....	24	7
APR. 12.....	248	130	AUG. 31.....	33	7.5
APR. 13.....	179	60	NOV. 8.....	33	16
APR. 14.....	219	57	NOV. 10.....	30	15
APR. 15.....	5770	700	NOV. 12.....	5	25
APR. 16.....	1660	400	NOV. 14.....	1600	450
APR. 18.....	1040	230	NOV. 15.....	1420	550
APR. 19.....	1420	230	NOV. 16.....	135	60
APR. 23.....	154	80	NOV. 17.....	27	20

RUSSIAN RIVER BASIN--Continued

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

Periodic determinations of suspended-sediment concentrations and turbidity,
October 1963 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
NOV. 18, 1965.....	1610	375	JAN. 27, 1966.....	6	9
NOV. 19.....	442	180	JAN. 28.....	4	9
NOV. 20.....	72	30	JAN. 29.....	11	8
NOV. 21.....	78	35	JAN. 30.....	1740	390
NOV. 22.....	37	15	JAN. 31.....	1820	540
NOV. 23.....	15	3.5	FEB. 1.....	3030	840
NOV. 24.....	1080	425	FEB. 2.....	448	210
NOV. 25.....	206	100	FEB. 3.....	310	141
NOV. 26.....	149	50	FEB. 4.....	596	186
NOV. 27.....	187	40	FEB. 5.....	650	220
NOV. 28.....	64	25	FEB. 6.....	614	195
NOV. 29.....	34	20	FEB. 7.....	281	225
NOV. 30.....	22	15	FEB. 8.....	160	76
DEC. 1.....	21	11	FEB. 9.....	152	66
DEC. 2.....	12	10	FEB. 10.....	156	65
DEC. 3.....	10	10	FEB. 11.....	70	25
DEC. 4.....	8	2	FEB. 12.....	66	33
DEC. 5.....	37	14	FEB. 13.....	64	25
DEC. 6.....	28	10	FEB. 14.....	52	38
DEC. 7.....	6	2	FEB. 15.....	48	22
DEC. 8.....	46	15	FEB. 16.....	60	25
DEC. 9.....	4	6	FEB. 17.....	411	201
DEC. 10.....	15	8	FEB. 18.....	496	210
DEC. 11.....	5	6	FEB. 19.....	528	232
DEC. 12.....	127	70	FEB. 20.....	236	40
DEC. 13.....	14	15	FEB. 21.....	178	42
DEC. 14.....	32	20	FEB. 22.....	102	30
DEC. 15.....	1	1	FEB. 23.....	88	26
DEC. 16.....	3	2	FEB. 24.....	124	44
DEC. 17.....	4	4	FEB. 25.....	122	52
DEC. 18.....	7	2	FEB. 26.....	51	32
DEC. 19.....	4	2	FEB. 27.....	62	38
DEC. 20.....	3	1	FEB. 28.....	44	38
DEC. 21.....	2	1	MAR. 1.....	30	20
DEC. 22.....	2	2	MAR. 2.....	44	17
DEC. 23.....	2	2	MAR. 3.....	--	650
DEC. 24.....	2	1	MAR. 4.....	38	25
DEC. 25.....	417	160	MAR. 5.....	37	20
DEC. 26.....	467	160	MAR. 6.....	52	15
DEC. 27.....	81	45	MAR. 7.....	44	20
DEC. 28.....	6850	950	MAR. 8.....	30	10
DEC. 29.....	1280	350	MAR. 9.....	272	110
DEC. 30.....	681	198	MAR. 10.....	183	100
DEC. 31.....	1120	272	MAR. 11.....	295	90
JAN. 1, 1966.....	1290	380	MAR. 12.....	141	65
JAN. 2.....	366	180	MAR. 13.....	166	65
JAN. 3.....	421	174	MAR. 14.....	112	55
JAN. 4.....	7060	1710	MAR. 15.....	115	35
JAN. 5.....	6990	1200	MAR. 16.....	101	45
JAN. 6.....	1580	670	MAR. 17.....	66	30
JAN. 7.....	618	300	MAR. 18.....	56	30
JAN. 8.....	644	272	MAR. 19.....	82	25
JAN. 9.....	444	171	MAR. 20.....	44	21
JAN. 10.....	356	150	MAR. 21.....	30	25
JAN. 11.....	150	65	MAR. 22.....	120	20
JAN. 12.....	188	72	MAR. 23.....	--	20
JAN. 13.....	62	35	MAR. 24.....	40	25
JAN. 14.....	48	35	MAR. 25.....	24	30
JAN. 15.....	58	25	MAR. 26.....	36	15
JAN. 16.....	44	30	MAR. 27.....	21	11
JAN. 17.....	44	18	MAR. 28.....	23	12
JAN. 18.....	42	23	MAR. 29.....	8	3
JAN. 19.....	24	22	MAR. 30.....	11	4
JAN. 20.....	16	19	MAR. 31.....	24	3
JAN. 21.....	13	14	APR. 1.....	13	4
JAN. 22.....	16	16	APR. 5.....	23	3
JAN. 23.....	22	14	APR. 8.....	10	1
JAN. 24.....	13	9	APR. 12.....	389	58
JAN. 25.....	29	12	APR. 15.....	11	10
JAN. 26.....	18	8	APR. 19.....	9	1

RUSSIAN RIVER BASIN--Continued

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

Periodic determinations of suspended-sediment concentrations and turbidity,
October 1963 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 22, 1966.....	6	2	JAN. 30, 1967.....	1520	620
APR. 26.....	7	2	JAN. 31.....	577	336
MAY 3.....	3	1	FEB. 5.....	114	70
MAY 10.....	10	3	FEB. 6.....	111	65
MAY 13.....	6	1	FEB. 7.....	98	56
MAY 17.....	4	1	FEB. 8.....	67	47
MAY 20.....	5	1	FEB. 9.....	44	28
MAY 24.....	5	3	FEB. 10.....	30	23
MAY 27.....	6	1	FEB. 11.....	52	24
MAY 31.....	3	3	FEB. 12.....	32	17
JUNE 3.....	6	1	FEB. 13.....	21	12
JUNE 7.....	10	4	FEB. 14.....	14	10
JUNE 9.....	2	1	FEB. 15.....	11	9
JUNE 10.....	15	4	FEB. 16.....	9	8
JUNE 14.....	9	5	FEB. 17.....	8	7
JUNE 17.....	7	6	FEB. 18.....	8	5
JUNE 24.....	33	2	FEB. 19.....	5	5
JUNE 28.....	82	6	FEB. 20.....	5	4
NOV. 18.....	5	7	FEB. 21.....	5	4
NOV. 19.....	28	9	FEB. 22.....	4	4
NOV. 20.....	972	705	FEB. 23.....	3	3
NOV. 21.....	270	263	FEB. 27.....	3	2
NOV. 22.....	198	190	MAR. 1.....	3	1
NOV. 23.....	87	115	MAR. 6.....	6	4
NOV. 25.....	54	32	MAR. 10.....	9	1
NOV. 26.....	9	10	MAR. 13.....	239	155
NOV. 27.....	10	6	MAR. 14.....	140	95
NOV. 28.....	30	16	MAR. 15.....	85	68
NOV. 29.....	75	68	MAR. 16.....	2020	700
NOV. 30.....	32	14	MAR. 17.....	447	320
DEC. 1.....	582	263	MAR. 18.....	256	180
DEC. 2.....	6150	2830	MAR. 19.....	151	105
DEC. 3.....	1050	336	MAR. 20.....	260	150
DEC. 4.....	4020	1000	MAR. 21.....	210	155
DEC. 5.....	2500	1000	MAR. 22.....	127	90
DEC. 6.....	968	465	MAR. 23.....	138	110
DEC. 7.....	693	381	MAR. 24.....	82	65
DEC. 8.....	204	140	MAR. 27.....	51	40
DEC. 10.....	130	123	MAR. 29.....	33	30
DEC. 11.....	156	100	MAR. 30.....	2480	1050
DEC. 12.....	90	56	MAR. 31.....	352	262
DEC. 13.....	82	56	APR. 3.....	87	72
DEC. 14.....	75	58	APR. 5.....	84	51
DEC. 15.....	70	37	APR. 6.....	246	166
DEC. 16.....	42	28	APR. 7.....	86	80
DEC. 17.....	34	21	APR. 8.....	64	64
DEC. 18.....	28	14	APR. 10.....	46	37
DEC. 19.....	24	19	APR. 12.....	62	53
JAN. 18, 1967.....	2	1	APR. 14.....	40	33
JAN. 19.....	3	1	APR. 17.....	113	70
JAN. 20.....	2370	780	APR. 18.....	526	284
JAN. 21.....	7520	3000	APR. 19.....	227	162
JAN. 22.....	1180	528	APR. 20.....	132	100
JAN. 23.....	880	312	APR. 21.....	332	246
JAN. 24.....	2710	328	APR. 22.....	120	85
JAN. 25.....	772	375	APR. 23.....	338	225
JAN. 26.....	963	390	APR. 24.....	220	156
JAN. 27.....	893	360	APR. 25.....	113	106
JAN. 28.....	6590	2800	APR. 26.....	97	85
JAN. 29.....	3500	1250	APR. 27.....	80	76

RUSSIAN RIVER BASIN--Continued

11-4652. DRY CREEK NEAR GEYSERVILLE, CALIF.--Continued

Periodic determinations of suspended-sediment concentrations and turbidity,
October 1963 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 28, 1967.....	73	51			
APR. 29.....	58	42			
APR. 30.....	57	44			
MAY 1.....	34	26			
MAY 3.....	20	16			
MAY 5.....	17	9			
MAY 8.....	15	8.2			
MAY 10.....	18	6.6			
MAY 12.....	11	4.1			
MAY 15.....	11	4.5			
MAY 17.....	12	4.3			
MAY 19.....	10	3.4			
MAY 22.....	7	2.5			
MAY 24.....	10	5.5			
MAY 26.....	8	3.9			
MAY 29.....	6	2.7			
MAY 31.....	6	2.2			
JUNE 2.....	161	68			
JUNE 3.....	28	12			
JUNE 5.....	3	1			
JUNE 7.....	28	3			
JUNE 9.....	11	2			
JUNE 12.....	9	4			
JUNE 14.....	7	4			
JUNE 16.....	12	5			
JUNE 17.....	5	2			
JUNE 19.....	13	4			
JUNE 21.....	8	3			
JUNE 23.....	15	6			
JUNE 26.....	7	7			
JUNE 30.....	3	1			
JULY 3.....	11	1			
JULY 5.....	10	1			
JULY 7.....	4	1			
JULY 10.....	3	2			
JULY 12.....	6	3			
JULY 14.....	7	3			
AUG. 7.....	3	2			
SEPT. 11.....	3	0			
SEPT. 13.....	6	1			
SEPT. 20.....	1	0			
SEPT. 27.....	2	0			

RUSSIAN RIVER BASIN--Continued

11-4670. RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.

LOCATION.--Lat 38°30'00", long 122°56'05", temperature recorder at gaging station on left bank 0.6 mile downstream from Hobson Creek and 3.4 miles east of Guerneville, Sonoma County.

DRAINAGE AREA.--1,340 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1965.

Water temperatures: January 1964 to September 1967.

Sediment records: October 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 80°F July 12, 13; minimum, 47°F Jan. 24-26.

EXTREMES, 1964-67.--Water temperatures: Maximum, 83°F June 24, 1964; minimum (1965-67), 42°F on several days in December 1965.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 30, 1966....	350			21	13	9.7	1.9	114	2		7.0			0.2				106			246	8.4
Jan. 20, 1967....	7880			19	8.0	5.7	1.1	91	0		2.6			.3				80			181	8.2
Mar. 30.....	4990			21	12	8.5	1.1	118	2		4.1			.2				102			224	8.3
May 13.....	1700	15		29	16	10	1.2	165	0	17	5.3		2.5	.2	184			138			302	7.9
July 5.....	313			--	--	11	--	163	0		7.4			.3				136			313	8.2
Sept. 7.....	275			--	--	8.5	--	137	0		5.0			.3				113			253	8.1

RUSSIAN RIVER BASIN--Continued

11-4670. RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	--	--		68	68	68	67	67	68	70	69	67	66	61	60	61	61	61	61	62	62	62	62	63	63	63	62	62	62	62	--	64	
Minimum	--	--	--	67	67	67	66	66	67	66	66	64	58	58	59	59	58	59	60	60	60	61	61	62	62	61	61	60	60	60	--	62	
November																																	
Maximum	62	61	61	61	61	60	58	58	58	57	57	57	58	58	58	58	58	58	58	58	55	53	53	53	53	53	53	53	54	54	--	57	
Minimum	59	59	60	60	60	58	57	57	57	56	57	56	57	58	58	58	58	58	58	58	55	53	53	53	53	53	53	53	53	53	--	56	
December																																	
Maximum	54	55	55	55	--	56	56	56	56	56	56	56	55	55	55	55	55	55	55	55	55	55	55	55	55	53	52	50	49	49	49	54	
Minimum	54	54	55	55	--	56	56	56	56	56	56	56	55	55	55	55	55	55	55	55	55	55	55	55	53	52	50	49	49	49	49	54	
January																																	
Maximum	50	50	50	50	50	50	50	50	50	49	49	49	49	50	51	52	52	48	48	49	51	52	51	48	47	47	48	49	51	53	53	50	
Minimum	49	50	50	50	50	50	50	50	50	49	49	49	49	49	50	51	48	48	48	48	50	51	48	47	47	47	48	49	51	53	53	49	
February																																	
Maximum	53	52	52	52	52	52	51	51	51	52	53	53	53	53	53	53	54	56	57	56	55	55	55	55	54	54	54	54	55	--	--	53	
Minimum	52	51	51	51	52	51	51	51	51	51	52	52	52	52	52	52	53	54	56	55	54	55	55	54	54	54	54	54	54	--	--	52	
March																																	
Maximum	55	55	55	53	52	54	56	57	58	58	56	52	49	49	49	51	52	54	54	54	56	56	56	56	54	54	54	55	53	52	50	53	
Minimum	55	54	53	52	52	52	54	56	57	56	52	49	49	49	49	49	51	52	54	54	54	56	56	53	54	54	54	53	52	50	50	52	
April																																	
Maximum	50	50	52	52	52	52	53	54	55	55	53	54	54	54	54	54	54	52	51	51	50	51	51	52	53	53	54	54	54	--	52		
Minimum	50	50	50	52	52	52	52	53	54	53	53	53	54	54	54	54	52	51	50	50	50	50	51	51	52	52	53	53	53	--	52		
May																																	
Maximum	54	56	58	58	58	59	61	62	62	61	59	58	60	62	64	66	67	68	68	69	70	71	72	72	70	68	68	67	67	67	65	64	
Minimum	54	54	56	57	58	58	58	58	61	61	58	56	58	60	62	64	65	66	67	68	68	70	71	70	68	68	67	67	66	63	62		
June																																	
Maximum	64	63	61	63	62	62	64	66	67	68	67	67	66	67	67	69	70	70	69	68	71	72	73	73	73	73	72	74	75	78	--	68	
Minimum	63	61	60	60	62	62	62	64	66	67	67	67	66	66	66	64	69	69	68	68	69	71	72	73	73	72	71	72	73	75	--	67	
July																																	
Maximum	77	77	77	77	76	77	76	77	77	78	79	80	80	79	78	76	76	76	77	78	79	77	76	76	76	77	78	78	78	78	78	77	
Minimum	75	75	75	75	74	74	74	74	74	74	76	77	75	75	75	74	73	72	72	73	74	74	73	72	72	73	74	75	75	74	74	74	
August																																	
Maximum	77	77	77	78	78	77	78	77	76	75	75	76	76	78	78	77	77	77	76	75	77	76	76	76	75	76	75	74	74	74	74	76	
Minimum	74	74	74	74	74	74	74	74	73	72	72	71	72	73	73	73	73	74	73	73	73	73	74	74	74	74	73	72	72	72	72	73	
September																																	
Maximum	74	74	74	74	73	74	74	72	72	71	72	72	72	72	71	70	70	71	72	72	71	71	71	71	70	70	70	69	69	69	68	--	71
Minimum	72	72	73	73	67	72	72	71	70	70	70	71	71	70	70	69	70	70	70	70	70	70	70	69	68	68	68	68	67	67	--	69	

RUSSIAN RIVER BASIN--Continued

11-4670. RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

Suspended-sediment, April to September 1967

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	7700	140	2900	3170	20	170	672	23	42
2..	6330	100	1700	2870	19	150	1010	24	65
3..	5510	90	1340	2630	19	135	1680	22	100
4..	4940	70	930	2450	21	140	1180	21	67
5..	4730	60	770	2300	22	137	956	20	52
6..	6810	150	2800	2160	22	130	820	20	44
7..	7860	170	3610	2030	21	120	872	21	49
8..	6780	150	2700	1920	20	104	912	21	52
9..	5640	140	2100	1870	18	91	896	20	48
10..	5310	130	1860	1890	17	87	880	20	48
11..	6350	150	2600	1870	15	76	848	20	46
12..	5270	130	1800	1780	13	62	832	22	49
13..	4580	88	1100	1700	14	64	804	21	46
14..	4190	66	747	1630	16	70	684	20	37
15..	4070	59	650	1570	19	81	604	23	38
16..	3820	55	570	1420	19	73	564	27	41
17..	4230	67	765	1250	17	57	548	27	40
18..	7880	73	1600	1130	19	58	520	26	37
19..	8790	65	1540	1060	21	60	488	25	33
20..	7420	65	1300	1010	18	49	484	25	33
21..	7060	66	1260	956	13	34	476	24	31
22..	7160	67	1300	904	11	27	457	22	27
23..	7460	68	1400	852	15	35	439	20	24
24..	8980	66	1600	856	20	46	429	20	23
25..	7240	55	1100	788	22	47	422	20	23
26..	6000	45	729	764	22	45	411	19	21
27..	5340	36	520	692	22	41	411	19	21
28..	4600	30	373	668	22	40	401	19	21
29..	4000	25	270	708	22	42	376	18	18
30..	3520	22	210	696	22	41	355	18	17
31..	--	--	--	680	22	40	--	--	--
Total	179570	--	42144	46274	--	2352	20431	--	1193
	JULY			AUGUST			SEPTEMBER		
1..	334	18	16	214	17	9.8	278	18	14
2..	338	18	16	202	17	9.3	285	19	15
3..	334	18	16	214	17	9.8	285	19	15
4..	331	18	16	205	17	9.4	299	19	15
5..	313	18	15	190	17	8.7	289	19	15
6..	306	18	15	202	17	9.3	275	18	13
7..	292	17	13	211	17	9.7	275	18	13
8..	289	17	12	205	17	9.4	278	18	14
9..	289	17	13	202	17	9.3	285	19	15
10..	289	17	13	202	17	9.3	285	19	15
11..	278	17	13	199	17	9.1	296	19	15
12..	254	17	12	199	17	9.1	310	20	17
13..	220	17	10	199	17	9.1	317	20	17
14..	223	17	10	203	17	9.3	331	21	19
15..	220	17	10	193	17	8.9	327	21	19
16..	223	17	10	185	17	8.5	317	20	17
17..	223	17	10	188	17	8.6	299	19	15
18..	223	17	10	188	17	8.6	341	21	19
19..	223	17	10	188	17	8.6	296	20	16
20..	220	17	10	205	17	9.4	275	19	14
21..	220	17	10	223	18	11	268	18	13
22..	208	17	9.5	223	18	11	278	18	14
23..	217	17	10.0	217	18	11	285	19	15
24..	226	17	10	229	18	11	289	19	15
25..	226	17	10	238	18	12	289	19	15
26..	220	17	10	250	18	12	285	19	15
27..	208	17	9.5	275	18	13	236	18	11
28..	193	17	8.9	275	18	13	268	17	12
29..	188	17	8.6	278	18	14	271	17	12
30..	190	17	8.7	278	18	14	278	18	14
31..	193	17	8.9	275	18	13	--	--	--
Total	7711	--	355.1	6755	--	318.2	8690	--	448

Total discharge for period Apr. 1 to Sept. 30, 1967 (cfs-days)..... 269431
 Total load for period Apr. 1 to Sept. 30, 1967 (tons)..... 46810.3

RUSSIAN RIVER BASIN--Continued

11-4670. RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)																	
Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
Oct. 3, 1966.....	1015	67		198	22	12	--	--	--	--	--	--	--				VPWC
Oct. 31.....	1415	63		357	22	21	--	--	--	--	--	--	--				
Dec. 7.....	1610	56		13300	379	13600	30	37	49	61	73	86	97	100			
Jan. 16, 1967.....	1130	51		484	6	7.8	--	--	--	--	--	--	--	--			
Jan. 18.....	0735	44		2680	153	1110	--	--	--	--	--	--	--	--			S
Jan. 20.....	0745	45		2890	188	1470	--	--	--	--	--	95	99	100			
Feb. 15.....	1425	51		1780	40	192	--	--	--	--	--	--	--	--			
Feb. 22.....	0750	43		1210	16	52	--	--	--	--	--	--	--	--			
Feb. 24.....	0755	45		1140	18	55	--	--	--	--	--	--	--	--			VPWC
Feb. 27.....	0855	52		1100	14	42	--	--	--	--	--	--	--	--			
Mar. 1.....	0810	52		1020	10	28	--	--	--	--	--	--	--	--			
Mar. 6.....	0800	52		912	10	25	--	--	--	--	--	--	--	--			
Mar. 16.....	0835	48		23600	2100	133800	26	29	41	56	70	82	97	100			VPWC
Mar. 17.....	1330	51		15000	533	21600	--	--	--	--	--	--	--	--			
Mar. 20.....	0900	50		6330	83	142020	--	--	--	--	--	--	--	--			
Mar. 22.....	0915	52		6700	92	1660	--	--	--	--	--	--	--	--			
Mar. 27.....	0850	52		4000	98	1060	--	--	--	--	--	--	--	--			V
Mar. 29.....	0900	52		3440	92	854	--	--	--	--	--	--	--	--			
Apr. 17.....	1620	52		4050	97	--	--	--	--	--	--	86	96	100			

RUSSIAN RIVER BASIN--Continued

11-4670. RUSSIAN RIVER NEAR GUERNEVILLE, CALIF.--Continued

Periodic determinations of suspended-sediment concentrations and turbidity,
water year October 1966 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 3, 1966.....	22	11	MAY 10, 1967	17	15
OCT. 31.....	22	45	MAY 12.....	13	16
DEC. 7.....	376	249	MAY 15.....	20	16
JAN. 16, 1967.....	6	8.3	MAY 17.....	17	18
JAN. 18.....	153	130	MAY 19.....	21	17
JAN. 20.....	188	155	MAY 22.....	10	15
FEB. 22.....	16	11	MAY 24.....	19	17
FEB. 24.....	18	10	MAY 26.....	22	19
FEB. 27.....	14	10	MAY 29.....	22	16
MAR. 1.....	10	6	MAY 31.....	22	16
MAR. 3.....	21	16	JUNE 2.....	24	19
MAR. 6.....	10	7	JUNE 5.....	20	15
MAR. 10.....	381	280	JUNE 7.....	21	19
MAR. 13.....	365	270	JUNE 9.....	20	15
MAR. 15.....	2100	640	JUNE 12.....	22	12
MAR. 17.....	533	350	JUNE 14.....	20	15
MAR. 20.....	83	50	JUNE 16.....	27	9
MAR. 22.....	92	37	JUNE 19.....	20	7
MAR. 27.....	98	40	JUNE 21.....	13	6
MAR. 29.....	92	50	JUNE 28.....	45	13
APR. 3.....	226	102	JULY 5.....	27	12
APR. 7.....	175	95	JULY 12.....	12	8
APR. 10.....	134	60	JULY 13.....	22	10
APR. 12.....	463	90	JULY 17.....	15	10
APR. 14.....	68	40	JULY 26.....	12	7
APR. 17.....	94	58	AUG. 1.....	26	16
APR. 19.....	65	48	AUG. 2.....	12	47
APR. 21.....	66	47	AUG. 9.....	25	15
APR. 24.....	52	25	AUG. 16.....	13	10
APR. 26.....	64	32	AUG. 23.....	17	9
APR. 28.....	64	30	AUG. 30.....	17	8
MAY 1.....	106	30	SEPT. 5.....	19	12
MAY 3.....	19	18	SEPT. 6.....	13	13
MAY 5.....	22	19	SEPT. 13.....	12	9
MAY 8.....	20	15	SEPT. 20.....	14	10
			SEPT. 26.....	10	8

MISCELLANEOUS ANALYSES OF STREAMS IN RUSSIAN RIVER BASIN

Periodic determinations of suspended-sediment discharge, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Percent finer than size indicated, in millimeters												Method of analysis
11-4639. MAACAMA CREEK NEAR KELLOGG, CALIF. (Lat 38°38'25", long 122°45'45")																			
Oct. 5, 1966.....	1315	60		0.4	1	T													
Nov. 7.....	1500	56		2.3	2	T													
Dec. 14.....	1345	54		117	3	0.9													
Jan. 11, 1967.....	1600	48		20	2	.1													
Jan. 21.....	1810	53		3610	1040	10100													
Feb. 8.....	1715	48		117	4	1.3													
Mar. 10.....	1000	52		32	4	.3													
Apr. 14.....	1115	48		132	2	.7													
May 16.....	1400	70		38	1	.1													
June 8.....	1245	68		27	2	.1													
July 12.....	1200	70		6.1	2	T													
Aug. 17.....	1540	72		1.5	6	T													
Sept. 8.....	1200	62		.3	1	T													

Periodic determinations of suspended-sediment concentrations and turbidity, February 1964 to August 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 18, 1964.....	1	2	FEB. 27.....	3	5
MAR. 9.....	0	2.5	MAR. 30.....	3	2
MAY 18.....	1	0	MAY 2.....	2	1
JUNE 15.....	1	4	JUNE 10.....	1	2
NOV. 9.....	15	14	OCT. 5.....	1	1
NOV. 10.....	46	20	NOV. 7.....	2	8
DEC. 26.....	713	--	DEC. 14.....	3	4
DEC. 29.....	306	--	JAN. 11, 1967.....	2	3
JAN. 15, 1965.....	--	2.5	JAN. 21.....	1040	360
FEB. 15.....	10	--	FEB. 8.....	4	8
MAR. 9.....	3	2	MAY 16.....	1	1
MAR. 31.....	2	2	JUNE 8.....	2	1.2
JUNE 23.....	17	--	JULY 12.....	2	9
JULY 27.....	1	1	AUG. 17.....	6	--
AUG. 21.....	1	--			
SEPT. 28.....	1	3			
NOV. 8.....	2	3			
DEC. 14.....	2	1			
JAN. 19, 1966.....	3	4			
FEB. 25.....	5	7			

T Less than 0.05 ton.

GARCIA RIVER BASIN

11-4676. GARCIA RIVER NEAR POINT ARENA, CALIF.

LOCATION.--Lat 38°55'35", long 123°37'45", temperature recorder at gaging station on left bank 0.9 mile downstream from North Fork Garcia River, and 3.5 miles northeast of town of Point Arena, Mendocino County.

DRAINAGE AREA.--98.5 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1963 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 69°F June 29, 30, July 1; minimum, 44°F Dec. 28, 29, Jan. 6.

EXTREMES, 1963-67.--Water temperatures: Maximum, 72°F June 22, 1964; minimum, 43°F Dec. 16, 17, 1965.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	64	65	64	63	63	62	63	62	64	63	62	59	58	58	58	59	59	59	58	60	57	58	61	61	59	59	58	59	58	59	59	60	
Minimum	60	60	59	60	59	59	59	58	58	58	59	56	54	53	53	54	54	53	54	56	56	54	56	56	56	56	55	54	54	54	54	56	
November																																	
Maximum	59	58	58	58	56	57	56	56	56	57	56	57	56	56	57	56	56	56	58	57	55	54	53	52	52	52	53	53	55	56	--	55	
Minimum	54	54	55	56	55	55	53	52	52	53	55	56	55	55	56	54	54	55	56	55	54	52	51	50	49	49	52	52	53	54	--	53	
December																																	
Maximum	55	55	55	55	55	55	55	54	54	55	55	56	56	53	52	52	52	51	52	53	52	51	52	51	50	49	47	47	48	46	48	52	
Minimum	54	54	54	54	54	54	54	53	52	54	54	55	53	52	51	50	50	48	50	49	50	49	50	49	48	46	45	44	44	46	45	50	
January																																	
Maximum	49	49	49	49	49	48	49	49	48	48	48	49	50	50	50	50	48	48	48	51	52	50	50	49	49	50	52	53	53	53	52	49	
Minimum	46	45	45	46	47	44	45	45	45	46	46	46	46	46	48	47	45	45	46	48	51	49	48	47	47	48	50	52	52	52	51	47	
February																																	
Maximum	52	52	52	52	52	52	52	52	52	52	52	53	54	51	50	52	53	54	53	52	52	52	52	51	52	52	54	54	--	--	--	52	
Minimum	50	50	49	50	50	49	48	48	49	49	49	50	50	48	48	47	48	49	48	46	46	46	46	48	49	47	47	48	--	--	--	48	
March																																	
Maximum	54	53	52	53	54	55	56	55	56	53	50	49	48	50	52	54	53	54	53	54	57	54	55	54	53	54	55	52	52	50	50	53	
Minimum	48	48	47	46	46	49	50	49	49	49	48	48	46	46	48	51	50	51	50	52	53	52	52	50	49	49	48	49	47	48	48	48	
April																																	
Maximum	51	54	54	52	53	52	54	56	56	53	53	55	53	55	54	52	50	50	53	52	51	52	51	54	54	53	54	52	55	57	--	53	
Minimum	47	48	49	49	50	50	50	50	50	48	48	49	49	49	48	47	47	46	47	47	49	48	50	49	50	49	50	48	47	49	--	48	
May																																	
Maximum	56	59	59	59	60	63	64	64	59	57	58	60	62	64	66	67	65	64	63	64	65	64	63	62	63	62	62	60	62	62	61	61	
Minimum	48	50	52	52	52	53	55	56	54	52	52	52	52	54	55	56	58	57	57	57	58	58	56	55	55	56	56	57	54	54	55	54	
June																																	
Maximum	58	57	64	60	58	63	64	64	61	64	60	62	64	64	62	64	64	65	61	63	65	64	64	66	64	65	66	68	69	69	--	63	
Minimum	56	55	55	57	56	56	57	56	58	56	56	56	56	57	57	56	57	58	59	57	57	58	57	58	58	58	58	59	60	60	--	57	
July																																	
Maximum	69	68	67	68	66	66	65	65	66	67	66	65	66	65	64	67	65	65	65	66	66	65	65	65	66	66	67	67	67	66	66	66	
Minimum	60	61	60	60	60	60	59	59	59	60	59	59	58	58	58	58	59	58	58	58	59	59	60	59	58	58	58	60	60	60	59	59	
August																																	
Maximum	68	67	66	65	66	66	66	67	67	66	67	67	66	67	67	66	67	66	66	66	66	66	66	66	66	65	67	66	66	64	63	66	
Minimum	60	60	60	59	59	58	59	59	60	60	60	60	59	59	59	60	60	60	60	59	59	59	59	60	59	60	59	60	61	58	58	58	59
September																																	
Maximum	66	66	66	66	66	66	66	66	66	67	66	68	68	66	66	67	66	67	68	68	67	66	67	64	66	65	64	66	65	64	--	66	
Minimum	59	59	60	59	60	58	59	60	59	60	62	59	60	60	60	60	59	62	62	60	62	62	62	61	61	60	59	60	60	60	--	60	

NAVARRO RIVER BASIN

11-4680. NAVARRO RIVER NEAR NAVARRO, CALIF.

LOCATION.--Lat 39°10'15", long 123°39'55", temperature recorder at gaging station 2.7 miles downstream from North Fork, 5.4 miles upstream from mouth, and 6.6 miles west of Navarro, Mendocino County.

DRAINAGE AREA.--303 square miles.

RECORDS AVAILABLE.--Chemical analyses: January 1959 to July 1965.

Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 77°F June 30.

EXTREMES, 1965-67.--Water temperatures: Maximum, 77°F Aug. 20, 1966, June 30, 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	66	66	65	65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	63	63	61	62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
December																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
February																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	50	48	48	49	50	50	50	48	47	47	48	48	49	49	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	48	47	47	48	49	50	48	47	46	46	47	48	48	48	48	--	--	--
March																																
Maximum	50	50	50	48	48	49	50	51	52	52	48	47	47	47	48	52	52	52	51	53	53	53	52	52	51	50	50	50	50	50	49	50
Minimum	48	49	48	47	46	47	48	49	50	49	47	46	46	45	47	48	49	50	50	51	52	52	52	51	50	50	50	50	50	49	46	48
April																																
Maximum	48	50	50	50	50	50	52	52	52	52	50	52	52	51	50	50	50	48	48	50	50	50	50	52	52	52	52	51	50	52	--	50
Minimum	45	46	48	49	50	49	49	50	50	49	49	49	49	49	50	50	50	50	48	46	47	47	49	48	49	49	50	49	48	50	--	48
May																																
Maximum	52	54	55	55	56	57	59	60	49	56	56	57	59	61	63	65	66	66	66	67	68	68	67	66	66	66	66	66	65	65	65	61
Minimum	50	52	53	54	54	55	56	58	47	55	54	54	55	57	59	61	62	62	63	64	64	64	62	62	62	62	64	62	61	59	58	58
June																																
Maximum	65	62	66	66	66	66	70	69	70	69	69	69	70	69	70	72	72	71	70	70	72	73	72	73	72	72	74	75	76	77	--	70
Minimum	62	61	62	64	64	63	65	66	67	65	66	66	67	65	65	65	66	66	66	65	65	66	66	66	66	66	67	66	68	70	70	--
July																																
Maximum	76	76	76	75	74	74	74	74	74	75	75	75	75	75	74	74	75	75	74	74	75	74	74	74	74	75	75	74	73	75	74	74
Minimum	70	70	69	68	69	68	68	68	68	68	68	68	68	68	67	67	67	68	67	68	67	68	68	69	69	69	68	67	68	68	67	68
August																																
Maximum	75	74	74	76	74	75	75	74	74	73	73	74	73	74	70	73	74	72	73	73	74	74	74	74	72	72	72	72	73	72	72	73
Minimum	68	68	66	68	67	68	68	68	68	68	68	67	67	67	68	68	68	68	68	68	67	69	68	68	68	68	66	68	68	66	66	67
September																																
Maximum	74	74	73	73	73	74	73	73	72	73	73	73	72	71	71	72	71	73	73	73	72	72	72	70	72	70	69	69	70	70	--	72
Minimum	68	70	68	68	68	70	69	69	65	68	69	66	67	66	66	66	68	69	68	68	67	69	68	67	67	66	65	66	66	66	--	67

NOYO RIVER BASIN

11-4685. NOYO RIVER NEAR FORT BRAGG, CALIF.

LOCATION.--Lat 39°25'31", long 123°44'10", temperature recorder at gaging station 0.7 mile downstream from South Fork, and 3.5 miles east of Fort Bragg, Mendocino County.

DRAINAGE AREA.--106 square miles.

RECORDS AVAILABLE.--Chemical analyses: January 1959 to September 1965.

Water temperatures: December 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 70°F July 29; minimum, 41°F Dec. 28, Jan. 8, 17-19.

EXTREMES, 1975-67.--Water temperatures: Maximum, 72°F July 21, 22, Aug. 17, 1966; minimum, 36°F Dec. 17-21, 1965.

REMARKS.--Clock stopped May 16 to June 14 and Sept. 21-30; temperature ranges, 52°F to 64°F and 50°F to 66°F, respectively.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	63	64	64	62	61	59	62	61	61	60	58	56	54	52	52	52	54	52	52	54	52	53	56	56	54	56	55	55	54	54	54	56	
Minimum	61	59	57	59	58	57	57	54	53	54	54	52	48	45	44	45	46	45	46	50	48	47	52	50	50	52	54	51	50	49	49	51	
November																																	
Maximum	53	53	52	52	52	52	52	50	49	50	52	52	51	53	54	53	52	54	55	54	53	52	50	48	46	46	48	49	50	51	52	--	51
Minimum	48	48	48	50	51	51	48	45	44	45	50	51	50	51	53	51	51	51	54	52	52	50	48	46	45	46	48	48	50	50	--	49	
December																																	
Maximum	52	52	52	53	52	52	52	52	52	52	54	54	54	53	51	50	50	50	49	50	51	49	48	49	48	48	45	43	42	44	44	49	
Minimum	52	52	52	52	52	52	51	51	51	51	52	53	53	51	50	49	48	48	49	49	47	47	47	46	44	42	42	41	42	42	42	48	
January																																	
Maximum	44	44	44	45	45	45	45	42	45	45	44	46	45	44	--	--	43	44	44	49	51	50	49	48	48	50	51	52	52	52	52	46	
Minimum	42	42	42	43	43	42	42	41	42	43	44	43	42	42	--	--	41	41	41	44	49	48	48	48	47	48	50	51	51	51	51	44	
February																																	
Maximum	51	51	50	50	50	49	49	50	50	50	50	--	--	50	48	46	48	49	50	50	47	46	46	47	49	49	49	50	--	--	--	48	
Minimum	50	50	49	50	49	47	46	48	48	47	47	--	--	48	45	43	45	46	48	46	43	42	42	43	45	46	45	45	46	--	--	46	
March																																	
Maximum	50	50	48	47	47	49	50	50	50	50	48	48	48	48	50	52	51	52	50	52	53	53	53	51	50	50	51	50	50	48	47	49	
Minimum	46	46	44	42	42	44	45	45	46	48	47	47	47	46	48	50	49	50	49	50	52	50	51	49	48	48	47	47	46	46	46	47	
April																																	
Maximum	49	50	51	50	51	50	51	52	52	50	50	51	51	50	50	49	48	48	50	50	50	51	50	52	53	50	52	48	51	53	--	50	
Minimum	46	47	49	49	49	50	49	50	49	48	47	49	49	47	47	46	47	46	48	48	49	49	49	50	50	50	52	48	46	46	--	48	
May																																	
Maximum	53	55	56	57	54	58	60	60	48	55	54	56	58	60	61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	47	48	50	50	51	51	51	54	43	52	51	49	50	53	55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
June																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	60	64	64	63	62	61	64	64	63	65	66	66	66	68	69	69	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	57	56	57	58	59	58	56	56	58	58	58	59	58	59	61	61	--	
July																																	
Maximum	69	67	66	66	66	66	66	66	66	66	68	66	66	66	66	66	66	66	66	66	66	69	66	66	67	68	67	68	67	70	59	66	
Minimum	61	61	61	59	60	58	58	59	58	59	59	60	57	57	57	57	57	56	56	58	58	60	60	60	59	58	56	57	60	59	57	58	
August																																	
Maximum	69	67	66	66	66	66	67	67	66	64	65	66	66	66	64	64	68	64	64	66	66	66	67	67	66	62	66	64	64	66	64	65	
Minimum	58	57	58	56	57	56	60	57	58	58	57	56	55	55	55	57	56	56	56	56	56	56	59	57	58	59	56	58	59	55	56	57	56
September																																	

TEN MILE RIVER BASIN

11-4686. MIDDLE FORK TEN MILE RIVER NEAR FORT BRAGG, CALIF.

LOCATION.--Lat 39°34'20", long 123°41'45", 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, Mendocino County.

DRAINAGE AREA.--32.9 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 68°F on several days in June and July; minimum, 42°F Jan. 8, 9, 19.

EXTREMES, 1964-67.--Water temperatures: Maximum, 69°F June 14, 18, 1966; minimum (1964-65, 1966-67), 42°F Jan. 8, 9, 19, 1967.

REMARKS.--Clock stopped Feb. 15 to Mar. 15 and May 10 to June 14; temperature ranges, 48°F to 51°F and 50°F to 60°F, respectively.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	57	59	54	56	54	59	62	63	63	62	58	59	56	56	55	56	56	55	52	55	55	55	56	55	52	56	54	56	54	54	54	56	
Minimum	56	54	52	53	52	53	56	56	55	55	57	54	50	48	48	48	48	48	49	52	51	48	52	52	51	52	53	53	52	51	51	51	
November																																	
Maximum	53	53	53	53	52	52	52	51	50	50	51	52	53	54	53	53	53	52	53	54	53	53	52	51	50	48	48	49	50	52	51	51	
Minimum	50	50	50	52	52	52	48	48	48	48	50	49	52	53	53	53	52	52	53	53	52	51	50	48	47	47	48	49	50	51	51	50	
December																																	
Maximum	52	52	52	52	52	52	52	52	51	51	52	51	52	52	52	50	50	50	50	50	50	50	48	48	48	48	47	44	44	44	44	49	
Minimum	52	52	52	52	52	52	52	51	51	51	51	51	52	52	50	50	50	50	50	50	48	48	48	48	47	44	44	43	44	44	44	49	
January																																	
Maximum	44	44	44	45	45	44	43	43	43	44	45	45	45	45	44	45	44	44	44	44	49	50	50	49	49	48	49	50	51	51	51	46	
Minimum	44	43	44	44	44	43	43	42	42	43	44	45	44	44	44	44	43	43	42	44	49	49	49	48	48	48	49	50	51	51	51	45	
February																																	
Maximum	51	51	51	50	50	50	48	48	48	48	49	49	50	50	49	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	
Minimum	51	51	50	50	50	48	48	48	48	48	48	48	48	49	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	
March																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50	51	51	51	51	52	52	52	52	50	50	50	51	50	50	49	48	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	50	50	50	50	50	51	52	51	49	48	48	48	50	48	48	48	48	---
April																																	
Maximum	50	50	50	50	50	50	50	51	51	50	51	49	50	48	50	48	48	48	49	48	48	48	49	49	49	51	49	50	48	50	51	49	
Minimum	48	48	49	48	49	50	49	50	49	49	48	48	48	48	47	47	48	47	48	48	48	48	48	48	48	48	48	46	47	48	---	48	
May																																	
Maximum	51	53	54	54	53	56	57	57	56	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	48	49	50	50	51	51	52	52	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
June																																	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	64	65	66	64	63	63	66	66	64	66	66	66	67	68	68	68	---	---	
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	60	60	60	60	61	60	60	59	59	60	60	60	60	61	63	63	---	---	
July																																	
Maximum	68	67	67	67	67	67	67	67	67	67	68	68	67	67	66	67	67	67	67	67	66	66	66	66	65	66	66	64	67	67	66	66	
Minimum	63	63	63	62	62	61	61	61	62	61	62	62	61	61	61	62	60	60	60	60	60	60	60	62	62	62	61	60	60	62	60	61	
August																																	
Maximum	67	64	64	64	64	66	67	64	63	64	64	64	64	64	63	64	64	63	63	63	64	64	64	63	62	63	62	63	63	62	61	63	
Minimum	61	61	60	60	59	60	60	61	60	60	60	59	58	58	59	60	59	59	59	59	59	59	60	60	60	60	60	61	58	58	59	59	
September																																	
Maximum	64	64	63	63	63	64	66	63	62	63	64	68	63	61	62	62	62	64	64	64	64	62	63	63	62	62	61	60	61	61	---	62	
Minimum	59	62	61	59	59	61	60	60	58	60	61	62	59	59	59	59	60	60	60	60	60	60	60	60	60	60	58	58	58	60	---	59	

MATTOLE RIVER BASIN

11-4690. MATTOLE RIVER NEAR PETROLIA, CALIF.

LOCATION.--Lat 40°18'40", long 124°16'10", at gaging station 0.2 mile downstream from Clear Creek, 1.2 miles southeast of Petrolia, Humboldt County, and 1.3 miles upstream from North Fork.

DRAINAGE AREA.--240 square miles.

RECORDS AVAILABLE.--Chemical analyses: January 1959 to September 1967.

Water temperatures: November 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 74°F Sept. 13, 14, 16; minimum, 42°F on several days in January.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 11, 1966....	28			41	6.5	9.0	1.2	135	0	--	4.2		--	0.0				129			290	8.2
Nov. 15.....	7860			16	3.1	5.3	1.7	40	0	--	2.9		--	.0				53			134	7.0
Dec. 13.....	4520			15	2.8	5.4	1.3	36	0	--	2.5		--	.0				49			129	7.3
Jan. 17, 1967....	338			23	4.1	6.1	.8	79	0	--	3.4		--	.1				74			177	8.2
Feb. 7.....	1900			15	3.2	5.6	.8	58	0	--	2.8		--	.0				50			130	8.0
Mar. 7.....	316			22	4.0	6.5	.8	76	0	--	2.6		--	.0				72			169	8.0
Apr. 4.....	1958			14	3.0	5.5	.8	45	0	--	2.3		--	.0				48			121	8.0
May 10.....	995	11		17	3.3	5.9	.8	62	0	12	2.2		0.7	.0	91			56			136	7.7
June 6.....	268			24	4.2	6.9	1.1	85	0	--	2.4		--	.2				78			180	8.2
July 18.....	83.3			--	--	8.6	--	111	0	--	4.1		--	.1				105			254	8.2
Aug. 8.....	49			--	--	8.8	--	118	2	--	4.2		--	.1				111			258	8.4
Sept. 12.....	37			34	5.7	9.1	1.5	120	0	27	4.2		.6	.1				108			262	8.0

MATTOLE RIVER BASIN--Continued

11-4690. MATTOLE RIVER NEAR PETROLIA, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1998 to September 2007																																	
Month	Day																																Average
	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		
October																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	59	59	58	57	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	58	58	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	--	
November																																	
Maximum	56	56	56	56	56	56	56	55	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	--	54	
Minimum	56	56	56	56	56	56	55	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	--	54	
December																																	
Maximum	54	54	54	54	54	56	56	56	56	55	55	55	55	55	55	55	55	55	55	55	55	55	54	54	54	54	54	53	53	52	52	54	
Minimum	54	54	54	52	52	54	56	56	55	55	55	55	55	55	55	55	55	55	55	55	55	54	54	54	54	54	54	53	53	52	52	54	
January																																	
Maximum	52	52	51	51	45	45	44	44	43	43	42	42	42	42	42	42	42	42	42	43	44	44	44	45	45	46	46	44	44	46	46	44	
Minimum	52	51	51	45	45	44	44	43	43	42	42	42	42	42	42	42	42	42	42	42	42	44	44	45	45	44	44	44	44	45	46	44	
February																																	
Maximum	46	50	50	50	50	50	50	50	50	50	50	50	50	49	48	48	49	49	49	49	48	48	48	47	47	47	47	47	--	--	--	48	
Minimum	46	46	50	50	50	50	50	50	50	49	49	49	49	48	48	48	48	49	49	48	47	47	47	47	47	47	46	46	47	--	--	--	
March																																	
Maximum	47	47	47	46	47	47	48	51	50	51	50	50	50	52	52	52	52	53	53	54	54	54	54	54	53	53	53	53	53	53	53	51	
Minimum	47	46	46	45	45	46	46	47	50	50	49	49	50	50	52	52	52	52	53	53	54	54	54	53	53	53	53	53	53	53	53	50	
April																																	
Maximum	53	52	52	53	53	53	53	53	53	53	52	52	52	52	48	48	48	48	48	48	48	49	49	49	48	48	48	48	48	49	50	50	
Minimum	52	52	52	52	53	53	53	53	53	52	52	52	52	47	48	48	48	46	48	48	48	48	48	48	48	48	48	48	48	48	49	49	
May																																	
Maximum	55	56	56	57	56	56	56	56	56	56	57	57	57	56	56	56	56	58	58	58	58	58	59	60	60	60	60	60	60	60	60	57	
Minimum	53	55	56	56	56	56	56	56	56	56	57	57	56	55	56	56	56	58	58	58	58	58	58	59	60	60	60	60	60	60	60	57	
June																																	
Maximum	60	60	61	61	63	63	63	64	64	64	64	64	64	64	65	66	66	67	67	67	68	68	68	68	68	68	68	68	69	69	70	--	65
Minimum	60	60	60	61	61	63	63	63	64	64	64	64	64	64	64	66	67	67	67	67	67	68	68	68	68	68	68	68	68	69	--	65	
July																																	
Maximum	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	
Minimum	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	
August																																	
Maximum	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	
Minimum	70	69	70	69	69	70	70	70	70	70	70	69	70	70	70	70	70	69	69	69	69	70	70	70	70	70	70	70	70	70	70	69	
September																																	
Maximum	70	70	70	70	70	70	70	70	70	70	71	72	74	74	73	74	73	73	73	73	73	73	73	72	72	71	71	71	71	71	--	71	
Minimum	70	70	70	70	70	70	70	70	70	70	70	71	72	73	73	73	72	72	72	72	72	73	73	72	71	71	71	71	71	71	--	71	

EEL RIVER BASIN

11-4700. LAKE PILLSBURY NEAR POTTER VALLEY, CALIF.

LOCATION.--Lat 39°24'30", long 122°57'30", 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, Mendocino County.

DRAINAGE AREA.--289 square miles.

RECORDS AVAILABLE.--Water temperatures: December 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 81°F July 1, 2, 4, 5.

EXTREMES, 1965-67.--Water temperatures: Maximum, 81°F July 1, 2, 4, 5, 1967

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	68	67	69	68	68	67	67	67	67	66	66	66	65	64	63	62	61	61	58	58	58	58	59	58	59	58	57	57	57	57	56	62	
Minimum	67	67	67	67	67	67	66	66	66	66	66	65	64	62	61	60	60	58	58	58	57	57	57	57	57	57	56	56	56	56	56	61	
November																																	
Maximum	57	56	56	56	55	56	56	54	54	54	53	53	53	53	53	52	52	52	52	51	50	50	49	49	49	48	48	47	48	48	--	52	
Minimum	56	56	56	55	54	54	54	54	54	53	53	53	53	53	52	52	52	52	51	50	50	49	48	48	48	48	47	47	47	48	--	51	
December																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	46	46	46	44	43	43	43	43	43	44	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	44	44	44	43	43	43	43	42	42	43	--	
January																																	
Maximum	43	44	44	44	43	43	43	44	44	43	43	43	42	45	43	43	42	44	43	42	42	42	42	42	42	42	42	43	44	45	45	43	
Minimum	42	42	43	43	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	41	41	41	42	43	43	44	42	
February																																	
Maximum	46	46	45	46	45	46	47	47	47	45	49	49	45	45	44	45	46	47	45	46	47	48	46	45	46	46	47	46	--	--	--	46	
Minimum	45	44	44	44	44	44	44	44	44	44	45	45	44	44	44	44	44	44	45	44	44	44	44	44	44	44	44	45	44	--	--	--	44
March																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
April																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	54	54	54	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	52	51	--	--
May																																	
Maximum	54	55	54	57	58	61	64	63	60	57	58	62	63	63	64	65	65	67	69	71	71	71	71	72	72	71	70	69	68	67	65	64	
Minimum	51	52	52	53	55	56	57	58	57	55	56	56	57	57	60	61	63	64	63	65	66	67	69	69	65	67	65	66	64	64	64	60	
June																																	
Maximum	64	63	65	65	64	64	67	66	65	68	68	67	69	70	71	76	74	75	76	75	76	75	75	76	75	76	76	77	77	80	80	--	71
Minimum	63	62	61	61	62	64	63	63	65	65	65	65	66	66	68	68	70	72	72	72	72	72	72	72	72	72	73	73	74	76	76	--	68
July																																	
Maximum	81	81	80	81	81	79	78	78	78	76	79	79	79	78	80	80	79	79	79	79	79	79	78	78	79	78	78	78	79	80	79	79	
Minimum	77	78	77	77	77	77	76	76	76	76	76	76	77	77	77	78	77	76	76	76	76	76	76	76	76	76	76	76	77	76	77	76	
August																																	
Maximum	80	79	80	79	79	78	79	79	79	79	78	78	80	79	78	78	79	79	78	78	78	78	78	78	78	78	78	78	78	78	79	78	78
Minimum	77	77	77	77	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76
September																																	
Maximum	77	77	77	77	76	76	76	76	75	75	74	74	73	74	75	74	74	74	72	74	75	72	72	74	72	73	74	72	73	71	71	--	74
Minimum	75	75	75	75	74	74	74	74	74	74	74	73	73	73	73	73	73	72	72	72	72	72	71	71	71	71	71	71	71	71	70	--	72

Periodic determinations of suspended-sediment concentrations and turbidity, water year October 1966 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 18, 1966.....	4	4
DEC. 22.....	486	420
JAN. 11, 1967.....	111	140
APR. 26.....	23	43
MAY 15.....	11	24
JUNE 13.....	4	H
JULY 14.....	1	1
AUG. 15.....	2	1
SEPT. 20.....	4	0

EEL RIVER BASIN--Continued

11-4705. EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CALIF.

LOCATION.--Lat 39°24'30", long 122°58'15", 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, Mendocino County.

DRAINAGE AREA.--290 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1963 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 73°F on several days in September; minimum, 41°F Jan. 17-21.

EXTREMES, 1963-67.--Water temperatures: Maximum, 73°F on several days in September 1967; minimum (1966-67), 41°F Jan. 17-21, 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	66	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	
Minimum	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	
November																																	
Maximum	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	
Minimum	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	
December																																	
Maximum	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	45	45	45	45	45	44	44	44	44	44	43	45	
Minimum	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	45	45	45	45	44	44	44	44	44	44	43	45	
January																																	
Maximum	43	43	43	43	43	43	43	43	43	42	42	42	42	42	42	42	42	41	41	41	42	42	42	42	42	42	42	42	42	43	43	44	42
Minimum	43	43	43	43	43	43	43	42	42	42	42	42	42	42	42	42	42	41	41	41	41	42	42	42	42	42	42	42	42	43	43	43	42
February																																	
Maximum	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	45	44	45	46	45	45	44	45	45	46	46	--	--	--	44	
Minimum	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	45	45	--	--	--	44
March																																	
Maximum	46	47	46	45	46	46	46	46	45	45	45	46	46	46	46	46	46	46	46	46	47	48	47	48	48	48	47	47	47	47	47	46	
Minimum	45	46	45	45	45	45	45	45	45	45	45	45	46	46	46	46	46	46	46	46	46	46	47	47	47	47	47	47	47	47	47	45	
April																																	
Maximum	48	48	48	47	47	47	46	46	46	46	46	46	46	46	46	46	46	48	48	48	48	48	48	49	49	49	49	50	50	50	--	47	
Minimum	47	47	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46	48	48	48	48	48	48	48	49	49	49	49	49	49	50	--	47
May																																	
Maximum	50	50	50	50	52	52	51	52	52	51	52	52	53	54	54	55	55	56	57	58	59	60	60	60	57	56	54	53	53	53	53	54	
Minimum	50	49	49	49	50	51	51	50	51	50	50	52	53	53	54	55	54	55	54	56	56	56	57	57	55	52	52	52	52	52	52	52	
June																																	
Maximum	52	56	57	56	56	57	56	55	55	55	55	55	54	53	52	52	52	54	53	53	53	53	54	54	54	54	54	54	54	54	--	54	
Minimum	52	52	56	54	55	56	54	54	54	54	54	54	53	52	51	51	51	52	52	52	52	52	53	53	53	53	53	53	53	53	--	53	
July																																	
Maximum	54	54	54	54	54	54	54	54	54	54	54	54	55	55	55	56	56	56	56	56	56	56	56	56	56	56	56	57	58	59	59	55	
Minimum	53	53	53	53	53	53	53	53	53	53	53	53	54	54	54	55	55	55	55	55	55	55	55	55	55	55	56	56	57	57	58	54	
August																																	
Maximum	60	61	60	60	60	61	61	62	62	63	63	64	64	64	64	65	65	65	65	65	65	65	65	66	66	67	67	67	68	69	70	64	
Minimum	59	59	59	60	60	60	60	60	61	62	62	63	63	63	64	64	64	64	64	63	64	65	64	65	65	65	66	66	66	67	68	68	63
September																																	
Maximum	71	71	71	71	72	73	73	73	72	72	72	72	73	73	72	71	71	71	71	71	71	71	71	71	71	71	72	71	71	72	71	--	71
Minimum	68	70	70	70	71	72	72	72	72	72	72	72	72	72	71	70	71	70	70	70	70	70	70	70	70	70	71	71	71	71	--	70	

EEL RIVER BASIN--Continued

11-4705. EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (° F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Nov. 18, 1966.....	1040	54		226	174	106	90	93	96	99	100	—						SPWC S S
Dec. 22.....	1400	46		462	171	213						100						
Jan. 17, 1967.....	1445	43		292	115	91						98	99	100				
July 14.....	1230	55		324	7	6.1						—						
Aug. 15.....	0915	—		304	5	4.1						—						
Sept. 20.....	0955	70		285	5	3.8						—						

Periodic determinations of suspended-sediment
concentration and turbidity, November 1965
to August 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
NOV. 10, 1965.....	14	13
DEC. 15.....	30	46
JAN. 17, 1966.....	412	580
JAN. 19.....	200	243
FEB. 15.....	135	171
MAR. 22.....	60	123
APR. 19.....	46	57
MAY 17.....	14	26
JUNE 14.....	14	30
JULY 26.....	4	9
AUG. 16.....	7	8
OCT. 18.....	5	7
NOV. 18.....	174	270
DEC. 22.....	171	322
JAN. 17, 1967.....	115	122
APR. 26.....	21	40
MAY 15.....	17	26
JUNE 13.....	10	14
JULY 14.....	7	1
AUG. 15.....	5	6

EEL RIVER BASIN--Continued

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.

LOCATION.--Lat 39°21'42", long 123°07'38", at gaging station 100 feet 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, Mendocino County.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1965.

Water temperatures: March 1964 to September 1967.

Sediment records: March 1964 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 39°F Jan. 17.

Sediment concentrations: Maximum daily, 909 ppm Dec. 2; minimum, 4 ppm Oct. 15, 18.

Sediment loads: Maximum daily, 756 tons Dec. 2; minimum daily, 3.3 tons Oct. 5.

EXTREMES, 1964-67.--Water temperatures (1964-65, 1966-67): Minimum, 39°F Jan. 17, 1967.

Sediment concentrations: Maximum daily, 3,970 ppm Jan. 4, 1965; minimum daily, 1 ppm 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.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	69	69	69	69	68	63	69	69	69	68	67	--	--	--	--	--	--	--	--	60	60	61	62	62	61	60	60	59	59	59	59	--	
Minimum	65	65	65	64	64	64	65	64	64	63	63	--	--	--	--	--	--	--	--	59	58	57	58	57	56	57	57	56	56	55	55	--	
November																																	
Maximum	59	59	58	57	50	55	54	53	52	52	52	53	53	53	51	49	52	53	52	49	49	--	--	48	48	49	49	49	51	50	--	52	
Minimum	55	54	54	54	53	54	52	51	50	50	52	52	53	51	49	49	49	51	49	48	47	--	--	45	45	46	46	48	49	49	--	50	
December																																	
Maximum	51	50	48	48	49	49	48	48	48	48	48	49	49	48	47	47	47	47	47	47	47	46	46	46	46	45	44	43	43	43	43	46	
Minimum	50	47	47	47	47	48	48	48	48	47	47	47	48	48	46	46	46	45	46	45	46	45	44	45	44	44	42	41	41	42	41	45	
January																																	
Maximum	43	43	44	44	44	43	43	43	43	43	43	43	42	42	42	42	41	42	42	48	47	44	44	44	44	44	44	44	45	46	46	46	43
Minimum	41	41	42	42	42	40	41	41	41	42	42	41	40	40	40	40	39	40	40	42	43	44	44	44	43	43	43	44	44	45	46	46	42
February																																	
Maximum	46	46	46	46	47	47	47	47	47	47	47	47	48	48	46	45	46	48	48	47	47	46	46	46	46	47	47	48	48	--	--	46	
Minimum	46	45	45	44	44	44	44	44	44	44	44	44	46	45	43	44	44	44	45	44	43	42	43	43	45	45	45	44	45	--	--	44	
March																																	
Maximum	48	48	47	47	47	48	49	48	48	47	46	45	45	46	46	46	46	47	47	48	49	48	46	49	48	49	49	47	47	45	46	47	
Minimum	44	45	45	43	42	44	45	44	45	44	44	44	44	44	44	44	45	46	45	46	46	47	46	46	46	46	45	44	45	45	42	44	
April																																	
Maximum	47	48	48	48	46	47	48	50	51	49	48	50	48	48	49	48	46	47	47	48	48	48	47	50	49	49	48	48	50	50	--	48	
Minimum	44	44	45	44	45	45	44	45	45	44	43	42	46	45	45	45	45	44	44	45	46	45	46	46	46	46	45	45	44	45	--	44	
May																																	
Maximum	52	53	53	54	54	55	55	56	52	53	52	55	56	57	59	60	60	61	62	63	64	64	65	63	62	60	60	58	58	58	56	57	
Minimum	45	45	46	45	49	50	49	50	50	50	49	49	49	49	51	52	52	54	53	55	56	56	56	54	53	52	53	52	51	50	49	50	
June																																	
Maximum	54	53	59	60	56	59	61	61	61	62	60	61	61	60	60	60	62	61	62	62	61	61	62	62	62	62	62	63	63	64	--	60	
Minimum	51	49	52	52	53	54	53	52	52	52	52	53	51	52	51	51	52	53	53	54	52	52	52	52	53	53	54	54	53	54	54	--	52
July																																	
Maximum	64	63	63	62	63	63	62	62	63	63	64	64	64	64	63	63	63	63	62	63	64	64	64	64	64	64	65	65	64	66	66	63	
Minimum	54	54	54	53	54	54	55	55	55	55	54	55	54	54	54	55	55	54	55	55	56	56	56	56	56	56	57	58	58	58	58	55	
August																																	
Maximum	66	66	66	66	66	66	66	66	66	67	66	66	67	67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	58	58	58	58	58	58	58	59	59	59	59	59	58	59	59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
September																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

EEL RIVER BASIN--Continued

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	318	9	7.7	314	7	5.9	309	899	750
2..	316	8	6.8	313	6	5.1	308	909	756
3..	314	7	5.9	314	6	5.1	307	900	746
4..	315	6	5.1	314	5	4.2	280	907	686
5..	303	4	3.3	308	5	4.2	309	829	692
6..	320	8	6.9	317	9	7.7	308	326	271
7..	319	8	6.9	329	9	8.0	307	289	240
8..	317	7	6.0	300	6	4.9	309	198	165
9..	316	6	5.1	318	7	6.0	311	189	159
10..	315	6	5.1	304	8	6.6	311	172	144
11..	314	6	5.1	315	9	7.7	310	159	133
12..	315	10	8.5	314	9	7.6	309	149	124
13..	317	8	6.8	310	9	7.5	308	148	123
14..	318	6	5.2	314	100	85	307	135	112
15..	316	6	5.1	314	518	439	305	135	111
16..	315	6	5.1	239	517	S 340	304	130	107
17..	315	6	5.1	78	180	K 44	304	126	103
18..	315	4	3.4	104	101	S 46	305	129	106
19..	315	6	5.1	301	201	163	308	119	99
20..	315	6	5.1	302	188	153	308	123	102
21..	315	6	5.1	309	198	165	310	117	98
22..	316	8	6.8	308	200	166	310	115	96
23..	318	8	6.9	309	200	167	309	128	107
24..	318	16	14	309	197	164	309	120	100
25..	318	6	5.2	309	198	165	309	101	84
26..	319	5	4.3	310	208	174	308	100	83
27..	318	6	5.2	309	181	151	308	100	83
28..	316	7	6.0	309	126	105	309	98	82
29..	315	7	6.0	309	121	101	311	90	76
30..	314	8	6.8	310	221	185	311	88	74
31..	314	8	6.8	--	--	--	312	90	76
Total	9789	--	186.4	8813	--	2893.5	9533	--	6688
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	311	82	69	307	280	232	310	68	57
2..	312	88	74	300	161	130	255	69	48
3..	294	100	79	299	168	136	311	69	58
4..	305	104	86	300	121	98	307	69	57
5..	297	92	74	304	121	99	259	69	48
6..	309	95	79	303	104	85	307	62	51
7..	310	89	74	303	103	84	304	62	51
8..	310	88	74	304	102	84	309	62	52
9..	310	85	71	305	104	86	309	59	49
10..	310	87	73	304	100	82	308	69	57
11..	313	82	69	304	88	72	306	220	180
12..	313	81	68	303	81	66	305	200	160
13..	312	80	67	303	79	65	305	185	152
14..	315	82	70	303	79	65	305	180	150
15..	314	80	68	303	84	69	272	181	133
16..	312	72	61	303	88	72	72	372	S 52
17..	312	73	61	307	91	75	274	170	126
18..	310	132	110	315	84	71	306	100	83
19..	307	321	266	314	80	68	306	92	76
20..	300	322	261	314	74	63	305	84	69
21..	281	604	S 479	314	71	60	305	85	70
22..	303	161	132	310	72	60	306	88	73
23..	302	158	129	303	72	59	305	81	67
24..	302	160	130	304	72	59	304	67	55
25..	305	198	163	306	72	59	304	64	53
26..	309	304	254	306	72	59	304	62	51
27..	310	368	308	306	67	55	304	57	47
28..	312	430	362	306	67	55	303	57	47
29..	312	367	309	--	--	--	304	58	48
30..	311	364	306	--	--	--	249	62	42
31..	311	352	296	--	--	--	304	68	56
Total	9534	--	4722	8553	--	2268	9027	--	2318

S Computed by subdividing day.

