(200)
Ga 3
Oregon
1972
pt. 2

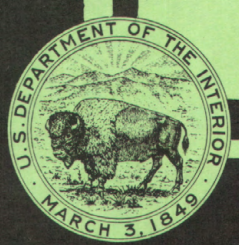
1972

Water Resources Data for Oregon

Part 2. Water Quality Records

RECEIVED
JUL 8 1974
DATA REPORTS UNIT

U.S. GEOLOGICAL SURVEY
RESTON, VA.
JAN 7 1981
LIBRARY



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the State of Oregon
and with other agencies

1972

Water Resources Data for Oregon

Part 2. Water Quality Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the State Engineer of Oregon
and with other agencies

Prepared in cooperation with

State Engineer of Oregon
Oregon Board of Higher Education
Oregon State Game Commission
Counties of Douglas and Lane
Cities of Coos Bay-North Bend, Portland, and Astoria
Portland General Electric Company
Corps of Engineers, U.S. Army
Forest Service, U.S. Department of Agriculture
Counties of Clark and Cowlitz, Washington; Public Utility Districts
Atomic Energy Commission

Water resources records, 1972, for Oregon are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Oregon
   Part 1. Surface-Water Records

2. Water Resources Data for Oregon
   Part 2. Water-Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
P.O. Box 3202
Portland, Oregon 97208

1974

CONTENTS

	Page
List of water-quality stations, in downstream order, for which records are published	IV
Introduction	1
Cooperation	2
Definition of terms	2
Special networks and programs	7
Downstream order and station number	7
Collection and examination of data	8
Solutes	10
Temperature	10
Sediment	10
Water-supply papers	13
Selected references	13
Water-quality records	17
Index	137

ILLUSTRATION

	Page
Figure 1. Map of Oregon showing sites where water-quality data were obtained during the 1972 water year	VII

TABLES

	Page
Table 1. Factors for conversion of chemical constituents in milligrams per liter to milliequivalents per liter	4
2. Factors for conversion of sediment concentration in parts per million to milligrams per liter	4
3. Temperature conversion table, degrees Fahrenheit (°F) to degrees Celsius (°C)	9
4. Water-supply paper numbers and parts, water years 1950-70	13
5. Factors for conversion of English Units to International System (SI) Units	12

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

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

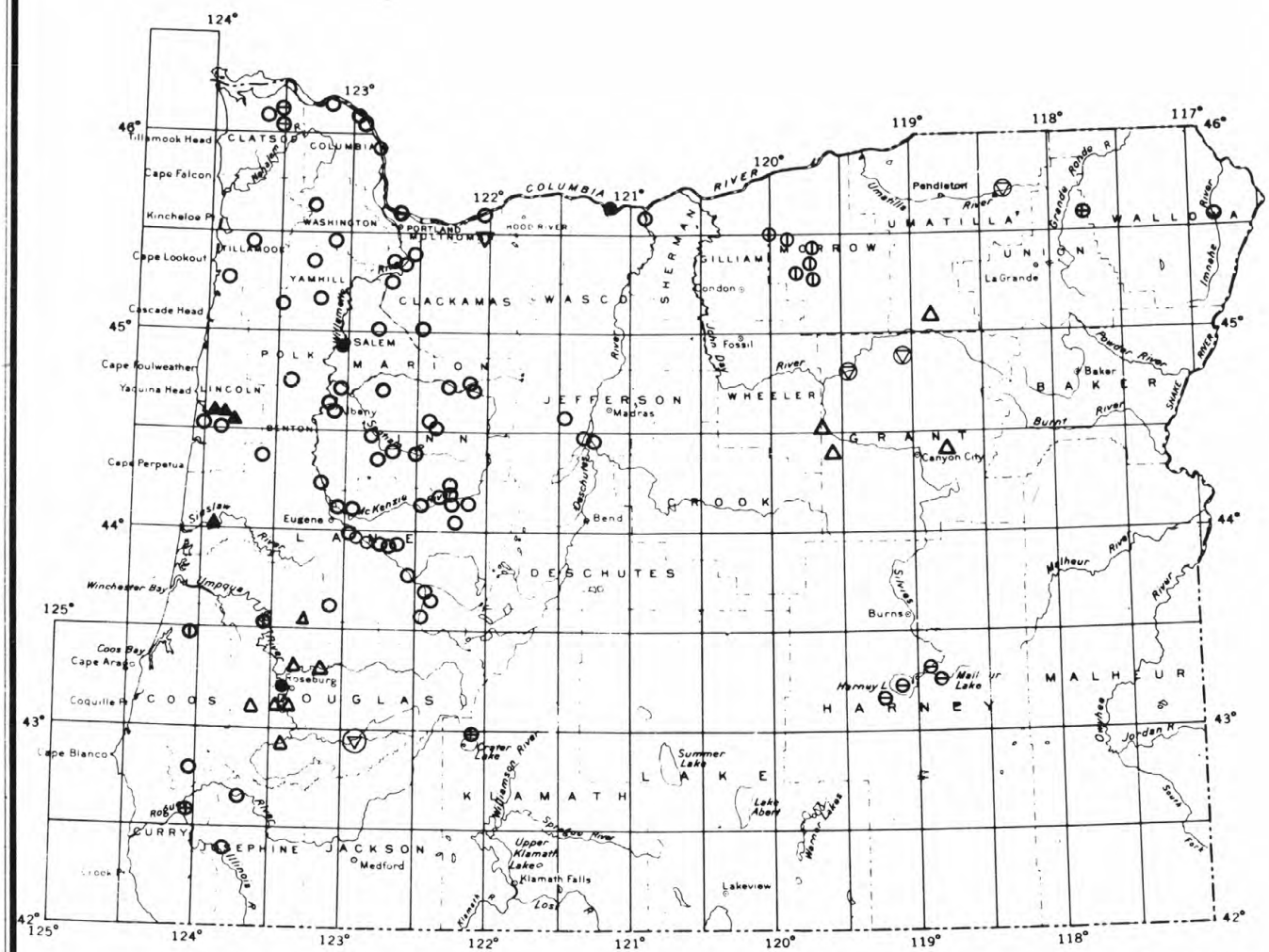
Page

PACIFIC SLOPE BASINS IN CALIFORNIA
KLAMATH RIVER BASIN
Crater Lake near Crater Lake (ct)..... 17
UPPER COLUMBIA RIVER BASIN
SNAKE RIVER BASIN
GRANDE RONDE RIVER BASIN
Minam River at Minam (cts)..... 19
PACIFIC SLOPE BASINS IN OREGON AND LOWER COLUMBIA RIVER BASIN
LOWER COLUMBIA RIVER BASIN
COLUMBIA RIVER:
UMATILLA RIVER BASIN
Umatilla River above Meacham Creek, near Gibbon (t)..... 22
WILLOW CREEK BASIN
Willow Creek near Heppner (c)..... 23
Balm Fork near Heppner (c)..... 24
Willow Creek at Heppner (cts)..... 25
Willow Creek below Hinnton Creek, near Heppner (c)..... 27
Willow Creek at Lexington (c)..... 28
Willow Creek at Ione (c)..... 29
DESCHUTES RIVER BASIN
Deschutes River at Benham Falls, near Bend (t)..... 30
Deschutes River near Culver (t)..... 31
Crooked River below Opal Springs, near Culver (t)..... 32
Metolius River near Grandview (t)..... 33
Deschutes River near Madras (t)..... 34
Deschutes River at Moody, near Biggs (t)..... 35
Columbia River near The Dalles (c)..... 36
Columbia River at Warrendale (t)..... 38
WILLAMETTE RIVER BASIN
Middle Fork Willamette River near Oakridge (t)..... 39
Hills Creek above Hills Creek Lake, near Oakridge (t)..... 40
Middle Fork Willamette River above Salt Creek, near Oakridge (t)..... 41
Middle Fork Willamette River below North Fork, near Oakridge (t)..... 42
Middle Fork Willamette River near Dexter (t)..... 43
Fall Creek near Lowell (t)..... 44
Winberry Creek near Lowell (t)..... 45
Fall Creek below Winberry Creek, near Fall Creek (t)..... 46
Middle Fork Willamette River at Jasper (t)..... 47
Coast Fork Willamette River at London (t)..... 48
Coast Fork Willamette River near Goshen (t)..... 49

LOWER COLUMBIA RIVER BASIN--Continued
COLUMBIA RIVER--Continued
WILLAMETTE RIVER BASIN--Continued Page
McKenzie River:
South Fork McKenzie River above Cougar Lake, near Rainbow (t) 50
South Fork McKenzie River near Rainbow (t) 51
Blue River below Tidbits Creek, near Blue River (t) 52
Lookout Creek near Blue River (t) 53
Blue River at Blue River (t) 54
McKenzie River near Vida (t) 55
McKenzie River near Coburg (t) 56
Willamette River at Harrisburg (ct) 57
Willamette River above Calapooia River, at Albany (t) 62
Calapooia River at Holley (t) 63
Calapooia River at Albany (t) 64
North Santiam River (head of Santiam River) below Boulder Creek, near Detroit (ct) 65
Breitenbush River above Canyon Creek, near Detroit (ct) 67
North Santiam River at Niagara (t) 69
South Santiam River above Cascadia (ct) 70
South Santiam River below Cascadia (ct) 71
Middle Santiam River near Cascadia (ct) 73
Quartzville Creek near Cascadia (t) 75
South Santiam River at Foster (t) 76
South Santiam River at Waterloo (t) 77
Thomas Creek near Scio (t) 78
Santiam River at Jefferson (t) 79
Willamette River at Salem (ct) 80
Willamette River above St. Johns Bridge, at Portland (t) 83
Clackamas River near Clackamas (t) 84
Columbia River near Columbia City (t) 85
Columbia River at Kalama, Wash. (t) 86
KALAMA RIVER BASIN
Kalama River above Spencer Creek, near Kalama, Wash. (t) 87
Columbia River at Rainier (t) 88
Columbia River at Longview, Wash. (t) 89
Columbia River at Wauna (t) 90
Columbia River at Altoona, Wash. (t) 91
BEAR CREEK BASIN
Bear Creek near Svenson (t) 92
PACIFIC SLOPE BASINS IN OREGON
NESTUCCA RIVER BASIN
Nestucca River near Beaver (t) 93
ALSEA RIVER BASIN
North Fork Alsea River (head of Alsea River):
Drift Creek:
Needle Branch near Salado (ts) 94
Meadow Creek:
Flynn Creek near Salado (ts) 97
Horse Creek:
Deer Creek near Salado (ts) 104

PACIFIC SLOPE BASINS IN OREGON--Continued Page
SIUSLAW RIVER BASIN
Siuslaw River near Mapleton (ts)..... 107
UMPQUA RIVER BASIN
South Umpqua River (head of Umpqua River) at Days Creek (t)..... 110
South Umpqua River near Roseburg (ct)..... 111
North Umpqua River at Winchester (t)..... 118
Umpqua River near Elkton (ct)..... 119
COOS RIVER BASIN
Millicoma River:
West Fork Millicoma River near Allegany (c)..... 121
COQUILLE RIVER BASIN
South Fork Coquille River near Illahe (t)..... 123
ROGUE RIVER BASIN
Rogue River below Prospect (t)..... 124
South Fork Rogue River south of Prospect (t)..... 125
Big Butte Creek near McLeod (t)..... 126
Rogue River near McLeod (t)..... 127
Rogue River near Agness (ct)..... 128
Analyses of samples collected at miscellaneous sites (cs)..... 130

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



- ○ Thermograph (temperature)
- ◐ Monthly chemical quality
- ⊖ Miscellaneous chemical quality
- ⊕ Thermograph and monthly chemical quality
- ● Daily temperature and chemical quality
- ▲ Daily temperature and sediment
- ▽ Daily sediment
- ⊽ Thermograph and periodic sediment
- △ Periodic sediment

Figure 1.--Map of Oregon showing sites where water-quality data were obtained during the 1972 water year.

WATER RESOURCES DATA FOR OREGON, 1972

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 characeristics of surface- and ground-water supplies of the Nation. These data for the 1972 water year for the quality of surface waters in Oregon are presented in this report. The data were collected by the Water Resources Division of the U.S. Geological Survey under the direction of S. F. Kapustka, district chief.

The Geological Survey, from 1941 through 1970, published an annual series of water-supply papers, "Quality of Surface Waters of the United States," 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 records for Oregon are contained in Parts 9-11, 12-16 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 and ground water have been released by the Geological Survey on a state boundary basis. This report is primarily for local and immediate use, and its distribution is limited. These records will be published later in Geological Survey water-supply papers.

COOPERATION

The work was done under cooperative agreements between the U.S. Geological Survey and the following organizations:

State Engineer of Oregon, C. L. Wheeler
Oregon Board of Higher Education, Roy E. Lieuallan, chancellor
Oregon State Game Commission, John W. McKean, director
Counties of Douglas and Lane
Cities of Coos Bay-North Bend, Portland, and Astoria
Portland General Electric Company
Corps of Engineers, U.S. Army
Bureau of Fish and Wildlife, U.S. Department of the Interior
Bureau of Reclamation, U.S. Department of the Interior
Forest Service, U.S. Department of Agriculture
Counties of Clark and Cowlitz, Washington; Public Utility Districts
Atomic Energy Commission

DEFINITION OF TERMS

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

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

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

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

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

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

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

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

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (ft^3/s)."

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

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

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

Hardness of water is physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Micrograms per liter (UG/L, µg/l) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 5. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, page 5.

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

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

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

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

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

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

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

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

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

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

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

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

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

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Total sediment discharge is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time (Colby and Hembree, 1955).

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

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

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known expecially for water used for irrigating farmland.

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

Specific conductance is a measure of the ability of a water to conduct an electrial current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

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

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

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

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

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

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.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

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

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

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of indentification, each water-quality station, gaging station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list

made up of both types of stations. Water-quality stations located at or near gaging stations or partial-records stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 14105700 which appears just to left of the station name includes the 2-digit part number "14" plus the 6-digit downstream order number "105700." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

COLLECTION AND EXAMINATION OF DATA

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads. Discharge records for streams in Oregon have been released in the report, "Water Resources Data for Oregon, 1972, Part 1. Surface-Water Records."

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

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

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended

sediment are now reported in milligrams per liter (mg/l) and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. To convert temperature in degrees Celsius to degrees Fahrenheit, see table 3, below.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," p. 2.)

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

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

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

Solutes

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

At chemical-quality stations where monitors are installed, the records consist of daily maximum, minimum, and mean values for each constituent measured. More detailed records (hourly values) may be obtained from the district office of the U.S. Geological Survey at the address given on page II of this report.

Temperature

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

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

Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples

were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment discharges for other periods of similar discharge.

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

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

FACTORS FOR CONVERTING ENGLISH UNITS TO INTERNATIONAL SYSTEM (SI) UNITS

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

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

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

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

WATER-SUPPLY PAPERS

The annual series of water-supply papers that give information on quality of surface waters in Oregon are shown in the following table.

Table 4.--Water-supply paper numbers and parts, water years 1947-70

Year	Parts 9-14	Year	Parts 9-14	Year	Parts 9-11	Parts 12-16
1947	1102	1956	1453	1964	1958	A1959
1948	1133	1957	1523	1965	1965	1966
1949	1163	1958	1574	1966	1995	1996
1950	1189	1959	1645	1967	2015	2016
1951	1200	1960	1745	1968	B2098, 2099	B2100
1952	1253	1961	1885	1969	B2148, B2149	B2150
1953	1293	1962	1945	1970	B2158, B2159	B2160
1954	1353	1963	1951			
1955	1401					

A Parts 12-15.
B In preparation.

SELECTED REFERENCES

American Public Health Association, and others 1971, Standard methods for the examination of water and wastewater, 13th ed.: Am. Public Health Assoc., New York, 874 p.

Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A1, 160 p.

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

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

Guy, H. P., 1969, Laboratory theory and methods for sediment analysis: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C1, 58 p.

_____1970, Fluvial sediment concepts: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C1, 55 p.

Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C2, 59 p.

Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water, Revised edition: U.S. Geological Survey Water-Supply Paper 1473, 363 p.

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

Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geol. Survey Techniques of Water Resources Inv., book 3, chap. C3, 66 p.

Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3, 33 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.

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

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

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

_____1957, The development and calibration of visual accumulation tube: Rept. 11.

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

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

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

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

11492200 CRATER LAKE NEAR CRATER LAKE, OREG.
(Hydrologic bench-mark station)

LOCATION.--Lat 42°58'45", long 122°04'45", (unsurveyed), Crater Lake National Park and Vicinity Quadrangle, Klamath County, temperature recorder at gaging station at boat harbor at end of trail in Cleatwood Cove, and 6 mi (9.6 km) northeast of Crater Lake Post Office.

DRAINAGE AREA.--26.2 mi^2 (67.9 km^2), of which 20.5 mi^2 (53.1 km^2) is lake area at elevation 6,176 ft (1,882 m).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1972.
Water temperatures: October 1963 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 15.0°C Aug. 11-14; minimum, 3.5°C on several days during March.

Period of record:
Water temperatures: Maximum, 18.0°C on several days in 1967; minimum, 0.5°C on several days in 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT. 16...	19	0	6.8	2.3	11	1.6	40	0	11	10	.1
JUNE 30...	19	10	6.8	2.6	9.5	1.7	33	0	11	9.0	.1
SEP. 11...	18	50	7.3	2.7	10	1.8	36	0	10	10	.1

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	TEMPER-ATURE (DEG C)	PH (UNITS)
OCT. 16...	.06	82	.11	26	0	117	.9	46	11.0	6.9
JUNE 30...	.63	79	.11	28	1	118	.8	41	--	6.9
SEP. 11...	.00	78	.11	29	0	115	.8	41	--	7.0

11492200 CRATER LAKE NEAR CRATER LAKE, OREG.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.0	6.5	6.5	6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
2	9.0	9.0	6.5	6.5	6.0	6.0	4.0	4.0	4.0	4.0	4.0	3.5
3	9.0	9.0	6.5	6.5	6.0	6.0	4.0	4.0	4.0	4.0	3.5	3.5
4	9.0	9.0	6.5	6.5	6.0	6.0	4.0	4.0	4.0	4.0	3.5	3.5
5	9.0	9.0	6.5	6.5	6.0	5.5	4.0	4.0	4.0	4.0	3.5	3.5
6	9.0	9.0	6.5	6.0	5.5	5.5	4.0	4.0	4.0	4.0	3.5	3.5
7	9.0	9.0	6.0	6.0	5.5	5.5	4.0	4.0	4.0	4.0	3.5	3.5
8	9.0	9.0	6.0	6.0	5.5	5.5	4.0	4.0	4.0	4.0	3.5	3.5
9	9.0	9.0	6.5	6.0	5.5	5.5	4.5	4.0	4.0	4.0	3.5	3.5
10	9.0	9.0	6.5	6.5	5.5	5.5	4.5	4.5	4.0	4.0	3.5	3.5
11	9.0	9.0	6.5	6.5	5.5	5.5	4.5	4.5	4.0	4.0	3.5	3.5
12	9.0	9.0	6.5	6.5	5.5	5.5	4.5	4.5	4.0	4.0	3.5	3.5
13	9.0	9.0	6.5	6.5	5.5	5.5	4.5	4.5	4.0	4.0	3.5	3.5
14	9.0	9.0	6.5	6.5	5.5	5.5	4.5	4.5	4.0	4.0	3.5	3.5
15	9.0	9.0	6.5	6.0	5.5	5.5	4.5	4.5	4.0	4.0	3.5	3.5
16	9.0	9.0	6.5	6.0	5.5	5.0	4.5	4.5	4.0	4.0	4.0	3.5
17	9.0	8.5	6.0	6.0	5.0	5.0	4.5	4.5	4.0	4.0	4.0	4.0
18	8.5	8.5	6.0	6.0	5.0	4.5	4.5	4.5	4.0	4.0	4.0	4.0
19	8.5	8.5	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0
20	8.5	8.5	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.0
21	8.5	8.5	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.5
22	8.5	8.5	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.5
23	8.5	8.5	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.5
24	8.5	8.0	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.5
25	8.0	7.0	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.5
26	7.0	7.0	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.5
27	7.0	7.0	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.5
28	7.0	7.0	6.0	6.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.5
29	7.0	6.5	6.0	6.0	4.5	4.5	4.5	4.0	4.0	4.0	4.5	4.5
30	6.5	6.5	6.0	6.0	4.5	4.5	4.0	4.0	---	---	4.5	4.5
31	6.5	6.5	---	---	4.5	4.0	4.0	4.0	---	---	4.5	4.5
MONTH	9.5	6.5	6.5	6.0	6.0	4.0	4.5	4.0	4.0	4.0	4.5	3.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.5	4.5	4.5	4.5	5.5	5.5	8.0	8.0	12.0	11.5	12.0	12.0
2	4.5	4.5	4.5	4.5	5.5	5.5	8.0	8.0	12.0	11.0	12.0	12.0
3	4.5	4.5	4.5	4.5	5.5	5.5	8.5	8.0	12.0	11.5	12.0	11.5
4	4.5	4.5	4.5	4.5	5.5	5.5	9.5	8.0	12.0	11.5	12.0	11.5
5	4.5	4.5	4.5	4.5	5.5	5.5	9.5	9.5	13.0	11.5	12.0	12.0
6	4.5	4.5	4.5	4.5	5.5	5.5	10.5	9.5	13.0	13.0	12.0	12.0
7	4.5	4.5	4.5	4.5	5.5	5.5	11.0	10.0	13.0	13.0	12.0	12.0
8	4.5	4.5	4.5	4.5	5.5	5.5	10.5	10.0	13.0	13.0	12.0	12.0
9	4.5	4.5	4.5	4.5	5.5	5.5	10.0	10.0	14.0	13.0	12.0	12.0
10	4.5	4.5	4.5	4.5	5.5	5.5	10.0	9.0	14.5	14.0	12.0	12.0
11	4.5	4.5	4.5	4.5	5.5	5.5	10.0	9.0	15.0	14.5	12.0	12.0
12	4.5	4.5	4.5	4.5	5.5	5.5	10.0	10.0	15.0	15.0	12.0	12.0
13	4.5	4.5	5.0	5.0	5.5	5.5	11.0	10.0	15.0	15.0	12.0	12.0
14	4.5	4.5	5.0	5.0	5.5	5.5	11.0	10.5	15.0	14.0	12.0	12.0
15	4.5	4.5	5.0	5.0	5.5	5.5	10.5	10.5	14.0	13.5	12.0	12.0
16	4.5	4.5	5.0	5.0	5.5	5.5	10.5	10.5	13.5	13.5	12.0	12.0
17	4.5	4.5	5.0	5.0	5.5	5.5	10.5	10.5	13.5	11.5	12.0	12.0
18	4.5	4.5	5.0	5.0	5.5	5.5	12.0	10.5	11.5	11.5	12.0	11.5
19	4.5	4.5	5.0	5.0	5.5	5.5	13.5	9.0	11.5	11.5	11.5	11.5
20	4.5	4.5	5.0	5.0	5.5	5.5	9.0	8.0	11.5	11.5	11.5	11.5
21	4.5	4.5	5.0	5.0	6.5	5.5	9.5	9.0	11.5	11.0	11.5	11.0
22	4.5	4.5	5.0	5.0	6.5	6.5	9.5	9.5	11.0	11.0	11.0	11.0
23	4.5	4.5	5.0	5.0	8.5	6.5	10.5	9.5	11.0	11.0	10.5	10.5
24	4.5	4.5	5.0	5.0	8.5	8.0	11.0	10.5	11.0	11.0	11.0	10.5
25	4.5	4.5	5.0	5.0	8.0	8.0	11.0	11.0	11.0	11.0	10.5	10.5
26	4.5	4.5	5.0	5.0	8.0	8.0	11.0	11.0	11.0	11.0	10.5	10.5
27	4.5	4.5	5.0	5.0	8.0	8.0	11.5	10.5	11.0	11.0	10.5	10.5
28	4.5	4.5	5.0	5.0	8.0	8.0	11.5	11.5	11.0	11.0	10.5	10.5
29	4.5	4.5	5.0	5.0	8.0	8.0	11.5	11.5	11.0	11.0	10.5	10.5
30	4.5	4.5	5.5	5.0	8.0	8.0	12.0	11.5	12.0	11.5	10.5	10.5
31	---	---	5.5	5.5	---	---	12.0	12.0	12.0	12.0	---	---
MONTH	4.5	4.5	5.5	4.5	8.5	5.5	13.5	8.0	15.0	11.0	12.0	10.5

13331500 MINAM RIVER AT MINAM, OREG.
(Hydrologic bench-mark station)

LOCATION.--Lat 45°37'12", long 117°43'32", in SW¼SW¼ sec.29, T.2 N., R.41 E., Wallowa County, at gaging station on left bank, 2.3 mi (3.7 km) downstream from Squaw Creek, 0.3 mi (0.5 km) west of Minam, and at mile 0.3 (0.5 km).

DRAINAGE AREA.--240 mi² (620 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: January 1966 to September 1972.
Water temperatures: October 1965 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 23.5°C Aug. 27, 28; minimum, freezing point on several days during winter period.

Period of record:
Water temperatures: Maximum, 26.0°C Aug. 17, 18, 1967; minimum, freezing point on many days during winter period each year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
19...	88	19	10	6.4	1.1	2.3	.8	37	0	2.3	.3	.1
JAN.												
04...	35	30	440	8.7	2.3	3.0	2.0	42	0	2.5	1.0	.0
FEB.												
07...	133	24	60	6.6	1.9	2.5	1.1	36	0	1.3	1.2	.0
JUNE												
02...	3620	12	70	3.2	.6	1.5	.6	18	0	5.3	.0	.0
AUG.												
01...	315	13	40	3.8	.8	2.0	.8	22	0	2.0	1.0	.0

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	TEMPER-ATURE (DEG C)	PH (UNITS)
OCT.												
19...	.02	.03	51	.07	12.1	21	0	53	.2	19	4.0	7.5
JAN.												
04...	.16	--	71	.10	6.71	31	0	73	.2	16	.0	7.4
FEB.												
07...	.06	--	57	.08	20.5	24	0	57	.2	17	.5	7.4
JUNE												
02...	.03	--	32	.04	313	10	0	25	.2	23	6.0	7.7
AUG.												
01...	.01	--	34	.05	28.9	13	0	35	.2	24	15.6	7.5

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
OCT.						
19...	1105	88	4.0	8.8	.6	37
JAN.						
04...	0950	35	.0	13.6	.8	4
AUG.						
01...	1000	321	15.5	9.3	1.0	4

DATE	TIME	TEMPER-ATURE (DEG C)	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
JAN.					
04...	0945	.0	34	3	.28
FEB.					
07...	1050	.5	105	6	1.7
JUNE					
02...	1040	6.0	3520	115	1090
AUG.					
01...	0950	15.5	321	2	1.7

13331500 MINAM RIVER AT MINAM, OREG.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	ENDRIN (UG/L)	DI-ELDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)
OCT. 19...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	CHLOR-DANE (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)	MALA-THION (UG/L)	DI-AZINON (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 19...	.0	.00	.00	.00	.00	.00	.00	.00

ANALYSIS OF ADDITIONAL SAMPLES

DATE	DIS-SOLVED URANIUM (U) (UG/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
OCT. 19...	.20	.02	.9	.3	1.8	2.3	46	<.4	<.1	<.4	<.4	<1

13331500 MINAM RIVER AT MINAM, OREG.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	5.0	3.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	3.0	2.0
2	10.5	4.5	4.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.0
3	11.5	5.5	4.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.0
4	14.0	7.0	4.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	3.0
5	14.5	8.0	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	6.5	4.0
6	13.5	8.5	0.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	5.0	3.0
7	14.5	8.5	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.0	5.0	1.5
8	13.5	7.0	0.5	0.5	0.0	0.0	0.0	0.0	1.0	0.5	5.5	1.5
9	13.0	6.5	2.0	0.5	0.0	0.0	0.0	0.0	1.0	0.0	6.0	3.0
10	13.5	6.5	4.0	1.5	0.0	0.0	0.0	0.0	0.5	0.0	6.5	4.5
11	12.0	8.0	4.0	2.0	0.0	0.0	0.5	0.0	0.0	0.0	6.0	4.5
12	11.5	6.5	4.5	3.0	0.0	0.0	0.0	0.0	0.5	0.0	5.5	4.0
13	8.5	6.0	4.5	3.0	0.0	0.0	0.0	0.0	0.5	0.0	5.0	4.0
14	8.0	4.5	3.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	6.0	3.5
15	6.0	3.5	4.0	2.0	0.0	0.0	0.0	0.0	1.0	0.0	6.5	4.0
16	6.5	1.5	3.0	1.5	0.0	0.0	0.0	0.0	1.5	0.5	7.0	4.5
17	6.5	1.0	3.0	0.5	0.0	0.0	0.0	0.0	1.5	0.5	8.0	4.0
18	5.5	1.5	4.0	1.0	0.0	0.0	0.0	0.0	3.5	1.0	5.5	4.5
19	6.0	4.5	5.5	1.5	0.0	0.0	1.0	0.0	4.5	3.0	6.0	4.0
20	7.0	5.0	6.0	3.5	0.5	0.0	2.0	1.0	4.0	2.0	6.5	4.0
21	8.0	4.0	4.5	2.0	0.5	0.0	4.5	2.0	4.0	1.0	6.0	4.0
22	9.0	4.0	3.5	0.5	1.5	0.0	4.5	3.0	4.5	3.0	7.0	4.5
23	8.0	6.5	1.0	0.5	2.0	0.5	3.5	1.5	4.5	2.0	6.5	4.0
24	6.5	4.5	3.0	1.0	1.0	0.0	2.0	1.0	4.5	1.5	6.0	3.5
25	6.5	3.0	3.5	1.5	1.5	0.5	2.0	0.5	5.0	1.5	5.0	2.0
26	8.0	5.0	2.0	0.5	1.0	0.0	0.5	0.0	4.5	1.5	4.5	1.5
27	5.0	1.5	3.0	1.0	0.0	0.0	0.0	0.0	5.0	3.5	5.0	0.5
28	1.5	0.0	2.0	1.0	0.0	0.0	0.0	0.0	6.0	3.5	6.0	1.5
29	1.5	0.0	3.0	1.5	0.0	0.0	0.0	0.0	4.5	2.0	6.5	2.0
30	1.0	0.0	3.5	0.5	0.0	0.0	0.0	0.0	---	---	7.0	2.0
31	2.0	0.0	---	---	0.0	0.0	0.0	0.0	---	---	8.5	3.0
MONTH	14.5	0.0	6.0	0.0	2.0	0.0	4.5	0.0	6.0	0.0	8.5	0.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	5.5	10.0	3.5	7.0	4.5	10.0	8.0	18.0	15.0	19.5	11.0
2	8.5	3.5	10.5	6.0	8.0	5.0	10.0	8.0	16.5	14.0	20.0	11.5
3	7.0	2.0	10.5	5.0	6.5	5.0	10.0	8.0	17.0	13.5	20.0	11.5
4	8.0	4.5	10.0	5.5	8.0	5.5	11.0	8.5	17.0	13.5	20.5	12.0
5	8.0	5.0	9.5	5.0	8.0	5.5	11.0	9.5	17.0	14.0	17.0	13.5
6	7.0	5.0	9.5	5.5	8.0	5.5	11.0	9.5	18.0	14.0	16.5	11.5
7	6.5	4.0	7.0	5.0	6.5	5.5	11.5	9.5	18.0	14.5	16.5	10.0
8	5.0	3.5	6.0	4.5	7.0	5.5	11.5	10.0	18.5	14.5	18.0	10.0
9	7.0	3.0	8.0	4.5	7.0	6.0	11.5	10.0	19.0	16.0	17.0	12.0
10	6.5	3.0	9.0	5.5	6.0	5.0	11.0	9.5	19.0	16.0	15.5	9.5
11	5.5	4.5	9.5	5.5	6.0	4.5	11.5	10.0	22.0	16.5	12.0	9.5
12	4.5	2.0	10.0	5.0	---	---	13.5	10.5	21.5	15.0	10.5	9.0
13	5.5	2.0	10.0	5.5	---	---	13.5	11.5	21.0	14.0	14.5	8.0
14	7.0	3.0	9.0	5.0	---	---	13.5	11.0	20.5	14.5	16.0	9.5
15	6.5	4.0	8.5	4.5	---	---	13.5	11.0	18.0	15.0	16.0	9.5
16	6.5	3.0	8.5	4.5	10.5	9.0	14.0	11.0	19.5	13.0	17.0	10.0
17	6.5	2.0	6.0	5.0	---	---	14.5	11.5	19.0	14.0	18.0	12.0
18	5.5	2.0	6.5	4.0	---	---	14.0	11.5	20.5	12.0	16.0	11.0
19	8.5	1.5	7.0	4.0	---	---	13.5	10.5	20.0	14.5	14.5	11.0
20	9.5	4.0	7.0	5.0	8.5	6.0	10.5	9.0	20.0	15.0	13.0	9.5
21	7.0	4.5	6.0	5.5	9.0	7.0	10.0	9.0	22.0	15.0	11.5	9.5
22	10.0	3.5	6.5	5.0	9.5	6.5	13.5	9.0	19.0	15.5	14.0	8.5
23	10.0	3.5	8.5	5.5	9.5	7.0	14.5	10.5	20.5	13.5	11.0	8.5
24	9.5	6.0	9.0	5.5	8.5	6.5	14.5	12.0	20.0	13.5	10.5	7.0
25	8.5	4.5	9.0	4.5	6.5	6.0	15.0	11.0	22.0	14.0	12.0	6.5
26	10.0	3.5	9.5	5.0	8.0	6.5	16.0	12.0	23.0	15.0	11.0	5.0
27	11.5	4.5	9.5	5.0	10.0	7.0	16.0	13.5	23.5	15.5	11.5	6.0
28	7.0	4.0	9.5	5.0	10.5	8.5	16.5	13.0	23.5	15.5	10.5	6.0
29	5.0	3.5	9.0	5.0	10.5	8.5	16.5	13.5	23.0	16.0	11.5	4.5
30	8.0	2.0	8.5	5.0	10.5	8.0	18.5	14.5	21.5	15.5	10.5	5.5
31	---	---	8.0	4.5	---	---	19.0	15.5	19.5	12.0	---	---
MONTH	11.5	1.5	10.5	3.5	---	---	19.0	8.0	23.5	12.0	20.5	4.5

14020000 UMATILLA RIVER ABOVE MEACHAM CREEK, NEAR GIBBON, OREG.

LOCATION.--Lat 45°43'11", long 118°19'20", in SE¼SW¼ sec.21, T.3 N., R.36 E., Umatilla County, Umatilla Indian Reservation, temperature recorder at gaging station on right bank, 0.8 mi (1.3 km) downstream from Ryan Creek, 2.2 mi (3.5 km) upstream from Meacham Creek, 2.5 mi (4.0 km) northeast of Gibbon, and at mile 83.1 (133.7 km).

DRAINAGE AREA.--131 mi² (339 km²).

PERIOD OF RECORD.--Water temperatures: June 1959 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 22.0°C July 30, Aug. 7-9; minimum, 2.0°C on several days during December to February.

Period of record:
Water temperatures: Maximum, 25.0°C July 13, 15, 21, 1961; minimum, freezing point on several days during winter period in 1960, 1962-64, 1968, and 1969.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	5.0	11.0	6.5	12.0	8.0	19.0	11.5	21.0	14.5	17.0	11.5
2	5.5	4.0	11.0	8.0	13.5	8.0	19.0	11.0	20.5	14.0	17.0	12.0
3	6.0	3.5	11.5	7.0	11.5	9.0	20.0	11.0	21.0	14.0	18.0	12.0
4	5.5	4.5	11.0	7.0	13.5	8.0	20.5	11.5	21.0	13.5	18.0	12.0
5	6.5	5.0	11.0	7.0	15.0	8.5	20.0	13.0	21.5	13.5	16.5	14.0
6	5.5	5.0	11.0	7.0	15.0	9.0	21.0	13.5	21.5	14.0	15.5	12.0
7	5.5	4.5	8.5	7.0	13.0	9.5	20.5	13.0	22.0	14.0	16.0	11.5
8	5.0	4.5	7.0	6.5	13.5	9.5	19.5	13.0	22.0	14.5	16.5	11.5
9	6.0	4.5	8.5	6.5	13.5	10.0	19.0	13.5	22.0	15.5	15.5	13.0
10	6.0	4.5	10.0	6.5	12.0	10.0	17.0	11.5	21.5	15.0	14.0	10.5
11	6.0	5.0	10.0	6.0	13.0	9.0	19.0	13.5	20.5	15.0	14.0	11.5
12	5.5	5.0	10.5	6.0	13.5	9.0	21.5	14.0	20.0	14.0	13.0	12.0
13	6.0	5.0	10.5	6.0	16.0	10.0	18.5	14.5	20.0	13.5	15.5	10.5
14	7.0	5.0	9.5	6.5	15.5	9.5	21.0	13.5	18.5	14.5	16.0	11.0
15	6.5	5.5	9.5	6.5	17.0	10.5	21.0	13.5	17.0	15.0	15.5	11.5
16	6.5	5.0	10.0	6.5	14.5	11.0	21.5	13.5	18.0	13.5	16.0	11.5
17	7.0	5.5	8.0	6.5	16.0	9.5	21.0	14.0	18.5	14.0	16.5	14.0
18	7.0	5.5	8.0	6.0	16.0	10.5	20.0	13.5	19.5	13.0	15.0	11.5
19	8.5	5.0	10.0	6.0	17.0	10.0	18.0	13.5	19.5	14.0	14.0	11.5
20	8.0	6.0	9.5	6.5	15.5	10.0	14.0	13.0	20.0	14.5	14.0	11.5
21	7.0	6.0	8.5	7.0	17.0	11.0	15.5	12.0	20.5	14.0	13.5	12.0
22	9.0	5.5	8.0	6.5	17.0	10.0	19.5	12.0	19.5	14.5	13.5	11.0
23	9.5	5.5	9.0	6.5	14.5	11.0	20.0	13.0	19.5	14.0	13.0	11.0
24	9.5	7.0	9.5	6.5	12.0	11.0	18.5	14.0	18.5	13.5	12.0	10.5
25	8.0	6.5	10.5	6.0	11.5	10.5	20.5	13.0	20.0	14.0	12.0	9.5
26	10.0	6.0	12.0	6.5	15.5	10.0	20.5	13.0	20.5	14.5	12.0	8.5
27	11.0	6.5	13.0	7.0	19.0	11.0	20.5	13.5	21.0	14.5	11.5	10.0
28	8.5	6.5	13.5	8.0	20.0	11.5	21.0	13.0	21.0	15.0	12.0	9.5
29	7.0	6.0	13.5	8.0	20.0	11.5	21.0	14.0	20.5	15.0	13.0	9.0
30	9.5	6.0	13.5	8.0	19.5	11.5	22.0	15.5	20.0	14.5	13.5	10.0
31	---	---	13.0	8.5	---	---	21.0	15.0	17.0	12.0	---	---
MONTH	11.0	3.5	13.5	6.0	20.0	8.0	22.0	11.0	22.0	12.0	18.0	8.5

14034450 WILLOW CREEK NEAR HEPPNER, OREG.

LOCATION.--Lat 45°20'47", long 119°29'45", in SE¼SE¼ sec.31, T.2 S., R.27 E., Morrow County, and at mile 54.2 (87.2 km).

DRAINAGE AREA.--62.5 mi^2 (161.9 km^2).

PERIOD OF RECORD.--Chemical analyses: March to September 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	DISSOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	CARBONATE ALKALINITY AS CACO3 (MG/L)	TURBIDITY (JTU)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
MAR. 22...	1000	6.0	7.6	11.7	140	69	--	1.8	2400	400	130
APR. 26...	1200	7.0	8.0	11.4	148	84	15	3.0	340	280	188
JUNE 08...	0845	14.0	8.0	9.0	247	128	8	.6	7900	1060	2860
JULY 13...	0915	15.4	7.3	8.8	430	218	5	1.9	11400	1100	1300
AUG. 18...	1200	12.8	7.9	9.3	505	336	4	4.1	1400	355	415
SEP. 28...	0900	6.8	8.2	11.0	342	262	3	2.2	12900	1800	1920

DATE	DISSOLVED SULFATE (SO4) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)
MAR. 22...	3.2	.14	--	--	.39	.25	.64
APR. 26...	4.6	.10	.00	--	--	.05	--
JUNE 08...	4.9	.09	--	--	.43	.07	.50
JULY 13...	10	.20	.00	--	.27	.13	.40
AUG. 18...	23	.17	.00	--	.54	.06	.60
SEP. 28...	20	.28	.20	.60	.72	.25	.97

14034480 BALM FORK NEAR HEPPNER, OREG.

LOCATION.--Lat 45°19'54", long 119°32'24", in SW¼SE¼ sec.2, T.3 S., R.26 E., Morrow County, and at mile 1.1 (1.8 km).

DRAINAGE AREA.--25.0 mi² (64.8 km²).

PERIOD OF RECORD.--Chemical analyses: March to September 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	DISSOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	CARBONATE ALKALINITY AS CACO3 (MG/L)	TURBIDITY (JTU)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
MAR. 22...	1115	8.0	8.0	10.7	290	125	--	.5	3200	540	280
APR. 26...	1400	12.4	8.6	10.0	350	155	10	1.2	850	28	34
JUNE 08...	1000	14.0	7.6	9.2	670	292	8	2.5	28500	1200	2660
JULY 13...	1030	16.8	6.7	8.7	640	292	9	1.4	17600	3400	800

DATE	DISSOLVED SULFATE (SO4) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)
MAR. 22...	11	.28	--	.75	1.4	2.2
APR. 26...	13	.14	.10	--	1.5	--
JUNE 08...	30	.19	--	.70	.00	.70
JULY 13...	29	.18	.00	.47	.65	1.1

14034500 WILLOW CREEK AT HEPPNER, OREG.

LOCATION.--Lat 45°21'02", long 119°32'56", in SE¼NW¼ sec.35, T.2 S., R.26 E., Morrow County, temperature recorder at gaging station on right bank at Heppner, 100 ft (30 m) upstream from Court Street bridge, 800 ft (244 m) southeast of Morrow County courthouse, 0.3 mi (0.5 km) downstream from Balm Fork, and at mile 52.2 (84.0 km).

DRAINAGE AREA.--87 mi^2 (225 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: March to September 1972.
Water temperatures: February 1963 to June 1968 (once daily readings only). March to September 1972.
Sediment records: February 1963 to June 1968.

EXTREMES.--March to September 1972.
Water temperatures: Maximum, 33.5°C July 4; minimum, freezing point Apr. 3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	DISSOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	CARBONATE ALKALINITY AS CACO3 (MG/L)	TURBIDITY (JTU)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
MAR. 21...	1445	7.8	8.1	11.0	150	67	--	1.7	1020	245	30
APR. 25...	1500	8.2	8.4	11.4	185	91	13	1.6	1400	90	50
JUNE 08...	1230	18.0	7.9	9.4	275	146	5	1.4	14800	420	1300
JULY 13...	1230	23.2	7.2	13.2	475	239	4	2.1	800	100	400
AUG. 18...	0840	11.8	8.0	10.4	480	285	1	2.8	2200	130	420
SEP. 27...	1445	13.0	9.4	8.2	405	271	4	1.9	23500	440	415

DATE	DISSOLVED SULFATE (SO4) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)
MAR. 21...	3.6	.22	--	--	.45	.32	.77
APR. 25...	5.0	.10	.00	--	--	.16	--
JUNE 08...	6.2	.09	--	--	.36	.13	.49
JULY 13...	14	.21	.00	--	.55	.32	.87
AUG. 18...	31	.52	.00	--	.71	2.2	2.9
SEP. 27...	28	.48	.37	.60	.63	1.3	1.9

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
MAR. 21...	1440	8.0	65	229	40
APR. 25...	1450	--	27	19	1.4
JULY 13...	1230	8.0	2.0	13	.07
SEP. 28...	0840	8.0	1.0	7	.02

14034500 WILLOW CREEK AT HEPPNER, OREG.--Continued

WATER TEMPERATURE (DEG. C) . WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	9.0	7.5
22	---	---	---	---	---	---	---	---	---	---	7.5	5.5
23	---	---	---	---	---	---	---	---	---	---	7.5	3.5
24	---	---	---	---	---	---	---	---	---	---	6.5	3.5
25	---	---	---	---	---	---	---	---	---	---	4.0	2.0
26	---	---	---	---	---	---	---	---	---	---	5.5	1.5
27	---	---	---	---	---	---	---	---	---	---	6.0	1.0
28	---	---	---	---	---	---	---	---	---	---	6.5	2.5
29	---	---	---	---	---	---	---	---	---	---	9.0	1.5
30	---	---	---	---	---	---	---	---	---	---	11.0	2.5
31	---	---	---	---	---	---	---	---	---	---	11.5	2.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	7.0	12.5	5.0	16.5	12.0	22.5	14.5	27.0	16.0	22.0	9.5
2	9.5	3.0	13.5	7.0	17.0	12.0	21.5	13.5	25.0	14.5	22.5	10.5
3	9.5	0.0	14.0	7.0	17.0	13.5	23.0	13.0	26.0	14.5	23.0	11.0
4	11.5	5.0	14.5	8.0	16.5	13.0	33.5	12.0	27.5	14.5	24.0	12.0
5	12.5	8.5	14.0	8.0	18.0	12.5	22.5	16.0	29.0	15.0	19.5	12.5
6	9.5	6.0	14.5	8.5	18.5	15.0	31.5	15.0	30.0	15.5	19.5	10.5
7	7.5	3.5	11.0	7.5	18.0	16.0	28.0	14.5	31.0	16.0	20.5	10.5
8	8.0	3.5	8.5	6.0	18.5	16.0	24.5	12.5	29.5	16.5	21.5	10.0
9	8.0	2.5	12.0	5.0	18.5	14.5	29.5	13.0	29.5	17.0	18.5	1.0
10	8.0	2.5	13.0	5.5	16.0	11.5	25.5	10.0	29.0	16.0	16.0	8.5
11	7.0	4.0	14.0	6.5	14.0	10.0	28.0	15.0	27.5	16.5	15.5	9.5
12	6.0	3.5	15.5	8.0	16.5	10.5	32.0	15.0	26.0	15.5	16.0	11.0
13	9.0	2.5	16.5	9.0	18.5	11.5	27.0	16.5	25.5	14.5	20.5	8.5
14	12.0	4.0	15.0	10.0	19.5	13.5	27.0	16.5	23.5	15.0	20.5	9.0
15	9.0	6.0	14.5	9.0	21.0	15.0	28.0	16.0	21.5	15.5	21.0	9.0
16	7.5	4.0	14.0	9.0	19.5	14.5	28.5	16.5	19.0	13.0	20.5	10.0
17	6.5	2.0	11.0	8.0	19.5	12.5	28.0	17.0	22.0	13.5	21.5	12.0
18	8.5	2.0	11.0	6.5	20.0	13.5	26.0	17.0	22.5	12.5	19.0	9.0
19	10.0	2.5	12.5	6.0	20.5	12.5	21.5	16.0	22.5	13.0	16.0	9.5
20	10.0	5.0	13.5	9.5	21.0	14.0	18.0	15.0	22.5	13.5	16.5	9.0
21	9.0	5.5	11.0	8.5	20.5	13.5	23.0	14.0	25.5	13.5	13.0	9.5
22	10.5	3.5	11.5	8.0	20.0	12.5	25.5	15.0	22.0	15.0	17.5	7.0
23	11.0	4.5	13.0	7.5	17.5	13.5	25.5	15.5	24.0	11.5	14.0	7.0
24	11.5	7.5	13.0	6.5	14.5	12.5	23.0	16.0	24.0	12.0	12.0	7.5
25	8.5	5.0	14.0	7.0	15.5	12.0	25.0	14.5	25.5	12.5	15.0	5.0
26	11.5	3.5	15.0	8.5	18.0	11.5	25.5	14.5	26.0	13.5	15.0	5.0
27	14.0	6.0	16.5	10.0	21.0	13.0	25.5	15.0	27.0	14.0	14.5	5.5
28	11.5	6.5	18.0	11.5	23.0	14.5	26.0	14.5	27.0	14.5	13.0	6.5
29	7.5	3.5	18.5	12.5	24.0	15.0	27.0	16.0	26.0	14.5	17.5	5.5
30	10.5	3.0	18.0	13.0	23.5	15.0	28.5	18.0	25.0	13.5	17.5	6.5
31	---	---	17.5	13.0	---	---	27.0	18.5	22.5	11.5	---	---
MONTH	14.0	0.0	18.5	5.0	24.0	10.0	33.5	10.0	31.0	11.5	24.0	1.0

14034610 WILLOW CREEK BELOW HINNTON CREEK, NEAR HEPPNER, OREG.

LOCATION.--Lat 45°21'57", long 119°33'53", in SE¼NW¼ sec.27, T.2 S., R.26 E., Morrow County, and at mile 48.8 (78.5 km).

DRAINAGE AREA.--139 mi^2 (360 km^2).

PERIOD OF RECORD.--Chemical analyses: March to September 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	DISSOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	CARBONATE ALKALINITY AS CACO3 (MG/L)	TURBIDITY (JTU)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
MAR. 22...	1230	7.0	7.7	11.6	190	85	--	1.9	4000	530	350
APR. 26...	1330	10.8	8.7	10.7	233	110	13	2.8	350	32	24
JUNE 08...	1345	19.8	7.8	9.0	300	153	7	1.7	16600	342	1460
JULY 13...	1400	23.2	7.0	11.8	585	257	4	4.6	600	40	400
AUG. 17...	1535	20.0	7.4	10.3	540	220	7	10	6000	200	1000
SEP. 28...	1000	11.2	7.7	10.8	445	184	17	>9.2	36700	--	160

14034700 WILLOW CREEK AT LEXINGTON, OREG.

LOCATION.--Lat 45°26'50", long 119°41'52", in NE¼SE¼ sec.28, T.1 S., R.25 E., Morrow County, and at mile 41.1 (66.1 km).

DRAINAGE AREA.--193 mi^2 (500 km^2).

PERIOD OF RECORD.--Chemical analyses: March to September 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	DISSOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	CARBONATE ALKALINITY AS CACO3 (MG/L)	TURBIDITY (JTU)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
MAR. 22...	1400	7.6	8.1	11.3	207	92	--	1.6	5800	240	100
APR. 27...	0845	9.0	8.3	10.0	288	137	15	2.2	9300	240	108
JUNE 08...	1500	21.4	7.0	8.6	420	192	10	1.3	3850	345	1860
JULY 13...	1500	23.0	7.1	15.6	670	317	2	1.7	340	40	420

14034900 WILLOW CREEK AT IONE, OREG.

LOCATION.—Lat 45°29'56", long 119°49'52", in NW¼NE¼ sec.9, T.1 S., R.24 E., Morrow County, and at mile 31.8 (51.2 km).

DRAINAGE AREA.—502 mi^2 (1,300 km^2).

PERIOD OF RECORD.—Chemical analyses: March to September 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	DISSOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	CARBONATE ALKALINITY AS CACO3 (MG/L)	TURBIDITY (JTU)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
MAR. 23...	1000	8.2	8.0	11.9	348	182	--	.8	16100	276	110
APR. 27...	1045	10.8	8.7	11.9	368	167	6	2.6	1630	108	96
JUNE 08...	1615	22.0	6.6	7.0	520	252	190	1.3	169000	7750	--
JULY 13...	1600	26.2	7.0	13.0	650	276	2	1.3	--	150	500
AUG. 17...	1400	20.5	7.8	10.1	495	267	1	1.2	1350	60	210

14064500 DESCHUTES RIVER AT BENHAM FALLS, NEAR BEND, OREG.

LOCATION.--Lat 43°55'49", long 121°24'39", in SW¼NE¼ sec.16, T.19 S., R.11 E., Deschutes County, temperature recorder at gaging station on right bank, 0.5 mi (0.8 km) upstream from Benham Falls, 10 mi (16.1 km) southwest of Bend, and at mile 181.4 (291.9 km).

DRAINAGE AREA.--1,759 mi² (4,556 km²).

PERIOD OF RECORD.--Water temperatures: November 1967 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 16.5°C on several days during July and August; minimum, 1.0°C on several days during January and February.

Period of record:
Water temperatures: Maximum, 17.0°C on several days in 1968, 1969, and 1971; minimum, freezing point Jan. 23, 26, 1969.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	5.5	9.5	8.5	14.5	14.0	15.0	14.5	15.5	15.0	14.0	13.0
2	7.0	6.0	10.0	9.0	14.0	13.0	14.5	14.0	15.5	14.5	13.5	13.5
3	7.0	7.0	10.5	10.0	14.0	13.5	14.5	13.5	15.0	14.5	13.5	13.5
4	7.0	6.5	10.5	10.0	14.0	13.5	15.0	14.0	15.5	14.5	14.0	13.5
5	7.0	6.5	11.0	10.5	14.5	14.0	15.0	14.5	16.0	15.5	13.5	13.5
6	7.0	7.0	10.5	10.0	14.5	14.0	14.5	14.5	16.5	15.5	13.5	13.5
7	7.0	6.5	10.0	9.0	14.0	13.5	14.5	14.5	16.5	15.5	13.5	13.5
8	6.5	6.5	9.0	8.0	13.5	13.0	14.5	14.5	16.5	16.0	13.5	13.5
9	6.5	6.0	9.0	8.0	13.5	13.0	14.5	13.5	16.5	15.5	13.5	13.5
10	6.0	6.0	9.5	8.5	13.5	13.0	14.5	14.0	16.0	15.5	13.5	13.0
11	6.0	6.0	10.0	9.5	13.0	12.0	15.5	14.5	16.0	15.5	13.5	12.0
12	6.0	5.5	11.0	9.5	13.0	12.0	16.0	15.0	16.0	15.5	12.0	12.0
13	6.0	5.5	11.5	11.0	14.0	13.0	16.5	15.5	15.5	14.5	12.0	11.5
14	6.5	6.0	11.5	11.0	14.0	13.5	16.5	15.5	14.5	14.5	12.0	12.0
15	7.0	6.5	11.5	11.0	14.5	14.0	16.5	15.5	14.5	14.0	12.0	12.0
16	7.0	6.5	11.0	10.5	14.5	14.5	16.5	16.0	14.5	13.5	12.0	12.0
17	7.0	6.5	10.5	9.5	14.5	14.0	16.5	16.0	13.5	12.0	12.0	12.0
18	6.5	6.0	9.5	9.0	14.5	14.0	16.5	16.0	13.5	12.0	12.0	12.0
19	6.5	6.0	9.0	8.5	14.5	14.0	16.5	15.5	14.0	13.0	12.0	11.5
20	7.0	6.5	9.0	9.0	14.5	14.0	15.5	14.5	14.0	13.5	11.5	11.0
21	7.0	6.5	9.0	8.5	15.0	14.5	14.5	14.0	14.0	14.0	11.5	11.0
22	7.0	6.5	9.5	8.5	15.0	14.5	14.5	14.0	14.0	14.0	11.0	10.5
23	7.0	7.0	10.0	9.0	14.5	13.5	15.0	14.5	14.5	14.0	11.0	11.0
24	7.0	6.5	10.5	10.0	13.5	13.5	15.5	14.5	14.5	13.5	11.0	10.0
25	7.0	6.5	11.5	10.5	13.5	13.0	15.5	15.0	14.5	13.5	10.5	10.0
26	8.5	7.0	12.0	11.5	13.5	13.5	15.5	14.5	14.5	14.0	10.5	9.5
27	9.5	8.5	13.0	12.0	14.5	13.5	15.5	14.5	14.5	14.0	9.5	9.0
28	9.5	9.0	13.5	13.0	15.0	14.5	15.5	14.5	14.5	14.0	9.5	9.0
29	9.0	7.0	14.0	13.5	15.0	14.5	15.5	15.0	14.5	14.0	9.5	9.0
30	8.5	7.0	14.5	14.0	15.0	14.5	15.5	14.5	14.5	14.0	9.5	9.0
31	---	---	14.5	14.0	---	---	15.5	15.0	14.5	13.5	---	---
MONTH	9.5	5.5	14.5	8.0	15.0	12.0	16.5	13.5	16.5	12.0	14.0	9.0

14076500 DESCHUTES RIVER NEAR CULVER, OREG.

LOCATION.—Lat 44°29'56", long 121°19'12", in NW¼SE¼ sec.29, T.12 S., R.12 E., Jefferson County, temperature recorder at gaging station on right bank, 2.5 mi (4.0 km) downstream from Squaw Creek, 6.0 mi (9.7 km) southwest of Culver, and at mile 120.6 (194.0 km).

DRAINAGE AREA.—2,705 mi² (7,006 km²).

PERIOD OF RECORD.—Water temperatures: September 1952 to September 1957, January 1959 to August 1961, July 1962 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 15.5°C July 13-18; minimum, 3.0°C on several days during December and January.

Period of record:
Water temperatures (1952-57, 1962-72): Maximum, 18.0°C July 13, 17, 1956; minimum, 1.5°C on several days in 1964 and 1965.