K Computed from estimated-concentration graph and subdividing day.

EEL RIVER BASIN--Continued

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	310	61	51	307	19	16	306	11	9.1
2..	309	48	40	307	20	17	205	10	5.5
3..	307	40	33	307	21	17	157	8	3.4
4..	307	39	32	307	28	23	316	6	5.1
5..	307	40	33	307	30	25	314	5	4.2
6..	305	40	33	307	38	31	314	5	4.2
7..	304	39	32	305	43	35	315	20	17
8..	304	32	26	302	51	42	316	10	8.5
9..	304	26	21	302	45	37	322	10	8.7
10..	304	24	20	302	30	24	331	10	8.9
11..	304	24	20	304	29	24	317	8	6.8
12..	304	24	20	304	28	23	318	8	6.9
13..	305	28	23	305	25	21	317	8	6.8
14..	304	30	25	305	21	17	314	8	6.8
15..	304	32	26	305	15	12	311	8	6.7
16..	304	38	31	298	12	9.7	306	8	6.6
17..	304	41	34	310	15	13	297	8	6.4
18..	303	41	34	315	14	12	312	8	6.7
19..	302	39	32	315	14	12	311	8	6.7
20..	302	32	26	313	14	12	305	8	6.6
21..	302	28	23	298	13	10	306	8	6.6
22..	302	26	21	304	13	11	304	8	6.6
23..	302	26	21	312	12	10	306	8	6.6
24..	302	28	23	312	12	10	305	8	6.6
25..	302	28	23	312	11	9.3	305	8	6.6
26..	302	26	21	312	10	8.4	303	8	6.5
27..	302	21	17	281	10	7.6	307	8	6.6
28..	304	20	16	311	11	9.2	305	8	6.6
29..	307	20	17	304	11	9.0	294	8	6.4
30..	307	20	17	301	11	8.9	303	8	6.5
31..	--	--	--	303	11	9.0	--	--	--
Total	9129	--	791	9477	--	525.1	9042	--	207.2
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	307	8	6.6	308	6	5.0	311	7	5.9
2..	304	8	6.6	309	6	5.0	312	7	5.9
3..	304	8	6.6	297	6	4.8	310	7	5.9
4..	306	8	6.6	308	6	5.0	310	7	5.9
5..	273	8	5.9	309	6	5.0	317	7	6.0
6..	303	8	6.5	309	7	5.8	324	7	6.1
7..	309	8	6.7	306	7	5.8	323	7	6.1
8..	305	8	6.6	307	7	5.8	319	7	6.0
9..	310	7	5.9	309	7	5.8	313	7	5.9
10..	315	7	6.0	309	7	5.8	312	8	6.7
11..	312	7	5.9	308	7	5.8	312	8	6.7
12..	294	7	5.6	308	6	5.0	310	8	6.7
13..	309	7	5.8	306	6	5.0	310	8	6.7
14..	309	7	5.8	310	6	5.0	314	8	6.8
15..	309	7	5.8	312	6	5.1	314	8	6.8
16..	305	7	5.8	313	6	5.1	313	8	6.8
17..	306	6	5.0	312	6	5.1	316	8	6.8
18..	305	6	4.9	299	6	4.8	317	8	6.8
19..	306	5	4.1	311	6	5.0	318	8	6.9
20..	304	5	4.1	310	6	5.0	317	8	6.8
21..	301	5	4.1	309	6	5.0	311	8	6.7
22..	310	6	5.0	309	6	5.0	311	8	6.7
23..	308	7	5.8	308	6	5.0	310	8	6.7
24..	312	8	6.7	307	6	5.0	315	8	6.8
25..	310	9	7.5	311	6	5.0	316	8	6.8
26..	310	9	7.5	313	6	5.1	313	8	6.8
27..	285	9	6.9	313	6	5.1	314	8	6.8
28..	302	8	6.5	310	6	5.0	314	8	6.8
29..	303	8	6.5	313	6	5.1	315	8	6.8
30..	310	7	5.9	310	6	5.0	319	8	6.9
31..	308	7	5.8	308	6	5.0	--	--	--
Total	9454	--	185.0	9571	--	160.0	9430	--	196.0
Total discharge for year (cfs-days).....									111352
Total load for year (tons).....									21140.2

EEL RIVER BASIN--Continued

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Jan. 17, 1967.....	1545	43		312	68							100						S
Mar. 16.....	1045	46		13	477							91	99	100				V

EEL RIVER BASIN--Continued

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, February 1964 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 7, 1964.....	23	27	MAY 20, 1964.....	13	7
FEB. 20.....	22	27	MAY 22.....	8	8.5
FEB. 21.....	19	29	MAY 25.....	7	11
FEB. 22.....	23	15	MAY 27.....	8	11
FEB. 23.....	24	14	MAY 29.....	12	7.5
FEB. 24.....	23	16	JUNE 1.....	8	7.5
FEB. 25.....	27	15	JUNE 3.....	9	9.5
FEB. 26.....	23	15	JUNE 5.....	7	9.5
FEB. 27.....	23	15	JUNE 8.....	5	11
MAR. 1.....	22	18	JUNE 10.....	6	11
MAR. 2.....	21	14	JUNF 12.....	5	11
MAR. 3.....	18	13	JUNE 16.....	5	8
MAR. 4.....	17	15	JUNE 17.....	7	2.6
MAR. 5.....	4	15	JUNE 19.....	8	3.0
MAR. 6.....	25	14	JUNE 22.....	13	3.0
MAR. 7.....	17	16	JUNE 24.....	10	3.0
MAR. 8.....	30	17	JUNE 26.....	8	3.0
MAR. 9.....	18	15	JUNE 29.....	6	4.0
MAR. 10.....	17	14	JUNE 30.....	7	3.7
MAR. 11.....	18	14	JULY 1.....	8	3.0
MAR. 12.....	37	58	JULY 3.....	8	5
MAR. 13.....	25	26	JULY 7.....	20	10
MAR. 14.....	46	28	JULY 8.....	12	5
MAR. 15.....	26	26	JULY 10.....	8	6
MAR. 16.....	19	28	JULY 13.....	6	3
MAR. 17.....	19	27	JULY 15.....	6	4
MAR. 18.....	16	23	JULY 17.....	7	3
MAR. 19.....	13	19	JULY 20.....	9	4
MAR. 20.....	14	20	JULY 22.....	7	7
MAR. 21.....	17	20	JULY 24.....	7	7
MAR. 22.....	16	23	JULY 27.....	6	3
MAR. 23.....	16	23	JULY 29.....	6	5
MAR. 24.....	15	13	JULY 31.....	4	5
MAR. 25.....	10	8	AUG. 3.....	6	5
MAR. 26.....	8	10	AUG. 5.....	5	5
MAR. 27.....	12	8	AUG. 7.....	11	5
MAR. 28.....	11	4	AUG. 10.....	7	5
MAR. 29.....	12	7	AUG. 12.....	6	5
MAR. 30.....	12	9	AUG. 14.....	6	7
MAR. 31.....	17	10	AUG. 17.....	6	6
APR. 1.....	12	12	AUG. 19.....	5	6
APR. 2.....	12	10	AUG. 21.....	4	6
APR. 3.....	10	10	AUG. 24.....	4	6
APR. 4.....	8	9	AUG. 26.....	4	6
APR. 5.....	10	7	AUG. 28.....	4	4
APR. 6.....	6	4	AUG. 31.....	6	6
APR. 7.....	7	7	SEPT. 1.....	9	10
APR. 8.....	7	10	SEPT. 2.....	5	8
APR. 9.....	7	10	SEPT. 4.....	7	10
APR. 10.....	8	11	SEPT. 7.....	8	7
APR. 11.....	7	7	SEPT. 9.....	6	6
APR. 12.....	5	10	SEPT. 11.....	7	7
APR. 13.....	8	7	SEPT. 14.....	6	8
APR. 14.....	6	4	SEPT. 16.....	6	10
APR. 15.....	8	5	SEPT. 18.....	5	9
APR. 17.....	4	1	SEPT. 21.....	6	5
APR. 20.....	14	3	SEPT. 23.....	7	7
APR. 22.....	6	1	SEPT. 25.....	7	7
APR. 24.....	5	0	SEPT. 28.....	6	6
APR. 27.....	6	0	SEPT. 30.....	6	5
APR. 29.....	4	2	OCT. 2.....	7	5
MAY 1.....	6	8	OCT. 5.....	9	10
MAY 4.....	6	4	OCT. 7.....	7	9
MAY 6.....	7	2	OCT. 8.....	7	7
MAY 8.....	4	0	OCT. 9.....	6	4
MAY 11.....	4	0	OCT. 12.....	5	7
MAY 13.....	4	0	OCT. 14.....	6	5
MAY 15.....	5	2	OCT. 16.....	7	6
MAY 18.....	10	11	OCT. 19.....	7	5
MAY 19.....	6	1	OCT. 21.....	6	8
			OCT. 23.....		

EEL RIVER BASIN--Continued

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 26, 1964.....	7	6	JAN. 12, 1965.....	517	450
OCT. 28.....	11	9	JAN. 13.....	369	330
OCT. 30.....	11	4	FEB. 16.....	178	350
NOV. 2.....	5	4	MAR. 9.....	118	132
NOV. 4.....	6	4	MAR. 10.....	126	116
NOV. 6.....	5	4	MAR. 11.....	130	140
NOV. 9.....	82	82	MAR. 12.....	121	152
NOV. 10.....	119	78	MAR. 13.....	107	148
NOV. 11.....	152	87	MAR. 14.....	96	108
NOV. 12.....	66	56	MAR. 15.....	102	120
NOV. 13.....	46	33	MAR. 16.....	117	128
NOV. 14.....	52	38	MAR. 17.....	104	100
NOV. 15.....	38	36	MAR. 18.....	98	144
NOV. 16.....	38	52	MAR. 19.....	80	128
NOV. 17.....	30	33	MAR. 20.....	70	120
NOV. 18.....	24	32	MAR. 21.....	91	152
NOV. 19.....	21	23	MAR. 22.....	100	128
NOV. 20.....	18	22	MAR. 23.....	102	120
NOV. 21.....	19	26	MAR. 24.....	81	108
NOV. 22.....	17	22	MAR. 25.....	70	100
NOV. 23.....	27	30	MAR. 26.....	48	92
NOV. 24.....	18	9	MAR. 27.....	273	172
NOV. 25.....	20	21	MAR. 28.....	88	120
NOV. 26.....	12	15	MAR. 29.....	66	80
NOV. 27.....	131	75	MAR. 30.....	98	116
NOV. 28.....	32	30	MAR. 31.....	114	112
NOV. 29.....	18	18	APR. 1.....	84	128
NOV. 30.....	18	16	APR. 2.....	101	120
DEC. 1.....	46	38	APR. 3.....	83	80
DEC. 2.....	52	44	APR. 4.....	90	90
DEC. 3.....	17	19	APR. 5.....	88	90
DEC. 4.....	20	16	APR. 6.....	62	96
DEC. 5.....	21	26	APR. 7.....	86	94
DEC. 6.....	21	22	APR. 8.....	78	66
DEC. 7.....	24	16	APR. 9.....	84	66
DEC. 8.....	17	15	APR. 10.....	87	80
DEC. 9.....	17	16	APR. 11.....	62	52
DEC. 10.....	19	10	APR. 12.....	62	42
DEC. 11.....	74	30	APR. 13.....	98	74
DEC. 12.....	14	12	APR. 14.....	105	74
DEC. 13.....	12	12	APR. 15.....	108	90
DEC. 14.....	13	9	APR. 16.....	226	70
DEC. 15.....	14	9	APR. 23.....	101	100
DEC. 16.....	12	9	APR. 24.....	82	90
DEC. 17.....	14	10	APR. 25.....	63	99
DEC. 18.....	13	9	APR. 26.....	72	114
DEC. 19.....	65	31	APR. 27.....	73	111
DEC. 20.....	139	102	APR. 28.....	65	96
DEC. 21.....	3540	900	APR. 29.....	68	84
DEC. 22.....	3620	2310	APR. 30.....	62	84
DEC. 23.....	2670	1792	MAY 1.....	74	81
DEC. 24.....	2660	1540	MAY 2.....	66	105
DEC. 25.....	2270	1596	MAY 3.....	52	81
DEC. 26.....	1520	952	MAY 4.....	64	87
DEC. 27.....	1520	1008	MAY 5.....	64	84
DEC. 28.....	1120	853	MAY 6.....	52	81
DEC. 29.....	648	504	MAY 7.....	54	75
DEC. 30.....	661	532	MAY 8.....	50	81
DEC. 31.....	582	462	MAY 9.....	50	69
JAN. 1, 1965.....	558	462	MAY 11.....	61	75
JAN. 2.....	525	462	MAY 12.....	54	56
JAN. 3.....	651	504	MAY 13.....	54	66
JAN. 4.....	4290	1710	MAY 14.....	44	48
JAN. 5.....	4390	1200	MAY 15.....	37	42
JAN. 6.....	1510	686	MAY 16.....	38	42
JAN. 7.....	1060	705	MAY 17.....	39	53
JAN. 8.....	680	600	MAY 18.....	34	48
JAN. 9.....	529	450	MAY 19.....	36	47
JAN. 10.....	484	360	MAY 20.....	29	35
JAN. 11.....	516	420	MAY 21.....	30	38

EEL RIVER BASIN--Continued

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
MAY 22, 1965.....	29	38	JULY 26, 1965.....	8	15
MAY 23.....	28	43	JULY 27.....	10	15
MAY 24.....	29	37	JULY 28.....	9	18
MAY 25.....	29	41	JULY 29.....	17	15
MAY 26.....	27	42	JULY 30.....	8	13
MAY 27.....	23	36	JULY 31.....	17	13
MAY 28.....	66	58	AUG. 1.....	8	15
MAY 29.....	24	28	AUG. 4.....	10	13
MAY 30.....	24	42	AUG. 5.....	12	16
MAY 31.....	26	37	AUG. 6.....	14	15
JUNE 1.....	25	50	AUG. 9.....	9	14
JUNE 2.....	28	30	AUG. 11.....	10	14
JUNE 3.....	29	40	AUG. 13.....	10	15
JUNE 4.....	38	47	AUG. 16.....	8	15
JUNE 5.....	22	37	AUG. 18.....	8	12
JUNE 6.....	22	30	AUG. 20.....	7	14
JUNE 7.....	21	28	AUG. 23.....	7	13
JUNE 8.....	22	35	AUG. 25.....	7	13
JUNE 9.....	22	30	AUG. 30.....	7	14
JUNE 10.....	22	32	SEPT. 2.....	11	14
JUNE 11.....	22	32	SEPT. 3.....	7	5
JUNE 12.....	20	33	SEPT. 4.....	6	10
JUNE 13.....	21	27	SEPT. 6.....	7	10
JUNE 14.....	20	28	SEPT. 8.....	7	12
JUNE 15.....	20	28	SEPT. 10.....	11	12
JUNE 16.....	18	27	SEPT. 13.....	7	12
JUNE 17.....	21	25	SEPT. 15.....	12	10
JUNE 18.....	20	27	SEPT. 17.....	5	7
JUNE 19.....	18	27	SEPT. 20.....	4	5
JUNE 20.....	18	27	SEPT. 22.....	6	5
JUNE 21.....	17	30	SEPT. 24.....	5	7
JUNE 22.....	18	27	SEPT. 27.....	11	12
JUNE 23.....	18	28	SEPT. 29.....	7	75
JUNE 24.....	19	25	OCT. 1.....	6	12
JUNE 25.....	15	30	OCT. 4.....	8	10
JUNE 26.....	20	20	OCT. 6.....	15	5
JUNE 27.....	18	22	OCT. 8.....	10	7.5
JUNE 28.....	24	28	OCT. 11.....	18	12
JUNE 29.....	17	27	OCT. 13.....	9	10
JUNE 30.....	42	25	OCT. 15.....	13	9
JULY 1.....	26	27	OCT. 18.....	9	7.5
JULY 2.....	41	24	OCT. 20.....	8	7
JULY 3.....	15	24	OCT. 22.....	5	5
JULY 4.....	16	24	OCT. 25.....	3	6
JULY 5.....	13	24	OCT. 27.....	4	7.5
JULY 6.....	13	17	OCT. 29.....	3	7.5
JULY 7.....	13	17	NOV. 1.....	6	5
JULY 8.....	12	25	NOV. 3.....	1	5
JULY 9.....	13	24	NOV. 5.....	3	5
JULY 10.....	14	19	NOV. 7.....	11	15
JULY 11.....	14	20	NOV. 8.....	6	12
JULY 12.....	19	28	NOV. 10.....	8	5
JULY 13.....	15	22	NOV. 11.....	6	10
JULY 14.....	14	20	NOV. 12.....	20	30
JULY 15.....	14	22	NOV. 13.....	76	60
JULY 16.....	14	20	NOV. 14.....	405	300
JULY 17.....	13	23	NOV. 15.....	72	80
JULY 18.....	13	16	NOV. 16.....	80	110
JULY 19.....	11	18	NOV. 17.....	80	100
JULY 20.....	12	19	NOV. 18.....	278	200
JULY 21.....	11	18	NOV. 19.....	146	140
JULY 22.....	6	22	NOV. 20.....	79	65
JULY 23.....	21	26	NOV. 21.....	121	120
JULY 24.....	9	15	NOV. 22.....	120	120
JULY 25.....	10	18	NOV. 23.....	175	120
			NOV. 24.....	150	130
			NOV. 25.....	68	50
			NOV. 26.....	68	55
			NOV. 27.....	79	55
			NOV. 28.....	70	45

EEL RIVER BASIN--Continued

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
NOV. 29, 1965.....	44	45	FEB. 8, 1966,	90	136
NOV. 30.....	48	40	FEB. 9.....	87	126
DEC. 1.....	54	50	FEB. 10.....	94	124
DEC. 2.....	46	50	FEB. 11.....	84	116
DEC. 3.....	40	40	FEB. 12.....	103	120
DEC. 4.....	36	35	FEB. 13.....	78	122
DEC. 5.....	36	40	FEB. 14.....	82	120
DEC. 6.....	42	40	FEB. 15.....	68	110
DEC. 7.....	33	45	FEB. 16.....	76	120
DEC. 8.....	32	45	FEB. 17.....	77	110
DEC. 9.....	30	35	FEB. 18.....	69	130
DEC. 10.....	24	40	FEB. 19.....	98	120
DEC. 11.....	38	30	FEB. 20.....	74	100
DEC. 12.....	33	30	FEB. 21.....	64	110
DEC. 13.....	23	40	FEB. 22.....	63	100
DEC. 14.....	24	25	FEB. 23.....	93	120
DEC. 15.....	24	37	FEB. 24.....	90	120
DEC. 16.....	22	35	FEB. 25.....	67	100
DEC. 17.....	20	35	FEB. 26.....	68	110
DEC. 18.....	30	45	FEB. 27.....	68	90
DEC. 19.....	33	40	FEB. 28.....	54	60
DEC. 20.....	35	40	MAR. 1.....	54	65
DEC. 21.....	82	65	MAR. 2.....	56	60
DEC. 22.....	75	55	MAR. 3.....	58	80
DEC. 23.....	53	45	MAR. 4.....	56	80
DEC. 24.....	55	40	MAR. 5.....	70	80
DEC. 25.....	54	60	MAR. 6.....	58	70
DEC. 26.....	50	50	MAR. 7.....	64	70
DEC. 28.....	868	550	MAR. 8.....	141	90
DEC. 29.....	912	630	MAR. 9.....	137	55
DEC. 30.....	79	86	MAR. 10.....	148	55
DEC. 31.....	128	135	MAR. 11.....	96	60
JAN. 1, 1966.....	82	105	MAR. 12.....	78	50
JAN. 2.....	86	100	MAR. 13.....	75	75
JAN. 3.....	518	420	MAR. 14.....	71	55
JAN. 4.....	672	500	MAR. 15.....	72	70
JAN. 5.....	687	550	MAR. 16.....	74	70
JAN. 6.....	534	450	MAR. 17.....	52	70
JAN. 7.....	517	570	MAR. 18.....	51	65
JAN. 8.....	396	260	MAR. 19.....	68	65
JAN. 9.....	313	268	MAR. 20.....	51	55
JAN. 10.....	206	195	MAR. 21.....	50	50
JAN. 11.....	204	201	MAR. 22.....	49	70
JAN. 12.....	186	169	MAR. 23.....	50	50
JAN. 13.....	152	166	MAR. 24.....	48	49
JAN. 14.....	158	225	MAR. 25.....	48	57
JAN. 15.....	129	195	MAR. 26.....	36	50
JAN. 16.....	140	147	MAR. 27.....	31	35
JAN. 17.....	147	144	MAR. 28.....	26	37
JAN. 18.....	145	147	MAR. 29.....	22	38
JAN. 19.....	144	195	MAR. 30.....	27	33
JAN. 20.....	188	195	MAR. 31.....	26	40
JAN. 21.....	156	189	APR. 1.....	36	45
JAN. 22.....	150	196	APR. 2.....	37	35
JAN. 23.....	142	200	APR. 3.....	36	37
JAN. 24.....	142	201	APR. 4.....	34	45
JAN. 25.....	136	220	APR. 5.....	36	45
JAN. 26.....	138	189	APR. 6.....	44	52
JAN. 27.....	140	212	APR. 7.....	40	45
JAN. 28.....	146	200	APR. 8.....	38	43
JAN. 29.....	178	204	APR. 9.....	40	45
JAN. 30.....	172	200	APR. 10.....	36	49
JAN. 31.....	109	168	APR. 11.....	51	49
FEB. 1.....	76	189	APR. 12.....	50	54
FEB. 2.....	106	174	APR. 13.....	44	55
FEB. 3.....	78	147	APR. 14.....	32	42
FEB. 4.....	278	216	APR. 15.....	30	40
FEB. 5.....	146	183	APR. 16.....	29	43
FEB. 6.....	149	183	APR. 17.....	34	49
FEB. 7.....	91	126	APR. 18.....	44	46

EEL RIVER BASIN--Continued

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 19, 1966.....	30	42	SEPT. 9, 1966.....	5	6
APR. 20.....	33	43	SEPT. 12.....	4	5
APR. 21.....	34	48	SEPT. 14.....	4	4
APR. 22.....	35	48	SEPT. 16.....	5	4
APR. 23.....	30	48	SEPT. 19.....	5	5
APR. 24.....	29	47	SEPT. 20.....	4	5
APR. 25.....	32	40	SEPT. 21.....	7	3.6
APR. 26.....	32	36	SEPT. 23.....	9	3.6
APR. 27.....	26	43	SEPT. 26.....	7	8.2
APR. 28.....	29	33	SEPT. 28.....	13	31
APR. 29.....	27	35	SEPT. 30.....	10	8.3
APR. 30.....	26	38	OCT. 3.....	7	7.5
MAY 2.....	27	40	OCT. 5.....	4	13
MAY 4.....	21	38	OCT. 7.....	8	9.7
MAY 6.....	22	36	OCT. 10.....	6	8.7
MAY 9.....	17	25	OCT. 12.....	10	10
MAY 11.....	17	33	OCT. 14.....	6	9
MAY 14.....	14	25	OCT. 17.....	6	9
MAY 17.....	13	22	OCT. 18.....	4	7.1
MAY 20.....	12	20	OCT. 19.....	6	5
MAY 23.....	12	19	OCT. 21.....	6	6
MAY 25.....	11	19	OCT. 24.....	16	6
MAY 27.....	11	19	OCT. 26.....	5	6
MAY 30.....	12	20	OCT. 28.....	7	7
JUNE 1.....	11	19	OCT. 31.....	8	7
JUNE 3.....	10	19	NOV. 2.....	6	7
JUNE 6.....	10	19	NOV. 4.....	5	7
JUNE 8.....	11	20	NOV. 7.....	9	10
JUNE 10.....	14	19	NOV. 9.....	7	10
JUNE 13.....	15	20	NOV. 11.....	9	9
JUNE 14.....	9	14	NOV. 14.....	9	10
JUNE 15.....	9	17	NOV. 15.....	536	680
JUNE 17.....	6	17	NOV. 16.....	540	630
JUNE 20.....	8	16	NOV. 18.....	202	320
JUNE 22.....	7	14	NOV. 19.....	202	300
JUNE 24.....	16	17	NOV. 20.....	193	300
JUNE 27.....	7	13	NOV. 21.....	198	300
JUNE 29.....	14	17	NOV. 22.....	200	300
JULY 1.....	7	11	NOV. 23.....	201	300
JULY 3.....	6	11	NOV. 24.....	198	300
JULY 6.....	10	14	NOV. 25.....	199	300
JULY 8.....	8	14	NOV. 26.....	204	325
JULY 11.....	9	13	NOV. 27.....	204	320
JULY 13.....	9	12	NOV. 28.....	126	210
JULY 15.....	6	11	NOV. 29.....	125	210
JULY 18.....	6	11	NOV. 30.....	106	210
JULY 19.....	6	11	DEC. 1.....	911	840
JULY 20.....	10	8	DEC. 2.....	912	780
JULY 22.....	8	8	DEC. 3.....	905	700
JULY 25.....	6	6	DEC. 4.....	901	780
JULY 27.....	6	6	DEC. 5.....	908	750
JULY 29.....	5	8	DEC. 6.....	316	360
AUG. 1.....	5	6.0	DEC. 7.....	307	260
AUG. 3.....	7	10	DEC. 8.....	196	240
AUG. 5.....	4	6	DEC. 9.....	193	242
AUG. 8.....	4	6	DEC. 10.....	175	216
AUG. 10.....	5	6	DEC. 11.....	160	206
AUG. 12.....	4	5	DEC. 12.....	144	123
AUG. 15.....	4	6	DEC. 13.....	146	125
AUG. 16.....	5	6	DEC. 14.....	135	246
AUG. 17.....	7	8	DEC. 15.....	136	225
AUG. 20.....	5	5	DEC. 16.....	128	172
AUG. 22.....	13	10	DEC. 17.....	122	138
AUG. 24.....	4	5	DEC. 18.....	129	138
AUG. 26.....	6	5	DEC. 19.....	117	225
AUG. 29.....	7	5	DEC. 20.....	124	190
AUG. 31.....	4	5	DEC. 21.....	116	188
SEPT. 2.....	4	5	DEC. 22.....	112	192
SEPT. 5.....	4	6	DEC. 23.....	123	260
SEPT. 7.....	4	5	DEC. 24.....	124	248

EEL RIVER BASIN--Continued

11-4710. POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
DEC. 25, 1966.....	98	208	FEB. 20, 1967.....	74	120
DEC. 26.....	100	190	FEB. 21.....	72	117
DEC. 27.....	100	148	FEB. 22.....	74	117
DEC. 28.....	98	138	FEB. 23.....	71	117
DEC. 29.....	92	138	FEB. 24.....	82	136
DEC. 30.....	82	142	FEB. 27.....	67	118
DEC. 31.....	90	132	MAR. 1.....	66	102
JAN. 1, 1967.....	80	134	MAR. 3.....	61	112
JAN. 2.....	85	135	MAR. 6.....	62	112
JAN. 3.....	99	133	MAR. 8.....	64	110
JAN. 4.....	110	133	MAR. 10.....	60	104
JAN. 5.....	92	135	MAR. 13.....	184	225
JAN. 6.....	97	135	MAR. 15.....	180	225
JAN. 7.....	87	125	MAR. 16.....	--	340
JAN. 8.....	88	130	MAR. 17.....	182	210
JAN. 9.....	86	--	MAR. 20.....	86	125
JAN. 10.....	86	128	MAR. 22.....	84	118
JAN. 11.....	88	125	MAR. 24.....	66	95
JAN. 12.....	80	120	MAR. 27.....	56	95
JAN. 13.....	80	138	MAR. 29.....	58	91
JAN. 14.....	83	122	MAR. 31.....	67	99
JAN. 17.....	68	149	APR. 3.....	40	65
JAN. 18.....	88	125	APR. 5.....	41	71
JAN. 19.....	324	420	APR. 7.....	37	51
JAN. 20.....	330	380	APR. 10.....	25	42
JAN. 21.....	896	630	APR. 12.....	26	37
JAN. 22.....	163	245	APR. 14.....	30	45
JAN. 23.....	158	245	APR. 17.....	42	51
JAN. 24.....	164	250	APR. 19.....	38	54
JAN. 25.....	165	245	APR. 21.....	26	41
JAN. 26.....	308	350	APR. 24.....	27	40
JAN. 27.....	328	340	APR. 26.....	26	38
JAN. 28.....	444	375	APR. 28.....	19	20
JAN. 29.....	366	360	MAY 1.....	18	19
JAN. 30.....	360	360	MAY 3.....	19	18
JAN. 31.....	362	360	MAY 5.....	30	25
FEB. 1.....	298	300	MAY 8.....	51	25
FEB. 2.....	157	260	MAY 10.....	37	37
FEB. 3.....	180	260	MAY 15.....	20	20
FEB. 4.....	124	175	MAY 17.....	15	20
FEB. 5.....	120	175	MAY 19.....	14	20
FEB. 6.....	104	160	MAY 22.....	13	19
FEB. 7.....	107	155	MAY 24.....	12	19
FEB. 8.....	100	150	MAY 26.....	10	15
FEB. 9.....	110	155	MAY 29.....	11	14
FEB. 10.....	102	135	MAY 31.....	11	20
FEB. 11.....	90	135	JUNE 2.....	10	9
FEB. 12.....	81	120	JUNE 5.....	9	10
FEB. 13.....	82	120	JUNE 7.....	20	24
FEB. 14.....	76	135	JUNE 13.....	8	10
FEB. 15.....	88	135	JUNE 21.....	8	15
FEB. 16.....	83	120	JUNE 25.....	8	15
FEB. 17.....	95	125	JULY 5.....	8	15
FEB. 18.....	82	125	JULY 12.....	7	15
FEB. 19.....	82	125	JULY 14.....	7	14
			JULY 19.....	5	14
			JULY 26.....	9	8
			AUG. 2.....	6	14
			AUG. 9.....	7	12
			AUG. 15.....	6	12

EEL RIVER BASIN--Continued

11-4721.5. EEL RIVER NEAR DOS RIOS, CALIF.

LOCATION.--Lat 39°37'30", long 123°20'25", at gaging station 1,100 feet upstream from Outlet Creek, and 6.3 miles south of Dos Rios, Mendocino County.

DRAINAGE AREA.--528 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1967.

Water temperatures: October 1966 to September 1967.

Sediment records: October 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 35°F Dec. 29.

Sediment concentrations: Maximum daily, 3,590 ppm Jan. 21; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 204,000 tons Jan. 21; minimum daily, less than 0.05 ton on many days.

REMARKS.--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. Periodic determinations of suspended-sediment concentration and turbidity are on page 432.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 12, 1966....	3.8			31	8.9	11	1.4	114	2	--	7.5		0.8	0.3				114			279	8.3
Nov. 16.....	700			20	5.8	5.5	1.3	73	0	--	2.5		5.1	.3				74			167	7.9
Dec. 14.....	1900			15	5.0	4.2	1.3	66	0	--	1.8		1.4	.1				58			128	8.1
Jan. 18, 1967....	72			26	7.8	7.0	.9	112	0	--	.3		.1	.1				97			222	8.2
Feb. 8.....	1460			15	4.9	3.9	.7	66	0	--	1.4		.5	.1				58			128	8.1
Mar. 8.....	110			24	6.8	6.2	.8	100	0	--	2.5		.5	.1				88			197	8.1
Apr. 5.....	1950			16	5.4	4.5	.7	73	0	--	1.2		.0	.1				62			136	8.1
May 10.....	1970	10		16	5.0	4.0	.7	71	0	9.0	1.2		.7	.1				60			132	7.8
June 7.....	400			19	5.5	4.3	.8	83	0	--	1.3		.5	.1				70			156	8.0
July 19.....	24			--	--	8.8	--	94	4	--	4.4		.2	.2				85			219	8.5
Aug. 9.....	7.9			--	--	9.4	--	100	4	20	5.1		.2	.4				96			231	8.5
Sept. 13.....	2.8			27	7.8	10	1.4	104	0	27	5.0		.0	.4				100			246	8.2

11-4721.5. EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

[illegible]

EEL RIVER BASIN--Continued

11-4721.5. EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4.0	1		3.4	1	T	800	500	1100
2..	3.8	1		3.4	1	T	7000	2200	42000
3..	3.8	1		3.4	1	T	5500	1200	18000
4..	3.8	1		3.4	1	T	9140	2590	86700
5..	3.8	1		3.4	1	T	19200	3070	167000
6..	3.8	1		4.0	1	T	8080	1280	29200
7..	3.8	1		5.6	1	T	4350	660	7750
8..	3.8	1		10	3	0.1	2720	370	2720
9..	3.8	1		6.8	2	T	1920	200	1040
10..	3.8	1		6.8	2	T	2440	270	1780
11..	3.8	1		7.1	2	T	2020	170	927
12..	3.8	1		12	4	.1	1760	133	632
13..	3.8	1		21	10	.6	1810	167	816
14..	3.8	1		128	60	21	1900	154	790
15..	3.8	1		292	90	71	1470	105	417
16..	3.8	1		700	460	870	1200	82	266
17..	4.0	1		350	210	198	995	70	188
18..	4.0	1		230	120	75	855	66	152
19..	4.0	1		550	520	772	745	61	123
20..	4.0	1		4000	2630	28400	623	52	87
21..	3.8	1		5000	1060	14300	533	47	68
22..	3.6	1		2000	500	2700	459	43	53
23..	3.8	1		900	118	287	415	40	45
24..	3.2	1		450	60	73	367	34	34
25..	3.4	1		350	28	26	299	34	27
26..	3.2	1		280	15	11	255	30	21
27..	3.4	1		230	13	8.1	210	23	13
28..	3.6	1		290	30	23	183	19	9.4
29..	3.6	1		370	40	40	160	14	6.0
30..	3.4	1		320	29	25	138	12	4.5
31..	3.4	1		--	--	--	128	9	3.1
Total	115.4	--	0.3	16530.3	--	47901.0	77675	--	361972.0
	JANUARY			FEBRUARY			MARCH		
1..	120	5	1.6	8640	700	16300	173	10	4.7
2..	114	5	1.5	5580	480	7230	153	8	3.3
3..	107	5	1.4	3980	290	3120	155	7	2.9
4..	105	4	1.1	3010	203	1650	150	7	2.8
5..	103	4	1.1	2450	152	1010	121	6	2.0
6..	99	3	.8	2050	117	648	145	4	1.6
7..	92	2	.5	1720	95	442	116	4	1.3
8..	90	2	.5	1460	78	307	110	4	1.2
9..	90	1	.2	1250	74	250	116	3	.9
10..	88	1	.2	1090	69	203	1100	820	2440
11..	88	2	.5	940	57	145	900	370	899
12..	83	2	.4	840	53	120	720	188	365
13..	81	1	.2	722	47	92	1150	102	317
14..	81	1	.2	695	37	B 69	1860	70	352
15..	77	1	.2	628	35	59	2170	104	704
16..	77	1	.2	605	37	B 60	8960	1780	S 45700
17..	73	2	.4	538	32	46	6990	736	S 14700
18..	72	1	.2	483	26	B 34	4360	380	4470
19..	72	1	.2	435	29	34	3190	245	2110
20..	4980	1530	S 37100	375	30	B 30	4010	310	3360
21..	21200	3590	S 204000	306	28	23	4080	257	2830
22..	11800	1700	S 58000	292	19	15	3260	161	1420
23..	5420	780	11400	279	17	B 13	3410	156	1440
24..	4830	610	7960	255	16	11	2970	114	914
25..	4520	350	4270	240	15	9.7	2520	96	653
26..	10400	2360	S 80900	215	12	7.0	2210	84	B 501
27..	11800	1350	43000	200	12	6.5	1930	76	B 396
28..	13400	1380	49900	188	12	6.1	1780	70	336
29..	20900	2450	S 139000	--	--	--	1690	45	205
30..	14000	1660	62700	--	--	--	1860	102	512
31..	14300	1030	39800	--	--	--	2490	151	1020
Total	139262	--	738041.4	39466	--	31940.3	64849	--	85664.7

S Computed by subdividing day.

T Less than 0.05 ton.

B Computed from estimated-concentration graph.

EEL RIVER BASIN--Continued

11-4721.5. EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2560	89	615	1480	24	96	202	3	1.6
2..	2480	78	522	1430	22	85	282	4	3.0
3..	2380	85	546	1340	21	76	1060	27	77
4..	2030	70	384	1260	18	61	504	8	11
5..	1950	52	274	1320	46	164	370	4	4.0
6..	3130	247	2090	1500	35	142	498	7	9.4
7..	2480	121	810	1570	43	182	400	4	4.3
8..	1830	36	178	1610	49	213	274	3	2.2
9..	1540	26	108	1680	48	218	220	3	1.8
10..	1500	49	198	1970	46	245	195	2	1.1
11..	1680	56	254	1840	49	243	185	2	1.0
12..	1420	47	180	1510	30	122	188	2	1.0
13..	1780	74	356	1200	27	87	143	2	.8
14..	1800	42	204	1020	24	66	99	2	.5
15..	1680	38	172	1010	20	55	73	2	.4
16..	1570	28	119	1030	18	50	88	2	.5
17..	2440	221	1460	1130	39	119	86	2	.5
18..	2700	101	736	1360	48	176	68	2	.4
19..	2860	128	988	1220	39	128	59	2	.3
20..	2590	93	650	1050	17	48	54	1	.1
21..	2380	61	392	1020	16	44	59	1	.2
22..	2090	54	305	994	17	46	63	2	.3
23..	2170	88	516	955	14	36	52	3	.4
24..	2170	125	732	465	12	15	47	4	.5
25..	2070	68	380	345	10	9.3	43	3	.3
26..	1960	40	212	282	7	5.3	37	2	.2
27..	1990	52	279	209	5	2.8	33	3	.3
28..	1870	37	187	178	4	1.9	33	2	.2
29..	1780	35	168	195	4	2.1	33	2	.2
30..	1690	30	137	216	2	1.2	33	2	.2
31..	--	--	--	230	2	1.2	--	--	--
Total	62570	--	14152	32619	--	2740.8	5481	--	123.7
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	31	2	0.2	17	2	0.1	3.0	1	
2..	27	3	.2	13	1	T	3.0	1	
3..	24	2	.1	10	5	.1	3.0	1	
4..	24	2	.1	9.3	4	.1	3.0	1	
5..	24	2	.1	8.6	3	.1	3.0	1	
6..	24	2	.1	7.9	6	.1	3.0	1	
7..	24	2	.1	7.2	6	.1	3.0	1	
8..	24	2	.1	7.9	6	.1	3.7	1	
9..	24	1	.1	7.9	6	.1	3.7	1	
10..	24	1	.1	7.9	6	.1	3.0	1	
11..	25	1	.1	7.2	5	.1	3.0	1	
12..	25	2	.1	7.2	5	.1	3.0	1	
13..	24	2	.1	7.2	4	.1	2.8	1	
14..	22	2	.1	7.2	4	.1	3.7	1	
15..	22	2	.1	7.2	5	.1	4.4	1	
16..	22	2	.1	7.2	5	.1	3.7	1	
17..	22	2	.1	7.2	5	.1	4.4	1	
18..	22	2	.1	7.2	5	.1	6.5	1	
19..	20	3	.2	5.8	6	.1	7.2	1	
20..	22	3	.2	5.8	6	.1	7.9	1	
21..	22	3	.2	5.1	6	.1	6.5	1	
22..	22	2	.1	5.1	7	.1	6.5	1	
23..	22	1	.1	5.1	8	.1	6.5	1	
24..	22	1	.1	5.1	8	.1	5.8	1	
25..	22	2	.1	5.8	7	.1	5.8	1	
26..	22	2	.1	6.5	6	.1	6.5	1	
27..	20	1	.1	5.8	7	.1	4.4	1	
28..	20	1	.1	4.4	4	T	3.7	1	
29..	19	2	.1	4.4	2	T	2.8	1	
30..	17	2	.1	4.4	2	T	2.8	1	
31..	15	2	.1	3.7	1	T	--	--	
Total	699	--	3.6	221.3	--	2.7	129.3	--	0.3
Total discharge for year (cfs-days).....							439617.3		
Total load for year (tons).....							1282542.8		

T Less than 0.05 ton.

B Computed from estimated-concentration graph.

EEL RIVER BASIN--Continued

11-4721.5. EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Dec. 3, 1966.....	1645	49		5520	1240		22	31	43	51	60	69	82	91	98	100		VPWC
Jan. 23, 1967.....	1300	--		5290	644			--	--	--		76	84	92	99	100		V
Jan. 29.....	1700	48		21800	2100			--	--	--		59	74	88	98	100		V
Mar. 16.....	0830	48		9750	2740			22		38		64	81	95	100	--		VPWC
Apr. 3.....	1815	48		2220	93			--	--	--		89	93	98	100	--		S

EEL RIVER BASIN--Continued

11-4722. OUTLET CREEK NEAR LONGVALE, CALIF.

LOCATION.--Lat 39°37'05", long 123°21'20", at gaging station 0.2 mile downstream from Bloody Run Creek, 0.9 mile upstream from mouth, and 8.2 miles downstream from Longvale, Mendocino County.

DRAINAGE AREA.--161 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1966.

Sediment records: November 1966 to September 1967.

Suspended sediment, April and May 1967

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	1700	44	200	270	5	3.6			
2..	1440	32	120	243	5	3.3			
3..	1520	23	94	222	4	2.4			
4..	1120	16	48	198	5	2.7			
5..	1070	30	87	179	7	3.4			
6..	2190	66	390	174	8	3.8			
7..	1810	28	137	154	8	3.3			
8..	1110	16	48	137	9	3.3			
9..	759	11	23	129	9	3.1			
10..	780	25	53	222	9	5.4			
11..	1170	48	150	212	8	4.6			
12..	787	16	34	177	6	2.9			
13..	628	7	12	142	7	2.7			
14..	822	19	42	124	8	2.7			
15..	622	8	13	108	9	2.6			
16..	494	3	4.0	99	10	2.7			
17..	1920	51	264	90	11	2.7			
18..	1850	29	140	82	7	1.5			
19..	1280	19	66	74	3	.6			
20..	884	17	41	69	2	.4			
21..	703	14	27	65	2	.4			
22..	722	12	23	60	2	.3			
23..	824	10	22	54	2	.3			
24..	735	9	18	51	3	.4			
25..	555	8	12	48	3	.4			
26..	455	7	8.6	46	2	.2			
27..	500	6	8.1	43	2	.2			
28..	420	5	5.7	41	2	.2			
29..	347	5	4.7	41	2	.2			
30..	304	5	4.1	40	4	.4			
31..	--	--	--	38	6	.6			
Total	29521	--	2099.2	3632	--	61.3			
Total discharge for period Apr. 1 to May 31, 1967 (cfs-days).....									33153
Total load for period Apr. 1 to May 31, 1967 (tons).....									2160.5

EEL RIVER BASIN--Continued

11-4722. OUTLET CREEK NEAR LONGVALE, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Oct. 10, 1966.....	1300	70		1.4	1	T												V
Nov. 1.....	1425	58		1.5	1	T												
Dec. 30.....	1345	40		88	2	0.5												
Jan. 30, 1967.....	1710	50		4150	279	3130					74	83	91	99	100			
Feb. 21.....	1455	45		106	3	.5												
Mar. 2.....	1545	52		69	1	.2												V
Mar. 3.....	1500	50		66	3	.5												
Mar. 6.....	1340	54		54	1	.1												
Mar. 8.....	1030	52		50	2	.3												
Mar. 10.....	1140	50		485	342	448					90	99	100					
Mar. 15.....	1110	46		1280	140	484												
Mar. 17.....	1610	51		2170	57	334												
Mar. 20.....	1625	52		2350	72	457												
Mar. 23.....	1520	51		1220	14	46												
Mar. 24.....	1510	52		766	10	21												
Mar. 27.....	1440	56		395	3	3.2												
Mar. 29.....	1510	53		380	5	5.1												
Mar. 31.....	1540	45		1630	33	145												
June 5.....	1410	61		56	2	.3												
July 10.....	1045	79		5.3	1	T												
Aug. 2.....	1235	84		2.4	6	T												
Sept. 18.....	1300	73		.3	2	T												

T Less than 0.05 ton.

EEL RIVER BASIN--Continued

11-4722. OUTLET CREEK NEAR LONGVALE, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
water year October 1966 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
NOV. 1, 1966.....	1	4			
DEC. 30.....	2	3			
MAR. 3, 1967.....	3	1			
MAR. 6.....	1	1			
MAR. 8.....	2	1			
MAR. 10.....	342	260			
MAR. 13.....	--	70			
MAR. 15.....	--	150			
MAR. 17.....	57	83			
MAR. 20.....	72	80			
MAR. 23.....	14	20			
MAR. 24.....	10	17			
MAR. 27.....	3	8			
MAR. 29.....	5	10			
MAR. 31.....	33	50			
APR. 3.....	21	30			
APR. 5.....	41	52			
APR. 7.....	28	52			
APR. 10.....	29	38			
APR. 12.....	10	19			
APR. 14.....	15	21			
APR. 17.....	47	51			
APR. 19.....	585	65			
APR. 21.....	14	24			
APR. 24.....	8	9			
APR. 26.....	7	10			
APR. 28.....	5	8.3			
MAY 1.....	4	6.7			
MAY 3.....	4	3.3			
MAY 5.....	7	5.7			
MAY 8.....	143	55			
MAY 10.....	9	5.0			
MAY 12.....	6	3.4			
MAY 15.....	9	6.0			
MAY 17.....	11	3.0			
MAY 19.....	2	2.7			
MAY 22.....	2	1.6			
MAY 24.....	3	5.7			
MAY 26.....	2	2.2			
MAY 29.....	2	1.8			
MAY 31.....	6	3.4			
JUNE 5.....	2	5.0			
JULY 10.....	1	1			
AUG. 2.....	6	6			

EEL RIVER BASIN--Continued

11-4725. EEL RIVER ABOVE DOS RIOS, CALIF.

LOCATION.--Lat 39°41'20", long 123°21'30", 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, Mendocino County.

DRAINAGE AREA.--705 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1957 to September 1959, October 1960 to September 1965, May 1966 to September 1967, Sediment records: October 1957 to September 1965.

EXTREMES, 1962-65, May to September 1966.--Water temperatures: Maximum, 84°F June 15, 1966; minimum (1962-65), 38°F Nov. 23, 1964.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	--	--	--	--	--	--	--	--	--	69	62	59	58	58	56	57	57	59	54	56	56	60	62	60	61	59	59	59	60	62	--		
Minimum	--	--	--	--	--	--	--	--	--	50	56	51	49	48	47	47	47	48	49	51	50	48	50	52	52	53	53	51	51	51	52	--	
November																																	
Maximum	62	62	62	62	58	54	55	54	53	53	52	55	56	55	56	56	52	55	56	54	50	49	50	49	48	48	48	52	52	--	53		
Minimum	52	52	54	53	52	51	50	48	46	48	51	51	55	55	54	52	51	51	54	50	47	46	46	44	44	46	45	47	48	50	--	49	
December																																	
Maximum	52	52	50	50	50	49	49	48	48	51	50	52	52	51	50	49	48	48	48	47	46	47	46	45	45	43	40	40	40	42	43	47	
Minimum	51	49	48	49	48	48	48	47	46	48	49	50	50	47	46	46	45	44	45	46	44	43	44	43	42	39	38	37	38	38	39	45	
January																																	
Maximum	43	43	--	--	--	--	--	41	42	42	43	44	46	46	46	45	44	44	44	48	46	46	46	44	44	46	47	49	49	48	48	45	
Minimum	39	38	--	--	--	--	--	38	39	40	40	40	42	42	42	40	40	39	42	44	44	44	44	42	43	44	46	47	48	48	48	42	
February																																	
Maximum	49	49	--	48	49	49	50	49	49	50	50	52	50	48	44	43	44	46	48	50	48	50	48	47	48	49	50	51	--	--	--	48	
Minimum	47	45	--	45	45	46	45	45	46	46	48	48	44	43	42	44	46	45	43	42	43	48	45	45	45	46	46	47	--	--	--	45	
March																																	
Maximum	50	55	52	53	54	55	57	58	55	52	48	46	46	46	47	51	51	51	52	51	53	56	54	53	53	52	55	55	51	49	45	46	51
Minimum	47	50	46	47	48	50	51	53	52	45	45	44	45	46	48	49	50	49	50	51	53	52	48	49	47	49	50	45	45	43	43	48	
April																																	
Maximum	50	52	50	52	50	50	52	56	56	52	52	56	52	51	51	50	47	48	48	49	50	49	48	51	52	49	49	48	49	49	--	50	
Minimum	46	49	48	49	48	49	50	50	51	46	46	49	49	48	47	47	42	42	46	45	47	46	46	46	46	45	44	43	44	43	--	46	
May																																	
Maximum	51	55	56	58	56	58	59	58	49	48	52	56	59	62	63	64	63	63	64	66	66	66	64	65	66	66	64	64	62	60	60	60	
Minimum	43	45	47	48	46	49	50	50	44	44	42	46	48	51	53	54	53	53	54	57	58	56	53	54	56	55	58	56	53	52	53	51	
June																																	
Maximum	54	56	58	61	59	60	63	69	67	69	68	69	71	73	74	76	79	79	78	78	72	71	--	--	--	--	--	--	--	--	--	--	
Minimum	51	48	52	57	53	54	55	59	59	59	59	60	60	62	64	66	68	69	70	69	65	63	--	--	--	--	--	--	--	--	--	--	
July																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
August																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	80	81	80	79	81	78	73	81	78	86	78	78	78	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	62	61	61	62	64	65	67	65	65	64	63	63	63	--	
September																																	
Maximum	76	76	76	76	77	78	76	74	74	74	73	74	75	75	74	73	76	74	72	73	71	71	71	72	72	73	72	72	72	71	68	--	
Minimum	62	62	64	62	62	62	62	62	60	60	61	60	60	60	60	60	61	59	57	56	57	58	58	59	59	58	58	58	59	59	--	59	

-373

LOCATION.--Lat 39°49'45", long 123°04'11", temperature recorder at gaging station on left bank, 1.2 miles upstream from Black Butte River, and 9.8 miles northeast of Covelo, Mendocino County.
DRAINAGE AREA.--204 square miles.
RECORDS AVAILABLE.--Water temperatures: May 1966 to September 1967.
EXTREMES, May to September 1966.--Water temperatures: Maximum, 80°F Aug. 2, 3, 7, 17, 18.
REMARKS.--Record missing because of bulb being buried and broken off.

[illegible]

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.

LOCATION.--Lat 39°49'15", long 123°04'50", at gaging station 10 feet upstream from highway bridge, 0.5 mile upstream from mouth, and 9.5 miles east of Covelo, Mendocino County.

DRAINAGE AREA.--162 square miles.

RECORDS AVAILABLE.--Chemical analyses: November 1964 to September 1966.

Specific conductance: October 1966 to September 1967.

Water temperatures: May 1964 to September 1967.

Sediment records: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 89°F Aug. 2; minimum, 33°F Mar. 10, 11.

Sediment concentrations: Maximum daily, 7,370 ppm Jan. 21; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 141,000 tons Jan. 21; minimum daily, less than 0.05 ton on many days.

EXTREMES, 1964-67.--Water temperatures: Maximum, 89°F Aug. 23, 1964, Aug. 2, 1967; minimum (1965-67), freezing point Dec. 24, 25, 1965, Mar. 3, 4, 1966.

Sediment concentrations (1965-67): Maximum daily, 10,600 ppm Jan. 4, 1966; minimum daily, 1 ppm on many days in 1967.

Sediment loads (1965-67): Maximum daily, 143,000 tons Jan. 4, 1966; minimum daily, less than 0.05 ton on many days in 1967.

REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

Specific conductance (micromhos at 25°C), water year October 1966 to September 1967

Day	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1.....	395	363	365	329	105	85	--	--	--	--	--	--
2.....	392	362	364	327	90	60	--	--	--	--	--	--
3.....	392	359	362	330	--	--	--	--	--	--	--	--
4.....	392	357	353	323	--	--	--	--	--	--	--	--
5.....	390	354	343	320	--	--	--	--	--	--	--	--
6.....	392	358	345	318	--	--	--	--	--	--	--	--
7.....	392	362	345	318	--	--	--	--	--	--	--	--
8.....	394	354	338	314	--	--	--	--	--	--	--	--
9.....	392	356	335	313	--	--	--	--	--	--	--	--
10.....	395	358	337	313	--	--	--	--	--	--	--	--
11.....	385	356	331	322	--	--	--	--	--	--	--	--
12.....	383	347	336	319	--	--	--	--	--	--	--	--
13.....	379	338	334	323	--	--	--	--	--	--	--	--
14.....	373	336	323	282	--	--	--	--	--	--	--	--
15.....	375	335	276	214	--	--	--	--	--	--	--	--
16.....	373	335	219	140	--	--	--	--	--	--	--	--
17.....	372	336	257	220	--	--	--	--	--	--	--	--
18.....	372	330	269	180	--	--	--	--	--	--	--	--
19.....	356	334	255	110	--	--	--	--	--	--	--	--
20.....	363	338	100	93	--	--	--	--	--	--	--	--
21.....	361	332	115	100	--	--	--	--	--	--	--	--
22.....	362	332	140	120	--	--	--	--	--	--	--	--
23.....	373	335	150	130	--	--	--	--	--	--	--	--
24.....	374	336	150	135	--	--	--	--	--	--	--	--
25.....	369	334	160	140	--	--	--	--	--	--	--	--
26.....	367	335	160	150	--	--	--	--	--	--	--	--
27.....	359	330	150	140	--	--	--	--	--	--	--	--
28.....	363	329	150	85	--	--	--	--	--	--	--	--
29.....	367	330	90	85	--	--	--	--	--	--	--	--
30.....	364	329	110	90	--	--	--	--	--	--	--	--
31.....	369	330	--	--	--	--	--	--	--	--	--	--
Average	376	342	252	219	--	--	--	--	--	--	--	--

Day	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1.....	--	--	--	--	--	--	--	--	--	--	469	446
2.....	--	--	--	--	--	--	--	--	--	--	469	446
3.....	--	--	--	--	--	--	--	--	--	--	465	448
4.....	--	--	--	--	--	--	--	--	--	--	467	450
5.....	--	--	--	--	--	--	--	--	--	--	467	448
6.....	--	--	--	--	--	--	--	--	--	--	466	448
7.....	--	--	--	--	--	--	--	--	--	--	466	448
8.....	--	--	--	--	--	--	--	--	--	--	468	449
9.....	--	--	--	--	--	--	--	--	--	--	468	449
10.....	--	--	--	--	--	--	--	--	--	--	472	451
11.....	--	--	--	--	--	--	--	--	--	--	470	448
12.....	--	--	--	--	--	--	--	--	--	--	470	450
13.....	--	--	--	--	--	--	--	--	--	--	470	450
14.....	--	--	--	--	--	--	--	--	--	--	472	450
15.....	--	--	--	--	--	--	--	--	--	--	471	451
16.....	--	--	--	--	--	--	--	--	--	--	473	451
17.....	--	--	--	--	--	--	--	--	--	--	472	457
18.....	--	--	--	--	--	--	--	--	--	--	472	451
19.....	--	--	--	--	--	--	--	--	--	--	475	451
20.....	--	--	--	--	--	--	--	--	--	--	475	450
21.....	--	--	--	--	--	--	--	--	--	--	475	453
22.....	--	--	--	--	--	--	--	--	520	489	475	452
23.....	--	--	--	--	--	--	--	--	513	479	475	452
24.....	--	--	--	--	--	--	--	--	501	474	492	456
25.....	--	--	--	--	--	--	--	--	491	469	486	464
26.....	--	--	--	--	--	--	--	--	488	465	488	466
27.....	--	--	--	--	--	--	--	--	482	453	490	467
28.....	--	--	--	--	--	--	--	--	471	446	492	472
29.....	--	--	--	--	--	--	--	--	469	445	496	478
30.....	--	--	--	--	--	--	--	--	469	445	502	482
31.....	--	--	--	--	--	--	--	--	471	444	--	--
Average	--	--	--	--	--	--	--	--	--	--	475	454

EEL RIVER BASIN--Continued

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	72	71	72	72	71	70	70	70	70	70	68	68	--	70	70	70	69	--	--	--	65	64	67	68	66	66	62	63	64	64	64	68
Minimum	59	58	57	56	56	56	57	56	56	55	55	56	--	57	56	55	55	--	--	--	54	54	54	54	53	53	51	51	51	51	51	54
November																																
Maximum	63	62	62	64	58	58	58	57	56	57	52	55	54	52	52	52	50	54	52	48	44	44	47	47	46	46	45	43	48	46	--	52
Minimum	51	49	50	49	49	50	48	46	46	48	50	51	52	50	48	45	46	47	48	44	39	39	39	38	37	40	39	43	42	41	--	45
December																																
Maximum	48	45	44	46	46	46	46	47	45	47	46	48	47	47	47	47	46	47	48	46	46	45	44	44	42	43	41	40	38	42	42	45
Minimum	44	43	44	44	44	44	44	43	43	43	42	46	45	41	40	41	40	40	40	42	40	38	41	40	40	38	37	37	37	38	38	41
January																																
Maximum	42	42	42	40	42	42	42	41	41	41	41	44	44	44	40	42	44	46	45	45	44	44	42	39	41	39	44	45	46	44	47	42
Minimum	38	38	38	38	39	37	37	36	37	38	40	40	39	39	38	38	37	42	40	39	38	38	38	37	37	41	41	43	42	42	42	38
February																																
Maximum	46	46	48	49	50	50	49	48	49	51	51	52	46	44	44	44	44	43	40	44	44	44	43	42	46	46	44	46	--	--	--	46
Minimum	40	39	40	40	40	40	40	40	40	41	41	44	40	39	39	39	38	37	36	40	40	38	38	40	40	38	41	41	--	--	--	39
March																																
Maximum	46	47	43	45	46	48	49	48	45	44	42	40	41	45	43	42	42	46	44	46	51	48	49	49	45	50	50	43	43	39	41	45
Minimum	41	41	38	38	38	40	41	42	42	33	33	35	35	36	36	38	38	39	38	41	40	42	40	38	39	39	39	39	37	37	37	38
April																																
Maximum	42	47	44	46	44	44	49	54	51	44	50	54	50	48	50	45	42	44	45	46	50	46	46	50	48	46	48	46	47	51	--	47
Minimum	37	37	40	39	41	42	42	43	41	41	39	40	42	41	39	38	38	37	38	38	40	40	41	43	43	41	41	38	40	40	--	40
May																																
Maximum	52	52	54	57	54	58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	41	42	43	43	42	43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June																																
Maximum	--	51	--	--	55	--	66	60	61	60	61	61	62	63	65	66	67	70	71	70	71	70	69	70	72	73	73	74	76	77	78	--
Minimum	--	--	--	--	--	54	47	47	48	48	49	48	48	49	50	52	54	55	58	57	55	55	55	56	58	59	59	60	61	63	--	53
July																																
Maximum	79	79	78	79	77	77	77	77	77	78	80	80	80	79	79	82	81	87	80	80	81	82	82	82	83	83	85	79	87	88	87	80
Minimum	63	63	64	63	63	64	62	62	62	63	64	65	65	64	64	68	67	64	63	64	65	66	66	66	67	67	67	70	70	73	70	65
August																																
Maximum	88	89	88	87	87	86	86	87	86	87	84	86	86	87	87	87	87	86	86	85	86	86	83	82	86	84	83	83	83	83	85	85
Minimum	71	71	71	70	69	68	68	68	68	69	67	66	65	65	65	70	69	71	68	71	71	70	71	72	72	69	69	67	67	67	67	68
September																																

EEL RIVER BASIN--Continued

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

Suspended sediment, December 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..							2600	2210	15500
2..							3550	4450	42700
3..							2400	2850	18500
4..							5600	5700	86200
5..							4700	6480	82200
6..							1440	2880	11200
7..							820	1850	4100
8..							510	1470	2000
9..							705	1090	2070
10..							810	2070	4530
11..							585	870	1400
12..							860	1640	3810
13..							920	2830	7030
14..							1030	1610	4480
15..							690	900	1680
16..							590	730	1160
17..							505	565	770
18..							460	530	658
19..							410	497	550
20..							355	410	390
21..							330	320	290
22..							290	242	189
23..							263	210	150
24..							240	190	123
25..							212	170	97
26..							198	150	80
27..							180	130	63
28..							161	115	50
29..							148	110	44
30..							133	98	35
31..							122	87	29
Total							31817	--	292078
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	112	77	23	1770	2160	10300	145	17	6.7
2..	103	60	17	1450	1720	6730	140	17	6.4
3..	96	36	9.3	1190	1290	4140	133	18	6.5
4..	89	27	6.5	1010	950	2590	128	17	5.9
5..	83	24	5.4	910	902	2220	123	15	5.0
6..	79	24	5.1	795	820	1800	118	12	3.8
7..	76	23	4.7	695	670	1300	113	10	3.1
8..	74	21	4.2	610	530	873	110	9	2.7
9..	73	20	3.9	540	450	660	104	7	2.0
10..	72	23	4.5	502	415	562	225	150	91
11..	72	24	4.7	455	380	470	198	210	110
12..	72	27	5.2	430	352	409	170	180	83
13..	74	27	5.4	375	320	320	142	170	65
14..	77	25	5.2	345	280	260	164	130	58
15..	81	21	4.6	320	239	206	390	85	90
16..	85	15	3.4	301	210	170	3750	3300	33000
17..	85	9	2.1	279	191	144	810	1600	3500
18..	83	7	1.6	258	160	110	620	700	1200
19..	82	7	1.5	242	130	85	505	340	460
20..	1600	5200	22500	225	98	60	795	730	1570
21..	7100	7370	141000	213	71	41	640	250	430
22..	3040	2930	24000	202	51	28	500	200	270
23..	1100	1950	5790	191	46	24	802	660	1400
24..	580	2240	3510	180	43	21	580	1050	1640
25..	288	1590	1240	172	36	17	445	560	670
26..	2400	4120	26700	165	29	13	430	460	530
27..	3950	3930	41900	158	22	9.4	408	377	415
28..	6600	4500	80200	151	17	6.9	390	310	330
29..	4500	6950	84400	--	--	--	370	295	295
30..	3200	4280	37000	--	--	--	355	31	299
31..	3450	2980	27800	--	--	--	595	340	550
Total	39376	--	496157.3	14134	--	33569.3	14398	--	47098.1

EEL RIVER BASIN--Continued

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

Suspended sediment, December 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	510	350	480	260	50	35	302	30	24
2..	460	340	420	350	62	59	289	35	27
3..	530	310	444	440	120	140	301	40	33
4..	465	246	309	505	240	330	249	40	27
5..	380	187	192	690	580	1080	290	420	329
6..	701	180	340	770	900	1900	350	360	340
7..	610	376	619	920	1300	3200	328	36	32
8..	522	310	440	1410	1600	6100	304	31	25
9..	450	310	380	1180	1800	5700	287	27	21
10..	390	301	317	1010	1390	3790	265	24	17
11..	450	220	270	775	870	1800	250	21	14
12..	375	115	116	590	560	892	232	18	11
13..	333	100	90	504	300	410	215	16	9.3
14..	363	102	100	540	390	570	202	14	7.6
15..	324	100	87	750	1170	2370	190	12	6.2
16..	295	100	80	1390	1800	6800	190	11	5.6
17..	350	271	256	1250	1810	6110	190	10	5.1
18..	610	420	690	1060	1200	3400	190	9	4.6
19..	515	270	375	990	970	2490	190	8	4.1
20..	483	210	270	850	820	1900	175	7	3.3
21..	447	170	210	795	690	1500	163	6	2.6
22..	406	140	150	730	556	1100	152	5	2.1
23..	372	120	120	660	420	750	143	5	1.9
24..	340	105	96	585	276	436	134	4	1.4
25..	312	93	78	520	180	250	124	4	1.3
26..	287	86	67	475	142	182	116	4	1.3
27..	273	80	59	436	120	140	108	3	.9
28..	261	78	55	401	100	110	101	3	.8
29..	250	73	49	371	82	82	95	3	.8
30..	239	62	40	346	60	56	89	2	.5
31..	--	--	--	320	40	35	--	--	--
Total	12303	--	7199	21833	--	53717	6214	--	959.4
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	84	2	0.5	14	1	T	5.0	1	T
2..	79	2	.4	13	1	T	5.0	1	T
3..	72	2	.4	13	1	T	5.2	2	T
4..	68	2	.4	12	1	T	5.2	2	T
5..	64	2	.3	11	1	T	5.2	2	T
6..	59	2	.3	10	1	T	5.2	2	T
7..	56	2	.3	9.6	1	T	5.2	2	T
8..	52	2	.3	9.6	1	T	5.2	2	T
9..	49	2	.3	9.6	1	T	5.2	2	T
10..	45	2	.2	9.6	1	T	4.8	2	T
11..	42	2	.2	10	1	T	4.8	2	T
12..	39	1	.1	9.0	1	T	5.0	2	T
13..	37	1	.1	8.0	1	T	5.0	2	T
14..	34	1	.1	7.6	1	T	5.0	2	T
15..	31	1	.1	6.8	1	T	4.8	2	T
16..	29	1	.1	6.5	1	T	4.6	2	T
17..	27	1	.1	5.9	1	T	4.6	2	T
18..	25	1	.1	5.6	1	T	5.6	3	T
19..	24	1	.1	5.1	1	T	6.2	4	0.1
20..	23	1	.1	5.0	1	T	5.9	4	.1
21..	22	1	.1	5.0	1	T	5.4	4	.1
22..	22	1	.1	5.0	1	T	5.0	4	.1
23..	21	1	.1	4.8	1	T	4.8	4	.1
24..	20	1	.1	4.8	1	T	4.8	4	.1
25..	19	1	.1	4.8	1	T	4.8	4	.1
26..	17	1	T	4.8	1	T	4.6	4	T
27..	16	1	T	4.8	1	T	4.4	4	T
28..	16	1	T	4.8	1	T	4.2	4	T
29..	15	1	T	4.8	1	T	4.0	4	T
30..	15	1	T	5.0	1	T	4.0	4	T
31..	15	1	T	5.0	1	T	--	--	--
Total	1137	--	5.2	234.5	--	0.6	148.7	--	1.4

Total discharge for period Dec. 1, 1966 to Sept. 30, 1967 (cfs-days)..... 141595.2

Total load for period Dec. 1, 1966 to Sept. 30, 1967 (tons)..... 930785.3

T Less than 0.05 ton.