REMARKS.—Recorder stopped Oct. 1-20, Mar. 31 to Apr. 11; range in temperature, 5.5°C to 11.0°C and 5.0°C to 8.5°C, respectively.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	6.5	6.0	6.0	6.0	3.0	3.0	5.0	5.0	6.5	5.5
2	---	---	6.5	6.5	6.0	6.0	3.5	3.0	5.0	5.0	5.5	4.0
3	---	---	6.5	6.5	6.0	6.0	3.5	3.5	5.5	5.0	4.0	4.0
4	---	---	6.5	6.5	6.0	6.0	3.0	3.0	5.0	5.0	4.0	4.0
5	---	---	6.5	6.5	6.0	5.5	3.0	3.0	5.0	5.0	5.0	4.0
6	---	---	6.5	5.5	6.0	6.0	3.5	3.0	5.5	5.0	5.0	5.0
7	---	---	5.5	5.5	6.0	5.5	3.5	3.5	6.0	5.5	5.0	4.5
8	---	---	5.5	5.5	5.5	5.0	3.5	3.5	6.5	6.0	5.0	4.5
9	---	---	6.5	5.5	5.0	5.0	3.5	3.5	6.5	6.5	5.5	5.0
10	---	---	6.5	6.5	5.0	5.0	3.5	3.5	6.5	6.5	5.5	5.5
11	---	---	6.5	6.5	5.0	4.0	4.0	3.5	6.5	6.5	6.0	5.5
12	---	---	7.0	6.5	4.0	4.0	4.0	4.0	6.5	6.5	6.0	6.0
13	---	---	7.0	7.0	4.0	4.0	4.0	4.0	6.5	6.5	6.5	6.0
14	---	---	7.0	7.0	4.0	3.5	4.0	4.0	6.5	6.5	6.5	6.0
15	---	---	7.0	6.5	3.5	3.5	4.0	4.0	6.5	6.5	7.0	6.0
16	---	---	6.5	6.0	4.0	3.5	4.0	4.0	6.5	6.5	7.0	6.5
17	---	---	6.0	5.5	4.0	4.0	4.5	4.0	6.5	6.5	8.0	7.0
18	---	---	5.5	5.5	4.0	4.0	5.0	4.5	6.5	6.5	8.0	7.0
19	---	---	6.0	5.5	4.0	4.0	5.0	5.0	6.5	6.5	7.0	6.5
20	---	---	6.5	6.0	4.0	4.0	5.5	5.0	6.5	6.5	6.5	6.0
21	8.0	8.0	6.5	6.5	4.0	4.0	5.5	5.5	6.5	6.5	7.0	6.5
22	8.5	8.0	6.5	6.5	4.5	4.0	5.5	5.5	6.5	6.5	7.0	6.5
23	8.5	8.5	6.5	6.5	4.0	4.0	5.5	5.5	6.5	6.5	6.5	6.0
24	8.5	8.0	6.5	6.5	4.0	4.0	5.5	5.0	6.5	6.5	6.5	6.0
25	8.5	8.0	6.5	6.5	4.0	3.5	5.0	5.0	6.5	6.5	6.0	5.5
26	8.5	8.0	6.5	6.5	3.5	3.0	5.0	5.0	6.5	6.5	5.5	5.0
27	8.5	8.0	6.5	6.0	3.0	3.0	5.0	5.0	6.5	6.5	5.0	4.5
28	8.0	6.0	6.0	6.0	3.0	3.0	5.0	5.0	6.5	6.5	4.5	4.5
29	6.0	5.5	6.0	6.0	3.0	3.0	5.0	5.0	6.5	6.5	4.5	4.0
30	5.5	5.5	6.0	6.0	3.0	3.0	5.0	5.0	---	---	5.5	4.5
31	6.0	5.5	---	---	3.5	3.0	5.0	5.0	---	---	---	---
MONTH	---	---	7.0	5.5	6.0	3.0	5.5	3.0	6.5	5.0	8.0	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	11.0	10.0	14.5	13.0	14.5	13.0	14.0	13.0	14.0	13.5
2	---	---	11.5	11.0	14.0	13.0	14.0	13.0	13.5	12.0	13.5	13.0
3	---	---	12.0	11.0	14.5	13.5	14.0	13.0	13.0	12.0	13.5	12.0
4	---	---	12.0	11.0	14.5	13.0	14.0	13.0	13.5	12.0	13.5	13.0
5	---	---	12.0	11.0	15.0	13.5	14.0	13.5	13.5	13.0	14.0	13.5
6	---	---	12.0	11.0	15.0	13.5	14.5	13.5	13.5	13.0	13.5	13.0
7	---	---	12.0	11.0	14.5	13.5	14.5	13.0	13.5	13.0	13.0	12.0
8	---	---	11.5	10.5	13.5	12.0	14.5	13.5	13.5	13.5	13.0	12.0
9	---	---	12.0	11.0	14.0	12.0	13.5	12.0	13.5	13.0	13.0	12.0
10	---	---	12.0	11.0	14.0	11.5	13.5	12.0	13.5	13.0	12.0	11.5
11	---	---	12.0	11.0	12.0	11.0	14.5	13.5	13.5	13.0	12.0	12.0
12	8.5	8.5	12.0	11.0	13.0	11.0	15.0	14.0	13.5	12.0	12.0	12.0
13	9.0	8.5	12.0	11.5	13.5	11.5	15.5	14.5	13.0	12.0	13.0	12.0
14	9.5	8.5	13.5	12.0	14.0	13.0	15.5	14.0	13.0	12.0	13.0	12.0
15	9.5	9.0	12.0	11.5	14.0	13.0	15.5	14.0	13.0	12.0	12.0	12.0
16	9.5	9.0	12.0	12.0	14.0	12.0	15.5	14.0	12.0	11.5	13.0	12.0
17	9.5	9.0	12.0	11.0	14.0	12.0	15.5	14.5	13.0	12.0	13.5	13.0
18	9.0	8.5	11.5	11.0	14.0	12.0	15.5	14.5	13.5	13.0	13.5	13.0
19	9.5	8.5	11.5	11.0	14.0	12.0	15.0	14.0	13.5	13.0	13.0	12.0
20	9.5	9.0	11.5	11.5	14.0	13.0	14.5	13.5	14.0	13.5	12.0	11.5
21	10.0	9.5	11.5	11.0	14.0	13.0	13.5	13.0	14.0	13.5	11.5	11.5
22	10.0	9.0	11.5	11.0	14.0	12.0	14.0	13.0	14.5	13.5	11.5	11.0
23	10.0	9.5	11.0	11.0	14.0	12.0	14.0	13.0	14.5	13.5	11.0	11.0
24	10.0	9.5	12.0	11.0	13.5	12.0	14.5	13.5	14.5	13.5	11.0	10.5
25	10.5	9.5	12.0	11.5	13.0	11.5	14.5	13.5	14.5	14.0	10.5	10.0
26	11.0	10.0	13.0	11.5	13.0	11.5	14.5	13.0	14.5	14.0	10.0	10.0
27	11.5	10.5	13.0	12.0	14.0	13.0	14.5	13.0	14.5	14.0	10.0	10.0
28	11.5	10.5	13.5	12.0	14.5	13.5	14.5	13.0	15.0	14.5	10.0	10.0
29	10.5	10.0	14.5	13.5	14.5	13.5	14.0	13.5	15.0	14.5	10.5	10.0
30	11.0	10.0	14.5	13.5	14.5	13.5	14.0	13.5	14.5	14.0	11.0	10.0
31	---	---	14.5	13.5	---	---	14.5	13.5	14.0	13.5	---	---
MONTH	---	---	14.5	10.0	15.0	11.0	15.5	12.0	15.0	11.5	14.0	10.0

14087400 CROOKED RIVER BELOW OPAL SPRINGS, NEAR CULVER, OREG.

LOCATION.—Lat 44°29'33", long 121°17'50", in NW¼NE¼ sec.33, T.12 S., R.12 E., Jefferson County, temperature recorder at gaging station on right bank, 0.2 mi (0.3 km) downstream from Opal Springs, 4.8 mi (7.7 km) southwest of Culver, and at mile 6.7 (10.8 km).

DRAINAGE AREA.—4,300 mi² (11,600 km²), approximately, of which 500 mi² (1,300 km²) is probably noncontributing.

PERIOD OF RECORD.—Water temperatures: October 1963 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 14.0°C on many days during June, July, and August; minimum, 7.0°C Jan. 24, 26-28.

Period of record:
Water temperatures: Maximum (1963-66, 1967-72), 15.0°C on many days in 1964 and 1969; minimum, 4.0°C Dec. 29, 30, 1964.

REMARKS.—Recorder stopped Sept. 11-30, range in temperature, 11.5°C to 13.0°C.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	12.0	11.0	11.0	11.5	11.5	11.0	11.0	9.0	9.0	10.5	8.5
2	12.0	12.0	11.0	11.0	11.5	11.5	11.0	11.0	10.0	9.0	8.5	8.5
3	12.0	12.0	11.5	11.0	11.5	11.5	11.0	11.0	10.0	10.0	8.5	8.0
4	12.0	12.0	11.5	11.5	11.5	11.5	11.0	11.0	10.0	10.0	8.0	8.0
5	13.0	12.0	11.5	11.0	11.5	11.5	11.0	11.0	10.0	10.0	8.5	8.0
6	13.0	13.0	11.0	11.0	11.5	11.0	11.0	11.0	10.0	10.0	9.0	8.5
7	13.0	13.0	11.0	11.0	11.0	11.0	11.0	11.0	10.0	10.0	9.0	8.0
8	13.0	12.0	11.0	11.0	11.0	11.0	11.0	11.0	10.5	10.0	8.5	8.5
9	13.0	12.0	11.0	11.0	11.0	11.0	11.0	11.0	10.5	10.5	8.5	8.5
10	13.0	12.0	11.5	11.5	11.0	11.0	11.0	11.0	10.5	10.5	9.0	8.5
11	13.0	12.0	11.5	11.5	11.0	11.0	11.0	11.0	10.5	10.5	9.0	9.0
12	12.0	12.0	11.5	11.5	11.0	11.0	11.0	11.0	10.5	10.5	9.0	9.0
13	12.0	12.0	11.5	11.5	11.0	11.0	11.0	11.0	10.5	10.5	9.0	9.0
14	12.0	12.0	11.5	11.5	11.0	11.0	11.0	11.0	10.5	10.5	9.0	8.5
15	12.0	12.0	11.5	11.5	11.0	11.0	11.0	11.0	11.0	11.0	9.0	8.5
16	12.0	12.0	11.5	11.5	11.0	11.0	11.0	11.0	11.0	11.0	9.5	8.5
17	12.0	11.5	11.5	11.5	11.0	11.0	11.0	11.0	11.0	11.0	9.5	9.0
18	11.5	11.5	11.5	11.5	11.0	11.0	11.0	11.0	11.0	10.5	9.5	9.0
19	11.5	11.5	11.5	11.5	11.0	11.0	11.0	11.0	10.5	10.0	9.5	8.5
20	11.5	11.5	11.5	11.5	11.0	11.0	11.0	11.0	10.5	10.5	9.0	8.5
21	11.5	11.5	11.5	11.5	11.0	11.0	11.0	11.0	10.5	9.5	9.5	9.0
22	11.5	11.5	11.5	11.5	11.0	11.0	11.0	9.0	9.5	9.5	9.5	9.5
23	11.5	11.5	11.5	11.5	11.0	11.0	9.0	8.0	9.5	9.5	9.5	8.5
24	11.5	11.5	11.5	11.5	11.0	11.0	8.0	7.0	9.5	9.0	9.5	9.0
25	11.5	11.5	11.5	11.5	11.0	11.0	8.0	8.0	9.0	9.0	9.5	9.0
26	11.5	11.5	11.5	11.5	11.0	11.0	8.0	7.0	9.0	9.0	9.0	8.5
27	11.5	11.5	11.5	11.5	11.0	11.0	7.0	7.0	10.0	9.0	9.0	9.0
28	11.5	11.0	11.5	11.5	11.0	11.0	8.5	7.0	10.5	10.0	9.5	9.0
29	11.0	11.0	11.5	11.5	11.0	11.0	9.0	8.5	10.5	10.5	9.5	9.0
30	11.0	11.0	11.5	11.5	11.0	11.0	9.0	9.0	---	---	10.0	9.5
31	11.0	11.0	---	---	11.0	11.0	9.0	9.0	---	---	10.5	10.0
MONTH	13.0	11.0	11.5	11.0	11.5	11.0	11.0	7.0	11.0	9.0	10.5	8.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	12.0	11.5	13.5	13.5	14.0	14.0	14.0	14.0	13.5	13.5
2	11.5	11.0	12.0	12.0	13.5	13.5	14.0	14.0	14.0	13.5	13.5	13.0
3	11.5	11.5	13.0	12.0	13.5	13.5	14.0	14.0	13.5	13.5	13.0	13.0
4	11.5	11.5	13.0	13.0	13.5	13.5	14.0	14.0	13.5	13.5	13.0	13.0
5	12.0	11.5	13.0	13.0	13.5	13.5	14.0	14.0	13.5	13.5	13.0	13.0
6	12.0	12.0	13.0	13.0	13.5	13.5	14.0	14.0	13.5	13.5	13.0	13.0
7	12.0	11.0	13.0	13.0	13.5	13.5	14.0	14.0	13.5	13.5	13.0	13.0
8	11.0	10.5	13.0	12.0	13.5	13.5	14.0	14.0	13.5	13.5	13.0	13.0
9	10.5	10.5	12.0	12.0	13.5	13.5	14.0	14.0	13.5	13.5	13.0	13.0
10	10.5	10.5	13.0	12.0	13.5	13.5	14.0	14.0	13.5	13.5	13.0	13.0
11	10.5	10.5	13.0	12.0	13.5	13.5	14.0	14.0	13.5	13.5	---	---
12	10.5	10.5	13.0	13.0	13.5	13.5	14.0	14.0	13.5	13.5	---	---
13	10.5	10.5	13.5	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
14	10.5	10.5	13.5	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
15	11.0	10.5	13.5	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
16	11.0	11.0	13.5	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
17	11.0	11.0	13.0	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
18	11.0	11.0	13.0	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
19	11.0	11.0	13.0	12.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
20	11.5	11.0	13.0	12.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
21	11.5	11.5	13.0	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
22	11.5	11.5	13.0	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
23	11.5	11.5	13.0	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
24	11.5	11.5	13.0	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
25	11.5	11.5	13.0	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
26	12.0	11.5	13.0	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
27	12.0	12.0	13.5	13.0	14.0	14.0	14.0	14.0	13.5	13.5	---	---
28	12.0	12.0	13.5	13.5	14.0	14.0	14.0	14.0	13.5	13.5	---	---
29	12.0	12.0	13.5	13.5	14.0	14.0	14.0	14.0	13.5	13.5	---	---
30	12.0	12.0	13.5	13.5	14.0	14.0	14.0	14.0	13.5	13.5	---	---
31	---	---	13.5	13.5	---	---	14.0	14.0	13.5	13.5	---	---
MONTH	12.0	10.5	13.5	11.5	14.0	13.5	14.0	14.0	14.0	13.5	---	---

14091500 METOLIUS RIVER NEAR GRANDVIEW, OREG.

LOCATION.--Lat 44°37'33", long 121°28'55", in SE¼SW¼ sec.12, T.11 S., R.10 E., Jefferson County, temperature recorder at gaging station on right bank, 1.0 mi (1.6 km) upstream from maximum controlled pool of Lake Billy Chinook, 15.0 mi (24.1 km) northwest of Culver, and at mile 13.6 (21.9 km).

DRAINAGE AREA.--316 mi^2 (818 km^2) at cableway 1.0 mi (1.6 km) downstream, where all discharge measurements are made. Hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--Water temperatures: July 1952 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 11.0°C on several days during July and August; minimum, 3.5°C Feb. 2, 3.

Period of record:
Water temperatures: Maximum, 13.5°C July 5, 1957; minimum, 3.0°C on several days in 1963, 1966, 1968, and 1971.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.0	6.0	6.0	5.5	5.0	5.0	4.5	4.5	4.0	4.5	4.5
2	8.0	6.0	6.0	5.5	5.5	5.0	5.5	4.5	4.0	3.5	5.0	4.5
3	8.5	6.5	6.5	5.5	5.5	5.0	4.5	4.0	4.5	3.5	5.5	5.0
4	8.5	6.5	6.5	6.0	5.5	5.0	4.5	4.0	5.0	4.0	6.0	5.5
5	8.5	6.5	6.0	5.0	6.0	5.5	5.5	4.5	5.5	4.5	6.0	5.0
6	8.5	7.0	5.5	4.5	6.0	5.0	5.5	5.0	6.0	5.0	5.5	4.5
7	8.5	6.5	6.5	5.0	6.0	4.5	5.5	5.0	6.0	5.0	6.0	5.0
8	8.0	6.5	6.0	5.0	5.5	4.5	5.0	4.5	6.0	5.0	6.0	5.0
9	8.0	6.5	6.0	5.5	5.5	4.5	5.0	5.0	6.0	5.0	6.0	6.0
10	8.0	6.5	6.5	6.0	5.0	4.5	5.0	5.0	5.5	5.0	6.0	6.0
11	8.0	6.5	6.5	6.0	5.0	4.5	5.0	4.5	6.0	5.0	6.0	6.0
12	8.0	6.5	6.5	6.0	5.0	4.0	5.0	4.5	6.0	5.5	6.0	5.5
13	8.0	6.5	6.0	6.0	5.0	5.0	5.0	4.5	6.0	5.0	6.0	5.0
14	7.0	6.0	6.0	6.0	5.0	5.0	5.0	4.0	5.5	5.5	6.5	5.5
15	6.5	6.5	6.0	5.5	5.0	4.5	5.0	4.5	6.0	5.5	6.5	5.5
16	6.5	5.5	6.0	5.0	5.5	5.0	5.5	5.0	6.0	5.5	6.5	5.5
17	6.5	5.5	6.0	5.0	5.5	5.0	5.5	5.5	5.5	5.0	6.5	6.0
18	7.0	6.0	6.0	5.5	5.5	5.0	6.0	5.5	5.5	5.0	6.0	5.5
19	7.0	6.5	6.0	5.5	5.0	4.5	5.5	5.5	6.0	5.0	6.5	5.0
20	7.0	6.5	6.5	6.0	5.5	5.0	5.5	5.0	5.5	5.0	6.5	5.5
21	7.0	5.5	7.0	5.5	5.5	5.0	5.0	4.5	6.0	5.0	6.0	6.0
22	7.0	6.0	6.0	5.5	5.5	5.0	5.0	4.5	5.5	5.0	6.0	5.5
23	7.0	6.5	6.0	5.5	5.0	5.0	5.0	4.0	5.5	5.0	6.0	5.5
24	6.5	5.5	6.0	6.0	5.5	4.5	5.0	4.0	5.5	5.0	6.0	5.0
25	6.5	5.5	6.0	5.0	5.0	4.5	5.0	4.5	5.5	4.5	6.0	5.0
26	6.5	6.0	5.5	5.0	4.5	4.0	4.5	4.0	6.0	5.0	6.0	4.5
27	6.0	5.5	6.0	5.5	5.0	4.5	4.0	4.0	6.0	5.5	5.5	5.0
28	5.5	5.0	6.0	5.5	4.5	4.0	4.0	4.0	5.5	4.5	6.0	5.0
29	5.5	4.5	6.0	5.5	5.0	4.5	4.5	4.0	4.5	4.0	7.0	5.0
30	6.0	5.5	6.0	5.0	5.5	5.0	4.5	4.0	---	---	6.5	5.0
31	6.0	5.5	---	---	5.5	5.0	5.0	4.0	---	---	7.0	6.0
MONTH	8.5	4.5	7.0	4.5	6.0	4.0	6.0	4.0	6.0	3.5	7.0	4.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.0	8.5	5.5	9.0	6.5	10.5	8.0	10.5	8.0	9.0	7.0
2	6.5	5.5	9.0	6.0	10.0	7.0	10.5	8.0	10.0	7.0	9.0	7.0
3	7.0	6.0	9.0	6.0	10.0	8.0	10.5	8.0	10.5	8.0	9.5	7.0
4	7.0	6.5	9.5	6.0	9.5	7.0	11.0	8.0	10.5	8.0	9.5	8.0
5	7.0	6.0	9.0	6.0	10.0	7.0	10.5	8.5	10.5	8.0	10.0	8.5
6	6.0	5.5	9.0	6.5	9.5	8.0	11.0	8.5	10.5	8.0	9.5	8.0
7	6.5	5.5	8.5	6.0	9.0	8.0	11.0	8.0	10.5	8.5	9.5	7.0
8	6.5	5.0	8.5	6.0	9.5	7.0	10.0	8.0	10.0	8.5	9.5	7.0
9	7.0	5.5	9.0	6.0	9.5	8.0	10.5	8.0	11.0	8.5	9.0	8.0
10	7.0	5.5	9.0	6.0	9.5	6.5	10.0	7.0	10.5	8.0	8.5	6.5
11	7.0	5.5	9.5	6.0	8.5	6.5	10.0	8.5	10.5	8.0	8.5	6.5
12	6.5	6.0	9.5	6.5	9.5	6.5	11.0	8.0	9.5	8.0	8.5	7.0
13	7.0	5.5	9.5	6.5	10.0	6.5	11.0	8.5	10.0	7.0	9.0	6.5
14	8.0	5.5	9.5	7.0	10.0	7.0	10.5	8.0	9.5	8.0	9.0	7.0
15	8.0	6.0	9.0	7.0	10.0	7.0	11.0	8.0	9.0	8.0	9.0	7.0
16	7.0	6.0	8.0	7.0	9.0	7.0	11.0	8.0	8.5	7.0	9.0	7.0
17	7.0	5.5	8.0	6.5	10.0	7.0	11.0	8.0	9.0	8.0	9.5	8.0
18	7.0	5.0	8.0	6.0	10.0	7.0	11.0	8.5	9.5	7.0	9.0	8.0
19	8.0	5.0	9.0	6.0	10.5	7.0	10.0	8.5	9.5	8.0	8.5	7.0
20	7.0	5.5	8.5	7.0	10.5	8.0	9.5	7.0	9.5	8.0	9.0	7.0
21	6.5	6.0	7.0	7.0	10.5	8.0	10.0	8.0	10.0	8.0	8.5	8.0
22	8.0	5.0	9.5	6.5	10.5	7.0	10.5	8.0	10.0	8.0	8.0	6.5
23	7.0	5.5	9.0	6.0	9.5	8.0	10.0	8.0	10.0	7.0	8.0	6.5
24	7.0	6.0	9.0	6.0	9.0	8.0	10.5	8.0	10.0	8.0	8.0	6.5
25	8.5	6.0	9.0	6.0	9.5	7.0	10.5	8.0	10.0	8.0	8.0	6.0
26	8.5	5.5	9.0	6.5	9.5	7.0	10.5	8.0	10.0	8.0	8.0	6.5
27	9.0	6.0	10.0	7.0	10.5	8.0	10.5	8.0	10.0	8.0	8.0	6.0
28	8.5	6.0	10.0	7.0	10.5	8.0	10.5	8.0	10.0	8.0	8.0	6.5
29	7.0	5.0	10.0	7.0	10.5	8.0	10.5	8.0	10.0	8.0	8.5	6.5
30	8.0	5.0	10.0	7.0	10.5	8.0	11.0	8.5	10.0	8.0	8.5	6.5
31	---	---	10.0	7.0	---	---	11.0	8.5	9.5	7.0	---	---
MONTH	9.0	5.0	10.0	5.5	10.5	6.5	11.0	7.0	11.0	7.0	10.0	6.0

14092500 DESCHUTES RIVER NEAR MADRAS, OREG.

LOCATION.—Lat 44°43'34", long 121°14'45", in SE¼SW¼ sec.1, T.10 S., R.12 E., Jefferson County, temperature recorder at gaging station on right bank, 400 ft (123 m) downstream from reregulating dam, 2.7 mi (4.3 km) downstream from Pelton Dam, 8.5 mi (13.7 km) northwest of Madras, and at mile 100.1 (161.1 km).

DRAINAGE AREA.—7,820 mi^2 (20,300 km^2), approximately.

PERIOD OF RECORD.—Water temperatures: October 1971 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 14.5°C Aug. 26 to Sept. 2; minimum, 5.5°C on many days during February and March.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	8.0	8.5	8.5	11.0	10.5	12.0	12.0	13.5	13.5	14.5	14.5
2	8.0	8.0	8.5	8.5	11.0	11.0	12.0	12.0	13.5	13.5	14.5	14.0
3	8.0	8.0	8.5	8.5	11.0	11.0	12.0	12.0	13.5	13.5	14.0	14.0
4	8.0	8.0	9.0	8.5	11.0	11.0	12.0	12.0	13.5	13.5	14.0	14.0
5	8.0	8.0	9.0	9.0	11.0	11.0	12.0	12.0	13.5	13.5	14.0	14.0
6	8.0	8.0	9.0	9.0	11.0	11.0	12.0	12.0	13.5	13.5	14.0	14.0
7	8.0	8.0	9.0	9.0	11.0	11.0	14.5	12.0	13.5	13.5	14.0	14.0
8	8.0	8.0	9.0	9.0	11.0	11.0	14.5	14.5	13.5	13.5	14.0	14.0
9	8.0	8.0	9.0	9.0	11.0	11.0	14.5	14.5	13.5	13.5	14.0	14.0
10	8.0	8.0	9.0	9.0	11.0	11.0	14.5	13.5	13.5	13.5	14.0	13.5
11	8.0	8.0	9.5	9.0	11.0	11.0	13.5	13.5	13.5	13.5	14.0	14.0
12	8.0	8.0	9.5	9.5	11.0	11.0	13.5	13.5	13.5	13.5	14.0	14.0
13	8.0	8.0	9.5	9.5	11.0	11.0	13.5	13.5	13.5	13.5	14.0	14.0
14	8.0	8.0	9.5	9.5	11.0	11.0	13.5	13.5	13.5	13.5	14.0	14.0
15	8.0	8.0	9.5	9.5	11.0	11.0	13.5	13.5	13.5	13.5	14.0	14.0
16	8.0	8.0	9.5	9.5	11.0	11.0	13.5	13.5	13.5	13.5	14.0	14.0
17	8.0	8.0	9.5	9.5	11.0	11.0	13.5	13.5	13.5	13.5	14.0	14.0
18	8.0	8.0	9.5	9.5	11.0	11.0	13.5	13.5	13.5	13.5	14.0	14.0
19	8.0	8.0	9.5	9.5	11.5	11.0	13.5	13.5	13.5	13.5	14.0	14.0
20	8.0	8.0	10.0	9.5	11.5	11.5	13.5	13.5	14.0	13.5	14.0	14.0
21	8.0	8.0	10.0	10.0	11.5	11.5	13.5	13.5	14.0	14.0	14.0	13.5
22	8.0	8.0	10.0	10.0	11.5	11.5	13.5	13.5	14.0	14.0	13.5	13.0
23	8.0	8.0	10.0	10.0	11.5	11.5	13.5	13.5	14.0	14.0	13.0	13.0
24	8.0	8.0	10.0	10.0	11.5	11.5	13.5	13.5	14.0	14.0	13.0	13.0
25	8.0	8.0	10.0	10.0	11.5	11.5	13.5	13.5	14.0	14.0	13.0	13.0
26	8.0	8.0	10.0	10.0	11.5	11.5	13.5	13.5	14.5	14.0	13.0	13.0
27	8.0	8.0	10.0	10.0	11.5	11.5	13.5	13.5	14.5	14.0	13.0	13.0
28	8.5	8.0	10.5	10.0	12.0	11.5	13.5	13.5	14.5	14.5	13.0	13.0
29	8.5	8.5	10.5	10.5	12.0	12.0	13.5	13.5	14.5	14.5	13.0	13.0
30	8.5	8.5	10.5	10.5	12.0	12.0	13.5	13.5	14.5	14.5	13.0	13.0
31	---	---	10.5	10.5	---	---	13.5	13.5	14.5	14.5	---	---
MONTH	8.5	8.0	10.5	8.5	12.0	10.5	14.5	12.0	14.5	13.5	14.5	13.0

14103000 DESCHUTES RIVER AT MOODY, NEAR BIGGS, OREG.

LOCATION.—Lat 45°37'20", long 120°54'05", in SE¼ sec.26, T.2 N., R.15 E., Sherman County, temperature recorder at gaging station on right bank, 4.0 mi (6.4 km) southwest of Biggs, and at mile 1.4 (2.3 km).

DRAINAGE AREA.—10,500 mi² (27,200 km²), approximately.

PERIOD OF RECORD.—Chemical analyses: August 1911 to July 1912, December 1952 to February 1954.
Water temperatures: December 1952 to February 1954, November 1954 to September 1958, June 1962 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 19.5°C Aug. 7, 9, 10; minimum, 3.5°C on several days during December and January.

Period of record:
Water temperatures: Maximum, 22.0°C July 12, 13, 1964; minimum, 0.5°C Dec. 30, 1955.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.5	9.5	8.5	8.0	6.5	5.5	5.0	6.5	5.5	9.0	6.5
2	13.5	11.5	9.5	9.0	6.5	6.5	5.0	4.5	6.0	5.5	7.0	6.5
3	14.0	13.0	9.5	9.0	6.5	6.5	4.5	3.5	5.5	5.5	6.5	6.5
4	14.5	13.5	9.5	9.0	6.5	6.5	3.5	3.5	5.5	5.5	8.0	6.5
5	15.0	14.0	9.5	8.0	8.0	6.5	5.0	3.5	6.0	5.5	9.5	7.0
6	15.0	14.0	8.0	7.0	8.0	6.5	5.5	5.0	6.5	6.0	8.5	8.0
7	14.5	13.5	8.0	7.0	6.5	5.5	6.0	5.5	8.0	6.5	8.5	7.0
8	14.5	13.5	8.0	7.0	5.5	5.0	6.0	6.0	8.0	8.0	7.0	7.0
9	14.0	13.0	8.0	8.0	6.0	5.0	6.0	6.0	8.0	8.0	8.0	7.0
10	14.0	13.5	9.0	8.0	6.0	6.0	6.0	6.0	8.0	7.0	8.0	7.0
11	14.0	13.5	9.5	9.0	6.0	5.5	6.5	6.0	7.0	7.0	8.5	8.0
12	14.0	13.0	9.5	9.0	5.5	5.5	6.5	5.5	8.0	7.0	8.5	8.5
13	14.0	12.0	9.5	9.0	5.5	5.5	5.5	5.5	8.0	8.0	9.0	8.5
14	11.5	11.0	9.0	8.5	5.5	5.5	6.0	5.5	8.0	7.0	9.0	9.0
15	11.0	10.5	8.5	8.5	5.5	5.5	6.0	6.0	8.0	8.0	9.0	9.0
16	11.0	9.5	8.5	8.0	6.0	5.5	6.5	6.0	9.0	8.0	9.5	9.0
17	10.0	9.0	7.0	7.0	6.5	6.0	6.5	6.5	9.0	9.0	9.5	9.5
18	10.5	9.5	7.0	7.0	6.5	6.5	7.0	6.5	8.5	8.5	9.5	9.0
19	11.0	10.5	8.0	7.0	6.5	6.0	8.0	7.0	8.5	8.5	9.0	9.0
20	11.0	10.5	9.0	8.0	6.5	6.0	8.0	8.0	8.5	8.5	9.0	9.0
21	11.0	10.0	8.5	8.5	6.0	6.0	8.0	6.5	8.5	8.5	9.0	9.0
22	10.5	10.0	8.0	8.0	6.5	6.0	6.5	6.5	8.5	8.0	9.0	9.0
23	10.5	10.5	8.0	8.0	6.0	5.5	6.5	6.0	8.0	7.0	9.0	8.5
24	10.5	10.0	8.0	8.0	5.5	5.5	6.0	5.5	7.0	7.0	8.5	8.0
25	10.0	9.5	8.0	8.0	5.5	5.5	6.0	5.5	7.0	6.5	8.0	6.5
26	10.0	9.5	8.0	8.0	5.5	4.0	5.0	5.0	8.0	7.0	6.5	6.0
27	10.0	9.5	8.0	8.0	4.0	3.5	5.0	5.0	9.5	8.0	6.5	6.0
28	9.5	8.0	8.0	8.0	3.5	3.5	5.5	5.5	9.5	9.0	8.0	6.5
29	8.0	7.0	8.0	8.0	4.0	3.5	5.5	5.5	9.0	8.0	8.0	7.0
30	8.0	7.0	8.0	8.0	4.5	4.0	5.5	5.5	---	---	9.0	7.0
31	8.0	8.0	---	---	5.5	4.5	5.5	5.5	---	---	9.0	8.5
MONTH	15.0	7.0	9.5	7.0	8.0	3.5	8.0	3.5	9.5	5.5	9.5	6.0

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

14105700 COLUMBIA RIVER NEAR THE DALLES, OREG.

LOCATION.—Lat 45°36'10", long 121°10'40", in NW¼ sec.3, T.1 N., R.13 E., Wasco County, at The Dalles Dam, 3.2 mi (5.1 km) upstream from gaging station, and 2.6 mi (4.2 km) northeast of The Dalles.

DRAINAGE AREA.—237,000 mi^2 (613,800 km^2), approximately (upstream from gaging station).

PERIOD OF RECORD.—Chemical analyses: December 1950 to September 1972.
Water temperatures: December 1950 to September 1969.

EXTREMES.—1971-72:
Specific conductance: Maximum daily, 251 micromhos/cm Feb. 3; minimum daily, 95 micromhos/cm June 8.

Period of record:
Specific conductance: Maximum daily, 324 micromhos/cm Dec. 7, 1955; minimum daily, 95 micromhos/cm June 8, 1972.

REMARKS.—No appreciable inflow between sampling point and gaging station except during periods of heavy local runoff.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
16...	109000	6.3	140	23	5.1	6.3	1.1	86	0	14	2.5	.2
NOV.												
19...	134000	10	60	22	6.8	11	1.8	98	0	34	4.4	.3
JAN.												
05...	145000	11	120	25	6.9	9.1	1.8	102	0	21	4.8	.1
FEB.												
18...	172000	14	220	26	6.6	7.8	1.7	95	0	18	5.9	.3
MAR.												
31...	336000	15	60	17	5.0	6.3	1.6	76	0	13	2.3	.2
MAY												
09...	326000	11	130	20	5.4	6.4	3.1	78	0	14	2.8	.2
JULY												
05...	381000	7.1	--	15	3.6	2.9	.9	51	0	9.0	1.0	.2
AUG.												
09...	191000	5.1	100	18	4.2	2.9	1.0	66	0	11	4.5	.1
SEP.												
28...	116000	6.6	130	20	4.9	5.5	1.1	79	0	12	2.6	.2

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	TEMPER-ATURE (DEG C)	PH (UNITS)
OCT.											
16...	.12	101	.14	29700	78	8	168	.3	15	--	7.6
NOV.											
19...	.29	140	.19	50700	83	3	219	.5	22	9.0	7.9
JAN.											
05...	.32	131	.18	51300	91	7	222	.4	18	5.0	8.0
FEB.											
18...	.55	130	.18	60400	92	14	207	.4	15	2.8	7.7
MAR.											
31...	.33	99	.13	89800	63	1	155	.3	17	7.8	7.5
MAY											
09...	.05	102	.14	89800	72	8	165	.3	15	12.5	7.7
JULY											
05...	2.6	76	.10	78200	52	10	129	.2	11	18.5	6.7
AUG.											
09...	.34	81	.11	41800	62	8	130	.2	9	21.5	7.5
SEP.											
28...	.07	92	.13	28800	70	5	160	.3	14	--	7.4

14105700 COLUMBIA RIVER NEAR THE DALLES, OREG.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
RANDOM (INSTANTANEOUS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	198	223	228	234	207	171	195	116	121	124	151
2	162	199	217	226	242	209	180	195	111	123	124	151
3	161	202	216	222	251	210	194	194	110	139	125	151
4	160	199	217	225	240	212	187	193	107	140	126	151
5	161	202	227	219	234	209	194	193	102	141	128	151
6	160	208	227	221	230	208	188	195	100	140	144	151
7	161	208	223	225	225	202	188	195	96	140	145	153
8	161	213	230	222	218	203	177	196	95	140	146	157
9	162	212	233	215	214	208	188	193	98	141	144	156
10	161	213	230	211	216	208	181	172	98	141	153	162
11	161	208	228	209	218	206	178	169	101	146	151	165
12	163	209	221	210	213	208	173	173	99	146	150	165
13	164	209	214	210	206	205	173	169	101	143	151	163
14	164	220	216	211	198	202	176	169	99	144	150	162
15	165	223	208	213	194	202	173	161	99	145	151	160
16	165	223	209	213	189	206	173	155	96	124	150	162
17	166	219	212	214	194	203	172	146	98	123	150	161
18	167	220	214	214	187	203	180	141	100	123	148	162
19	168	216	208	221	203	205	188	139	104	128	152	163
20	169	215	209	221	212	210	187	142	102	123	148	160
21	177	219	215	217	215	208	187	145	107	124	150	163
22	182	217	215	204	225	204	187	138	111	124	149	169
23	187	218	215	209	225	194	189	134	113	124	151	171
24	191	216	214	209	203	187	187	130	116	124	147	170
25	196	216	215	209	210	178	188	126	123	124	151	170
26	197	215	215	209	226	187	180	126	115	127	148	178
27	195	217	203	210	213	188	189	123	117	123	148	180
28	194	215	209	217	215	193	188	124	118	127	148	146
29	189	219	209	217	213	176	189	124	119	124	149	166
30	186	224	219	221	---	177	189	121	119	125	153	163
31	190	---	229	221	---	171	---	118	---	123	149	---
MONTH	173	213	217	216	216	200	183	158	106	132	145	161

14128910 COLUMBIA RIVER AT WARRENDALE, OREG.

LOCATION.--Lat 45°36'45", long 122°01'35", in NW¼SE¼ sec.35, T.2 N., R.6 E., Multnomah County, temperature recorder on left bank, 0.1 mi (0.2 km) downstream from Tumalt Creek, 1.0 mi (1.6 km) west of Warrendale, 5.1 mi (9.2 km) downstream from Bonneville Dam, and at mile 141.0 (226.9 km).

DRAINAGE AREA.--240,400 mi^2 (622,600 km^2), approximately.

PERIOD OF RECORD.--Water temperatures: August 1967 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 20.5°C on several days during August and September; minimum, 1.0°C Feb. 3-11.

Period of record:
Water temperatures: Maximum, 22.5°C Aug. 11-13, 1971; minimum, 1.0°C Feb. 3-11, 1972.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	16.0	11.5	11.0	9.0	8.5	4.5	4.5	2.5	2.0	5.0	4.5
2	16.0	16.0	11.0	11.0	9.0	8.5	4.5	4.5	2.0	1.5	4.5	4.5
3	16.0	16.0	11.0	11.0	9.0	8.5	4.5	4.5	1.5	1.0	4.5	4.5
4	16.5	16.0	11.0	10.5	8.5	8.0	4.5	4.5	1.0	1.0	5.0	4.5
5	16.5	16.0	10.5	10.0	8.5	8.0	4.5	4.5	1.0	1.0	5.0	4.5
6	16.5	16.5	10.0	9.5	8.5	8.5	4.5	4.0	1.0	1.0	5.5	5.0
7	16.5	16.5	9.5	9.0	8.5	8.0	4.5	4.0	1.5	1.0	5.5	5.0
8	16.5	16.0	9.5	9.0	8.0	7.5	4.5	4.0	1.5	1.0	5.5	5.5
9	16.5	16.0	9.0	9.0	7.5	7.5	4.0	4.0	1.5	1.0	5.5	5.0
10	16.5	16.0	9.5	9.0	7.5	7.5	4.0	4.0	1.5	1.0	5.5	5.0
11	16.5	16.0	9.5	9.5	7.5	7.0	4.0	4.0	1.5	1.0	5.5	5.5
12	16.0	15.5	9.5	9.5	7.0	7.0	4.0	3.5	2.0	1.5	5.5	5.5
13	16.0	15.5	9.5	9.5	7.0	7.0	3.5	3.5	2.0	1.5	6.0	5.5
14	16.0	15.5	9.5	9.5	7.0	7.0	3.5	3.5	2.0	2.0	6.5	6.0
15	15.5	15.0	9.5	9.5	7.0	7.0	3.5	3.5	2.5	2.0	6.5	6.0
16	15.0	15.0	9.5	9.5	7.0	7.0	3.5	3.5	3.0	2.5	6.5	6.5
17	15.0	14.5	9.5	9.0	7.0	6.5	4.0	3.5	2.5	2.5	7.0	6.5
18	14.5	14.5	9.0	9.0	6.5	6.5	4.0	4.0	3.0	2.5	7.0	7.0
19	14.5	14.0	9.0	8.5	6.5	6.0	4.0	4.0	3.0	3.0	7.0	7.0
20	14.5	14.5	9.0	8.5	6.0	6.0	4.5	4.0	3.0	3.0	7.5	7.0
21	14.5	14.0	9.0	9.0	6.0	6.0	4.0	4.0	3.0	3.0	8.0	7.5
22	14.5	14.0	9.0	9.0	6.0	6.0	4.5	4.0	3.5	3.0	8.0	8.0
23	14.5	14.5	9.0	9.0	6.0	5.5	4.5	4.5	3.5	3.0	8.0	7.5
24	14.5	14.0	9.0	9.0	5.5	5.5	4.5	4.0	3.5	3.5	8.0	7.5
25	14.0	14.0	9.0	8.5	5.5	5.5	4.0	3.5	4.0	3.5	7.5	7.5
26	14.0	13.5	8.5	8.5	5.5	5.0	3.5	2.5	4.5	4.0	7.5	7.0
27	13.5	13.0	9.0	8.5	5.0	5.0	2.5	2.0	5.0	4.5	7.5	7.0
28	13.0	12.5	9.0	9.0	5.0	5.0	2.5	2.0	5.5	5.0	7.0	7.0
29	12.5	12.0	9.0	9.0	5.0	5.0	2.5	2.0	5.0	5.0	7.0	7.0
30	12.0	12.0	9.0	9.0	5.0	5.0	2.0	2.0	---	---	7.0	7.0
31	11.5	11.5	---	---	5.0	4.5	2.0	2.0	---	---	7.0	7.0
MONTH	16.5	11.5	11.5	8.5	9.0	4.5	4.5	2.0	5.5	1.0	8.0	4.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	7.0	10.0	9.5	13.5	13.0	15.5	15.0	18.5	18.5	20.0	19.5
2	7.5	7.0	10.0	9.5	14.0	13.5	15.5	15.0	18.5	18.5	20.0	19.5
3	7.0	7.0	10.5	10.0	14.0	13.5	16.0	15.5	19.0	18.5	20.5	20.0
4	7.5	7.0	10.5	10.0	14.0	13.5	16.0	15.5	19.5	18.5	20.0	20.0
5	7.5	7.0	11.0	10.5	14.0	14.0	16.0	16.0	19.5	19.0	20.5	20.0
6	7.5	7.5	11.5	10.5	14.0	14.0	16.0	16.0	20.0	19.5	20.0	19.5
7	7.5	7.5	11.0	11.0	14.0	13.5	16.0	16.0	20.5	19.5	20.0	19.5
8	8.0	7.5	11.0	10.5	14.0	13.5	16.0	16.0	20.5	20.0	19.5	19.5
9	8.0	8.0	11.0	10.5	13.5	13.5	16.0	15.5	20.5	20.0	19.5	19.0
10	8.0	8.0	11.5	11.0	13.5	13.5	16.0	16.0	20.5	20.0	19.5	19.0
11	8.5	8.0	12.0	11.5	13.5	13.5	16.0	16.0	20.5	20.0	19.0	19.0
12	8.5	8.0	12.0	11.5	13.5	13.5	16.5	16.0	20.0	20.0	19.0	19.0
13	8.0	8.0	12.0	12.0	13.5	13.0	17.0	16.5	20.0	19.5	19.0	19.0
14	8.0	8.0	12.5	12.0	13.5	13.5	17.0	17.0	20.0	19.5	19.0	19.0
15	8.0	8.0	12.5	12.0	14.0	13.5	17.5	17.0	20.0	19.5	19.0	19.0
16	8.0	8.0	12.5	12.0	13.5	13.5	17.5	17.0	19.5	19.5	19.0	18.5
17	8.0	7.5	12.5	12.0	13.5	13.5	18.0	17.5	19.5	19.5	18.5	18.0
18	8.0	7.5	12.0	12.0	14.0	13.5	18.0	18.0	19.5	19.5	18.0	17.5
19	8.0	7.5	12.5	12.0	14.0	14.0	18.0	18.0	20.0	19.5	17.5	17.0
20	8.0	7.5	12.0	12.0	14.0	14.0	18.5	18.0	20.0	19.5	17.5	17.0
21	8.0	7.5	12.0	12.0	14.0	14.0	18.5	18.5	20.0	19.5	17.5	17.0
22	8.0	7.5	12.0	11.5	14.5	14.0	18.5	18.5	20.0	19.5	17.0	17.0
23	8.0	7.5	12.0	11.5	14.5	14.0	18.5	18.5	20.0	19.5	16.5	16.5
24	8.0	8.0	12.0	11.5	14.5	14.5	19.0	18.5	20.0	19.5	16.5	16.5
25	8.5	8.0	12.0	11.5	14.5	14.0	19.0	18.5	20.0	19.5	16.5	16.0
26	9.0	8.5	12.0	11.5	14.5	14.0	18.5	18.5	20.0	19.5	16.0	16.0
27	9.5	9.0	12.0	11.5	14.5	14.0	18.5	18.5	20.0	20.0	16.0	15.5
28	9.5	9.5	12.5	12.0	15.0	14.0	19.0	18.5	20.5	20.0	16.0	15.5
29	9.5	9.0	13.0	12.5	15.0	14.5	19.0	18.5	20.5	20.0	15.5	15.5
30	10.0	9.5	13.5	13.0	15.0	14.5	18.5	18.5	20.0	20.0	15.5	15.5
31	---	---	13.5	13.0	---	---	18.5	18.5	20.0	20.0	---	---
MONTH	10.0	7.0	13.5	9.5	15.0	13.0	19.0	15.0	20.5	18.5	20.5	15.5

14144800 MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°35'50", long 122°27'20", in NE¼ sec.9, T.23 S., R.3 E., Lane County, temperature recorder at gaging station on right bank, 0.2 mi (0.3 km) upstream from Windfall Creek, 8.3 mi (13.4 km) upstream from Hills Creek Dam, 10 mi (16.1 km) south of Oakridge, and at mile 240.8 (387.4 km).

DRAINAGE AREA.--258 mi^2 (668 km^2).

PERIOD OF RECORD.--Water temperatures: October 1958 to January 1959, September 1959 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 20.5°C Aug. 6, 7, 9; minimum, freezing point probably occurred during January.

Period of record:
Water temperatures: Maximum, 23.0°C July 15, 1970; minimum, freezing point on several days during winter period each year.

REMARKS.--Recorder stopped Dec. 26 to Jan. 26, Feb. 8 to Mar. 3; range in temperature, 0.0°C to 4.0°C, and 3.0°C to 5.5°C, respectively.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

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

14144900 HILLS CREEK ABOVE HILLS CREEK LAKE, NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°40'50", long 122°22'10", in NW¼NW¼ sec.8, T.22 S., R.4 E., Lane County, temperature recorder at gaging station on right bank, 0.2 mi (0.3 km) downstream from Tufti Creek, 0.7 mi (1.1 km) upstream from Hills Creek Lake, 6.5 mi (10.5 km) southeast of Oakridge, and at mile 4.1 (6.6 km).

DRAINAGE AREA.--52.7 mi^2 (136.5 km^2).

PERIOD OF RECORD.--Water temperatures: October 1958 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 22.5°C Aug. 7; minimum, 0.5°C Jan. 21, Mar. 6, 7.

Period of record:
Water temperatures: Maximum, 22.5°C Aug. 7, 1972; minimum, freezing point Jan. 19-25, 1962.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	10.5	6.5	4.5	5.5	4.5	3.5	3.0	---	---	5.0	4.0
2	---	10.5	5.0	4.5	5.5	4.5	4.0	3.0	---	---	5.5	5.0
3	---	10.5	5.5	4.0	5.0	4.5	3.0	1.0	---	---	5.0	4.5
4	---	10.5	5.5	4.0	4.5	4.0	2.5	0.5	---	---	5.5	5.0
5	---	10.5	5.0	3.5	5.5	4.5	3.0	2.0	---	---	6.5	5.0
6	---	10.5	4.0	2.5	5.0	4.5	3.5	2.0	---	---	6.0	0.5
7	---	10.5	5.5	3.0	4.0	4.0	4.0	3.0	---	---	6.0	0.5
8	---	10.5	5.0	3.5	4.5	3.0	3.0	2.0	---	---	7.0	4.5
9	---	10.5	6.5	4.0	4.5	4.0	4.0	3.0	---	---	---	---
10	---	10.5	6.5	5.5	4.0	4.0	3.5	3.0	---	---	---	---
11	---	14.5	6.5	5.5	4.5	3.5	4.0	3.5	---	---	---	---
12	---	13.0	6.5	6.0	3.5	3.0	4.5	4.0	---	---	---	---
13	---	13.0	6.5	6.0	3.5	3.0	4.5	4.0	---	---	---	---
14	---	13.0	6.0	5.0	3.5	3.0	3.5	3.0	---	---	---	---
15	---	13.0	5.5	5.0	4.0	3.0	4.0	3.0	---	---	---	---
16	---	13.0	5.0	4.5	4.0	3.5	4.0	3.0	---	---	---	---
17	---	13.0	5.0	4.0	4.0	3.5	4.5	4.0	---	---	---	---
18	---	13.0	5.0	4.5	4.5	3.5	5.0	4.0	---	---	---	---
19	---	13.0	5.5	4.0	4.5	4.0	5.5	4.5	---	---	---	---
20	---	13.0	6.0	5.0	4.0	3.5	5.0	4.5	---	---	7.0	5.0
21	---	13.0	6.0	4.5	4.5	4.0	5.0	0.5	---	---	7.0	5.5
22	---	13.0	6.0	5.0	4.5	4.0	5.5	5.0	---	---	6.5	5.5
23	---	---	6.5	4.5	4.5	4.0	---	---	---	---	6.5	4.5
24	---	---	6.0	6.0	4.5	4.0	---	---	---	---	5.5	4.0
25	---	---	5.5	5.5	4.0	3.0	---	---	---	---	4.0	3.5
26	9.0	8.0	6.0	5.5	3.0	2.5	---	---	---	---	4.5	3.0
27	6.5	4.0	6.0	5.0	2.5	1.5	---	---	---	---	5.0	3.0
28	4.5	3.0	6.0	5.5	2.5	1.0	---	---	---	---	5.5	3.0
29	4.0	2.5	6.0	5.5	3.0	2.5	---	---	---	---	6.5	3.5
30	4.5	3.5	6.0	5.0	3.0	3.0	---	---	---	---	7.0	3.5
31	5.0	4.0	---	---	3.5	3.0	---	---	---	---	6.5	4.0
MONTH	---	2.5	6.5	2.5	5.5	1.0	---	---	---	---	---	---

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

14145500 MIDDLE FORK WILLAMETTE RIVER ABOVE SALT CREEK, NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°43'20", long 122°26'15", in NW¼NE¼ sec.27, T.21 S., R.3 E., Lane County, temperature recorder at gaging station on right bank, 90 ft (27 m) upstream from highway bridge, 0.4 mi (0.6 km) upstream from Salt Creek, 1.1 mi (1.8 km) downstream from Hills Creek Dam, 2.3 mi (3.7 km) southeast of Oakridge, and at mile 231.4 (372.3 km).

DRAINAGE AREA.--392 mi² (1,015 km²).

PERIOD OF RECORD.--Water temperatures: October 1960 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 15.5°C Sept. 19, 26; minimum, 3.5°C Feb. 2-5.

Period of record:
Water temperatures: Maximum, 25.0°C Sept. 4, 1960; minimum, 1.5°C Jan. 4, 1961.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	14.5	11.5	11.5	6.5	6.5	5.0	5.0	4.0	4.0	5.5	5.5
2	14.5	14.5	11.5	11.0	6.5	6.0	5.0	5.0	4.0	3.5	6.0	5.5
3	14.5	14.5	11.0	11.0	6.0	6.0	5.0	5.0	3.5	3.5	7.0	6.0
4	14.5	14.5	11.0	11.0	6.0	6.0	5.0	5.0	3.5	3.5	8.0	6.5
5	14.5	14.5	11.0	11.0	6.0	5.5	5.0	5.0	4.0	3.5	10.0	6.5
6	14.5	14.5	11.0	10.5	6.0	5.5	5.0	5.0	4.0	4.0	8.5	6.5
7	14.5	14.5	10.5	10.5	6.0	5.5	5.0	5.0	4.5	4.0	9.0	6.0
8	14.5	14.5	10.5	10.0	6.0	5.5	5.0	5.0	4.5	4.0	8.0	5.5
9	14.5	14.5	10.0	10.0	6.0	5.5	5.0	4.5	4.5	4.0	6.5	6.0
10	14.5	14.0	10.0	10.0	6.0	6.0	4.5	4.0	4.5	4.5	7.0	6.5
11	14.5	14.0	10.0	10.0	6.0	6.0	4.0	4.0	4.5	4.5	8.5	7.0
12	14.5	14.0	10.0	10.0	6.5	6.0	4.5	4.0	4.5	4.5	8.5	7.0
13	14.5	14.5	10.0	10.0	6.5	6.5	4.5	4.5	4.5	4.5	7.0	6.0
14	14.5	14.5	10.0	9.5	6.5	6.5	5.0	4.5	4.5	4.5	6.5	6.0
15	14.5	14.0	9.5	9.5	6.5	6.5	4.5	4.0	4.5	4.5	7.0	6.0
16	14.0	13.5	9.5	9.0	6.5	6.5	4.0	4.0	4.5	4.5	6.5	6.0
17	13.5	13.5	9.0	9.0	6.5	6.5	4.0	4.0	4.5	4.5	6.5	6.0
18	13.5	13.5	9.0	8.5	6.5	6.0	4.0	4.0	4.5	4.5	6.5	6.0
19	13.5	13.5	8.5	8.5	6.0	6.0	4.0	4.0	4.5	4.5	6.5	6.5
20	13.5	13.5	8.5	8.5	6.0	6.0	4.5	4.0	4.5	4.5	6.5	6.0
21	13.5	13.0	8.5	8.5	6.0	6.0	5.0	4.5	4.5	4.5	6.0	6.0
22	13.0	13.0	8.5	8.0	6.0	6.0	4.5	4.5	4.5	4.5	6.5	6.0
23	13.0	13.0	8.0	8.0	6.0	5.5	4.5	4.5	5.0	4.5	7.0	6.0
24	13.0	12.0	8.0	8.0	5.5	5.5	4.5	4.5	5.0	5.0	6.5	6.5
25	13.0	12.0	8.0	8.0	5.5	5.5	4.5	4.5	5.0	5.0	8.0	6.0
26	12.0	11.5	8.0	7.0	5.5	5.0	4.5	4.5	5.0	5.0	6.5	6.0
27	12.0	12.0	7.0	7.0	5.5	5.0	4.5	4.5	5.0	5.0	6.5	6.0
28	12.0	12.0	7.0	7.0	5.0	5.0	4.5	4.0	5.5	5.0	6.0	6.0
29	12.0	12.0	7.0	6.5	5.0	5.0	4.0	4.0	6.0	5.5	6.0	6.0
30	12.0	12.0	6.5	6.5	5.0	5.0	4.0	4.0	---	---	6.0	5.5
31	12.0	11.5	---	---	5.0	5.0	4.0	4.0	---	---	6.0	5.5
MONTH	14.5	11.5	11.5	6.5	6.5	5.0	5.0	4.0	6.0	3.5	10.0	5.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	6.0	5.5	5.0	9.0	8.0	9.5	9.0	10.0	9.5	13.0	12.0
2	7.0	6.5	5.5	5.5	9.0	8.0	9.5	9.0	11.0	10.0	13.0	12.0
3	6.5	6.5	5.5	5.0	9.0	8.5	9.0	9.0	10.0	10.0	13.0	12.0
4	6.5	6.5	5.5	5.5	9.0	8.0	9.0	9.0	10.0	10.0	13.0	12.0
5	6.5	6.5	5.5	5.5	9.0	8.0	9.0	9.0	10.0	10.0	13.5	13.0
6	6.5	6.5	6.0	5.5	8.5	8.0	9.0	9.0	10.0	10.0	13.5	12.0
7	7.0	6.5	6.5	6.0	9.0	8.5	9.5	9.0	10.5	10.0	13.5	13.0
8	7.0	6.5	6.5	6.0	9.5	8.5	10.0	9.0	11.0	10.5	13.5	13.5
9	7.0	6.5	6.5	6.0	9.0	8.5	10.0	9.5	11.0	11.0	13.5	13.5
10	7.0	6.0	6.5	6.0	9.5	8.5	9.5	9.0	11.5	11.0	14.0	13.5
11	6.5	6.0	6.5	6.0	9.0	8.5	10.0	9.0	11.0	10.5	14.0	13.5
12	6.0	6.0	6.5	6.0	8.5	7.0	10.0	9.0	11.0	11.0	14.0	13.5
13	6.0	6.0	6.5	6.0	8.5	7.0	10.0	9.5	11.0	11.0	14.0	13.5
14	6.0	5.5	6.5	5.5	9.0	8.0	10.0	9.5	11.0	11.0	14.0	13.5
15	6.5	6.0	7.0	5.5	9.0	8.5	10.0	9.5	11.0	11.0	14.0	14.0
16	6.5	6.0	6.5	6.0	8.5	8.5	10.0	9.5	11.0	11.0	14.5	14.0
17	6.5	6.0	7.0	6.0	8.5	8.5	10.0	9.5	12.0	11.0	14.5	14.0
18	6.5	6.0	8.0	6.5	9.0	8.5	10.0	9.5	11.0	11.0	14.5	12.0
19	6.5	6.0	8.5	7.0	9.0	8.5	10.0	9.5	11.5	11.0	15.5	14.5
20	6.0	6.0	8.0	7.0	9.0	8.5	10.0	9.5	11.5	11.0	14.5	14.0
21	6.0	6.0	8.0	7.0	9.0	8.5	10.0	9.0	11.5	11.0	14.5	14.5
22	6.5	6.0	8.0	8.0	8.5	8.0	10.0	9.0	11.5	11.0	15.0	14.5
23	6.0	6.0	8.5	8.0	9.0	8.0	10.0	9.5	11.5	11.0	15.0	14.5
24	6.0	6.0	9.0	8.0	8.5	8.5	10.0	9.5	12.0	11.0	15.0	14.5
25	6.0	5.5	8.5	8.0	9.0	8.5	10.0	9.0	12.0	11.5	15.0	14.5
26	6.5	5.5	8.5	8.0	9.0	8.5	10.0	9.5	12.0	11.5	15.5	14.5
27	6.5	5.5	8.5	8.0	9.5	9.0	10.0	9.5	12.0	11.5	15.0	14.5
28	6.0	5.5	8.5	8.0	9.5	9.0	10.0	9.5	12.0	11.5	14.5	14.5
29	6.0	5.5	8.5	8.0	9.5	9.0	10.0	9.5	12.0	12.0	15.0	14.5
30	6.0	5.5	9.0	8.0	9.5	9.0	10.5	9.5	12.0	12.0	15.0	14.5
31	---	---	9.0	8.0	---	---	10.5	10.0	12.0	12.0	---	---
MONTH	7.0	5.5	9.0	5.0	9.5	7.0	10.5	9.0	12.0	9.5	15.5	12.0

14148000 MIDDLE FORK WILLAMETTE RIVER BELOW NORTH FORK, NEAR OAKRIDGE, OREG.

LOCATION.—Lat 43°48'05", long 122°33'35", in SW¼ sec.27, T.20 S., R.2 E., Lane County, temperature recorder at gaging station on left bank, 0.5 mi (0.8 km) downstream from Whitehead Creek, 4.2 mi (6.8 km) downstream from North Fork of Middle Fork Willamette River, 7.0 mi (11.3 km) northwest of Oakridge, and at mile 220.2 (354.3 km).