EEL RIVER BASIN--Continued

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Nov. 4, 1966.....	1055	59		D 3.8	2	0.2	--	--	--	--	--	--	--	--	--	--	--	
Dec. 6.....	1225	46		1430	2630		25	31	48	61	72	80	89	95	100	--	--	VPWC
Jan. 20, 1967.....	0825	41		D 1600	5220		--	22	--	41	--	60	74	86	91	98	100	VPWC
Jan. 21.....	0920	44		D 7100	7750		22	25	36	47	58	66	83	93	98	99	100	VPWC
Jan. 23.....	1130	39		1000	1660		27	34	43	56	68	75	84	92	99	100	--	VPWC
Jan. 23.....	1720	40		1200	1830		--	--	--	--	--	66	70	79	85	94	100	V
Jan. 26.....	0900	40		D 2400	7610		20	24	33	43	55	63	80	93	98	100	--	VPWC
Jan. 27.....	0835	42		D 3950	2850		--	25	--	48	--	67	79	89	96	98	100	VPWC
Jan. 28.....	0910	44		D 6600	8170		20	28	39	50	63	71	87	96	100	--	--	VPWC
Apr. 14.....	1510	48		456	292		--	--	--	--	--	62	55	66	91	100	--	V

D Daily mean discharge.

EEL RIVER BASIN--Continued

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, October 1965 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 4, 1965.....	2	1	FEB. 9, 1966.....	460	174
NOV. 16.....	105	72	FEB. 11.....	322	159
NOV. 17.....	1860	600	FEB. 16.....	147	63
NOV. 18.....	2900	600	FEB. 19.....	282	150
NOV. 19.....	295	220	FEB. 21.....	190	86
NOV. 20.....	234	120	FEB. 22.....	398	126
NOV. 21.....	126	50	FEB. 23.....	264	104
NOV. 22.....	50	40	FEB. 25.....	597	300
NOV. 23.....	37	35	FEB. 26.....	274	116
NOV. 24.....	681	350	MAR. 3.....	91	37
NOV. 25.....	298	240	MAR. 5.....	103	50
NOV. 26.....	134	55	MAR. 6.....	319	90
NOV. 27.....	223	70	MAR. 7.....	485	75
NOV. 28.....	189	50	MAR. 8.....	602	140
NOV. 29.....	142	50	MAR. 9.....	2680	750
NOV. 30.....	100	40	MAR. 10.....	2040	550
DEC. 1.....	95	35	MAR. 12.....	1100	350
DEC. 2.....	76	35	MAR. 14.....	1320	400
DEC. 3.....	112	45	MAR. 15.....	919	275
DEC. 4.....	177	50	MAR. 16.....	1080	375
DEC. 5.....	194	60	MAR. 17.....	739	170
DEC. 6.....	372	110	MAR. 18.....	556	200
DEC. 7.....	418	57	MAR. 22.....	485	120
DEC. 9.....	84	33	MAR. 23.....	400	130
DEC. 10.....	56	14	MAR. 29.....	1560	350
DEC. 11.....	27	21	APR. 7.....	1090	275
DEC. 12.....	28	22	APR. 8.....	808	360
DEC. 13.....	13	14	APR. 10.....	1080	470
DEC. 15.....	6	10	APR. 11.....	1000	430
DEC. 16.....	5	10	APR. 12.....	924	430
DEC. 18.....	3	2	APR. 17.....	528	290
DEC. 19.....	2	4	APR. 19.....	349	164
DEC. 20.....	2	2	APR. 21.....	156	87
DEC. 21.....	2	1	MAY 4.....	72	34
DEC. 22.....	3	2	JULY 20.....	1	0
DEC. 23.....	2	1	AUG. 31.....	1	1
DEC. 24.....	1640	500	NOV. 4.....	2	2
DEC. 25.....	228	100	DEC. 1.....	1840	1225
DEC. 26.....	56	40	DEC. 2.....	7900	980
DEC. 27.....	57	40	DEC. 3.....	2720	760
DEC. 28.....	3580	2000	DEC. 4.....	6450	510
DEC. 29.....	1380	300	DEC. 5.....	4910	2620
DEC. 30.....	848	320	DEC. 6.....	2480	1645
DEC. 31.....	759	270	DEC. 7.....	1840	500
JAN. 1, 1966.....	195	147	DEC. 9.....	961	336
JAN. 2.....	230	174	DEC. 10.....	1680	580
JAN. 3.....	2830	1060	DEC. 12.....	1540	370
JAN. 4.....	8910	4020	DEC. 13.....	3550	820
JAN. 5.....	7730	2850	DEC. 14.....	1280	300
JAN. 6.....	4900	2000	DEC. 15.....	910	210
JAN. 7.....	3470	400	DEC. 16.....	702	190
JAN. 8.....	2670	600	DEC. 17.....	529	160
JAN. 9.....	1560	500	DEC. 18.....	542	240
JAN. 10.....	971	320	DEC. 22.....	239	162
JAN. 12.....	900	375	DEC. 24.....	192	132
JAN. 14.....	750	250	DEC. 26.....	146	58
JAN. 15.....	746	200	DEC. 28.....	112	68
JAN. 17.....	656	225	DEC. 30.....	96	58
JAN. 18.....	598	370	JAN. 2, 1967.....	60	28
JAN. 20.....	478	195	JAN. 3.....	35	21
JAN. 21.....	392	279	JAN. 6.....	24	10
JAN. 25.....	280	150	JAN. 8.....	21	10
JAN. 28.....	181	92	JAN. 12.....	28	9
JAN. 29.....	1860	580	JAN. 17.....	8	5
JAN. 30.....	523	370	JAN. 20.....	6690	1700
JAN. 31.....	378	174	JAN. 21.....	5180	3000
FEB. 1.....	369	200	JAN. 22.....	2920	1100
FEB. 2.....	352	140	JAN. 23.....	1590	520
FEB. 3.....	549	212	JAN. 24.....	1980	950
FEB. 4.....	2920	670	JAN. 25.....	1290	450

EEL RIVER BASIN--Continued

11-4729. BLACK BUTTE RIVER NEAR COVELO, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1965 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
JAN. 26, 1967.....	4900	2000			
JAN. 27.....	2920	1550			
JAN. 28.....	3440	3100			
JAN. 29.....	6060	2800			
JAN. 30.....	4860	1500			
JAN. 31.....	2740	1150			
FEB. 1.....	2080	775			
FEB. 2.....	1570	600			
FEB. 3.....	1330	500			
FEB. 4.....	986	450			
FEB. 5.....	908	390			
FEB. 8.....	507	240			
FEB. 10.....	422	225			
FEB. 15.....	231	210			
FEB. 17.....	194	52			
FEB. 20.....	101	29			
FEB. 22.....	52	38			
FEB. 24.....	44	30			
FEB. 27.....	20	20			
MAR. 1.....	32	12			
MAR. 3.....	18	17			
MAR. 6.....	12	12			
MAR. 8.....	8	7			
MAR. 10.....	384	300			
MAR. 13.....	170	150			
MAR. 15.....	82	65			
MAR. 17.....	1720	780			
MAR. 20.....	1380	520			
MAR. 24.....	669	315			
MAR. 27.....	356	175			
MAR. 29.....	295	130			
MAR. 31.....	352	215			
APR. 3.....	308	175			
APR. 4.....	181	105			
APR. 5.....	176	138			
APR. 7.....	352	118			
APR. 10.....	304	125			
APR. 12.....	92	60			
APR. 14.....	104	210			
APR. 17.....	385	46			
APR. 19.....	252	265			
APR. 24.....	103	76			
APR. 26.....	82	54			
APR. 28.....	78	55			
MAY 1.....	44	34			
MAY 2.....	58	42			
MAY 5.....	598	200			
MAY 10.....	1200	348			
MAY 12.....	510	275			
MAY 15.....	1420	344			
MAY 19.....	947	348			
MAY 22.....	526	325			
MAY 24.....	246	224			
MAY 26.....	143	125			
MAY 29.....	76	66			
MAY 31.....	35	40			
JUNE 2.....	42	24			
JUNE 5.....	1560	1300			
JUNE 7.....	62	67			
JUNE 14.....	13	5			
JUNE 17.....	5	3			
JULY 1.....	2	3			

EEL RIVER BASIN--Continued

11-4730. MIDDLE FORK EEL RIVER BELOW BLACK BUTTE RIVER, NEAR COVELO, CALIF.

LOCATION.--Lat 39°49'35", long 123°05'30", at gaging station 0.2 mile downstream from Black Butte River, and 8.6 miles east of Covelo, Mendocino County.

DRAINAGE AREA.--367 square miles.

RECORDS AVAILABLE.--Chemical analyses: November 1964 to September 1966.

Water temperatures: July to November 1961, October 1962 to September 1967.

Sediment records: October 1962 to September 1967 (discontinued).

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 6,500 ppm Jan. 29; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 246,000 tons Jan. 29; minimum daily, less than 0.05 ton on several days in September.

EXTREMES, 1962-67.--Water temperatures (1962-63, 1965-66): Maximum, 80°F Sept. 4, 1963, Aug. 2, 3, 7, 17, 18, 1966.

Sediment concentrations: Maximum daily, (estimated) 9,000 ppm Dec. 22, 1964; minimum daily, 1 ppm on many days during 1962-67.

Sediment loads: Maximum daily, (estimated) 2,500,000 tons Dec. 22, 1964; minimum daily, less than 0.05 ton on many days during 1962-67.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Aver- age
	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		
October	--	--	--	--	--	--	--	--	68	--	--	67	--	--	--	62	--	--	--	--	--	--	62	--	--	--	--	--	--	--	--	--	--
November	--	--	--	58	--	56	--	54	--	--	55	53	53	51	50	47	47	48	50	48	43	41	42	42	--	43	42	43	45	--	--	--	
December	45	45	44	44	43	45	43	--	44	43	--	44	45	44	44	44	43	44	--	--	42	41	--	--	--	39	--	37	--	39	--	--	
January	--	40	40	--	--	39	--	40	--	--	--	42	--	--	--	--	41	--	--	40	42	39	42	38	33	40	42	43	43	--	--	--	
February	48	44	43	42	45	--	--	45	--	--	42	45	45	--	42	--	41	--	--	43	--	49	--	43	--	--	41	--	--	--	--	--	
March	45	--	43	--	--	47	--	48	--	39	--	--	42	--	41	--	43	--	--	45	--	--	--	--	45	--	46	--	43	--	44	--	
April	--	--	44	48	44	--	46	--	--	43	--	48	--	44	--	--	40	--	42	--	--	--	--	47	--	46	--	43	--	--	--	--	
May	50	55	--	--	51	--	--	--	--	45	--	--	--	45	53	--	58	--	54	--	--	--	56	--	55	--	56	--	--	56	--	52	--
June	--	50	--	--	54	60	57	--	--	--	--	--	--	60	--	--	--	--	--	--	--	66	--	--	--	--	--	--	--	--	--	--	--
July	77	--	--	--	--	--	--	--	--	--	74	72	--	--	--	--	--	--	--	--	--	--	--	--	74	--	--	--	79	--	--	--	
August	--	--	79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	77	--	--	--	
September	--	--	--	--	--	--	--	74	--	--	--	--	--	--	--	71	--	--	71	--	--	--	--	--	--	--	--	--	67	--	--	--	--

EEL RIVER BASIN--Continued

11-4730. MIDDLE FORK EEL RIVER BELOW BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	13	2	0.1	10	2	0.1	3500	2250	21300
2..	13	2	.1	10	2	.1	8500	3900	89500
3..	12	2	.1	10	2	.1	5500	2300	34200
4..	12	2	.1	10	2	.1	7400	5100	102000
5..	12	2	.1	15	2	.1	11200	5700	172000
6..	11	2	.1	18	5	.2	3300	2550	22700
7..	9.7	2	.1	25	3	.2	1900	1500	7700
8..	9.7	2	.1	20	3	.2	1400	1000	3800
9..	9.7	2	.1	18	3	.1	1000	1000	2700
10..	9.7	2	.1	16	2	.1	1900	2400	12300
11..	9.7	2	.1	30	2	.2	1300	1400	4900
12..	9.7	2	.1	70	405	77	2300	1900	11800
13..	9.7	2	.1	150	265	107	2500	2300	15500
14..	9.7	2	.1	700	1400	2650	2600	1600	11200
15..	9.7	3	.1	1700	280	1290	1400	1100	4160
16..	9.0	4	.1	2500	1600	10800	1200	990	3210
17..	9.0	4	.1	1000	240	648	1000	790	2130
18..	9.0	3	.1	600	58	94	900	600	1460
19..	9.0	4	.1	1600	1500	6480	800	520	1100
20..	9.0	4	.1	5500	4400	65300	720	410	800
21..	9.0	5	.1	3500	1700	16100	670	330	597
22..	9.0	6	.1	2100	750	4250	630	260	442
23..	9.0	6	.1	1200	280	907	600	210	340
24..	9.0	6	.1	800	170	367	560	170	260
25..	9.0	5	.1	650	160	280	530	130	190
26..	9.0	4	.1	550	150	223	490	100	132
27..	10	6	.2	540	91	133	460	70	87
28..	10	5	.1	1200	1200	3890	440	43	51
29..	10	4	.1	2500	2300	15500	410	35	39
30..	10	3	.1	2300	500	3110	390	38	40
31..	10	2	.1	--	--	--	370	34	34
Total	309.3	--	3.2	29342	--	132207.5	65870	--	526672
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	350	26	25	4680	1800	22700	420	42	48
2..	330	20	18	3000	1300	10500	400	39	42
3..	310	18	15	2600	990	6950	390	38	40
4..	295	20	16	2100	700	3970	380	36	37
5..	280	22	17	1900	550	2620	365	34	34
6..	270	23	17	1700	470	2200	355	33	32
7..	260	17	12	1600	430	1900	350	30	28
8..	260	8	5.6	1500	430	1740	345	27	25
9..	250	5	3.4	1400	430	1600	340	25	23
10..	245	7	4.6	1350	380	1390	600	140	227
11..	240	8	5.2	1320	320	1140	480	180	230
12..	240	8	5.2	1250	230	776	390	120	130
13..	245	8	5.3	1200	180	583	430	97	110
14..	250	8	5.4	1160	140	440	470	85	110
15..	260	7	4.9	1060	130	372	2200	87	517
16..	265	7	5.0	1000	130	350	7000	2900	55000
17..	260	6	4.2	850	130	298	3500	1600	15100
18..	255	6	4.1	760	110	246	2500	750	5100
19..	250	6	4.1	680	90	184	2200	520	3100
20..	3400	3400	31200	640	65	112	2700	1200	8750
21..	14300	6200	239000	600	60	97	2300	880	5500
22..	7000	2900	54800	560	60	91	2000	780	4200
23..	2950	1400	11200	530	60	86	2500	690	4700
24..	2500	1200	8100	500	57	77	2100	600	3400
25..	2100	700	3970	470	54	79	1700	520	2400
26..	6700	3900	70600	450	52	63	1500	440	1800
27..	8000	2600	56200	440	51	61	1300	360	1260
28..	10000	3100	83700	430	47	55	1200	310	1000
29..	14000	6500	246000	--	--	--	1200	290	940
30..	8000	4500	97000	--	--	--	1400	310	1200
31..	8200	3400	75000	--	--	--	1900	360	1850
Total	92265	--	976947.0	35730	--	60880	44915	--	116933

EEL RIVER BASIN--Continued

11-4730. MIDDLE FORK EEL RIVER BELOW BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	1800	330	1600	960	30	78	880	70	170
2..	1400	280	1100	1040	25	70	850	100	230
3..	1100	230	680	1200	42	136	830	110	250
4..	1160	185	579	1400	220	830	920	140	350
5..	1020	170	468	1800	450	2190	1050	410	1200
6..	2000	240	1300	2150	560	3300	1120	110	333
7..	1800	240	1200	2800	650	4900	1080	55	160
8..	1700	140	640	3500	720	6800	920	50	120
9..	1680	110	500	4100	780	8600	830	41	92
10..	1660	102	457	3200	830	7170	730	34	67
11..	1720	92	430	2300	780	4800	670	27	49
12..	1500	85	344	1850	620	3100	610	21	35
13..	1400	80	300	1450	580	2600	580	17	27
14..	1550	78	326	1850	600	3000	540	14	20
15..	1400	75	280	2500	1100	7430	520	13	18
16..	1100	72	210	3500	2200	21000	510	13	18
17..	1600	390	1680	4000	1850	20000	500	13	18
18..	1800	440	2100	3600	1100	10700	490	13	17
19..	2100	210	1190	3300	895	7970	470	13	16
20..	1750	130	610	3100	775	6500	460	13	16
21..	1650	100	450	3000	660	5300	430	13	15
22..	1500	92	370	2800	540	4100	410	13	14
23..	1450	80	310	2300	440	2700	380	13	13
24..	1500	58	235	1800	310	1510	340	12	11
25..	1420	50	190	1500	250	1000	320	11	9.5
26..	1150	50	155	1350	215	784	280	10	7.6
27..	1200	55	180	1200	190	620	260	9	6.3
28..	1160	60	190	1100	150	450	240	8	5.2
29..	1100	55	160	1050	120	340	220	6	3.6
30..	1050	42	120	1020	95	260	205	5	2.8
31..	--	--	--	950	70	180	--	--	--
Total	44420	--	18354	67870	--	138418	17645	--	3294.0
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	195	4	2.1	45	2	0.2	16	2	0.1
2..	180	4	1.9	43	2	.2	15	1	T
3..	170	4	1.8	41	2	.2	15	1	T
4..	160	4	1.7	40	2	.2	15	1	T
5..	152	4	1.6	39	2	.2	14	1	T
6..	145	4	1.6	38	2	.2	14	1	T
7..	138	4	1.5	36	2	.2	14	1	T
8..	130	4	1.4	35	2	.2	14	1	T
9..	118	4	1.3	34	2	.2	13	1	T
10..	112	4	1.2	32	2	.2	13	1	T
11..	108	4	1.2	31	2	.2	13	1	T
12..	103	4	1.1	30	2	.2	13	1	T
13..	97	4	1.0	29	2	.2	13	2	.1
14..	92	3	.7	28	2	.2	13	2	.1
15..	90	3	.7	27	2	.1	13	2	.1
16..	86	3	.7	26	2	.1	14	2	.1
17..	84	2	.5	25	2	.1	16	2	.1
18..	81	2	.4	24	2	.1	18	2	.1
19..	78	1	.2	24	2	.1	17	2	.1
20..	74	1	.2	23	2	.1	16	2	.1
21..	71	1	.2	22	2	.1	15	2	.1
22..	67	1	.2	21	2	.1	14	2	.1
23..	64	1	.2	21	2	.1	15	2	.1
24..	62	1	.2	20	2	.1	14	1	T
25..	59	1	.2	20	2	.1	14	1	T
26..	57	1	.2	19	2	.1	14	1	T
27..	55	1	.1	18	2	.1	14	1	T
28..	53	2	.3	18	2	.1	14	1	T
29..	51	2	.3	17	2	.1	14	1	T
30..	49	2	.3	17	2	.1	14	1	T
31..	47	2	.3	16	2	.1	--	--	--
Total	3028	--	25.3	859	--	4.5	431	--	1.8
Total discharge for year (cfs-days).....								402684.3	
Total load for year (tons).....								1973740.3	

T Less than 0.05 ton.

EEL RIVER BASIN--Continued

11-4730. MIDDLE FORK EEL RIVER BELOW BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 6, 1966.....	1730	45		5230	2140		23	30	45	56	67	74	84	92	96	100	---	VPWC
Jan. 20, 1967.....	0800	40		D 3400	4050		20	21	31	41	52	60	74	88	97	100	---	VPWC
Jan. 20.....	1645	41		D 3400	4270		---	23	---	44	---	64	81	94	99	100	---	VPWC
Jan. 21.....	1025	42		D 14300	6770		24	26	30	42	54	63	80	92	99	99	100	VPWC
Jan. 21.....	1640	42		D 14300	4810		23	26	30	43	55	63	77	90	96	100	---	VPWC
Jan. 22.....	1100	39		D 7000	2920		---	23	---	39	---	51	64	75	87	98	100	VPWC
Jan. 23.....	1530	42		2950	1130		22	32	44	56	66	75	82	90	98	100	---	VPWC
Jan. 26.....	0820	40		D 6700	6850		---	23	---	36	---	53	68	81	91	97	100	VPWC
Jan. 27.....	0810	42		D 8000	2780		16	23	32	41	50	59	70	82	93	100	---	VPWC
Jan. 29.....	0810	43		D 14000	8320		18	28	39	50	61	70	87	96	100	---	---	VPWC
Jan. 29.....	1120	43		D 14000	6900		24	30	36	46	58	65	81	94	99	100	---	VPWC
Feb. 8.....	1720	45		D 1500	443		---	---	---	---	---	59	64	71	84	96	100	S
Apr. 4.....	1820	48		1160	179		---	---	---	---	---	54	61	69	82	99	100	S

D Daily mean discharge.

EEL RIVER BASIN--Continued

11-4730. MIDDLE FORK EEL RIVER BELOW BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, October 1964 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 4, 1964.....	2	1	FEB. 18, 1965.....	890	160
OCT. 12.....	1	1	FEB. 21.....	853	150
OCT. 18.....	1	1	FEB. 22.....	1020	170
OCT. 26.....	1	2	FEB. 23.....	848	120
OCT. 27.....	1	2	FEB. 24.....	811	140
OCT. 28.....	1	1	FEB. 25.....	606	150
OCT. 29.....	14	6	MAR. 1.....	1280	210
OCT. 30.....	2	2	MAR. 2.....	1040	240
OCT. 31.....	1	1	MAR. 4.....	757	180
NOV. 1.....	13	15	MAR. 6.....	815	140
NOV. 2.....	54	32	MAR. 7.....	451	130
NOV. 8.....	16	16	MAR. 9.....	472	120
NOV. 9.....	252	112	MAR. 12.....	448	100
NOV. 10.....	89	79	MAR. 13.....	386	90
NOV. 12.....	208	140	MAR. 14.....	402	80
NOV. 13.....	31	17	MAR. 15.....	420	76
NOV. 17.....	6	6	MAR. 16.....	322	84
NOV. 25.....	165	97	MAR. 17.....	297	84
NOV. 26.....	38	23	MAR. 18.....	258	62
NOV. 27.....	31	36	MAR. 21.....	280	130
NOV. 28.....	1280	293	MAR. 23.....	319	125
NOV. 29.....	346	60	MAR. 25.....	365	114
NOV. 30.....	104	19	MAR. 26.....	295	80
DEC. 1.....	864	140	MAR. 27.....	550	228
DEC. 2.....	505	80	MAR. 28.....	471	96
DEC. 3.....	164	70	MAR. 29.....	383	108
DEC. 5.....	33	6	MAR. 30.....	525	162
DEC. 6.....	32	9	MAR. 31.....	383	126
DEC. 8.....	10	3	APR. 1.....	371	138
DEC. 9.....	75	17	APR. 2.....	397	138
DEC. 10.....	499	72	APR. 3.....	366	102
DEC. 11.....	547	110	APR. 4.....	307	96
DEC. 12.....	116	30	APR. 5.....	272	96
DEC. 13.....	105	18	APR. 8.....	266	96
DEC. 17.....	12	3	APR. 9.....	303	138
JAN. 7, 1965.....	1740	416	APR. 10.....	264	108
JAN. 8.....	1130	260	APR. 11.....	291	108
JAN. 9.....	1830	397	APR. 12.....	445	108
JAN. 10.....	2740	560	APR. 13.....	371	112
JAN. 11.....	2920	600	APR. 15.....	5570	2000
JAN. 12.....	2360	420	APR. 16.....	4220	1600
JAN. 13.....	1940	380	APR. 17.....	1920	1140
JAN. 14.....	3270	500	APR. 18.....	7300	2160
JAN. 15.....	3580	520	APR. 19.....	6130	3280
JAN. 16.....	3370	420	APR. 20.....	4090	1440
JAN. 17.....	3090	480	APR. 21.....	3800	1920
JAN. 18.....	3350	340	APR. 22.....	2890	1020
JAN. 19.....	3770	420	APR. 23.....	2340	780
JAN. 20.....	3240	500	APR. 24.....	2080	900
JAN. 21.....	2610	480	APR. 25.....	1980	600
JAN. 22.....	2460	540	APR. 26.....	2240	595
JAN. 23.....	14600	1320	APR. 27.....	1760	840
JAN. 24.....	6190	1020	APR. 28.....	1940	440
JAN. 25.....	4340	1020	MAY 6.....	614	300
JAN. 27.....	4160	780	MAY 9.....	390	168
JAN. 28.....	2680	700	MAY 12.....	429	130
JAN. 31.....	3770	440	MAY 19.....	184	56
FEB. 1.....	2690	380	MAY 24.....	87	22
FEB. 2.....	2510	440	JUNE 7.....	12	2
FEB. 4.....	1790	380	JUNE 20.....	6	3
FEB. 5.....	4390	600	JUNE 27.....	3	2
FEB. 6.....	2860	560	JULY 11.....	1	1
FEB. 7.....	2490	350	JULY 12.....	1	2
FEB. 9.....	1820	320	JULY 18.....	1	1
FEB. 11.....	1440	360	AUG. 2.....	2	1
FEB. 12.....	1240	270	AUG. 21.....	3	1
FEB. 13.....	1220	250	AUG. 24.....	3	1
FEB. 14.....	1070	180	SEPT. 5.....	3	1
FEB. 15.....	1080	190	SEPT. 19.....	1	1
FEB. 17.....	931	170	SEPT. 26.....	2	1
			OCT. 4.....	1	0

EEL RIVER BASIN--Continued

11-4730. MIDDLE FORK EEL RIVER BELOW BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 10, 1965.....	3	1	JAN. 21, 1966.....	234	120
OCT. 14.....	3	1	JAN. 23.....	178	84
NOV. 4.....	1	2	JAN. 25.....	133	98
NOV. 7.....	9	1	JAN. 29.....	676	201
NOV. 8.....	336	126	JAN. 30.....	255	174
NOV. 9.....	13	3	FEB. 1.....	225	126
NOV. 10.....	2	1	FEB. 2.....	205	40
NOV. 11.....	2	1	FEB. 3.....	175	94
NOV. 12.....	207	165	FEB. 4.....	1340	400
NOV. 13.....	1820	580	FEB. 5.....	1210	420
NOV. 14.....	1990	600	FEB. 6.....	594	390
NOV. 15.....	876	450	FEB. 10.....	179	99
NOV. 16.....	280	156	FEB. 17.....	77	33
NOV. 17.....	193	340	FEB. 19.....	163	100
NOV. 18.....	2760	700	FEB. 22.....	149	76
NOV. 20.....	604	240	FEB. 25.....	271	116
NOV. 21.....	373	120	MAR. 3.....	104	33
NOV. 22.....	237	100	MAR. 4.....	41	30
NOV. 23.....	209	65	MAR. 5.....	117	45
NOV. 24.....	729	180	MAR. 6.....	453	120
NOV. 25.....	359	120	MAR. 7.....	373	130
NOV. 26.....	305	50	MAR. 8.....	986	240
NOV. 27.....	374	70	MAR. 9.....	1840	550
NOV. 28.....	168	50	MAR. 10.....	3110	550
NOV. 29.....	147	55	MAR. 11.....	1760	380
NOV. 30.....	250	35	MAR. 12.....	1130	275
DEC. 1.....	90	40	MAR. 13.....	1970	325
DEC. 2.....	780	25	MAR. 14.....	1810	275
DEC. 3.....	169	50	MAR. 15.....	1430	550
DEC. 4.....	271	90	MAR. 16.....	1170	275
DEC. 5.....	511	120	MAR. 17.....	824	150
DEC. 6.....	843	140	MAR. 19.....	638	110
DEC. 7.....	536	120	MAR. 21.....	433	80
DEC. 9.....	322	63	MAR. 23.....	335	55
DEC. 11.....	106	37	MAR. 29.....	1270	240
DEC. 12.....	52	28	APR. 1.....	1670	450
DEC. 13.....	43	26	APR. 3.....	1500	400
DEC. 15.....	21	14	APR. 8.....	966	200
DEC. 16.....	13	10	APR. 9.....	864	232
DEC. 18.....	23	11	APR. 10.....	922	410
DEC. 19.....	13	5	APR. 11.....	981	380
DEC. 20.....	4	2	APR. 12.....	828	280
DEC. 21.....	2	2	APR. 17.....	526	260
DEC. 22.....	4	4	APR. 19.....	390	125
DEC. 23.....	7	2	APR. 21.....	166	81
DEC. 24.....	1230	300	MAY 4.....	142	41
DEC. 25.....	194	60	MAY 20.....	19	18
DEC. 26.....	56	20	JUNE 29.....	2	2
DEC. 27.....	138	40	JULY 6.....	1	1
DEC. 28.....	9760	1800	JULY 20.....	1	1
DEC. 29.....	2430	350	JULY 23.....	1	1
DEC. 30.....	569	165	AUG. 13.....	1	1
DEC. 31.....	468	109	AUG. 31.....	1	1
JAN. 1, 1966.....	167	126	OCT. 9.....	2	1
JAN. 2.....	164	114	OCT. 12.....	2	2
JAN. 3.....	686	234	OCT. 16.....	4	1
JAN. 4.....	6240	1650	OCT. 23.....	6	1
JAN. 5.....	6040	900	NOV. 4.....	2	300
JAN. 6.....	5260	1890	NOV. 6.....	7	9
JAN. 7.....	3520	1340	NOV. 8.....	3	1
JAN. 8.....	2730	450	NOV. 11.....	2	1
JAN. 10.....	1500	350	NOV. 12.....	900	930
JAN. 12.....	908	275	NOV. 13.....	187	132
JAN. 13.....	638	300	NOV. 14.....	2610	940
JAN. 14.....	570	180	NOV. 15.....	1980	136
JAN. 15.....	552	180	NOV. 16.....	797	380
JAN. 17.....	398	120	NOV. 17.....	267	170
JAN. 18.....	355	110	NOV. 18.....	66	60
JAN. 19.....	275	116	NOV. 19.....	1970	700
JAN. 20.....	241	100	NOV. 20.....	3530	1480

EEL RIVER BASIN--Continued

11-4730. MIDDLE FORK EEL RIVER BELOW BLACK BUTTE RIVER, NEAR COVELO, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
NOV. 21, 1966.....	1540	1540	MAR. 3, 1967	38	8
NOV. 22.....	753	753	MAR. 6.....	32	7
NOV. 23.....	252	146	MAR. 8.....	26	5
NOV. 24.....	153	91	MAR. 10.....	287	210
NOV. 26.....	157	65	MAR. 13.....	163	103
NOV. 27.....	91	66	MAR. 15.....	88	45
NOV. 28.....	1920	178	MAR. 17.....	1230	520
NOV. 29.....	1430	630	MAR. 20.....	981	350
DEC. 1.....	3790	900	MAR. 24.....	580	220
DEC. 2.....	6070	950	MAR. 27.....	334	110
DEC. 3.....	1970	710	MAR. 29.....	293	70
DEC. 4.....	4360	340	MAR. 31.....	514	155
DEC. 5.....	4470	8750	APR. 3.....	410	120
DEC. 7.....	1600	450	APR. 4.....	167	60
DEC. 9.....	732	228	APR. 5.....	170	83
DEC. 10.....	1590	580	APR. 7.....	294	152
DEC. 12.....	2070	400	APR. 10.....	223	71
DEC. 13.....	2450	510	APR. 12.....	156	52
DEC. 14.....	1440	300	APR. 14.....	121	73
DEC. 15.....	1110	270	APR. 17.....	478	282
DEC. 16.....	956	214	APR. 19.....	279	137
DEC. 17.....	673	264	APR. 24.....	139	44
DEC. 18.....	599	172	APR. 26.....	107	34
DEC. 21.....	308	68	APR. 28.....	185	40
DEC. 22.....	466	52	MAY 1.....	67	20
DEC. 26.....	102	39	MAY 2.....	49	24
DEC. 28.....	38	27	MAY 5.....	499	172
DEC. 30.....	39	20	MAY 10.....	888	450
JAN. 2, 1967.....	20	9	MAY 14.....	450	225
JAN. 3.....	18	10	MAY 15.....	1490	426
JAN. 6.....	23	9	MAY 17.....	1650	400
JAN. 8.....	7	6	MAY 19.....	869	480
JAN. 12.....	8	6	MAY 22.....	506	200
JAN. 17.....	6	4	MAY 24.....	284	264
JAN. 20.....	2250	920	MAY 26.....	214	90
JAN. 21.....	7590	3000	MAY 29.....	112	38
JAN. 22.....	2560	900	MAY 31.....	65	20
JAN. 23.....	1210	408	JUNE 2.....	109	26
JAN. 24.....	1570	500	JUNE 5.....	645	468
JAN. 25.....	752	255	JUNE 6.....	59	30
JAN. 26.....	5000	1400	JUNE 14.....	13	4
JAN. 27.....	2470	750	JUNE 22.....	13	6
JAN. 28.....	3160	1225	JULY 1.....	4	3
JAN. 29.....	5570	2600	JULY 11.....	4	1
FEB. 1.....	1890	570	JULY 12.....	5	5
FEB. 2.....	1300	525	JULY 24.....	1	1
FEB. 3.....	1030	420	JULY 29.....	1	1
FEB. 4.....	707	360	AUG. 4.....	1	1
FEB. 5.....	750	270			
FEB. 8.....	443	175			
FEB. 11.....	329	80			
FEB. 12.....	238	125			
FEB. 13.....	559	80			
FEB. 15.....	370	100			
FEB. 17.....	192	30			
FEB. 20.....	61	30			
FEB. 22.....	103	25			
FEB. 24.....	216	21			
FEB. 27.....	58	13			
MAR. 1.....	41	11			

EEL RIVER BASIN--Continued

11-4738. ELK CREEK NEAR HEARST, CALIF.

LOCATION.--Lat 39°38'57", long 123°07'12", temperature recorder at gaging station on right bank 300 feet upstream from unnamed tributary, and 13.5 miles northeast of Hearst, Mendocino County.

DRAINAGE AREA.--84.1 square miles.

RECORDS AVAILABLE.--water temperatures: October 1964 to September 1967.

EXTREMES, 1966-67.--water temperatures: Maximum, 94°F Aug. 2; minimum, 37°F Feb. 19-22.

EXTREMES, 1965-67.--water temperatures: Maximum, 94°F Aug. 2, 1967; minimum (1966-67), 37°F Feb. 19-22, 1967.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	--	--	--	--	--	72	74	74	74	72	70	68	66	66	66	66	66	66	61	63	63	66	68	68	66	66	63	67	65	64	66	67	
Minimum	--	--	--	--	--	58	60	58	58	58	57	56	52	49	50	50	50	50	51	53	52	51	53	53	53	54	52	50	51	51	51	51	53
November																																	
Maximum	65	64	63	63	59	58	60	60	58	58	57	60	59	56	56	56	57	56	55	54	49	49	49	48	52	52	51	51	50	50	50	55	
Minimum	50	50	50	49	49	52	50	50	47	50	53	55	56	56	54	54	56	55	54	49	48	47	44	45	50	50	50	48	48	49	--	50	
December																																	
Maximum	50	49	49	50	50	49	49	49	49	49	50	52	51	50	50	48	47	47	46	48	50	47	48	47	47	46	44	45	45	47	47	48	
Minimum	49	48	48	48	48	48	48	48	47	48	48	50	49	50	48	47	46	46	45	44	46	42	44	43	43	40	38	38	41	43	41	45	
January																																	
Maximum	46	46	46	45	46	45	45	45	46	46	46	48	48	46	46	47	46	46	44	47	48	45	45	44	45	45	47	48	49	47	47	46	
Minimum	41	41	40	40	42	39	39	39	40	42	42	42	41	39	40	40	38	39	38	43	45	43	43	42	42	43	45	47	45	45	46	41	
February																																	
Maximum	47	46	47	46	48	48	47	48	46	46	48	50	48	46	44	46	49	49	47	47	47	47	47	47	--	47	48	44	43	--	--	46	
Minimum	45	44	43	43	43	43	42	42	42	43	42	45	43	41	40	40	40	40	37	37	37	37	37	40	--	43	40	40	39	--	--	41	
March																																	
Maximum	45	45	44	45	45	45	49	48	49	48	47	47	49	49	47	47	46	47	47	48	48	48	48	48	48	51	52	48	48	51	52	47	
Minimum	38	42	42	44	45	45	43	43	45	46	47	44	45	46	47	45	45	44	44	44	44	44	44	46	43	42	44	45	46	42	43	44	
April																																	
Maximum	51	54	48	53	54	56	56	56	52	50	49	45	45	49	53	50	47	48	48	47	48	49	49	49	49	51	50	51	50	49	--	50	
Minimum	43	46	44	41	41	43	43	44	45	45	45	41	42	43	43	47	43	43	44	44	47	48	48	48	49	50	50	50	48	48	--	45	
May																																	
Maximum	50	50	52	53	53	53	54	57	57	53	53	52	53	54	55	56	57	65	65	67	69	69	69	69	67	68	69	68	69	66	67	66	59
Minimum	49	50	51	52	50	51	52	53	53	49	50	51	52	53	54	55	52	54	53	54	56	56	56	55	55	56	55	57	56	54	--	53	
June																																	
Maximum	66	59	67	69	70	73	71	73	68	68	67	66	65	65	65	67	69	70	70	70	71	70	69	68	80	81	80	80	82	84	83	71	61
Minimum	55	55	55	57	59	61	60	60	60	60	61	61	60	61	63	63	65	66	68	69	69	69	67	67	67	64	66	65	66	68	67	--	62
July																																	
Maximum	83	83	83	82	81	81	81	81	80	81	81	82	82	83	83	84	84	83	83	84	85	87	87	87	87	87	90	87	92	91	91	84	
Minimum	69	68	68	66	67	67	66	66	65	66	68	69	69	68	69	71	71	70	69	71	71	73	72	73	72	73	73	74	77	77	78	77	70
August																																	
Maximum	93	94	92	91	91	89	89	89	87	89	87	87	87	87	86	87	87	86	82	84	82	83	83	83	80	80	82	80	79	--	--	--	86
Minimum	78	79	78	77	76	75	75	75	75	73	73	72	72	73	73	73	73	75	71	72	72	73	74	74	75	75	73	72	--	--	--	--	74
September																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

EEL RIVER BASIN--Continued

11-4738. ELK CREEK NEAR HEARST, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concent- ration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Oct. 5, 1966.....	1030	62		1.6	1	T	--	--	--	--	--	--	--	--	--	--	VPWC VPWC VPWC	
Nov. 2.....	1200	58		1.9	1	T	--	--	--	--	--	--	--	--	--	--		
Dec. 4.....	1210	50		1970	4320	23000	19	23	32	40	50	56	73	91	99	100		
Dec. 4.....	1500	50		3960	6100	65200	--	23	--	35	--	50	71	90	98	100		
Dec. 4.....	1705	50		4870	7620	100000	17	21	29	35	44	50	68	85	94	99		100
Dec. 5.....	0420	49		2940	4480	35600	--	--	--	--	--	--	--	--	--	--		
Dec. 5.....	0750	49		2560	4040	27900	--	--	--	--	--	--	--	--	--	--		
Dec. 5.....	1155	49		2140	3850	22200	--	--	--	--	--	--	--	--	--	--		
Dec. 5.....	2400	50		3930	5920	62800	--	--	--	--	--	--	--	--	--	--		
Feb. 24, 1967.....	1000	42		90	26	6.3	--	--	--	--	--	--	--	--	--	--		
June 8.....	1230	67		93	5	1.3	--	--	--	--	--	--	--	--	--	--		
July 12.....	0930	69		17	3	.1	--	--	--	--	--	--	--	--	--	--		
Aug. 2.....	1335	83		6.7	6	.1	--	--	--	--	--	--	--	--	--	--		

Periodic determinations of suspended-sediment con-
 centration and turbidity, water year October 1966
 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 5, 1966.....	1	1
NOV. 2.....	1	6
DEC. 4.....	4320	760
DEC. 5.....	4480	830
FEB. 24, 1967.....	26	23
JUNE 8.....	5	4

T Less than 0.05 ton.

EEL RIVER BASIN--Continued

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.

LOCATION.--Lat 38°42'23", long 123°19'27", at gaging station 0.6 mile upstream from Eastman Creek, 1.7 miles southeast of Dos Rios, Mendocino County and 1.9 miles upstream from mouth.

DRAINAGE AREA.--745 square miles.

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 1967.

Sediment records: October 1957 to September 1967.

EXTREMES, 1966-67.--Sediment concentrations: Maximum daily, 7,100 ppm Jan. 21; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 613,000 tons Jan. 29; minimum daily, less than 0.05 ton on several days in October.

EXTREMES, 1965-67.--Sediment concentrations: Maximum daily, 11,800 ppm Jan. 4, 1966; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 1,430,000 tons Jan. 4, 1966; minimum daily, less than 0.05 ton on many days.

REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

Specific conductance (micromhos at 25°C), water year October 1966 to September 1967

Day	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1.....	436	406	477	449	--	--	--	--	--	--	--	--
2.....	434	410	474	464	--	--	--	--	--	--	--	--
3.....	439	404	479	455	--	--	--	--	--	--	318	304
4.....	447	464	477	456	--	--	--	--	--	--	324	307
5.....	441	408	477	464	--	--	311	303	--	--	326	306
6.....	439	409	477	463	--	--	318	305	--	--	329	304
7.....	440	410	489	465	--	--	325	310	--	--	327	305
8.....	444	409	487	472	--	--	345	310	--	--	319	305
9.....	443	406	490	473	--	--	321	311	--	--	318	306
10.....	469	420	478	477	--	--	316	310	--	--	324	279
11.....	498	419	484	473	--	--	316	309	--	--	298	275
12.....	471	429	480	464	--	--	318	309	--	--	305	275
13.....	452	430	480	403	--	--	319	306	--	--	306	281
14.....	454	423	448	222	--	--	359	304	--	--	308	284
15.....	454	433	227	214	--	--	--	--	--	--	298	242
16.....	457	429	214	206	--	--	--	--	--	--	--	--
17.....	454	426	241	216	--	--	--	--	--	--	250	236
18.....	455	431	253	242	--	--	--	--	--	--	252	240
19.....	457	440	256	233	--	--	--	--	--	--	246	244
20.....	458	442	--	--	--	--	--	--	--	--	263	242
21.....	461	444	--	--	--	--	--	--	--	--	259	244
22.....	463	444	--	--	--	--	--	--	--	--	259	245
23.....	463	436	--	--	--	--	--	--	--	--	255	238
24.....	462	438	--	--	--	--	--	--	--	--	265	243
25.....	470	441	--	--	--	--	--	--	--	--	267	250
26.....	468	444	--	--	--	--	--	--	--	--	280	250
27.....	471	450	--	--	--	--	--	--	--	--	282	261
28.....	471	446	--	--	--	--	--	--	--	--	279	266
29.....	472	447	--	--	--	--	--	--	--	--	284	270
30.....	471	447	--	--	--	--	--	--	--	--	288	275
31.....	473	445	--	--	--	--	--	--	--	--	287	278
Average	457	428	--	--	--	--	--	--	--	--	290	270

Day	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1.....	293	271	293	263	210	195	--	--	--	--	--	--
2.....	297	270	287	246	215	199	--	--	--	--	--	--
3.....	288	273	272	235	218	178	--	--	--	--	--	--
4.....	294	264	261	222	283	159	--	--	--	--	--	--
5.....	299	255	246	219	203	186	--	--	--	--	--	--
6.....	297	271	251	205	206	172	--	--	--	--	--	--
7.....	282	245	229	190	206	173	--	--	--	--	--	--
8.....	267	245	217	186	--	--	--	--	--	--	--	--
9.....	277	253	221	205	--	--	--	--	--	--	--	--
10.....	285	267	231	207	--	--	--	--	--	--	--	--
11.....	293	276	236	218	--	--	--	--	--	--	--	--
12.....	281	245	243	206	--	--	--	--	--	--	--	--
13.....	273	263	241	201	--	--	--	--	--	--	--	--
14.....	275	256	234	190	--	--	--	--	--	--	--	--
15.....	278	256	278	185	--	--	--	--	--	--	--	--
16.....	284	271	265	178	--	--	--	--	--	--	--	--
17.....	291	272	257	173	--	--	--	--	--	--	--	--
18.....	282	260	248	170	--	--	--	--	--	--	--	--
19.....	288	264	263	176	--	--	--	--	--	--	--	--
20.....	286	273	257	149	--	--	--	--	--	--	--	--
21.....	286	270	253	164	--	--	--	--	--	--	--	--
22.....	291	269	248	161	--	--	--	--	--	--	--	--
23.....	292	278	242	152	--	--	--	--	--	--	--	--
24.....	282	261	186	155	--	--	--	--	--	--	--	--
25.....	281	254	190	158	--	--	--	--	--	--	--	--
26.....	287	272	191	158	--	--	--	--	--	--	--	--
27.....	285	265	188	152	--	--	--	--	--	--	--	--
28.....	293	273	183	157	--	--	--	--	--	--	--	--
29.....	291	262	192	160	--	--	--	--	--	--	--	--
30.....	293	261	200	171	--	--	--	--	--	--	--	--
31.....	--	--	204	178	--	--	--	--	--	--	--	--
Average	286	263	235	186	--	--	--	--	--	--	--	--

EEL RIVER BASIN--Continued

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	76	74	74	74	72	72	72	72	72	72	68	67	67	65	65	65	67	65	61	61	61	63	65	65	63	63	61	61	61	61	66		
Minimum	65	65	65	63	63	63	65	63	63	61	53	58	58	58	56	58	58	56	56	58	56	56	58	58	56	58	56	56	56	54	59		
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	61	58	59	59	58	58	58	56	56	53	58	59	59	58	58	56	54	56	58	50	46	43	42	43	43	44	45	46	46	46	46	46	
Minimum	54	52	54	54	54	52	52	50	52	56	56	58	56	56	54	50	52	56	43	43	43	42	40	42	--	--	39	36	38	39	39	--	
December	47	47	46	46	45	46	45	45	45	47	45	48	47	45	42	43	43	43	43	43	43	42	40	42	--	--	--	39	36	38	39	39	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
January	38	39	40	39	--	--	--	--	--	--	--	--	--	--	40	43	40	39	39	42	45	42	40	41	40	43	45	46	47	45	45	--	
Maximum	--	--	--	--	43	41	41	41	43	43	45	45	45	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	41	38	38	34	40	41	43	43	41	36	--	--	--	--	--	42	--	--	--	47	--	--	--	--	--	--	--	--	
February	45	43	43	44	44	43	43	45	43	44	45	45	48	41	41	--	45	--	--	--	42	--	--	--	47	--	--	48	--	--	--	--	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
March	45	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	--	--	49	49	50	52	54	54	52	50	47	45	47	49	50	49	49	50	49	50	52	50	50	50	49	50	52	50	49	47	45	49	
Minimum	--	--	45	43	43	45	47	47	49	43	40	43	40	43	45	47	43	47	47	47	47	47	49	45	45	47	47	49	47	43	44	44	
April	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	49	50	50	50	49	49	52	54	54	52	50	54	52	50	50	49	49	49	49	50	50	50	49	52	52	50	50	49	50	54	--	50	
Minimum	43	43	47	47	47	47	47	49	49	49	47	47	47	47	45	45	45	43	45	43	45	43	45	47	47	47	47	47	45	45	47	--	46
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	54	56	56	56	54	58	53	56	54	50	50	54	56	58	59	58	58	58	59	59	61	61	59	59	59	59	59	59	59	59	58	57	
Minimum	47	49	49	49	47	47	50	47	47	47	47	47	47	50	52	52	52	47	52	52	52	54	52	54	52	54	52	54	54	52	50	50	
June	--	--	--	--	--	--	--	--	56	65	--	--	--	64	--	68	--	71	--	--	73	--	64	--	64	--	70	--	--	80	--	--	
Maximum	54	54	59	61	61	63	63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	52	50	50	54	56	54	56	--	--	--	78	--	79	76	74	--	--	74	--	78	--	70	--	--	74	--	77	--	78	--	--	79	--
July	--	--	75	--	73	--	71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
August	--	77	--	81	--	--	80	--	78	--	79	--	--	80	--	80	--	83	--	--	70	--	82	--	77	--	--	70	--	72	--	--	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
September	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	70	--	--	--	--	--	--	--	--	--	--	--	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

EEL RIVER BASIN--Continued

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	17	2	0.1	18	2	0.1	5440	3380	S 64700
2..	16	2	.1	18	2	.1	15800	5870	S 304000
3..	16	2	.1	18	2	.1	9920	2980	S 84600
4..	16	2	.1	18	2	.1	15100	4330	S 267000
5..	16	2	.1	18	2	.1	23500	6080	S 425000
6..	16	2	.1	22	2	.1	6350	2600	44600
7..	16	2	.1	29	1	.1	3450	1780	16600
8..	16	2	.1	34	1	.1	2500	1310	8840
9..	16	2	.1	29	1	.1	1870	980	4950
10..	16	2	.1	25	1	.1	3300	2280	20300
11..	16	2	.1	25	1	.1	2640	1280	9120
12..	16	2	.1	53	65	S 38	3700	2110	21100
13..	16	2	.1	258	202	S 140	3950	1770	18900
14..	16	1	T	888	1600	S 7490	4100	1700	18800
15..	16	1	T	2160	1220	S 7580	2500	1110	7490
16..	17	1	T	5350	4250	S 7340	2050	1100	6090
17..	17	1	T	1660	424	S 2080	1710	650	3000
18..	17	1	T	1010	98	S 276	1550	544	2280
19..	17	1	T	1780	828	S 8470	1410	530	2020
20..	17	1	T	12300	6100	S 203000	1270	380	1300
21..	17	1	T	9240	3650	S 93000	1130	300	915
22..	17	1	T	4660	2020	S 29600	990	240	642
23..	17	2	.1	2020	860	4690	960	218	565
24..	17	3	.1	1440	800	3110	900	190	460
25..	17	2	.1	1200	620	2000	818	160	350
26..	18	1	T	1070	400	1160	778	130	270
27..	18	1	T	1050	260	737	700	93	176
28..	18	2	.1	2110	1310	S 12100	682	72	133
29..	18	2	.1	5060	2520	S 36600	664	73	131
30..	18	2	.1	2630	1110	7880	652	75	132
31..	18	2	.1	--	--	--	604	65	106
Total	519	--	2.5	56193	--	427292.1	120988	--	1334570
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	574	55	85	8700	1840	43200	628	30	51
2..	538	53	77	5750	1450	22500	610	26	43
3..	496	52	70	4900	1330	17600	598	27	44
4..	472	51	65	4400	1240	14700	568	27	41
5..	472	46	59	3800	1130	11600	550	27	40
6..	435	48	56	3400	700	6430	532	26	37
7..	410	38	42	3100	480	4020	520	24	34
8..	410	29	32	2800	405	3060	514	18	25
9..	400	29	31	2500	400	2700	508	16	22
10..	385	25	26	2250	338	2050	1630	1960	S 17100
11..	385	19	20	2000	270	1460	1500	3600	15000
12..	385	25	26	1900	242	1240	1400	1500	5700
13..	385	22	23	1750	223	1050	1600	450	1940
14..	395	30	32	1600	222	959	1950	440	2300
15..	425	28	32	1500	195	790	3690	808	S 8140
16..	450	23	28	1410	148	563	16000	4300	K 196000
17..	440	20	24	1310	118	417	7520	1900	38600
18..	420	25	28	1260	93	320	6080	1100	18000
19..	395	25	27	1170	82	260	4350	760	8900
20..	7580	3830	S 120000	1080	78	227	5690	1300	20000
21..	31400	7100	S 603000	990	77	210	5150	1300	18000
22..	10900	3230	S 103000	910	74	180	4380	810	9580
23..	4650	1720	21600	834	67	150	5660	790	12000
24..	4330	1700	19900	770	58	121	4250	690	7920
25..	3600	1250	12200	756	53	110	3500	550	5200
26..	13900	4210	S 187000	728	50	98	2960	430	3400
27..	15200	2910	119000	688	44	82	2660	353	2540
28..	19100	4000	206000	652	37	65	2460	330	2200
29..	30400	7080	S 613000	--	--	--	2320	325	2040
30..	15200	3670	151000	--	--	--	2480	370	2500
31..	15500	2890	121000	--	--	--	3600	430	4180
Total	180032	--	2277483	62908	--	136162	95858	--	401577

S Computed by subdividing day.

T Less than 0.05 ton.

K Computed from estimated-concentration graph and subdividing day.

EEL RIVER BASIN--Continued

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	3380	420	3800	1640	102	452	1250	170	570
2..	2800	400	3000	1750	95	450	1320	165	588
3..	3040	393	3230	2050	172	952	1230	170	560
4..	2860	360	2800	2600	650	4560	1190	170	550
5..	2540	250	1710	3000	720	5830	1340	268	970
6..	4130	700	8000	3500	640	6000	1510	270	1100
7..	3830	512	5290	4000	1000	11000	1340	152	550
8..	2980	370	3000	4800	1500	19400	1260	73	248
9..	2820	350	2700	4900	1200	16000	1260	67	228
10..	2800	354	2680	4700	900	11400	1090	63	190
11..	2900	350	2700	3500	710	6700	1090	59	170
12..	2500	270	1820	2800	690	5220	1030	56	156
13..	2360	270	1700	2600	570	4000	940	49	120
14..	2600	328	2300	2300	800	5000	850	42	96
15..	2240	320	1900	3400	1280	11800	786	38	81
16..	1950	330	1700	4300	1400	16000	770	36	75
17..	3000	480	3890	4600	1200	14900	770	35	73
18..	3450	457	4260	4500	1300	16000	762	35	72
19..	3550	492	4720	3900	1300	13700	707	34	65
20..	3020	420	3400	3600	1200	12000	676	31	57
21..	2680	235	1700	3300	1000	8900	622	28	47
22..	2500	200	1400	3200	880	7600	556	25	38
23..	2420	190	1200	3100	700	5900	490	21	28
24..	2540	202	1390	2900	540	4230	450	17	21
25..	2380	220	1400	2800	420	3200	415	13	15
26..	2080	270	1520	2300	343	2130	390	9	9.5
27..	2240	270	1600	2000	300	1600	365	9	8.9
28..	1960	202	1070	1800	240	1200	336	10	9.1
29..	1950	210	1100	1700	200	918	308	8	6.7
30..	1730	160	750	1500	160	650	284	5	3.8
31..	--	--	--	1400	163	616	--	--	--
Total	81230	--	77730	94440	--	218308	25387	--	6706.0
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	256	4	2.8	57	1	0.2	25	1	0.1
2..	231	4	2.5	55	2	.3	23	1	.1
3..	210	4	2.3	53	1	.1	23	1	.1
4..	195	3	1.6	51	1	.1	23	1	.1
5..	183	3	1.5	52	1	.1	22	1	.1
6..	173	2	.9	51	2	.3	22	1	.1
7..	163	2	.9	49	2	.3	22	1	.1
8..	158	2	.9	46	1	.1	22	1	.1
9..	145	2	.8	45	1	.1	21	1	.1
10..	140	2	.8	44	1	.1	20	1	.1
11..	135	2	.7	43	1	.1	20	1	.1
12..	127	1	.3	42	1	.1	20	1	.1
13..	122	2	.7	40	1	.1	19	1	.1
14..	120	2	.6	39	1	.1	19	1	.1
15..	112	2	.6	38	1	.1	19	1	.1
16..	107	3	.9	36	1	.1	20	2	.1
17..	101	4	1.1	36	1	.1	22	2	.1
18..	96	4	1.0	34	1	.1	22	4	.2
19..	91	5	1.2	32	1	.1	25	5	.3
20..	86	3	.7	31	1	.1	23	4	.2
21..	80	1	.2	31	1	.1	21	4	.2
22..	76	1	.2	31	1	.1	20	3	.2
23..	72	2	.4	30	1	.1	20	3	.2
24..	67	4	.7	29	1	.1	22	5	.3
25..	66	3	.5	28	1	.1	21	2	.1
26..	66	2	.4	28	1	.1	20	1	.1
27..	63	2	.3	28	1	.1	21	1	.1
28..	62	2	.3	29	5	.4	21	1	.1
29..	61	2	.3	29	2	.2	21	1	.1
30..	60	1	.2	27	1	.1	22	2	.1
31..	59	1	.2	25	1	.1	--	--	--
Total	3683	--	26.5	1189	--	4.2	641	--	3.9
Total discharge for year (cfs-days).....							723068		
Total load for year (tons).....							4879865.2		

K Computed from estimated-concentration graph and subdividing day.

EEL RIVER BASIN--Continued

11-4739. MIDDLE FORK EEL RIVER AT DOS RIOS, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Nov. 20, 1966.....	1630	50		14200	5890		24	25	31	40	51	60	75	89	97	99	100	VPWC
Dec. 2.....	1635	47		30000	9150		18	24	31	41	51	59	78	92	98	100	--	VPWC
Jan. 25, 1967.....	0810	40		3900	1120		--	--	--	--	--	57	64	76	94	100	--	V
Jan. 26.....	1240	43		22500	6290		--	23	--	39	--	57	72	88	97	98	100	VPWC
Jan. 27.....	1655	45		13300	2630		--	29	--	46	--	64	76	86	95	100	--	VPWC
Jan. 28.....	1305	46		19300	3840		21	29	37	47	58	68	82	91	98	100	--	VPWC
Jan. 29.....	0850	47		42600	9740		25	31	35	47	60	70	87	96	99	100	--	VPWC
Jan. 29.....	1650	47		27400	7050		--	27	--	44	--	64	80	91	96	100	--	VPWC
Jan. 31.....	0840	45		17600	3180		--	29	--	45	--	64	76	89	98	100	--	VPWC
Apr. 5.....	1520	46		2540	193		--	--	--	--	--	72	77	84	96	100	--	V
May 4.....	1105	48		2760	648		21	30	46	61	76	85	90	94	99	100	--	VPWC
June 8.....	1400	56		1260	72		--	--	--	--	--	95	96	99	100	--	--	V

EEL RIVER BASIN--Continued

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, October 1964 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 10, 1964.....	4	2	JAN. 31, 1965.....	2820	670
OCT. 17.....	7	3	FEB. 1.....	2500	660
OCT. 26.....	3	1	FEB. 2.....	2750	530
OCT. 28.....	2	3	FEB. 3.....	2300	500
OCT. 30.....	2	2	FEB. 5.....	5440	840
NOV. 1.....	1	2	FEB. 6.....	2760	600
NOV. 2.....	3	2	FEB. 7.....	1960	480
NOV. 5.....	1	2	FEB. 9.....	1860	420
NOV. 7.....	2	3	FEB. 10.....	1440	280
NOV. 9.....	621	288	FEB. 11.....	810	250
NOV. 10.....	1330	664	FEB. 12.....	1820	250
NOV. 11.....	260	150	FEB. 13.....	648	300
NOV. 12.....	506	288	FEB. 14.....	4470	240
NOV. 13.....	81	36	FEB. 15.....	1010	260
NOV. 14.....	27	16	FEB. 16.....	900	220
NOV. 15.....	10	8	FEB. 17.....	1370	190
NOV. 16.....	8	5	FEB. 18.....	930	190
NOV. 17.....	4	3	FEB. 19.....	1090	210
NOV. 18.....	5	2	FEB. 21.....	713	260
NOV. 19.....	4	2	FEB. 22.....	1420	170
NOV. 20.....	2	1	FEB. 23.....	952	170
NOV. 21.....	2	2	FEB. 24.....	434	210
NOV. 22.....	68	50	FEB. 25.....	1660	160
NOV. 23.....	12	10	FEB. 26.....	1460	160
NOV. 25.....	730	416	FEB. 28.....	2440	300
NOV. 26.....	80	50	MAR. 1.....	590	220
NOV. 27.....	35	21	MAR. 2.....	1480	240
NOV. 28.....	2340	904	MAR. 3.....	1170	230
NOV. 29.....	324	134	MAR. 4.....	1000	180
NOV. 30.....	176	76	MAR. 5.....	1010	160
DEC. 2.....	269	140	MAR. 6.....	1240	180
DEC. 3.....	298	140	MAR. 7.....	784	170
DEC. 4.....	146	75	MAR. 8.....	513	130
DEC. 5.....	60	44	MAR. 9.....	610	130
DEC. 6.....	40	20	MAR. 10.....	528	120
DEC. 7.....	26	13	MAR. 11.....	618	120
DEC. 8.....	20	13	MAR. 12.....	566	130
DEC. 10.....	66	35	MAR. 13.....	751	100
DEC. 11.....	812	420	MAR. 14.....	216	104
DEC. 12.....	201	165	MAR. 15.....	478	64
DEC. 13.....	130	85	MAR. 16.....	636	100
DEC. 14.....	64	90	MAR. 17.....	348	180
DEC. 15.....	44	46	MAR. 18.....	294	84
DEC. 16.....	28	25	MAR. 22.....	400	180
DEC. 17.....	22	30	MAR. 24.....	280	138
DEC. 18.....	19	13	MAR. 26.....	727	150
DEC. 19.....	680	120	MAR. 27.....	2320	630
DEC. 20.....	1040	306	MAR. 28.....	1700	280
DEC. 21.....	9000	1680	MAR. 29.....	632	300
DEC. 29.....	5460	1616	MAR. 30.....	1140	276
DEC. 30.....	5420	1162	MAR. 31.....	1020	280
DEC. 31.....	5360	752	APR. 2.....	628	216
JAN. 1, 1965.....	4430	784	APR. 4.....	855	192
JAN. 2.....	6710	1200	APR. 6.....	459	192
JAN. 3.....	7980	825	APR. 11.....	818	288
JAN. 4.....	4340	640	APR. 13.....	1560	312
JAN. 5.....	19200	2350	APR. 14.....	800	228
JAN. 6.....	8880	1564	APR. 15.....	9320	2520
JAN. 7.....	5400	870	APR. 16.....	5240	1440
JAN. 8.....	4310	684	APR. 17.....	2860	1140
JAN. 9.....	5920	660	APR. 18.....	8050	1620
JAN. 11.....	6210	1079	APR. 19.....	7560	1620
JAN. 12.....	3630	754	APR. 20.....	4690	1320
JAN. 13.....	4140	650	APR. 21.....	5120	1260
JAN. 14.....	3750	540	APR. 22.....	3020	1620
JAN. 15.....	3700	660	APR. 24.....	2160	1200
JAN. 16.....	3540	676	APR. 25.....	2670	900
JAN. 17.....	3020	550	APR. 26.....	2140	1080
JAN. 18.....	3680	740	APR. 27.....	2080	504
JAN. 19.....	3950	715			
JAN. 21.....	3240	670			
JAN. 22.....	2700	550			
JAN. 24.....	7790	900			
JAN. 25.....	4100	816			
JAN. 27.....	2800	600			
JAN. 30.....	2720	580			

EEL RIVER BASIN--Continued

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 24, 1965.....	2040	560	DEC. 14, 1965.....	52	25
MAY 2.....	1520	297	DEC. 15.....	60	30
MAY 4.....	954	250	DEC. 16.....	35	25
MAY 6.....	650	240	DEC. 17.....	32	15
MAY 8.....	416	132	DEC. 18.....	22	15
MAY 10.....	296	148	DEC. 20.....	18	9
MAY 12.....	772	150	DEC. 22.....	28	7
MAY 14.....	2430	172	DEC. 23.....	13	5
MAY 17.....	509	111	DEC. 24.....	6740	650
MAY 20.....	286	96	DEC. 27.....	159	45
MAY 23.....	243	47	DEC. 28.....	11400	900
MAY 26.....	159	47	DEC. 29.....	2880	600
MAY 29.....	96	37	DEC. 30.....	1240	400
JUNE 3.....	30	27	DEC. 31.....	1330	250
JUNE 7.....	26	20	JAN. 1, 1966.....	1230	200
JUNE 8.....	17	18	JAN. 2.....	1180	160
JUNE 13.....	21	14	JAN. 3.....	4040	600
JUNE 18.....	8	8	JAN. 4.....	12800	3100
JUNE 23.....	6	5	JAN. 5.....	9530	2200
JUNE 29.....	4	3	JAN. 6.....	9630	900
JULY 6.....	2	1	JAN. 7.....	4020	1000
JULY 12.....	4	1	JAN. 8.....	3210	800
JULY 21.....	5	1	JAN. 9.....	3960	450
JULY 31.....	2	1	JAN. 10.....	2620	450
AUG. 23.....	2	1	JAN. 11.....	2150	300
AUG. 24.....	2	1	JAN. 12.....	2060	300
SEPT. 16.....	1	1	JAN. 14.....	872	200
SEPT. 23.....	1	1	JAN. 15.....	421	200
SEPT. 30.....	2	2	JAN. 16.....	822	240
OCT. 4.....	1	1	JAN. 17.....	900	300
OCT. 9.....	1	1	JAN. 18.....	610	210
OCT. 16.....	1	1	JAN. 21.....	396	183
OCT. 24.....	1	1	JAN. 22.....	374	134
OCT. 30.....	1	1	JAN. 23.....	400	120
NOV. 4.....	1	1.5	JAN. 24.....	312	98
NOV. 7.....	3	1	JAN. 25.....	178	100
NOV. 8.....	452	111	JAN. 26.....	177	84
NOV. 9.....	51	30	JAN. 27.....	100	67
NOV. 11.....	4	3	JAN. 28.....	82	65
NOV. 12.....	24	30	JAN. 29.....	874	420
NOV. 13.....	440	135	JAN. 30.....	2080	490
NOV. 15.....	1470	700	JAN. 31.....	559	160
NOV. 16.....	644	189	FEB. 1.....	1220	440
NOV. 17.....	164	70	FEB. 2.....	706	195
NOV. 18.....	5760	550	FEB. 3.....	572	147
NOV. 19.....	2210	600	FEB. 4.....	2940	1060
NOV. 20.....	955	300	FEB. 5.....	2080	580
NOV. 21.....	460	130	FEB. 6.....	1760	530
NOV. 22.....	108	70	FEB. 7.....	462	225
NOV. 23.....	153	55	FEB. 8.....	973	225
NOV. 24.....	3400	300	FEB. 9.....	800	210
NOV. 25.....	1880	250	FEB. 10.....	915	222
NOV. 26.....	264	130	FEB. 11.....	730	135
NOV. 27.....	1350	130	FEB. 12.....	350	132
NOV. 28.....	576	100	FEB. 13.....	263	126
NOV. 29.....	68	50	FEB. 16.....	100	74
NOV. 30.....	243	40	FEB. 17.....	116	100
DEC. 1.....	64	50	FEB. 18.....	134	86
DEC. 2.....	240	50	FEB. 19.....	2020	420
DEC. 3.....	434	50	FEB. 20.....	610	147
DEC. 4.....	550	95	FEB. 21.....	410	126
DEC. 5.....	345	110	FEB. 22.....	314	126
DEC. 6.....	562	260	FEB. 23.....	746	174
DEC. 7.....	625	100	FEB. 24.....	1200	232
DEC. 8.....	374	75	FEB. 25.....	727	153
DEC. 9.....	90	55	FEB. 26.....	505	150
DEC. 10.....	160	70	FEB. 27.....	550	114
DEC. 11.....	244	40	FEB. 28.....	478	106
DEC. 12.....	85	50	MAR. 1.....	416	86
DEC. 13.....	72	30	MAR. 2.....	458	86

EEL RIVER BASIN--Continued

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
MAR. 3, 1966	250	75	MAY 12, 1966.....	215	58
MAR. 4.....	286	60	MAY 13.....	192	71
MAR. 5.....	269	120	MAY 14.....	243	58
MAR. 6.....	652	140	MAY 15.....	270	70
MAR. 7.....	1320	200	MAY 16.....	172	52
MAR. 8.....	1680	320	MAY 17.....	154	52
MAR. 9.....	3100	750	MAY 18.....	88	43
MAR. 10.....	3620	750	MAY 19.....	116	60
MAR. 11.....	1740	450	MAY 20.....	132	52
MAR. 12.....	1280	350	MAY 21.....	172	82
MAR. 13.....	2040	325	MAY 22.....	127	52
MAR. 14.....	1630	400	MAY 23.....	65	29
MAR. 15.....	1480	450	MAY 24.....	94	30
MAR. 16.....	824	350	MAY 25.....	76	52
MAR. 17.....	1240	280	MAY 26.....	78	30
MAR. 18.....	1380	240	MAY 27.....	60	24
MAR. 19.....	1420	275	MAY 28.....	47	21
MAR. 20.....	1150	180	MAY 29.....	36	15
MAR. 21.....	396	140	MAY 30.....	30	20
MAR. 22.....	772	160	MAY 31.....	29	17
MAR. 23.....	780	140	JUNE 1.....	20	17
MAR. 24.....	444	150	JUNE 3.....	15	11
MAR. 25.....	1030	140	JUNE 5.....	9	9
MAR. 26.....	1320	200	JUNE 7.....	3	4
MAR. 27.....	1970	160	JUNE 9.....	3	3
MAR. 28.....	2080	375	JUNE 11.....	5	2
MAR. 29.....	1500	375	JUNE 13.....	4	2
MAR. 30.....	1580	350	JUNE 16.....	16	14
MAR. 31.....	1560	500	JUNE 18.....	3	1
APR. 1.....	1700	550	JUNE 21.....	5	1
APR. 2.....	1660	600	JUNE 24.....	3	1
APR. 3.....	1790	600	JUNE 27.....	2	1
APR. 4.....	1540	400	JUNE 29.....	2	1
APR. 5.....	2030	425	JULY 1.....	4	1
APR. 6.....	1740	425	JULY 6.....	3	1
APR. 7.....	1610	280	JULY 9.....	7	1
APR. 8.....	1540	280	JULY 11.....	3	1
APR. 9.....	1240	280	JULY 13.....	7	1
APR. 10.....	2600	650	JULY 15.....	3	1
APR. 11.....	1740	650	JULY 18.....	1	1
APR. 12.....	2100	500	JULY 20.....	1	1
APR. 13.....	1020	370	JULY 22.....	1	1
APR. 14.....	1010	268	JULY 25.....	1	1
APR. 15.....	1140	260	JULY 27.....	2	1
APR. 16.....	1710	370	JULY 29.....	12	7
APR. 17.....	1410	490	AUG. 1.....	1	1
APR. 18.....	1060	292	AUG. 3.....	3	1
APR. 19.....	868	219	AUG. 5.....	1	1
APR. 20.....	589	174	AUG. 8.....	1	1
APR. 21.....	578	150	AUG. 10.....	1	1
APR. 22.....	385	165	AUG. 12.....	2	1
APR. 23.....	404	178	AUG. 15.....	2	1
APR. 24.....	624	300	AUG. 17.....	1	1
APR. 25.....	880	308	AUG. 19.....	2	1
APR. 26.....	870	350	AUG. 22.....	1	1
APR. 27.....	423	240	AUG. 24.....	1	1
APR. 28.....	350	144	AUG. 26.....	1	1
APR. 29.....	354	105	AUG. 29.....	10	2
APR. 30.....	298	114	AUG. 30.....	2	2
MAY 1.....	254	120	AUG. 31.....	2	1
MAY 2.....	418	126	SEPT. 2.....	1	1
MAY 3.....	270	147	SEPT. 5.....	1	1
MAY 4.....	684	171	SEPT. 7.....	1	1
MAY 5.....	470	174	SEPT. 9.....	1	1
MAY 6.....	402	141	SEPT. 12.....	3	2
MAY 7.....	268	116	SEPT. 14.....	2	1
MAY 8.....	242	126	SEPT. 16.....	3	1
MAY 9.....	286	100	SEPT. 18.....	2	1
MAY 10.....	336	75	SEPT. 19.....	2	1
MAY 11.....	258	63	OCT. 11.....	2	1

EEL RIVER BASIN--Continued

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 21, 1966.....	1	4	JAN. 11, 1967.....	19	8
OCT. 24.....	3	2	JAN. 12.....	28	8
OCT. 26.....	12	4	JAN. 13.....	18	8
OCT. 28.....	2	5	JAN. 14.....	32	12
OCT. 31.....	2	2	JAN. 15.....	27	8
NOV. 2.....	2	4	JAN. 16.....	25	11
NOV. 4.....	2	5	JAN. 17.....	14	10
NOV. 6.....	2	4	JAN. 18.....	27	10
NOV. 7.....	1	3	JAN. 19.....	24	8
NOV. 9.....	1	2	JAN. 20.....	3680	970
NOV. 11.....	1	1	JAN. 21.....	5960	2928
NOV. 12.....	3	4	JAN. 22.....	2480	1250
NOV. 13.....	149	260	JAN. 23.....	1570	920
NOV. 14.....	64	260	JAN. 24.....	1630	300
NOV. 15.....	1060	260	JAN. 25.....	1120	240
NOV. 16.....	2160	100	JAN. 26.....	6290	740
NOV. 17.....	298	260	JAN. 27.....	2630	1040
NOV. 18.....	64	70	JAN. 28.....	3840	1608
NOV. 20.....	7910	350	JAN. 29.....	9740	2360
NOV. 21.....	2430	350	JAN. 30.....	3460	1380
NOV. 22.....	1710	680	JAN. 31.....	2620	700
NOV. 23.....	836	300	FEB. 1.....	1760	500
NOV. 24.....	902	300	FEB. 2.....	1420	350
NOV. 27.....	250	100	FEB. 3.....	1360	260
NOV. 28.....	1620	90	FEB. 4.....	1260	220
NOV. 29.....	1860	1300	FEB. 5.....	1180	185
NOV. 30.....	1450	485	FEB. 6.....	679	320
DEC. 1.....	5520	1820	FEB. 7.....	486	268
DEC. 2.....	9150	1320	FEB. 8.....	398	250
DEC. 3.....	2790	1320	FEB. 9.....	416	238
DEC. 4.....	2680	860	FEB. 10.....	344	175
DEC. 5.....	6010	2480	FEB. 11.....	266	154
DEC. 6.....	2420	1365	FEB. 12.....	248	138
DEC. 7.....	1920	940	FEB. 13.....	280	140
DEC. 8.....	1250	652	FEB. 14.....	227	130
DEC. 9.....	930	440	FEB. 15.....	270	100
DEC. 10.....	2470	980	FEB. 17.....	118	50
DEC. 11.....	1260	651	FEB. 20.....	76	67
DEC. 12.....	1880	960	FEB. 24.....	52	44
DEC. 13.....	1400	772	FEB. 27.....	44	28
DEC. 14.....	1520	540	MAR. 1.....	28	23
DEC. 15.....	1160	336	MAR. 2.....	22	21
DEC. 16.....	965	241	MAR. 3.....	27	23
DEC. 17.....	396	408	MAR. 6.....	27	15
DEC. 18.....	617	174	MAR. 8.....	18	13
DEC. 19.....	473	128	MAR. 10.....	431	275
DEC. 20.....	352	172	MAR. 13.....	349	190
DEC. 21.....	292	150	MAR. 15.....	792	260
DEC. 22.....	266	96	MAR. 17.....	1460	700
DEC. 23.....	228	50	MAR. 20.....	1420	600
DEC. 27.....	82	60	MAR. 22.....	750	380
DEC. 28.....	118	44	MAR. 24.....	688	340
DEC. 29.....	72	32	MAR. 27.....	350	185
DEC. 30.....	77	37	MAR. 29.....	323	170
DEC. 31.....	64	34	MAR. 31.....	418	225
JAN. 1, 1967.....	52	28	APR. 3.....	394	185
JAN. 2.....	58	25	APR. 5.....	230	120
JAN. 3.....	49	19	APR. 7.....	562	262
JAN. 4.....	54	19	APR. 10.....	353	155
JAN. 5.....	46	19	APR. 12.....	268	112
JAN. 6.....	51	17	APR. 14.....	336	155
JAN. 7.....	33	16	APR. 17.....	490	195
JAN. 8.....	26	42	APR. 18.....	466	195
JAN. 9.....	30	12	APR. 19.....	494	245
JAN. 10.....	24	10			

EEL RIVER BASIN--Continued

11-4739. MIDDLE FORK EEL RIVER NEAR DOS RIOS, CALIF.--Continued

Periodic determinations of suspended sediment concentration and turbidity,
October 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 21, 1967.....	232	120			
APR. 24.....	212	100			
APR. 26.....	273	132			
APR. 28.....	204	87			
MAY 1.....	86	50			
MAY 3.....	206	112			
MAY 4.....	710	300			
MAY 5.....	680	145			
MAY 8.....	1560	675			
MAY 10.....	808	360			
MAY 12.....	591	367			
MAY 15.....	1260	375			
MAY 17.....	1220	435			
MAY 19.....	1300	450			
MAY 22.....	934	300			
MAY 24.....	568	312			
MAY 26.....	348	156			
MAY 29.....	183	114			
MAY 31.....	159	91			
JUNE 2.....	165	76			
JUNE 5.....	308	230			
JUNE 7.....	112	72			
JUNE 8.....	100	72			
JUNE 9.....	66	54			
JUNE 12.....	55	40			
JUNE 14.....	40	37			
JUNE 16.....	36	30			
JUNE 19.....	34	28			
JUNE 21.....	28	20			
JUNE 23.....	21	14			
JUNE 26.....	8	8			
JUNE 28.....	10	6			
JUNE 30.....	4	3			
JULY 3.....	4	1			
JULY 5.....	3	1			
JULY 7.....	2	1			
JULY 10.....	2	1			
JULY 12.....	1	1			
JULY 13.....	2	1			
JULY 14.....	2	1			
JULY 17.....	4	1			
JULY 19.....	5	1			
JULY 21.....	1	1			
JULY 26.....	2	1			
JULY 28.....	2	1			
JULY 31.....	1	1			
AUG. 2.....	2	5			
AUG. 4.....	1	5			
AUG. 7.....	2	5			
AUG. 9.....	1	5			
AUG. 11.....	1	1			
AUG. 14.....	1	1			
AUG. 16.....	1	1			
AUG. 18.....	1	1			
AUG. 21.....	1	1			
AUG. 23.....	1	1			
AUG. 25.....	1	1			

EEL RIVER BASIN--Continued

11-4750. EEL RIVER AT FORT SEWARD, CALIF.

LOCATION.--Lat 40°13'05", long 123°37'54", at gaging station at bridge, 1.0 mile southeast of Fort Seward, Humboldt County, 1.9 miles upstream from Dobbyn Creek, and 11.8 miles northeast of Garberville.

DRAINAGE AREA.--2,107 square miles.

RECORDS AVAILABLE.--Water temperatures: November 1960 to September 1967.

Sediment records: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 88°F Sept. 21; minimum, 36°F Dec. 28, 29.

Sediment concentrations: Maximum daily, 11,300 ppm Dec. 5; minimum daily, 1 ppm on many days.

Sediment loads: Maximum daily, 2,270,000 tons Dec. 5; minimum daily, 0.1 ton on several days.

EXTREMES, 1960-64, 1965-67.--Water temperatures: Maximum, 91°F July 16, Aug. 15, 1966; minimum, 33°F on several days during December 1965.

Sediment concentrations (1965-67): Maximum daily, 13,900 ppm Jan. 4, 1966; minimum daily 1 ppm on many days during 1965-67.

Sediment loads (1965-67): Maximum daily, 4,270,000 tons Jan. 4, 1966; minimum daily, 0.1 ton on many days during 1965-67.

REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	78	76	79	79	77	75	75	76	78	79	71	69	67	66	64	67	68	67	61	62	65	63	69	72	69	68	64	68	67	67	68	70	
Minimum	68	63	63	63	63	65	64	66	64	65	62	58	53	52	51	55	52	52	53	56	55	54	59	59	57	59	60	59	56	56	55	58	
November	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	68	67	66	66	59	57	60	59	56	55	54	57	57	58	57	56	53	55	56	55	50	46	49	48	47	48	47	47	51	50	---	55	
Minimum	54	54	54	53	53	53	51	50	49	50	52	54	56	56	54	51	50	50	54	50	45	42	43	42	41	44	44	46	47	49	---	49	
December	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	52	50	48	50	50	48	49	50	47	51	59	53	50	51	49	47	47	48	47	48	45	45	47	45	44	42	41	38	42	43	47		
Minimum	49	47	47	48	47	47	47	46	46	46	47	48	49	46	47	43	44	43	43	44	43	41	41	43	43	39	37	36	36	37	38	43	
January	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	44	43	43	43	44	42	42	42	43	43	43	44	46	48	48	49	47	44	41	44	46	45	43	42	41	44	47	48	50	48	48	44	
Minimum	39	39	38	38	38	37	38	37	37	39	39	40	40	42	42	41	42	40	38	41	44	42	41	40	39	40	44	47	46	46	47	40	
February	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	50	51	51	52	53	53	54	53	52	55	52	56	50	50	45	51	51	51	55	54	54	54	53	49	52	54	52	54	---	---	---	52	
Minimum	47	46	46	46	47	46	45	46	46	47	47	47	47	44	43	43	43	46	46	44	43	43	45	45	45	45	45	47	---	---	---	45	
March	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	52	52	51	52	47	49	52	55	55	52	43	44	43	43	47	51	47	51	49	51	56	54	54	53	49	54	53	50	50	46	43	49	
Minimum	48	46	46	44	46	46	45	49	48	42	40	40	40	41	43	46	45	46	46	46	49	50	48	46	46	45	47	45	44	42	41	45	
April	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	50	55	54	54	56	57	60	60	56	52	51	55	52	51	53	48	46	47	48	49	53	52	51	54	54	50	51	52	51	57	---	52	
Minimum	40	48	46	46	44	46	49	51	50	46	44	47	48	46	46	46	44	42	45	45	45	47	47	47	48	46	46	46	45	47	---	46	
May	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	58	61	63	62	63	66	69	69	58	53	53	59	64	68	72	72	70	70	70	72	73	73	70	69	71	70	70	69	69	66	66	66	
Minimum	49	51	53	55	55	55	56	58	52	50	50	49	53	55	57	58	58	58	60	61	62	62	60	59	61	60	62	60	58	57	---	56	
June	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	61	63	70	70	68	71	72	74	71	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	58	57	67	61	62	64	64	65	64	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
July	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
August	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Maximum	---	---	---	80	---	73	---	---	81	---	---	---	74	---	---	82	---	---	---	---	75	---	---	81	---	---	---	75	---	---	79	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
September	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Maximum	---	---	---	79	---	---	75	---	---	68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

EEL RIVER BASIN--Continued

11-4750. EEL RIVER AT FORT SEWARD, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	37	4	0.4	39	2	0.2	7680	2360	S 60800
2..	37	2	.2	40	2	.2	29400	7730	S 735000
3..	36	2	.2	40	1	.1	34200	5850	S 573000
4..	35	1	.1	40	1	.1	30200	6470	S 697000
5..	35	1	.1	40	1	.1	72000	11300	S 2270000
6..	33	3	.3	48	1	.1	33900	4920	S 465000
7..	33	4	.4	51	2	.3	20500	3600	199000
8..	34	4	.4	51	2	.3	15100	2100	85600
9..	34	4	.4	58	3	.5	10500	1400	39700
10..	34	3	.3	49	5	.7	11700	1000	31600
11..	34	3	.3	34	9	.8	10900	200	5900
12..	34	3	.3	70	60	S 12	10300	1150	32000
13..	33	3	.3	180	165	S 107	10900	1300	38300
14..	34	2	.2	992	1970	S 6800	12500	1610	54300
15..	34	2	.2	3820	5410	S 55400	9050	785	19200
16..	34	2	.2	8070	4990	S 109000	7280	520	10200
17..	35	1	.1	3590	1800	S 19900	5900	410	6530
18..	35	1	.1	1370	350	1290	4940	285	3800
19..	35	2	.2	1370	290	1070	4120	210	2340
20..	35	2	.2	19100	5530	S 315000	3440	190	1760
21..	35	2	.2	23700	4770	S 307000	3050	150	1240
22..	35	2	.2	18500	3320	S 180000	2670	125	901
23..	35	2	.2	7500	1110	22500	2440	100	659
24..	37	2	.2	3900	980	10300	2320	85	532
25..	38	1	.1	2360	380	2420	2080	70	390
26..	38	1	.1	1720	200	929	1910	55	284
27..	38	2	.2	1640	170	753	1730	47	220
28..	38	2	.2	1840	210	1040	1520	41	168
29..	38	2	.2	6510	1910	S 36300	1410	32	122
30..	39	2	.2	5520	800	11900	1330	28	101
31..	39	1	.1	--	--	--	1280	25	86
Total	1101	--	6.8	112242	--	1081724.4	366250	--	5335733
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	1170	22	69	32500	2700	237000	1420	23	88
2..	1090	21	62	23200	2200	138000	1340	23	83
3..	1060	20	57	17100	1400	64600	1270	24	82
4..	1030	13	36	12800	1200	41500	1220	20	66
5..	1010	12	33	10100	850	23200	1150	14	43
6..	985	11	29	8200	640	14200	1040	10	28
7..	920	10	25	7080	500	9560	1050	11	31
8..	878	9	21	6180	350	5800	978	12	32
9..	866	8	19	5480	248	3670	932	14	35
10..	848	6	14	5000	214	2900	3210	1330	S 18700
11..	830	6	13	4610	183	2280	11300	3130	S 92300
12..	818	5	11	4200	152	1700	9410	660	16800
13..	812	5	11	4000	125	1350	10100	740	20200
14..	806	5	11	3940	112	1200	8690	400	9390
15..	806	4	8.7	3560	102	980	9770	700	18500
16..	806	3	6.5	3340	86	780	35700	3360	S 377000
17..	800	2	4.3	3050	74	609	31300	2720	230000
18..	788	4	8.5	2800	67	510	22500	1750	106000
19..	770	7	15	2560	62	429	16600	1320	59200
20..	11200	4090	S 224000	2340	54	340	16600	1320	59200
21..	66700	9340	S 1630000	2140	48	277	17000	1280	58800
22..	45500	4900	S 627000	1990	44	240	13200	1500	53500
23..	23000	3060	S 193000	1880	40	203	13800	1300	48400
24..	18900	2670	S 139000	1790	37	180	12100	850	27800
25..	19500	2350	S 129000	1750	34	161	9410	660	16800
26..	34300	4550	S 519000	1740	29	140	7950	590	12700
27..	45800	4130	S 517000	1640	26	115	6980	390	7350
28..	50000	5410	S 724000	1520	24	98	6250	260	4400
29..	72600	6900	S 1360000	--	--	--	6080	258	4240
30..	49300	5100	S 683000	--	--	--	6430	617	10700
31..	47500	3700	S 485000	--	--	--	9350	660	16700
Total	501393	--	7230454.0	176490	--	552022	294130	--	1269168

S Computed by subdividing day.

EEL RIVER BASIN--Continued

11-4750. EEL RIVER AT FORT SEWARD, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	9500	601	15000	5240	110	1600	2010	69	374
2..	9170	572	14200	4980	100	1340	1930	58	300
3..	9050	390	9530	5000	101	1400	2190	56	330
4..	8840	335	8000	5180	130	1820	2490	64	430
5..	7830	291	6150	5620	202	3100	1970	66	350
6..	12400	761	25000	5880	286	4540	2160	57	332
7..	12700	795	27300	6450	403	7000	2200	86	511
8..	9650	435	11300	7750	1030	21600	1910	55	284
9..	7980	238	5130	8930	1280	30900	1740	38	179
10..	7180	314	6090	8780	960	22800	1670	34	150
11..	8030	302	6550	7630	640	13000	1570	31	131
12..	7280	237	4660	6480	390	6820	1540	27	110
13..	6540	215	3800	5560	295	4400	1490	24	97
14..	7500	278	5630	5160	420	5850	1330	29	100
15..	6930	209	3910	5620	820	12000	1200	37	120
16..	6150	168	2790	6850	1080	20000	1130	22	67
17..	8390	509	11500	7600	1130	23000	1120	17	51
18..	11600	664	20800	7750	1100	23000	1110	12	36
19..	10600	480	13700	6940	845	16000	1050	12	34
20..	9800	380	10100	6390	590	10200	1020	12	33
21..	8480	284	6500	6200	535	9000	950	12	31
22..	7980	225	4800	5950	525	8430	895	12	29
23..	7700	249	5200	5410	475	6900	796	12	26
24..	8300	326	7310	4830	352	4590	710	11	21
25..	7580	226	4630	3990	258	2800	653	11	19
26..	6900	199	3710	3380	210	1920	619	11	18
27..	7150	188	3600	3030	178	1500	586	11	17
28..	6880	163	3030	2720	150	1100	557	9	14
29..	6250	140	2400	2570	125	870	520	7	9.8
30..	5720	123	1900	2370	104	665	424	7	8.0
31..	--	--	--	2180	85	500	--	--	--
Total	250060	--	254220	172420	--	268645	39540	--	4211.8
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	385	7	7.3	112	7	2.1	82	1	0.2
2..	350	6	5.7	110	9	2.7	82	1	.2
3..	325	6	5.3	107	11	3.2	82	2	.4
4..	295	6	4.8	103	3	.8	82	2	.4
5..	268	6	4.3	99	3	.8	82	2	.4
6..	254	6	4.1	95	3	.8	82	2	.4
7..	242	6	3.9	92	3	.7	81	2	.4
8..	238	6	3.9	91	4	1.0	81	1	.2
9..	231	6	3.7	95	5	1.3	81	1	.2
10..	228	6	3.7	99	4	1.1	76	1	.2
11..	222	6	3.6	98	3	.8	74		.2
12..	217	6	3.5	98	3	.8	74	2	.4
13..	207	6	3.4	97	2	.5	74	3	.6
14..	198	6	3.2	97	2	.5	74	2	.4
15..	180	6	2.9	95	2	.5	74	2	.4
16..	175	6	2.8	92	2	.5	74	1	.2
17..	170	7	3.2	91	2	.5	74	1	.2
18..	160	9	3.9	91	2	.5	74	1	.2
19..	153	12	5.0	88	1	.2	74	1	.2
20..	150	9	3.6	86	1	.2	74	2	.4
21..	145	6	2.3	86	1	.2	74	2	.4
22..	143	5	1.9	84	1	.2	74	2	.4
23..	141	6	2.3	82	2	.4	74	2	.4
24..	141	5	1.9	82	2	.4	74	3	.6
25..	141	4	1.5	82	1	.2	74	2	.4
26..	140	5	1.9	82	1	.2	74	2	.4
27..	140	5	1.9	82	1	.2	74	1	.2
28..	140	7	2.6	82	1	.2	74	1	.2
29..	138	6	2.2	82	1	.2	74	1	.2
30..	125	6	2.0	82	1	.2	74	1	.2
31..	118	5	1.6	82	1	.2	--	--	--
Total	6160	--	103.9	2844	--	22.1	2291	--	9.6

Total discharge for year (cfs-days)..... 1924921
 Total load for year (tons)..... 15996320.6

EEL RIVER BASIN--Continued

11-4750. EEL RIVER AT FORT SEWARD, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Nov. 30, 1966.....	0835	49		5700	916		33	44	59	66	77	82	87	92	100	--	--	VPWC
Jan. 20, 1967.....	1620	41		15800	5670		--	19	--	31	--	51	70	82	87	98	100	VPWC
Jan. 23.....	1605	45		21200	2810		--	25	--	37	--	62	71	82	95	100	--	VPWC
Jan. 26.....	1630	45		48800	7870		13	16	23	30	41	49	68	94	100	--	--	VPWC
Jan. 28.....	1515	49		51400	4180		--	21	--	38	--	57	77	93	99	100	--	VPWC
Jan. 29.....	1540	50		84000	6820		18	23	35	45	58	66	87	98	100	--	--	VPWC
Feb. 1.....	1555	49		29900	3040		--	--	--	--	--	48	64	83	96	100	--	V
Feb. 4.....	1000	48		12900	1290		--	--	--	--	--	57	70	86	96	100	--	V
Feb. 5.....	1000	47		10100	717		--	--	--	--	--	74	84	93	99	100	--	V
Feb. 7.....	1000	46		7080	548		--	--	--	--	--	62	67	73	80	95	100	S
Apr. 12.....	1145	50		7400	242		--	--	--	--	--	70	76	85	100	--	--	V
May 7.....	1525	56		9740	1510		24	35	50	65	80	90	95	99	100	--	--	VPWC

EEL RIVER BASIN--Continued

11-4750, EEL RIVER AT FORT SEWARD, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, October 1965 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 1, 1965.....	2	4	JAN. 15, 1966.....	381	200
OCT. 4.....	2	1	JAN. 16.....	262	160
OCT. 8.....	2	1	JAN. 17.....	240	120
OCT. 12.....	1	1	JAN. 18.....	196	160
OCT. 15.....	2	1	JAN. 19.....	175	100
OCT. 20.....	1	1	JAN. 20.....	189	100
OCT. 25.....	4	1	JAN. 21.....	134	100
OCT. 29.....	1	3	JAN. 22.....	155	80
NOV. 2.....	2	2	JAN. 23.....	111	95
NOV. 5.....	2	3	JAN. 24.....	98	55
NOV. 8.....	20	35	JAN. 25.....	100	70
NOV. 12.....	10	31	JAN. 26.....	79	50
NOV. 13.....	76	75	JAN. 27.....	68	40
NOV. 14.....	1910	530	JAN. 28.....	60	60
NOV. 16.....	753	430	JAN. 29.....	854	110
NOV. 18.....	594	320	JAN. 30.....	4020	150
NOV. 19.....	1780	670	JAN. 31.....	712	280
NOV. 20.....	810	480	FEB. 1.....	802	300
NOV. 21.....	255	300	FEB. 2.....	474	250
NOV. 22.....	126	160	FEB. 3.....	293	140
NOV. 23.....	84	74	FEB. 4.....	4740	1050
NOV. 24.....	3750	1340	FEB. 5.....	2460	742
NOV. 25.....	1770	500	FEB. 6.....	1940	570
NOV. 26.....	1120	350	FEB. 7.....	1020	370
NOV. 28.....	286	126	FEB. 8.....	609	248
NOV. 29.....	149	68	FEB. 9.....	409	252
NOV. 30.....	94	58	FEB. 10.....	302	220
DEC. 1.....	76	48	FEB. 11.....	234	168
DEC. 2.....	57	42	FEB. 12.....	190	129
DEC. 3.....	46	42	FEB. 13.....	134	126
DEC. 5.....	63	35	FEB. 14.....	117	90
DEC. 6.....	94	45	FEB. 15.....	108	66
DEC. 7.....	198	136	FEB. 17.....	71	55
DEC. 8.....	116	111	FEB. 18.....	60	57
DEC. 9.....	83	74	FEB. 19.....	346	200
DEC. 10.....	52	52	FEB. 20.....	571	212
DEC. 11.....	48	47	FEB. 21.....	155	114
DEC. 12.....	36	45	FEB. 22.....	124	90
DEC. 13.....	25	30	FEB. 23.....	285	140
DEC. 14.....	22	15	FEB. 24.....	407	220
DEC. 15.....	20	30	FEB. 25.....	428	250
DEC. 16.....	13	25	FEB. 26.....	406	174
DEC. 17.....	12	20	FEB. 27.....	266	130
DEC. 18.....	12	15	FEB. 28.....	190	77
DEC. 19.....	9	11	MAR. 1.....	126	65
DEC. 20.....	8	6	MAR. 2.....	132	67
DEC. 21.....	7	12	MAR. 3.....	113	70
DEC. 22.....	8	10	MAR. 4.....	188	55
DEC. 23.....	9	7	MAR. 7.....	868	300
DEC. 24.....	1230	550	MAR. 8.....	3900	875
DEC. 25.....	1880	550	MAR. 9.....	3290	1400
DEC. 26.....	644	220	MAR. 10.....	3650	875
DEC. 28.....	4000	1300	MAR. 11.....	2040	650
DEC. 29.....	5430	800	MAR. 12.....	1580	250
DEC. 30.....	2360	475	MAR. 13.....	2220	325
DEC. 31.....	2490	275	MAR. 14.....	1230	300
JAN. 1, 1966.....	2480	260	MAR. 15.....	1140	140
JAN. 2.....	633	180	MAR. 16.....	1120	300
JAN. 3.....	6180	750	MAR. 17.....	692	180
JAN. 4.....	8140	1400	MAR. 18.....	517	225
JAN. 5.....	9140	1200	MAR. 19.....	1240	160
JAN. 6.....	5740	1200	MAR. 20.....	432	140
JAN. 7.....	4680	1300	MAR. 21.....	360	70
JAN. 8.....	--	800	MAR. 22.....	315	80
JAN. 9.....	3100	700	MAR. 23.....	294	80
JAN. 10.....	1640	720	MAR. 24.....	224	90
JAN. 11.....	1230	280	MAR. 25.....	325	80
JAN. 12.....	694	300	MAR. 26.....	390	100
JAN. 13.....	812	250	MAR. 27.....	465	170
JAN. 14.....	419	200	MAR. 28.....	466	250

EEL RIVER BASIN--Continued

11-4750. EEL RIVER AT FORT SEWARD, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1965 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
MAR. 29, 1966.....	585	275	JULY 29, 1966.....	10	2
MAR. 30.....	1270	325	AUG. 1.....	9	2
MAR. 31.....	669	480	AUG. 3.....	11	2
APR. 1.....	1150	390	AUG. 17.....	5	3
APR. 2.....	1160	510	OCT. 3.....	2	3
APR. 4.....	862	480	OCT. 5.....	1	2
APR. 5.....	700	430	OCT. 7.....	4	6
APR. 6.....	746	450	OCT. 10.....	3	3
APR. 7.....	644	450	OCT. 14.....	2	2
APR. 8.....	618	400	OCT. 17.....	1	2
APR. 9.....	502	340	OCT. 21.....	2	3
APR. 10.....	918	410	OCT. 25.....	1	4
APR. 11.....	2700	976	OCT. 28.....	2	3
APR. 13.....	818	350	OCT. 31.....	1	2
APR. 14.....	501	280	NOV. 1.....	2	6
APR. 15.....	498	270	NOV. 4.....	1	4
APR. 16.....	545	220	NOV. 12.....	61	21
APR. 17.....	590	340	NOV. 13.....	201	58
APR. 18.....	553	330	NOV. 16.....	5070	1820
APR. 19.....	330	260	NOV. 18.....	225	180
APR. 20.....	262	144	NOV. 19.....	166	186
APR. 21.....	224	160	NOV. 20.....	6480	2000
APR. 22.....	154	136	NOV. 21.....	3680	1200
APR. 23.....	164	124	NOV. 22.....	2560	860
APR. 24.....	147	144	NOV. 23.....	938	410
APR. 25.....	192	144	NOV. 24.....	334	213
APR. 26.....	248	184	NOV. 25.....	183	136
APR. 27.....	190	164	NOV. 26.....	112	74
APR. 28.....	126	136	NOV. 27.....	62	60
APR. 29.....	114	100	NOV. 28.....	97	60
APR. 30.....	96	93	NOV. 29.....	916	602
MAY 1.....	82	78	NOV. 30.....	852	284
MAY 2.....	82	80	DEC. 1.....	2260	353
MAY 3.....	86	82	DEC. 2.....	12200	1900
MAY 4.....	92	78	DEC. 3.....	5840	2120
MAY 6.....	183	124	DEC. 4.....	5200	680
MAY 9.....	76	73	DEC. 5.....	8380	2560
MAY 11.....	82	73	DEC. 6.....	4330	1160
MAY 13.....	54	47	DEC. 7.....	3580	510
MAY 16.....	40	43	DEC. 8.....	1680	340
MAY 18.....	39	34	DEC. 9.....	1120	300
MAY 20.....	29	25	DEC. 10.....	1080	250
MAY 23.....	24	33	DEC. 12.....	4140	252
MAY 25.....	16	17	DEC. 13.....	1160	370
MAY 27.....	16	22	DEC. 14.....	1420	468
MAY 30.....	10	13	DEC. 15.....	686	240
JUNE 1.....	7	12	DEC. 16.....	537	198
JUNE 3.....	6	9	DEC. 17.....	381	284
JUNE 6.....	4	5	DEC. 18.....	247	240
JUNE 8.....	3	5	DEC. 19.....	206	140
JUNE 10.....	4	6	DEC. 20.....	168	150
JUNE 13.....	3	4	DEC. 21.....	136	154
JUNE 15.....	4	5	DEC. 22.....	112	68
JUNE 17.....	5	8	DEC. 23.....	108	52
JUNE 20.....	2	2	DEC. 24.....	82	140
JUNE 22.....	2	2	DEC. 26.....	58	68
JUNE 24.....	3	3	DEC. 27.....	48	55
JUNE 27.....	1	6	DEC. 28.....	41	49
JUNE 29.....	11	7	DEC. 29.....	34	40
JULY 1.....	2	4	DEC. 30.....	28	180
JULY 5.....	3	2	DEC. 31.....	25	28
JULY 8.....	2	3	JAN. 1, 1967.....	21	24
JULY 11.....	1	2	JAN. 2.....	21	24
JULY 13.....	12	4	JAN. 3.....	20	19
JULY 15.....	10	2	JAN. 4.....	11	17
JULY 18.....	11	3	JAN. 5.....	12	16
JULY 20.....	11	5	JAN. 6.....	11	12
JULY 22.....	10	2	JAN. 7.....	10	14
JULY 25.....	11	2	JAN. 8.....	9	10
JULY 27.....	9	2	JAN. 9.....	7	10

EEL RIVER BASIN--Continued

11-4750. EEL RIVER AT FORT SEWARD, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1965 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
JAN. 10, 1967.....	6	10	MAR. 30, 1967.....	818	277
JAN. 11.....	7	10	MAR. 31.....	734	412
JAN. 12.....	6	10	APR. 1.....	470	262
JAN. 13.....	5	8	APR. 2.....	466	245
JAN. 14.....	5	8	APR. 3.....	377	190
JAN. 15.....	4	8	APR. 4.....	328	190
JAN. 16.....	3	8	APR. 5.....	259	132
JAN. 17.....	2	7	APR. 7.....	778	415
JAN. 18.....	4	6	APR. 8.....	340	210
JAN. 19.....	1	7	APR. 9.....	229	150
JAN. 20.....	5670	760	APR. 10.....	336	120
JAN. 21.....	9050	2460	APR. 11.....	290	177
JAN. 23.....	2810	550	APR. 12.....	358	170
JAN. 24.....	2090	400	APR. 13.....	210	90
JAN. 25.....	1800	330	APR. 14.....	312	150
JAN. 26.....	7870	1820	APR. 15.....	198	115
JAN. 27.....	3540	680	APR. 16.....	162	82
JAN. 28.....	4180	770	APR. 17.....	616	300
JAN. 29.....	6820	2500	APR. 18.....	562	350
JAN. 30.....	4450	780	APR. 19.....	470	280
JAN. 31.....	4780	736	APR. 20.....	550	230
FEB. 1.....	3040	440	APR. 21.....	276	145
FEB. 2.....	1950	352	APR. 24.....	300	175
FEB. 3.....	1340	290	APR. 25.....	210	120
FEB. 4.....	1290	200	APR. 26.....	199	100
FEB. 5.....	717	220	APR. 28.....	160	90
FEB. 7.....	548	256	APR. 30.....	124	70
FEB. 9.....	250	172	MAY 2.....	92	60
FEB. 11.....	186	138	MAY 4.....	138	89
FEB. 13.....	126	61	MAY 6.....	286	212
FEB. 15.....	106	97	MAY 8.....	1180	440
FEB. 17.....	74	71	MAY 9.....	490	775
FEB. 18.....	62	60	MAY 10.....	911	400
FEB. 21.....	46	47	MAY 12.....	347	246
FEB. 23.....	41	33	MAY 14.....	262	156
FEB. 25.....	34	28	MAY 16.....	1100	460
FEB. 27.....	25	24	MAY 18.....	1100	272
MAR. 1.....	22	19	MAY 20.....	559	548
MAR. 2.....	25	16	MAY 22.....	532	325
MAR. 3.....	24	16	MAY 24.....	325	250
MAR. 5.....	12	12	MAY 26.....	206	138
MAR. 7.....	11	10	MAY 28.....	156	150
MAR. 10.....	1390	360	MAY 30.....	98	80
MAR. 11.....	2300	1020	JUNE 1.....	66	58
MAR. 12.....	554	300	JUNE 4.....	67	51
MAR. 13.....	570	330	JUNE 6.....	54	55
MAR. 14.....	366	196	JUNE 7.....	86	76
MAR. 15.....	588	240	JUNE 9.....	38	25
MAR. 16.....	5800	1650	JUNE 11.....	31	26
MAR. 17.....	2480	775	JUNE 13.....	24	20
MAR. 18.....	1540	500	JUNE 15.....	37	6
MAR. 19.....	1480	460	JUNE 18.....	12	6
MAR. 20.....	1780	465	JUNE 20.....	12	6
MAR. 21.....	1100	435	JUNE 27.....	11	3
MAR. 22.....	1660	340	JULY 12.....	6	2
MAR. 23.....	1140	390	JULY 14.....	6	3
MAR. 24.....	818	425	JULY 17.....	7	2
MAR. 25.....	556	220	JULY 19.....	12	3
MAR. 26.....	668	237	JULY 23.....	6	2
MAR. 29.....	250	135	AUG. 3.....	11	4

EEL RIVER BASIN--Continued

11-4752.5. EEL RIVER AT MCCANN, CALIF.

LOCATION.--Lat 40°19'35", long 123°50'15", downstream from Summer Bridge approximately 0.5 mile northwest of McCann, Humboldt County, and 6.5 miles upstream from confluence with the South Fork.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 12, 1966....	33			49	13	8.8	1.6	188	0	--	6.3		--	0.1				176			377	7.9
Nov. 16.....	7430			26	6.9	5.8	1.2	88	0	--	5.0		--	.3				94			223	7.9
Dec. 14.....	10100			18	5.2	3.8	1.5	73	0	--	1.5		--	.0				66			143	8.1
Jan. 18, 1967....	824			30	8.0	6.0	1.0	118	0	--	3.4		--	.0				108			240	7.7
Feb. 8.....	6180			21	5.5	4.3	.7	84	0	--	1.5		--	.1				75			161	8.0
Mar. 8.....	930			29	7.7	5.9	.9	113	0	--	2.6		--	.0				104			226	8.1
Apr. 5.....	7830	8.1		17	5.6	4.1	.9	74	0	--	1.3		--	.1				66			140	8.2
May 10.....	9800			17	4.9	3.3	.6	71	0	8.0	1.0		0.7	.0	78			62			131	8.0
June 7.....	2060			22	5.6	4.0	.7	86	0	--	1.0		--	.0				78			167	8.1
July 19.....	2060			--	--	6.6	--	139	0	--	3.8		--	.1				124			279	8.2
Aug. 9.....	100			--	--	7.5	--	153	4	--	4.5		--	.1				153			323	8.4
Sept. 13.....	90			47	11	8.6	1.6	168	0	31	6.0		--	.0				162			342	8.0

11-4755. SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.

DRAINAGE AREA.--43.9 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1960 September 1967.

Sediment records: October 1962 to September 1967

EXTREMES, 1966-67.--Water temperatures: Maximum, 75°F Aug. 1, 2; minimum, 43°F on several days in December and January.

Sediment concentrations: Maximum daily, 1.390 ppm Jan. 21; minimum daily, 1 ppm on several days in February.

Sediment loads: Maximum daily, 9,100 tons Jan. 21; minimum daily, less than 0.05 ton on many days.

EXTREMES, 1960-67.--Water temperatures: Maximum (1960-61, 1962-67), 82°F Aug. 7, 1961; minimum (1961-65, 1966-67), 37°F

Nov. 17, 18, 1961

Sediment concentrations (1962-67): Maximum daily, (estimated) 4,900 ppm Dec. 22, 1964; minimum daily, 1 ppm on many days during 1963-67.

Sediment loads (1962-67): Maximum daily, (estimated) 230,000 tons Dec. 22, 1964; minimum daily, less than 0.05 ton on many days during 1963-67.

Temperature (°F) of water, water year October 1966 to September 1967

[illegible]

EEL RIVER BASIN--Continued

11-4755. SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967
(Where no concentrations are reported, loads are estimated)

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2.0	--	T	2.6	--	T	309	219	S 226
2..	2.2	--	T	2.6	--	T	1480	845	S 4210
3..	2.3	--	T	2.5	--	T	965	285	S 806
4..	15	14	0.6	2.5	4	T	1320	593	S 3180
5..	6.6	12	.2	2.5	--	T	2010	811	S 5000
6..	3.4	34	.3	12	13	S 0.5	900	190	462
7..	2.9	15	.1	13	20	.7	576	125	194
8..	2.7	11	.1	6.7	23	.4	427	80	92
9..	2.5	11	.1	5.1	23	.3	338	25	23
10..	2.5	12	.1	4.4	18	.2	369	42	42
11..	2.4	13	.1	8.3	5	.1	308	26	22
12..	2.4	14	.1	147	186	S 81	317	30	26
13..	2.4	15	.1	98	39	10	372	235	S 277
14..	2.5	15	.1	312	130	S 112	358	99	96
15..	2.6	14	.1	284	82	S 74	305	26	21
16..	2.7	12	.1	433	186	S 264	254	20	14
17..	2.6	10	.1	154	18	7.5	211	15	8.5
18..	2.5	--	T	89	15	3.6	178	12	5.8
19..	2.5	--	T	227	65	S 82	152	10	4.1
20..	2.5	--	T	669	181	327	132	9	3.2
21..	2.6	2	T	838	219	S 512	116	9	2.8
22..	2.6	--	T	661	100	S 193	103	9	2.5
23..	2.9	--	T	351	34	32	109	8	2.4
24..	2.9	--	T	221	30	18	91	6	1.5
25..	2.8	--	T	158	24	10	83	7	1.6
26..	2.6	--	T	121	14	4.6	75	7	1.4
27..	2.7	--	T	98	10	2.6	69	6	1.1
28..	2.7	--	T	100	10	2.7	63	5	.9
29..	2.8	--	T	101	12	3.3	59	4	.6
30..	2.8	--	T	83	8	1.8	56	3	.5
31..	2.6	3	T	--	--	--	52	3	.4
Total	97.2	--	2.5	5207.2	--	1743.4	12157	--	14728.3
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	49	3	0.4	810	80	175	46	5	0.6
2..	45	3	.4	554	44	66	45	5	.6
3..	43	2	.2	419	21	24	44	4	.5
4..	41	2	.2	329	13	12	42	4	.5
5..	42	4	.5	265	9	6.4	40	3	.3
6..	38	8	.8	219	7	4.1	38	4	.4
7..	36	6	.6	188	7	3.6	37	8	.8
8..	34	5	.5	160	7	3.0	37	10	1.0
9..	33	5	.4	140	7	2.6	37	10	1.0
10..	32	4	.3	124	6	2.0	474	316	S 560
11..	30	3	.2	114	4	1.2	523	206	S 330
12..	29	2	.2	101	3	.8	403	30	33
13..	28	2	.2	97	3	.8	403	42	46
14..	27	2	.1	93	3	.8	393	28	30
15..	26	2	.1	95	5	1.3	412	41	S 51
16..	25	3	.2	90	4	1.0	1210	661	S 2220
17..	24	3	.2	80	2	.4	865	639	S 1530
18..	23	4	.2	77	2	.4	654	407	S 749
19..	25	20	1.4	72	1	.2	495	76	100
20..	1030	495	S 1790	67	1	.2	589	95	S 151
21..	2360	1390	S 9100	62	1	.2	526	51	72
22..	975	320	S 933	59	1	.2	457	42	52
23..	578	75	117	58	1	.2	451	105	128
24..	543	163	S 243	55	1	.1	358	44	43
25..	470	42	.53	56	1	.2	304	10	8.2
26..	1290	804	S 3090	52	1	.1	259	7	4.9
27..	1390	385	1440	50	3	.4	219	8	4.7
28..	1680	330	1500	47	5	.6	211	29	17
29..	2470	1060	S 7600	--	--	--	185	26	13
30..	1400	964	S 3630	--	--	--	265	49	S 41
31..	1230	500	1660	--	--	--	374	72	73
Total	16046	--	31163.1	4533	--	307.8	10396	--	6262.5

S Computed by subdividing day.

T Less than 0.05 ton.

EEL RIVER BASIN--Continued

11-4755. SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	390	73	77	160	6	2.6	41	5	0.6
2..	358	45	43	148	8	3.2	50	13	1.8
3..	339	19	17	136	10	3.7	42	12	1.4
4..	301	9	7.3	124	11	3.7	39	9	.9
5..	309	17	14	116	11	3.4	37	5	.5
6..	512	75	104	107	10	2.9	36	5	.5
7..	498	38	51	97	11	2.9	35	5	.5
8..	432	16	19	92	13	3.2	34	5	.5
9..	355	14	13	103	17	4.7	32	5	.4
10..	345	41	38	138	32	12	31	4	.3
11..	345	34	32	120	23	7.5	30	4	.3
12..	313	16	14	105	13	3.7	29	4	.3
13..	301	26	21	97	7	1.8	29	4	.3
14..	355	45	43	92	5	1.2	28	4	.3
15..	320	13	11	86	5	1.2	26	4	.3
16..	289	9	7.0	80	6	1.3	26	3	.2
17..	558	147	226	77	6	1.2	25	3	.2
18..	554	72	110	72	7	1.4	24	3	.2
19..	484	27	35	67	7	1.3	24	3	.2
20..	419	20	23	62	7	1.2	23	3	.2
21..	361	20	19	59	6	1.0	23	3	.2
22..	320	21	18	56	6	.9	21	4	.2
23..	301	22	18	53	6	.9	20	4	.2
24..	262	24	17	52	6	.8	20	4	.2
25..	230	25	16	50	5	.7	20	4	.2
26..	214	26	15	47	5	.6	19	4	.2
27..	233	29	18	46	5	.6	18	4	.2
28..	206	13	7.2	46	5	.6	18	4	.2
29..	190	9	4.6	44	4	.5	17	3	.1
30..	178	6	2.9	42	4	.5	17	3	.1
31..	--	--	--	41	4	.4	--	--	--
Total	10272	--	1041.0	2615	--	71.6	834	--	11.7
	JULY			AUGUST			SEPTEMBER		
1..	16	3	0.1	6.5	5	0.1	2.2	--	
2..	16	3	.1	6.2	4	.1	2.2	--	
3..	15	3	.1	5.9	4	.1	2.1	--	
4..	14	3	.1	5.6	--	T	2.2	--	
5..	14	3	.1	5.2	--	T	2.2	--	
6..	14	3	.1	5.4	2	T	2.1	4	
7..	14	3	.1	5.4	--	T	1.9	--	
8..	14	3	.1	5.0	--	T	1.9	--	
9..	14	4	.2	4.8	--	T	1.9	--	
10..	13	4	.1	4.6	--	T	2.1	--	
11..	12	4	.1	4.5	--	T	2.1	--	
12..	12	4	.1	4.5	--	T	2.0	--	
13..	11	5	.1	4.1	2	T	2.0	--	
14..	11	5	.1	4.1	--	T	1.9	2	
15..	11	5	.1	3.9	--	T	1.9	--	
16..	10	5	.1	3.6	--	T	1.6	--	
17..	10	4	.1	3.6	--	T	1.9	--	
18..	9.5	4	.1	3.4	--	T	2.3	--	
19..	9.3	3	.1	3.2	2	T	2.5	--	
20..	9.1	3	.1	3.1	--	T	2.5	--	
21..	9.0	2	T	3.1	--	T	2.2	--	
22..	9.1	8	.2	2.9	--	T	2.0	8	
23..	9.1	10	.2	2.9	--	T	1.9	--	
24..	8.6	17	.4	2.7	--	T	1.9	--	
25..	8.2	10	.2	2.7	--	T	1.9	--	
26..	7.9	8	.2	2.7	--	T	1.6	--	
27..	7.6	8	.2	2.7	--	T	1.6	--	
28..	7.3	7	.1	2.7	--	T	1.6	--	
29..	7.3	7	.1	2.7	--	T	1.3	1	
30..	7.3	6	.1	2.7	4	T	1.3	--	
31..	6.9	6	.1	2.4	--	T	--	--	
Total	337.2	--	3.9	122.8	--	1.0	58.8	--	0.6
Total discharge for year (cfs-days).....								62676.2	
Total load for year (tons).....								55337.4	

S Computed by subdividing day.

T Less than 0.05 ton.

EEL RIVER BASIN--Continued

11-4755. SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
Nov. 12, 1966.....	1130	52		190	258			--		--		99	100	--	--	--	S
Nov. 23.....	1445	49		323	29			--		--		91	98	100	--	--	S
Jan. 21, 1967.....	1030	48		3020	1420			--		--		70	82	92	99	100	V
Jan. 21.....	1745	48		1950	1390			--		--		73	84	93	99	100	V
Jan. 26.....	0940	47		1830	1820		22	30	47	60	74	82	94	99	100	--	VPWC
Jan. 29.....	1745	50		2010	636			33		57		78	87	94	99	100	VPWC
Jan. 30.....	1800	49		1370	1210			--		--		69	80	91	99	100	V

EEL RIVER BASIN--Continued

11-4755. SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, October 1965 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 4, 1965.....	2	1	APR. 18, 1966.....	5	14
OCT. 5.....	1	2	APR. 20.....	3	10
OCT. 10.....	1	1	APR. 25.....	6	10
OCT. 15.....	1	2	APR. 30.....	3	11
OCT. 19.....	1	1	MAY 4.....	4	2
OCT. 25.....	1	1	MAY 6.....	2	2
NOV. 1.....	1	1	MAY 9.....	1	1
NOV. 3.....	1	1	MAY 11.....	1	1
NOV. 6.....	8	17	MAY 14.....	1	1
NOV. 8.....	215	232	MAY 18.....	1	1
NOV. 18.....	295	310	MAY 23.....	1	2
NOV. 20.....	2	9	MAY 27.....	1	1
NOV. 23.....	56	75	MAY 31.....	1	1
NOV. 24.....	380	100	JUNE 3.....	1	2
NOV. 25.....	36	50	JUNE 4.....	3	3
NOV. 26.....	10	21	JUNE 8.....	3	5
NOV. 27.....	9	11	JUNE 12.....	2	1
NOV. 28.....	6	9	JUNE 15.....	2	3
NOV. 30.....	2	6	JUNE 20.....	2	1
DEC. 4.....	3	1	JUNE 22.....	2	1
DEC. 7.....	2	1	JUNE 24.....	1	2
DEC. 9.....	1	3	JUNE 27.....	1	1
DEC. 11.....	2	3	JUNE 30.....	1	1
DEC. 15.....	2	3	JULY 2.....	1	1
DEC. 18.....	1	2	JULY 8.....	4	1
DEC. 21.....	1	2	JULY 12.....	3	2
DEC. 24.....	58	50	JULY 14.....	1	1
DEC. 26.....	13	10	JULY 18.....	1	1
DEC. 27.....	11	7	JULY 19.....	1	1
DEC. 28.....	879	375	JULY 20.....	3	2
DEC. 29.....	210	120	JULY 22.....	3	2
DEC. 30.....	108	70	JULY 25.....	2	1
DEC. 31.....	79	40	JULY 29.....	2	1
JAN. 2, 1966.....	109	50	AUG. 2.....	2	2
JAN. 3.....	906	450	AUG. 8.....	5	1
JAN. 4.....	3520	900	AUG. 15.....	34	1
JAN. 5.....	1890	500	AUG. 29.....	1	1
JAN. 6.....	1170	400	OCT. 4.....	43	42
JAN. 12.....	17	25	OCT. 6.....	88	225
JAN. 14.....	14	20	OCT. 14.....	15	2
JAN. 17.....	7	5	OCT. 21.....	2	1
JAN. 20.....	5	13	OCT. 31.....	3	1
JAN. 22.....	18	30	NOV. 4.....	4	1
JAN. 24.....	31	44	NOV. 6.....	7	6
JAN. 28.....	2	9	NOV. 10.....	22	32
JAN. 29.....	230	201	NOV. 11.....	4	6
JAN. 31.....	15	15	NOV. 12.....	258	344
FEB. 4.....	151	110	NOV. 13.....	35	42
FEB. 5.....	33	30	NOV. 14.....	179	166
FEB. 7.....	17	17	NOV. 16.....	228	186
FEB. 9.....	10	13	NOV. 17.....	14	19
FEB. 15.....	3	10	NOV. 18.....	14	10
FEB. 22.....	3	9	NOV. 19.....	23	26
FEB. 25.....	38	42	NOV. 20.....	176	166
FEB. 27.....	11	15	NOV. 21.....	256	176
FEB. 28.....	6	13	NOV. 22.....	89	152
MAR. 3.....	6	8	NOV. 23.....	29	26
MAR. 6.....	50	58	NOV. 24.....	30	16
MAR. 9.....	344	156	NOV. 27.....	10	7
MAR. 12.....	40	27	NOV. 28.....	8	13
MAR. 15.....	72	56	DEC. 4.....	195	126
MAR. 18.....	13	18	DEC. 5.....	778	490
MAR. 22.....	10	15	DEC. 6.....	141	130
MAR. 28.....	3	10	DEC. 7.....	129	70
APR. 2.....	2	10	DEC. 9.....	20	21
APR. 5.....	8	21	DEC. 12.....	23	28
APR. 6.....	15	7	DEC. 13.....	51	46
APR. 10.....	59	50	DEC. 15.....	24	20
APR. 11.....	37	45	DEC. 20.....	9	10
APR. 14.....	12	11	DEC. 24.....	11	8

EEL RIVER BASIN--Continued

11-4755. SOUTH FORK EEL RIVER NEAR BRANSCOMB, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1965 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
DEC. 25, 1966.....	7	9			
DEC. 28.....	5	7			
DEC. 29.....	3	7			
JAN. 2, 1967.....	3	2			
JAN. 4.....	2	2			
JAN. 6.....	8	10			
JAN. 9.....	5	6			
JAN. 11.....	14	19			
JAN. 13.....	2	1			
JAN. 18.....	5	1			
JAN. 20.....	284	265			
JAN. 21.....	1390	650			
JAN. 22.....	169	135			
JAN. 23.....	60	45			
JAN. 24.....	242	120			
JAN. 25.....	54	35			
JAN. 26.....	1820	875			
JAN. 27.....	326	220			
JAN. 28.....	306	255			
JAN. 29.....	636	555			
JAN. 30.....	1210	570			
JAN. 31.....	178	135			
FEB. 1.....	85	135			
FEB. 2.....	33	28			
FEB. 3.....	18	16			
FEB. 5.....	8	10			
FEB. 6.....	7	9			
FEB. 8.....	7	7			
FEB. 12.....	3	5			
FEB. 13.....	3	6			
FEB. 15.....	8	15			
FEB. 17.....	2	6			
FEB. 20.....	1	5			
FEB. 26.....	1	3			
FEB. 28.....	6	7			
MAR. 6.....	3	2			
MAR. 10.....	267	246			
MAR. 12.....	38	34			
MAR. 14.....	12	17			
MAR. 16.....	797	255			
MAR. 17.....	843	265			
MAR. 21.....	43	40			
MAR. 23.....	105	90			
MAR. 25.....	8	10			
MAR. 28.....	46	76			
MAR. 30.....	76	95			
MAR. 31.....	70	96			
APR. 3.....	15	10			
APR. 4.....	8	14			
APR. 6.....	44	30			
APR. 8.....	15	8			
APR. 11.....	34	37			
APR. 16.....	9	7			
APR. 17.....	175	112			
APR. 19.....	22	20			
APR. 24.....	25	30			
APR. 27.....	20	28			
APR. 30.....	5	15			
MAY 4.....	11	10			
MAY 10.....	27	41			
MAY 14.....	5	4			
MAY 19.....	7	7			
MAY 31.....	4	2			
JUNE 3.....	12	21			
JUNE 5.....	5	4			
JUNE 13.....	4	2			
JUNE 18.....	3	2			
JUNE 26.....	4	2			
JULY 1.....	3	2			
JULY 7.....	3	2			
JULY 21.....	2	3			

EEL RIVER BASIN--Continued

11-4758. SOUTH FORK EEL RIVER AT LEGGETT, CALIF.

LOCATION.--Lat 39°52'30", long 123°43'10", 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, Mendocino County.

DRAINAGE AREA.--248 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 78°F on several days in June, July, and August; minimum, 42°F on several days in January.

EXTREMES, 1965-67.--Water temperatures: Maximum 78°F on several days in June 1966, and during June, July, and August in 1967; minimum, 41°F Dec. 20, 21, 23, 1965.