DRAINAGE AREA.—924 mi^2 (2,393 km^2).

PERIOD OF RECORD.--Water temperatures: September 1950 to October 1960, June 1961 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 20.0°C Aug. 7; minimum, 2.0°C Jan. 3.

Period of record:
Water temperatures: Maximum, 23.5°C Aug. 3, 1961; minimum, freezing point Jan. 20-22, 1962.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	12.0	9.5	9.0	6.0	5.5	4.0	4.0	4.5	4.0	5.0	4.5
2	13.5	12.0	9.5	9.0	5.5	5.5	4.0	3.5	4.0	3.5	5.5	5.0
3	14.0	12.0	9.5	9.0	5.5	5.5	3.5	2.0	4.0	3.5	5.0	5.0
4	14.0	13.0	9.0	8.0	5.5	5.0	3.5	3.0	4.0	4.0	5.0	5.0
5	14.5	13.0	8.0	7.0	5.5	5.0	3.5	3.0	4.0	4.0	5.5	5.0
6	14.0	13.0	8.0	6.5	5.5	5.0	3.5	3.0	4.5	4.0	5.5	5.5
7	14.5	13.5	8.0	7.0	5.0	5.0	3.5	3.5	4.5	4.5	5.5	5.0
8	14.5	13.0	8.0	8.0	5.0	4.5	3.5	3.0	4.5	4.5	6.0	5.0
9	14.5	13.0	8.0	8.0	5.0	5.0	3.5	3.0	4.5	4.5	5.5	5.5
10	14.5	13.5	8.0	8.0	5.0	4.5	3.5	3.0	4.5	4.5	5.5	5.5
11	14.0	13.5	8.0	8.0	5.0	4.5	4.5	3.5	4.5	4.5	6.0	5.5
12	14.5	13.5	8.5	8.0	5.0	4.5	5.0	4.5	4.5	4.5	6.0	5.5
13	13.5	13.5	8.0	8.0	4.5	4.5	5.0	5.0	4.5	4.5	6.0	5.5
14	13.5	13.0	8.0	6.5	4.5	4.5	5.0	4.5	4.5	4.5	6.0	5.5
15	13.0	12.0	7.0	6.5	5.0	4.5	4.5	4.5	5.0	4.5	6.0	5.5
16	13.0	12.0	7.0	6.5	5.0	4.5	4.5	4.5	5.0	5.0	6.0	5.5
17	12.0	11.5	7.0	6.5	5.0	4.5	5.0	4.5	5.5	5.0	6.5	5.5
18	12.0	11.5	7.0	6.5	4.5	4.5	5.0	5.0	5.5	5.0	6.0	6.0
19	12.0	12.0	6.5	6.5	4.5	4.5	5.0	5.0	5.5	5.5	6.0	5.5
20	12.0	11.5	7.0	6.5	4.5	4.5	5.0	5.0	5.5	5.5	6.0	5.5
21	11.5	11.0	6.5	6.5	5.0	4.5	5.0	5.0	5.5	5.0	6.0	6.0
22	11.5	11.5	6.5	6.5	5.0	4.5	5.5	5.0	5.5	5.5	6.0	6.0
23	11.5	11.5	6.5	6.5	4.5	4.5	5.5	5.5	5.5	5.0	6.0	6.0
24	11.5	11.0	6.5	6.0	4.5	4.5	5.5	5.0	5.0	5.0	6.0	5.5
25	11.5	11.0	6.0	5.5	4.5	4.5	5.0	5.0	5.5	5.0	5.5	5.0
26	11.5	11.0	6.0	5.5	4.5	4.0	5.0	4.5	5.5	5.0	5.5	5.0
27	11.0	10.0	6.0	5.5	4.0	3.5	4.5	4.5	5.5	5.5	5.5	5.0
28	10.0	9.5	6.0	5.5	3.5	3.5	4.5	4.0	6.0	5.5	5.5	5.0
29	10.0	9.0	6.0	5.5	3.5	3.5	4.5	4.0	5.5	5.0	6.0	5.0
30	9.5	9.5	6.0	6.0	4.0	3.5	4.0	4.0	---	---	6.5	5.0
31	9.5	9.0	---	---	4.0	3.5	4.5	4.0	---	---	6.0	5.0
MONTH	14.5	9.0	9.5	5.5	6.0	3.5	5.5	2.0	6.0	3.5	6.5	4.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	5.5	7.0	6.0	10.0	8.5	14.5	11.5	18.0	14.5	15.5	13.5
2	8.0	6.0	8.0	6.0	10.5	8.5	15.0	12.0	18.0	14.5	15.5	13.5
3	7.0	6.0	8.5	6.5	10.5	9.0	15.0	12.0	18.5	15.0	15.5	13.5
4	7.0	6.0	8.5	6.5	10.0	9.0	15.5	12.0	18.5	15.0	15.0	13.5
5	7.0	6.0	8.5	6.5	11.0	9.0	15.5	13.0	18.5	15.5	14.5	14.0
6	6.5	6.0	8.5	6.5	10.5	9.5	15.0	13.0	19.0	15.5	15.5	13.5
7	6.0	5.5	8.0	6.5	10.0	9.5	15.0	12.0	20.0	14.5	15.5	13.0
8	6.0	5.5	7.0	6.0	10.5	9.0	13.5	11.5	16.5	14.5	15.5	13.5
9	6.0	5.5	8.5	6.5	10.0	9.0	14.0	10.5	17.0	14.5	15.0	13.5
10	6.0	5.5	8.5	6.5	9.5	9.0	14.5	11.0	16.5	14.0	14.5	13.0
11	6.5	6.0	9.0	6.5	10.0	8.5	15.5	12.0	16.0	13.5	14.5	13.0
12	6.0	5.5	9.0	7.0	11.0	8.5	15.5	13.0	15.0	13.0	15.0	13.0
13	6.0	5.5	9.5	7.0	11.0	9.0	17.0	14.0	15.0	13.0	15.5	13.0
14	6.5	5.5	9.5	7.0	11.5	9.5	16.5	13.5	14.5	13.0	15.5	13.5
15	6.5	6.0	8.5	7.0	11.0	10.0	16.5	13.5	14.0	13.0	15.5	13.5
16	6.5	6.0	8.0	7.0	11.5	10.0	16.5	14.0	14.0	11.5	15.5	13.5
17	6.0	5.5	8.0	6.5	12.0	9.5	18.0	14.0	14.0	11.5	15.5	14.0
18	6.5	5.0	8.5	6.5	13.0	10.0	17.0	14.5	13.5	11.5	15.0	13.5
19	6.5	5.0	8.5	6.5	13.0	10.5	16.5	14.0	14.0	12.0	15.0	14.0
20	6.5	5.5	8.5	7.0	13.5	10.5	15.5	13.5	14.5	13.0	14.5	13.5
21	6.0	6.0	8.0	7.0	13.5	11.0	16.5	13.0	15.0	13.0	14.0	13.5
22	6.5	5.5	8.0	7.0	13.5	10.5	16.5	13.5	15.0	13.0	14.5	13.5
23	6.5	6.0	8.0	7.0	12.0	10.5	16.5	13.5	15.0	12.0	14.0	13.5
24	6.5	6.0	9.0	7.0	11.5	10.0	18.0	14.5	15.0	13.0	13.5	13.0
25	6.5	6.0	9.0	7.0	12.0	10.0	18.0	14.5	15.5	13.0	14.0	13.0
26	7.0	6.0	9.5	8.0	13.0	10.0	18.0	16.0	15.5	13.0	14.5	13.0
27	8.0	6.0	10.0	8.5	14.0	10.0	18.0	14.0	15.5	13.5	14.5	13.0
28	7.0	5.5	10.0	8.5	14.5	11.0	18.0	14.5	16.0	13.5	14.0	13.0
29	6.0	5.5	10.0	8.5	14.5	11.5	18.5	15.0	15.5	13.5	15.0	13.0
30	7.0	5.5	10.0	8.5	14.5	11.5	19.0	15.0	15.5	13.5	15.0	13.0
31	---	---	10.0	8.5	---	---	18.5	15.0	15.5	13.5	---	---
MONTH	8.0	5.0	10.0	6.0	14.5	8.5	19.0	10.5	20.0	11.5	15.5	13.0

14150000 MIDDLE FORK WILLAMETTE RIVER NEAR DEXTER, OREG.

LOCATION.--Lat 43°56'45", long 122°50'10", near center of sec.5, T.19 S., R.1 W., Lane County, temperature recorder at gaging station on right bank, 0.6 mi (1.0 km) upstream from Lost Creek, 2.0 mi (3.2 km) northwest of Dexter, 2.6 mi (4.2 km) downstream from Dexter Dam, and at mile 201.2 (323.7 km).

DRAINAGE AREA.--1,001 mi^2 (2,593 km^2).

PERIOD OF RECORD.--Water temperatures: August 1955 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 15.5°C on many days during October, August, and September; minimum, 4.0°C Jan. 16, 17, Feb. 8-10.

Period of record:
Water temperatures: Maximum, 18.5°C Sept. 17, 21, 22, 24, 25, 1961; minimum, 3.5°C on several days in 1957 and 1969.

WATER TEMPERATURE (DEG. C) . WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	14.5	12.0	11.5	8.5	8.0	5.0	5.0	5.0	4.5	6.0	6.0
2	15.0	14.5	11.5	11.5	8.0	8.0	5.0	5.0	5.0	4.5	6.0	6.0
3	15.0	14.5	11.5	11.0	8.0	8.0	5.0	4.5	5.0	4.5	6.5	6.0
4	15.5	15.0	11.0	11.0	8.0	8.0	5.0	4.5	4.5	4.5	6.0	6.0
5	15.5	15.0	11.5	11.0	8.0	8.0	5.0	4.5	4.5	4.5	6.0	6.0
6	15.5	15.0	11.0	10.5	8.0	8.0	4.5	4.5	4.5	4.5	6.0	6.0
7	15.5	15.0	11.0	10.5	8.0	7.0	4.5	4.5	4.5	4.5	6.0	5.5
8	15.5	15.0	10.5	10.5	7.0	7.0	4.5	4.5	4.5	4.0	5.5	5.5
9	15.5	15.0	10.5	10.5	7.0	6.5	4.5	4.5	4.5	4.0	5.5	5.5
10	15.5	15.5	10.5	10.5	6.5	6.5	4.5	4.5	4.5	4.0	6.0	5.5
11	15.5	15.0	10.5	10.5	6.5	6.5	4.5	4.5	4.5	4.5	6.0	6.0
12	15.5	15.0	10.5	10.5	6.5	6.5	4.5	4.5	4.5	4.5	6.0	6.0
13	15.0	14.5	10.5	10.5	6.5	6.5	4.5	4.5	4.5	4.5	6.5	6.0
14	14.5	14.5	10.5	10.0	6.5	6.0	4.5	4.5	4.5	4.5	6.5	6.0
15	14.5	14.0	10.0	10.0	6.0	6.0	4.5	4.5	4.5	4.5	6.5	6.0
16	14.5	14.0	10.0	10.0	6.0	6.0	4.5	4.0	4.5	4.5	6.5	6.5
17	14.0	14.0	10.0	10.0	6.0	6.0	4.5	4.0	5.0	4.5	7.0	6.5
18	14.0	14.0	10.0	9.5	6.0	6.0	5.0	4.5	5.0	5.0	6.5	6.5
19	14.0	14.0	9.5	9.5	6.0	6.0	5.0	4.5	5.0	5.0	6.5	6.5
20	14.0	14.0	9.5	9.5	6.0	5.5	5.5	4.5	5.5	5.0	7.0	6.5
21	14.0	13.5	9.5	9.5	5.5	5.5	5.5	5.5	5.5	5.0	7.0	7.0
22	13.5	13.5	9.5	9.5	5.5	5.5	5.5	5.0	5.5	5.0	7.0	6.5
23	13.5	13.5	9.5	9.0	5.5	5.5	5.0	5.0	5.5	5.5	7.0	6.5
24	13.5	13.5	9.0	9.0	5.5	5.5	5.0	5.0	5.5	5.5	7.0	7.0
25	13.5	13.5	9.0	9.0	5.5	5.5	5.0	5.0	6.0	5.5	7.0	6.5
26	13.5	13.0	9.0	9.0	5.5	5.0	5.0	5.0	6.0	5.5	6.5	6.0
27	13.0	13.0	9.0	9.0	5.0	5.0	5.0	5.0	6.0	5.5	6.0	6.0
28	13.0	12.0	9.0	9.0	5.0	5.0	5.0	5.0	6.5	6.0	6.5	6.0
29	12.0	12.0	9.0	8.5	5.0	5.0	5.0	5.0	6.5	6.0	6.5	6.0
30	12.0	12.0	8.5	8.5	5.0	5.0	5.0	5.0	---	---	8.0	6.0
31	12.0	12.0	---	---	5.0	5.0	5.0	5.0	---	---	7.0	6.0
MONTH	15.5	12.0	12.0	8.5	8.5	5.0	5.5	4.0	6.5	4.0	8.0	5.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.5	9.0	7.0	9.5	9.0	14.0	11.0	15.0	13.0	15.0	14.5
2	8.0	6.5	9.5	7.0	10.0	9.0	14.0	11.5	15.0	13.0	15.5	14.5
3	7.0	6.5	10.0	8.0	10.0	9.5	14.0	11.5	15.0	13.0	15.0	14.5
4	8.5	6.5	10.0	8.0	10.0	9.5	14.0	11.5	15.0	13.0	15.0	14.5
5	8.0	7.0	10.0	8.5	10.0	9.5	14.5	11.5	15.0	13.0	14.5	14.5
6	8.0	7.0	10.0	8.5	10.0	9.5	14.0	12.0	15.5	13.0	15.0	14.5
7	7.0	6.5	9.0	8.5	10.5	9.5	14.0	12.0	15.5	13.0	15.0	14.5
8	6.5	6.5	10.0	8.5	10.5	10.0	13.0	12.0	15.0	13.5	15.0	14.5
9	6.5	6.0	10.5	8.5	10.5	10.0	14.0	11.5	15.0	14.0	15.0	14.5
10	6.5	6.0	10.5	8.5	11.0	10.5	14.0	11.5	15.0	13.0	15.0	14.5
11	6.5	6.5	11.0	8.5	11.5	10.5	14.0	12.0	15.0	13.0	15.0	14.5
12	7.0	6.5	11.0	9.0	12.0	11.0	14.0	11.5	14.5	13.5	15.0	14.5
13	7.0	6.5	11.0	9.0	12.0	11.0	14.5	12.0	15.0	13.5	15.0	14.5
14	7.0	6.5	10.5	9.0	13.0	11.0	14.5	11.5	15.0	13.5	15.5	14.5
15	7.0	6.5	9.5	9.0	11.5	11.0	14.5	11.5	14.5	13.5	15.5	15.0
16	7.0	6.5	10.0	9.5	13.0	11.0	14.5	12.0	14.5	13.5	15.5	15.0
17	8.0	6.5	9.5	8.5	13.0	11.0	14.5	12.0	14.5	14.0	15.5	15.0
18	8.0	6.5	9.0	8.0	13.5	11.0	14.5	12.0	14.5	14.0	15.5	15.0
19	8.5	6.5	9.0	8.5	13.5	11.5	14.5	12.0	14.5	13.5	15.0	15.0
20	8.0	6.5	8.5	8.0	14.0	11.0	14.5	12.0	15.0	13.5	15.0	15.0
21	8.0	7.0	8.5	8.0	13.5	11.5	15.0	12.0	14.5	14.0	15.0	15.0
22	8.0	6.5	8.5	8.0	13.5	12.0	15.0	13.0	14.5	14.0	15.0	15.0
23	8.0	6.5	8.5	8.5	13.0	12.0	15.0	13.0	15.0	14.0	15.0	15.0
24	7.0	7.0	9.0	8.5	13.0	12.0	15.0	13.0	15.0	14.0	15.0	15.0
25	7.0	6.5	9.0	8.5	13.0	12.0	15.0	13.0	15.0	14.0	15.0	14.5
26	7.0	6.5	9.5	8.5	13.5	12.0	15.0	13.0	15.0	14.0	15.0	14.5
27	7.0	7.0	9.5	9.0	13.5	12.0	15.0	13.0	15.5	14.0	15.0	15.0
28	8.0	7.0	10.0	9.0	13.5	11.5	15.0	13.0	15.5	14.0	15.0	15.0
29	8.0	7.0	10.0	9.0	14.0	11.5	15.0	13.0	15.5	14.0	15.0	15.0
30	8.5	7.0	10.0	9.0	13.5	11.5	15.0	13.0	15.5	14.5	15.5	15.0
31	---	---	9.5	9.5	---	---	15.0	13.0	15.5	14.5	---	---
MONTH	8.5	6.0	11.0	7.0	14.0	9.0	15.0	11.0	15.5	13.0	15.5	14.5

14150300 FALL CREEK NEAR LOWELL, OREG.

LOCATION.--Lat 43°58'15", long 122°38'15", in SW¼ sec.25, T.18 S., R.1 E., Lane County, temperature recorder at gaging station on right bank, 0.1 mi (0.2 km) downstream from North Fork, 8.0 mi (12.9 km) northeast of Lowell, and at mile 14.4 (23.2 km).

DRAINAGE AREA.--118 mi^2 (306 km^2).

PERIOD OF RECORD.--Water temperatures: August 1963 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 23.5°C Aug. 7, 9; minimum, 3.0°C Feb. 2, 3.

Period of record:
Water temperatures: Maximum, 24.5°C Aug. 11, 1971; minimum, 0.5°C Dec. 17-21, 1965.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	6.0	8.5	5.5	14.0	12.0	20.0	15.5	20.5	17.5	19.0	15.0
2	7.0	6.5	9.5	7.0	14.5	13.0	20.5	15.5	20.0	16.0	19.5	15.5
3	7.0	6.0	10.0	8.0	14.5	13.5	21.5	16.5	20.5	16.0	19.5	15.5
4	8.5	7.0	10.0	8.5	14.5	13.5	22.0	17.5	21.0	17.0	18.0	16.0
5	8.5	8.5	11.0	9.5	16.0	14.5	22.0	18.0	22.0	17.5	17.0	15.5
6	8.5	6.5	11.0	9.5	16.0	15.5	19.5	17.5	22.5	18.5	17.5	14.5
7	6.5	5.0	10.5	9.0	16.5	15.0	19.0	16.0	23.5	19.5	17.0	13.5
8	6.0	5.0	9.0	8.5	---	---	17.0	15.0	23.0	19.5	16.0	14.0
9	5.5	5.0	10.5	9.0	14.0	12.0	18.0	14.0	23.5	19.5	15.5	14.0
10	6.0	5.0	10.5	8.5	12.0	10.0	18.0	14.0	22.5	19.0	14.0	12.5
11	6.0	6.0	11.0	9.0	13.5	10.5	20.0	16.0	21.0	18.0	14.5	11.0
12	6.0	5.0	12.0	10.5	15.5	10.5	21.0	19.0	19.5	17.0	15.0	12.0
13	5.5	5.0	13.5	11.5	16.5	12.5	22.0	18.5	19.0	15.5	15.5	12.0
14	6.5	5.5	13.5	12.0	17.5	14.0	21.5	18.0	18.0	15.5	16.0	12.5
15	6.5	5.5	13.0	11.5	16.0	13.5	22.0	18.0	17.0	15.5	16.0	13.0
16	6.5	5.5	11.5	11.0	14.5	12.5	23.0	18.5	16.0	14.0	16.0	13.0
17	5.5	5.0	11.0	9.5	16.5	11.5	23.0	18.5	16.0	14.0	15.5	14.0
18	5.5	4.5	9.5	8.5	17.5	13.0	22.0	18.5	16.0	13.5	14.5	14.0
19	6.5	4.5	10.5	8.5	18.5	14.0	21.0	17.0	17.5	14.0	14.0	13.0
20	6.0	5.0	10.5	10.0	18.5	14.5	19.5	16.0	18.5	15.0	13.5	12.0
21	6.0	6.0	10.0	9.5	17.5	15.0	20.0	15.5	19.5	16.5	13.5	13.0
22	6.5	5.5	9.5	9.0	17.5	14.0	20.5	16.0	20.0	16.5	13.0	12.0
23	7.0	6.0	9.5	9.0	15.5	14.0	20.5	16.5	19.0	15.5	12.0	11.0
24	7.0	6.5	10.0	8.0	14.0	13.0	20.5	17.0	19.0	15.5	11.5	10.5
25	6.5	6.0	10.0	8.5	15.0	12.5	20.0	17.0	19.5	15.5	11.0	9.5
26	8.5	6.0	12.0	9.5	16.0	13.0	20.0	16.0	20.0	16.0	11.0	9.0
27	9.5	7.0	13.5	11.0	18.5	13.5	20.5	16.0	21.0	17.0	10.5	8.5
28	9.5	6.0	14.5	13.0	20.0	15.5	20.5	16.5	21.0	17.5	10.0	8.0
29	6.0	5.5	15.0	14.0	20.5	16.0	21.0	17.0	21.0	17.5	10.5	8.0
30	7.0	5.0	14.5	13.0	20.0	16.0	21.0	17.5	20.0	17.0	11.0	9.0
31	---	---	14.0	13.0	---	---	21.0	18.0	19.0	15.5	---	---
MONTH	9.5	4.5	15.0	5.5	20.5	10.0	23.0	14.0	23.5	13.5	19.5	8.0

14150800 WINBERRY CREEK NEAR LOWELL, OREG.

LOCATION.--Lat 43°54'50", long 122°41'15", in NE¼SE¼ sec.16, T.19 S., R.1 E., Lane County, temperature recorder at gaging station on right bank, 0.9 mi (1.5 km) upstream from Nelson Creek, 4.6 mi (7.4 km) east of Lowell, and at mile 4.4 (7.1 km).

DRAINAGE AREA.--43.9 mi^2 (113.7 km^2).

PERIOD OF RECORD.--Water temperatures: August 1963 to September 1972.

EXTREMES.--1971-72:

Water temperatures: Maximum, 26.0°C July 16, 17, Aug. 7; minimum, freezing point Jan. 4, 30, Feb. 2, 3.

Period of record:
Water temperatures: Maximum, 26.5°C July 3, 1967: minimum, freezing point on several days in 1965, and Jan. 4, 30, Feb. 2, 3. 1972.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	8.5	8.0	7.0	8.0	6.5	3.5	2.5	2.5	0.5	6.5	4.0
2	11.5	7.5	7.5	6.0	7.5	6.0	4.5	2.5	1.0	0.0	7.5	6.0
3	12.0	8.0	7.5	6.0	6.5	6.0	2.5	1.0	2.5	0.0	6.5	5.5
4	13.0	9.0	8.0	6.0	7.0	6.0	2.0	0.0	3.5	1.5	7.5	5.5
5	13.5	9.5	6.0	4.0	9.0	7.0	3.0	1.5	4.5	2.5	9.0	6.0
6	14.0	10.5	5.0	3.0	7.5	6.0	3.5	2.0	5.0	2.5	7.5	5.0
7	15.0	11.5	7.0	4.0	6.0	5.0	4.0	3.0	6.0	4.0	6.5	4.5
8	14.5	10.5	7.0	4.5	7.0	4.5	3.0	2.5	5.5	3.0	8.0	7.0
9	14.5	11.0	8.5	5.5	5.5	4.0	4.0	3.0	5.0	3.0	8.0	7.0
10	13.0	11.5	9.0	7.0	6.0	4.5	4.0	3.5	5.5	3.0	8.5	7.0
11	13.5	12.0	9.5	7.5	6.0	4.5	6.0	4.0	5.5	3.5	9.0	7.0
12	13.5	11.0	9.0	7.0	6.0	4.0	6.5	5.5	6.5	4.5	9.5	7.5
13	12.0	10.5	8.5	7.0	5.5	4.0	6.0	4.5	6.5	4.5	9.0	7.0
14	11.0	9.5	7.5	6.5	6.0	4.0	4.5	3.5	6.0	4.0	8.5	6.0
15	9.5	8.0	7.5	5.5	6.5	4.5	5.0	3.5	7.0	5.0	10.0	7.5
16	9.0	6.0	6.0	4.5	6.5	5.0	5.5	3.5	7.0	5.0	10.5	7.5
17	7.5	4.5	6.0	4.5	6.0	4.0	6.0	4.5	8.0	5.5	10.5	8.0
18	9.0	6.5	6.5	5.5	6.0	4.5	7.0	5.5	8.0	5.0	9.0	7.0
19	10.0	8.5	7.0	5.0	6.5	4.5	7.5	5.5	8.5	6.5	8.0	6.5
20	10.0	7.5	7.5	5.5	6.5	4.0	7.5	5.5	6.5	4.5	8.5	5.5
21	8.5	6.0	7.0	6.0	6.0	4.5	7.5	5.5	7.0	4.0	8.5	7.0
22	9.5	8.0	8.0	6.5	6.5	4.0	7.5	5.5	6.0	4.5	8.0	6.5
23	9.0	8.0	7.5	5.5	6.0	4.0	7.0	4.0	6.0	4.5	7.5	6.0
24	10.0	7.0	8.5	6.5	5.5	4.0	5.5	4.0	5.5	4.0	6.5	4.5
25	8.5	5.5	7.5	6.0	5.5	3.0	5.5	3.5	6.5	4.5	4.5	3.5
26	9.5	8.0	9.0	7.0	4.0	2.5	4.0	3.0	6.5	4.5	5.5	3.5
27	8.0	6.0	9.0	7.5	2.5	1.5	3.5	1.5	8.0	6.0	6.0	4.0
28	6.5	4.0	9.0	7.5	2.5	1.0	3.0	1.0	8.5	6.5	6.5	4.0
29	5.0	3.0	9.0	7.5	3.5	2.0	2.0	0.5	6.5	4.0	7.0	3.0
30	6.0	4.5	9.0	7.0	4.5	2.5	2.0	0.0	---	---	8.0	3.5
31	8.0	6.0	---	---	4.5	3.0	3.0	1.0	---	---	7.5	4.5
MONTH	15.0	3.0	9.5	3.0	9.0	1.0	7.5	0.0	8.5	0.0	10.5	3.0

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

14151000 FALL CREEK BELOW WINBERRY CREEK, NEAR FALL CREEK, OREG.

LOCATION.--Lat 43°56'40", long 122°46'25", in NW¼SE¼ sec.2, T.19 S., R.1 W., Lane County, temperature recorder at gaging station on left bank, 10 ft (3 m) upstream from highway bridge, 1.1 mi (1.8 km) downstream from Fall Creek Dam, 2.3 mi (3.7 km) southeast of town of Fall Creek, and at mile 6.1 (9.8 km).