Temperature (°F) of water, water year October 1966 to September 1967

		Temperature (°F) of water, water year October 1966 to September 1967																															
Month	Day																															Average	
	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		
October																																	
Maximum	68	68	68	66	66	65	66	66	66	65	65	65	59	57	57	57	57	56	57	57	57	57	57	57	57	57	57	57	56	56	56	60	
Minimum	67	67	65	66	64	64	64	65	64	63	64	59	57	56	56	56	55	55	55	56	57	56	56	56	56	56	57	56	55	55	54	59	
November																																	
Maximum	55	55	55	54	54	55	55	53	52	52	53	54	54	54	55	54	53	54	55	54	52	50	50	49	49	48	49	50	50	52	52	--	52
Minimum	54	54	54	53	53	54	52	51	51	51	52	53	53	54	54	53	52	52	54	52	50	50	49	47	47	48	49	50	50	51	--	51	
December																																	
Maximum	52	52	52	52	53	52	52	51	51	51	52	54	54	53	51	50	50	49	49	50	49	48	48	48	47	47	46	44	44	44	44	49	
Minimum	52	52	52	52	52	52	51	51	51	51	51	52	52	50	50	49	49	48	48	49	48	48	47	47	47	46	44	44	44	44	44	48	
January																																	
Maximum	44	44	44	44	44	44	44	43	44	44	44	45	46	46	46	46	44	45	44	48	49	48	46	46	46	45	48	49	50	50	50	45	
Minimum	44	44	44	44	44	44	42	42	42	42	43	44	43	43	43	43	42	42	42	44	44	48	46	46	44	44	44	48	50	50	49	44	
February																																	
Maximum	50	49	49	49	49	49	48	48	48	47	48	48	48	47	46	48	50	50	49	48	48	48	47	48	47	49	50	49	--	--	--	48	
Minimum	49	49	49	49	49	48	48	47	47	48	48	48	46	46	46	46	48	47	46	45	46	46	47	47	48	48	48	49	--	--	--	47	
March																																	
Maximum	49	50	49	49	49	50	52	52	50	50	46	46	46	46	48	50	50	50	50	51	52	52	52	51	50	51	51	51	--	--	--	51	
Minimum	48	47	45	45	45	46	48	48	48	46	46	46	46	46	46	48	50	50	50	50	51	52	50	50	50	50	50	48	--	--	--	48	
April																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	53	50	49	50	48	48	48	49	49	50	51	50	51	53	51	50	49	50	52	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	48	49	48	48	48	46	46	48	49	49	50	50	50	51	50	48	49	49	50	--	--	
May																																	
Maximum	52	54	55	56	57	58	59	61	58	56	54	57	59	61	62	64	65	65	65	66	67	67	67	66	66	65	65	63	64	61	63	61	
Minimum	51	51	53	53	54	55	56	58	56	54	54	53	54	55	47	58	59	60	61	62	62	62	60	60	60	60	59	60	59	58	58	56	
June																																	
Maximum	59	59	67	66	64	66	68	69	68	69	68	70	70	71	72	72	74	74	73	73	73	72	73	74	75	74	74	76	77	78	--	70	
Minimum	58	58	62	61	62	62	62	62	63	63	63	64	64	64	65	66	66	68	68	68	67	66	66	66	67	68	68	68	70	70	--	64	
July																																	
Maximum	78	77	77	77	77	77	77	77	77	77	78	78	77	78	78	77	77	76	76	76	76	76	77	77	77	76	76	77	74	76	77	76	
Minimum	70	70	70	70	70	69	69	69	69	69	70	70	70	70	70	70	70	69	68	69	69	70	70	70	70	70	69	68	69	67	67	69	
August																																	
Maximum	76	76	76	76	77	76	77	77	77	77	77	77	77	77	78	77	77	77	77	76	76	76	77	76	77	76	74	78	77	74	76	76	
Minimum	66	68	68	67	68	69	69	69	69	68	69	68	67	68	69	68	68	68	68	68	68	69	70	70	70	71	70	70	70	70	69	67	
September																																	
Maximum	77	77	77	77	76	76	76	76	75	73	74	75	74	74	74	74	70	74	74	74	74	74	74	74	74	73	74	73	74	73	71	--	
Minimum	70	70	69	69	67	69	68	68	66	66	67	66	66	65	64	65	67	67	66	67	66	66	66	66	66	65	65	65	66	64	66	--	

EEL RIVER BASIN--Continued

11-4765. SOUTH FORK EEL RIVER NEAR MIRANDA, CALIF.

LOCATION.--Lat 40°10'55", long 123°46'30", 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, Humboldt County, and 20 miles upstream from mouth.

DRAINAGE AREA.--537 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Water temperatures: November 1960 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 82°F June 30 to July 4; minimum, 42°F Dec. 27, 28, Jan. 6-8.

EXTREMES, 1960-64, 1965-67.--Water temperatures: Maximum (1960-61, 1963-64, 1965-67), 93°F July 25, 1964; minimum, 34°F Jan. 20, 21, 1963.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 12, 1966....	38			40	13	10	1.5	188	0	--	7.3		0.9	0.1				154			336	8.2
Nov. 16.....	7600			20	6.1	6.4	1.5	69	0	--	3.6		6.4	.0				75			180	7.0
Dec. 14.....	4970			13	4.3	5.2	1.2	60	0	--	2.9		.1	.0				50			120	8.0
Jan. 18, 1967....	435			22	7.0	6.8	1.0	94	2	--	3.9		.2	.1				84			190	8.3
Feb. 8.....	1880			14	5.0	5.7	.7	69	0	--	2.6		.6	.0				56			137	8.0
Mar. 8.....	423			20	6.6	6.8	.9	88	2	--	3.1		.7	.0				77			179	8.3
Apr. 5.....	3240			13	4.7	5.5	.9	72	0	--	2.5		.2	.1				52			122	8.1
May 10.....	1320	12		16	5.6	5.9	.8	76	0	7.0	2.9		.2	.0				63			148	8.1
June 7.....	375			22	7.0	7.0	1.1	101	0	--	3.1		.5	.2	88			84			189	8.2
July 19.....	114			--	--	9.0	--	124	4	--	5.1		.2	.0				111			252	8.4
Aug. 9.....	76			--	--	9.5	--	136	0	3.3	6.1		.4	.1				113			259	8.2
Sept. 13.....	84			32	10	10	1.5	146	0	14	7.2		.9	.1				121			275	8.1

EEL RIVER BASIN--Continued

11-4765. SOUTH FORK EEL RIVER NEAR MIRANDA, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	69	69	68	69	68	66	68	68	67	68	66	63	60	59	58	59	59	60	57	58	58	57	62	64	62	62	61	60	59	60	61	62
Minimum	66	64	62	64	63	64	63	64	62	63	63	58	56	54	53	54	54	54	54	54	55	55	56	60	59	57	59	57	55	56	56	58
November																																
Maximum	61	59	58	58	56	54	55	53	52	52	54	56	56	56	56	56	54	55	56	56	52	50	50	49	48	50	50	53	54	—	53	
Minimum	56	55	55	54	54	54	52	50	48	50	52	54	56	56	56	54	53	53	55	52	50	50	48	48	46	48	50	50	51	52	—	52
December																																
Maximum	54	53	52	53	53	52	52	52	52	52	53	54	54	53	52	50	50	49	49	50	50	48	50	50	48	48	44	44	44	46	45	50
Minimum	53	52	51	52	52	52	51	50	50	50	51	52	53	53	52	50	50	49	48	48	49	47	48	48	48	44	42	42	43	44	43	48
January																																
Maximum	46	45	45	46	46	44	44	44	45	45	45	47	47	48	48	47	45	46	44	48	49	48	47	46	46	46	48	50	52	52	52	47
Minimum	44	43	43	44	43	42	42	42	43	44	44	44	45	46	46	46	44	43	43	44	48	47	46	44	44	46	47	50	50	50	52	45
February																																
Maximum	52	52	52	52	52	52	51	51	52	52	52	53	52	50	48	50	53	53	51	49	49	50	51	50	51	50	51	52	—	—	—	51
Minimum	51	50	50	50	50	50	49	50	50	50	49	50	49	48	46	48	50	51	48	46	46	46	48	48	48	48	48	49	—	—	—	48
March																																
Maximum	52	51	50	51	52	53	55	55	53	52	46	47	46	47	50	52	51	52	51	53	56	54	54	—	—	—	—	—	—	—	—	—
Minimum	50	48	47	46	47	48	50	51	50	46	44	45	45	45	47	50	50	50	49	50	52	52	50	—	—	—	—	—	—	—	—	—
April																																
Maximum	—	—	—	—	52	50	52	53	54	54	51	53	53	51	52	51	49	48	51	50	51	53	52	53	54	53	51	50	52	54	—	51
Minimum	—	—	—	—	49	48	48	50	49	50	47	49	50	48	48	48	48	45	47	48	48	49	50	49	50	50	48	48	48	49	—	48
May																																
Maximum	55	57	59	59	60	63	65	66	64	56	57	60	63	65	68	70	70	70	70	70	72	72	69	67	68	68	69	68	67	65	65	65
Minimum	51	52	53	54	55	57	58	61	56	54	54	54	56	58	60	62	63	63	63	64	64	65	64	61	60	62	61	65	62	60	58	59
June																																
Maximum	61	62	68	68	66	66	68	66	66	68	68	70	72	74	74	75	77	77	76	73	74	73	74	76	76	76	76	78	81	82	—	72
Minimum	58	58	59	60	62	62	61	62	61	62	62	63	65	66	68	68	69	72	70	69	68	67	67	68	69	69	69	69	73	76	—	65
July																																
Maximum	82	82	82	82	80	76	78	76	76	78	78	78	78	78	77	76	76	76	76	76	76	77	76	76	76	76	78	77	76	75	76	77
Minimum	77	74	75	75	74	70	68	68	69	68	68	69	69	69	68	68	68	69	69	69	69	69	69	69	69	69	67	67	72	72	69	69
August																																
Maximum	77	77	77	76	76	76	76	78	79	79	79	79	80	80	80	80	79	80	80	80	79	77	77	78	78	79	80	80	76	76	78	78
Minimum	69	71	70	69	69	70	68	68	72	71	70	70	70	70	72	73	69	71	73	73	70	69	70	70	74	73	73	71	68	69	70	70
September																																
Maximum	78	79	78	76	76	76	74	75	75	73	74	74	74	74	74	75	70	73	74	76	75	74	75	74	72	73	73	72	72	68	—	74
Minimum	70	70	69	68	68	70	69	69	68	69	69	66	66	67	67	68	68	68	67	69	70	70	68	70	66	66	68	66	66	66	—	68

EEL RIVER BASIN--Continued

11-4770, EEL RIVER AT SCOTIA, CALIF.
(International hydrological decade station)

LOCATION.--Lat 40°29'30", long 124°05'55", at gaging station at bridge on U.S. Highway 101, 0.5 mile north of Scotia, Humboldt County, and 6 miles upstream from Van Duzen River.

DRAINAGE AREA.--3,113 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Water temperatures: October 1957 to September 1967.

Sediment records: October 1957 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 76°F Aug. 17, Sept. 2; minimum, 44°F on several days in January and March.

Sediment concentrations: Maximum daily, 7,710 ppm Dec. 5; minimum daily, 1 ppm on many days in August and September.

Sediment loads: Maximum daily, 2,800,000 tons Dec. 5; minimum daily, 0.4 ton on many days in August and September.

EXTREMES, 1957-67.--Water temperatures: Maximum (1960-64, 1965-67), 76°F Aug. 16, 1962, Aug. 17, Sept. 2, 1967; minimum, 38°F Jan. 13, 14, 1963.

Sediment concentrations: Maximum daily, (estimated) 32,000 ppm Dec. 23, 1964; minimum daily, 1 ppm on many days during 1958-64, 1966-67.

Sediment loads: Maximum daily, (estimated) 57,000,000 tons Dec. 23, 1964; minimum daily, 0.3 ton on many days during 1958-63, 1966.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 11, 1966....	111	11		39	14	11	1.5	174	2	25	7.0	0.2	1.3	0.1	197			155			339	8.4
Nov. 15.....	7550	11		30	7.8	8.9	1.4	95	0	36	7.0	.1	3.9	.1	153			107			248	7.6
Dec. 13.....	17600	11		18	7.9	5.5	2.1	79	0	15	3.8	.1	.3	.0	102			78			171	7.8
Jan. 17, 1967....	1650	11		31	8.9	7.0	1.0	123	1	22	4.1	.1	.3	.1	147			114			249	8.3
Feb. 7.....	11100	12		24	7.7	6.0	.9	97	0	19	3.0	.2	.2	.1	121			92			199	8.1
Mar. 7.....	2060	12		28	8.1	6.3	.9	114	2	17	3.4	.1	.1	.1	134			104			221	8.3
Apr. 4.....	14400	12		18	6.9	5.5	1.2	82	0	11	2.5	.1	.1	.1	98			74			156	8.2
May 9.....	11000	9.6		19	5.4	3.9	.9	78	0	9.0	1.1	.1	.9	.0	88			70			148	8.0
June 7.....	2900	10		24	6.5	5.2	.9	98	0	11	1.8	.2	.3	.0	108			86			185	8.2
July 19.....	386	10		40	10	8.0	1.1	156	1	19	4.0	.2	.2	.1	170			141			311	8.3
Aug. 9.....	136	11		44	13	9.0	1.6	172	4	21	5.8	.1	.2	.1	194			164			324	8.6
Sept. 13.....	151	8.7		44	12	9.8	1.3	171	5	21	7.2	.2	2.8	.1	196			162			339	8.4

Date of collection	Strontium (Sr)	Lithium (Li)	Total phosphate (PO ₄)	Dissolved oxygen (DO) (mg/l)
Oct. 11, 1966.....	0.48	0.01	0.07	14.0
Nov. 15.....	.24	.02	.17	9.9
Dec. 13.....	.12	.02	.30	10.6
Jan. 17, 1967.....	.33	.01	.09	12.0
Feb. 7.....	.26	.01	.09	9.3
Mar. 7.....	.32	.01	.08	10.6
Apr. 4.....	.21	.01	.15	11.3
May 9.....	.23	.01	.13	10.2
June 7.....	.30	.01	.07	9.7
July 19.....	.38	.01	.06	9.1
Aug. 9.....	.35	.02	.05	7.0
Sept. 13.....	.20	.01	.05	8.4

EEL RIVER BASIN--Continued
 11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued
 Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1966 to September 1967																																		
Month	Day																															Average		
	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			
October																																		
Maximum	67	66	65	65	66	66	65	66	66	65	63	62	61	59	59	60	60	59	57	59	60	58	60	62	62	62	62	62	60	61	61	62		
Minimum	65	63	61	63	64	64	64	64	63	62	61	59	57	56	56	56	57	56	56	57	58	56	56	60	61	61	62	60	59	59	59	59		
November																																		
Maximum	60	60	60	59	59	59	58	56	55	54	55	57	57	57	57	57	57	56	56	56	56	54	52	52	51	50	50	52	52	53	--	55		
Minimum	59	59	58	58	58	57	56	55	54	53	54	55	57	57	57	57	56	56	56	56	54	52	52	51	50	50	50	50	52	52	--	54		
December																																		
Maximum	53	54	54	54	54	54	54	54	53	53	53	53	53	53	53	53	52	52	52	52	52	51	50	50	50	50	49	48	46	46	47	51		
Minimum	52	53	53	53	54	54	54	54	53	53	53	53	53	53	52	52	52	52	52	52	51	50	50	50	50	49	48	46	46	46	46	51		
January																																		
Maximum	48	48	48	45	45	45	44	45	44	44	45	46	46	47	47	47	47	46	46	46	46	46	46	46	46	45	48	48	48	48	48	46		
Minimum	47	48	44	45	45	44	44	44	44	44	44	45	46	46	47	47	46	46	46	46	46	46	46	46	45	45	45	46	48	48	48	45		
February																																		
Maximum	48	48	49	49	49	49	49	49	49	49	49	48	48	48	48	48	48	47	48	48	48	47	48	48	48	48	48	49	--	--	--	48		
Minimum	48	48	48	49	49	49	49	49	49	49	49	48	48	48	48	48	48	47	47	48	48	47	47	48	48	48	48	48	--	--	--	48		
March																																		
Maximum	49	49	49	48	49	50	51	51	51	51	48	45	44	44	46	47	47	47	47	47	48	50	50	50	50	49	49	48	48	47	46	48		
Minimum	49	49	48	48	48	49	50	51	51	48	45	44	44	44	44	46	47	47	47	47	48	50	50	50	49	48	48	48	48	46	45	47		
April																																		
Maximum	46	48	48	48	48	48	48	48	50	50	50	48	48	48	48	48	48	47	46	47	47	48	48	48	50	50	49	48	50	--	48			
Minimum	45	46	48	48	48	48	48	48	48	50	48	48	48	48	48	48	47	46	46	46	46	47	48	48	48	50	49	48	48	--	47			
May																																		
Maximum	51	53	53	53	54	56	57	58	58	54	52	52	54	56	59	59	59	58	58	59	60	60	60	59	59	59	60	60	60	58	58	57		
Minimum	50	51	52	53	53	54	56	57	54	52	51	51	52	54	56	58	58	58	58	58	59	60	60	59	58	57	58	58	58	58	56	55		
June																																		
Maximum	57	58	60	60	60	60	61	60	59	59	59	61	64	66	66	67	68	69	68	66	66	65	67	68	67	68	69	70	72	74	--	64		
Minimum	57	56	56	58	59	60	60	59	57	58	59	59	61	64	64	64	63	63	66	64	62	64	63	65	66	65	65	66	68	71	--	62		
July																																		
Maximum	75	74	73	74	73	71	71	69	69	72	73	71	72	72	71	72	70	72	74	74	72	70	70	73	72	72	74	71	74	70	73	72		
Minimum	72	72	71	71	70	68	68	67	65	66	68	69	68	68	67	68	68	67	67	68	68	68	68	68	68	68	66	68	69	68	68	68		
August																																		
Maximum	74	75	74	74	75	72	73	74	74	72	75	75	75	75	75	75	76	75	75	74	74	74	74	74	74	75	74	72	74	75	74	74		
Minimum	68	70	69	69	69	68	68	69	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	69	69	69	69	69	69	70	69		
September																																		
Maximum	75	76	75	74	75	74	73	73	72	70	73	73	72	72	72	72	73	71	72	72	74	70	72	72	71	71	72	70	71	70	71	--	72	
Minimum	70	71	70	69	69	69	68	68	67	68	69	67	67	67	68	69	69	69	68	69	70	69	68	68	68	68	67	66	68	--	--	68		

EEL RIVER BASIN--Continued

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	121	3	1.0	115	3	0.9	12500	2120	71600
2..	120	2	.6	115	3	.9	33500	4090	370000
3..	117	3	.9	115	4	1.2	41000	4920	545000
4..	116	5	1.6	115	5	1.6	36000	4040	393000
5..	115	4	1.2	117	7	2.2	133000	7710	S 2800000
6..	113	4	1.2	123	9	3.0	67200	4960	S 931000
7..	113	3	.9	140	7	2.6	36800	2850	283000
8..	111	3	.9	145	6	2.3	25700	1860	129000
9..	111	2	.6	153	5	2.1	18200	1410	69000
10..	111	2	.6	153	9	3.7	18500	1250	62400
11..	111	2	.6	156	13	5.5	18700	1120	56500
12..	111	2	.6	184	15	7.5	17300	1160	54000
13..	109	2	.6	1170	197	S 870	17600	1100	52300
14..	99	3	.8	3150	656	5580	20400	1600	88100
15..	104	3	.8	7550	1890	S 41800	15800	1130	48200
16..	107	3	.9	13100	2460	S 90300	12600	860	29300
17..	107	3	.9	11700	1830	S 64800	10400	655	18400
18..	109	3	.9	4170	508	5720	8900	418	10000
19..	109	4	1.2	4850	644	S 10100	7770	350	7340
20..	109	3	.9	20300	3970	S 252000	6900	276	5140
21..	111	2	.6	34000	5080	466000	6120	265	4380
22..	115	2	.6	44500	3800	457000	5480	260	3850
23..	127	2	.7	26200	1320	93400	5110	232	3200
24..	126	2	.7	16000	359	15500	4900	182	2410
25..	122	2	.7	9300	247	6200	4510	148	1800
26..	120	2	.6	5210	151	2120	4220	152	1730
27..	118	3	1.0	4190	100	1130	3900	104	1100
28..	116	2	.6	3650	89	877	3650	83	818
29..	115	2	.6	12200	631	20800	3320	67	601
30..	115	2	.6	9900	606	16200	3110	53	445
31..	115	2	.6	--	--	--	2990	40	323
Total	3523	--	25.0	232771	--	1550430.5	606080	--	6043937
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2800	38	287	56800	2750	422000	2500	32	216
2..	2600	31	218	34500	2040	201000	2420	31	200
3..	2460	19	126	25500	1440	99100	2390	36	230
4..	2350	16	102	18800	1050	53000	2350	44	279
5..	2250	15	91	14800	860	34400	2250	49	300
6..	2160	15	87	12400	740	25000	2140	42	240
7..	2080	14	79	11100	628	19000	2060	30	170
8..	2000	14	76	9780	535	14100	1990	13	70
9..	1950	13	68	8700	456	11000	1950	7	37
10..	1880	11	56	7940	397	8510	3790	68	696
11..	1820	10	49	7160	352	6800	17400	3010	S 152000
12..	1780	9	43	6410	312	5400	15200	2410	98900
13..	1730	8	37	5990	292	4700	16100	1800	78000
14..	1710	8	37	5830	282	4440	15600	1530	64400
15..	1690	7	32	5690	254	3900	17500	1800	85100
16..	1680	6	27	5460	223	3300	57300	6190	S 1040000
17..	1650	6	27	5210	198	2790	56800	4530	S 724000
18..	1630	5	22	4980	180	2400	36900	1990	198000
19..	1680	6	27	4600	179	2200	27600	736	55000
20..	11700	1100	S 59300	4250	185	2120	26100	994	70000
21..	90800	6150	S 1630000	3950	164	1700	28600	1390	110000
22..	80700	5180	S 1190000	3680	121	1200	22100	975	58200
23..	37000	2590	S 259000	3400	90	830	21700	863	51000
24..	27700	2070	155000	3150	76	646	20700	926	51800
25..	31500	2380	202000	3000	65	530	16300	740	33000
26..	45300	3740	S 583000	2850	54	420	13500	645	24000
27..	88300	4370	S 1050000	2700	45	328	11600	613	19200
28..	93400	3740	S 964000	2580	37	260	10600	613	18000
29..	130000	7060	S 2510000	--	--	--	10300	638	17700
30..	98400	5110	1360000	--	--	--	11300	630	19000
31..	86200	4120	S 962000	--	--	--	18300	1170	57800
Total	858900	--	10925791	283210	--	931074	495340	--	3027538

S Computed by subdividing day.

EEL RIVER BASIN--Continued

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	18900	1180	60000	8700	213	5000	2810	58	440
2..	17100	952	44000	7970	202	4300	2730	57	420
3..	15200	731	30000	7700	191	4000	2750	61	450
4..	14400	619	24000	7610	187	3840	3210	66	570
5..	13100	516	18000	7760	210	4400	2900	56	438
6..	18900	1190	S 66200	8000	253	5460	2770	52	390
7..	23500	1480	93900	8180	292	6400	2900	49	380
8..	18500	943	47000	9360	382	9650	2730	46	340
9..	14500	671	26300	11000	500	15000	2570	39	271
10..	13000	602	21000	11700	585	18000	2450	32	210
11..	13900	636	23900	11300	635	19400	2330	27	170
12..	12800	593	20000	9150	433	11000	2220	22	132
13..	11000	454	13500	7730	296	6180	2150	19	110
14..	12600	413	14000	6950	248	4700	2070	18	101
15..	12400	404	13500	6890	250	4650	1960	17	90
16..	10600	328	9400	8030	386	B 8370	1790	14	68
17..	14000	490	18500	9150	614	15200	1690	14	64
18..	21500	1410	B 81900	9470	727	19000	1620	12	52
19..	19300	587	30600	8700	704	16500	1590	11	47
20..	18600	561	28000	7730	578	12000	1550	9	38
21..	16000	481	20800	7400	458	9150	1510	9	37
22..	14100	405	15000	6950	388	7300	1430	10	39
23..	13000	368	12900	6560	369	6540	1380	11	41
24..	13700	435	16000	6020	344	5600	1320	9	32
25..	12600	432	14700	5050	294	4000	1260	7	24
26..	11300	381	12000	4260	219	2500	1200	7	23
27..	12100	478	15600	3810	158	1600	1130	7	21
28..	12200	405	13000	3570	119	1150	1060	7	20
29..	10400	276	7750	3330	95	850	1000	8	22
30..	9750	226	5900	3270	77	680	950	7	18
31..	--	--	--	2990	65	525	--	--	--
Total	438950	--	817350	226290	--	232945	59030	--	5058
Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	900	6	15	275	5	3.7	153	1	0.4
2..	870	6	14	267	4	2.9	156	1	.4
3..	840	6	14	258	3	2.1	150	1	.4
4..	800	6	13	248	2	1.3	148	1	.4
5..	760	5	10	238	2	1.3	145	1	.4
6..	730	5	9.9	228	3	1.8	143	1	.4
7..	700	4	7.6	220	5	3.0	143	1	.4
8..	670	4	7.2	213	5	2.9	136	2	.7
9..	640	4	6.9	206	4	2.2	136	1	.4
10..	600	4	6.5	201	5	2.7	135	1	.4
11..	570	5	7.7	196	4	2.1	135	1	.4
12..	540	6	8.7	190	2	1.0	136	1	.4
13..	510	7	9.6	185	1	.5	151	1	.4
14..	480	7	9.1	182	1	.5	160	1	.4
15..	460	8	9.9	180	1	.5	165	1	.4
16..	440	8	9.5	179	1	.5	166	2	.9
17..	420	8	9.1	178	2	1.0	204	1	.6
18..	400	9	9.7	177	1	.5	216	3	1.7
19..	386	8	8.3	180	2	1.0	181	2	1.0
20..	375	7	7.1	174	2	.9	168	2	.9
21..	365	7	6.9	171	2	.9	160	2	.9
22..	355	7	6.7	165	2	.9	155	1	.4
23..	340	6	5.5	165	3	1.3	152	1	.4
24..	330	6	5.3	162	4	1.7	150	1	.4
25..	325	5	4.4	165	3	1.3	145	1	.4
26..	320	5	4.3	165	2	.9	143	2	.8
27..	315	5	4.3	162	2	.9	137	2	.7
28..	310	4	3.3	159	1	.4	133	1	.4
29..	303	4	3.3	156	1	.4	130	1	.4
30..	295	4	3.2	156	1	.4	130	1	.4
31..	282	5	3.8	153	1	.4	--	--	--
Total	15631	--	243.8	5954	--	41.9	4562	--	16.6
Total discharge for year (cfs-days).....							3230241		
Total load for year (tons).....							23534450.8		

S Computed by subdividing day.

B Computed from estimated-concentration graph.

EEL RIVER BASIN--Continued

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (° F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
Jan. 26, 1967.....	1600	47		58000	5580		--	23	--	40	--	63	87	98	100		VPWC
Jan. 27.....	1600	49		86100	3910		--	27	--	50	--	72	91	100	--		VPWC
Jan. 27.....	1630	49		85700	3270		24	30	43	55	68	77	94	100	--		VPWC
Jan. 29.....	1700	51		141000	7200		21	29	38	49	61	70	90	100	--		VPWC
Jan. 31.....	1600	50		88200	3560		19	27	36	46	58	65	87	100	--		VPWC
Mar. 31.....	1420	46		18100	1180		--	--	--	--	--	53	65	92	100		V
May 17.....	1440	63		8340	726		--	--	--	--	--	93	94	99	100		V

EEL RIVER BASIN--Continued

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, October 1964 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
OCT. 2, 1964.....	3	3	JAN. 15, 1965.....	3410	496
OCT. 5.....	2	2	JAN. 16.....	2340	544
OCT. 8.....	3	2	JAN. 19.....	2570	360
OCT. 11.....	3	2	JAN. 20.....	2590	312
OCT. 14.....	14	11	JAN. 21.....	2540	370
OCT. 17.....	3	2	JAN. 22.....	2000	257
OCT. 20.....	3	2	JAN. 23.....	3440	434
OCT. 23.....	4	2	JAN. 25.....	4290	420
OCT. 26.....	3	4	JAN. 26.....	2820	420
OCT. 27.....	4	4	JAN. 27.....	2640	300
OCT. 28.....	58	46	JAN. 28.....	2130	320
OCT. 29.....	116	133	JAN. 29.....	1760	240
OCT. 30.....	23	12	JAN. 30.....	1860	190
NOV. 1.....	8	7	JAN. 31.....	1480	280
NOV. 2.....	14	10	FEB. 1.....	1560	370
NOV. 5.....	43	38	FEB. 2.....	1350	230
NOV. 6.....	16	13	FEB. 3.....	1140	220
NOV. 7.....	16	14	FEB. 4.....	915	175
NOV. 9.....	545	112	FEB. 5.....	1010	240
NOV. 10.....	1230	1200	FEB. 6.....	1770	250
NOV. 11.....	785	141	FEB. 7.....	1180	220
NOV. 12.....	1630	816	FEB. 8.....	826	190
NOV. 13.....	525	264	FEB. 9.....	641	170
NOV. 14.....	141	95	FEB. 10.....	545	150
NOV. 15.....	68	44	FEB. 11.....	458	110
NOV. 16.....	36	33	FEB. 12.....	405	100
NOV. 17.....	36	26	FEB. 13.....	359	145
NOV. 18.....	18	12	FEB. 15.....	376	130
NOV. 19.....	15	13	FEB. 16.....	255	130
NOV. 20.....	16	16	FEB. 17.....	270	90
NOV. 22.....	7	7	FEB. 18.....	236	80
NOV. 24.....	9	8	FEB. 19.....	220	100
NOV. 25.....	220	119	FEB. 20.....	207	70
NOV. 26.....	276	142	FEB. 21.....	197	72
NOV. 27.....	114	93	FEB. 22.....	196	48
NOV. 28.....	2810	952	FEB. 23.....	170	64
NOV. 29.....	1290	568	FEB. 24.....	196	84
NOV. 30.....	466	165	FEB. 25.....	160	64
DEC. 1.....	1310	280	FEB. 26.....	169	104
DEC. 2.....	822	260	FEB. 27.....	219	112
DEC. 3.....	741	210	FEB. 28.....	1110	280
DEC. 4.....	302	126	MAR. 1.....	1060	360
DEC. 5.....	162	75	MAR. 2.....	410	280
DEC. 6.....	101	47	MAR. 3.....	242	150
DEC. 7.....	66	28	MAR. 4.....	178	104
DEC. 8.....	46	26	MAR. 5.....	178	128
DEC. 9.....	42	21	MAR. 6.....	134	112
DEC. 10.....	54	23	MAR. 7.....	128	84
DEC. 12.....	759	300	MAR. 8.....	111	80
DEC. 13.....	212	105	MAR. 9.....	117	72
DEC. 14.....	82	47	MAR. 10.....	108	76
DEC. 15.....	68	42	MAR. 11.....	98	76
DEC. 16.....	42	23	MAR. 12.....	89	68
DEC. 17.....	32	21	MAR. 15.....	77	68
DEC. 18.....	22	15	MAR. 16.....	78	60
DEC. 19.....	490	114	MAR. 17.....	70	52
DEC. 20.....	1950	342	MAR. 18.....	75	50
DEC. 21.....	9450	1876	MAR. 19.....	74	64
JAN. 3, 1965.....	7540	1386	MAR. 20.....	56	52
JAN. 4.....	4550	770	MAR. 22.....	48	120
JAN. 5.....	12000	1980	MAR. 23.....	48	60
JAN. 6.....	11500	2016	MAR. 24.....	46	78
JAN. 7.....	9500	1376	MAR. 25.....	52	46
JAN. 8.....	5950	832	MAR. 26.....	72	52
JAN. 9.....	3730	704	MAR. 27.....	136	58
JAN. 10.....	4290	800	MAR. 28.....	1070	318
JAN. 11.....	6130	1088	MAR. 29.....	766	720
JAN. 12.....	3610	640	MAR. 30.....	231	286
JAN. 13.....	3880	528	MAR. 31.....	127	138
JAN. 14.....	2830	520	APR. 1.....	184	192

EEL RIVER BASIN--Continued

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
APR. 2, 1965.....	136	198	JULY 25, 1965.....	9	3
APR. 3.....	127	176	JULY 29.....	8	3
APR. 4.....	92	132	AUG. 1.....	16	5
APR. 5.....	86	126	AUG. 2.....	11	4
APR. 6.....	88	104	AUG. 7.....	7	1
APR. 7.....	97	114	AUG. 10.....	18	8
APR. 8.....	58	102	AUG. 13.....	6	1
APR. 9.....	100	102	AUG. 16.....	5	2
APR. 12.....	357	297	AUG. 17.....	8	3
APR. 13.....	248	187	AUG. 26.....	7	2
APR. 14.....	182	168	AUG. 27.....	6	5
APR. 15.....	5070	1800	AUG. 31.....	9	5
APR. 16.....	7220	2160	SEPT. 7.....	4	3
APR. 17.....	2930	1500	SEPT. 11.....	3	3
APR. 18.....	4870	1500	SEPT. 15.....	3	2
APR. 19.....	5340	1440	SEPT. 19.....	4	4
APR. 20.....	2980	1020	SEPT. 22.....	5	4
APR. 21.....	2680	1320	SEPT. 29.....	4	3
APR. 22.....	2430	1200	OCT. 5.....	8	4
APR. 23.....	1830	1020	OCT. 10.....	3	1
APR. 24.....	1680	910	OCT. 13.....	3	2
APR. 25.....	1440	560	OCT. 17.....	6	3
APR. 26.....	1040	570	OCT. 20.....	3	1
APR. 27.....	953	570	OCT. 23.....	2	1
APR. 28.....	908	386	OCT. 31.....	2	1
APR. 30.....	585	330	NOV. 4.....	4	3
MAY 1.....	476	270	NOV. 7.....	5	1
MAY 2.....	394	250	NOV. 8.....	6	7
MAY 3.....	573	200	NOV. 10.....	28	22
MAY 4.....	244	168	NOV. 11.....	10	10
MAY 5.....	242	132	NOV. 12.....	24	25
MAY 6.....	215	129	NOV. 13.....	149	82
MAY 7.....	176	105	NOV. 14.....	1530	580
MAY 8.....	124	105	NOV. 15.....	1930	750
MAY 9.....	102	84	NOV. 16.....	808	450
MAY 10.....	104	86	NOV. 17.....	440	288
MAY 11.....	96	90	NOV. 18.....	1090	500
MAY 12.....	80	64	NOV. 19.....	3420	1200
MAY 13.....	67	42	NOV. 20.....	1120	580
MAY 14.....	71	50	NOV. 22.....	207	174
MAY 15.....	68	54	NOV. 25.....	2750	840
MAY 16.....	69	55	NOV. 26.....	1210	500
MAY 17.....	73	74	NOV. 27.....	1060	370
MAY 18.....	63	58	NOV. 29.....	344	135
MAY 19.....	61	53	NOV. 30.....	198	126
MAY 20.....	58	45	DEC. 1.....	141	80
MAY 21.....	55	48	DEC. 2.....	108	58
MAY 22.....	54	42	DEC. 3.....	83	47
MAY 23.....	64	61	DEC. 4.....	68	48
MAY 24.....	46	42	DEC. 5.....	62	52
MAY 25.....	37	37	DEC. 6.....	57	38
MAY 26.....	31	25	DEC. 7.....	68	48
MAY 27.....	23	25	DEC. 8.....	64	48
MAY 28.....	20	20	DEC. 9.....	94	73
MAY 31.....	20	30	DEC. 10.....	50	55
JUNE 2.....	14	19	DEC. 12.....	45	40
JUNE 4.....	14	26	DEC. 13.....	33	40
JUNE 7.....	9	14	DEC. 14.....	27	33
JUNE 8.....	9	10	DEC. 15.....	22	30
JUNE 9.....	6	10	DEC. 16.....	22	24
JUNE 11.....	8	10	DEC. 17.....	20	26
JUNE 13.....	6	10	DEC. 18.....	15	22
JUNE 16.....	6	5	DEC. 20.....	15	15
JUNE 19.....	7	7	DEC. 22.....	9	13
JUNE 22.....	42	33	DEC. 25.....	2170	800
JUNE 25.....	8	10	DEC. 26.....	807	530
JUNE 28.....	12	12	DEC. 27.....	438	260
JULY 14.....	9	5	DEC. 28.....	8830	1950
JULY 18.....	8	4	DEC. 30.....	3040	830
JULY 22.....	10	5	DEC. 31.....	2080	750

EEL RIVER BASIN--Continued

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
JAN. 1, 1966.....	1620	500	MAR. 20, 1966.....	746	190
JAN. 2.....	1410	470	MAR. 21.....	596	250
JAN. 3.....	4820	1100	MAR. 22.....	474	120
JAN. 4.....	13500	3000	MAR. 23.....	406	150
JAN. 6.....	8170	2320	MAR. 24.....	374	120
JAN. 8.....	4650	1314	MAR. 25.....	360	140
JAN. 9.....	3170	600	MAR. 26.....	358	110
JAN. 10.....	2140	500	MAR. 27.....	368	110
JAN. 11.....	1620	350	MAR. 28.....	377	130
JAN. 12.....	1110	300	MAR. 29.....	465	130
JAN. 13.....	986	240	MAR. 30.....	463	140
JAN. 14.....	679	240	MAR. 31.....	459	275
JAN. 15.....	580	240	APR. 1.....	632	380
JAN. 17.....	546	110	APR. 2.....	679	430
JAN. 19.....	456	110	APR. 3.....	771	430
JAN. 20.....	306	120	APR. 4.....	592	380
JAN. 22.....	283	60	APR. 5.....	541	380
JAN. 23.....	270	50	APR. 6.....	485	330
JAN. 24.....	268	65	APR. 7.....	507	360
JAN. 25.....	166	70	APR. 8.....	503	310
JAN. 26.....	118	55	APR. 9.....	456	310
JAN. 27.....	110	55	APR. 11.....	1320	430
JAN. 28.....	98	50	APR. 12.....	1840	470
JAN. 29.....	3580	600	APR. 13.....	1320	450
JAN. 30.....	4800	1340	APR. 14.....	611	330
JAN. 31.....	2340	650	APR. 15.....	538	220
FEB. 1.....	1320	500	APR. 16.....	382	144
FEB. 2.....	1950	540	APR. 17.....	400	144
FEB. 3.....	1010	330	APR. 18.....	479	172
FEB. 4.....	3360	540	APR. 19.....	358	188
FEB. 5.....	4010	750	APR. 20.....	276	164
FEB. 6.....	2630	610	APR. 21.....	190	152
FEB. 7.....	2760	490	APR. 22.....	150	141
FEB. 8.....	1540	400	APR. 23.....	138	123
FEB. 9.....	1120	330	APR. 24.....	123	93
FEB. 10.....	1030	280	APR. 25.....	134	75
FEB. 11.....	654	165	APR. 26.....	156	90
FEB. 13.....	482	135	APR. 27.....	166	110
FEB. 14.....	414	120	APR. 28.....	132	120
FEB. 15.....	428	105	APR. 29.....	110	82
FEB. 16.....	276	84	APR. 30.....	96	86
FEB. 17.....	196	80	MAY 1.....	84	60
FEB. 18.....	227	70	MAY 2.....	71	52
FEB. 19.....	1000	200	MAY 3.....	62	50
FEB. 20.....	932	280	MAY 4.....	82	54
FEB. 21.....	438	174	MAY 5.....	82	62
FEB. 22.....	290	150	MAY 6.....	100	65
FEB. 23.....	562	180	MAY 7.....	118	114
FEB. 24.....	798	180	MAY 8.....	72	67
FEB. 25.....	1120	300	MAY 9.....	60	54
FEB. 26.....	1310	340	MAY 10.....	52	43
FEB. 27.....	766	250	MAY 11.....	52	48
FEB. 28.....	488	150	MAY 13.....	46	49
MAR. 1.....	410	110	MAY 14.....	56	47
MAR. 2.....	517	120	MAY 15.....	38	33
MAR. 3.....	378	110	MAY 16.....	38	35
MAR. 4.....	352	90	MAY 17.....	35	38
MAR. 5.....	618	110	MAY 19.....	31	34
MAR. 6.....	1080	250	MAY 20.....	21	20
MAR. 7.....	1480	300	MAY 21.....	21	20
MAR. 8.....	4440	550	MAY 22.....	28	17
MAR. 9.....	4700	700	MAY 23.....	18	20
MAR. 10.....	3730	800	MAY 24.....	14	15
MAR. 12.....	1680	400	MAY 25.....	14	15
MAR. 13.....	1460	400	MAY 26.....	14	17
MAR. 14.....	1440	350	MAY 28.....	13	15
MAR. 16.....	1260	425	MAY 30.....	11	11
MAR. 17.....	1200	320	JUNE 1.....	7	9
MAR. 18.....	808	180	JUNE 3.....	8	9
MAR. 19.....	948	275	JUNE 8.....	7	8

EEL RIVER BASIN--Continued

11-4770. EEL RIVER AT SCOTIA, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
JUNE 11, 1966.....	7	8	DEC. 14, 1966	2000	498
JUNE 14.....	6	8	DEC. 15.....	1370	360
JUNE 17.....	7	6	DEC. 16.....	1030	224
JUNE 20.....	4	3	DEC. 17.....	796	198
JUNE 22.....	4	3	DEC. 18.....	563	264
JUNE 25.....	4	4	DEC. 19.....	456	208
JUNE 28.....	3	3	DEC. 20.....	347	154
JULY 3.....	3	3	DEC. 21.....	258	82
JULY 6.....	5	4	DEC. 22.....	325	65
JULY 9.....	3	4	DEC. 23.....	288	97
JULY 12.....	3	4	DEC. 24.....	223	90
JULY 15.....	7	4	DEC. 25.....	188	78
JULY 19.....	8	4	DEC. 26.....	171	65
JULY 21.....	6	4	DEC. 27.....	92	58
JULY 24.....	7	5	DEC. 28.....	105	50
JULY 27.....	5	4	DEC. 29.....	86	44
JULY 30.....	2	3	DEC. 30.....	66	36
AUG. 8.....	4	5	DEC. 31.....	50	30
OCT. 2.....	2	2	JAN. 1, 1967.....	54	26
OCT. 4.....	7	4	JAN. 2.....	31	20
OCT. 6.....	4	6	JAN. 3.....	21	21
OCT. 9.....	2	3	JAN. 4.....	22	19
OCT. 12.....	2	4	JAN. 5.....	33	22
OCT. 16.....	3	3	JAN. 6.....	21	19
OCT. 19.....	4	2	JAN. 7.....	20	19
OCT. 23.....	2	2	JAN. 8.....	20	15
OCT. 27.....	3	5	JAN. 9.....	17	11
OCT. 30.....	2	4	JAN. 10.....	14	9
NOV. 3.....	4	7	JAN. 11.....	15	8
NOV. 6.....	9	1	JAN. 12.....	12	7
NOV. 9.....	5	1	JAN. 13.....	11	11
NOV. 11.....	13	2	JAN. 14.....	11	11
NOV. 13.....	232	186	JAN. 15.....	16	2
NOV. 14.....	997	780	JAN. 16.....	8	85
NOV. 15.....	2960	950	JAN. 17.....	8	10
NOV. 16.....	2330	220	JAN. 18.....	7	9
NOV. 17.....	2470	1580	JAN. 19.....	8	9
NOV. 18.....	680	610	JAN. 21.....	7350	2640
NOV. 19.....	461	390	JAN. 22.....	4240	1824
NOV. 20.....	3870	1680	JAN. 23.....	2460	924
NOV. 21.....	5080	1900	JAN. 24.....	2080	828
NOV. 22.....	4160	1850	JAN. 25.....	1860	600
NOV. 23.....	1560	800	JAN. 26.....	5580	2080
NOV. 25.....	285	208	JAN. 27.....	3910	1376
NOV. 26.....	170	114	JAN. 28.....	4020	1780
NOV. 27.....	122	106	JAN. 29.....	7200	2680
NOV. 28.....	103	83	JAN. 30.....	4560	1750
NOV. 29.....	1130	168	JAN. 31.....	3560	1380
NOV. 30.....	1080	390	FEB. 1.....	2590	600
DEC. 1.....	2740	1476	FEB. 2.....	2240	470
DEC. 2.....	4540	1692	FEB. 3.....	1440	380
DEC. 3.....	5430	2112	FEB. 5.....	966	235
DEC. 4.....	4020	1800	FEB. 8.....	657	268
DEC. 5.....	7240	3156	FEB. 10.....	749	175
DEC. 6.....	4400	1800	FEB. 12.....	389	116
DEC. 7.....	2740	1104	FEB. 14.....	360	50
DEC. 8.....	1960	480	FEB. 17.....	240	76
DEC. 10.....	1450	408	FEB. 20.....	248	50
DEC. 12.....	1240	288	FEB. 22.....	150	37
DEC. 13.....	1340	330	FEB. 24.....	61	30

EEL RIVER BASIN--Continued

11-4770, EEL RIVER AT SCOTIA, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 27, 1967.....	62	19	MAY 6, 1967.....	291	85
MAR. 1.....	42	17	MAY 8.....	458	180
MAR. 4.....	67	12	MAY 11.....	766	375
MAR. 8.....	18	12	MAY 13.....	350	175
MAR. 10.....	69	48	MAY 15.....	300	138
MAR. 12.....	2820	675	MAY 17.....	872	465
MAR. 14.....	1760	350	MAY 19.....	844	400
MAR. 16.....	7720	2600	MAY 21.....	540	325
MAR. 18.....	1720	800	MAY 23.....	451	300
MAR. 20.....	1310	600	MAY 28.....	158	100
MAR. 22.....	947	420	MAY 31.....	94	65
MAR. 24.....	955	440	JUNE 2.....	78	60
MAR. 27.....	733	230	JUNE 5.....	90	24
MAR. 29.....	752	170	JUNE 9.....	62	40
MAR. 31.....	1310	490	JUNE 12.....	30	21
APR. 3.....	846	255	JUNE 14.....	25	12
APR. 5.....	614	195	JUNE 17.....	16	11
APR. 7.....	1680	550	JUNE 20.....	11	7
APR. 9.....	780	225	JUNE 23.....	13	11
APR. 11.....	736	160	JUNE 26.....	8	7
APR. 13.....	516	130	JUNE 29.....	8	4
APR. 15.....	477	155	JULY 2.....	6	2
APR. 17.....	679	280	JULY 4.....	6	2
APR. 19.....	618	300	JULY 7.....	4	1
APR. 21.....	526	190	JULY 10.....	4	3
APR. 23.....	420	120	JULY 12.....	6	3
APR. 25.....	494	200	JULY 15.....	8	4
APR. 27.....	614	145	JULY 18.....	9	4
APR. 29.....	313	80	JULY 19.....	8	3
MAY 4.....	228	50	JULY 22.....	7	4

EEL RIVER BASIN--Continued

11-4775. VAN DUZEN RIVER NEAR DINSMORES, CALIF.

LOCATION.--Lat 40°29'05", long 123°39'25", temperature recorder at gaging station on right bank 10 feet upstream from private road bridge, 0.3 mile upstream from South Fork, and 2.8 miles west of Dinsmores, Trinity County.

DRAINAGE AREA.--85.1 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 75°F Aug. 1, 27; minimum, 33°F Mar. 10, 11, 30.

EXTREMES, 1965-67.--Water temperatures: Maximum, 75°F on several days during August 1966, Aug. 1, 27, 1967; minimum, freezing point Mar. 2, 3, 1966.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	66	66	65	64	63	63	64	64	64	63	60	59	56	56	55	56	56	55	52	54	54	52	58	58	57	56	56	54	55	55	56	58	
Minimum	58	58	57	56	55	56	56	57	56	55	55	51	50	58	48	48	48	47	47	49	48	48	51	52	51	51	50	50	49	49	50	52	
November																																	
Maximum	56	55	54	54	51	51	52	50	49	49	51	54	53	51	50	50	51	51	51	48	45	45	45	44	45	46	45	44	46	47	--	49	
Minimum	50	49	49	49	48	48	47	46	45	48	49	51	51	49	49	46	48	48	48	45	40	40	40	40	39	42	41	42	41	44	--	45	
December																																	
Maximum	46	44	43	44	44	44	44	45	44	46	47	46	45	44	44	44	44	44	44	42	42	43	43	42	39	38	38	39	40	40	41	43	
Minimum	44	42	41	43	43	43	42	42	42	43	44	42	42	40	41	40	40	40	40	40	36	40	40	40	36	34	35	36	37	36	38	40	
January																																	
Maximum	40	40	41	40	40	38	39	40	41	40	42	42	42	42	42	41	40	40	38	40	40	40	40	37	38	38	40	42	43	42	44	40	
Minimum	36	37	36	36	36	36	35	36	38	39	39	39	39	40	38	38	36	37	37	37	38	37	37	34	34	36	38	40	40	40	40	37	
February																																	
Maximum	42	44	46	46	46	46	46	46	46	47	46	48	42	42	38	44	47	46	44	45	45	46	46	43	46	46	47	47	--	--	--	45	
Minimum	40	40	40	40	40	40	39	39	39	39	39	42	40	42	38	36	35	38	40	41	39	37	37	39	38	41	41	40	40	40	--	39	
March																																	
Maximum	45	46	46	46	44	44	46	50	46	45	42	40	39	40	42	41	42	44	42	46	49	46	43	46	42	49	48	42	45	40	41	44	
Minimum	43	40	40	38	39	38	36	42	44	33	33	38	34	36	38	34	38	39	39	39	41	41	40	39	39	39	40	38	37	33	36	38	
April																																	
Maximum	47	50	42	48	48	50	50	50	49	43	46	50	45	46	47	42	38	46	48	46	47	47	46	46	47	44	45	48	48	51	--	46	
Minimum	40	48	38	39	40	42	42	42	41	41	38	40	40	38	40	38	37	35	38	39	39	39	40	40	40	40	40	38	37	39	--	39	
May																																	
Maximum	53	55	54	55	54	57	56	57	47	46	46	54	56	58	60	60	60	59	61	62	64	64	62	60	63	62	62	56	58	54	56	57	
Minimum	40	40	41	44	44	42	44	45	46	41	40	41	43	44	46	46	46	46	46	48	59	50	59	48	48	50	59	52	49	48	46	46	
June																																	
Maximum	50	58	62	64	63	63	62	62	62	64	63	65	67	68	69	70	70	69	69	68	71	71	71	71	71	70	70	72	72	72	--	66	
Minimum	48	46	49	51	54	53	54	55	54	54	54	54	55	56	57	62	62	60	64	64	64	64	60	61	61	60	62	64	63	--	57		
July																																	
Maximum	73	74	74	74	72	72	70	70	70	72	73	72	71	72	71	72	71	72	69	70	71	68	66	69	71	71	71	72	74	74	74	71	
Minimum	64	64	60	66	64	64	62	63	63	64	64	65	64	63	64	64	64	62	72	62	63	59	59	58	64	64	62	65	66	64	65	63	
August																																	
Maximum	75	74	73	72	72	72	72	72	72	73	73	73	73	74	74	74	74	74	74	74	74	74	74	72	73	74	75	74	73	73	72	73	
Minimum	68	66	64	64	65	62	64	64	64	64	64	64	63	64	64	65	65	65	64	65	64	64	64	65	65	66	66	66	64	63	62	62	64
September																																	
Maximum	72	73	73	72	72	72	72	71	71	66	70	70	70	70	69	69	64	69	69	70	70	70	70	68	69	69	68	67	64	--	--	69	
Minimum	62	62	63	62	62	62	62	62	61	60	61	59	60	60	59	59	61	60	60	61	62	62	62	61	60	60	60	60	59	59	--	60	

EEL RIVER BASIN--Continued

11-4785. VAN DUZEN RIVER NEAR BRIDGEVILLE, CALIF.

LOCATION.--Lat 40°28'50", long 123°53'23", at gaging station at bridge on State Highway 36, 0.9 mile upstream from Grizzly Creek, and 5 miles west of Bridgeville, Humboldt County.

DRAINAGE AREA.--222 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1967.

Water temperatures: December 1960 to September 1967.

Sediment records: October 1955 to September 1963.

EXTREMES, 1966-67.--Water temperatures: Maximum, 85°F July 1, 2; minimum, 35°F Dec. 28.

EXTREMES, 1960-64, 1965-67.--Water temperatures: Maximum, 85°F July 1, 2, 1967; minimum, 33°F Dec. 18-20, 23, 1965.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 11, 1966....	10			51	11	11	1.6	176	5	--	6.0	--	0.1					172			377	8.5
Nov. 15.....	1710			25	5.3	4.4	1.5	78	0	--	2.7	--	.1					84			184	7.9
Dec. 13.....	2080			17	3.7	3.3	1.0	64	0	--	1.3	--	.0					58			128	8.1
Jan. 17, 1967....	139			26	5.9	4.8	.9	94	0	--	1.9	--	.0					90			194	8.2
Feb. 7.....	864			18	4.2	3.5	.8	71	0	--	1.3	--	.0					62			139	8.1
Mar. 7.....	155			25	5.3	5.3	.9	90	0	--	1.9	--	.0					84			186	8.0
Apr. 4.....	1020			16	4.3	3.6	.8	65	0	--	.9	--	.0					58			124	8.0
May 9.....	1470	7.9		15	4.2	2.6	.5	60	0	7.0	1.0		0.2		68			55			113	7.8
June 5.....	240			21	4.9	3.6	.9	85	0	--	.8	--	.0					72			158	8.1
July 17.....	37			--	--	6.6	--	126	0	--	3.2	--	.1					106			252	8.2
Aug. 7.....	22			--	--	7.3	--	127	4	--	3.2	--	.0					123			268	8.6
Sept. 11.....	11			45	8.6	9.2	1.7	147	3	31	4.8		.3	.4				148			317	8.4

EEL RIVER BASIN--Continued

11-4785. VAN DUZEN RIVER NEAR BRIDGEVILLE, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	63	66	68	67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum	61	60	56	58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
November																																	
Maximum	60	52	51	52	54	54	55	52	52	52	54	56	56	54	53	52	52	54	54	52	50	46	45	44	44	48	46	47	48	48	—	51	
Minimum	52	49	49	48	52	50	48	47	45	46	51	53	54	52	52	49	49	50	52	50	44	44	42	42	41	44	43	46	45	47	—	47	
December																																	
Maximum	49	48	47	48	48	47	47	47	46	48	48	49	50	47	46	46	44	45	45	46	44	43	46	44	45	42	39	39	40	41	42	45	
Minimum	48	47	46	46	46	46	46	46	46	46	46	48	47	46	43	43	42	42	43	44	40	40	42	42	42	38	36	35	38	39	40	43	
January																																	
Maximum	44	42	43	43	42	40	40	42	43	44	44	46	46	43	45	44	44	44	42	44	44	42	42	42	41	43	44	46	47	49	46	43	
Minimum	41	38	38	40	40	36	36	36	37	40	41	42	41	41	40	41	40	38	38	42	42	41	41	40	39	41	43	43	46	42	44	40	
February																																	
Maximum	46	46	46	46	47	46	47	47	47	48	48	49	46	44	41	45	48	49	48	47	47	48	48	46	48	49	49	50	—	—	—	47	
Minimum	44	43	43	44	44	43	43	43	43	46	43	44	42	40	40	40	43	44	41	39	39	40	42	43	44	41	41	43	—	—	—	42	
March																																	
Maximum	48	49	50	50	53	54	56	56	52	48	46	44	42	44	48	47	47	47	46	50	51	50	50	48	46	50	50	48	46	44	44	48	
Minimum	44	42	40	40	41	43	48	48	48	46	39	41	40	40	42	43	44	45	43	46	47	47	46	43	44	42	46	42	41	41	41	43	
April																																	
Maximum	49	51	46	50	48	48	49	50	51	48	48	50	47	47	48	45	44	46	49	48	48	50	49	50	52	47	46	49	49	52	—	48	
Minimum	41	43	44	43	46	44	42	47	45	45	42	46	44	42	43	42	40	40	43	44	44	46	46	46	46	46	46	42	42	44	44	—	43
May																																	
Maximum	54	56	56	56	56	59	60	59	58	49	48	54	57	60	62	62	61	61	63	64	65	61	63	64	65	66	66	62	62	60	61	59	
Minimum	44	48	49	50	50	50	52	53	49	46	46	44	48	52	54	54	55	55	56	56	58	58	57	56	56	57	56	55	54	54	52	52	
June																																	
Maximum	57	59	68	66	70	66	63	62	62	67	65	68	73	75	74	75	76	77	71	65	74	69	75	76	75	73	77	80	83	84	—	70	
Minimum	52	52	54	57	58	60	58	58	57	56	57	58	58	60	60	61	62	62	63	62	62	61	61	62	63	62	63	61	64	66	—	59	
July																																	
Maximum	85	85	82	83	80	78	79	68	70	80	80	70	77	80	78	78	79	78	79	78	71	76	74	78	77	79	80	80	80	76	77	77	
Minimum	68	67	65	66	66	65	64	64	64	64	64	64	64	64	64	64	63	64	64	64	64	64	64	64	64	63	64	64	64	65	66	64	
August																																	
Maximum	78	80	78	78	77	77	80	80	79	79	81	81	81	81	81	80	81	80	80	79	78	80	80	76	79	80	80	76	80	76	76	79	
Minimum	62	67	64	64	65	65	65	62	65	65	66	66	65	64	64	64	66	64	63	64	63	66	65	64	66	67	66	66	64	65	64	64	
September																																	
Maximum	82	81	80	80	79	81	68	76	77	74	76	77	77	75	74	76	70	74	77	79	74	71	76	74	74	76	72	73	74	73	—	75	
Minimum	66	64	64	65	63	67	66	64	64	63	65	62	61	61	63	64	64	64	62	63	65	66	63	65	64	62	61	63	62	64	—	63	

EEL RIVER BASIN--Continued

11-4785. VAN DUZEN RIVER NEAR BRIDGEVILLE, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
Oct. 5, 1966.....	1150	63		10	5	0.1						--	--	--	--		VPWC
Nov. 1.....	1005	54		12	3	.1						--	--	--	--		
Jan. 3, 1967.....	1245	43		219	15	8.9						--	--	--	--		
Jan. 30.....	1535	48		6190	2920	48800	20	30	41	52	62	70	86	95	99	100	
Mar. 3.....	1105	46		191	6	3.1						--	--	--	--		V
Apr. 11.....	1220	45		1110	203	608						--	--	--	--		
May 8.....	1440	41		1380	532	1980						75	86	94	100		
June 5.....	1405	68		273	7	5.2						--	--	--	--		
July 27.....	1135	73		31	2	.2						--	--	--	--		

Periodic determinations of suspended-sediment
concentration and turbidity, September 1964
to July 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
SEPT. 30, 1964.....	5	6
FEB. 25, 1965.....	71	33
MAR. 23.....	16	11
JUNE 8.....	32	3
JULY 14.....	3	2
AUG. 26.....	35	30
OCT. 5.....	20	3
NOV. 20.....	569	470
DEC. 13.....	38	33
MAR. 7, 1966.....	1500	490
OCT. 5.....	5	5
NOV. 1.....	3	2
JAN. 3, 1967.....	15	29
JUNE 5.....	7	7
JULY 27.....	2	1

MISCELLANEOUS ANALYSES OF STREAMS IN EEL RIVER BASIN

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
11-4731. WILLIAMS CREEK NEAR COVELO, CALIF. (Lat 39°49'30", long 123°08'25")																		
Oct. 13, 1966.....	0945	53		0.3	2	T					--	--	--	--	--	--	S	
Nov. 5.....	1455	58		.8	2	T												
Dec. 8.....	1040	45		176	114	54					70	78	86	97	100			
Jan. 4, 1967.....	1110	40		19	3	.2					--	--	--	--	--		V	
Feb. 1.....	1730	46		360	162	158					66	73	84	96	98	100		
Mar. 1.....	1410	51		21	1	.1					--	--	--	--	--			
Apr. 4.....	1250	48		100	6	1.6					--	--	--	--	--			
May 2.....	1040	50		80	6	1.3					--	--	--	--	--			
June 6.....	1000	59		31	2	.2					--	--	--	--	--			
July 12.....	1530	85		4.3	3	T					--	--	--	--	--			
Aug. 3.....	1645	83		1.4	1	T					--	--	--	--	--			
Sept. 19.....	1030	66		.6	2	T					--	--	--	--	--			
11-4737. MILL CREEK NEAR COVELO, CALIF. (Lat 39°44'45", long 123°10'15")																		
Jan. 7, 1967.....	1100	37		19	2	0.1											VPWC	
Feb. 2.....	1100	44		508	110	15												
Mar. 7.....	1710	46		44	2	.2												
Mar. 16.....	1600	45		2020	1060	5780	22	31	40	50	59	68	83	95	100			
Apr. 7.....	1040	47		594	106	170												
May 3.....	1745	67		123	9	3.0												
June 7.....	1455	75		14	4	.2												
July 11.....	0915	80		.1	2	T												
11-4745. NORTH FORK EEL RIVER NEAR MINA, CALIF. (Lat 39°56'10", long 123°21'10")																		
Oct. 12, 1966.....	1100	62		2.2	6							--	--	--	--	--	S	
Nov. 3.....	1420	59		3.5	150	1.4												
Dec. 7.....	1315	46		D 2100	470	2660						72	78	85	95	99		100
Jan. 5, 1967.....	1640	41		D 115	9	2.8						--	--	--	--	--	VPWC	
Jan. 31.....	1325	46		D 4430	931	11100	17	25	34	44	54	64	76	87	96	100		
Jan. 31.....	1325	46		D 4430	966	11600						--	--	--	--	--		
Feb. 14.....	1130	48		D 325	12	11						--	--	--	--	--		
Feb. 28.....	1140	47		D 140	3	1.1						--	--	--	--	--		
Mar. 15.....	1255	41		D 1300	189	663						50	53	55	62	78		100
Apr. 6.....	1625	44		D 1920	168	871						73	80	92	99	100	V	
Apr. 6.....	1625	44		D 1920	186	964						--	--	--	--	--		
May 3.....	1230	49		D 905	34	83						--	--	--	--	--		
June 7.....	1055	67		D 99	5	1.3						--	--	--	--	--		
July 11.....	1520	81		D 16	1	T						--	--	--	--	--		
Aug. 4.....	0940	74		D 6.1	1	T						--	--	--	--	--		
Sept. 20.....	1420	75		D 3.3	5	T						--	--	--	--	--		

T Less than 0.05 ton.
D Daily mean discharge.

MISCELLANEOUS ANALYSES OF STREAMS IN EEL RIVER BASIN--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1965 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
11-4721.5, EEL RIVER NEAR DOS RIOS, CALIF. (Lat 39°37'30", long 123°20'25")					
OCT. 11, 1966.....	1	1	JAN. 24, 1967.....	648	360
NOV. 1.....	1	1	JAN. 25.....	302	120
NOV. 17.....	209	365	JAN. 26.....	2050	400
NOV. 18.....	100	173	JAN. 27.....	1280	290
NOV. 19.....	149	133	JAN. 28.....	1400	350
NOV. 20.....	2310	1120	JAN. 29.....	2790	1450
NOV. 21.....	864	512	JAN. 30.....	1590	1225
NOV. 22.....	687	450	JAN. 31.....	1100	1125
NOV. 23.....	110	103	FEB. 1.....	732	800
NOV. 24.....	70	50	FEB. 2.....	405	350
NOV. 25.....	21	28	FEB. 3.....	260	335
NOV. 26.....	17	23	FEB. 4.....	193	225
NOV. 27.....	13	17	FEB. 5.....	154	175
NOV. 28.....	28	44	FEB. 6.....	122	120
NOV. 29.....	42	46	FEB. 7.....	92	110
NOV. 30.....	30	48	FEB. 8.....	80	85
DEC. 1.....	572	208	FEB. 9.....	77	85
DEC. 2.....	3420	1470	FEB. 10.....	61	75
DEC. 3.....	1240	360	FEB. 11.....	60	75
DEC. 4.....	3260	495	FEB. 12.....	53	60
DEC. 5.....	2500	596	FEB. 13.....	43	55
DEC. 6.....	1050	360	FEB. 15.....	36	34
DEC. 7.....	592	228	FEB. 17.....	30	65
DEC. 8.....	403	226	FEB. 19.....	28	57
DEC. 9.....	186	268	FEB. 21.....	23	48
DEC. 10.....	221	248	FEB. 22.....	19	39
DEC. 11.....	154	190	FEB. 24.....	16	33
DEC. 12.....	118	150	FEB. 25.....	15	30
DEC. 13.....	236	116	FEB. 26.....	12	28
DEC. 14.....	131	172	FEB. 27.....	12	27
DEC. 15.....	101	152	FEB. 28.....	13	23
DEC. 16.....	76	106	MAR. 1.....	10	19
DEC. 17.....	67	102	MAR. 2.....	8	14
DEC. 18.....	68	129	MAR. 3.....	6	11
DEC. 19.....	58	56	MAR. 4.....	8	11
DEC. 20.....	50	102	MAR. 5.....	6	8
DEC. 21.....	48	172	MAR. 6.....	5	8
DEC. 22.....	42	86	MAR. 7.....	4	7
DEC. 23.....	36	83	MAR. 8.....	4	6
DEC. 24.....	34	77	MAR. 9.....	3	4
DEC. 25.....	34	73	MAR. 10.....	376	300
DEC. 26.....	28	60	MAR. 11.....	210	380
DEC. 27.....	23	57	MAR. 12.....	182	110
DEC. 28.....	19	58	MAR. 13.....	100	100
DEC. 29.....	13	65	MAR. 14.....	68	90
DEC. 30.....	10	24	MAR. 15.....	72	85
DEC. 31.....	10	12	MAR. 16.....	2740	850
JAN. 1, 1967.....	4	12	MAR. 17.....	547	350
JAN. 2.....	5	9	MAR. 18.....	408	270
JAN. 3.....	6	10	MAR. 19.....	254	210
JAN. 4.....	4	10	MAR. 20.....	320	215
JAN. 5.....	3	9	MAR. 21.....	278	180
JAN. 6.....	3	8	MAR. 22.....	171	135
JAN. 7.....	2	8	MAR. 23.....	181	135
JAN. 8.....	3	5	MAR. 24.....	112	90
JAN. 9.....	1	4	MAR. 25.....	89	120
JAN. 10.....	1	6	MAR. 28.....	68	60
JAN. 11.....	2	6	MAR. 29.....	49	70
JAN. 12.....	2	6	MAR. 30.....	164	115
JAN. 13.....	1	5	APR. 1.....	76	90
JAN. 14.....	1	5	APR. 2.....	75	85
JAN. 15.....	1	4	APR. 3.....	93	90
JAN. 16.....	1	4	APR. 4.....	52	68
JAN. 17.....	2	5	APR. 5.....	58	72
JAN. 18.....	1	4	APR. 6.....	326	210
JAN. 19.....	3	8	APR. 7.....	78	55
JAN. 20.....	2280	275	APR. 9.....	26	34
JAN. 21.....	3140	670	APR. 10.....	67	65
JAN. 22.....	1370	340	APR. 11.....	54	68
JAN. 23.....	546	360	APR. 12.....	46	51

MISCELLANEOUS ANALYSES OF STREAMS IN EEL RIVER BASIN--Continued

Periodic determinations of suspended-sediment concentration and turbidity, October 1965 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
11-4721.5, EEL RIVER NEAR DOS RIOS, CALIF.--Continued					
APR. 13, 1967.....	90	58	MAY 30, 1967.....	2	3
APR. 14.....	42	51	MAY 31.....	2	4
APR. 15.....	39	42	JUNE 1.....	2	4
APR. 16.....	26	37	JUNE 2.....	4	3
APR. 17.....	117	100	JUNE 3.....	48	34
APR. 18.....	110	100	JUNE 4.....	6	9
APR. 19.....	134	105	JUNE 5.....	3	24
APR. 20.....	98	83	JUNE 6.....	8	5
APR. 21.....	62	58	JUNE 7.....	4	3
APR. 22.....	52	52	JUNE 9.....	3	1
APR. 23.....	80	72	JUNE 10.....	2	1
APR. 24.....	128	85	JUNE 16.....	1	3
APR. 25.....	46	44	JUNE 17.....	2	3
APR. 26.....	38	39	JUNE 18.....	2	3
APR. 27.....	59	58	JUNE 19.....	2	2
APR. 28.....	37	38	JUNE 20.....	1	2
APR. 29.....	36	40	JUNE 21.....	1	2
APR. 30.....	31	33	JUNE 22.....	1	2
MAY 1.....	26	25	JUNE 24.....	5	5
MAY 2.....	22	23	JUNE 25.....	5	3
MAY 3.....	22	24	JUNE 26.....	2	3
MAY 4.....	17	20	JUNE 27.....	3	3
MAY 5.....	54	76	JUNE 28.....	2	3
MAY 6.....	35	34	JUNE 29.....	2	3
MAY 7.....	42	42	JUNE 30.....	2	3
MAY 8.....	50	43	JULY 2.....	3	3
MAY 9.....	46	42	JULY 3.....	2	3
MAY 10.....	113	90	JULY 4.....	2	3
MAY 11.....	51	45	JULY 5.....	2	3
MAY 12.....	30	31	JULY 7.....	2	1
MAY 13.....	27	32	JULY 8.....	2	1
MAY 15.....	20	20	JULY 10.....	1	1
MAY 16.....	18	26	JULY 11.....	1	1
MAY 17.....	38	37	JULY 13.....	2	1
MAY 18.....	50	46	JULY 15.....	2	1
MAY 19.....	22	24	JULY 17.....	2	1
MAY 21.....	17	17	JULY 19.....	3	1
MAY 22.....	17	29	JULY 21.....	3	1
MAY 23.....	14	11	JULY 25.....	2	1
MAY 24.....	12	10	JULY 27.....	1	1
MAY 25.....	9	10	JULY 29.....	2	1
MAY 26.....	7	8	JULY 30.....	2	1
MAY 27.....	5	8			
MAY 28.....	4	5			
MAY 29.....	4	4			
11-4740, EEL RIVER BELOW DOS RIOS, CALIF. (Lat 39°44'15", long 123°22'15")					
OCT. 4, 1965.....	2	1	NOV. 23, 1965.....	12	15
OCT. 9.....	14	0	NOV. 24.....	624	400
OCT. 16.....	1	0	NOV. 25.....	348	70
OCT. 24.....	1	1	NOV. 26.....	85	75
OCT. 30.....	1	1	NOV. 27.....	68	60
NOV. 4.....	1	1	NOV. 28.....	32	25
NOV. 7.....	10	12	NOV. 29.....	12	15
NOV. 8.....	22	30	NOV. 30.....	8	10
NOV. 9.....	3	2	DEC. 1.....	11	7
NOV. 11.....	2	1	DEC. 2.....	7	10
NOV. 12.....	17	24	DEC. 3.....	5	6
NOV. 13.....	44	30	DEC. 4.....	6	5
NOV. 14.....	558	330	DEC. 5.....	4	7
NOV. 16.....	34	35	DEC. 6.....	6	5
NOV. 17.....	169	53	DEC. 7.....	3	1
NOV. 18.....	1080	300	DEC. 8.....	3	1
NOV. 19.....	151	70	DEC. 9.....	3	1
NOV. 20.....	36	35	DEC. 10.....	2	1
NOV. 21.....	18	25	DEC. 11.....	4	2
NOV. 22.....	11	10	DEC. 12.....	2	3

MISCELLANEOUS ANALYSES OF STREAMS IN EEL RIVER BASIN--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
October 1965 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
11-4740. EEL RIVER BELOW DOS RIOS, CALIF.--Continued					
DEC. 13, 1965.....	3	1	JAN. 21, 1966.....	176	75
DEC. 14.....	2	2	JAN. 31.....	259	140
DEC. 15.....	4	1	FEB. 2.....	182	100
DEC. 16.....	2	1	FEB. 3.....	237	110
DEC. 17.....	4	1	FEB. 4.....	1110	275
DEC. 18.....	4	2	FEB. 6.....	465	180
DEC. 20.....	2	1	FEB. 13.....	110	70
DEC. 22.....	2	1	FEB. 23.....	128	70
DEC. 23.....	12	10	FEB. 26.....	90	60
DEC. 24.....	4970	800	MAR. 4.....	104	54
DEC. 25.....	349	160	MAR. 8.....	254	80
DEC. 26.....	164	65	MAR. 11.....	573	250
DEC. 27.....	117	45	MAY 2.....	206	120
DEC. 28.....	6340	1700	JULY 19.....	4	2
DEC. 29.....	1410	550	AUG. 30.....	1	1
DEC. 30.....	1250	240			
DEC. 31.....	1080	220			
JAN. 1, 1966.....	350	120			
JAN. 5.....	4490	900			
JAN. 6.....	3410	600			
JAN. 7.....	2310	550			
JAN. 8.....	1900	500			
JAN. 9.....	1350	450			
JAN. 10.....	973	275			
JAN. 11.....	872	275			
JAN. 12.....	650	200			
JAN. 13.....	506	220			
JAN. 14.....	510	130			
JAN. 15.....	466	140			
JAN. 17.....	404	160			
11-4745. NORTH FORK EEL RIVER NEAR MINA, CALIF. (Lat 39°56'18", long 123°20'36")					
NOV. 3, 1966.....	150	260			
DEC. 7.....	470	270			
JAN. 5, 1967.....	9	48			
FEB. 28.....	3	4			
MAR. 15.....	189	97			
APR. 6.....	168	110			
MAY 3.....	34	42			
JUNE 7.....	5	6			
JULY 11.....	1	1			
AUG. 3.....	1	1			
11-4766. BULL CREEK NEAR WEOTT, CALIF. (Lat 40°21'05", long 123°00'10")					
OCT. 13, 1966.....	13	9.2	DEC. 17, 1966.....	1770	440
NOV. 28.....	711	1000	DEC. 18.....	1220	340
NOV. 29.....	695	224	DEC. 19.....	945	260
NOV. 30.....	409	142	DEC. 20.....	841	220
DEC. 1.....	3060	1572	DEC. 21.....	691	192
DEC. 2.....	5810	2320	DEC. 22.....	592	168
DEC. 3.....	3640	1700	DEC. 23.....	791	240
DEC. 4.....	12600	5600	DEC. 24.....	821	192
DEC. 5.....	15000	9600	DEC. 25.....	568	180
DEC. 6.....	8600	2500	DEC. 26.....	536	149
DEC. 7.....	6180	1900	DEC. 27.....	458	242
DEC. 8.....	4840	1400	DEC. 28.....	417	190
DEC. 9.....	3580	950	DEC. 29.....	1220	360
DEC. 10.....	3480	950	DEC. 30.....	294	132
DEC. 11.....	2890	900	DEC. 31.....	140	160
DEC. 12.....	2930	852	JAN. 1, 1967.....	94	61
DEC. 13.....	2540	860	JAN. 2.....	75	39
DEC. 14.....	3290	820	JAN. 3.....	42	28
DEC. 15.....	2680	710	JAN. 4.....	32	23
DEC. 16.....	2220	670	JAN. 5.....	57	40

MISCELLANEOUS ANALYSES OF STREAMS IN EEL RIVER BASIN--Continued
Periodic determinations of suspended-sediment concentrations and turbidity,
October 1965 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
11-4766. BULL CREEK NEAR WEOTT, CALIF.--Continued					
JAN. 6, 1967.....	58	38	APR. 8, 1967.....	652	780
JAN. 7.....	43	30	APR. 10.....	966	850
JAN. 8.....	31	20	APR. 12.....	545	200
JAN. 9.....	27	17	APR. 13.....	2180	900
JAN. 10.....	22	15	APR. 15.....	620	236
JAN. 11.....	17	13	APR. 17.....	1840	825
JAN. 12.....	22	16	APR. 19.....	1220	640
JAN. 13.....	17	13	APR. 21.....	846	300
JAN. 14.....	15	13	APR. 23.....	587	215
JAN. 15.....	15	13	APR. 25.....	256	120
JAN. 16.....	12	9	APR. 27.....	264	110
JAN. 17.....	11	9	APR. 29.....	146	60
JAN. 18.....	9	7	MAY 1.....	80	42
JAN. 19.....	7	6	MAY 3.....	45	25
JAN. 20.....	2300	1250	MAY 5.....	27	16
JAN. 21.....	4030	2100	MAY 6.....	4	2.3
JAN. 22.....	1320	600	MAY 7.....	16	5.5
JAN. 23.....	1250	820	MAY 9.....	14	9.2
JAN. 24.....	4160	2560	MAY 11.....	76	175
JAN. 25.....	2780	1360	MAY 13.....	18	11
JAN. 26.....	8550	3968	MAY 15.....	14	8.2
JAN. 27.....	8810	4880	MAY 17.....	15	8.4
JAN. 28.....	7550	4560	MAY 19.....	11	6.7
JAN. 29.....	9540	5160	MAY 21.....	8	5.8
JAN. 30.....	5560	3540	MAY 23.....	8	4.9
JAN. 31.....	5760	2700	MAY 25.....	6	3.4
FEB. 1.....	4140	2100	MAY 27.....	5	3.4
FEB. 2.....	2660	1450	MAY 29.....	5	4.0
FEB. 3.....	1940	1000	MAY 31.....	4	3.4
FEB. 5.....	1310	600	JUNE 2.....	6	4.5
FEB. 7.....	597	380	JUNE 4.....	4	2.2
FEB. 9.....	383	190	JUNE 6.....	5	1.5
FEB. 11.....	419	175	JUNE 8.....	8	8
FEB. 13.....	169	70	JUNE 10.....	7	8
FEB. 15.....	284	160	JUNE 12.....	3	3
FEB. 17.....	178	80	JUNE 14.....	3	3
FEB. 19.....	86	65	JUNE 16.....	4	3
FEB. 21.....	62	43	JUNE 20.....	4	2
FEB. 23.....	33	23	JUNE 22.....	4	3
FEB. 25.....	26	20	JUNE 24.....	4	2
FEB. 28.....	15	12	JUNE 26.....	2	2
MAR. 1.....	13	10	JUNE 28.....	3	2
MAR. 3.....	12	10	JUNE 30.....	5	5
MAR. 5.....	9	8	JULY 2.....	3	2
MAR. 7.....	6	5	JULY 4.....	2	2
MAR. 9.....	5	3	JULY 6.....	6	6
MAR. 10.....	802	340	JULY 8.....	3	2
MAR. 11.....	478	325	JULY 10.....	2	2
MAR. 12.....	589	340	JULY 12.....	3	2
MAR. 13.....	775	390	JULY 14.....	3	3
MAR. 14.....	6280	2800	JULY 16.....	2	2
MAR. 15.....	2460	1150	JULY 18.....	8	3
MAR. 16.....	9120	5600			
MAR. 17.....	5360	2900			
MAR. 19.....	2270	1200			
MAR. 21.....	2890	1500			
MAR. 23.....	2310	1200			
MAR. 25.....	1430	620			
MAR. 27.....	816	420			
MAR. 29.....	981	470			
MAR. 30.....	1730	896			
APR. 1.....	1190	700			
APR. 3.....	674	350			
APR. 5.....	608	490			
APR. 6.....	2520	1080			

MAD RIVER BASIN

11-4805. MAD RIVER NEAR FOREST GLEN, CALIF.

LOCATION.--Lat 40°27'30", long 123°30'35", temperature recorder at gaging station on right bank 0.7 mile downstream from Lamb Creek, and 7.0 miles northwest of Forest Glen, Trinity County.

DRAINAGE AREA.--143 square miles.

RECORDS AVAILABLE.--Water temperatures: November 1960 to September 1967.

Sediment records: January 1957 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 37°F Mar. 10.

EXTREMES, 1960-67.--Water temperatures: Maximum (1960-66), 79°F June 25, 1961; minimum, 35°F Jan. 24, 1962.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	69	68	68	67	67	65	65	66	65	64	61	59	57	57	57	57	57	56	54	53	54	59	57	56	55	53	52	52	52	53	58	
Minimum	61	61	60	60	59	60	58	59	57	57	56	54	50	51	50	50	48	49	51	50	53	52	50	49	48	50	47	47	47	47	52	
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	52	50	50	56	53	52	53	51	50	51	52	54	52	53	52	52	52	50	51	50	46	46	44	44	44	44	44	44	46	46	--	49
Minimum	47	46	45	50	50	50	49	47	46	48	50	51	52	51	51	50	49	50	46	41	42	41	40	41	41	42	44	44	44	--	46	
December	--	--	--	--	48	48	47	47	46	47	47	--	47	--	--	--	46	--	--	--	47	--	--	--	--	--	46	--	--	--	--	--
Maximum	46	44	45	47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	45	43	43	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
January	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	43	40	41	41	42	41	42	42	42	42	40	41	40	40	39	40	41	41	41	40	41	41	41	41	41	40	41	40
Minimum	--	--	--	--	40	39	39	39	40	40	40	40	40	40	38	39	38	38	38	39	40	40	40	40	40	40	40	41	41	40	40	39
February	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	43	44	45	45	46	46	46	46	47	47	46	47	44	45	43	46	48	47	46	46	49	47	47	45	46	47	48	48	--	--	46	
Minimum	40	42	43	43	43	42	43	43	43	43	42	42	42	43	41	42	43	43	42	40	40	41	41	42	43	42	42	43	--	--	42	
March	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	46	48	45	47	48	50	50	51	46	40	42	43	43	44	44	43	44	45	44	46	47	46	45	46	44	47	46	44	46	43	45	45
Minimum	43	42	43	43	40	42	43	43	44	37	40	41	41	42	40	39	43	44	44	44	44	44	44	43	41	43	43	42	39	42	42	42
April	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	48	48	46	47	46	46	47	48	48	46	47	49	46	46	48	45	44	46	47	47	48	47	47	47	48	46	46	49	47	50	--	47
Minimum	42	42	41	40	44	43	43	44	43	44	44	44	43	43	43	43	42	42	43	43	43	44	44	44	44	43	43	42	43	43	--	43
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	50	51	51	52	51	54	54	55	51	49	50	52	54	54	55	56	56	56	56	56	59	56	56	57	59	58	58	54	57	52	53	54
Minimum	43	43	43	45	44	46	46	47	48	48	47	46	45	45	46	46	48	47	46	47	47	47	46	46	47	46	48	46	46	45	46	46
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	50	56	58	60	60	62	61	61	61	61	60	62	64	64	65	66	67	67	66	66	66	65	66	67	68	67	67	68	69	70	--	63
Minimum	47	46	47	48	49	51	56	50	51	51	50	51	52	53	54	54	55	56	57	51	55	55	55	55	56	57	56	56	57	58	--	52
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	70	70	70	69	68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	59	59	58	59	58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
August	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	--	--	--	--	64	63	61	63	63	63	63	63	63	58	63	63	64	63	63	64	64	64	64	64	64	63	62	--	--
Minimum	--	--	--	--	--	--	--	56	54	53	55	53	53	53	53	53	55	55	55	56	56	56	56	56	55	55	55	56	57	--	--	--

MAD RIVER BASIN--Continued

11-4805. MAD RIVER NEAR FOREST GLEN, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Oct. 6, 1966.....	1320	64		73	2	0.4												
Oct. 28.....	1000	46		73	33	6.5												
Nov. 4.....	1405	55		52	3	.4												
Nov. 20.....	1000	48		178	23	11												
Nov. 30.....	1605	48		365	31	30												
Dec. 1.....	1230	46		610	36	59												
Dec. 2.....	1200	46		1140	273	840												
Dec. 3.....	1100	45		720	45	87												
Dec. 4.....	1100	46		875	90	213												
Dec. 5.....	1000	48		4060	403	4420												
Dec. 6.....	1100	48		2630	90	639												
Dec. 7.....	1030	46		1510	83	338												
Dec. 8.....	1000	46		1050	80	227												
Dec. 9.....	1000	46		840	72	163												
Dec. 10.....	1000	46		900	64	156												
Dec. 11.....	1200	46		865	59	138												
Dec. 13.....	1300	46		865	78	182												
Dec. 17.....	1200	46		560	50	76												
Dec. 21.....	1300	46		352	47	45												
Dec. 27.....	1430	46		340	22	20												
Dec. 31.....	1630	45		335	18	16												
Jan. 5, 1967.....	1545	43		115	19	5.9												
Jan. 6.....	1300	43		111	10	3.0												
Jan. 13.....	1400	46		81	10	2.2												
Jan. 20.....	0930	39		190	65	33												
Jan. 21.....	1000	43		820	108	239												
Jan. 22.....	1200	43		2120	74	424												
Jan. 23.....	1600	43		1340	41	148												
Jan. 24.....	1300	43		1070	39	113												
Jan. 26.....	1430	43		1060	91	261												
Jan. 27.....	1330	43		4000	209	2260												
Jan. 28.....	1000	43		5200	215	3020												
Jan. 28.....	1330	43		5280	237	3380												
Jan. 29.....	1530	43		6450	211	3670												
Jan. 30.....	0900	43		3920	182	1930												
Jan. 30.....	1430	43		4160	135	1520												

MAD RIVER BASIN--Continued

11-4805. MAD RIVER NEAR FOREST GLEN, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967--Continued

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Jan. 31, 1967.....	0930	43		3540	106	1010												
Jan. 31.....	1530	43		3250	99	869												
Feb. 1.....	1735	43		2060	106	590					87	92	94	96	100			V
Feb. 3.....	1045	48		1120	187	565												
Feb. 5.....	1100	43		730	76	150												
Feb. 7.....	1030	41		660	58	103												
Feb. 7.....	1600	43		190	70	36												
Feb. 8.....	1015	41		450	52	63												
Feb. 8.....	1630	43		430	55	64												
Feb. 10.....	1155	43		348	70	66												
Feb. 12.....	1600	43		262	49	35												
Feb. 14.....	1300	43		259	42	29												
Feb. 16.....	1000	41		256	38	26												
Feb. 19.....	1100	41		178	37	18												
Feb. 28.....	0800	41		78	23	4.8												
Mar. 1.....	0935	45		75	22	4.5												
Mar. 5.....	1300	45		73	20	3.9												
Mar. 13.....	1100	43		300	44	36												
Mar. 15.....	1330	45		830	36	81												
Mar. 18.....	1000	45		1730	64	299												
Mar. 20.....	1300	45		1490	54	217												
Mar. 27.....	1330	46		680	31	57												
Mar. 29.....	1300	46		535	26	38												
Apr. 8.....	1100	46		775	26	54												
Apr. 13.....	1110	45		560	19	29												
Apr. 22.....	1000	45		505	20	27												
May 10.....	1300	48		720	13	25												
May 15.....	1330	52		490	9	12												
May 21.....	1400	55		360	7	6.8												
June 7.....	1250	57		115	3	.9												
July 31.....	1810	52		85	10	2.3												
Aug. 1.....	0855	55		85	5	1.1												

MAD RIVER BASIN--Continued

11-4805. MAD RIVER NEAR FOREST GLEN, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity, February 1964 to September 1967

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
FEB. 5, 1964.....	57	40	JAN. 27, 1965.....	133	96
FEB. 7.....	37	47	JAN. 28.....	112	100
FEB. 9.....	28	38	JAN. 29.....	102	80
FEB. 11.....	34	40	JAN. 31.....	91	90
FEB. 13.....	23	38	FEB. 4.....	70	60
FEB. 15.....	21	26	FEB. 5.....	61	48
FEB. 17.....	19	24	FEB. 14.....	42	58
FEB. 19.....	19	30	FEB. 20.....	40	40
FEB. 21.....	18	24	FEB. 23.....	60	61
FEB. 23.....	20	23	FEB. 25.....	20	40
FEB. 25.....	20	28	MAR. 7.....	4	5
FEB. 27.....	16	21	MAR. 14.....	23	19
FEB. 29.....	17	21	MAR. 21.....	12	15
MAR. 2.....	12	16	MAR. 23.....	16	16
MAR. 4.....	4	9	MAR. 26.....	16	18
MAR. 6.....	4	8	MAR. 28.....	17	20
MAR. 8.....	6	10	MAR. 29.....	22	22
MAR. 10.....	4	10	MAR. 30.....	49	41
MAR. 12.....	6	7	APR. 2.....	26	23
MAR. 14.....	6	8	APR. 4.....	25	33
MAR. 16.....	5	7	APR. 8.....	18	23
MAR. 18.....	3	7	APR. 10.....	18	20
MAR. 20.....	4	10	APR. 12.....	17	23
MAR. 25.....	12	20	APR. 18.....	247	86
MAR. 30.....	15	18	APR. 19.....	140	68
APR. 2.....	13	12	APR. 21.....	55	35
APR. 6.....	6	8	APR. 25.....	26	38
APR. 9.....	7	6	APR. 29.....	10	39
APR. 12.....	5	2	MAY 2.....	9	12
APR. 15.....	6	3	MAY 9.....	5	7
APR. 28.....	2	0	MAY 11.....	9	3
MAY 5.....	3	3	MAY 17.....	7	6
MAY 15.....	1	5	MAY 23.....	5	6
MAY 22.....	6	7	MAY 25.....	6	10
JUNE 3.....	5	6	MAY 27.....	180	17
JUNE 5.....	2	5	MAY 31.....	3	6
JUNE 12.....	2	5	JUNE 3.....	2	3
JUNE 19.....	14	20	JUNE 6.....	4	4
JUNE 24.....	15	20	JUNE 8.....	6	9
JULY 7.....	12	7	JUNE 10.....	7	8
JULY 9.....	5	4	JUNE 13.....	9	8
JULY 14.....	4	4	JUNE 17.....	3	5
JULY 29.....	5	3	JUNE 20.....	3	1
AUG. 11.....	3	4	JUNE 24.....	2	1
SEPT. 1.....	6	7	JUNE 27.....	3	3
SEPT. 8.....	3	7	JULY 1.....	3	3
SEPT. 14.....	7	5	JULY 7.....	4	3
SEPT. 30.....	2	4	JULY 12.....	3	2
OCT. 1.....	2	5	JULY 14.....	5	2
OCT. 2.....	2	5	JULY 18.....	3	1
OCT. 9.....	3	5	JULY 25.....	4	2
OCT. 16.....	4	3	AUG. 1.....	4	3
OCT. 23.....	3	5	AUG. 8.....	2	4
OCT. 28.....	3	5	AUG. 15.....	2	2
NOV. 29.....	6	13	AUG. 21.....	13	19
NOV. 30.....	8	7	AUG. 29.....	11	11
DEC. 1.....	26	22	SEPT. 2.....	11	15
DEC. 8.....	10	15	SEPT. 5.....	13	15
DEC. 17.....	6	10	SEPT. 12.....	8	14
DEC. 20.....	359	168	SEPT. 19.....	12	15
DEC. 24.....	1450	812	SEPT. 27.....	5	5
DEC. 27.....	725	408	OCT. 10.....	5	5
JAN. 6, 1965.....	912	520	OCT. 18.....	4	3
JAN. 14.....	211	180	OCT. 25.....	4	3
JAN. 15.....	212	150	OCT. 31.....	4	3
JAN. 18.....	153	115	NOV. 7.....	30	30
JAN. 20.....	359	168	NOV. 14.....	20	25
JAN. 23.....	1800	560	NOV. 19.....	38	20
JAN. 24.....	250	160	NOV. 21.....	53	70
JAN. 25.....	208	120	NOV. 24.....	47	47

MAD RIVER BASIN--Continued

11-4805. MAD RIVER NEAR FOREST GLEN, CALIF.--Continued

Periodic determinations of suspended-sediment concentration and turbidity,
February 1964 to September 1967--Continued

Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)	Date of collection	Concentration of suspended sediment (ppm)	Turbidity (ppm silica)
NOV. 26, 1965.....	25	33	DEC. 11, 1966.....	59	49
NOV. 28.....	19	25	DEC. 13.....	78	106
DEC. 5.....	12	20	DEC. 17.....	50	84
DEC. 12.....	7	15	DEC. 21.....	47	76
DEC. 13.....	11	15	DEC. 27.....	22	38
DEC. 19.....	3	12	DEC. 31.....	18	37
DEC. 26.....	5	11	JAN. 5, 1967.....	17	33
DEC. 28.....	335	380	JAN. 6.....	10	25
DEC. 30.....	17	25	JAN. 13.....	10	21
JAN. 4, 1966.....	625	350	JAN. 20.....	65	100
JAN. 5.....	459	201	JAN. 21.....	108	100
JAN. 9.....	180	268	JAN. 22.....	74	60
FEB. 4.....	138	100	JAN. 23.....	41	54
FEB. 6.....	61	67	JAN. 24.....	39	60
FEB. 9.....	44	47	JAN. 26.....	91	82
FEB. 13.....	36	58	JAN. 27.....	209	100
FEB. 17.....	34	57	JAN. 28.....	215	100
FEB. 20.....	28	51	JAN. 29.....	211	135
FEB. 23.....	26	42	JAN. 30.....	182	100
FEB. 26.....	24	38	JAN. 31.....	119	100
FEB. 28.....	25	40	FEB. 1.....	106	105
MAR. 3.....	26	40	FEB. 3.....	187	130
MAR. 4.....	26	40	FEB. 5.....	76	80
MAR. 7.....	65	55	FEB. 7.....	70	85
MAR. 9.....	133	80	FEB. 8.....	55	93
MAR. 10.....	112	75	FEB. 10.....	70	95
MAR. 11.....	69	40	FEB. 12.....	49	84
MAR. 13.....	36	45	FEB. 14.....	42	80
MAR. 16.....	42	45	FEB. 16.....	38	77
MAR. 20.....	40	30	FEB. 19.....	37	72
MAR. 27.....	26	35	FEB. 28.....	23	42
MAR. 30.....	24	35	MAR. 1.....	22	42
MAR. 31.....	28	40	MAR. 5.....	20	37
APR. 27.....	3	10	MAR. 13.....	44	65
JULY 18.....	3	5	MAR. 15.....	36	65
AUG. 18.....	7	5	MAR. 18.....	64	80
OCT. 6.....	2	2	MAR. 20.....	54	74
OCT. 28.....	33	48	MAR. 27.....	31	59
NOV. 20.....	23	35	MAR. 29.....	26	52
NOV. 30.....	31	30	APR. 8.....	26	45
DEC. 1.....	36	54	APR. 13.....	19	32
DEC. 2.....	273	90	APR. 22.....	20	24
DEC. 3.....	45	48	MAY 10.....	13	16
DEC. 4.....	90	65	MAY 15.....	9	12
DEC. 5.....	403	98	MAY 21.....	7	7
DEC. 6.....	90	82	JUNE 7.....	2	5
DEC. 7.....	83	68	JUNE 30.....	9	13
DEC. 8.....	80	97	AUG. 1.....	5	5
DEC. 9.....	72	104			
DEC. 10.....	64	75			

MAD RIVER BASIN--Continued

11-4807.5. MAD RIVER NEAR KNEELAND, CALIF.

LOCATION.--Lat 40°45'50", long 123°53'20", temperature recorder at gaging station on left bank at mouth of Maple Creek, 30 feet upstream from bridge, and 5.4 miles east of Kneeland, Humboldt County.

DRAINAGE AREA.--352 square miles.

RECORDS AVAILABLE.--Water temperatures: November 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 74°F on several days in August; minimum, 44°F on several days in January.

EXTREMES, 1965-67.--Water temperatures: Maximum, 74°F on several days in August 1967; minimum, 36°F Mar. 2, 1966.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
November																																
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	50	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	48	--	--
December																																
Maximum	50	50	50	50	49	49	48	49	48	48	49	48	49	50	50	50	50	49	48	48	48	48	48	48	48	48	47	46	45	45	45	48
Minimum	50	50	48	48	48	48	48	48	48	48	48	48	49	50	50	50	49	48	48	48	48	48	48	48	48	48	47	46	45	45	45	47
January																																
Maximum	45	45	45	45	46	46	45	44	44	45	45	45	46	46	46	46	46	46	46	47	48	47	46	46	46	45	46	47	47	46	46	45
Minimum	45	45	45	45	45	45	44	44	44	44	44	45	45	45	46	46	45	45	44	44	46	47	46	46	44	44	45	46	46	46	45	46
February																																
Maximum	46	46	46	46	47	47	47	47	47	47	48	48	48	48	46	46	46	46	47	47	47	47	46	46	46	46	47	47	47	--	--	46
Minimum	46	46	46	46	46	47	47	47	47	47	47	47	47	47	48	46	45	45	46	47	46	46	46	46	46	46	46	46	46	--	--	46
March																																
Maximum	47	48	47	47	46	47	48	48	49	50	48	46	46	46	46	47	47	47	47	46	46	47	48	48	48	48	47	46	46	46	46	47
Minimum	47	47	46	45	45	46	47	48	48	48	46	46	46	46	46	46	46	46	46	46	46	47	48	48	48	46	46	46	46	46	46	46
April																																
Maximum	46	46	46	46	46	47	47	47	47	47	48	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	46
Minimum	46	46	46	46	46	46	46	47	46	46	46	47	47	47	47	47	47	47	47	47	47	47	46	47	47	47	47	47	46	47	--	46
May																																
Maximum	48	48	48	49	50	50	52	54	53	53	53	53	53	52	53	53	53	53	54	55	56	57	57	58	58	59	60	60	60	60	61	54
Minimum	47	47	47	48	49	49	50	51	51	53	53	53	52	51	52	51	51	52	52	53	54	55	55	57	57	57	58	59	59	60	60	53
June																																
Maximum	60	61	60	63	63	64	64	64	63	63	62	63	63	64	64	65	66	66	66	68	68	68	68	68	68	68	68	68	68	69	--	65
Minimum	60	60	59	60	62	63	63	63	62	62	62	62	62	62	63	64	64	65	66	67	68	68	68	67	67	67	67	67	67	67	--	64
July																																
Maximum	70	71	71	72	73	73	73	73	73	72	72	72	72	72	72	72	72	72	73	73	72	72	72	72	72	72	73	72	72	72	72	72
Minimum	68	69	71	71	72	72	72	72	72	72	72	72	72	71	72	71	71	72	72	72	72	72	72	72	72	72	72	71	71	70	71	71
August																																
Maximum	72	72	72	73	74	74	74	74	73	73	73	73	73	73	74	74	73	73	73	73	72	72	73	73	73	72	72	72	72	72	72	72
Minimum	71	71	72	72	73	74	74	73	72	73	72	71	72	72	72	73	72	72	72	72	72	72	72	72	72	71	71	71	71	71	71	71
September																																
Maximum	71	70	70	70	70	70	70	70	70	69	69	69	69	68	68	68	67	67	67	67	67	66	70	67	67	67	66	66	65	65	--	68
Minimum	70	69	69	69	69	70	70	70	69	69	69	69	68	67	67	67	67	67	67	66	65	65	66	66	66	66	65	65	65	65	64	67

MAD RIVER BASIN--Continued

11-4810. MAD RIVER NEAR ARCATA, CALIF.

LOCATION.--Lat 40°54'35", long 124°03'35", at gaging station 100 feet upstream from bridge on U.S. Highway 299, 1.0 mile downstream from Warren Creek, and 2.8 miles northeast of Arcata, Humboldt County.

DRAINAGE AREA.--485 square miles.

RECORDS AVAILABLE.--Chemical analyses: November 1958 to September 1967.

Water temperatures: December 1957 to September 1967.

Sediment records: December 1957 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 70°F Sept. 5; minimum, 41°F Dec. 28, Jan. 17.

Sediment concentrations: Maximum daily, 5,770 ppm Mar. 16; minimum daily, 3 ppm on many days in October and September.

Sediment loads: Maximum daily, 306,000 tons Dec. 5; minimum daily, 0.1 ton Nov. 2, 10-12.

EXTREMES, 1957-67.--Water temperatures: Maximum (1963-64, 1965-67), 77°F June 15, 16, July 12, 1966; minimum, 33°F Dec. 17-20, 1965.

Sediment concentrations: Maximum daily, 21,500 ppm Dec. 23, 1964; minimum daily, 1 ppm on many days in 1958-60, 1962, 1965.

Sediment loads: Maximum daily, 3,140,000 tons Dec. 22, 1964; minimum daily, 0.1 ton on many days in 1958-60, 1962, 1966.

REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 10, 1966....	55			34	5.7	4.5	1.0	120	4	--	1.9		--	0.0				108			233	8.5
Nov. 14.....	576			25	4.6	5.6	1.3	75	0	--	3.4		--	.0				82			181	7.6
Dec. 12.....	3620			16	3.5	3.1	2.0	56	0	--	1.7		--	.0				54			110	7.8
Jan. 16, 1967....	252			25	4.4	3.9	.8	73	0	--	2.2		--	.1				80			174	8.1
Feb. 6.....	1700			16	3.0	3.1	.8	57	0	--	1.5		--	.0				52			114	8.0
Mar. 6.....	255			24	4.1	4.1	.9	82	0	--	2.2		--	.0				77			165	8.0
Apr. 3.....	2071			14	3.3	3.5	.9	55	0	--	1.4		--	.0				48			108	7.8
May 8.....	2260	6.8		13	2.7	2.6	.9	50	0	6.0	.9		0.7	.0	76			44			98	7.6
June 5.....	345			21	3.5	4.0	.9	77	0	--	1.4		--	.0				67			147	8.0
July 17.....	89			--	--	5.0	--	113	0	--	2.8		--	.1				93			216	8.2
Aug. 7.....	58			--	--	4.8	--	114	0	--	2.6		--	.0				100			215	8.2
Sept. 11.....	77			32	4.8	4.8	.9	111	0	12	2.8		.0	.1				100			210	8.2

MAD RIVER BASIN--Continued

11-4810. MAD RIVER NEAR ARCATA, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	--	57	--	--	55	--	62	--	57	--	56	--	55	--	65	--	66	67	66	--	65	58	64	--	58	60	61	--	59	58	--	--	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
November	62	--	60	53	53	--	52	--	50	--	--	--	--	--	60	58	57	56	55	57	57	56	52	50	52	52	52	51	50	53	--	--	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	60	58	57	56	55	57	57	56	52	50	52	52	52	51	50	53	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	56	56	54	54	54	54	56	52	50	50	49	48	48	50	50	49	52	--	--
December	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	54	52	51	52	52	52	51	52	50	52	52	54	54	52	51	49	50	51	50	51	50	51	48	50	50	49	47	46	45	48	48	50	
Minimum	52	50	49	50	50	50	50	50	50	50	50	51	50	48	48	47	47	47	48	48	47	44	46	46	46	44	42	41	42	42	43	47	
January	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	49	47	46	47	48	46	48	48	47	50	49	50	51	49	50	50	47	48	44	46	46	46	45	45	44	44	46	48	48	48	47	48	47
Minimum	44	44	44	45	43	42	42	42	43	45	46	46	46	47	46	43	41	42	42	42	44	44	44	44	43	44	46	45	45	46	45	44	44
February	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	47	48	50	52	53	52	52	50	54	54	52	52	50	51	48	48	51	54	54	52	52	53	52	51	54	53	54	54	--	--	--	51	
Minimum	45	45	46	49	48	47	48	48	49	49	47	48	46	45	45	46	48	49	47	45	45	46	48	49	47	46	47	48	--	--	--	47	
March	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	53	55	53	56	58	57	59	60	54	52	50	48	48	48	50	50	48	50	49	50	51	51	52	52	51	51	51	50	50	50	49	51	
Minimum	48	47	46	45	45	46	50	51	52	46	45	47	45	44	46	48	48	48	48	48	50	50	50	50	49	49	50	48	48	48	48	47	
April	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	50	51	51	52	51	51	52	52	51	49	50	48	48	48	49	47	48	48	49	48	49	49	49	50	50	49	49	48	48	48	48	49	
Minimum	48	49	50	50	50	50	50	51	50	48	47	48	48	46	46	47	46	46	46	46	48	48	48	48	48	48	47	46	46	47	--	47	
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	49	50	51	51	52	52	53	52	52	52	52	51	52	52	53	53	54	54	55	56	56	56	56	57	57	57	57	56	57	56	56	53	
Minimum	48	48	49	50	50	51	52	52	52	50	50	49	50	51	51	52	52	53	54	54	56	56	55	56	56	56	56	55	55	55	52	52	
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	56	57	57	57	57	57	59	59	59	59	59	59	60	60	60	59	60	59	59	59	59	60	61	61	61	60	61	61	61	62	62	--	59
Minimum	55	56	56	56	56	56	58	58	58	58	58	58	58	58	59	59	59	59	59	59	59	59	60	60	60	60	60	60	60	60	61	--	58
July	--	--	--	--	63	--	63	--	62	--	--	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	62	63	64	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	62	62	62	63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
August	--	66	--	--	66	--	--	67	--	--	--	65	--	--	66	--	--	68	--	--	65	--	--	64	--	--	65	--	--	65	--	--	--
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September	63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Maximum	--	--	--	69	70	68	65	68	68	63	67	67	66	62	64	64	61	66	65	66	67	64	65	60	63	66	62	60	66	62	--	64	
Minimum	--	--	--	70	68	61	62	60	59	59	60	58	57	58	58	57	58	58	57	59	64	58	58	57	57	58	58	58	54	56	--	59	

reverse ?

MAD RIVER BASIN--Continued

11-4810. MAD RIVER NEAR ARCATA, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	70	17	3.2	21	3	0.2	2530	808	S 6780
2..	50	5	.7	17	3	.1	5510	2430	S 42600
3..	46	5	.6	14	5	.2	5010	1250	16900
4..	46	5	.6	12	5	.2	8620	3070	S 112000
5..	46	5	.6	11	10	.3	18700	5450	S 306000
6..	46	4	.5	29	15	1.2	7330	2300	45500
7..	46	4	.5	44	10	1.2	5750	1420	22000
8..	46	4	.5	26	7	.5	5370	1120	16200
9..	47	3	.4	19	4	.2	4290	900	10400
10..	55	3	.4	18	3	.1	4230	930	10600
11..	54	3	.4	16	3	.1	3660	740	7310
12..	53	3	.4	18	3	.1	3620	660	6450
13..	51	3	.4	75	37	S 9.0	3710	859	9020
14..	49	4	.5	576	388	S 671	3950	714	S 7730
15..	50	5	.7	1400	942	S 5030	2990	485	3920
16..	55	5	.7	2700	1770	S 14400	2290	400	2470
17..	54	6	.9	960	270	S 771	1770	305	1460
18..	60	134	22	588	70	111	1450	200	783
19..	66	56	10.0	1140	493	S 2600	1200	175	567
20..	62	15	2.5	4490	1870	S 23500	1070	158	456
21..	61	7	1.2	4840	1160	S 15600	955	148	382
22..	69	15	2.8	3250	440	3860	880	122	290
23..	81	15	3.3	1680	220	998	930	118	296
24..	67	8	1.4	1140	100	308	930	95	239
25..	51	9	1.2	845	80	183	860	79	183
26..	45	23	2.8	688	90	167	870	80	188
27..	44	31	3.7	708	80	153	780	103	217
28..	37	39	3.9	810	100	219	704	90	171
29..	33	23	2.0	2290	822	S 5220	688	70	130
30..	30	7	.6	1510	300	1220	696	75	141
31..	26	6	.4	--	--	--	636	53	91
Total	1596	--	69.8	29935	--	75024.4	101979	--	631474
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	620	51	85	5590	1150	17400	306	39	32
2..	592	47	75	4230	900	10300	300	34	28
3..	564	44	67	3230	620	5410	291	22	17
4..	496	50	67	2730	440	3240	270	13	9.5
5..	628	79	134	2130	288	1660	276	9	6.7
6..	560	68	103	1700	248	1140	255	19	13
7..	471	37	47	1390	200	751	237	42	27
8..	433	28	33	1200	175	570	252	58	39
9..	387	27	28	1080	162	472	243	75	S 49
10..	373	42	42	945	144	370	1710	491	S 2880
11..	349	20	19	850	123	282	1990	380	2000
12..	339	24	22	775	103	220	1470	364	1440
13..	333	29	26	708	128	245	1490	210	845
14..	291	14	11	740	143	290	1290	210	731
15..	267	20	14	870	144	S 363	1490	593	S 2390
16..	252	56	38	945	203	520	8410	5770	S 151000
17..	231	82	51	825	173	385	5410	1400	20400
18..	228	27	17	790	95	200	4740	930	11900
19..	231	36	22	696	52	98	3880	700	7330
20..	2590	1040	S 8950	620	28	47	3600	690	6710
21..	8510	3330	S 79000	572	35	54	3570	715	6890
22..	5850	1250	S 19700	517	52	73	3250	570	5000
23..	4210	880	S 10000	457	48	59	3710	780	7810
24..	4220	1240	S 15800	433	50	58	3470	720	6750
25..	4420	606	S 7770	405	48	52	2940	400	3200
26..	5850	1890	S 35000	415	34	38	2420	340	2220
27..	9800	3010	S 79000	349	22	21	1790	310	1500
28..	12800	4640	S 162000	333	32	29	1700	230	1060
29..	15900	4900	S 217000	--	--	--	1920	160	830
30..	10300	2290	S 63900	--	--	--	2540	283	1940
31..	8470	1670	38200	--	--	--	3020	410	3340
Total	100565	--	737221	35525	--	44347	68240	--	248387.2

S Computed by subdividing day.

MAD RIVER BASIN--Continued

11-4810, MAD RIVER NEAR ARCATA, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2820	280	2100	1700	84	390	454	47	58
2..	2160	240	1400	1550	88	368	405	27	30
3..	2000	190	1000	1540	138	570	339	16	15
4..	1710	150	693	1620	176	770	321	22	19
5..	1700	160	730	1670	174	780	345	34	32
6..	2630	280	1990	1690	173	789	339	45	41
7..	3180	442	3800	1870	245	1200	294	41	33
8..	2730	400	2950	2260	573	3500	288	20	16
9..	2330	305	1900	2460	644	4300	261	8	5.6
10..	2190	220	1300	3030	635	5190	240	8	5.2
11..	2050	185	1000	3290	492	4370	222	7	4.2
12..	1680	173	785	3040	368	3020	216	7	4.1
13..	1660	210	940	2430	270	1800	201	6	3.3
14..	2780	402	3020	1970	179	952	165	6	2.7
15..	2700	228	1700	1760	161	770	153	6	2.5
16..	2110	134	763	1700	192	881	143	8	3.1
17..	2920	279	2200	1560	164	690	132	10	3.6
18..	2940	264	2100	1420	135	518	122	9	3.0
19..	2490	192	1300	1230	121	400	118	8	2.5
20..	2130	163	937	1170	118	373	112	7	2.1
21..	1820	135	660	1110	115	340	109	6	1.8
22..	1640	111	492	1010	103	281	106	6	1.7
23..	1560	100	420	955	87	220	98	6	1.6
24..	1660	172	771	845	66	151	100	6	1.6
25..	1920	161	830	725	60	120	100	6	1.6
26..	2000	148	799	664	61	109	96	6	1.6
27..	2530	232	1600	608	56	92	96	6	1.6
28..	2510	290	1970	580	46	72	90	10	2.4
29..	2220	223	1300	580	31	49	85	14	3.2
30..	1990	124	666	540	25	36	83	12	2.7
31..	--	--	--	520	37	52	--	--	--
Total	66760	--	42116	47097	--	33153	5833	--	305.7
	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	82	10	2.2	46	6	0.7	44	3	0.4
2..	83	10	2.2	45	6	.7	49	3	.4
3..	126	10	3.4	43	6	.7	67	4	.7
4..	132	9	3.2	42	6	.7	101	4	1.1
5..	130	8	2.8	41	6	.7	108	4	1.2
6..	130	8	2.8	50	8	1.1	97	4	1.0
7..	110	8	2.4	58	9	1.4	88	4	1.0
8..	91	7	1.7	56	10	1.5	88	4	1.0
9..	76	6	1.2	58	8	1.3	76	4	.8
10..	74	6	1.2	56	7	1.1	77	4	.8
11..	74	6	1.2	57	6	.9	77	4	.8
12..	74	6	1.2	52	6	.8	71	4	.8
13..	79	6	1.3	47	6	.8	82	3	.7
14..	78	6	1.3	37	6	.6	87	3	.7
15..	75	6	1.2	33	6	.5	94	3	.8
16..	87	6	1.4	33	10	.9	93	3	.8
17..	89	6	1.4	36	34	3.3	102	3	.8
18..	87	6	1.4	46	12	1.5	132	3	1.1
19..	90	6	1.5	53	6	.9	108	4	1.2
20..	87	6	1.4	72	6	1.2	74	4	.8
21..	78	6	1.3	77	5	1.0	62	4	.7
22..	74	7	1.4	71	4	.8	63	4	.7
23..	77	8	1.7	69	3	.6	64	4	.7
24..	74	8	1.6	69	3	.6	61	3	.5
25..	56	8	1.2	72	3	.6	72	3	.6
26..	52	8	1.1	70	3	.6	74	3	.6
27..	49	8	1.1	61	3	.5	65	3	.5
28..	47	9	1.1	55	3	.4	61	3	.5
29..	47	10	1.3	48	3	.4	65	3	.5
30..	48	10	1.3	43	3	.3	69	3	.6
31..	46	8	1.0	43	3	.3	--	--	--
Total	2502	--	50.5	1639	--	27.4	2371	--	22.8
Total discharge for year (cfs-days).....							464042		
Total load for year (tons).....							1812198.8		

MAD RIVER BASIN--Continued

11-4810. MAD RIVER NEAR ARCATA, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Nov. 29, 1966.....	1230	53		2660	1050		--	41	--	66	--	88	95	100	--			VPWC
Dec. 5.....	0750	50		18900	5970		23	31	44	55	69	79	94	100	--			VPWC
Feb. 2, 1967.....	1500	48		4090	869		--	--	--	--	--	97	100	--	--			V
Feb. 3.....	1430	50		3200	783		--	--	--	--	--	68	77	90	99	100		V
Mar. 16.....	0830	50		10700	9500		19	25	34	46	60	71	93	100	--			VPWC
Mar. 16.....	1400	45		14500	7200		--	29	--	53	--	77	92	100	--			VPWC
Mar. 17.....	1000	48		5320	1130		29	42	58	72	86	91	99	100	--			VPWC
Apr. 10.....	1300	48		2180	244		--	--	--	--	--	85	89	93	100			V
Apr. 27.....	1100	45		2570	242		--	--	--	--	--	91	94	97	100			V

REDWOOD CREEK BASIN

11-4825. REDWOOD CREEK AT ORICK, CALIF.

LOCATION.--Lat 41°17'20", long 123°03'30", at gaging station on pier of bridge on U.S. Highway 101 at Orick, Humboldt County, and 0.9 mile downstream from Prairie Creek.

DRAINAGE AREA.--278 square miles.

RECORDS AVAILABLE.--Chemical analyses: November 1958 to September 1966.

Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 36°F Feb. 20, Mar. 3, 11.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																																Average
	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		
October																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
November																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	56	58	58	58	56	54	54	54	53	50	50	51	51	52	54	54	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	54	53	56	56	54	53	52	51	50	58	50	50	50	51	52	53	--	--
December																																	
Maximum	55	54	54	54	53	53	53	53	53	55	55	55	55	54	52	52	53	52	53	53	50	51	52	51	50	49	48	50	50	50	49	52	
Minimum	54	52	52	52	52	51	51	51	51	52	54	54	52	50	49	49	48	49	50	48	47	48	48	47	43	42	42	45	44	46	45	48	
January																																	
Maximum	49	49	50	52	53	54	53	50	51	52	50	51	53	52	51	52	52	51	48	48	48	48	46	48	46	48	50	52	52	50	52	50	
Minimum	45	44	44	48	48	48	44	42	42	44	46	47	48	47	47	43	42	44	44	46	47	46	46	46	45	48	48	52	49	48	48	46	
February																																	
Maximum	52	48	48	48	48	48	48	48	49	50	46	49	44	46	43	44	46	48	49	47	46	47	47	46	48	47	48	48	--	--	--	47	
Minimum	48	46	44	42	42	42	42	42	43	43	41	42	39	39	40	40	44	41	38	36	38	40	41	42	40	40	41	43	--	--	--	41	
March																																	
Maximum	48	48	48	49	49	51	52	51	49	48	44	42	42	44	46	45	46	46	44	46	49	48	48	47	48	47	44	44	44	42	44	46	
Minimum	40	38	36	38	39	39	42	43	44	38	36	38	38	38	40	42	42	41	41	44	45	44	41	41	40	42	39	38	38	39	38	40	
April																																	
Maximum	44	45	--	--	--	--	--	--	--	--	48	48	45	46	49	44	44	46	49	47	52	49	48	52	50	44	44	48	48	51	--	--	
Minimum	40	42	--	--	--	--	--	--	--	--	45	45	42	40	39	42	40	39	40	42	42	44	44	44	44	42	41	40	41	43	--	--	
May																																	
Maximum	53	54	56	52	57	58	61	60	56	48	49	54	56	58	62	62	62	62	61	64	61	63	62	--	66	65	60	63	60	65	59		
Minimum	43	44	48	48	48	48	51	54	46	44	45	44	48	48	51	54	54	53	53	55	56	55	54	52	--	56	55	56	55	53	52	50	
June																																	
Maximum	59	64	68	63	64	62	62	62	66	63	66	65	69	69	65	67	69	71	65	60	70	69	70	69	66	70	72	73	73	74	--	66	
Minimum	53	52	54	58	58	58	56	55	55	54	56	56	56	58	58	57	58	59	59	58	58	59	58	59	59	59	60	58	60	61	--	57	
July																																	
Maximum	74	72	71	71	72	68	66	71	67	66	72	70	68	70	72	70	71	74	74	70	70	--	--	--	--	73	74	72	74	74	72	71	
Minimum	60	60	60	60	60	60	59	58	57	60	60	60	60	60	60	58	58	60	60	60	60	--	--	--	--	59	58	64	60	58	58	59	
August																																	
Maximum	71	72	72	73	73	72	71	71	72	71	72	70	70	70	72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	69	60	60	65	58	60	61	60	60	60	61	60	59	58	57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

KLAMATH RIVER BASIN

11-5165.3. KLAMATH RIVER BELOW IRON GATE DAM, CALIF.

LOCATION.--Lat 41°55'40", long 122°26'35", at gaging station 0.1 mile downstream from Bogus Creek, 0.6 mile downstream from Iron Gate Dam, Siskiyou County, and 5.9 miles northeast of Hornbrook.

RECORDS AVAILABLE.--Chemical analyses: October 1961 to June 1967 (discontinued).

Water temperatures: October 1962 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 73°F Aug. 6; minimum, 38°F on many days during December to February.

EXTREMES, 1962-67.--Water temperatures: Maximum, 73°F Aug. 6, 1967; minimum, 34°F on several days in January 1965.

Chemical analyses, in parts per million, October 1966 to June 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 3, 1966.....	1310			12	7.3	18	3.0	96	0		4.0	0.1	5.7	0.0				60	0	1.0	207	8.1
Oct. 31.....	1690			12	6.7	16	2.6	91	0		2.5		6.1	.1				58	0	.9	188	8.0
Dec. 6.....	3530			13	7.0	18	2.6	87	0		5.6		8.4	.0				62	0	1.0	201	7.9
Jan. 4, 1967.....	3050			12	7.2	20	2.6	90	0		4.0		6.9	.0				60	0	1.1	212	7.6
Feb. 18.....	3680			15	6.9	15	1.5	93	0		2.8		2.7	.1				66	0	.8	189	8.0
Mar. 9.....	1790			14	6.6	17	2.0	88	0		4.1		2.2	.0				62	0	.9	194	7.6
Apr. 4.....	1760			17	7.8	18	2.3	95	0		4.1		1.6	.0				74	0	.9	213	7.6
May 2.....	3540	15		15	8.2	20	2.2	88	0	35	4.0		1.8	.0	160	0.22		71	0	1.0	232	7.5
June 12.....	1050			11	6.6	16	1.8	76	0		3.0		—	.0				54	0	.9	189	7.7

KLAMATH RIVER BASIN--Continued

11-5165.3. KLAMATH RIVER BELOW IRON GATE DAM, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	63	62	62	61	60	60	60	61	60	60	60	58	58	57	57	57	56	58	57	57	55	55	55	55	55	54	54	55	53	53	53	57	
Minimum	62	62	61	60	60	60	60	60	60	59	58	58	57	57	57	56	56	56	57	55	55	55	55	55	53	53	54	53	53	53	53	56	
November																																	
Maximum	53	53	53	53	53	53	52	52	52	51	51	51	51	50	49	49	48	48	48	48	48	48	47	47	47	46	46	46	46	46	46	49	
Minimum	53	53	53	53	53	52	52	51	51	51	51	51	50	49	49	48	48	48	48	48	48	47	47	46	46	46	46	46	46	46	46	49	
December																																	
Maximum	46	46	46	46	44	44	44	44	44	44	44	44	44	43	42	42	42	42	42	41	41	40	39	39	39	39	39	39	39	39	39	42	
Minimum	46	46	46	44	44	44	44	44	44	44	43	43	43	43	42	42	42	42	41	41	40	39	39	39	39	39	39	39	39	39	39	41	
January																																	
Maximum	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	
Minimum	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	
February																																	
Maximum	38	38	38	38	38	38	38	38	38	39	39	39	39	39	39	39	40	40	40	40	40	40	40	40	40	40	40	40	41	---	---	---	39
Minimum	38	38	38	38	38	38	38	38	38	38	39	39	39	39	39	39	40	40	40	40	40	40	40	40	40	40	40	40	40	---	---	---	39
March																																	
Maximum	41	41	41	41	41	42	42	42	42	42	42	42	42	42	42	42	42	43	43	43	43	44	44	45	45	45	45	45	45	45	45	45	47
Minimum	40	40	41	41	41	41	42	42	42	42	42	42	42	42	42	42	42	42	43	43	43	43	44	44	44	45	45	45	45	45	45	45	47
April																																	
Maximum	45	45	45	45	45	45	45	46	46	46	46	47	47	46	46	46	46	46	47	47	47	48	48	48	49	49	48	48	49	49	49	46	
Minimum	45	45	44	44	44	44	45	45	46	45	45	46	46	46	46	46	46	46	47	47	47	48	48	48	49	48	48	48	48	48	48	46	
May																																	
Maximum	49	49	50	50	50	51	52	52	52	50	52	52	52	53	54	54	57	57	57	58	61	61	61	61	61	61	63	62	61	61	61	60	55
Minimum	47	48	49	49	49	50	50	51	50	50	50	51	52	52	53	54	55	55	57	57	59	59	59	59	59	59	60	61	60	60	59	54	
June																																	
Maximum	59	58	59	61	62	62	63	63	62	62	62	62	61	62	62	63	64	65	64	67	67	64	65	66	66	67	69	66	67	67	67	63	
Minimum	58	58	58	58	58	58	58	59	59	58	59	59	59	60	61	61	62	63	63	63	63	63	63	63	64	64	64	65	65	66	66	61	
July																																	
Maximum	67	69	69	69	68	70	68	69	70	69	69	70	71	70	71	70	71	71	70	70	70	70	70	69	70	71	71	70	70	71	71	69	
Minimum	67	67	67	67	66	66	67	67	67	67	68	68	68	68	69	69	68	68	68	68	68	68	68	68	69	69	69	69	69	70	69	67	
August																																	
Maximum	72	72	72	72	72	73	71	70	69	69	69	69	69	70	70	70	70	70	70	70	72	72	72	72	72	71	70	70	70	69	---	70	
Minimum	70	70	70	70	70	70	69	69	69	68	68	69	69	70	70	70	69	69	70	70	70	71	70	70	70	70	70	70	69	69	---	69	
September																																	
Maximum	70	70	70	70	70	70	69	68	68	68	68	68	67	67	67	66	66	66	66	66	64	64	64	64	64	63	63	63	63	63	---	66	
Minimum	69	69	70	70	69	69	68	68	68	68	67	67	66	66	66	66	65	65	64	63	63	63	63	63	63	63	62	62	62	62	---	65	

KLAMATH RIVER BASIN--Continued

11-5166. COTTONWOOD CREEK AT HORN BROOK, CALIF.

LOCATION.--Lat 41°55'00", long 122°33'45", temperature recorder at gaging station on right bank 0.5 mile upstream from Rancheria Gulch, and 0.6 mile northwest of Hornbrook, Siskiyou County.

DRAINAGE AREA.--89.8 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1964 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 83°F July 1; minimum, freezing point on several days in December and January.

EXTREMES, 1964-67.--Water temperatures: Maximum (1964-65, 1966-67), 84°F July 17, 1966; minimum, freezing point on several days in December 1965, December 1966 and January 1967.

REMARKS.--Clock stopped May 1-5, Aug. 27 to Sept. 13; temperature ranges, 38°F to 59°F and 60°F to 75°F, respectively.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	68	66	65	63	63	65	67	68	65	62	63	61	60	59	60	60	60	59	57	59	59	60	66	64	62	62	61	60	60	60	61	62	
Minimum	59	60	57	56	56	57	61	58	58	55	55	54	50	48	50	50	48	48	48	52	50	52	58	55	53	54	53	50	50	50	51	53	
November																																	
Maximum	58	58	58	59	56	54	51	50	46	48	50	52	51	50	49	48	48	48	50	50	50	47	45	41	40	42	42	43	44	44	--	49	
Minimum	50	47	47	48	48	50	46	44	43	43	46	47	48	48	47	46	46	45	48	48	47	45	41	40	38	40	40	41	43	48	--	45	
December																																	
Maximum	46	46	44	45	43	42	42	43	40	42	42	43	43	42	40	39	40	40	40	41	38	37	39	38	40	38	37	36	36	38	37	40	
Minimum	44	44	44	38	38	38	39	39	36	38	38	39	40	38	38	36	36	38	38	38	34	34	35	35	36	34	32	32	34	34	32	27	
January																																	
Maximum	38	38	38	40	39	39	36	36	36	38	40	39	44	39	41	40	38	38	39	39	38	37	37	40	40	41	40	39	41	40	43	39	
Minimum	33	33	33	36	34	33	32	32	32	34	36	35	38	36	37	34	33	33	34	37	35	34	34	36	37	35	37	34	38	37	39	34	
February																																	
Maximum	44	43	43	44	44	42	44	43	46	45	44	44	43	42	41	43	46	44	43	43	43	43	43	43	43	43	44	45	--	--	--	43	
Minimum	38	38	38	38	38	38	37	37	39	39	38	38	38	38	38	40	42	40	40	36	36	36	39	39	40	41	39	39	41	--	--	--	38
March																																	
Maximum	45	45	42	41	43	43	44	45	45	45	42	42	42	43	45	48	47	48	44	48	51	50	50	48	47	50	48	43	43	42	46	45	
Minimum	43	39	37	37	38	39	41	40	41	42	39	39	39	36	36	42	40	40	37	39	40	42	42	37	38	38	38	40	37	38	36	39	
April																																	
Maximum	47	52	48	51	47	48	50	53	51	48	50	54	47	50	47	44	42	55	48	50	52	48	51	53	53	48	48	50	47	52	--	49	
Minimum	38	37	38	38	42	41	42	42	42	43	40	41	40	38	39	38	38	37	38	41	38	40	40	42	42	39	41	38	38	40	--	39	
May																																	
Maximum	--	--	--	--	--	61	65	64	53	51	50	56	60	62	64	65	65	64	65	67	68	68	66	62	64	64	64	61	60	59	55	61	
Minimum	--	--	--	--	--	44	47	47	50	44	42	41	42	44	47	49	50	49	50	50	50	52	53	49	48	50	51	53	49	48	46	47	
June																																	
Maximum	51	61	64	66	66	62	67	66	66	65	65	63	68	70	71	73	74	76	78	72	72	68	72	75	74	74	71	78	77	78	--	69	
Minimum	48	45	48	52	52	53	53	52	52	51	52	51	50	54	55	57	58	60	63	60	57	56	54	58	60	59	62	62	62	62	--	55	
July																																	
Maximum	83	82	79	77	77	75	74	74	76	76	76	74	75	76	78	74	77	78	76	77	76	76	76	77	78	76	76	75	76	79	81	76	
Minimum	64	56	64	62	62	60	59	61	60	62	62	62	62	61	60	61	60	60	59	59	60	62	62	62	62	61	62	60	60	62	63	61	
August																																	
Maximum	77	76	76	77	77	77	75	75	74	76	76	76	77	77	76	78	78	78	78	82	79	76	79	77	75	74	--	--	--	--	--	76	
Minimum	60	64	64	65	64	64	61	62	65	66	66	65	66	66	66	68	68	69	69	69	67	66	68	67	67	70	--	--	--	--	--	65	
September																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	68	67	67	66	69	71	70	73	72	68	69	68	67	67	67	67	--		
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	61	62	62	64	62	63	66	67	68	64	63	63	63	62	62	63	62	--	

KLAMATH RIVER BASIN--Continued

11-5175. SHASTA RIVER NEAR YREKA, CALIF.

LOCATION.--Lat 41°49'30", long 122°35'40", at gaging station 0.5 mile upstream from mouth, and 7 miles north of Yreka, Siskiyou County.

DRAINAGE AREA.--793 square miles.

RECORDS AVAILABLE.--Chemical analyses: December 1958 to September 1967.

Water temperatures: June 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 86°F July 1, 2, 12; minimum, 37°F sometime during period Jan. 20 to Feb. 1.

EXTREMES, 1965-67.--Water temperatures: Maximum, 86°F Aug. 2, 3, 1966, July 1, 2, 12, 1967; minimum, 35°F Dec. 24, 1965.

REMARKS.--Clock stopped Oct. 30 to Nov. 3, Dec. 6 to Jan. 6, Jan. 20 to Feb. 1, Mar. 17 to May 3; temperature ranges, 49°F to 52°F, 42°F to 49°F, 37°F to 46°F, and 43°F to 62°F, respectively.

Chemical analyses, in parts per million, water year October 1965 to September 1966.