DRAINAGE AREA.--186 mi^2 (482 km^2).

PERIOD OF RECORD.--Water temperatures: August 1950 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 20.5°C Sept. 11; minimum, 5.0°C Feb. 9-20.

Period of record:
Water temperatures: Maximum, 26.0°C July 28, 1958; minimum, 0.5°C on several days in 1962 and 1965.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	14.5	9.5	9.0	8.0	7.0	6.0	6.0	6.0	6.0	7.0	6.0
2	15.0	14.5	9.5	9.5	7.0	7.0	6.0	6.0	6.0	6.0	7.0	6.5
3	15.0	15.0	9.5	9.0	7.0	7.0	6.0	6.0	6.0	5.5	6.5	6.0
4	15.0	15.0	9.5	9.0	7.0	7.0	6.0	6.0	5.5	5.5	6.0	6.0
5	15.0	15.0	9.0	8.5	8.0	7.0	6.0	6.0	5.5	5.5	6.0	6.0
6	15.5	15.0	9.0	8.5	8.0	7.0	6.0	6.0	5.5	5.5	6.5	6.0
7	15.5	15.5	8.5	8.5	7.0	6.5	6.0	6.0	5.5	5.5	6.5	6.0
8	15.5	15.5	8.5	8.0	6.5	6.5	6.5	6.0	5.5	5.5	6.5	6.5
9	16.0	15.5	8.0	8.0	7.0	6.5	7.0	6.5	5.5	5.0	6.5	6.5
10	16.0	15.5	8.0	8.0	6.5	6.5	8.5	6.0	5.0	5.0	6.5	6.5
11	16.0	16.0	8.0	8.0	6.5	6.5	7.0	6.0	5.0	5.0	6.5	6.5
12	16.0	16.0	8.0	8.0	6.5	6.5	6.0	6.0	5.0	5.0	7.0	6.5
13	16.0	16.0	8.0	8.0	6.5	6.5	6.0	6.0	5.0	5.0	6.5	6.5
14	16.0	16.0	8.0	8.0	6.5	6.5	6.0	6.0	5.0	5.0	7.0	6.5
15	16.0	15.5	8.0	8.0	6.5	6.5	6.0	6.0	5.0	5.0	6.5	6.5
16	15.5	15.0	8.0	8.0	6.5	6.5	6.0	6.0	5.0	5.0	7.0	6.5
17	15.0	15.0	8.0	8.0	6.5	6.5	6.0	6.0	6.0	5.0	7.0	6.5
18	15.0	14.5	8.0	8.0	6.5	6.5	6.5	6.0	5.5	5.0	7.0	6.5
19	14.5	14.5	8.0	8.0	6.5	6.5	6.0	6.0	5.0	5.0	7.0	7.0
20	14.5	13.5	8.0	8.0	6.5	6.5	7.0	6.0	5.5	5.0	7.0	7.0
21	13.5	13.5	8.0	8.0	6.5	6.5	7.0	6.5	6.0	5.5	7.0	7.0
22	13.5	13.5	8.0	7.0	6.5	6.5	6.5	6.5	6.0	5.5	7.0	7.0
23	13.5	13.5	7.0	7.0	6.5	6.5	6.5	6.5	6.0	5.5	7.0	7.0
24	13.5	13.0	7.0	7.0	6.5	6.5	6.5	6.5	5.5	5.5	7.0	7.0
25	13.0	13.0	7.0	7.0	6.5	6.5	6.5	6.5	5.5	5.5	7.0	7.0
26	13.0	12.0	7.0	7.0	6.5	6.5	6.5	6.5	6.0	5.5	8.0	7.0
27	12.0	11.5	8.0	7.0	6.5	6.5	6.5	6.5	6.0	5.5	8.0	8.0
28	11.5	10.5	8.0	8.0	6.5	6.0	6.5	6.0	6.5	6.0	8.0	7.0
29	10.5	10.0	8.0	8.0	6.5	6.0	6.0	6.0	6.0	6.0	8.5	7.0
30	10.0	10.0	8.0	8.0	6.5	6.0	6.0	6.0	---	---	10.0	8.0
31	10.0	9.5	---	---	6.5	6.0	6.0	6.0	---	---	9.0	8.0
MONTH	16.0	9.5	9.5	7.0	8.0	6.0	8.5	6.0	6.5	5.0	10.0	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	9.0	8.0	9.0	9.0	15.0	14.5	8.5	8.5	9.5	9.5
2	9.0	8.5	9.0	8.5	10.5	9.0	15.5	14.5	8.5	8.5	10.0	9.5
3	9.0	8.0	9.5	8.5	12.0	10.5	15.5	14.5	8.5	8.5	10.0	10.0
4	8.0	8.0	10.5	9.0	12.0	11.5	16.0	14.5	8.5	8.5	10.5	10.0
5	8.0	8.0	10.0	9.5	12.0	11.5	15.5	15.0	8.5	8.5	11.0	10.5
6	8.0	7.0	10.0	8.0	12.0	11.5	16.0	15.0	8.5	8.5	20.0	11.0
7	8.0	7.0	8.0	8.0	12.0	11.5	15.5	9.5	8.5	8.5	20.0	19.5
8	8.0	8.0	10.5	8.0	12.0	11.5	9.5	9.5	8.5	8.5	20.0	20.0
9	8.0	8.0	12.0	10.0	12.0	11.0	10.0	9.0	8.5	8.5	20.0	20.0
10	8.0	7.0	13.0	10.0	11.5	10.5	10.0	9.0	8.5	8.0	20.0	20.0
11	8.0	8.0	13.5	10.0	11.5	10.5	10.0	9.0	8.5	8.5	20.5	20.0
12	8.0	7.0	13.5	10.0	13.0	11.5	10.0	9.0	8.5	8.5	20.0	20.0
13	7.0	7.0	13.0	10.5	13.0	12.0	10.0	9.0	8.5	8.5	20.0	20.0
14	7.0	7.0	12.0	10.5	13.0	12.0	10.5	9.0	8.5	8.5	20.0	19.5
15	7.0	7.0	11.0	10.5	13.0	12.0	10.0	9.0	8.5	8.5	20.0	19.5
16	7.0	7.0	11.0	10.5	13.0	12.0	10.0	9.0	8.5	8.5	20.0	19.5
17	7.0	7.0	11.0	9.5	13.0	12.0	10.0	9.0	8.5	8.5	20.0	19.5
18	7.0	7.0	10.0	9.0	13.5	13.0	9.5	9.0	8.5	8.5	19.5	19.5
19	8.0	7.0	9.5	9.0	14.0	13.5	9.5	9.0	8.5	8.5	19.5	19.5
20	8.0	7.0	9.5	9.0	14.0	13.5	9.5	9.0	8.5	8.5	19.5	19.0
21	8.0	8.0	9.0	9.0	14.5	13.5	9.0	9.0	8.5	8.5	19.0	19.0
22	8.0	7.0	9.0	9.0	14.0	13.5	9.0	9.0	8.5	8.5	19.0	18.5
23	8.0	7.0	9.0	9.0	14.0	13.5	9.0	9.0	8.5	8.5	18.5	18.5
24	8.0	8.0	10.0	9.0	14.0	13.5	9.0	8.5	9.0	8.5	18.5	18.0
25	8.0	8.0	10.0	9.5	14.0	13.5	8.5	8.5	9.0	9.0	18.0	13.5
26	8.0	7.0	10.0	9.5	14.5	13.5	8.5	8.5	9.0	9.0	13.5	13.5
27	8.0	7.0	11.0	10.0	15.0	13.5	8.5	8.5	9.0	9.0	14.0	13.5
28	8.5	8.0	11.0	11.0	14.5	14.0	8.5	8.5	9.0	9.0	15.0	14.0
29	8.5	8.5	11.0	9.5	15.0	14.0	8.5	8.5	9.0	9.0	15.0	15.0
30	8.5	8.0	11.5	9.5	15.0	14.5	8.5	8.5	9.5	9.0	15.5	15.5
31	---	---	11.0	9.0	---	---	8.5	8.5	9.5	9.5	---	---
MONTH	9.0	7.0	13.5	8.0	15.0	9.0	16.0	8.5	9.5	8.0	20.5	9.5

14152000 MIDDLE FORK WILLAMETTE RIVER AT JASPER, OREG.

LOCATION.--Lat 43°59'55", long 122°54'20", in SW¼SW¼ sec.14, T.18 S., R.2 W., Lane County, temperature recorder at gaging station on right bank 25 ft (8 m) downstream from highway bridge at Jasper, 0.1 mi (0.2 km) downstream from Hills Creek, and at mile 195.0 (313.8 km).

DRAINAGE AREA.--1,340 mi² (3,470 km²).

PERIOD OF RECORD.--Water temperatures: October 1953 to December 1962, October 1963 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 18.5°C July 4, 5; minimum, 3.5°C Jan. 4.

Period of record:
Water temperatures: Maximum, 20.5°C July 27, 28, 1958; minimum, 1.5°C Jan. 25-27, 1969.

WATER TEMPERATURE (DEG. C) • WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	13.5	11.0	10.5	8.5	8.0	5.0	5.0	5.0	4.5	7.0	6.5
2	14.5	13.5	10.5	10.5	8.0	8.0	5.0	5.0	4.5	4.5	7.0	7.0
3	14.5	14.0	10.5	10.0	8.0	8.0	5.0	4.0	4.5	4.5	7.0	7.0
4	15.0	14.0	10.0	9.5	8.0	8.0	4.0	3.5	4.5	4.5	7.0	7.0
5	15.0	14.5	9.5	9.0	8.0	8.0	4.0	4.0	4.5	4.5	7.0	7.0
6	15.0	14.5	10.0	9.5	8.0	8.0	4.0	4.0	5.0	4.5	7.0	7.0
7	15.0	14.5	10.0	10.0	8.0	7.0	4.0	4.0	5.5	5.0	7.0	6.5
8	15.0	14.5	10.0	9.5	7.0	7.0	4.0	4.0	5.0	5.0	7.0	6.5
9	15.0	14.5	9.5	9.5	7.0	7.0	4.5	4.0	5.0	5.0	7.0	7.0
10	15.0	14.5	9.5	9.5	7.0	6.5	4.5	4.5	5.0	5.0	7.0	7.0
11	14.5	14.5	9.5	9.5	6.5	6.5	5.5	4.5	5.0	5.0	7.0	7.0
12	15.0	14.5	10.0	9.5	6.5	6.5	5.5	5.5	5.0	5.0	7.0	7.0
13	15.0	15.0	10.0	9.5	6.5	6.5	5.5	5.5	5.5	5.0	8.0	7.0
14	15.0	15.0	9.5	9.0	6.5	6.5	5.5	5.0	5.5	5.5	8.0	7.0
15	15.0	14.5	9.5	9.0	6.5	6.0	5.5	5.0	5.5	5.5	8.0	7.0
16	14.5	14.0	9.5	9.0	6.0	6.0	5.0	5.0	6.0	5.5	8.0	7.0
17	14.0	14.0	9.5	9.5	6.0	6.0	5.0	5.0	6.0	6.0	8.5	8.0
18	14.0	14.0	9.5	9.0	6.0	6.0	6.0	5.0	6.0	6.0	8.0	8.0
19	14.0	14.0	9.0	9.0	6.0	6.0	6.5	6.0	6.0	6.0	8.0	7.0
20	14.0	13.5	9.0	9.0	6.0	6.0	6.5	6.5	6.5	6.0	8.0	7.0
21	13.5	13.5	9.0	9.0	6.0	6.0	6.5	6.5	6.0	6.0	8.0	8.0
22	13.5	13.5	9.0	9.0	6.0	6.0	6.5	6.5	6.0	6.0	8.0	8.0
23	13.5	13.5	9.0	9.0	6.0	5.5	6.5	6.0	6.5	6.0	8.0	8.0
24	13.5	13.0	9.0	9.0	5.5	5.5	6.0	6.0	6.0	6.0	8.0	7.0
25	13.5	13.0	9.0	8.5	5.5	5.5	6.0	5.5	6.5	6.0	7.0	7.0
26	13.5	13.0	8.5	8.5	5.5	5.0	5.5	5.5	6.5	6.5	7.0	6.5
27	13.0	11.5	8.5	8.5	5.0	5.0	5.5	5.0	8.0	6.5	7.0	6.5
28	12.0	11.5	8.5	8.5	5.0	5.0	5.5	5.0	8.5	8.0	8.0	6.5
29	11.5	11.0	8.5	8.5	5.0	5.0	5.5	5.0	8.0	6.5	9.0	6.5
30	11.5	11.0	8.5	8.5	5.0	5.0	5.0	5.0	---	---	9.5	6.5
31	11.0	11.0	---	---	5.0	5.0	5.0	5.0	---	---	8.0	7.0
MONTH	15.0	11.0	11.0	8.5	8.5	5.0	6.5	3.5	8.5	4.5	9.5	6.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	10.0	6.5	10.5	9.5	17.0	13.5	15.5	13.0	16.0	15.0
2	10.0	8.0	11.0	7.0	12.0	10.0	17.0	14.0	15.5	12.0	16.5	15.0
3	9.5	8.0	12.0	8.0	11.5	10.5	18.0	14.0	16.0	12.0	16.5	15.0
4	10.5	9.0	13.0	8.5	12.0	10.5	18.5	15.0	16.0	13.0	16.0	15.0
5	10.0	9.5	12.0	9.0	13.0	11.0	18.5	15.0	16.0	13.0	15.5	15.5
6	9.5	8.5	11.0	9.0	12.0	11.0	16.5	15.0	16.0	13.0	16.5	15.5
7	8.5	8.0	9.5	8.5	13.0	11.0	16.5	14.5	16.5	13.0	17.0	16.0
8	8.0	8.0	10.5	8.0	13.0	11.5	15.0	14.5	15.5	13.5	16.0	15.5
9	8.0	7.0	13.0	9.0	12.0	11.0	17.0	14.0	16.0	14.0	16.0	16.0
10	8.5	7.0	12.0	8.5	11.5	11.0	17.0	14.0	16.0	13.0	16.0	15.5
11	8.0	7.0	13.5	9.0	12.0	11.0	18.0	15.0	16.0	13.0	16.0	15.5
12	7.0	6.5	14.0	9.5	13.5	11.5	18.0	14.5	15.0	13.5	16.5	15.5
13	7.0	6.5	14.0	10.0	14.0	12.0	18.0	15.0	15.5	13.5	16.5	15.5
14	8.5	7.0	14.0	10.5	15.5	12.0	17.0	14.5	15.5	14.0	16.5	16.0
15	8.0	7.0	11.5	10.0	14.0	13.0	18.0	14.0	15.0	14.0	16.5	16.0
16	8.0	7.0	10.5	10.0	15.0	12.0	18.0	14.0	15.0	13.5	16.5	16.0
17	8.0	6.5	10.5	9.5	15.5	11.5	18.0	14.0	15.0	14.0	16.5	16.0
18	8.5	6.0	10.5	9.0	16.0	12.0	17.0	14.5	15.0	13.5	16.0	16.0
19	9.5	6.0	10.0	9.0	16.5	13.0	17.0	14.0	15.5	13.5	16.0	16.0
20	8.0	6.5	10.0	9.5	17.0	13.5	16.5	13.5	15.5	14.0	16.0	16.0
21	8.0	7.0	9.5	9.0	16.0	14.0	17.0	13.5	15.0	14.0	16.0	16.0
22	8.5	6.5	9.0	9.0	16.0	13.5	16.5	13.5	16.0	14.0	16.0	15.5
23	8.0	7.0	9.0	9.0	14.5	14.0	16.0	13.0	16.0	14.0	16.0	15.5
24	8.0	8.0	9.5	8.5	14.0	13.5	16.0	13.0	16.0	14.0	16.0	15.5
25	8.0	6.5	10.0	9.0	15.0	13.5	15.5	13.0	16.0	14.0	16.0	15.0
26	8.0	6.5	11.5	9.0	15.5	13.5	16.0	12.0	16.0	14.0	15.0	14.5
27	8.5	7.0	12.0	10.0	16.5	13.5	16.0	12.0	16.5	14.5	15.0	15.0
28	8.0	6.5	12.0	10.0	16.0	13.5	16.0	12.0	16.5	14.5	15.5	15.0
29	8.5	6.5	12.0	10.0	16.5	13.5	15.5	12.0	16.0	14.5	16.0	15.5
30	9.0	6.5	11.0	10.0	17.0	13.5	16.0	12.0	16.0	14.5	16.5	16.0
31	---	---	10.5	10.0	---	---	15.5	12.0	16.0	15.0	---	---
MONTH	10.5	6.0	14.0	6.5	17.0	9.5	18.5	12.0	16.5	12.0	17.0	14.5

14152500 COAST FORK WILLAMETTE RIVER AT LONDON, OREG.

LOCATION.—Lat 43°38'30", long 123°05'05", in SW¼ sec.20, T.22 S., R.3 W., Lane County, temperature recorder on left bank, 700 ft (213 m) upstream from gaging station, 0.6 mi (1.0 km) north of London, 11 mi (17.7 km) south of Cottage Grove, and at mile 35.9 (57.8 km).

DRAINAGE AREA.—72.1 mi² (186.7 km²).

PERIOD OF RECORD.—Water temperatures: July 1960 to September 1965, June 1967 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 25.0°C Aug. 7 9; minimum, 2.5°C Feb. 2.

Period of record:
Water temperatures: Maximum, 25.5°C July 7, 1968, Aug. 11, 1971; minimum, 1.0°C Nov. 30 to Dec. 2, 1969.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

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

14157500 COAST FORK WILLAMETTE RIVER NEAR GOSHEN, OREG.

LOCATION.—Lat 43°58'50", long 122°57'55", in NW¼ sec.29, T.18 S., R.2 W., Lane County, temperature recorder at gaging station on right bank at downstream side of bridge on State Highway 58, 2.5 mi (4.0 km) southeast of Goshen, and at mile 6.4 (10.3 km).

DRAINAGE AREA.—642 mi² (1,663 km²).

PERIOD OF RECORD.—Water temperatures: August 1961 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 23.5°C July 13, 17; minimum, 3.0°C Dec. 28, 29, Jan. 4-9.

Period of record:
Water temperatures: Maximum, 26.5°C July 24, 1962; minimum, freezing point Jan. 12, 1963.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	14.0	8.0	8.0	7.0	6.5	4.0	4.0	5.0	4.5	7.0	7.0
2	14.5	13.5	8.0	7.0	6.5	6.5	4.0	4.0	4.5	4.0	8.0	7.0
3	14.5	13.5	8.0	6.5	6.5	6.5	4.0	3.5	4.5	4.5	8.0	7.0
4	15.5	14.5	7.0	7.0	6.5	6.5	3.5	3.0	4.5	4.5	8.0	7.0
5	15.5	15.0	7.0	6.5	6.5	6.5	3.0	3.0	5.0	4.5	8.0	7.0
6	15.5	15.5	6.5	6.5	6.5	6.5	3.0	3.0	5.0	5.0	8.0	7.0
7	15.5	15.5	6.5	6.5	6.5	6.5	3.5	3.0	5.5	5.0	7.0	7.0
8	16.0	15.5	6.5	6.5	6.5	6.5	3.5	3.0	5.5	5.5	7.0	7.0
9	16.0	15.5	6.5	6.5	6.5	6.5	3.5	3.0	6.0	6.0	7.0	7.0
10	16.0	15.5	6.5	6.5	6.5	6.0	3.5	3.5	6.0	6.0	7.0	7.0
11	15.5	15.5	7.0	6.5	6.0	5.5	4.5	3.5	6.0	6.0	8.0	7.0
12	15.5	15.5	7.0	6.5	5.5	5.0	5.0	4.5	7.0	6.0	8.5	8.0
13	15.5	15.0	7.0	7.0	5.0	5.0	5.0	5.0	7.0	7.0	9.0	8.5
14	15.0	14.0	7.0	7.0	5.0	5.0	5.0	5.0	8.0	7.0	8.5	8.5
15	14.0	13.5	7.0	6.5	5.0	5.0	5.0	5.0	8.0	8.0	8.5	8.5
16	13.5	13.0	7.0	6.5	5.0	5.0	5.0	5.0	8.0	8.0	9.0	8.5
17	13.0	12.0	6.5	6.5	5.0	4.5	5.0	5.0	8.5	8.0	9.0	8.5
18	12.0	12.0	6.5	6.5	5.0	5.0	5.5	5.0	8.5	8.0	9.5	8.5
19	12.0	12.0	6.5	6.5	5.0	5.0	6.0	5.5	8.0	7.0	9.0	8.5
20	12.0	12.0	6.5	6.5	5.0	5.0	6.5	6.0	7.0	7.0	9.5	8.5
21	12.0	11.0	6.5	6.5	5.0	5.0	6.5	6.5	7.0	7.0	9.5	9.0
22	12.0	12.0	6.5	6.5	5.0	5.0	6.5	6.0	7.0	7.0	9.5	9.0
23	12.0	11.5	6.5	6.5	5.0	5.0	6.5	6.0	7.0	6.5	9.5	9.0
24	11.5	11.5	6.5	6.5	5.0	5.0	6.0	6.0	6.5	6.5	9.0	8.5
25	11.5	10.5	6.5	6.5	5.0	4.5	6.0	5.5	7.0	6.5	8.5	8.5
26	11.0	11.0	7.0	6.5	4.5	4.0	5.5	5.5	7.0	7.0	8.5	8.5
27	11.0	10.5	7.0	7.0	4.0	3.5	5.5	5.0	8.5	7.0	8.5	8.5
28	10.5	9.0	7.0	7.0	3.5	3.0	5.5	5.5	8.5	8.5	8.5	8.0
29	9.0	7.0	7.0	7.0	3.5	3.0	5.5	5.5	8.5	7.0	8.5	7.0
30	8.0	8.0	7.0	7.0	3.5	3.5	5.5	5.0	---	---	8.5	8.0
31	8.0	8.0	---	---	4.0	3.5	5.0	5.0	---	---	8.5	8.5
MONTH	16.0	7.0	8.0	6.5	7.0	3.0	6.5	3.0	8.5	4.0	9.5	7.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.5	9.5	7.0	15.5	14.0	20.5	18.0	19.0	18.0	18.5	17.0
2	9.0	8.5	10.5	8.5	16.5	14.5	20.5	18.5	19.0	16.5	19.0	18.0
3	9.5	9.0	11.0	9.5	17.0	15.5	21.0	18.5	19.0	16.5	19.0	18.0
4	10.0	9.5	11.5	10.5	16.5	14.5	21.5	19.5	20.0	18.0	19.0	18.0
5	10.0	10.0	12.0	11.5	16.5	15.0	21.5	20.0	21.0	18.5	18.5	17.0
6	10.0	9.5	12.0	11.5	16.5	15.5	21.5	19.5	21.0	19.0	18.0	16.5
7	9.5	8.0	11.5	11.0	16.5	15.5	19.5	18.5	21.5	19.0	18.5	17.0
8	8.5	8.0	11.5	10.0	18.0	16.0	19.0	17.0	21.0	19.5	19.0	18.5
9	9.0	8.0	13.0	11.0	18.0	14.5	18.5	16.0	21.0	19.5	19.0	18.5
10	9.0	8.0	14.5	12.0	14.5	13.0	19.5	17.0	21.0	19.0	18.5	18.0
11	9.0	8.5	14.5	13.0	14.0	13.0	21.5	19.5	20.5	18.5	18.0	16.5
12	9.0	8.0	15.5	13.5	15.0	13.0	22.0	20.0	20.5	19.0	18.5	17.0
13	8.5	8.0	16.5	14.5	17.0	15.0	23.5	21.0	19.0	16.5	18.5	17.0
14	9.0	8.5	16.5	15.5	18.5	16.5	22.0	21.0	18.5	17.0	19.5	18.0
15	9.0	8.5	16.5	14.5	18.5	16.0	22.0	20.0	18.5	17.0	19.5	18.5
16	9.0	8.5	14.5	13.5	16.0	15.0	23.0	20.5	18.0	16.5	19.5	18.5
17	8.5	8.0	13.5	12.0	17.0	15.0	23.5	21.0	18.0	16.0	19.0	18.5
18	8.5	8.0	12.0	11.5	18.5	16.0	23.0	21.0	18.0	16.5	18.5	18.0
19	8.5	7.0	12.0	10.0	19.5	17.0	21.0	20.0	18.0	16.5	18.0	18.0
20	8.0	7.0	12.0	11.5	19.5	17.0	20.0	17.0	19.0	17.0	18.0	17.0
21	8.0	7.0	11.5	11.0	19.5	17.0	19.0	17.0	19.0	18.5	18.0	18.0
22	8.5	7.0	11.0	11.0	18.5	16.5	19.5	18.0	19.5	18.0	18.0	17.0
23	8.5	8.0	11.0	10.5	18.5	17.0	20.0	18.0	19.5	18.0	17.0	17.0
24	8.0	8.0	12.0	10.0	17.0	16.0	19.5	18.0	20.0	18.0	17.0	17.0
25	8.0	7.0	12.0	10.5	16.0	15.0	19.0	17.0	20.0	18.5	17.0	16.5
26	9.5	7.0	14.0	11.5	17.0	15.0	18.5	16.5	20.5	18.5	16.5	16.0
27	10.0	8.5	14.5	13.5	19.5	16.0	19.0	16.5	21.0	19.0	16.0	15.5
28	9.5	8.5	15.5	14.0	20.5	18.5	19.0	17.0	21.0	20.0	16.0	15.0
29	8.5	7.0	15.5	14.5	20.5	18.5	19.5	18.0	21.0	19.5	16.0	15.5
30	8.5	7.0	15.5	14.5	20.5	18.5	19.5	18.0	21.0	18.0	16.0	16.0
31	---	---	15.5	15.0	---	---	19.5	18.0	18.0	16.5	---	---
MONTH	10.0	7.0	16.5	7.0	20.5	13.0	23.5	16.0	21.5	16.0	19.5	15.0

14159200 SOUTH FORK MCKENZIE RIVER ABOVE COUGAR LAKE, NEAR RAINBOW, OREG.

LOCATION.—Lat 44°02'50", long 122°13'00", in T.17 S., R.5 E., (unsurveyed), Lane County, temperature recorder at gaging station on right bank, 100 ft (30 m) upstream from Tipsoo Creek, 8.0 mi (12.9 km) south of Rainbow, 9.0 mi (14.5 km) southeast of town of Blue River, and at mile 10.4 (16.7 km).

DRAINAGE AREA.—160 mi^2 (414 km^2) at cableway 0.2 mi (0.3 km) downstream, where all discharge measurements are made.

PERIOD OF RECORD.—Water temperatures: November 1957 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 14.5°C July 5, 15-17, 30, Aug. 5-7, 9, 10; minimum, 1.0°C Jan. 4, 29, Feb. 2.

Period of record:
Water temperatures: Maximum, 17.0°C July 8, 1968; minimum, 0.5°C Mar. 1, 1962, Jan. 31, 1969.