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 3, 1966.....	65			36	39	49	4.2	324	24	--	29		--	0.5	--			250			626	8.7
Oct. 31.....	171			28	29	38	2.9	252	14	--	21		--	.4	--			190			477	8.8
Dec. 6.....	480			28	34	42	4.2	244	10	--	24		--	.5	--			210			533	8.6
Jan. 1, 1967.....	190			30	32	38	2.6	270	14	--	22		--	.3	--			206			509	8.7
Feb. 14.....	235			30	31	33	2.0	262	14	--	18		--	.4	--			202			484	8.6
Mar. 9.....	144			27	28	34	2.1	240	9	--	20		--	.2	--			182			460	8.6
Apr. 4.....	201	36		28	33	35	2.4	244	11	--	20		--	.4	--			206			476	8.7
May 2.....	187			30	33	36	2.3	282	7	11	18		1.2	.4	314			210			512	8.5
June 12.....	123			30	33	35	2.0	274	21	--	17		--	.4	--			210			503	8.7
July 5.....	47			--	--	45	--	320	21	--	25		--	.7	--			254			626	8.8
Aug. 1.....	33			--	--	50	--	343	12	--	30		--	.6	--			265			675	8.7
Sept. 5.....	42			37	40	49	4.4	322	26	12	30		1.0	.6	371			257			662	8.9

KLAMATH RIVER BASIN--Continued

11-5175. SHASTA RIVER NEAR YREKA, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	--	--	--	--	--	63	64	63	62	59	58	56	54	54	54	54	54	--	52	52	53	55	57	58	--	--	56	53	53	--	--	--	
Minimum	--	--	--	--	--	55	57	56	56	53	53	51	48	47	47	48	47	--	47	48	49	50	52	52	--	--	52	50	50	--	--	--	
November																																	
Maximum	--	--	--	52	50	50	49	48	46	48	49	51	51	52	50	50	51	50	52	51	49	47	45	44	44	46	46	47	49	50	--	48	
Minimum	--	--	--	48	48	48	46	45	45	46	47	48	50	50	50	48	48	48	49	49	47	45	43	43	42	44	44	46	47	47	--	46	
December																																	
Maximum	51	50	46	46	46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	50	46	45	46	43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
January																																	
Maximum	--	--	--	--	--	--	41	40	42	42	44	44	46	45	44	43	42	42	42	42	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	39	38	40	41	42	42	44	44	42	41	39	40	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--
February																																	
Maximum	--	--	47	47	48	48	47	48	49	48	49	48	46	45	47	50	50	48	48	48	48	50	50	48	48	49	50	50	--	--	--	48	
Minimum	--	--	44	44	45	44	44	44	44	46	45	45	45	43	43	44	46	47	44	43	43	45	45	46	46	44	45	46	--	--	--	44	
March																																	
Maximum	50	50	48	48	50	52	53	54	52	50	47	46	47	44	45	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	48	45	44	42	43	45	46	47	48	44	43	42	43	42	42	44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
April																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May																																	
Maximum	--	--	--	65	62	66	70	68	61	54	52	54	60	65	69	70	72	69	71	72	74	74	73	68	69	71	70	67	69	66	60	66	
Minimum	--	--	--	54	53	53	57	58	54	50	50	50	52	56	58	60	62	61	61	63	65	65	63	60	58	59	59	60	58	56	54	57	
June																																	
Maximum	54	59	64	68	69	68	71	72	71	70	70	70	72	75	77	79	80	81	82	78	74	70	73	77	80	81	80	83	83	84	--	73	
Minimum	51	50	54	60	60	60	61	61	61	61	61	60	59	61	63	65	66	68	70	68	64	64	61	64	65	65	66	66	68	70	--	62	
July																																	
Maximum	86	86	85	85	83	82	82	82	83	84	85	86	85	85	84	79	81	79	79	80	82	82	82	83	82	82	83	78	83	84	83	82	
Minimum	71	73	73	71	71	69	67	69	68	69	71	72	71	69	70	69	69	66	65	66	67	69	68	68	69	68	70	70	70	70	70	69	
August																																	
Maximum	83	83	82	82	82	78	79	80	78	81	82	81	82	82	82	82	83	84	84	82	81	82	82	80	76	72	77	78	77	77	75	80	
Minimum	68	70	69	69	68	68	65	66	68	70	68	68	68	70	70	70	70	71	72	72	69	68	70	69	69	69	66	67	64	65	65	68	
September																																	
Maximum	74	76	73	75	75	76	76	74	73	67	68	70	69	69	70	70	64	69	71	74	74	72	70	70	69	69	70	69	68	66	--	71	
Minimum	63	63	64	64	64	65	66	63	62	62	61	59	58	58	59	60	62	60	62	63	64	65	63	62	61	61	61	62	62	60	--	61	

KLAMATH RIVER BASIN--Continued

11-5195. SCOTT RIVER NEAR FORT JONES, CALIF.

LOCATION.--Lat 41°38'28", long 123°00'54", at gaging station 1.7 miles upstream from Snow Creek, and 10.8 miles downstream from Fort Jones, Siskiyou County.

DRAINAGE AREA.--653 square miles.

RECORDS AVAILABLE.--Chemical analyses: November 1958 to September 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 3, 1966.....	40			27	15	5.1	0.6	160	0	--	4.8		--	0.0	--			129			271	8.1
Oct. 31.....	58			30	16	5.0	.7	170	3	--	4.0		--	.0	--			141			283	8.4
Dec. 7.....	860			14	12	2.8	.9	93	0	--	1.7		--	.0	--			84			167	8.1
Jan. 4, 1967.....	354			18	12	3.2	.6	111	0	--	3.0		--	.0	--			94			192	8.1
Feb. 14.....	925			20	11	2.9	.5	109	0	--	1.5		--	.0	--			95			188	8.2
Mar. 9.....	494			20	12	3.8	.5	116	0	--	1.4		--	.0	--			100			199	8.0
Apr. 4.....	645			21	12	3.3	.6	111	4	--	.9		--	.0				102			196	8.4
May 2.....	451	15		24	14	3.7	.7	131	7	6.0	1.6		1.4	.0	A 138			118			232	8.6
June 13.....	1180			11	7.3	2.3	.5	68	0	--	.6		1.7	.0	--			58			115	7.8
July 5.....	568			--	--	3.3	--	107	0	--	2.1		--	.0	--			91			181	8.2
Aug. 1.....	89			--	--	6.1	--	168	0	--	4.2		--	.0	--			143			289	8.1
Sept. 6.....	50			29	15	5.3	.9	163	0	9.5	4.3		3.0	.1	157			134			282	8.2

A Calculated from sum of determined constituents.

KLAMATH RIVER BASIN--Continued

11-5205. KLAMATH RIVER NEAR SEIAD VALLEY, CALIF.

LOCATION.--Lat 41°51'20", long 123°13'50", at gaging station 0.4 mile upstream from Bittenbender Creek, 1.4 miles downstream from Grider Creek, and 2.2 miles west of Seiad Valley, Siskiyou County.

DRAINAGE AREA.--6,980 square miles, 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 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 78°F July 12; minimum, 37°F sometime during period Dec. 4 to Jan. 31.

EXTREMES, 1963-67.--Water temperatures: Maximum, 78°F July 26, 1964, July 12, 1967; minimum (1963-64, 1966-67), 37°F Feb. 7, 1964, and sometime during period Dec. 4, 1966 to Jan. 31, 1967.

REMARKS.--Clock stopped Nov. 5-28, Dec. 4 to Jan. 31; temperature ranges, 42°F to 51°F and 37°F to 45°F, respectively.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	64	63	62	61	62	62	62	62	61	60	59	58	56	55	55	55	54	54	54	53	53	53	57	57	56	56	54	53	52	52	53	57	
Minimum	60	59	58	57	58	58	59	58	58	56	56	55	53	51	52	52	51	50	50	52	52	52	53	55	55	53	52	51	51	50	50	54	
November																																	
Maximum	52	52	51	51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	48	--	--	
Minimum	50	50	49	49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	47	--	--	
December																																	
Maximum	48	47	46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	47	46	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
January																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
February																																	
Maximum	--	42	42	42	42	42	42	42	42	42	42	42	42	40	40	41	43	44	43	42	42	43	44	43	45	44	44	44	44	--	--	42	
Minimum	--	41	41	41	42	41	41	41	41	42	42	42	40	40	39	40	41	43	42	40	42	42	43	43	43	42	42	43	--	--	--	41	
March																																	
Maximum	44	44	42	42	44	46	46	46	47	46	43	44	44	43	44	45	45	45	45	47	50	49	48	46	46	47	48	47	45	44	44	45	
Minimum	44	42	41	40	40	42	43	43	44	42	42	42	42	42	42	43	45	45	44	44	47	48	46	45	45	44	46	44	43	42	42	43	
April																																	
Maximum	47	49	49	48	48	48	49	51	52	50	50	50	48	47	48	47	46	47	49	48	50	49	50	52	52	49	48	49	49	50	--	48	
Minimum	44	45	46	46	47	46	46	48	48	48	46	46	46	46	46	46	46	46	44	46	47	48	48	49	49	48	47	46	48	48	--	46	
May																																	
Maximum	52	53	54	55	55	56	58	58	57	52	50	54	56	57	58	59	59	58	59	60	60	60	60	59	58	60	60	59	59	59	57	57	
Minimum	48	50	51	52	53	52	54	55	51	49	49	50	52	53	54	55	55	55	56	57	58	58	56	55	57	57	58	56	55	55	55	54	
June																																	
Maximum	55	57	60	61	63	61	63	62	63	62	63	61	62	64	66	66	67	67	69	66	65	65	65	68	70	70	70	70	72	74	--	64	
Minimum	54	53	56	59	59	59	58	59	59	59	58	57	56	57	59	60	61	61	63	62	61	60	59	61	64	65	64	64	66	68	--	60	
July																																	
Maximum	75	76	75	76	74	73	72	74	74	75	76	78	77	77	77	76	76	73	72	73	73	76	76	75	74	75	75	74	76	76	76	75	
Minimum	70	71	70	70	69	68	66	68	68	68	70	72	70	70	70	70	69	66	66	66	67	69	69	68	68	67	67	69	68	68	68	68	
August																																	
Maximum	76	76	76	76	75	74	73	74	74	74	75	74	75	75	75	75	75	77	76	75	75	75	74	73	71	73	71	73	71	71	71	74	
Minimum	68	70	70	70	69	69	67	67	69	68	68	68	68	69	69	69	69	69	71	71	69	69	69	69	67	69	66	67	66	65	65	63	
September																																	
Maximum	70	70	69	71	71	71	72	70	68	66	66	67	67	67	67	68	65	66	68	69	70	70	69	68	68	68	68	68	66	64	--	63	
Minimum	65	64	65	64	65	65	65	65	63	63	63	62	61	61	61	62	63	62	63	64	66	66	66	65	63	63	63	62	63	62	67	--	63

KLAMATH RIVER BASIN--Continued

11-5225. SALMON RIVER AT SOMESBAR, CALIF.

LOCATION.--Lat 41°22'40", long 123°28'35", temperature recorder at gaging station on left bank at Somesbar, Siskiyou County, and 1.0 mile upstream from mouth.

DRAINAGE AREA.--751 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 36°F Dec. 27, 28.

EXTREMES, 1965-67.--Water temperatures: Maximum (1965-66), 90°F Sept. 4, 5, 1966; minimum, 33°F on several days in December 1965.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	53	56	57	59	57	55	54	54	55	54	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	49	49	52	52	52	52	50	47	48	48	48	--	
November																																	
Maximum	54	54	52	52	54	52	50	50	48	50	50	52	52	52	51	50	48	47	49	51	50	46	44	44	42	42	44	44	45	46	46	--	48
Minimum	47	46	46	46	46	48	46	43	42	44	48	50	50	50	50	48	47	47	49	46	44	44	42	40	40	42	43	44	44	45	--	45	
December																																	
Maximum	46	45	44	45	45	45	44	45	44	45	45	46	46	44	43	43	43	43	43	43	44	43	40	42	42	42	41	38	40	41	42	42	43
Minimum	45	42	42	44	44	44	44	44	43	44	44	44	44	44	43	43	43	43	43	42	40	39	40	42	40	42	40	38	36	36	40	41	41
January																																	
Maximum	42	42	42	44	44	42	40	40	42	42	44	44	45	45	44	44	43	41	42	43	44	44	44	43	44	45	46	46	47	46	47	46	43
Minimum	41	40	40	42	42	40	40	40	40	41	42	43	44	44	43	43	40	40	40	42	43	43	43	41	42	42	44	45	46	45	41	42	42
February																																	
Maximum	47	46	46	46	46	45	45	46	46	46	46	46	46	46	44	43	44	47	47	46	44	44	45	45	46	47	46	46	47	--	--	45	
Minimum	46	45	44	44	44	44	44	44	44	44	44	44	45	45	42	41	42	44	46	44	42	42	43	44	45	44	44	45	--	--	--	43	
March																																	
Maximum	47	46	45	44	45	46	46	47	46	46	44	44	44	43	44	45	46	47	47	46	49	50	50	50	49	48	49	46	45	44	42	43	46
Minimum	46	45	43	41	41	41	44	44	45	42	41	42	42	42	43	45	44	46	44	45	47	48	46	46	46	46	45	45	42	41	40	41	43
April																																	
Maximum	45	47	45	46	45	45	48	50	49	47	47	48	46	44	46	44	43	45	47	46	46	46	46	47	49	48	47	46	46	46	50	--	46
Minimum	42	43	43	43	44	43	44	46	47	46	43	44	44	42	42	42	42	41	43	43	42	42	44	46	46	46	46	44	42	44	44	--	43
May																																	
Maximum	50	51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51	--
Minimum	45	46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	46	--
June																																	
Maximum	49	52	53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	48	46	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
August																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--</														

KLAMATH RIVER BASIN--Continued

11-5230. KLAMATH RIVER AT ORLEANS, CALIF.

LOCATION.--Lat 41°18'13", long 123°32'00", at gaging station at Orleans, 25 feet upstream from highway bridge, and 0.2 mile downstream from Cheenitch Creek.
DRAINAGE AREA.--8,500 square miles, approximately, not including Lost River or Lower Klamath Lake basins.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Water temperatures: October 1965 to September 1967.

Sediment records: January to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 82°F on several days in July and August.

Sediment concentrations: Maximum daily, 2,280 ppm Jan. 28; minimum daily, 3 ppm on several days in July and August.

Sediment loads: Maximum daily, 538,000 tons Jan. 29; minimum daily, 16 tons on several days in July and August.

EXTREMES, 1965-67.--Water temperatures: Maximum, 82°F on several days in July and August 1967; minimum, 34°F Dec. 18, 25, 26, 1965.

Sediment concentrations (January to September 1967): Maximum daily, 2,280 ppm Jan. 28, 1967; minimum daily, 3 ppm on several days in July and August 1967.

Sediment loads (January to September 1967): Maximum daily, 538,000 tons Jan. 29; minimum daily, 16 tons on several days in July and August 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Nov. 14, 1966....	7880			13	6.6	7.1	1.4	72	0	--	2.2		--	0.1	--			60			150	8.0
Dec. 12.....	21600			11	6.6	5.4	1.1	66	0	--	2.3		--	.0	--			54			129	8.0
Jan. 16, 1967....	5990			14	8.0	12	1.6	92	0	--	3.4		--	.0	--			68			185	7.9
Feb. 6.....	15500			18	8.7	53	.9	93	0	--	1.3		--	.0	--			81			174	8.1
Mar. 6.....	6840			21	10	3.9	.5	114	0	--	1.5		--	.0	--			94			199	8.1
Apr. 3.....	9250			16	8.1	6.7	1.2	87	0	--	2.2		--	.0	--			74			163	8.2
May 8.....	18900	12		11	5.7	6.0	1.1	64	0	7.0	1.6		0.8	.0	82			51			122	7.8
June 5.....	13900			11	6.0	7.4	.9	67	0	--	1.6		--	.0	--			52			135	7.9
July 17.....	2550			--	--	6.9	--	85	0	--	3.3		--	.0	--			61			164	8.2
Aug. 7.....	2070			--	--	9.4	--	93	0	--	6.0		--	.0	--			61			189	8.2
Sept. 11.....	2140			16	8.3	14	2.6	101	0	15	5.2		1.4	.0	116			74			224	7.9

KLAMATH RIVER BASIN--Continued

11-5230. KLAMATH RIVER AT ORLEANS, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	64	64	62	60	60	60	61	62	60	59	57	56	53	51	52	52	51	50	49	49	50	49	52	54	58	58	58	56	56	55	56	55	
Minimum	61	60	58	57	56	56	57	58	56	56	55	52	50	48	48	48	48	47	47	48	48	48	49	51	53	57	56	54	54	54	53	53	
November																																	
Maximum	56	55	54	53	52	52	51	49	48	48	50	52	52	53	52	50	49	49	50	50	48	45	44	43	42	44	45	45	—	—	—	49	
Minimum	54	53	52	52	50	51	49	48	46	46	48	50	52	52	50	48	48	48	49	48	45	44	43	42	41	42	43	44	—	—	—	47	
December																																	
Maximum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42	43	44	—	
Minimum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	42	43	—	
January																																	
Maximum	45	44	44	45	44	44	44	42	43	44	45	46	46	46	46	46	44	43	42	44	44	44	45	41	41	41	43	43	44	44	44	43	
Minimum	44	42	43	44	44	43	42	42	42	43	44	44	45	46	46	44	43	42	42	42	42	44	41	40	40	40	41	43	43	44	44	42	
February																																	
Maximum	45	45	45	45	45	44	44	44	45	45	45	46	47	43	42	44	46	47	46	44	44	45	45	45	47	46	46	47	—	—	—	45	
Minimum	44	44	44	44	44	43	43	43	44	44	44	44	44	43	42	41	42	43	45	44	42	42	42	43	42	45	45	44	46	—	—	—	43
March																																	
Maximum	48	47	45	44	45	47	48	48	48	47	44	44	44	44	45	46	47	47	47	47	50	50	50	49	48	49	48	48	46	45	45	46	
Minimum	46	45	43	42	42	43	45	45	46	43	42	43	43	43	43	43	45	45	45	45	47	49	48	46	46	47	45	44	42	43	44	44	
April																																	
Maximum	47	50	49	49	48	48	50	51	51	51	50	50	50	47	49	49	46	47	48	48	50	50	52	52	52	50	48	49	49	52	—	49	
Minimum	42	46	47	46	47	46	47	49	48	49	47	48	46	46	46	45	45	44	45	46	47	48	48	49	49	48	47	46	47	48	—	46	
May																																	
Maximum	54	55	56	56	57	58	59	58	58	51	49	54	56	58	59	59	59	58	60	60	61	61	61	60	59	60	60	60	60	57	57	57	
Minimum	48	50	52	54	54	54	56	55	51	48	47	48	51	54	56	56	55	54	55	56	56	56	56	56	56	57	57	58	57	57	54	54	
June																																	
Maximum	57	57	62	63	64	64	63	64	64	64	63	62	64	66	67	68	69	70	70	69	69	68	70	67	73	73	73	73	76	78	—	67	
Minimum	55	54	56	59	60	60	60	60	60	60	60	60	58	60	62	63	64	65	66	65	65	65	64	66	67	69	69	70	71	73	—	62	
July																																	
Maximum	80	80	81	80	80	79	79	79	79	79	80	80	80	81	82	81	81	81	82	81	81	82	82	82	81	78	78	78	80	79	80	80	
Minimum	73	75	76	76	73	74	74	74	74	74	74	74	75	74	75	76	76	76	76	76	77	76	77	77	76	75	73	75	74	74	74	75	
August																																	
Maximum	80	81	80	80	79	78	77	77	77	78	79	79	80	80	82	80	78	77	76	77	78	78	78	78	78	78	78	78	78	78	77	78	
Minimum	75	76	76	75	74	72	72	72	72	72	74	74	74	74	75	76	76	74	73	72	72	72	72	74	74	73	72	73	74	74	74	73	
September																																	
Maximum	76	77	76	76	76	75	73	72	71	68	70	69	69	69	69	69	67	68	70	72	72	72	72	71	70	70	70	70	68	67	—	71	
Minimum	72	72	72	72	72	70	68	69	66	66	66	65	64	64	64	64	66	64	65	66	68	68	68	67	66	66	65	66	65	65	—	67	

KLAMATH RIVER BASIN--Continued
11-5230. KLAMATH RIVER AT ORLEANS, CALIF.--Continued

Suspended sediment, January to September 1967

Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	6320	44	750	27800	560	42000	8950	68	1600
2..	5860	39	620	22000	370	22000	8680	64	1500
3..	5690	37	570	18600	290	14600	8230	57	1270
4..	5910	39	620	16900	260	11900	7850	48	1000
5..	6470	46	800	16500	260	11600	7180	39	756
6..	6170	42	700	15500	210	8790	6840	36	665
7..	6030	41	670	15100	195	7950	6740	39	710
8..	5790	38	590	14700	179	7100	6700	46	830
9..	5690	37	570	14400	159	6180	6740	68	1200
10..	5790	38	590	14000	142	5400	7930	108	2310
11..	5690	37	570	13600	128	4700	7580	51	1000
12..	5610	36	550	13400	117	4200	7560	40	820
13..	5650	36	550	12900	108	3760	7260	35	686
14..	5890	39	620	12400	96	3200	7080	35	669
15..	5970	40	640	12700	88	3020	7060	35	667
16..	5990	40	650	12000	86	2800	15600	436	S 21100
17..	5890	39	620	11800	87	2800	19200	282	15000
18..	5780	38	590	12300	91	3000	17900	249	12000
19..	5860	39	620	11700	93	2900	18400	214	11000
20..	11100	96	K 3000	10100	76	2100	15900	173	7430
21..	16000	120	K 5000	10800	65	1900	15300	140	5800
22..	13700	94	3500	10500	64	1800	15000	115	4660
23..	10400	85	2390	10300	74	2060	17200	355	S 16500
24..	9580	97	2510	10200	79	2200	16100	141	6130
25..	10300	83	2310	9080	75	1840	14600	73	2900
26..	17400	371	S 18800	9350	69	1700	13300	68	2440
27..	40100	733	S 83100	9150	68	1680	12400	78	2600
28..	81700	2280	S 510000	9100	70	1700	11700	72	2270
29..	86100	2260	S 538000	--	--	--	11000	74	2200
30..	57200	920	142000	--	--	--	10700	71	2050
31..	38100	710	73000	--	--	--	10400	65	1800
Total	503730	--	1395500	376880	--	184880	347080	--	131563
Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	9900	57	1520	8750	52	1230	13300	100	3590
2..	9430	56	1400	8750	53	1250	12800	94	3200
3..	9250	56	1400	9030	55	1300	12000	89	2880
4..	9150	57	1400	9580	54	1400	11800	88	2800
5..	9030	60	1460	10400	84	2400	13900	90	3380
6..	9430	60	1500	10900	189	5560	14200	89	3400
7..	9450	56	1430	13500	204	7440	13800	83	3090
8..	9450	49	1300	18900	230	S 11700	12700	75	2600
9..	9300	44	1100	22300	259	S 15700	11600	70	2190
10..	9230	42	1000	19800	204	10900	11300	59	1800
11..	9100	42	1030	16700	156	7000	11000	47	1400
12..	8750	40	950	15000	122	4940	10000	45	1200
13..	8730	38	896	14700	127	5000	9080	45	1100
14..	8830	44	1000	16800	170	7710	8630	46	1100
15..	8450	46	1050	19900	260	14000	9030	48	1170
16..	8280	46	1000	23000	289	17900	9500	47	1200
17..	8580	46	1070	25000	231	16000	9830	43	1140
18..	8400	50	1100	26500	249	17800	9580	38	980
19..	8430	56	1270	23000	283	18000	9330	39	982
20..	9180	56	1400	20500	297	16400	9130	50	1200
21..	9630	56	1460	26000	300	21000	9000	74	1800
22..	9600	56	1500	28500	301	23200	9000	97	2400
23..	9500	56	1440	25500	302	21000	7400	114	2280
24..	9480	54	1400	22500	298	18100	6800	73	1300
25..	9450	47	1200	20500	206	11000	6350	33	566
26..	9380	47	1200	18800	175	8880	6000	23	370
27..	9350	50	1260	17600	155	7400	5600	22	330
28..	9150	52	1300	16800	143	6490	5250	22	310
29..	9130	53	1310	16100	132	5700	5050	22	300
30..	8950	53	1300	15200	120	4900	4900	21	280
31..	--	--	--	14800	104	4160	--	--	--
Total	279950	--	37646	555310	--	315460	287860	--	50338

S Computed by subdividing day.

K Computed from estimated-concentration graph and subdividing day.

KLAMATH RIVER BASIN--Continued
11-5230. KLAMATH RIVER AT ORLEANS, CALIF.--Continued
Suspended sediment, January to September 1967--Continued

Day	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	4650	20	250	1990	8	43	1920	5	26
2..	4400	19	230	2040	7	39	2050	5	28
3..	4250	19	220	2120	8	46	2130	6	35
4..	3950	18	190	2110	7	40	2140	7	40
5..	3750	15	152	2050	6	33	2130	8	46
6..	3550	13	120	2060	6	33	2120	10	57
7..	3400	12	110	2070	6	34	2130	9	52
8..	3200	11	95	2060	7	39	2120	9	52
9..	3100	9	75	2050	7	39	2130	9	52
10..	3000	9	73	2050	8	44	2120	8	46
11..	2900	8	63	2040	7	39	2140	8	46
12..	2800	7	53	2020	6	33	2140	7	40
13..	2770	7	52	2020	6	33	2130	7	40
14..	2690	8	58	2030	5	27	2120	7	40
15..	2600	8	56	2020	5	27	2120	7	40
16..	2530	8	55	1990	5	27	2100	7	40
17..	2550	9	62	1990	5	27	2110	7	40
18..	2400	9	58	1990	4	21	2210	7	42
19..	2320	9	56	1980	4	21	2190	8	47
20..	2260	8	49	1990	4	21	2150	8	46
21..	2410	7	46	1950	4	21	2120	9	52
22..	2240	7	42	1950	4	21	2110	12	68
23..	2180	6	35	1940	4	21	2150	14	81
24..	2150	5	29	1920	3	16	2170	9	53
25..	2110	4	23	1920	3	16	2190	5	30
26..	2080	3	17	1950	3	16	2180	4	24
27..	2040	3	17	1950	3	16	2140	4	23
28..	2030	3	16	1950	4	21	2120	4	23
29..	2020	3	16	1940	4	21	2150	5	29
30..	2020	4	22	1920	4	21	2160	5	29
31..	2000	4	22	1920	4	21	--	--	--
Total	86350	--	2362	61980	--	877	63890	--	1267
Total discharge for period Jan. 1 to Sept. 30, 1967 (cfs-days).....									2557030
Total load for period Jan. 1 to Sept. 30, 1967 (tons).....									2119893

KLAMATH RIVER BASIN--Continued

11-5230. KLAMATH RIVER AT ORLEANS, CALIF.--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Oct. 5, 1966.....	1420	64		1960	6	32						---	---	---	---			
Oct. 24.....	1550	62		2540	12	82						---	---	---	---			
Oct. 27.....	1030	67		2550	21	145						---	---	---	---			
Oct. 28.....	1200	65		2430	23	151						---	---	---	---			
Oct. 29.....	0600	55		2430	20	131						---	---	---	---			
Oct. 31.....	1630	66		2420	7	46						---	---	---	---			
Nov. 27.....	1040	50		6540	54	954						---	---	---	---			
Dec. 28.....	0830	40		7880	47	1000						---	---	---	---			
Feb. 7, 1967.....	1245	45		15400	321	---						56	66	78	97	100		V
Mar. 14.....	1220	43		7080	49	---						56	62	80	100			V

KLAMATH RIVER BASIN--Continued

11-5255. TRINITY RIVER AT LEWISTON, CALIF.

LOCATION.--Lat 40°43'10", long 122°48'09", at gaging station 400 feet upstream from Deadwood Creek, and 0.8 mile northeast of Lewiston, Trinity County.

DRAINAGE AREA.--728 square miles.

RECORDS AVAILABLE.--Chemical analyses: December 1953 to September 1967.

Water temperatures: September 1951 to September 1955, October 1957 to September 1958, July 1959 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 58°F May 15, 16; minimum, 42°F on several days in November.

EXTREMES, 1951-55, 1957-58, 1959-67.--Water temperatures: Maximum (1951-55, 1957-58, 1959-63, 1964-67), 79°F July 20, 21, 28, 29, 1960; minimum, 33°F on several days in January 1952.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (microhmhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 10, 1966....	208			5.1	7.2	2.4	0.6	54	0	--	1.5		2.1	0.0				42			96	7.9
Nov. 14.....	259			5.0	7.3	2.1	.5	53	0	--	1.3		1.7	.0				42			93	8.1
Dec. 12.....	212			6.0	7.3	2.9	.6	55	0	--	2.1		2.0	.0				45			101	7.9
Jan. 16, 1967....	166			5.2	7.2	2.6	.5	53	0	--	1.2		1.3	.0				42			95	7.8
Feb. 6.....	164			6.5	7.0	2.6	.5	52	0	--	.8		1.3	.0				45			97	7.8
Mar. 6.....	164			5.2	7.1	2.6	.3	52	0	--	1.3		1.1	.0				42			94	7.7
Apr. 3.....	164			5.4	7.4	2.9	.6	51	0	--	1.4		.7	.0				44			94	7.9
May 8.....	134	11		5.2	7.3	2.5	.4	53	0	2.0	1.2		.2	.0	62			43			93	7.5
June 5.....	1820			5.0	7.1	2.7	.6	49	0	--	.9		1.3	.0				42			90	7.6
July 17.....	155			--	--	2.7	--	53	0	--	1.8		.7	.0				42			95	7.7
Aug. 7.....	149			--	--	2.8	--	53	0	.2	1.9		.6	.0				42			95	7.6
Sept. 11.....	157			4.9	7.2	2.5	.4	52	0	.3	1.7		.4	.1				42			94	7.8

462

Month	Day																																	Average
	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			
October	48	48	47	47	47	46	46	46	46	46	46	45	45	45	45	45	45	45	45	45	44	44	44	44	44	44	44	44	44	43	43	44		
Maximum	47	47	46	46	46	46	46	46	46	46	45	45	45	45	45	45	45	45	45	44	44	44	44	44	44	44	44	44	43	43	43	45		
Minimum	November	43	42	42	42	42	42	43	43	43	43	43	43	43	43	43	44	44	44	44	44	44	44	45	44	44	44	44	44	44	—	43		
Maximum	Minimum	42	42	42	42	42	42	42	43	43	43	43	43	43	43	43	44	44	44	44	44	44	44	44	44	44	44	44	44	44	—	43		
December	Maximum	45	45	45	45	45	45	45	45	45	45	45	45	45	45	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44		
Maximum	Minimum	44	45	45	45	45	45	45	45	45	45	45	45	45	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44		
January	Maximum	44	43	43	43	43	43	43	43	43	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	43		
Maximum	Minimum	43	43	43	43	43	43	43	43	43	43	44	44	44	44	44	44	44	44	44	44	44	44	44	43	43	44	44	44	44	44	43		
February	Maximum	44	44	44	44	45	45	45	45	44	44	44	45	45	45	45	45	45	45	45	45	45	45	44	44	44	44	44	—	—	—	44		
Maximum	Minimum	44	44	44	44	44	45	45	45	44	44	44	44	45	45	45	45	45	45	44	44	44	44	44	44	44	44	44	—	—	—	44		
March	Maximum	45	45	46	46	46	46	46	45	45	46	46	45	45	45	44	44	45	45	45	45	46	46	47	45	45	47	47	46	46	46	45		
Maximum	Minimum	44	44	45	45	45	45	45	45	45	45	46	45	45	45	44	44	44	44	44	45	45	45	45	45	45	46	46	46	46	46	44		
April	Maximum	46	47	45	46	46	46	47	46	46	47	48	47	47	47	46	46	46	46	46	46	46	45	45	46	46	46	47	46	47	—	46		
Maximum	Minimum	45	45	45	45	45	45	45	46	46	45	46	46	46	46	46	46	46	46	45	45	45	45	45	45	45	45	45	45	45	—	45		
May	Maximum	48	49	51	52	51	52	53	56	55	52	52	55	56	53	58	58	57	57	57	57	57	57	54	52	51	51	52	52	50	50	53		

KLAMATH RIVER BASIN--Continued

11-5270. TRINITY RIVER NEAR BURNT RANCH, CALIF.

LOCATION.--Lat 40°47'20", long 123°26'20", temperature recorder at gaging station on left bank 500 feet upstream from Cedar Flat Creek, 700 feet upstream from highway bridge at Cedar Flat, and 2.3 miles southeast of Burnt Ranch, Trinity County.
DRAINAGE AREA.--1,439 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1958 to September 1966.

Water temperatures: October 1961 to September 1964, October 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 81°F Aug. 17-19, 24; minimum, 34°F Dec. 28, 29.

EXTREMES, 1962-64, 1966-67.--Water temperatures: Maximum, 81°F Aug. 17-19, 24, 1967; minimum (1962-63, 1966-67), 34°F Dec. 28, 29, 1966.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of water, water year October 1966 to September 1967																																		
Month	Day																															Average		
	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			
October	--	--	--	--	--	--	--	--	--	--	59	58	53	52	52	51	51	51	50	51	51	51	54	56	56	55	54	52	51	50	50	--		
Maximum	--	--	--	--	--	--	--	--	--	--	58	53	51	49	50	49	49	49	50	49	49	49	51	54	54	53	52	50	49	48	48	--		
Minimum	--	--	--	--	--	--	--	--	--	--	58	53	51	49	50	49	49	49	50	49	49	49	51	54	54	53	52	50	49	48	48	--		
November	50	50	49	48	48	49	49	48	46	48	48	50	51	50	50	50	48	50	51	50	46	43	42	42	42	44	44	45	46	48	--	47		
Maximum	48	48	47	46	46	48	48	46	44	46	47	48	50	50	50	49	48	48	48	49	46	42	42	42	42	44	44	44	44	44	--	45		
Minimum	48	48	47	46	46	48	48	46	44	46	47	48	50	50	50	49	48	48	48	49	46	42	42	42	42	44	44	44	44	44	--	45		
December	46	46	44	44	44	46	46	45	44	44	44	46	46	45	44	44	43	42	42	42	44	44	41	41	42	42	40	38	36	38	38	42		
Maximum	46	42	42	44	43	44	45	44	42	42	43	45	45	44	42	42	42	42	42	42	42	41	40	40	40	37	35	34	34	36	37	41		
Minimum	46	42	42	44	43	44	45	44	42	42	43	45	45	44	42	42	42	42	42	42	42	41	40	40	40	37	35	34	34	36	37	41		
January	38	38	39	43	42	40	42	40	40	42	43	44	45	44	44	43	42	41	40	40	38	40	42	41	40	41	41	42	44	44	45	41		
Maximum	36	37	37	39	40	39	39	38	38	40	42	42	43	43	42	40	40	38	38	38	38	38	40	42	41	40	39	39	40	42	43	44	39	
Minimum	36	37	37	39	40	39	39	38	38	40	42	42	43	43	42	40	40	38	38	38	38	38	40	42	41	40	39	39	40	42	43	44	39	
February	45	45	45	45	45	45	45	45	46	46	46	46	46	43	42	44	47	47	46	44	44	45	46	46	47	47	47	48	--	--	--	45		
Maximum	44	44	44	44	44	44	44	44	44	45	43	45	43	42	40	42	44	46	43	41	41	42	43	44	45	45	45	46	--	--	--	43		
Minimum	44	44	44	44	44	44	44	44	44	45	43	45	43	42	40	42	44	46	43	41	41	42	43	44	45	45	45	46	--	--	--	43		
March	47	47	46	45	46	47	48	49	47	46	44	43	42	42	44	46	46	47	46	48	50	50	48	48	46	48	49	47	45	44	43	46		
Maximum	46	44	44	42	42	43	45	46	46	42	41	41	41	41	42	44	45	46	45	46	46	48	47	45	45	44	45	44	43	42	41	43		
Minimum	46	44	44	42	42	43	45	46	46	42	41	41	41	41	42	44	45	46	45	46	46	48	47	45	45	44	45	44	43	42	41	43		
April	47	50	47	50	48	47	48	52	52	49	47	50	49	48	50	46	46	47	48	47	48	49	49	51	50	48	47	48	49	52	--	48		
Maximum	42	45	46	46	47	46	45	48	48	46	44	45	46	46	46	45	44	44	45	44	45	46	46	47	48	46	46	45	46	47	--	45		
Minimum	42	45	46	46	47	46	45	48	48	46	44	45	46	46	46	45	44	44	45	44	45	46	46	47	48	46	46	45	46	47	--	45		
May	54	56	56	57	55	57	58	56	57	50	48	53	56	58	59	58	57	56	57	59	59	58	58	57	58	57	57	57	55	54	54	56		
Maximum	48	49	51	53	52	51	53	53	50	48	46	46	50	52	54	54	52	52	52	54	54	53	53	53	53	54	53	54	53	51	51	51		
Minimum	48	49	51	53	52	51	53	53	50	48	46	46	50	52	54	54	52	52	52	54	54	53	53	53	53	54	53	54	53	51	51	51		
June	53	53	56	59	60	50	60	60	60	60	60	60	60	62	63	64	64	64	63	65	63	64	65	66	68	68	70	71	72	--	62			
Maximum	50	49	51	55	57	56	56	57	56	57	57	56	56	58	59	60	60	60	61	61	60	60	60	60	62	63	62	62	63	65	67	--	58	
Minimum	50	49	51	55	57	56	56	57	56	57	57	56	56	58	59	60	60	60	61	61	60	60	60	60	62	63	62	62	63	65	67	--	58	
July	73	74	74	74	73	73	74	74	76	78	78	77	77	78	79	77	74	74	75	76	78	79	78	76	76	77	76	79	78	77	79	76		
Maximum	68	69	70	57	66	66	66	67	68	68	69	69	69	70	70	70	67	65	66	67	68	69	70	69	67	67	70	70	69	70	70	67		
Minimum	68	69	70	57	66	66	66	67	68	68	69	69	69	70	70	70	67	65	66	67	68	69	70	69	67	67	70	70	69	70	70	67		
August	79	79	78	78	76	75	76	78	78	78	78	79	79	80	80	80	81	81	81	80	78	79	80	81	77	79	79	78	77	77	77	78		
Maximum	70	70	70	70	68	68	69	70	72	72	71	71	72	72	73	72	73	73	74	74	72	71	73	75	74	73	74	72	70	71	71	71		
Minimum	70	70	70	70	68	68	69	70	72	72	71	71	72	72	73	72	73	73	74	74	72	71	73	75	74	73	74	72	70	71	71	71		
September	76	76	76	75	74	74	76	73	72	69	71	72	72	72	70	70	68	70	72	73	73	72	72	72	71	70	70	68	68	--	71			
Maximum	70	70	71	70	68	68	68	68	66	67	66	66	66	66	65	66	66	65	66	66	65	67	68	69	68	68	68	66	66	66	64	--	67	
Minimum	70	70	71	70	68	68	68	68	66	67	66	66	66	66	65	66	66	65	66	66	65	67	68	69	68	68	68	66	66	66	64	--	67	

KLAMATH RIVER BASIN--Continued

11-5285. HAYFORK CREEK NEAR HYAMPOM, CALIF.

LOCATION.--Lat 40°37'35", long 123°26'00", temperature recorder at gaging station on right bank 1.2 miles upstream from mouth, and 1.3 miles northeast of Hyampom, Trinity County.

DRAINAGE AREA.--378 square miles.

RECORDS AVAILABLE.--Water temperatures: December 1960 to September 1967.

EXTREMES, 1960-66.--Water temperatures: Maximum (1960-61, 1962-66), 83°F July 13, 1961; minimum, freezing point several days in January 1962.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	64	64	63	62	61	61	62	62	62	60	58	58	55	53	52	52	52	51	50	50	52	50	54	53	53	53	53	52	51	51	51	55	
Minimum	60	60	59	58	58	57	58	58	58	57	56	54	51	49	49	49	48	48	48	49	49	49	52	51	51	50	50	50	49	49	48	52	
November																																	
Maximum	50	50	49	49	48	49	49	49	47	47	48	50	51	52	53	52	52	51	52	52	50	46	46	46	46	46	46	46	46	47	--	48	
Minimum	48	47	47	47	46	47	47	46	46	46	47	48	50	51	52	50	50	50	51	49	46	45	45	44	44	44	45	46	46	46	--	47	
December																																	
Maximum	48	47	46	46	47	47	47	47	46	47	48	49	48	47	46	45	44	44	44	45	45	43	44	44	44	43	41	40	39	40	40	44	
Minimum	47	43	44	46	46	46	46	46	46	46	47	48	47	46	45	44	44	43	44	44	43	42	43	42	43	42	39	38	38	39	38	43	
January																																	
Maximum	40	40	40	41	44	43	43	41	40	40	40	40	40	40	40	40	41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	38	39	39	40	41	42	41	40	39	39	39	39	40	40	38	38	39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
February																																	
Maximum	45	45	44	44	44	44	44	44	44	44	45	45	45	43	43	45	46	46	46	44	42	43	44	44	44	45	44	44	45	--	--	44	
Minimum	40	44	44	43	43	42	42	42	43	44	43	44	44	42	42	43	44	45	44	42	42	42	42	44	43	43	43	44	--	--	--	42	
March																																	
Maximum	47	46	46	44	44	46	46	46	45	44	42	42	42	42	43	45	45	46	45	46	49	48	48	47	46	47	47	46	44	44	44	45	
Minimum	44	44	43	42	42	43	43	44	44	41	40	40	40	41	42	43	43	44	44	45	46	47	46	45	45	44	45	44	44	42	42	43	
April																																	
Maximum	45	46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	42	44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May																																	
Maximum	49	50	51	52	52	54	56	57	56	51	49	51	53	56	58	59	59	59	59	61	63	64	62	61	61	61	61	60	60	58	56	56	
Minimum	49	48	50	51	51	50	52	53	50	48	48	47	51	53	56	57	58	58	59	61	62	60	59	58	58	57	58	57	55	54	54	54	
June																																	
Maximum	55	54	56	60	61	63	64	64	64	64	64	64	64	66	68	68	70	70	70	70	69	68	68	69	70	71	71	71	73	74	--	66	
Minimum	52	52	52	56	59	60	60	60	60	60	60	60	60	61	62	63	65	65	65	66	66	64	64	65	66	66	67	67	67	70	--	62	
July																																	
Maximum	76	76	76	76	74	73	72	72	72	72	74	74	74	74	74	74	74	72	70	71	72	72	73	73	73	72	71	71	71	74	73	72	73
Minimum	72	72	72	71	71	69	67	67	67	67	68	70	69	68	68	70	69	66	66	68	67	67	68	68	68	66	67	67	67	67	67	68	68
August																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
September																																	

KLAMATH RIVER BASIN--Continued

11-5287. SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.

LOCATION.--Lat 40°39'00", long 123°29'35", temperature recorder at gaging station on left bank 0.3 mile downstream from Big Creek, 3.0 miles northeast of Hyampom, Trinity County, and 3.5 miles downstream from Hayfork Creek.

DRAINAGE AREA.--764 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

Sediment records: October 1966 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 84°F June 30, July 1, 3; minimum, 34°F Dec. 28.

Sediment concentrations: Maximum daily, 3,890 ppm Jan. 29; minimum daily, 1 ppm Aug. 1.

Sediment loads: Maximum daily, 260,000 tons Jan. 29; minimum daily, (estimated) 0.3 ton on several days in October and September.

EXTREMES, 1965-67.--Water temperatures: Maximum, 84°F June 30, July 1, 3, 1967; minimum, freezing point Dec. 20, 21, 26, 1965.

Sediment concentrations (1966-67): Maximum daily, 3,890 ppm Jan. 29, 1967; minimum daily, 1 ppm Aug. 1, 1967.

Sediment loads: Maximum daily, 260,000 tons Jan. 29; minimum daily, (estimated) 0.3 ton on several days in October and September.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October																																	
Maximum	73	70	72	71	71	70	70	70	71	77	65	62	63	62	62	64	63	62	58	58	60	57	65	65	64	62	62	60	60	60	62	64	
Minimum	59	60	57	55	55	56	58	58	56	56	55	52	49	47	49	59	48	47	48	51	51	51	54	53	52	52	52	49	50	49	48	52	
November																																	
Maximum	61	60	59	59	54	54	54	54	50	52	52	54	54	56	54	52	52	51	54	50	56	43	46	46	46	46	47	47	46	46	--	51	
Minimum	50	48	47	46	46	48	47	45	45	46	50	50	52	51	50	48	48	49	50	46	42	42	43	42	42	43	44	44	44	44	--	46	
December																																	
Maximum	47	46	43	45	46	46	45	46	46	45	46	46	48	47	46	44	44	44	44	44	45	42	43	44	42	42	39	38	38	41	40	43	
Minimum	45	41	41	43	43	44	44	44	43	43	44	46	46	44	42	42	42	42	42	42	40	39	40	41	40	37	35	34	35	36	36	41	
January																																	
Maximum	41	40	40	41	44	43	44	44	44	45	46	46	48	48	47	47	44	45	42	43	45	44	44	43	43	44	45	46	48	46	48	44	
Minimum	36	36	36	37	37	40	41	40	39	41	42	43	44	44	43	40	39	39	38	42	44	42	42	41	40	40	43	45	45	45	46	40	
February																																	
Maximum	47	47	47	47	47	47	47	47	48	48	48	50	46	46	43	47	50	51	50	48	48	49	50	48	51	50	49	52	--	--	--	48	
Minimum	46	45	44	45	44	44	44	44	44	44	44	45	44	46	43	42	40	42	46	42	42	41	42	42	44	43	43	43	--	--	--	43	
March																																	
Maximum	47	48	44	49	46	45	49	52	51	44	43	40	40	43	42	44	45	46	44	47	50	48	47	47	44	48	48	44	44	44	44	45	
Minimum	43	42	41	42	44	44	43	46	44	38	48	36	37	48	40	42	42	43	43	44	43	47	43	42	42	42	42	40	40	38	39	42	
April																																	
Maximum	47	48	48	47	48	50	51	52	47	46	48	51	50	56	49	44	43	44	48	45	48	49	45	52	50	47	48	48	49	53	--	48	
Minimum	40	42	40	37	38	40	40	41	41	42	41	44	44	41	42	43	40	40	41	42	42	44	44	44	44	42	42	41	42	44	--	41	
May																																	
Maximum	54	55	56	57	55	58	60	59	54	50	48	55	58	60	62	63	63	62	63	65	66	66	64	63	64	64	64	62	62	67	59	59	
Minimum	44	43	46	49	49	48	50	53	48	46	46	46	48	50	52	54	54	53	53	54	56	56	55	53	52	52	52	54	52	52	50	50	
June																																	
Maximum	54	55	62	63	67	67	67	68	67	67	67	67	69	71	72	74	75	76	74	76	74	72	75	78	78	76	78	80	80	84	--	71	
Minimum	50	50	50	52	56	57	56	56	56	55	56	57	55	58	68	60	61	63	65	62	60	60	62	63	64	64	64	66	65	70	--	59	
July																																	
Maximum	84	83	84	81	80	80	79	78	81	82	81	80	82	82	82	79	78	78	79	80	82	82	82	82	79	80	81	80	83	81	82	83	
Minimum	69	68	68	68	66	64	65	64	65	66	67	66	66	66	68	66	64	63	64	64	65	66	66	66	63	64	79	67	66	67	65	66	
August																																	
Maximum	80	77	76	76	75	75	76	78	77	78	78	78	78	79	79	79	80	80	80	77	76	78	80	76	74	79	78	78	77	77	77	77	
Minimum	65	62	62	61	61	60	60	61	61	62	61	61	61	61	63	62	62	63	63	62	61	62	64	64	65	66	64	64	61	61	60	62	
September																																	
Maximum	76	77	76	76	74	74	76	73	73	68	71	73	74	73	74	73	73	64	72	73	75	75	63	65	73	72	74	72	73	72	68	--	72
Minimum	60	60	61	61	60	60	59	59	58	58	60	68	67	56	56	57	60	60	59	60	60	60	60	59	59	57	58	58	57	58	--	59	

KLAMATH RIVER BASIN--Continued

11-5287. SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	69	2	0.4	77	2	0.4	2630	1080	S 8170
2..	69	2	.4	77	2	.4	5940	1700	S 28200
3..	69	2	.4	75	2	.4	4860	945	12400
4..	69	2	.4	74	2	.4	8860	2050	S 72600
5..	67	2	.4	74	2	.4	17800	2950	S 155000
6..	67	2	.4	97	3	.8	5530	1390	20800
7..	65	2	.4	109	3	.9	3300	820	7310
8..	65	2	.4	108	3	.9	2340	560	3540
9..	65	3	.5	99	2	.5	1930	420	2190
10..	65	3	.5	95	2	.5	2840	780	6000
11..	63	3	.5	95	2	.5	2660	550	3950
12..	65	3	.5	146	14	5.5	3090	560	4670
13..	63	2	.3	246	47	31	3620	610	5960
14..	62	2	.3	286	67	52	3860	750	7800
15..	63	2	.3	403	170	180	2940	490	3900
16..	63	2	.3	750	640	1300	2400	450	2920
17..	63	2	.3	478	240	310	2060	380	2110
18..	65	2	.4	310	82	69	1820	190	934
19..	65	2	.4	389	140	150	1660	150	672
20..	69	2	.4	1910	1800	9300	1530	110	454
21..	72	2	.4	2360	1000	6400	1420	80	310
22..	72	2	.4	1320	300	1100	1330	64	230
23..	75	2	.4	735	81	160	1270	76	261
24..	75	2	.4	553	51	76	1180	83	260
25..	77	2	.4	462	38	47	1110	61	183
26..	77	2	.4	414	33	37	1050	34	96
27..	76	2	.4	410	32	35	980	44	116
28..	76	2	.4	571	53	82	926	122	305
29..	76	2	.4	2030	420	2300	884	125	298
30..	76	2	.4	1430	240	930	860	125	290
31..	76	2	.4	--	--	--	812	134	290
Total	2139	--	12.3	16183	--	22570.6	93492	--	352219
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	770	135	281	7220	1080	21100	992	6	166
2..	740	125	250	6960	760	14300	974	58	150
3..	710	115	220	4310	810	9430	950	52	133
4..	695	115	216	3800	721	7400	920	55	140
5..	705	161	306	3540	601	5740	890	55	130
6..	661	120	214	3360	458	4150	854	49	110
7..	715	124	239	3200	339	2900	824	36	80
8..	625	167	282	2930	320	2500	800	40	86
9..	607	140	229	2750	290	2150	788	50	106
10..	603	153	249	2600	252	1800	1070	82	240
11..	580	125	196	2420	218	1420	1140	71	219
12..	575	98	152	2280	180	1100	1060	69	200
13..	567	93	142	2180	143	842	1040	71	199
14..	553	91	136	2060	129	720	992	75	201
15..	549	75	111	1930	151	787	1050	68	193
16..	540	65	95	1830	160	790	5320	1540	S 28100
17..	530	61	87	1740	148	695	5100	910	12500
18..	517	66	92	1650	140	620	4270	240	2770
19..	530	68	97	1560	132	560	3640	322	3160
20..	1710	2250	S 11000	1460	127	501	3530	411	3900
21..	11800	3510	S 108000	1360	114	420	3860	426	4440
22..	6760	1270	23200	1300	98	340	3740	408	4120
23..	3740	910	9190	1230	80	266	4660	437	5500
24..	3220	700	6090	1190	71	230	4040	287	3130
25..	2690	790	5740	1150	73	227	3370	180	1600
26..	4780	1840	S 24400	1110	78	230	2940	110	873
27..	7500	1980	S 40700	1050	78	221	2590	135	940
28..	14200	3840	S 150000	1020	73	201	2420	156	1020
29..	24500	3890	S 260000	--	--	--	2250	120	729
30..	13200	2300	82000	--	--	--	2170	121	710
31..	10400	1480	41600	--	--	--	2110	150	855
Total	116272	--	765514	69190	--	81640	70354	--	76700

S Computed by subdividing day.

KLAMATH RIVER BASIN--Continued

11-5287, SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2030	76	417	1470	78	310	1070	71	205
2..	1920	95	490	1530	67	277	1120	83	251
3..	1910	139	717	1550	48	201	1080	73	210
4..	1930	119	620	1750	76	359	1010	50	140
5..	1930	130	677	1910	89	460	1020	40	110
6..	2220	138	830	2060	136	756	1000	42	113
7..	2470	120	800	2330	458	2880	932	44	111
8..	2430	122	800	3040	374	3070	890	44	106
9..	2430	121	794	3190	131	1130	848	39	89
10..	2420	110	720	2780	111	833	812	29	64
11..	2340	92	581	2290	114	705	782	24	51
12..	2090	95	536	1980	138	738	760	17	35
13..	1990	128	688	1810	151	738	735	9	18
14..	2030	116	636	1770	158	755	695	7	13
15..	1910	144	743	1900	134	687	680	7	13
16..	1810	141	689	2110	155	883	657	12	21
17..	1870	150	757	2210	210	1250	630	18	31
18..	1840	129	641	2130	222	1300	621	19	32
19..	1750	110	520	1970	224	1190	625	13	22
20..	1700	139	638	1930	215	1100	616	8	13
21..	1640	103	456	1930	194	1000	594	7	11
22..	1620	83	363	1870	166	840	567	7	11
23..	1660	75	340	1770	153	731	544	9	13
24..	1680	72	330	1630	119	520	508	9	12
25..	1750	72	340	1510	77	314	495	9	12
26..	1750	74	350	1410	94	360	474	9	12
27..	1780	74	360	1310	132	467	462	10	12
28..	1700	61	280	1250	172	581	446	11	13
29..	1620	52	227	1220	74	244	418	12	14
30..	1540	71	295	1150	67	210	403	18	20
31..	--	--	--	1110	79	237	--	--	--
Total	57760	--	16635	57870	--	25126	21494	--	1778
	JULY			AUGUST			SEPTEMBER		
1..	396	22	24	149	1	0.4	77	6	1.2
2..	382	15	15	147	2	.8	77	6	1.2
3..	365	10	6.9	143	3	1.2	74	5	1.0
4..	354	7	6.7	136	2	.7	74	4	.8
5..	344	74	69	132	3	1.1	74	3	.6
6..	334	78	70	130	3	1.1	74	3	.6
7..	322	70	61	132	5	1.8	77	2	.4
8..	310	53	44	130	5	1.8	74	2	.4
9..	304	42	34	126	10	3.4	72	2	.4
10..	295	37	29	121	15	4.9	71	2	.4
11..	286	18	14	120	14	4.5	71	2	.4
12..	263	2	1.4	115	12	3.7	74	2	.4
13..	255	5	3.4	113	12	3.7	75	3	.6
14..	246	7	4.6	111	11	3.3	72	3	.6
15..	235	7	4.4	110	9	2.7	69	3	.6
16..	232	8	5.0	106	7	2.0	67	3	.5
17..	224	9	5.4	102	5	1.4	67	3	.5
18..	221	10	6.0	98	5	1.3	77	3	.6
19..	216	11	6.4	94	4	1.0	86	3	.7
20..	211	12	6.8	93	10	2.5	83	3	.7
21..	208	13	7.3	93	15	3.8	80	3	.6
22..	203	14	7.7	89	15	3.6	73	4	.8
23..	196	15	7.9	88	14	3.3	70	4	.8
24..	188	12	6.1	88	14	3.3	67	3	.5
25..	181	12	5.9	85	14	3.2	67	3	.5
26..	174	13	6.1	87	20	4.7	63	3	.5
27..	167	14	6.3	90	14	3.4	64	3	.5
28..	167	15	6.8	90	8	1.9	63	3	.3
29..	145	15	5.9	89	9	2.2	62	3	.5
30..	142	9	3.5	86	10	2.3	60	2	.3
31..	134	3	1.1	80	8	1.7	--	--	--
Total	7700	--	484.6	3373	--	76.7	2154	--	17.9

Total discharge for year (cfs-days)..... 517981
 Total load for year (tons)..... 1342774.1

KLAMATH RIVER BASIN--Continued

11-5287. SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis	
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000		2.000
Dec. 3, 1966.....	1300	43		4440	1140			--		--		32	40	57	76	96	100	V
Dec. 4.....	1430	46		7100	1870			22		40		57	70	83	94	100	--	VPWC
Dec. 4.....	1710	50		11200	3070			16		32		50	68	82	92	100	--	VPWC
Dec. 5.....	0815	45		22200	3310			19		36		51	72	90	94	97	100	VPWC
Dec. 6.....	1420	47		5140	1270			--		--		36	44	61	95	100	--	V
Dec. 19.....	1455	44		1650	151			--		--		55	60	70	85	94	100	S
Jan. 5, 1967.....	1230	40		715	197			--		--		80	86	89	89	94	100	S
Jan. 31.....	1320	44		9940	1190		13	21	30	38	46	53	64	78	98	100	--	VPWC
Mar. 1.....	1420	46		1000	58			--		--		80	85	89	96	98	100	S
Mar. 17.....	1040	44		5030	1000			--		--		30	36	60	84	100	--	V
Mar. 19.....	1800	44		3460	362			--		--		45	51	66	88	100	--	V
June 8.....	1215	61		884	44			--		--		64	70	87	100	--	--	V

KLAMATH RIVER BASIN--Continued

11-5290. SOUTH FORK TRINITY RIVER NEAR SALYER, CALIF.

LOCATION.--Lat 40°50'30", long 123°34'00", at gaging station 4 miles south of Salyer, Humboldt County, and 8 miles upstream from mouth.

DRAINAGE AREA.--898 square miles.

RECORDS AVAILABLE.--Water temperatures: November 1956 to September 1967 (discontinued).

Sediment records: November 1956 to September 1967 (discontinued).

EXTREMES, 1966-67.--Water temperatures: Maximum, 79°F on several days in July and August; minimum, freezing point Jan. 2.

Sediment concentrations: Maximum daily, 4,260 ppm Jan. 21; minimum daily, 1 ppm on several days in October and November.

Sediment loads: Maximum daily, 331,000 tons Jan. 29; minimum daily, 0.2 ton on several days in October.

EXTREMES, 1956-67.--Water temperatures: Maximum (1962-67), 81°F Aug. 10, 1966; minimum (1963-67), freezing point Jan. 2, 1967.

Sediment concentrations: Maximum daily, 20,400 ppm Dec. 23, 1964; minimum daily, 1 ppm on many days during 1956-67.

Sediment loads: Maximum daily, 3,020,000 tons Dec. 22, 1964; minimum daily, 0.2 ton on many days in 1957, 1960-62, 1964, 1966-67.

REMARKS.--Where no maximum or minimum is shown, temperature is once-daily reading.

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average	
	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		
October	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	70	69	68	67	67	66	67	68	67	66	63	61	59	58	59	58	58	57	54	57	57	55	60	61	60	60	60	57	56	56	57	61	
Minimum	62	62	60	59	58	59	62	62	59	58	58	54	52	50	51	51	50	50	50	52	52	52	54	56	56	56	53	52	51	51	55	55	
November	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	56	56	55	55	53	54	53	53	49	51	52	54	54	54	53	52	50	52	54	48	44	44	44	45	44	46	45	45	45	45	45	51	
Minimum	51	50	50	49	49	51	50	49	47	47	50	52	53	53	53	52	50	51	52	48	44	44	44	44	43	44	---	---	---	---	---	48	
December	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	46	46	42	43	40	40	42	42	42	42	41	40	40	39	39	38	38	38	40	39	36	38	39	39	36	34	34	34	34	34	34	39	
Minimum	44	40	40	40	40	39	38	38	38	38	38	40	39	38	36	36	36	36	36	36	36	36	36	36	36	34	34	34	34	34	34	37	
January	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	34	36	38	38	37	38	38	38	38	38	37	37	37	37	37	37	37	37	44	42	44	40	43	42	44	---	---	---	---	---	---	---	
Minimum	33	32	36	37	37	34	38	38	38	33	36	34	35	36	36	---	---	---	---	---	---	---	---	43	40	40	40	42	44	46	44	---	
February	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	46	46	44	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
March	45	---	42	---	41	---	46	---	45	44	39	37	---	42	44	45	45	46	45	---	48	---	46	47	47	49	47	41	45	42	44	---	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
April	---	47	---	45	46	47	49	50	47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Minimum	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
May	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Maximum	51	53	54	55	53	56	57	58	54	49	48	52	55	58	59	60	61	60	61	63	64	64	62	60	60	60	61	60	59	55	56	57	
Minimum	45	46	47	49	49	49	51	53	48	48	46	46	48	50	52	54	55	54	54	55	57	58	57	55	54	54	54	56	53	53	50	51	
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	56	54	60	62	64	64	63	63	63	63	63	63	64	66	64	68	70	71	70	71	70	68	70	71	72	72	72	73	76	77	---	66	
Minimum	52	50	51	55	58	59	58	58	58	58	57	58	58	60	62	63	64	66	66	66	66	64	64	63	65	67	66	66	67	70	71	---	61
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	79	78	78	78	76	75	74	74	74	75	77	78	76	77	78	77	76	74	74	74	76	76	77	77	76	76	76	76	79	78	77	76	
Minimum	73	73	72	73	72	69	67	68	67	68	70	71	69	69	70	71	68	68	66	67	68	68	69	69	68	67	67	69	69	68	68	69	
August	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	79	79	77	76	76	75	76	77	76	77	78	77	78	78	79	78	78	79	79	78	77	78	79	77	74	78	78	77	76	76	75	77	
Minimum	69	69	68	67	66	66	65	66	68	65	68	67	65	68	69	69	68	68	69	68	67	68	69	70	70	70	70	70	67	66	66	67	
September	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	74	75	75	74	74	74	74	72	72	68	71	72	72	71	71	71	67	71	72	73	74	73	73	72	71	71	71	71	69	68	---	71	
Minimum	66	66	67	66	66	66	66	65	63	63	63	62	62	62	62	62	65	64	64	65	66	65	65	65	63	63	63	64	62	63	---	64	

KLAMATH RIVER BASIN--Continued

11-5290, SOUTH FORK TRINITY RIVER NEAR SALYER, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	84	2	0.5	102	1	0.3	2700	482	S 4120
2..	84	2	.5	101	2	.5	5670	2200	S 36000
3..	84	2	.5	101	2	.5	5810	1100	17300
4..	83	2	.4	101	2	.5	8270	2030	S 54200
5..	83	2	.4	101	1	.3	19800	3680	S 216000
6..	82	2	.4	125	31	11	8090	1760	38400
7..	83	2	.4	156	21	8.8	5400	1320	19200
8..	82	2	.4	153	10	4.1	4470	810	9780
9..	82	2	.4	140	11	4.2	3910	770	8130
10..	82	2	.4	133	3	1.1	4780	1550	20000
11..	82	1	.2	133	2	.7	4500	870	10600
12..	80	1	.2	199	27	S 16	4620	1260	15700
13..	80	1	.2	353	198	S 206	4840	1350	17600
14..	82	2	.4	485	240	314	5070	1390	19000
15..	83	2	.4	726	475	S 1070	4240	780	8930
16..	86	1	.2	1050	1020	S 3000	3590	530	5140
17..	87	1	.2	596	230	370	3090	420	3500
18..	89	1	.2	311	80	67	2510	340	2300
19..	90	2	.5	512	616	S 986	2200	241	1430
20..	93	2	.5	2370	1950	S 14900	2000	191	1030
21..	99	2	.5	3150	1150	9800	1680	230	1040
22..	104	2	.6	2010	350	1900	1470	200	794
23..	109	2	.6	1130	140	427	1400	170	643
24..	109	2	.6	791	80	171	1250	120	405
25..	109	2	.6	581	56	88	1200	116	376
26..	106	2	.6	474	30	38	1170	92	291
27..	104	3	.8	425	44	50	1080	98	286
28..	104	1	.3	579	84	130	1040	88	247
29..	104	1	.3	2140	577	S 3440	996	84	226
30..	104	1	.3	1760	216	1000	950	88	226
31..	104	1	.3	--	--	--	920	114	283
Total	2837	--	12.8	20988	--	38005.0	118716	--	513177
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	880	98	233	11200	1300	39300	1170	44	139
2..	860	88	204	7890	1000	21300	1160	44	140
3..	860	84	195	6360	654	11200	1130	36	110
4..	850	84	193	5610	552	8400	1100	29	86
5..	860	151	351	5220	422	5950	950	29	74
6..	800	90	194	4860	400	5200	910	36	88
7..	750	96	194	4470	434	5200	810	30	66
8..	742	84	168	4260	452	5200	770	21	44
9..	725	81	159	4070	402	4400	708	22	42
10..	682	161	296	3870	322	3360	1010	160	436
11..	682	87	160	3720	256	2570	1240	122	408
12..	674	87	158	3560	214	2060	1180	74	236
13..	665	68	122	3630	184	1800	1050	58	160
14..	657	70	124	3720	166	1670	940	66	168
15..	657	58	103	3640	180	1770	940	176	447
16..	640	46	79	3240	138	1210	6770	2000	37000
17..	631	55	94	3080	162	1350	6600	726	12900
18..	614	49	81	2930	139	1100	6100	466	7680
19..	606	52	85	3070	132	1090	5580	369	5560
20..	1790	2080	S 12600	3070	93	771	5500	332	4900
21..	12700	4260	146000	2730	74	545	5760	329	5120
22..	8500	1620	37200	2190	80	473	5610	232	3510
23..	6200	820	13700	1740	90	423	6740	497	9040
24..	4650	660	8290	1720	71	330	6230	349	5870
25..	4000	600	6480	1530	60	248	5430	234	3430
26..	6110	1920	S 33300	1440	58	230	4830	197	2570
27..	9940	2050	55000	1360	50	184	4390	188	2230
28..	17900	3290	S 158000	1280	46	160	3910	182	1920
29..	31200	3840	S 331000	--	--	--	3480	156	1470
30..	19300	2280	S 122000	--	--	--	3360	181	1640
31..	14400	1590	61800	--	--	--	3290	150	1330
Total	150525	--	988563	105460	--	127494	98648	--	108814

S Computed by subdividing day.