WATER TEMPERATURE (DEG. C) • WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.5	4.5	8.0	4.5	9.0	6.0	13.5	9.0	13.5	9.5	12.0	8.5
2	6.5	5.0	8.0	5.0	9.5	6.5	13.5	9.0	13.5	9.0	12.0	9.0
3	6.0	4.5	8.5	5.0	9.5	7.0	13.5	9.0	13.5	9.0	12.0	9.0
4	6.5	5.0	8.5	5.0	9.5	6.5	14.0	9.5	14.0	9.5	11.5	9.0
5	6.0	5.0	8.0	5.0	10.5	7.0	14.5	10.0	14.5	10.0	11.5	9.5
6	5.5	4.5	8.0	5.0	9.5	7.0	14.0	10.0	14.5	10.0	11.0	9.0
7	5.0	3.5	5.5	5.0	9.0	8.0	13.5	9.0	14.5	10.0	11.0	8.0
8	4.5	4.0	6.0	5.0	9.5	7.0	10.5	9.0	13.5	10.0	10.5	8.5
9	5.0	4.0	8.0	5.0	9.5	8.0	12.0	8.5	14.5	10.0	10.0	8.5
10	5.5	4.0	8.0	4.5	8.0	6.5	12.0	8.0	14.5	10.0	10.0	7.0
11	5.5	4.5	8.5	5.0	8.5	6.5	13.0	9.0	13.5	9.5	9.5	7.0
12	5.0	3.5	8.5	5.0	10.5	6.5	13.5	9.0	12.0	9.5	10.0	8.0
13	5.0	4.0	8.5	5.5	11.0	7.0	14.0	9.5	12.0	9.0	10.5	7.0
14	6.0	4.5	8.0	5.5	11.5	8.5	14.0	9.0	11.0	9.0	10.5	7.0
15	6.0	4.5	6.5	5.0	10.5	9.0	14.5	9.5	10.0	9.0	10.5	8.0
16	5.0	4.0	5.5	5.5	10.5	8.5	14.5	9.5	11.0	8.5	10.5	8.0
17	5.5	3.5	5.5	5.0	11.5	8.0	14.5	9.5	11.0	9.0	11.0	8.5
18	6.0	3.5	6.0	4.5	11.5	8.5	14.0	9.5	10.5	8.5	10.0	8.5
19	6.0	3.5	8.0	4.5	12.0	8.5	13.5	9.0	11.5	9.0	9.5	8.0
20	5.5	4.0	7.0	5.5	12.0	9.0	11.5	8.5	11.0	9.0	10.0	8.0
21	5.0	4.5	5.5	5.5	12.0	9.0	12.0	8.5	12.0	9.0	9.0	8.0
22	6.5	4.0	6.0	5.5	12.0	9.0	13.0	8.5	12.0	9.0	9.0	8.0
23	6.0	4.5	6.5	5.5	10.0	9.0	13.5	9.0	12.0	8.5	8.5	7.0
24	6.0	5.0	8.0	5.0	9.0	8.5	13.5	9.5	12.0	9.0	8.5	7.0
25	6.0	4.5	8.5	5.0	10.0	8.5	13.5	9.0	12.0	9.0	8.5	6.5
26	8.0	4.5	9.0	5.5	11.0	8.5	13.5	9.0	13.0	9.0	8.5	6.0
27	8.5	5.0	9.0	6.0	13.0	8.5	13.5	9.0	13.0	9.5	8.0	6.0
28	6.0	4.0	9.5	6.0	13.5	9.0	14.0	9.0	13.5	9.5	8.0	6.0
29	5.5	4.0	9.0	6.0	14.0	9.0	14.0	9.5	13.0	9.5	9.0	6.0
30	6.5	3.5	9.0	6.0	14.0	9.5	14.5	9.5	12.0	9.0	9.0	6.5
31	---	---	9.0	6.0	---	---	14.0	10.0	12.0	9.0	---	---
MONTH	8.5	3.5	9.5	4.5	14.0	6.0	14.5	8.0	14.5	8.5	12.0	6.0

14159500 SOUTH FORK MCKENZIE RIVER NEAR RAINBOW, OREG.

LOCATION.--Lat 44°08'10", long 122°14'50", in NE¼ sec.31, T.16 S., R.5 W., Lane County, temperature recorder at gaging station on right bank, 0.2 mi (0.3 km) upstream from Cougar Creek, 0.6 mi (1.0 km) downstream from Cougar Dam, 2.0 mi (3.2 km) south of Rainbow, and at mile 3.9 (6.3 km).

DRAINAGE AREA.--208 mi^2 (539 km^2).

PERIOD OF RECORD.--Water temperatures: July 1955 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 12.0°C Oct. 8-13, Sept. 28-30; minimum, 3.0°C on many days during January and February

Period of record:
Water temperatures: Maximum, 20.0°C July 28, 1958; minimum, 0.5°C Jan. 20-23, 1962.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.5	4.5	5.0	5.0	4.5	4.5	6.5	6.5	8.5	7.0	9.5	8.5
2	4.5	4.5	5.0	5.0	5.0	4.5	7.0	6.5	8.5	7.0	9.5	8.0
3	4.5	4.5	5.0	5.0	5.0	4.5	7.0	6.0	8.5	7.0	9.5	9.0
4	4.5	4.5	5.0	5.0	5.0	4.5	6.5	6.0	8.5	7.0	9.5	9.0
5	4.5	4.5	5.0	5.0	5.0	4.5	6.5	6.5	8.5	7.0	9.5	9.5
6	4.5	4.5	5.0	5.0	4.5	4.5	7.0	6.5	8.5	8.5	9.5	9.5
7	4.5	4.5	5.0	5.0	5.0	5.0	7.0	6.5	8.5	8.5	9.5	9.5
8	4.5	4.5	5.0	5.0	5.0	5.0	7.0	6.0	8.5	8.5	10.0	9.5
9	4.5	4.5	5.0	5.0	5.0	5.0	7.0	6.0	9.0	8.5	10.0	10.0
10	4.5	4.5	5.0	5.0	5.0	5.0	7.0	6.5	9.0	8.0	10.0	9.5
11	4.5	4.5	5.0	5.0	5.5	5.0	7.0	6.0	9.0	8.0	10.0	10.0
12	4.5	4.5	5.0	5.0	5.5	5.0	7.0	6.5	9.0	8.0	10.0	10.0
13	4.5	4.5	5.0	5.0	5.5	5.0	7.0	6.5	9.0	8.5	10.5	10.0
14	5.0	4.5	5.0	5.0	5.5	5.5	7.0	6.5	9.0	9.0	10.5	10.5
15	5.0	5.0	5.0	5.0	5.5	5.5	8.0	6.5	9.0	9.0	10.5	10.5
16	5.0	5.0	5.0	5.0	5.5	5.5	8.0	7.0	9.0	9.0	11.0	10.5
17	5.0	5.0	5.0	5.0	5.5	5.5	8.0	7.0	9.0	9.0	11.0	11.0
18	5.0	5.0	5.0	5.0	5.5	5.5	8.0	7.0	9.0	9.0	11.0	11.0
19	5.0	5.0	5.0	5.0	5.5	5.5	8.0	7.0	9.0	9.0	11.5	11.0
20	5.0	5.0	5.0	5.0	5.5	5.5	8.5	7.0	9.0	8.5	11.5	11.5
21	5.0	5.0	5.0	5.0	6.0	5.5	8.5	7.0	8.5	8.5	11.5	11.5
22	5.0	5.0	5.0	5.0	6.0	6.0	8.0	7.0	8.5	8.5	11.5	11.5
23	5.0	5.0	5.0	5.0	6.5	6.0	8.5	7.0	8.5	8.5	11.5	11.5
24	5.0	5.0	5.0	4.5	6.5	6.5	8.5	7.0	8.5	8.5	11.5	11.5
25	5.0	5.0	4.5	4.5	6.5	6.5	8.5	7.0	8.5	8.5	11.5	11.5
26	5.0	5.0	4.5	4.5	6.5	6.5	8.5	7.0	9.0	8.5	11.5	11.5
27	5.0	5.0	4.5	4.5	6.5	6.5	8.0	7.0	9.0	8.5	11.5	11.5
28	5.0	5.0	5.0	4.5	6.5	6.0	8.5	7.0	9.0	8.5	12.0	11.5
29	5.0	5.0	5.0	4.5	6.5	6.5	8.5	7.0	9.0	9.0	12.0	12.0
30	5.0	5.0	5.0	4.5	6.5	6.5	8.0	7.0	9.0	9.0	12.0	12.0
31	---	---	4.5	4.5	---	---	8.5	7.0	9.0	9.0	---	---
MONTH	5.0	4.5	5.0	4.5	6.5	4.5	8.5	6.0	9.0	7.0	12.0	8.0

14161100 BLUE RIVER BELOW TIDBITS CREEK, NEAR BLUE RIVER, OREG.

LOCATION.--Lat 44°13'05", long 122°15'50", in SE¼NE¼ sec.36, T.15 S., R.4 E., Lane County, temperature recorder at gaging station on left bank, 0.2 mi (0.3 km) downstream from Tidbits Creek, 5.5 mi (8.8 km) northeast of town of Blue River, and at mile 8.5 (13.7 km).

DRAINAGE AREA.--45.8 mi² (118.6 km²).

PERIOD OF RECORD.--Water temperatures: September 1963 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum recorded, 21.5°C Aug. 7; minimum, freezing point Jan. 28-30, Feb. 1, 2.

Period of record:
Water temperatures: Maximum, 21.5°C on several days in 1965, 1968, and 1970, Aug. 7, 1972; minimum, freezing point on several days in 1969, 1971, and Jan. 28-30, Feb. 1, 2, 1972.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.0	5.5	4.5	5.5	5.0	3.0	2.0	1.0	0.0	3.0	1.0
2	9.0	7.0	5.5	5.5	5.5	5.0	3.0	2.0	0.5	0.0	3.5	2.0
3	9.5	8.0	5.5	5.0	5.0	4.0	2.0	1.0	1.5	0.5	3.5	3.5
4	10.0	9.0	6.0	5.0	4.5	3.5	1.5	0.5	3.0	1.5	4.0	3.5
5	11.0	9.5	5.5	4.5	5.5	3.5	3.0	1.5	3.5	3.0	4.5	4.0
6	11.5	10.5	4.5	4.0	5.5	5.5	3.5	3.0	3.5	3.5	4.5	4.0
7	11.5	10.0	6.0	4.5	5.5	5.0	4.0	3.5	4.0	3.5	4.5	3.5
8	11.5	10.0	6.0	5.5	5.0	3.5	3.5	2.0	4.0	3.5	5.0	4.0
9	11.5	10.5	6.0	5.5	5.0	4.5	4.0	3.0	4.0	3.5	5.0	4.5
10	11.5	10.5	6.5	6.0	4.5	4.5	3.5	3.0	4.0	3.5	5.0	4.5
11	11.5	11.0	7.0	6.0	4.5	3.0	3.5	2.0	4.0	3.5	5.0	4.5
12	11.0	10.0	6.5	6.0	3.0	2.0	4.0	3.5	4.0	3.5	4.5	4.5
13	11.0	10.0	6.5	5.0	3.5	3.0	4.0	3.5	4.0	3.5	4.5	4.5
14	10.0	9.0	5.5	4.5	3.0	2.0	3.5	3.0	3.5	3.0	4.5	4.0
15	9.0	7.0	5.5	5.0	3.0	1.5	3.5	3.0	4.0	3.5	5.0	4.5
16	7.0	6.0	5.0	4.5	3.5	3.0	3.5	3.0	4.0	4.0	5.0	4.0
17	6.5	5.0	5.0	4.5	3.5	3.5	4.0	3.5	4.5	4.0	5.0	4.0
18	7.0	6.5	5.5	5.0	4.0	3.5	4.5	3.5	4.5	4.0	4.5	4.0
19	8.0	7.0	6.5	5.5	4.0	3.5	4.5	4.5	4.5	4.5	4.5	3.5
20	8.0	8.0	6.5	5.5	4.0	4.0	4.5	3.5	4.5	4.0	5.0	3.5
21	8.0	6.5	6.5	5.5	4.0	3.5	4.5	4.0	4.5	4.0	5.0	4.5
22	8.5	7.0	6.5	6.0	4.0	4.0	4.5	4.0	4.5	4.0	4.5	3.5
23	8.5	8.0	6.0	5.5	4.0	4.0	4.5	3.5	4.5	3.5	4.5	3.5
24	8.0	7.0	6.5	6.0	4.0	4.0	4.0	3.5	3.5	2.0	4.5	3.5
25	7.0	5.5	6.0	5.0	4.0	3.0	3.5	3.0	3.5	2.0	3.5	2.0
26	8.0	6.5	6.0	5.0	3.0	2.0	3.0	1.5	3.5	3.0	3.5	1.5
27	6.5	5.0	6.0	6.0	2.0	1.5	1.5	0.5	3.5	3.5	4.0	2.0
28	5.0	4.0	6.0	5.5	1.5	1.0	1.0	0.0	4.0	3.5	4.5	3.5
29	4.0	3.0	6.0	5.5	1.5	1.0	0.5	0.0	4.0	3.0	5.0	3.5
30	4.0	3.0	6.0	5.5	3.0	1.5	1.0	0.0	---	---	5.5	3.5
31	4.5	3.5	---	---	3.0	2.0	1.0	1.0	---	---	5.0	3.5
MONTH	11.5	3.0	7.0	4.0	5.5	1.0	4.5	0.0	4.5	0.0	5.5	1.0

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

14161500 LOOKOUT CREEK NEAR BLUE RIVER, OREG.

LOCATION.--Lat 44°12'35", long 122°15'20", in T.15 or 16 S., R.5 E. (unsurveyed), Lane County, temperature recorder at gaging station on left bank, 6.0 mi (9.7 km) northeast of town of Blue River, and at mile 0.5 (0.8 km).

DRAINAGE AREA.--24.1 mi^2 (62.4 km^2).

PERIOD OF RECORD.--Water temperatures: August 1950 to September 1955, September 1963 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 20.5°C Aug. 7; minimum, 3.0°C on several days during December and January.

Period of record:
Water temperatures: Maximum (1950-55, 1963-65, 1967-72), 21.5°C July 28 1968; minimum, freezing point Jan. 31, Feb. 1, 1969.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

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

14162200 BLUE RIVER AT BLUE RIVER, OREG.

LOCATION.--Lat 44°09'45", long 122°19'55", in NW¼SE¼ sec.21, T.16 S., R.4 E. (unsurveyed), Lane County, temperature recorder at gaging station on right bank, 0.3 mi (0.5 km) upstream from Simmonds Creek, 0.7 mi (1.1 km) north of town of Blue River, and at mile 0.9 (1.4 km).

DRAINAGE AREA.--87.7 mi² (227.1 km²).

PERIOD OF RECORD.--Water temperatures: August 1966 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 18.0°C on several days during September; minimum, 1.0°C Jan. 30, 31.

Period of record:
Water temperatures: Maximum, 26.0°C July 6, 1968; minimum, 1.0°C Dec. 15, 21, 1967, Jan. 30, 31, 1972.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	13.0	6.5	5.5	6.5	6.5	2.0	1.5	3.5	3.0	5.5	4.5
2	13.5	13.0	6.0	5.5	6.5	6.0	2.0	2.0	3.0	2.0	5.5	5.0
3	14.0	13.5	6.0	5.5	6.0	6.0	2.0	1.5	3.0	2.0	5.0	4.5
4	14.5	13.5	6.5	6.0	6.0	5.5	2.0	2.0	3.0	3.0	4.5	4.5
5	14.5	14.0	6.5	5.5	6.5	5.5	2.0	2.0	3.0	3.0	5.0	4.0
6	15.5	14.5	6.0	5.5	6.5	5.5	2.0	2.0	3.0	3.0	5.5	4.5
7	15.5	14.5	5.5	5.5	6.0	5.5	2.0	2.0	3.5	3.0	---	5.0
8	15.5	14.5	5.5	5.0	6.0	5.5	3.0	2.0	3.5	3.0	5.0	5.0
9	16.0	15.0	5.5	5.5	6.0	5.5	3.0	3.0	3.5	3.0	---	4.5
10	16.0	15.0	6.0	5.5	5.5	5.0	3.5	3.0	3.5	2.5	---	4.5
11	16.0	15.5	6.5	6.0	5.0	5.0	5.5	3.5	3.0	3.0	5.0	4.5
12	16.0	15.0	7.0	6.5	5.0	4.5	5.0	4.5	3.0	3.0	---	---
13	16.0	15.5	7.0	7.0	4.5	4.5	4.5	4.0	3.5	3.0	---	---
14	15.5	15.0	7.0	6.5	4.5	4.0	4.5	4.0	4.0	3.5	---	---
15	15.0	13.5	6.5	5.5	4.0	3.5	4.0	3.5	4.0	3.5	---	---
16	13.5	12.0	6.0	5.5	4.0	3.5	3.5	3.5	4.0	3.5	---	---
17	12.0	11.5	6.0	5.5	4.0	4.0	4.0	3.5	4.5	4.0	---	---
18	12.0	11.5	6.0	5.5	4.0	4.0	5.0	4.0	4.5	4.0	---	---
19	11.5	11.0	6.0	5.5	4.5	4.0	5.0	4.5	4.5	4.5	---	---
20	11.0	9.5	6.5	6.0	4.5	4.5	5.5	4.5	4.5	4.5	---	---
21	10.0	9.0	6.5	6.0	5.0	4.5	5.5	5.5	5.0	4.5	---	---
22	9.5	9.0	6.5	6.0	5.0	5.0	5.5	4.5	5.0	4.5	---	---
23	9.5	9.0	6.5	6.5	5.0	4.5	5.0	4.5	4.5	4.5	6.0	5.5
24	9.5	8.5	6.5	6.5	4.5	4.5	5.0	4.5	4.5	4.5	6.0	5.5
25	9.5	9.0	6.5	6.5	4.5	4.0	5.0	4.5	4.5	4.5	5.5	5.5
26	9.0	8.5	7.0	6.5	4.0	3.5	5.5	5.0	4.5	4.5	5.5	5.5
27	9.0	8.0	7.0	6.5	3.5	3.0	5.0	4.5	5.0	4.5	5.5	5.5
28	8.5	7.0	6.5	6.5	3.0	1.5	4.5	4.0	5.0	4.0	5.5	5.5
29	8.0	6.5	6.5	6.5	1.5	1.5	4.5	3.5	4.5	4.5	6.0	5.5
30	6.5	6.0	6.5	6.0	1.5	1.0	4.0	3.5	---	---	6.5	5.0
31	6.0	5.5	---	---	1.5	1.0	3.5	3.5	---	---	5.5	5.0
MONTH	16.0	5.5	7.0	5.0	6.5	1.0	5.5	1.5	5.0	2.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.5	5.0	6.0	6.0	8.0	7.5	9.5	8.5	9.0	8.5	11.0	11.0
2	5.5	5.0	6.5	6.0	8.0	7.5	10.0	8.5	9.0	8.5	11.5	11.0
3	5.5	5.0	6.5	6.0	8.0	7.5	10.0	8.5	9.0	8.5	11.5	11.5
4	5.5	5.0	6.0	6.0	8.0	7.5	10.0	8.5	9.0	8.5	12.0	11.5
5	5.5	5.0	6.0	6.0	8.0	8.0	10.0	8.5	9.0	8.5	12.0	11.5
6	5.5	5.5	6.5	6.0	8.0	8.0	10.0	9.0	9.0	8.5	12.0	12.0
7	5.5	5.5	6.5	6.0	8.0	8.0	10.0	9.0	9.0	8.5	12.5	12.0
8	5.5	5.5	6.5	6.0	8.0	8.0	9.5	9.0	9.0	8.5	12.5	12.0
9	5.5	5.5	6.5	6.0	8.0	8.0	10.0	8.5	9.0	9.0	12.5	12.5
10	5.5	5.5	6.5	6.0	8.0	8.0	10.0	8.5	9.0	9.0	13.0	12.5
11	5.5	5.5	7.0	6.5	8.5	8.0	10.0	8.5	9.0	9.0	13.0	13.0
12	5.5	5.5	7.0	6.5	8.5	8.0	10.0	8.5	9.0	9.0	13.0	13.0
13	5.5	5.5	6.5	6.5	8.5	8.0	10.0	8.5	9.5	9.0	13.5	13.0
14	5.5	5.5	6.5	6.5	8.5	8.0	10.0	8.5	9.5	9.0	13.5	13.5
15	5.5	5.5	6.5	6.5	8.5	8.0	10.0	8.5	9.5	9.0	14.0	13.5
16	5.5	5.5	6.5	6.5	8.5	8.0	10.0	8.5	9.5	9.5	14.0	14.0
17	5.5	5.5	6.5	6.5	8.5	8.0	10.0	8.5	9.5	9.5	14.5	14.0
18	6.0	5.5	6.5	6.5	9.0	8.0	10.0	8.5	9.5	9.5	15.0	14.5
19	6.0	5.5	7.0	6.5	9.0	8.0	9.5	8.5	9.5	9.5	15.0	15.0
20	6.0	5.5	7.0	7.0	9.0	8.5	9.0	8.5	10.0	9.5	15.5	15.0
21	6.0	5.5	7.0	7.0	9.0	8.5	9.5	8.5	10.0	10.0	15.5	15.5
22	6.0	5.5	7.0	7.0	9.0	8.5	9.5	8.5	10.0	10.0	16.0	15.5
23	6.0	5.5	7.0	7.0	8.5	8.5	9.5	9.0	10.5	10.5	17.0	16.0
24	6.0	5.5	7.0	7.0	8.5	8.5	9.5	9.0	10.5	10.5	18.0	17.0
25	6.0	5.5	7.5	7.0	8.5	8.5	9.5	9.0	10.5	10.5	18.0	17.5
26	6.0	5.5	7.5	7.0	8.5	8.5	9.5	9.0	10.5	10.5	18.0	17.5
27	6.5	6.0	7.5	7.5	9.0	8.5	9.5	9.0	10.5	10.5	18.0	17.5
28	6.0	6.0	7.5	7.5	9.0	8.5	9.5	9.0	11.0	10.5	18.0	18.0
29	6.0	6.0	7.5	7.5	9.5	8.5	9.5	9.0	11.0	10.5	18.0	17.5
30	6.0	6.0	7.5	7.5	9.5	8.5	9.0	8.5	11.0	10.5	18.0	17.5
31	---	---	8.0	7.5	---	---	9.0	8.5	11.0	11.0	---	---
MONTH	6.5	5.0	8.0	6.0	9.5	7.5	10.0	8.5	11.0	8.5	18.0	11.0

14162500 MCKENZIE RIVER NEAR VIDA, OREG.

LOCATION.--Lat 44°07'30", long 122°28'10", in NE¼NE¼ sec.5, T.17 S., R.3 E., Lane County, temperature recorder at gaging station on right bank, 0.4 mi (0.6 km) downstream from Mason Creek, 5.4 mi (8.7 km) east of Vida, and at mile 47.7 (76.7 km).

DRAINAGE AREA.--930 mi^2 (2,409 km^2) at cableway 0.4 mi (0.6 km) downstream, where all discharge measurements are made.

PERIOD OF RECORD.--Water temperatures: June 1961 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 14.0°C July 15-17; minimum, 3.0°C Feb. 2-4.

Period of record:
Water temperatures: Maximum, 16.0°C July 6, 7, 28, 1968; minimum, 2.0°C Jan. 21-24, 1962.

REMARKS.--Recorder stopped Mar. 7-29, Apr. 7 to May 6, May 9 to June 14; range in temperature, 4.5°C to 5.5°C, 5.0°C to 9.5°C, and 6.5°C to 11.0°C, respectively.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	5.5	---	---	---	---	13.0	9.5	13.5	10.0	12.0	9.5
2	8.0	6.0	---	---	---	---	13.0	9.5	13.0	9.5	12.0	9.5
3	7.0	6.0	---	---	---	---	13.0	9.5	13.0	9.5	12.0	10.0
4	7.0	6.5	---	---	---	---	13.0	9.5	13.5	9.5	11.5	9.5
5	7.0	6.5	9.0	---	---	---	13.5	10.0	13.5	10.0	11.5	10.5
6	6.5	6.0	8.5	7.0	---	---	13.0	10.0	13.5	10.0	11.0	10.0
7	---	---	8.0	6.5	---	---	13.0	9.5	13.0	10.0	11.5	9.5
8	---	---	7.0	6.5	---	---	11.5	9.5	11.5	10.0	11.0	9.5
9	---	---	---	6.5	---	---	12.0	9.0	13.0	9.5	11.0	10.0
10	---	---	---	---	---	---	11.5	9.0	13.0	9.5	11.0	9.5
11	---	---	---	---	---	---	13.0	10.0	13.0	9.5	11.0	9.0
12	---	---	---	---	---	---	13.5	9.5	11.5	9.5	11.0	9.5
13	---	---	---	---	---	---	13.5	10.5	11.5	9.5	11.0	9.5
14	---	---	---	---	11.0	---	13.5	10.0	11.0	9.5	11.5	9.5
15	---	---	---	---	11.0	9.5	14.0	10.0	10.5	9.5	11.5	9.5
16	---	---	---	---	10.0	8.5	14.0	10.0	10.0	9.5	11.5	9.5
17	---	---	---	---	11.0	8.5	14.0	10.0	11.0	9.5	11.5	10.0
18	---	---	---	---	11.5	8.5	13.5	10.0	10.5	9.0	11.5	10.0
19	---	---	---	---	11.5	9.0	13.0	10.0	11.5	9.5	10.5	10.0
20	---	---	---	---	11.5	9.0	12.0	9.5	11.0	9.5	10.5	10.0
21	---	---	---	---	11.5	9.0	12.0	9.0	11.5	9.5	10.5	10.5
22	---	---	---	---	11.0	9.0	12.0	9.0	12.0	10.0	10.5	10.0
23	---	---	---	---	11.0	9.0	13.0	9.5	12.0	9.5	10.5	10.0
24	---	---	---	---	9.5	9.0	13.0	9.5	12.0	9.5	11.0	10.5
25	---	---	---	---	10.0	8.5	13.0	9.5	12.0	9.5	11.5	10.5
26	---	---	---	---	10.5	8.5	13.0	9.5	12.0	9.5	11.5	10.5
27	---	---	---	---	12.0	9.0	13.0	9.5	12.0	9.5	11.5	10.5
28	---	---	---	---	13.0	9.0	13.5	9.5	13.0	10.0	11.5	10.5
29	---	---	---	---	13.0	9.0	13.5	10.0	12.0	10.0	11.5	10.5
30	---	---	---	---	13.0	9.5	13.5	10.0	12.0	9.5	11.5	11.0
31	---	---	---	---	---	---	13.5	10.5	11.5	9.5	---	---
MONTH	---	---	---	---	---	---	14.0	9.0	13.5	9.0	12.0	9.0

14165500 MCKENZIE RIVER NEAR COBURG, OREG.

LOCATION.--Lat 44°06'45", long 123°02'45", in NE¼NE¼ sec.9, T.17 S., R.3 W., Lane County, temperature recorder at gaging station on left bank, at downstream side of Armitage Bridge, 2.0 mi (3.2 km) southeast of Coburg, and at mile 7.1 (11.4 km).

DRAINAGE AREA.--1,337 mi^2 (3,463 km^2).

PERIOD OF RECORD.--Water temperatures: October 1963 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 18.0°C July 15-18, Aug. 7; minimum, 3.0°C Dec. 28, 29.

Period of record:
Water temperatures: Maximum, 20.0°C July 8, 1968; minimum, 1.5°C Dec. 17, 18, 1964.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.5	8.5	7.0	11.0	10.0	16.0	13.0	16.5	14.5	14.5	12.0
2	8.0	7.0	9.5	8.5	11.0	10.5	16.5	13.0	16.0	13.5	15.0	12.0
3	8.0	8.0	10.5	9.0	11.0	10.0	16.5	13.5	16.5	13.5	15.0	12.0
4	9.0	8.0	10.0	9.5	11.0	10.0	16.5	14.0	16.5	14.0	14.5	12.0
5	9.5	9.0	10.0	9.5	12.0	10.5	16.5	14.0	17.0	14.0	13.5	12.0
6	9.0	8.0	9.5	9.5	11.5	11.0	16.0	14.0	17.0	14.0	13.5	11.0
7	8.0	6.5	9.5	7.0	11.5	10.5	14.5	13.5	18.0	14.5	13.5	11.5
8	7.0	6.5	8.0	7.0	11.5	11.0	14.0	13.0	16.5	14.5	13.5	11.5
9	6.5	6.5	10.0	8.0	11.5	10.0	13.5	11.0	16.0	13.5	13.0	11.5
10	6.5	6.5	10.5	9.0	10.0	9.5	14.5	12.0	16.0	13.5	12.0	11.0
11	7.0	6.5	11.0	9.5	10.0	9.0	16.0	12.0	16.0	13.5	12.0	10.5
12	7.0	6.5	12.0	10.0	11.0	10.0	16.5	13.5	15.5	13.5	13.5	11.0
13	6.5	6.5	11.5	11.0	13.5	11.0	17.0	14.5	14.0	12.0	13.5	11.0
14	8.0	6.5	11.0	10.0	13.5	12.0	17.0	14.5	14.0	11.5	14.0	11.5
15	8.0	8.0	10.0	9.0	13.5	12.0	18.0	14.5	13.0	11.5	14.0	11.5
16	8.0	7.0	9.0	8.5	12.0	11.0	18.0	14.5	12.0	11.0	14.0	11.5
17	7.0	6.5	9.0	8.5	13.5	10.5	18.0	14.5	13.0	11.0	14.0	12.0
18	6.5	6.0	9.0	8.0	14.5	11.5	18.0	14.5	12.0	11.0	13.0	12.0
19	7.0	6.0	10.0	9.0	15.0	12.0	17.0	14.5	13.5	11.0	13.0	11.5
20	7.0	6.5	10.0	9.0	15.0	12.0	16.0	13.5	14.0	12.0	11.5	11.0
21	7.0	6.5	9.0	8.5	14.5	12.0	15.5	12.0	14.0	12.0	11.5	11.0
22	7.0	6.0	8.5	8.0	14.5	12.0	16.5	13.0	14.5	13.0	11.5	11.0
23	7.0	7.0	9.0	8.5	13.5	11.5	16.0	13.0	15.0	12.0	11.5	11.0
24	7.0	7.0	9.5	8.0	11.5	10.5	16.5	13.5	15.0	13.0	11.0	10.5
25	7.0	7.0	10.0	9.0	11.0	10.0	15.5	14.0	15.5	13.0	11.5	11.0
26	8.5	6.5	11.0	10.0	13.5	10.5	16.0	13.5	15.5	13.0	11.5	11.0
27	9.5	8.0	11.5	10.5	14.5	11.0	16.5	13.5	16.0	13.5	11.5	10.5
28	9.0	7.0	11.5	11.0	16.0	12.0	16.5	13.5	16.0	13.5	11.0	10.5
29	7.0	6.0	11.5	11.0	16.5	13.5	16.5	13.5	16.0	13.5	12.0	11.0
30	7.0	6.0	11.0	10.0	16.0	13.5	16.5	14.0	15.5	13.5	13.0	11.5
31	---	---	11.0	10.0	---	---	16.0	14.0	14.5	12.0	---	---
MONTH	9.5	6.0	12.0	7.0	16.5	9.0	18.0	11.0	18.0	11.0	15.0	10.5

14166000 WILLAMETTE RIVER AT HARRISBURG, OREG.

LOCATION.--Lat 44°16'05", long 123'10'20", in SW¼NE¼ sec.16, T.15 S., R.4 W., Lane County, monitor station on left bank, at gaging station at bridge on U.S. Highway 99 at Harrisburg, and at mile 161.2 (259.4 km).