KLAMATH RIVER BASIN--Continued

11-5290. SOUTH FORK TRINITY RIVER NEAR SALYER, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	3070	136	1130	1850	87	435	1250	70	240
2..	2840	100	767	1850	76	380	1360	70	257
3..	2520	84	570	1880	84	426	1310	68	240
4..	2370	121	774	1960	108	572	1270	52	178
5..	2320	150	940	2080	166	932	1220	40	130
6..	2610	194	1370	2250	181	1100	1210	40	131
7..	2970	208	1670	2320	328	2050	1150	48	149
8..	3000	164	1330	2930	509	4030	1060	33	94
9..	2840	148	1130	3120	558	4700	1010	29	79
10..	2770	166	1240	3310	334	2980	920	28	70
11..	2610	157	1110	2340	269	1700	919	29	72
12..	2280	130	800	2120	290	1660	901	31	75
13..	2030	136	745	1980	200	1070	869	28	66
14..	2090	137	773	1950	121	637	827	26	58
15..	1980	131	700	2080	168	943	786	25	53
16..	1880	128	650	2270	154	944	743	36	72
17..	1960	178	942	2280	188	1160	704	70	130
18..	2240	141	853	2160	117	682	692	83	155
19..	2160	128	746	2030	122	669	681	36	66
20..	2140	104	601	1960	145	767	685	14	26
21..	2090	96	542	1950	170	895	655	13	23
22..	2040	92	507	1920	179	928	622	11	18
23..	2040	94	518	1840	212	1050	598	13	21
24..	2030	106	581	1740	160	752	572	15	23
25..	2060	99	550	1680	152	689	553	17	25
26..	2030	104	570	1580	131	559	546	19	28
27..	2080	126	708	1530	108	446	537	14	20
28..	2010	96	521	1500	90	365	524	10	14
29..	1950	90	474	1420	78	299	503	10	14
30..	1900	94	482	1340	58	210	490	11	15
31..	--	--	--	1300	60	211	--	--	--
Total	68910	--	24294	62520	--	34241	25167	--	2542
	JULY			AUGUST			SEPTEMBER		
1..	475	10	13	208	2	1.1	100	6	1.6
2..	462	9	11	203	2	1.1	98	6	1.6
3..	444	8	9.6	201	2	1.1	98	5	1.3
4..	424	8	9.2	195	2	1.1	98	4	1.1
5..	407	7	7.7	188	2	1.0	98	3	.8
6..	405	26	28	179	2	1.0	98	3	.8
7..	387	49	51	182	4	2.0	98	2	.5
8..	376	28	28	180	4	1.9	98	2	.5
9..	374	9	9.1	175	8	3.8	98	2	.5
10..	359	10	9.7	167	12	5.4	98	2	.5
11..	360	10	9.7	162	12	5.2	98	2	.5
12..	332	12	11	158	11	4.7	98	2	.5
13..	310	13	11	156	11	4.6	98	3	.8
14..	298	12	9.7	151	11	4.5	98	3	.8
15..	291	10	7.9	146	9	3.5	98	3	.8
16..	288	9	7.0	142	7	2.7	98	3	.8
17..	281	6	4.6	137	5	1.8	98	3	.8
18..	274	3	2.2	133	5	1.8	101	3	.8
19..	271	3	2.2	127	4	1.4	108	3	.9
20..	270	4	2.9	123	8	2.7	108	3	.9
21..	266	5	3.6	121	12	3.9	102	3	.8
22..	266	5	3.6	119	14	4.5	98	4	1.1
23..	251	5	3.4	118	14	4.5	98	4	1.1
24..	245	5	3.3	118	13	4.1	98	3	.8
25..	240	5	3.2	117	14	4.4	98	3	.8
26..	231	5	3.1	115	17	5.3	98	3	.8
27..	224	5	3.0	117	14	4.4	98	3	.8
28..	224	5	3.0	118	8	2.5	98	2	.5
29..	223	4	2.4	117	9	2.8	98	3	.8
30..	213	4	2.3	111	10	3.0	98	2	.5
31..	213	3	1.7	106	8	2.3	--	--	--
Total	9684	--	277.1	4590	--	94.1	2969	--	24.8
Total discharge for year (cfs-days).....							671014		
Total load for year (tons).....							1837538.8		

KLAMATH RIVER BASIN--Continued

11-5290. SOUTH FORK TRINITY RIVER NEAR SALYER, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
Dec. 5, 1966.....	1240	47		18400	3950		15	23	28	42	51	57	75	90	98	100	--	VPWC
Dec. 6.....	1200	47		7680	1940		16	23	32	41	49	57	69	82	96	99	100	VPWC
Jan. 3, 1967.....	1230	41		850	98		--	--	--	--	--	87	92	95	99	100	--	S
Jan. 26.....	1305	42		7600	2970		--	20	--	38	--	54	67	82	94	100	--	VPWC
Feb. 3.....	1530	46		5570	790		--	--	--	--	--	60	69	80	93	100	--	V
Feb. 8.....	1500	48		4290	452		--	--	--	--	--	64	71	78	82	95	100	S
Feb. 23.....	1210	44		2170	116		--	--	--	--	--	65	69	72	81	96	100	S
Apr. 10.....	1540	46		2530	256		--	--	--	--	--	56	63	73	88	99	100	V
Apr. 28.....	1215	47		2080	109		--	--	--	--	--	74	80	88	95	100	--	V
June 7.....	1050	58		1140	40		--	--	--	--	--	92	96	98	100	--	--	S

KLAMATH RIVER BASIN--Continued

11-5300. TRINITY RIVER AT HOOPA, CALIF.

LOCATION.--Lat 40°03'00", long 123°40'15", at gaging station in Hoopa Valley Indian Reservation, on left bank at Hoopa, Humboldt County, and 0.4 mile upstream from Supply Creek.

DRAINAGE AREA.--2,865 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Water temperatures: November 1956 to September 1967.

Sediment records: November 1956 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Minimum, 40°F on several days in December and January.

Sediment concentrations: Maximum daily, 5,240 ppm Jan. 29; minimum daily, 2 ppm Sept. 11, 12.

Sediment loads: Maximum daily, 638,000 tons Jan. 29; minimum daily, 2.3 tons Sept. 11, 12.

EXTREMES, 1956-67.--Water temperatures (1963-67): Maximum (1963-66), 80°F July 16, 1965; minimum (1964-67), 37°F Dec. 17-20, 1965.

Sediment concentrations: Maximum daily, 20,000 ppm Dec. 23, 1964; minimum daily, 1 ppm on many days during 1957-64.

Sediment loads: Maximum daily, 8,900,000 tons Dec. 23, 1964; minimum daily, 1.0 ton on many days during 1957-64.

REMARKS.--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 period of heavy runoff.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 10, 1966....	458			27	10	5.1	1.1	116	4	--	5.6		1.9	0.0				108			237	8.4
Nov. 14.....	2440			24	8.5	4.6	.8	99	0	--	4.4		1.9	.0				95			211	8.2
Dec. 12.....	9660			22	8.7	3.8	.8	96	0	--	2.2		2.4	.0				91			188	8.1
Jan. 16, 1967....	2160			23	8.0	4.3	.6	100	0	--	2.7		.7	.0				90			192	8.0
Feb. 6.....	9710			21	8.0	2.6	.5	94	0	--	1.2		1.2	.0				86			172	8.1
Mar. 6.....	2990			22	7.8	3.0	.5	98	0	--	1.9		.5	.0				87			181	8.0
Apr. 3.....	5240			20	7.3	3.1	.5	91	0	--	1.3		.0	.0				80			162	8.2
June 5.....	5110			15	6.0	2.9	.6	72	0	--	1.3		.6	.0				62			130	8.0
July 17.....	1270			--	--	3.7	--	104	0	--	2.9		.3	.0				91			196	8.0
Aug. 7.....	858			--	--	4.2	--	113	0	10	4.1		.2	.0				101			216	8.1
Sept. 11.....	434			28	9.3	5.4	.6	118	0	13	5.3		.9	.0				108			232	7.8

KLAMATH RIVER BASIN--Continued

11-5300. TRINITY RIVER AT HOOPA, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average		
	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			
October	--	--	71	63	69	--	68	--	--	68	--	67	--	60	--	--	61	--	55	--	--	--	--	58	--	60	--	56	--	59	58	--		
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
November	--	56	--	56	--	--	53	52	50	51	51	53	54	55	54	53	52	53	54	55	54	46	--	47	48	--	50	--	49	49	--	--		
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
December	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Maximum	50	49	46	47	47	47	47	47	46	46	47	48	48	48	48	46	46	45	45	46	46	44	44	44	44	44	42	41	40	42	42	45		
Minimum	49	46	45	46	47	47	46	46	46	46	46	47	48	48	47	46	46	45	44	44	44	44	43	42	44	44	42	41	40	40	40	42	44	
January	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Maximum	43	43	42	43	42	42	42	42	42	42	43	44	44	45	45	44	44	42	42	42	42	42	42	43	42	42	43	44	44	45	45	46	43	
Minimum	42	42	41	42	41	40	40	41	40	41	42	42	43	44	44	43	42	40	40	41	42	42	42	42	42	41	42	43	44	44	45	45	42	
February	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Maximum	46	46	46	46	46	45	45	45	46	46	46	47	46	45	43	44	46	48	47	46	44	45	45	46	47	47	47	48	--	--	--	45		
Minimum	45	46	46	46	45	44	44	44	45	45	44	45	45	43	42	42	44	46	45	43	42	43	44	44	45	45	46	46	--	--	--	44		
March	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Maximum	48	48	46	46	46	47	48	48	47	47	44	43	43	44	45	46	45	46	46	47	49	49	49	47	46	47	47	46	46	45	44	46		
Minimum	47	45	44	44	43	44	47	45	45	44	42	42	42	42	43	44	44	45	44	45	46	48	47	45	44	44	45	44	44	44	43	44		
April	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Maximum	46	48	47	47	47	46	48	50	50	48	47	49	48	47	49	47	45	46	48	47	47	47	47	48	49	49	48	47	47	48	51	--	47	
Minimum	44	45	45	45	46	46	45	47	47	46	45	46	47	46	46	45	44	44	44	45	44	45	44	45	46	47	48	47	46	45	46	47	--	45
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	52	53	54	55	54	55	57	56	55	50	48	51	54	56	58	59	58	57	58	59	59	59	59	59	58	58	58	57	56	54	56	55	55	
Minimum	48	49	50	51	51	50	52	54	50	48	48	47	50	52	54	55	56	55	54	55	56	57	56	55	54	55	54	55	54	53	52	52	--	
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	53	56	57	60	62	61	60	61	61	62	62	62	63	64	64	66	67	68	67	66	66	66	66	66	69	70	70	72	75	76	--	64	--	
Minimum	52	50	52	57	57	58	57	57	57	57	58	58	57	58	60	60	62	63	63	62	62	60	60	62	64	65	64	64	67	68	--	59	--	
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Maximum	77	76	76	77	76	74	73	73	74	76	77	77	77	76	77	78	77	76	74	73	74	74	75	--	--	--	--	--	--	--	--	--	--	
Minimum	68	70	70	70	71	68	66	67	66	67	68	70	70	70	70	72	70	70	67	67	68	68	68	--	--	--	--	--	--	--	--	--	--	
August	--	77	--	76	--	75	--	76	--	77	--	77	--	75	--	78	--	78	--	78	--	78	--	77	--	77	--	78	--	75	--	76	--	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
September	--	76	--	75	--	74	--	74	--	68	--	74	--	75	--	71	--	73	--	--	--	72	--	73	--	73	--	73	--	70	--	--	--	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

KLAMATH RIVER BASIN--Continued

11-5300. TRINITY RIVER NEAR HOOPA, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967

Day	OCTOBER			NOVEMBER			DECEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	410	5	5.5	514	9	12	5940	951	S 18000
2..	418	5	5.6	498	9	12	12500	3090	S 106000
3..	466	5	6.3	490	10	13	13700	2270	S 86000
4..	482	5	6.5	498	11	15	14800	2540	S 119000
5..	490	4	5.3	490	11	15	39700	5190	S 572000
6..	482	5	6.5	706	54	S 105	21500	2430	141000
7..	482	5	6.5	842	38	86	13700	1830	67700
8..	474	5	6.4	738	20	40	10300	1520	42300
9..	474	5	6.4	650	13	23	8380	1600	36200
10..	458	5	6.2	610	10	16	9560	3100	S 80900
11..	450	5	6.1	618	8	13	9280	2880	72200
12..	434	5	5.9	770	50	104	9660	2300	60000
13..	434	5	5.9	1200	271	S 941	11000	2010	59700
14..	434	5	5.9	2440	1150	S 7660	13300	1760	63200
15..	442	5	6.0	3240	1110	S 9840	10000	1550	41900
16..	450	4	4.9	5290	1310	S 18700	8200	1390	30800
17..	450	3	3.6	3370	460	4190	7160	1280	24700
18..	442	3	3.6	1910	120	619	6340	1190	20400
19..	442	4	4.8	1940	296	S 1770	5760	1100	17100
20..	442	4	4.8	6820	2660	S 56300	5350	1000	14400
21..	490	5	6.6	8400	2040	S 48300	4930	910	12100
22..	538	5	7.3	5530	450	6720	4470	830	10000
23..	602	5	8.1	3370	160	1500	4200	750	8510
24..	562	6	9.1	2490	50	336	3910	660	6970
25..	538	7	10	2140	40	231	3660	580	5730
26..	570	8	12	1930	30	160	3470	480	4500
27..	554	9	13	1900	22	113	3260	360	3170
28..	538	11	16	2060	80	440	3080	260	2160
29..	538	10	15	4440	1020	S 13000	2960	280	2240
30..	530	10	14	4580	720	8900	2890	340	2650
31..	514	9	12	--	--	--	2780	340	2550
Total	15030	--	235.8	70474	--	180174	275740	--	1734080
Day	JANUARY			FEBRUARY			MARCH		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2700	270	1970	23100	1990	124000	3410	660	6080
2..	2600	260	1830	18300	1780	87900	3360	620	5600
3..	2510	230	1560	14300	1590	61400	3290	595	5290
4..	2470	170	1130	11500	1510	46000	3180	575	4900
5..	2500	190	1280	10400	1520	42700	3070	550	4560
6..	2370	250	1600	9710	1500	39000	2990	520	4200
7..	2270	240	1470	9130	1200	29600	2920	500	3940
8..	2220	220	1320	8740	980	23000	2860	480	3700
9..	2180	200	1180	8340	860	19400	2900	480	3760
10..	2150	190	1100	8060	970	21000	3710	495	5000
11..	2120	170	973	7860	1050	22300	4140	520	5810
12..	2110	160	912	7640	1110	23000	3810	545	5600
13..	2100	150	851	7520	1140	23100	3820	565	5830
14..	2120	140	801	7140	1100	21000	3640	560	5500
15..	2150	140	813	6570	1040	18400	3710	550	5510
16..	2160	130	758	6070	980	16000	11800	3020	S 121000
17..	2150	130	755	5710	930	14300	16300	2650	S 120000
18..	2100	100	567	5470	890	13000	12100	1580	52000
19..	2140	110	636	5200	810	11400	9710	1350	35400
20..	5110	1010	S 17100	4860	700	9190	9130	1270	31300
21..	17600	4590	S 221000	4520	600	7320	9560	1210	31200
22..	15500	2760	116000	4310	640	7450	9200	1210	30000
23..	9950	1810	48600	4160	865	9720	10300	1510	42000
24..	8280	1320	29500	4020	900	9770	9730	990	26000
25..	7980	1260	27100	3930	895	9500	8300	940	21100
26..	15200	2540	S 112000	3760	865	8800	7500	1260	26000
27..	20700	2880	161000	3590	795	7710	6860	1480	27400
28..	28600	4210	S 330000	3470	725	6800	6460	1400	24000
29..	46100	5240	S 638000	--	--	--	6300	1130	19200
30..	36100	2880	281000	--	--	--	5890	1010	16000
31..	28800	2290	178000	--	--	--	5920	1050	16800
Total	283040	--	2180806	217380	--	733660	195870	--	714680

S Computed by subdividing day.

KLAMATH RIVER BASIN--Continued

11-5300. TRINITY RIVER NEAR HOOPA, CALIF.--Continued

Suspended sediment, water year October 1966 to September 1967--Continued

Day	APRIL			MAY			JUNE		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	5620	1180	18000	4310	425	4900	5980	730	11800
2..	5330	1310	18900	4300	430	4990	6030	460	7490
3..	5240	1380	20000	4500	455	5500	5650	615	9380
4..	5270	1260	17900	4910	525	6960	5220	700	9900
5..	5220	1020	14000	5540	650	9700	5110	640	8830
6..	5870	890	14100	5980	795	12800	4910	570	7600
7..	6460	830	15000	6800	950	17000	5020	535	7250
8..	6570	940	16700	9780	1160	30600	4950	490	6500
9..	6390	1030	18000	11200	1230	37000	4880	420	5530
10..	6320	1050	17900	9560	1040	26800	4790	400	5200
11..	6500	1000	18000	8100	860	19000	4720	430	5480
12..	6030	930	15100	7140	725	14000	4630	455	5700
13..	5800	810	13000	6640	620	11000	4470	465	5610
14..	5980	710	11500	6520	550	9680	4390	470	5600
15..	5650	700	11000	7160	600	12000	4390	460	5450
16..	5930	720	10400	8600	920	21400	4460	420	5100
17..	5540	800	12000	9470	1170	30000	4490	315	3820
18..	5580	810	12200	9250	1090	27200	4540	275	3400
19..	5170	800	11000	8080	1010	22000	4470	340	4100
20..	5000	790	10700	7840	1070	22600	4490	345	4200
21..	4810	790	10000	8840	905	22000	4390	260	3080
22..	4720	790	10100	8960	650	15700	4130	210	2300
23..	4810	700	9100	8360	515	12000	3930	215	2300
24..	4790	520	6730	7600	465	9540	3670	225	2200
25..	4840	500	6500	7080	450	8600	3380	260	2370
26..	4840	580	7580	7040	450	8550	3220	250	2200
27..	5020	580	7900	7040	420	8000	2990	160	1290
28..	4840	595	7780	7100	365	7000	2740	105	780
29..	4630	585	7300	7020	390	7400	2540	123	844
30..	4420	485	5790	6700	595	10800	2370	110	700
31..	--	--	--	6520	735	13000	--	--	--
Total	162790	--	374180	227940	--	467720	130950	--	146004
	JULY			AUGUST			SEPTEMBER		
	Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment		Mean discharge (cfs)	Suspended sediment	
		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day		Mean concentration (ppm)	Tons per day
1..	2280	86	529	1010	15	41	434	10	12
2..	2130	88	510	930	12	30	426	4	4.6
3..	2060	100	556	898	16	39	426	5	5.8
4..	2000	101	550	874	17	40	418	4	4.5
5..	1910	90	464	866	15	35	410	4	4.4
6..	1850	85	420	842	13	30	402	3	3.3
7..	1780	88	423	858	14	32	410	3	3.3
8..	1720	86	400	874	16	38	402	3	3.3
9..	1660	80	359	850	15	34	386	3	3.1
10..	1600	69	300	826	12	27	386	3	3.1
11..	1550	52	218	810	12	26	434	2	2.3
12..	1500	37	150	786	12	25	434	2	2.3
13..	1450	27	106	738	12	24	418	3	3.4
14..	1400	30	110	682	17	31	402	4	4.3
15..	1350	35	130	650	19	33	378	4	4.1
16..	1300	39	137	610	16	26	370	4	4.0
17..	1270	42	140	578	13	20	386	4	4.2
18..	1240	56	187	562	14	21	466	5	6.3
19..	1220	52	170	546	16	24	498	4	5.4
20..	1150	48	150	522	10	14	474	4	5.1
21..	1120	45	136	498	4	5.4	434	4	4.7
22..	1130	31	95	498	5	6.7	402	4	4.3
23..	1120	22	67	490	5	6.6	378	5	5.1
24..	1130	25	76	482	4	5.2	363	4	3.9
25..	1130	30	92	490	3	4.0	356	4	3.8
26..	1070	24	69	498	6	8.1	349	4	3.8
27..	1030	17	47	554	13	19	342	4	3.7
28..	1030	19	53	586	9	14	335	4	3.6
29..	1020	21	58	530	8	11	328	4	3.5
30..	1090	20	59	474	12	15	314	4	3.4
31..	1150	19	59	458	16	20	--	--	--
Total	44440	--	6820	20870	--	705.0	11961	--	128.6

Total discharge for year (cfs-days)..... 1656485
 Total load for year (tons)..... 6539193.4

KLAMATH RIVER BASIN--Continued

11-5300. TRINITY RIVER NEAR HOOPA, CALIF.--Continued

Particle-size analyses of suspended sediment, water year October 1966 to September 1967
 (Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
 P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

F, pipet, S, sieve, V, visual accumulation tube, W, in distilled water)																	
Date of collection	Time (24 hour)	Water tem- per- ature (° F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
Dec. 1, 1966.....	1525	49		6300	628						55	68	81	97	100		V
Feb. 2, 1967.....	1330	46		18100	1050						57	72	92	100	--		V
Feb. 22.....	1255	43		4380	210						39	47	66	95	100		V
Mar. 16.....	1605	46		16200	5500			14		27	43	55	69	84	97	100	VPWC
June 2.....	1400	51		6050	181						45	50	58	88	100		V

KLAMATH RIVER BASIN--Continued

11-5303. BLUE CREEK NEAR KLAMATH, CALIF.

LOCATION.--Lat 41°27'00", long 123°53'40", temperature recorder at gaging station on left bank 600 feet downstream from West Fork, 3.0 miles upstream from mouth, and 9.2 miles southeast of Klamath, Del Norte County.

DRAINAGE AREA.--120 square miles.

RECORDS AVAILABLE.--Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 69°F Aug. 15; minimum, 39°F Feb. 15, Mar. 3.

Temperature (°F) of water, water year October 1966 to September 1967

Temperature (°F) of Water, Water Year October 1966 to September 1967																																	
Month	Day																															Average	
	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		
October																																	
Maximum	62	65	64	64	63	63	64	64	63	62	60	60	59	58	60	59	59	58	57	58	57	56	59	60	59	59	59	58	58	58	59	60	
Minimum	60	58	58	59	59	58	59	59	58	58	57	56	55	54	55	54	54	54	54	56	54	54	55	56	56	56	56	55	55	55	55	56	
November																																	
Maximum	58	58	58	58	58	57	56	54	54	56	56	55	54	54	53	52	52	53	54	52	50	50	49	49	50	51	50	50	51	51	--	53	
Minimum	55	55	55	54	55	54	53	52	52	53	54	54	53	53	51	51	51	52	52	50	48	48	48	48	48	49	48	50	50	50	--	51	
December																																	
Maximum	51	50	49	51	48	49	48	49	49	49	49	49	49	49	48	48	48	48	48	49	47	47	49	48	49	46	46	46	46	46	48		
Minimum	50	48	48	48	48	48	48	48	48	48	46	48	47	47	46	46	46	47	48	46	46	46	47	47	45	44	44	44	45	45	46		
January																																	
Maximum	47	46	47	47	45	44	44	44	--	--	46	47	46	47	46	44	43	44	44	44	44	45	45	44	44	45	46	46	46	46	46	45	
Minimum	45	45	45	45	43	42	42	42	--	--	44	43	44	44	44	42	41	42	42	42	44	44	44	44	44	44	46	46	46	46	46	43	
February																																	
Maximum	46	46	47	47	47	47	47	47	45	46	44	44	42	42	40	42	43	44	42	42	42	43	44	44	44	45	45	45	45	--	--	44	
Minimum	44	44	46	46	46	46	46	45	43	43	43	42	42	40	40	39	41	41	40	40	40	41	41	42	43	42	42	43	--	--	--	42	
March																																	
Maximum	44	44	43	43	44	45	45	48	46	45	45	44	44	44	44	44	45	45	44	46	48	47	45	46	46	47	47	44	45	44	46	45	
Minimum	42	40	39	40	41	41	41	45	45	40	41	42	42	42	42	42	43	42	42	44	45	45	43	44	43	44	44	43	42	43	43	42	
April																																	
Maximum	47	49	47	47	46	47	48	48	47	47	47	48	48	46	48	46	45	47	47	47	49	47	48	49	48	46	46	48	47	49	--	47	
Minimum	43	44	45	45	44	45	46	46	45	43	44	44	44	44	43	43	43	44	43	44	44	45	45	46	46	46	45	44	44	44	--	44	
May																																	
Maximum	51	52	52	51	52	53	53	53	48	46	46	50	51	52	53	53	53	53	54	53	55	56	55	54	55	55	54	52	52	50	53	52	
Minimum	45	45	46	47	47	47	47	47	46	44	44	44	45	46	47	47	47	46	47	49	49	49	49	49	49	48	49	48	48	48	48	47	
June																																	
Maximum	50	53	57	58	52	55	55	56	55	58	58	59	60	61	61	62	63	63	62	59	63	62	63	64	64	64	64	65	66	67	--	59	
Minimum	49	48	48	41	47	52	51	52	52	51	52	52	51	52	53	53	54	55	55	55	55	55	55	55	55	56	56	56	57	58	--	52	
July																																	
Maximum	67	66	65	66	66	66	66	65	66	63	66	66	66	66	65	65	63	66	66	66	66	66	66	66	64	66	67	63	68	67	68	65	
Minimum	58	58	58	58	58	58	57	58	59	58	58	59	59	59	59	59	59	58	57	58	58	59	59	60	59	58	58	61	59	58	58	58	
August																																	
Maximum	67	66	67	67	68	67	66	68	66	68	68	68	68	68	69	68	68	68	68	68	68	68	68	68	68	66	67	68	67	68	68	67	
Minimum	59	60	60	60	60	60	62	60	60	60	60	60	60	60	61	60	60	60	60	61	60	62	62	62	62	62	61	59	60	60	60	60	
September																																	
Maximum	68	68	68	68	68	67	66	67	67	67	67	67	67	67	67	67	67	66	66	66	66	66	66	66	66	64	64	64	62	61	--	66	
Minimum	59	60	60	60	60	60	62	62	60	58	60	59	61	59	59	59	60	60	60	60	60	60	61	61	61	60	59	58	58	57	--	59	

KLAMATH RIVER BASIN--Continued

11-5305. KLAMATH RIVER NEAR KLAMATH, CALIF.
(International hydrological decade station)

LOCATION.--Lat 41°30'45", long 123°58'30", at gaging station, 2.8 miles upstream from Turwar Creek, and 3.3 miles east of Klamath, Del Norte County.

DRAINAGE AREA.--12,100 square miles, approximately, not including Lost River or Lower Klamath Lake basins.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Water temperatures: November 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 73°F Oct. 2 and on several days in August; minimum, 40°F Jan. 10-14.

EXTREMES, 1965-67.--Water temperatures: Maximum (1966-67), 73°F Oct. 2, 1966 and on several days in August 1967; minimum, 40°F Jan. 10-14, 1967.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (calculated)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 10, 1966....	2730	18		21	9.7	13	2.0	112	5	16	5.2	0.2	1.3	0.1	146			92			234	8.4
Nov. 14.....	3080	18		17	7.1	7.3	1.3	80	0	15	3.6	.0	2.1	.0	111			72			169	7.6
Dec. 13.....	50700	13		12	5.7	3.4	.8	61	0	7.0	1.0	.0	.1	.0	73			54			116	8.0
Jan. 17, 1967....	7630	19		17	8.1	4.3	1.3	94	0	9.0	3.8	.0	1.5	.1	115			76			186	8.1
Feb. 7.....	34600	14		16	7.2	4.3	.8	83	0	7.0	1.6	.2	.5	.0	92			70			150	8.1
Mar. 7.....	12900	16		17	7.7	5.6	.9	88	0	10	2.6	.1	.5	.0	104			74			165	8.1
Apr. 4.....	20700	15		16	7.0	4.6	.7	83	0	8.0	1.4	.1	.1	.0	94			69			148	8.2
May 9.....	35200	12		13	5.3	4.0	.9	63	0	6.0	1.2	.2	.5	.0	74			54			113	7.8
June 6.....	20600	12		13	6.0	5.7	1.0	68	0	10	1.4	.1	.6	.0	83			57			133	8.0
July 18.....	3980	14		19	7.1	5.6	1.2	88	2	9.0	2.9	.1	.7	.0	105			76			185	8.3
Aug. 8.....	2980	15		22	7.2	7.3	1.4	100	0	10	4.4	.1	.5	.1	117			84			198	8.2
Sept. 12.....	2700	27		21	9.0	11	1.5	111	0	13	5.1	.2	2.4	.0	145			89			214	8.2

Date of collection	Strontium (Sr)	Lithium (Li)	Total phosphate (PO ₄)	Dissolved oxygen (DO) (mg/l)
Oct. 10, 1966.....	0.08	0.05	0.30	14.0
Nov. 14.....	.07	.02	.37	10.2
Dec. 13.....	.04	.02	.20	11.1
Jan. 17, 1967.....	.05	.01	.22	12.0
Feb. 7.....	.09	.01	.16	12.0
Mar. 7.....	.10	.01	.12	11.3
Apr. 4.....	.10	.01	.11	11.4
May 9.....	.07	.01	.13	10.8
June 6.....	.10	.01	.17	10.0
July 18.....	.10	.01	.13	8.5
Aug. 8.....	.15	.02	.13	8.0
Sept. 12.....	.10	.01	.15	8.4

KLAMATH RIVER BASIN--Continued

11-5305. KLAMATH RIVER NEAR KLAMATH, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

Month	Day																															Average
	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	
October																																
Maximum	71	73	71	71	69	70	70	70	70	70	68	67	64	63	62	63	62	62	62	60	61	61	61	63	63	64	64	64	63	62	62	65
Minimum	69	68	67	68	67	67	67	67	67	66	66	64	61	60	60	59	60	60	59	59	59	59	60	58	61	62	63	63	62	61	60	62
November																																
Maximum	62	62	59	59	58	57	57	56	56	54	54	55	56	56	56	56	56	56	57	57	57	57	57	57	56	56	56	55	48	48	48	55
Minimum	60	57	56	58	57	55	55	54	54	53	53	54	55	56	56	55	56	56	56	56	57	57	57	56	56	56	55	47	48	48	54	
December																																
Maximum	48	48	48	48	48	45	44	47	48	48	48	48	49	49	49	48	48	48	48	48	48	48	48	47	47	47	47	46	46	46	44	47
Minimum	48	48	48	48	44	43	43	43	48	46	48	48	48	48	48	48	47	46	46	48	47	47	47	46	47	46	46	46	46	44	44	46
January																																
Maximum	44	44	42	42	42	42	42	42	41	41	40	40	41	41	42	42	42	42	42	42	42	42	42	42	42	42	42	42	43	43	42	41
Minimum	43	42	42	42	42	42	42	41	41	40	40	40	40	40	41	41	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	41
February																																
Maximum	42	42	43	43	44	44	44	46	46	46	46	46	46	46	46	44	46	47	47	47	47	46	46	46	46	46	46	46	46	46	46	45
Minimum	42	42	42	43	42	42	42	41	45	45	46	45	46	45	44	44	44	46	46	44	44	44	44	45	46	46	46	46	46	46	46	44
March																																
Maximum	47	47	47	47	46	47	47	48	48	48	48	46	46	46	46	46	47	48	48	48	49	49	49	49	48	48	48	48	48	48	47	47
Minimum	46	47	47	46	44	45	46	47	48	48	46	46	46	46	44	45	46	47	48	47	48	49	49	49	48	48	47	47	48	48	47	46
April																																
Maximum	46	48	48	48	48	48	48	49	49	49	49	49	49	49	49	48	48	49	48	49	49	49	49	49	49	50	50	50	49	49	49	48
Minimum	46	46	48	48	48	48	48	48	49	47	48	49	49	49	49	48	48	47	48	49	48	49	49	49	50	50	50	50	49	48	49	48
May																																
Maximum	49	51	51	52	53	54	54	54	54	54	53	51	52	52	53	54	55	55	55	56	56	57	57	57	57	56	56	56	56	56	56	54
Minimum	48	50	50	51	52	52	52	54	54	53	51	49	50	52	52	54	54	55	55	55	56	56	57	57	56	56	56	56	56	56	56	53
June																																
Maximum	55	55	56	58	58	59	59	59	59	59	59	58	59	59	60	60	61	62	62	62	62	61	61	61	62	62	63	62	63	64	64	60
Minimum	55	53	54	56	58	59	59	59	59	58	58	58	58	58	59	59	60	61	62	62	62	61	61	61	61	62	62	62	61	61	63	59
July																																
Maximum	66	66	66	65	65	65	65	66	66	66	66	66	66	66	67	67	67	67	67	67	67	67	67	67	67	66	66	66	66	68	70	66
Minimum	64	66	65	65	65	64	64	65	66	65	66	66	66	66	66	66	67	67	67	67	67	67	67	67	66	66	66	66	66	68	68	66
August																																
Maximum	70	70	70	70	70	73	70	70	70	70	71	71	71	71	72	72	72	72	72	72	72	73	73	73	73	73	73	73	73	73	72	71
Minimum	69	70	70	70	70	70	70	68	70	70	70	71	71	71	71	72	72	72	72	72	72	73	73	73	73	73	73	73	73	72	71	71
September																																
Maximum	72	72	72	72	72	72	72	72	72	70	70	70	69	69	69	69	69	69	69	70	71	71	71	71	71	70	70	70	70	69	69	70
Minimum	71	71	72	71	71	71	72	70	70	70	68	68	68	69	69	68	69	68	68	69	70	71	71	70	71	70	69	70	69	68	68	69

MISCELLANEOUS ANALYSES OF STREAMS IN KLAMATH RIVER BASIN

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concentra- tion (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeter's											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	
11-5258. WEAVER CREEK NEAR DOUGLAS CITY, CALIF. (Lat 40°40'15", long 122°56'30")																		
Dec. 1, 1966.....	1300	49		117	240	76	--	--	--	--	--	52	58	64	84	96	100	S
Jan. 4, 1967.....	1400	46		20	138	7.5	--	--	--	--	--	--	--	--	--	--	--	
Jan. 11.....	1110	41		17	1		--	--	--	--	--	--	--	--	--	--	--	
Jan. 21.....	1200	45		172	158	73	--	--	--	--	--	--	--	--	--	--	--	
Jan. 23.....	1500	45		56	228	34	--	--	--	--	--	--	--	--	--	--	--	
Jan. 28.....	1500	38		397	706	757	--	--	--	--	--	--	--	--	--	--	--	
Jan. 29.....	0730	34		367	3410	3380	13	17	26	34	45	57	81	96	100	--	VPWC	
Jan. 29.....	1730	40		464	880	1100	--	--	--	--	--	--	--	--	--	--	--	
Jan. 31.....	1100	41		540	2420	3530	13	17	26	33	43	53	72	88	98	100	VPWC	
Mar. 1.....	1615	51		56	4	.6	--	--	--	--	--	--	--	--	--	--	--	
Apr. 5.....	--	43		102	8	2.2	--	--	--	--	--	--	--	--	--	--	--	
May 3.....	1315	59		58	3	.5	--	--	--	--	--	--	--	--	--	--	--	
June 8.....	0950	52		66	1	.2	--	--	--	--	--	--	--	--	--	--	--	
11-5265. NORTH FORK TRINITY RIVER AT HELENA, CALIF. (Lat 40°46'55", long 123°07'40")																		
Oct. 17, 1966.....	1635	56		23	1	0.1						--	--	--	--	--	--	
Nov. 14.....	1500	48		404	18	20						--	--	--	--	--	--	
Nov. 15.....	1700	49		592	75	120						--	--	--	--	--	--	
Nov. 16.....	1710	50		517	8	11						--	--	--	--	--	--	
Nov. 17.....	1520	48		252	5	3.4						--	--	--	--	--	--	
Nov. 18.....	1600	49		174	1	.5						--	--	--	--	--	--	
Nov. 19.....	1720	49		686	64	119						--	--	--	--	--	--	
Nov. 20.....	1315	48		870	61	143						--	--	--	--	--	--	
Nov. 21.....	1600	42		621	17	29						--	--	--	--	--	--	
Nov. 22.....	1740	45		425	7	8.0						--	--	--	--	--	--	
Nov. 23.....	1600	44		352	6	5.7						--	--	--	--	--	--	
Nov. 24.....	1350	42		292	4	3.2						--	--	--	--	--	--	
Nov. 25.....	1415	--		254	4	2.7						--	--	--	--	--	--	
Nov. 30.....	1500	48		517	5	6.9						--	--	--	--	--	--	
Dec. 1.....	1005	48		1670	167	753						--	--	--	--	--	--	
Dec. 1.....	1400	47		1380	418	1560						28	37	55	90	100	V	
Dec. 2.....	1420	44		1170	63	199						--	--	--	--	--	--	
Dec. 3.....	1400	44		746	20	40						--	--	--	--	--	--	
Dec. 4.....	1350	45		1210	105	343						--	--	--	--	--	--	
Dec. 5.....	1215	45		1900	257	1320						--	--	--	--	--	--	
Dec. 6.....	1155	46		762	67	138						--	--	--	--	--	--	
Dec. 7.....	1400	45		651	26	46						--	--	--	--	--	--	
Dec. 8.....	1735	45		520	12	17						--	--	--	--	--	--	
Dec. 9.....	1345	42		511	8	11						--	--	--	--	--	--	

MISCELLANEOUS ANALYSES OF STREAMS IN KLAMATH RIVER BASIN--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967--Continued

(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;

P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment concen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
							Percent finer than size indicated, in millimeters										
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
11-5265. NORTH FORK TRINITY RIVER AT HELENA, CALIF.--Continued																	
Dec. 10, 1966.....	1525	44		693	25	47						--	--	--	--		
Dec. 11.....	1340	45		669	11	20						--	--	--	--		
Dec. 12.....	1450	47		786	49	104						--	--	--	--		
Dec. 13.....	1245	47		1340	350	1270						--	--	--	--		
Dec. 14.....	1555	46		950	82	210						--	--	--	--		
Dec. 15.....	1410	45		806	40	87						--	--	--	--		
Dec. 16.....	1605	45		647	22	38						--	--	--	--		
Dec. 17.....	1700	44		560	37	56						--	--	--	--		
Dec. 18.....	1130	42		511	17	23						--	--	--	--		
Dec. 19.....	1610	43		472	8	10						--	--	--	--		
Dec. 20.....	1205	45		441	7	8.3						--	--	--	--		
Dec. 21.....	1550	43		414	4	4.5						--	--	--	--		
Dec. 22.....	1630	42		385	4	4.2						--	--	--	--		
Dec. 23.....	1535	43		357	4	3.9						--	--	--	--		
Dec. 24.....	1525	43		330	3	2.7						--	--	--	--		
Dec. 25.....	1530	42		299	9	7.3						--	--	--	--		
Dec. 26.....	1330	41		286	3	2.3						--	--	--	--		
Dec. 27.....	1545	40		262	4	2.8						--	--	--	--		
Dec. 28.....	1430	40		248	2	1.3						--	--	--	--		
Dec. 29.....	1605	41		237	2	1.3						--	--	--	--		
Dec. 30.....	1505	44		224	2	1.2						--	--	--	--		
Dec. 31.....	1305	42		215	2	1.2						--	--	--	--		
Jan. 1, 1967.....	1530	43		207	3	1.7						--	--	--	--		
Jan. 2.....	1430	43		198	2	1.1						--	--	--	--		
Jan. 9.....	1515	39		160	4	1.7						--	--	--	--		
Jan. 10.....	1715	39		155	1	.4						--	--	--	--		
Jan. 11.....	1205	40		161	2	.9						--	--	--	--		
Jan. 11.....	1710	40		154	1	.4						--	--	--	--		
Jan. 12.....	1025	42		152	2	.8						--	--	--	--		
Jan. 13.....	1000	43		158	2	.9						--	--	--	--		
Jan. 14.....	1430	43		174	2	.9						--	--	--	--		
Jan. 15.....	1530	43		182	2	1.0						--	--	--	--		
Jan. 16.....	1425	42		188	2	1.0						--	--	--	--		
Jan. 17.....	1500	40		180	2	1.0						--	--	--	--		
Jan. 18.....	1710	41		174	2	.9						--	--	--	--		
Jan. 19.....	1310	40		167	1	.5						--	--	--	--		

Jan. 20.....	1420	35	214	2	1.2					--	--	--	--
Jan. 21.....	1330	37	560	4	6.0					--	--	--	--
Jan. 22.....	1325	39	511	4	5.5					--	--	--	--
Jan. 23.....	1430	40	280	2	1.5					--	--	--	--
Jan. 24.....	1140	39	345	2	1.9					--	--	--	--
Jan. 25.....	1505	40	482	2	2.6					--	--	--	--
Jan. 26.....	1050	35	582	5	7.9					--	--	--	--
Jan. 27.....	0945	37	802	12	26					--	--	--	--
Jan. 28.....	1215	40	1550	203	850					--	--	--	--
Jan. 29.....	1245	44	4270	1170	13490					--	--	--	--
Jan. 30.....	1040	44	2120	253	1450					--	--	--	--
Jan. 31.....	1040	45	1940	171	896					--	--	--	--
Feb. 1.....	1905	44	1360	80	294					--	--	--	--
Feb. 2.....	1455	45	1080	42	122					--	--	--	--
Feb. 4.....	1555	45	842	15	34					--	--	--	--
Feb. 5.....	1550	47	865	15	35					--	--	--	--
Feb. 6.....	1150	44	885	15	36					--	--	--	--
Feb. 7.....	1215	44	900	19	46					--	--	--	--
Feb. 8.....	1330	45	875	17	40					--	--	--	--
Feb. 9.....	1250	46	830	11	25					--	--	--	--
Feb. 10.....	1430	46	850	16	37					--	--	--	--
Feb. 11.....	1440	46	814	13	29					--	--	--	--
Feb. 12.....	1445	47	860	21	49					--	--	--	--
Feb. 13.....	1320	44	850	22	50					--	--	--	--
Feb. 14.....	1050	43	766	17	35					--	--	--	--
Feb. 15.....	0930	41	686	8	15					--	--	--	--
Feb. 16.....	1100	44	602	8	13					--	--	--	--
Feb. 17.....	1330	46	554	5	7.5					--	--	--	--
Feb. 18.....	1045	45	560	5	7.6					--	--	--	--
Feb. 19.....	1230	44	533	4	5.8					--	--	--	--
Feb. 20.....	0955	40	498	3	4.0					--	--	--	--
Feb. 21.....	1115	41	470	4	5.1					--	--	--	--
Feb. 22.....	1125	42	446	3	3.6					--	--	--	--
Feb. 23.....	1100	42	435	2	2.3					--	--	--	--
Feb. 24.....	1045	43	435	2	2.3					--	--	--	--
Feb. 25.....	1255	45	410	4	4.4					--	--	--	--

MISCELLANEOUS ANALYSES OF STREAMS IN KLAMATH RIVER BASIN--Continued

Periodic determinations of suspended-sediment discharge and particle-size analyses, water year October 1966 to September 1967--Continued
(Methods of analysis: B, bottom withdrawal tube; C, chemically dispersed; D, decantation; N, in native water;
P, pipet; S, sieve; V, visual accumulation tube; W, in distilled water)

Date of collection	Time (24 hour)	Water tem- per- ature (°F)	Sam- pling point	Discharge (cfs)	Sediment con- cen- tration (ppm)	Sediment discharge (tons per day)	Suspended sediment											Method of analysis
							Percent finer than size indicated, in millimeters											
							0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	

11-5265. NORTH FORK TRINITY RIVER AT HELENA, CALIF.--Continued																		
Feb. 27, 1967.....	1725	46		372	2	2.0						--	--	--	--			
Feb. 28.....	1115	44		369	3	3.0						--	--	--	--			
Mar. 1.....	1445	47		375	2	2.0						--	--	--	--			
Mar. 6.....	1050	42		318	1	.9						--	--	--	--			
Mar. 9.....	1515	46		330	1	.9						--	--	--	--			
Mar. 11.....	1105	41		361	3	2.9						--	--	--	--			
Mar. 13.....	1045	40		356	1	1.0						--	--	--	--			
Mar. 14.....	1600	41		347	1	.9						--	--	--	--			
Mar. 15.....	1520	43		347	2	1.9						--	--	--	--			
Mar. 16.....	0920	43		1730	511	2390						--	--	--	--			
Mar. 16.....	1220	45		2370	289	1850					62	79	98	100			V	
Mar. 17.....	1050	44		1560	76	320					--	--	--	--				
Mar. 18.....	1340	46		1070	27	78					--	--	--	--				
Mar. 19.....	1145	43		865	14	33					--	--	--	--				
Mar. 20.....	1210	44		822	11	24					--	--	--	--				
Mar. 21.....	1010	45		846	12	27					--	--	--	--				
Mar. 22.....	1020	45		830	10	22					--	--	--	--				
Mar. 23.....	1310	46		855	16	37					--	--	--	--				
Mar. 24.....	1220	45		758	9	18					--	--	--	--				
Mar. 27.....	1305	46		547	3	4.4					--	--	--	--				
Mar. 29.....	0855	42		485	3	3.9					--	--	--	--				
Mar. 31.....	1155	40		316	3	2.6					--	--	--	--				
Apr. 4.....	0955	45		444	1	1.2					--	--	--	--				
Apr. 5.....	1030	43		438	2	2.4					--	--	--	--				
Apr. 6.....	1205	43		485	11	14					--	--	--	--				
Apr. 8.....	1740	47		520	4	5.6					--	--	--	--				
Apr. 11.....	1640	47		482	2	2.6					--	--	--	--				
Apr. 13.....	1155	45		449	1	1.2					--	--	--	--				
Apr. 15.....	1045	44		419	2	2.3					--	--	--	--				
Apr. 17.....	1415	43		400	2	2.2					--	--	--	--				
Apr. 19.....	1355	44		366	2	2.0					--	--	--	--				
Apr. 21.....	1410	45		337	1	.9					--	--	--	--				
Apr. 24.....	1755	47		335	2	1.8					--	--	--	--				
Apr. 26.....	1145	46		337	1	.9					--	--	--	--				
Apr. 28.....	1140	44		325	1	.9					--	--	--	--				
Apr. 30.....	1010	42		304	3	2.5					--	--	--	--				

SMITH RIVER BASIN

11-5325. SMITH RIVER NEAR CRESCENT CITY, CALIF.

LOCATION.--Lat 41°47'20", long 124°03'20", at gaging station, 0.5 mile downstream from South Fork, and 8 miles east of Crescent City, Del Norte County.

DRAINAGE AREA.--609 square miles.

RECORDS AVAILABLE.--Chemical analyses: October 1953 to September 1967.

Water temperatures: October 1965 to September 1967.

EXTREMES, 1966-67.--Water temperatures: Maximum, 72°F Sept. 1, 2; minimum, 42°F on several days during winter months.

Chemical analyses, in parts per million, water year October 1966 to September 1967

Date of collection	Mean discharge (cfs)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids (residue at 180°C)			Hardness as CaCO ₃		Sodium adsorption ratio	Specific conductance (micro-mhos at 25°C)	pH
															Parts per million	Tons per acre-foot	Tons per day	Calcium, Magnesium	Non-carbonate			
Oct. 10, 1966....	223			13	14	2.6	0.8	98	2	--	2.6		--	0.0				90			182	8.4
Nov. 15.....	39500			5.2	8.1	1.3	.4	49	0	--	1.3		--	.0				46			89	7.9
Dec. 12.....	19000			6.5	7.4	1.4	.5	50	0	--	1.4		--	.0				46			91	8.0
Jan. 16, 1967....	1850			6.1	9.0	1.8	.3	62	0	--	1.1		--	.0				52			109	7.9
Feb. 6.....	5600			7.0	6.9	1.5	.5	50	0	--	1.6		--	.0				46			94	7.8
Mar. 6.....	1700			5.8	8.5	1.6	.2	60	0	--	1.4		--	.0				50			103	8.0
Apr. 3.....	4330	10		5.2	8.1	1.8	.3	53	0	--	1.4		--	.0				46			92	8.0
May 9.....	6740			5.4	6.5	1.2	.3	45	0	2.0	1.1		0.1	--	52			40			80	7.9
June 6.....	1580			6.6	7.2	1.6	.3	53	0	--	.8		--	.0				46			95	7.9
July 18.....	1070			--	--	2.5	--	79	0	--	2.4		--	.1				67			145	8.2
Aug. 8.....	369			--	--	2.5	--	84	2	--	2.6		--	.0				76			157	8.5
Sept. 12.....	299			11	13	2.7	.8	91	0	7.1	2.8		--	.0				81			168	7.7

SMITH RIVER BASIN--Continued

11-5325. SMITH RIVER NEAR CRESCENT CITY, CALIF.--Continued

Temperature (°F) of water, water year October 1966 to September 1967

temperature (°F) of water, water year October 1966 to September 1967																																	
Month	Day																															Average	
	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		
October																																	
Maximum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	65	54	54	54	57	57	57	56	56	56	56	59	59	--
Minimum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	45	52	52	53	54	55	55	55	55	54	54	54	55	--
November																																	
Maximum	--	--	--	--	62	55	53	51	50	53	54	55	56	54	54	53	53	54	55	54	51	50	49	48	49	49	49	50	50	50	--	52	
Minimum	--	--	--	--	54	52	51	50	49	51	53	54	54	54	53	52	52	52	52	52	50	49	48	47	47	48	48	49	48	48	--	50	
December																																	
Maximum	50	50	48	49	48	48	48	48	49	49	50	49	49	48	48	49	48	47	47	48	46	45	46	46	46	46	46	43	42	44	50	50	47
Minimum	48	48	48	48	48	48	48	48	48	49	48	49	48	48	47	48	46	47	47	46	45	44	44	45	46	46	43	42	42	42	44	48	46
January																																	
Maximum	50	50	48	45	44	43	43	42	43	44	45	45	46	46	46	45	44	44	43	44	46	46	46	45	45	46	46	47	47	48	46	46	45
Minimum	48	48	48	44	42	42	42	42	42	43	44	45	45	45	45	44	42	42	43	44	45	45	45	45	45	46	46	47	46	46	46	46	44
February																																	
Maximum	47	46	46	47	47	46	46	47	47	47	46	47	47	44	44	45	47	47	45	45	45	45	45	46	48	46	46	47	--	--	--	46	
Minimum	46	45	45	45	46	45	44	45	45	46	45	45	43	43	43	43	45	44	43	42	42	43	43	44	45	44	44	44	45	--	--	--	44
March																																	
Maximum	48	47	45	45	45	47	47	47	47	47	45	45	44	44	44	46	46	46	47	46	48	49	49	48	47	46	48	47	46	45	44	44	46
Minimum	46	45	43	42	42	43	44	44	45	42	42	43	42	43	44	45	45	45	44	46	47	47	47	45	44	45	45	45	44	44	44	44	44
April																																	
Maximum	48	49	47	48	47	47	48	48	48	49	48	48	47	45	48	46	44	47	48	48	48	49	48	49	48	49	46	45	47	46	48	--	47
Minimum	44	44	45	46	46	45	46	47	46	48	45	46	44	43	44	44	43	44	44	44	45	45	46	46	46	46	45	44	45	44	44	--	45
May																																	
Maximum	51	52	52	52	53	54	55	54	50	46	47	51	52	54	55	55	55	55	56	56	57	58	57	57	57	57	56	54	54	52	54	53	
Minimum	45	45	46	47	48	48	48	48	46	44	44	44	46	47	48	48	48	48	48	48	50	50	51	51	51	50	51	50	52	50	50	49	48
June																																	
Maximum	52	50	58	58	59	56	58	61	61	61	60	61	62	64	64	65	66	66	65	61	66	65	66	67	67	67	67	69	71	71	--	63	
Minimum	50	50	50	53	54	54	54	54	54	55	55	55	54	56	57	58	59	60	60	59	59	59	59	60	61	61	61	62	64	65	--	57	
July																																	
Maximum	71	71	70	71	70	69	70	68	69	69	70	69	70	71	70	70	70	70	69	69	70	68	68	68	67	69	70	66	68	67	68	69	
Minimum	65	65	64	65	65	63	63	64	64	64	64	64	64	65	65	65	65	65	64	64	64	64	65	65	64	64	64	64	63	64	64	64	
August																																	
Maximum	68	69	68	68	68	68	71	71	70	70	70	70	70	71	71	71	71	71	71	70	70	71	70	71	69	69	70	70	71	71	70	70	
Minimum	64	66	65	66	64	64	66	66	66	66	66	66	66	66	67	66	66	66	66	67	66	66	67	67	67	67	66	65	65	65	65	65	
September																																	
Maximum	72	72	71	70	70	70	68	68	66	65	66	66	66	65	65	65	65	66	66	68	68	67	67	66	66	66	66	65	63	64	--	66	
Minimum	66	67	66	64	66	66	65	65	63	64	64	64	62	62	62	62	62	62	62	64	65	66	65	64	64	63	63	63	62	62	--	63	

INDEX

	Page
Alameda Creek near Niles.....	120
Alamo River near Niland.....	28
All American Canal above Pilot Knob Wasteway.....	26
American River at Fair Oaks.....	240
Arroyo Grande above Phoenix Creek, near Arroyo Grande.....	73
Arroyo Seco near Greenfield.....	83
Arroyo Trabuco near San Juan Capistrano.....	44
Arroyo Valle near Livermore.....	116
Audubon Creek near Bolinas.....	278
Battle Creek below Coleman Fish Hatchery, near Cottonwood.....	182
Bear Creek near Rumsey.....	273
Bear River, near Auburn.....	272
near Wheatland.....	234
Big Chico Creek near Chico.....	197
Big Creek below Huntington Lake.....	138
Big Grizzly Creek near Portola.....	206
Big Rock Creek near Valyermo.....	35
Big Sulphur Creek near Cloverdale.....	322
Big Sur River near Big Sur.....	74
Black Butte River near Covelo.....	374
Blue Creek near Klamath.....	478
Borel Canal below Isabella Dam.....	128
Bull Creek near Weott.....	434
Butte Creek near Chico.....	201
Cache Creek, above Rumsey.....	251
at Yolo.....	256
near Capay.....	255
near Lower Lake.....	263
Canyon Creek near Georgetown.....	237
Castaic Creek above Cordova Ranch, near Castaic.....	68
Clear Creek, at French Gulch.....	264
near Igo.....	175
Clear Lake at Lakeport.....	263
Collection and examination of samples.....	9
Colma Creek at South San Francisco.....	102
Colorado River Aqueduct near Parker Dam, Ariz.-Calif.....	20
Colorado River, below Hoover Dam, Ariz.-Nev.....	19
below Parker Dam, Ariz.-Calif.....	21
Colusa Trough near Colusa.....	205
Cooperation.....	2
Cosumnes River, at McConnell.....	164
at Michigan Bar.....	158
Cottonwood Creek, at Hornbrook.....	450
near Cottonwood.....	178

	Page
Cow Creek near Millville.....	177
Coyote Creek near Gilroy.....	110
Cuyama River below Twitchell Dam.....	72
Definition of terms and abbreviations.....	3
Delta-Mendota Canal, above Tracy pumping plant, near Tracy. near Mendota.....	152 153
Dry Creek, near Cloverdale.....	329
near Geyserville.....	330
East Fork Carson River near Markleeville.....	37
East Fork of West Fork Mojave River above Cedar Springs....	34
East Fork Russian River, near Calpella.....	289
near Ukiah.....	303
East Walker River near Bridgeport.....	36
Eel River, above Dos Rios.....	372
at Fort Seward.....	400
at McCann.....	407
at Scotia.....	417
below Dos Rios.....	432
below Scott Dam, near Potter Valley.....	352
near Dos Rios.....	364
Elder Creek near Paskenta.....	270
Elk Creek near Hearst.....	388
Feather River, at Nicolaus.....	235
at Oroville.....	214
at Yuba City.....	223
near Gridley.....	219
Garcia River near Point Arena.....	345
Gila Gravity Main Canal near Imperial Dam, Ariz.-Calif.....	23
Hayfork Creek near Hyampom.....	464
Highland Creek below Highland Creek Dam, near Kelseyville..	247
Indian Creek near Crescent Mills.....	211
Introduction.....	1
Kaweah River, at Three Rivers.....	133
below Terminus Dam.....	134
Kern River, at Kernville.....	126
Canal No. 3, near Kernville.....	125
near Kernville.....	129
near Quaking Aspen Camp.....	124
Kings River, above North Fork, near Trimmer.....	135
below North Fork, near Trimmer.....	136
Klamath River, at Orleans.....	456
below Iron Gate Dam.....	448
near Klamath.....	479
near Seiad Valley.....	454

	Page
Lake Mead at Hoover Dam, Ariz.-Nev.....	16
Lake Mendocino near Ukiah.....	298
Lake Pillsbury near Potter Valley.....	351
Lake Tahoe at Tahoe.....	41
Lily Creek near Pinecrest.....	142
Little Grizzly Creek near Genesee.....	210
Little Stony Creek above East Park Reservoir, near Lodoga.....	198
Los Angeles Aqueduct at outlet, at San Fernando	38
Los Angeles River at Los Angeles.....	58
Maacama Creek near Kellogg.....	344
Mad River, near Arcata.....	442
near Forest Glen.....	436
near Kneeland.....	444
Marble Fork Kaweah River at Potwisha Camp.....	132
Matilija Creek above reservoir, near Matilija Hot Springs	70
Mattole River near Petrolia.....	349
McCloud River above Shasta Lake.....	173
Merced River at Happy Isles Bridge, near Yosemite.....	141
Middle Fork American River near Auburn.....	273
Middle Fork Cottonwood Creek near Ono.....	267
Middle Fork Eel River, above Black Butte River, near Covelo.....	373
below Black Butte River, near Covelo.....	381
near Dos Rios.....	390
Middle Fork Feather River, near Clio.....	207
near Merrimac.....	208
Middle Fork Stanislaus River at Hells Half Acre Bridge, near Pinecrest.....	144
Middle Fork Ten Mile River near Fort Bragg.....	348
Middle Yuba River above Oregon Creek, near North San Juan	227
Mill Creek, at mouth, near Los Molinos.....	190
near Covelo.....	431
Mission Creek below Whittier Narrows Dam.....	59
Mojave River, at Lower Narrows, near Victorville.....	33
at The Forks, near Cedar Springs.....	32
Mokelumne River, at Woodbridge.....	157
below Camanche Dam.....	155
near Mokelumne Hill.....	154
Morses Creek at Bolinas.....	277
Nacimiento River near Bryson.....	75
Napa River near St. Helena.....	274
Navarro River near Navarro.....	346
New River near Westmoreland.....	29
North Fork American River at North Fork Dam.....	236
North Fork Eel River near Mina.....	431, 434
North Fork Feather River at Pulga.....	212

	Page
North Fork Trinity River at Helena.....	481
North Yuba River below New Bullards Bar Dam, near North San Juan	230
Noyo River near Fort Bragg.....	347
 Oregon Creek near North San Juan.....	 229
Outlet Creek near Longvale.....	369
 Pajaro River at Chittenden.....	 97
Panoche Creek below Silver Creek, near Panoche.....	164
Pescadero Creek near Pescadero.....	101
Pine Creek at Bolinas.....	275
Pit River, near Canby.....	169
near Montgomery Creek.....	172
Potter Valley Powerhouse tailrace near Potter Valley...	354
Putah Creek, near Guenoc.....	259
near Winters.....	261
 Red Bank Creek at Rawson Bridge, near Red Bluff.....	 270
Redwood Creek at Orick.....	447
Russian River, near Cloverdale.....	314
near Guerneville.....	339
near Healdsburg.....	328
near Hopland.....	313
near Ukiah.....	280
 Sacramento River, above Colusa Trough, at Knights Landing.....	 204
at Bend.....	184
at Butte City.....	200
at Delta.....	166
at Freeport.....	245
at Keswick.....	174
at Sacramento.....	241
below Wilkens Slough, near Grimes.....	203
near Hamilton City.....	196
near Mount Shasta.....	165
near Red Bluff.....	189
near Rio Vista.....	262
Salinas River near Chualar.....	87
Salmon Creek at Bodega.....	279
Salmon River at Somesbar.....	455
Salsipuedes Creek near Lompoc.....	69
Salton Sea at Salton Sea State Park.....	27
San Antonio River near Lockwood.....	79
San Gabriel River, at Azusa powerhouse, at Azusa.....	56
at Whittier Narrows.....	57
San Joaquin River, at Antioch.....	140
near Vernalis.....	146

	Page
San Juan Creek near San Juan Capistrano.....	44
San Lorenzo River at Big Trees.....	99
Santa Ana River, at Colton.....	52
below Prado Dam.....	53
Santa Clara River near Santa Paula.....	66
Santa Margarita River near Fallbrook.....	43
Santa Paula Creek near Santa Paula.....	67
Santa Ynez River near Buellton.....	69
Scott River near Fort Jones.....	453
Sediment.....	11
Selected references.....	14
Sespe Creek, near Fillmore.....	61
near Wheeler Springs.....	60
Shasta River near Yreka.....	451
Smith River near Crescent City.....	486
Solutes.....	9
Soquel Creek at Soquel.....	98
South Cow Creek near Millville.....	176
South Fork American River, near Kyburz.....	238
near Lotus.....	239
South Fork Cottonwood Creek near Cottonwood.....	268
South Fork Eel River, at Leggett.....	414
near Branscomb.....	408
near Miranda.....	415
South Fork Feather River below Ponderosa Dam.....	209
South Fork Pit River near Likely.....	168
South Fork Trinity River, below Hyampom.....	465
near Salyer.....	469
South Yuba River at Jones Bar, near Grass Valley.....	231
Special networks.....	8
Spruce Branch at South San Francisco.....	106
Stanislaus River below Goodwin Dam, near Knights Ferry	145
Station numbers.....	8
Stockton Ship Channel near Rindge Pump, on Rindge	
Tract.....	151
Stone Corral Creek near Sites.....	271
Stony Creek below Black Butte Dam, near Orland.....	199
Susan River at Susanville.....	42
Temperature.....	11
Thomes Creek at Paskenta.....	191
Trinity River, near Burnt Ranch.....	463
at Hoopa.....	473
at Lewiston.....	461
Truckee River at Floriston.....	39
Tule River, below Success Dam.....	131
near Springville.....	130
Tuolumne River at Modesto.....	143
Turbidity.....	12
Uvas Creek above Uvas Reservoir, near Morgan Hill.....	91

	Page
Van Duzen River, near Dinsmores.....	427
near Bridgeville.....	428
Ventura River near Ventura.....	71
Water-supply papers.....	13
Weaver Creek near Douglas City.....	481
West Branch Feather River near Paradise.....	213
West Fork Carson River at Woodfords.....	37
West Fork Mojave River, above Cedar Springs.....	34
below Cedar Springs.....	34
Whitewater River, at White Water.....	30
near Meca.....	31
Williams Creek near Covelo.....	431
Willow Creek at mouth, near Auberry.....	139
Yuba River at Marysville.....	233
Yuma Main Canal below Colorado River siphon at Yuma, Ariz.....	24