DRAINAGE AREA.--3,420 mi² (8,860 km²), approximately.

PERIOD OF RECORD.--Specific conductance: October 1969 to September 1972.
PH: October 1969 to September 1972.
Dissolved oxygen: October 1969 to September 1972.
Water temperatures: June 1961 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 71 micromhos/cm Oct. 14; minimum, 30 micromhos/cm Mar. 2, 3, 7.
PH: Maximum, 8.6 units June 19; minimum, 6.0 units Oct. 20, 21.
Dissolved oxygen: Maximum, 14.2 mg/l Feb. 25; minimum, 6.9 mg/l July 30.
Water temperatures: Maximum, 23.5°C July 16, 17; minimum, 1.5°C Feb. 1, 2.

Period of record:
Specific conductance: Maximum, 71 micromhos/cm Oct. 14, 1971; minimum, 30 micromhos/cm Mar. 2, 3, 7, 1972.
PH: Maximum, 8.6 units June 19, 1972; minimum, 6.0 units Oct. 20, 21, 1971.
Dissolved oxygen: Maximum, 14.2 mg/l Feb. 25, 1972; minimum, 6.9 mg/l July 30, 1972.
Water temperatures: Maximum, 23.5°C July 16, 17, 1972; minimum, 1.0°C Jan. 26, 27, 1969.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	41	40	56	54	---	---	36	34
2	---	---	---	---	41	40	55	55	---	---	35	30
3	---	---	---	---	42	41	55	53	---	---	32	30
4	---	---	53	52	43	42	54	54	---	---	35	32
5	---	---	53	52	42	39	57	54	---	---	35	34
6	---	---	54	52	40	34	58	57	---	---	35	32
7	---	---	54	54	41	39	56	56	---	---	33	30
8	---	---	54	53	40	39	56	54	---	---	32	31
9	---	---	56	54	41	38	56	55	---	---	34	32
10	---	---	65	54	41	40	55	51	---	---	34	32
11	---	---	51	50	40	40	51	41	---	---	34	33
12	---	---	52	50	41	40	---	---	---	---	35	33
13	---	---	51	51	42	41	---	---	---	---	36	34
14	71	63	51	48	42	41	---	---	---	---	35	34
15	67	64	49	48	42	41	---	---	---	---	---	---
16	67	66	50	49	43	42	---	---	---	---	---	---
17	68	66	51	49	44	43	---	---	---	---	---	---
18	68	67	51	50	45	43	---	---	---	---	---	---
19	68	67	51	50	45	44	---	---	---	---	---	---
20	---	---	51	51	46	41	---	---	---	---	---	---
21	---	---	52	51	46	45	---	---	---	---	---	---
22	---	---	52	51	46	45	---	---	39	37	---	---
23	---	---	54	52	45	44	---	---	41	39	---	---
24	---	---	54	51	47	45	---	---	41	40	---	---
25	---	---	51	49	47	46	---	---	42	40	---	---
26	---	---	49	40	48	47	---	---	42	41	---	---
27	---	---	42	37	49	48	---	---	41	38	43	41
28	---	---	44	42	48	48	---	---	37	36	44	41
29	---	---	42	39	48	47	---	---	36	35	44	42
30	---	---	40	39	50	48	---	---	---	---	45	43
31	---	---	---	---	54	51	---	---	---	---	46	45
MONTH	---	---	65	37	54	34	---	---	---	---	---	---

14166000 WILLAMETTE RIVER AT HARRISBURG, OREG.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	47	45	46	43	44	40	55	50	53	50	49	45
2	47	44	48	45	45	42	55	49	53	49	49	44
3	47	44	48	45	45	43	54	48	54	49	50	45
4	45	41	49	43	46	42	53	45	52	51	49	47
5	44	42	48	44	46	42	52	48	---	---	51	48
6	44	41	47	43	46	43	52	48	---	---	51	48
7	41	39	47	44	46	43	51	48	---	---	52	48
8	41	39	47	43	46	43	52	50	---	---	52	50
9	42	40	47	43	47	45	53	47	---	---	52	50
10	42	40	51	45	48	45	53	48	48	46	52	49
11	45	42	50	45	47	43	52	48	51	48	53	50
12	45	44	50	43	46	42	53	50	53	48	53	50
13	44	41	48	42	48	45	53	49	51	46	53	49
14	45	42	45	40	51	48	59	47	50	46	53	48
15	44	43	43	41	54	52	52	49	50	48	52	48
16	45	43	43	41	55	51	53	47	51	49	53	50
17	48	42	44	43	55	51	53	48	52	48	52	50
18	49	45	44	41	55	50	54	50	51	49	52	50
19	47	45	44	41	54	49	54	49	51	47	53	51
20	48	47	44	43	54	51	53	47	51	47	53	51
21	49	47	45	43	55	52	55	44	51	47	54	52
22	48	42	43	41	54	50	54	48	50	46	54	50
23	45	43	44	42	53	51	53	48	50	46	53	48
24	45	42	45	42	54	53	53	48	52	45	53	51
25	44	41	46	42	55	52	54	47	51	47	52	51
26	43	39	46	41	55	41	52	49	51	46	53	50
27	44	40	46	42	55	44	55	48	49	45	51	50
28	45	43	45	40	52	44	54	48	50	46	51	49
29	45	42	44	40	54	50	53	48	51	46	52	47
30	46	42	44	40	54	51	53	44	51	47	53	51
31	---	---	43	41	---	---	53	49	50	46	---	---
MONTH	49	39	51	40	55	40	59	44	54	45	54	44

PH (STANDARD UNITS) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	7.2	7.2	7.2	7.1	7.3	7.2	7.4	7.3
2	---	---	---	---	7.3	7.2	7.1	7.1	7.3	7.2	7.3	7.1
3	---	---	---	---	7.3	7.2	7.2	7.1	7.3	7.3	7.1	7.1
4	---	---	---	---	7.3	7.3	7.1	7.1	7.4	7.3	7.2	7.1
5	---	---	---	---	7.3	7.2	7.1	7.0	7.3	7.3	7.2	7.1
6	7.6	7.3	---	---	7.2	7.1	6.9	6.9	7.4	7.3	7.2	7.2
7	7.6	7.2	---	---	7.3	7.1	7.3	7.2	7.4	7.3	7.8	6.9
8	7.8	7.2	---	---	7.3	7.2	7.9	7.5	7.4	7.3	7.3	7.1
9	7.9	7.3	---	---	7.3	7.2	7.6	7.5	7.4	7.4	7.3	7.2
10	7.6	7.4	---	---	7.4	7.2	7.6	7.5	7.4	7.4	7.4	7.2
11	7.9	7.4	---	---	7.3	7.3	7.6	7.4	7.4	7.4	7.3	7.3
12	7.8	7.4	7.4	7.3	7.4	7.3	7.4	7.1	7.4	7.4	7.8	7.4
13	7.7	7.4	7.4	7.3	7.3	7.3	7.4	7.3	7.4	7.4	7.4	7.2
14	7.8	7.4	7.4	7.4	7.4	7.3	7.4	7.4	7.4	7.4	7.2	7.2
15	7.9	7.4	7.4	7.3	7.4	7.3	7.7	7.4	7.4	7.4	---	---
16	7.9	7.4	7.5	7.3	7.4	7.3	8.0	7.4	7.5	7.4	---	---
17	7.9	7.4	7.4	7.3	7.4	7.3	7.7	7.3	7.4	7.3	---	---
18	7.7	7.4	7.5	7.4	7.4	7.3	7.5	7.4	7.4	7.3	---	---
19	7.7	7.4	7.5	7.4	7.4	7.4	---	---	7.4	7.3	---	---
20	7.7	6.0	7.4	7.3	7.8	7.3	---	---	7.4	7.3	---	---
21	8.1	6.0	7.5	7.4	7.4	7.3	---	---	7.4	7.3	---	---
22	7.9	7.7	7.5	7.4	7.4	7.4	---	---	7.4	7.4	---	---
23	8.0	7.7	7.5	7.4	7.5	7.4	---	---	7.4	7.3	---	---
24	8.1	7.7	7.5	7.4	7.4	7.3	---	---	7.4	7.4	---	---
25	8.2	7.7	7.5	7.4	7.4	7.3	---	---	7.4	7.3	---	---
26	8.5	7.7	7.4	7.1	7.3	7.3	---	---	7.4	7.3	---	---
27	8.0	7.7	7.1	7.0	7.3	7.3	---	---	7.5	7.3	6.5	6.5
28	7.9	7.0	7.2	7.1	7.4	7.3	---	---	7.4	7.3	6.5	6.5
29	---	---	7.2	7.2	7.4	7.3	---	---	7.3	7.3	6.5	6.5
30	---	---	7.2	7.2	7.3	7.3	---	---	---	---	6.5	6.5
31	---	---	---	---	7.3	7.2	7.3	7.2	---	---	6.5	6.5
MONTH	---	---	---	---	7.8	7.1	---	---	7.5	7.2	---	---

14166000 WILLAMETTE RIVER AT HARRISBURG, OREG.--Continued

PH (STANDARD UNITS) WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.8	6.5	6.8	6.5	7.0	6.6	7.4	6.5	7.7	7.0	7.7	7.1
2	6.6	6.5	6.8	6.5	7.0	6.5	7.4	6.5	7.8	7.1	7.7	7.2
3	6.6	6.5	6.9	6.5	6.9	6.5	7.8	6.5	7.8	7.1	7.7	7.2
4	7.3	6.6	6.9	6.5	7.1	6.5	7.4	6.4	7.4	6.6	7.6	7.2
5	6.8	6.6	6.9	6.5	7.1	6.5	7.3	6.4	6.7	6.6	7.4	7.2
6	6.6	6.6	6.9	6.5	7.0	6.5	7.1	6.4	6.6	6.4	7.7	7.2
7	6.6	6.5	6.9	6.5	7.1	6.5	7.1	6.4	6.4	6.4	7.6	7.2
8	6.6	6.5	6.9	6.5	7.2	6.6	6.8	6.4	---	---	7.6	7.2
9	6.6	6.5	7.0	6.5	7.1	6.6	7.1	6.5	---	---	7.6	7.2
10	6.6	6.5	7.1	6.5	6.9	6.6	7.7	6.5	7.6	7.0	7.7	7.2
11	6.6	6.5	7.2	6.5	7.0	6.6	7.1	6.4	7.6	6.9	7.6	7.2
12	6.6	6.5	7.4	6.5	7.0	6.5	7.1	6.4	7.6	7.0	7.6	7.1
13	6.6	6.5	7.4	6.4	8.1	6.5	7.1	6.4	7.7	7.0	7.6	7.1
14	6.6	6.5	7.4	6.4	6.9	6.5	7.1	6.5	7.7	7.0	7.6	7.1
15	6.6	6.5	6.7	6.4	6.7	6.5	7.1	6.5	7.6	7.0	7.6	7.1
16	6.6	6.5	7.0	6.5	7.0	6.5	7.3	6.5	7.4	7.0	7.7	7.1
17	6.8	6.5	6.6	6.5	7.1	6.4	7.2	6.6	7.6	7.0	7.5	7.0
18	6.9	6.6	6.7	6.5	7.3	6.5	7.2	6.5	7.6	7.0	7.5	7.1
19	6.7	6.5	6.8	6.5	8.6	6.5	7.3	6.6	7.7	7.0	7.5	7.1
20	6.7	6.5	6.7	6.5	7.4	6.4	7.3	6.6	7.6	7.0	7.5	7.1
21	6.7	6.6	6.9	6.6	7.5	6.4	7.3	6.7	7.6	7.0	7.4	7.1
22	6.8	6.6	7.3	6.6	7.5	6.5	7.5	6.7	7.7	7.0	7.7	7.1
23	6.7	6.6	6.8	6.6	7.4	6.4	7.6	6.8	7.9	7.1	7.6	7.3
24	6.7	6.6	6.8	6.6	6.9	6.4	7.6	6.8	8.2	6.7	7.7	7.3
25	6.7	6.6	6.9	6.5	7.3	6.5	7.5	6.8	7.9	7.1	7.7	7.3
26	7.0	6.6	6.9	6.5	8.5	6.5	7.9	7.0	7.9	7.1	7.7	7.3
27	7.0	6.6	7.0	6.6	8.4	6.7	7.9	7.1	7.9	7.1	7.7	7.3
28	6.7	6.5	7.3	6.6	7.9	6.5	7.8	7.1	7.8	7.1	7.7	7.3
29	6.7	6.5	7.0	6.5	7.5	6.7	7.9	7.1	7.8	7.1	7.7	7.4
30	6.8	6.5	7.0	6.5	7.9	6.7	7.9	7.1	7.8	7.2	7.7	7.3
31	---	---	6.9	6.5	---	---	7.7	7.1	7.7	7.2	---	---
MONTH	7.3	6.5	7.4	6.4	8.6	6.4	7.9	6.4	8.2	6.4	7.7	7.0

DISSOLVED OXYGEN (MG/L) . WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	11.2	10.2	10.8	10.5	10.5	10.5	11.7	11.3	11.5
2	---	---	---	11.2	10.7	10.9	10.9	10.6	10.7	11.7	11.4	11.5
3	---	---	---	11.2	10.6	11.0	11.4	11.1	11.3	12.1	11.6	11.8
4	---	---	---	10.6	10.0	10.2	11.6	11.5	11.6	12.2	11.8	12.0
5	---	---	---	10.9	10.1	10.5	11.6	10.9	11.3	12.2	11.9	12.1
6	11.2	9.9	10.6	10.9	10.3	10.6	11.2	10.8	11.1	12.8	12.0	12.3
7	10.8	9.3	9.9	10.7	10.2	10.4	11.5	11.9	12.3	12.5	11.3	12.0
8	11.5	9.4	10.2	10.9	10.3	10.6	12.0	11.6	11.8	12.0	11.9	12.0
9	11.0	9.2	10.1	11.4	10.6	10.6	12.4	12.1	12.2	12.1	11.9	12.0
10	10.5	9.1	9.7	11.2	10.7	11.1	13.0	11.0	12.2	12.0	11.9	12.0
11	11.0	9.2	9.9	10.7	10.1	10.4	12.5	12.0	12.3	11.9	11.4	11.7
12	11.0	9.5	10.1	10.2	9.8	10.0	12.8	12.3	12.6	11.5	11.3	11.4
13	10.7	9.7	10.2	10.5	10.0	10.3	12.8	12.3	12.5	11.5	11.3	11.4
14	11.1	9.6	10.4	11.0	10.7	10.8	12.9	12.6	12.7	11.8	11.3	11.6
15	11.1	9.7	10.4	11.3	10.9	11.0	13.3	12.8	13.2	11.9	11.6	11.8
16	11.3	10.2	10.7	11.5	11.0	11.2	13.6	13.2	13.5	11.9	11.6	11.8
17	11.4	10.2	10.8	11.8	11.2	11.5	13.7	13.4	13.6	11.6	11.4	11.5
18	11.0	10.3	10.6	12.0	11.7	11.9	14.1	13.6	13.7	11.5	11.4	11.4
19	11.0	10.2	10.6	12.2	11.8	12.0	14.1	12.9	13.7	---	---	---
20	11.0	9.9	10.7	12.1	11.9	12.0	13.9	12.5	13.2	---	---	---
21	10.7	9.5	10.0	12.4	12.1	12.2	13.0	11.2	12.1	---	---	---
22	10.4	9.5	10.1	12.2	11.6	11.9	11.6	11.2	11.5	---	---	---
23	10.4	9.3	9.8	11.6	11.2	11.4	11.7	11.4	11.6	---	---	---
24	10.8	9.2	9.9	11.5	11.3	11.4	11.7	11.3	11.5	---	---	---
25	10.7	9.3	10.1	11.5	11.3	11.4	11.7	11.3	11.5	---	---	---
26	10.6	9.2	10.0	11.4	10.5	11.0	11.9	11.7	11.8	---	---	---
27	10.5	9.6	10.0	10.8	10.6	10.7	12.1	11.6	11.8	---	---	---
28	11.5	9.8	10.4	10.8	10.4	10.5	12.2	11.8	12.0	---	---	---
29	11.4	9.8	10.7	10.5	10.2	10.3	12.2	11.8	12.0	---	---	---
30	11.0	10.1	10.6	10.4	10.3	10.3	12.1	11.5	11.9	---	---	---
31	11.1	10.2	10.6	---	---	---	12.0	11.5	11.7	12.8	12.8	12.8
MONTH	11.5	9.1	10.3	12.4	9.8	11.0	14.1	10.5	12.1	---	---	---

14166000 WILLAMETTE RIVER AT HARRISBURG, OREG.--Continued

DISSOLVED OXYGEN (MG/L) • WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.8	12.7	12.8	13.2	10.3	11.1	11.3	11.1	11.2	11.6	10.5	10.9
2	12.9	12.7	12.8	12.4	9.1	10.0	11.2	11.0	11.1	11.5	10.2	11.0
3	12.8	12.7	12.8	12.6	9.1	10.7	11.0	10.8	10.9	12.0	9.7	11.3
4	12.7	12.6	12.7	12.7	10.1	10.7	10.9	10.6	10.7	11.7	10.9	11.3
5	12.6	12.4	12.5	12.7	10.7	11.3	11.1	10.3	10.8	11.6	10.8	11.2
6	12.5	12.5	12.5	11.1	10.2	10.6	11.3	11.0	11.2	11.2	10.4	10.9
7	12.6	12.5	12.6	11.7	9.1	10.0	11.5	11.2	11.3	11.6	10.5	11.1
8	12.6	12.5	12.6	12.0	9.3	11.1	11.4	11.2	11.3	12.4	11.0	11.6
9	12.6	12.5	12.6	12.0	11.8	11.9	11.3	11.2	11.2	12.2	10.9	11.4
10	12.6	12.5	12.5	12.1	12.0	12.0	11.2	10.9	11.1	11.2	10.0	10.5
11	12.6	12.4	12.5	12.1	12.0	12.0	10.8	10.6	10.7	11.1	9.8	10.4
12	12.5	12.4	12.5	12.0	11.9	12.0	10.7	10.5	10.6	10.9	9.3	10.2
13	12.4	12.4	12.4	11.9	11.8	11.9	10.8	10.6	10.7	11.0	9.3	10.1
14	12.5	12.3	12.4	11.9	11.0	11.2	10.7	10.4	10.5	11.2	9.8	10.4
15	12.6	12.4	12.5	11.7	11.2	11.5	10.5	10.2	10.4	11.3	10.0	10.5
16	12.6	12.4	12.5	11.6	11.0	11.4	10.5	10.4	10.4	10.7	9.8	10.4
17	12.6	12.3	12.4	11.5	10.9	11.2	10.4	10.2	10.3	10.6	9.5	9.8
18	12.4	12.2	12.3	11.6	11.3	11.5	10.4	10.1	10.3	11.6	9.7	10.9
19	12.4	12.3	12.4	11.6	11.3	11.5	10.2	9.9	10.1	10.9	9.5	10.2
20	12.6	12.4	12.5	11.7	11.3	11.5	11.6	9.7	10.8	10.7	10.1	10.4
21	12.8	12.6	12.7	11.5	11.1	11.3	14.1	11.4	11.8	11.6	10.1	10.9
22	12.6	11.5	12.0	11.5	11.2	11.3	14.0	11.4	12.1	11.8	11.4	11.6
23	13.6	11.5	11.7	---	---	---	13.4	11.2	11.6	11.8	11.3	11.5
24	13.9	11.5	11.6	---	---	---	13.6	11.1	11.5	11.7	11.1	11.4
25	14.2	11.5	12.0	---	---	---	13.7	11.1	11.8	11.4	10.6	11.1
26	13.7	11.5	11.8	---	---	---	13.4	11.1	11.9	11.1	9.9	10.6
27	13.4	11.2	11.6	11.9	11.7	4.9	12.8	10.2	11.5	10.6	9.6	10.1
28	13.2	10.9	11.3	11.9	11.7	11.8	12.4	9.7	10.7	10.2	9.3	9.7
29	13.0	10.7	11.0	11.9	11.7	11.9	12.4	10.2	11.4	10.3	9.2	9.8
30	---	---	---	11.7	11.3	11.5	11.9	9.9	11.1	10.8	9.5	10.1
31	---	---	---	11.3	11.2	11.3	---	---	---	10.9	9.9	10.4
MONTH	14.2	10.7	12.3	13.2	9.1	11.1	14.1	9.7	11.0	12.4	9.2	10.7

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.0	10.1	10.5	10.4	8.5	9.4	9.2	7.7	8.4	10.4	9.1	9.7
2	11.0	9.9	10.4	10.2	8.4	9.4	8.9	7.4	8.1	10.4	9.0	9.7
3	10.8	9.7	10.2	10.6	8.4	9.5	8.5	7.2	7.9	10.1	9.0	9.5
4	10.9	9.3	10.2	10.4	8.3	9.4	---	---	---	9.9	8.8	9.3
5	10.6	8.9	9.7	10.3	8.3	9.3	---	---	---	9.9	9.1	9.5
6	10.3	9.3	9.8	10.1	8.4	9.2	---	---	---	10.3	9.2	9.7
7	10.5	9.3	9.9	10.1	8.8	9.4	---	---	---	10.5	9.1	9.8
8	10.6	9.2	9.8	9.9	8.9	9.3	---	---	---	10.9	9.3	10.1
9	10.1	9.3	9.7	10.7	9.1	9.9	---	---	---	10.7	9.6	10.2
10	11.0	9.9	10.4	10.2	8.7	9.7	10.1	9.3	9.7	10.8	9.5	10.2
11	11.0	10.2	10.6	10.8	7.8	9.3	9.4	8.3	8.8	10.9	9.6	10.2
12	11.0	10.0	10.4	9.6	8.2	8.9	9.6	7.7	8.7	10.6	9.1	9.8
13	11.1	8.1	10.3	9.3	7.9	8.6	9.9	8.5	9.2	10.3	9.0	9.5
14	12.3	9.8	10.9	9.1	7.6	8.4	9.8	8.5	9.2	10.1	8.8	9.4
15	10.1	9.1	9.7	9.0	7.8	8.2	10.0	8.6	9.3	9.8	8.5	9.2
16	12.1	9.5	10.3	8.9	7.5	8.2	9.8	8.7	9.2	9.6	8.2	8.9
17	12.7	9.4	10.3	8.9	7.3	8.1	9.9	8.5	9.2	9.6	8.2	8.9
18	12.2	9.1	9.9	8.8	7.3	8.0	9.8	8.6	9.1	10.0	8.7	9.3
19	12.0	9.1	9.6	8.3	7.1	7.7	9.7	8.5	9.1	10.1	8.8	9.3
20	12.2	8.3	9.5	8.9	7.0	7.8	9.5	8.1	8.8	9.9	8.8	9.4
21	10.5	8.2	9.2	9.2	7.5	8.3	10.3	8.5	9.3	9.7	9.1	9.3
22	11.9	7.2	9.2	9.2	7.6	8.4	10.8	9.3	10.0	11.8	8.9	10.4
23	11.3	7.6	8.9	10.3	8.1	9.2	10.7	9.2	9.8	10.3	9.4	9.9
24	11.5	8.3	9.4	9.9	8.5	9.2	12.5	8.2	10.4	10.3	9.4	9.8
25	12.1	9.0	9.9	10.3	8.4	9.2	11.1	9.2	10.2	10.3	9.1	9.7
26	---	---	---	11.0	7.6	9.4	11.2	9.3	10.1	10.3	9.3	9.8
27	---	---	---	10.1	8.6	9.3	11.0	9.1	9.9	10.0	9.2	9.5
28	---	---	---	10.0	8.5	9.2	10.8	8.9	9.9	9.6	8.9	9.3
29	---	---	---	9.5	7.9	8.7	10.7	8.9	9.9	9.7	8.9	9.2
30	10.5	9.2	9.8	9.4	6.9	8.6	10.8	9.2	9.9	9.3	8.4	8.9
31	---	---	---	9.1	7.6	8.3	10.6	9.1	9.8	---	---	---
MONTH	12.7	7.2	9.9	11.0	6.9	8.9	12.5	7.2	9.4	11.8	8.2	9.6

14166000 WILLAMETTE RIVER AT HARRISBURG, OREG.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	7.5	11.5	7.5	15.0	11.0	20.0	15.5	18.5	16.0	19.0	15.5
2	9.5	7.0	13.5	9.0	15.5	11.0	20.5	15.5	18.5	15.5	19.5	16.0
3	10.0	7.5	15.0	10.5	14.0	12.0	21.5	17.0	20.0	15.5	19.0	16.0
4	11.5	8.5	15.0	11.0	15.0	11.0	22.0	17.5	---	---	17.5	15.0
5	11.0	9.5	14.0	11.0	16.0	11.5	21.5	17.5	---	---	16.5	15.0
6	9.5	7.5	13.0	10.5	14.5	12.5	19.0	16.5	---	---	17.0	14.0
7	8.0	7.0	11.0	9.5	15.0	12.0	17.5	15.0	---	---	18.0	15.0
8	8.0	6.5	11.0	8.0	15.5	12.0	16.0	14.5	---	---	16.5	15.0
9	8.0	6.0	14.0	9.0	14.0	10.5	17.0	13.0	---	---	16.5	14.5
10	8.5	6.5	14.5	10.0	12.0	9.0	18.0	14.0	20.5	17.0	16.0	13.5
11	9.0	7.5	15.5	10.5	12.5	9.5	20.0	10.0	19.5	16.0	16.5	13.0
12	8.5	7.0	17.0	12.0	14.5	9.5	22.0	17.0	17.5	15.5	17.0	13.5
13	8.5	6.5	17.0	13.0	16.0	11.5	22.5	18.5	17.5	14.0	17.5	14.0
14	9.5	7.5	16.0	12.5	15.5	13.0	22.0	18.0	17.0	14.5	18.0	15.0
15	9.0	8.0	13.5	11.0	14.5	13.0	22.5	18.0	16.0	14.0	18.0	15.0
16	9.0	7.0	11.0	10.0	15.0	11.0	23.5	18.5	15.0	13.0	18.0	15.0
17	9.0	6.5	11.0	9.5	16.5	11.5	23.5	19.5	16.5	13.0	17.0	15.5
18	9.0	6.5	11.5	9.0	17.5	12.5	22.5	19.0	15.5	13.5	16.0	14.5
19	10.5	6.5	13.5	9.0	18.0	14.0	21.0	17.5	17.0	13.5	15.5	14.0
20	10.0	8.0	12.5	11.0	18.0	14.0	21.0	17.0	17.5	14.5	15.0	13.5
21	10.5	8.0	11.0	9.5	17.0	13.5	20.5	16.5	17.5	15.0	15.0	14.0
22	10.5	7.0	10.0	8.5	16.5	13.0	21.0	16.5	18.5	15.0	15.5	13.0
23	10.0	8.0	11.0	8.5	15.5	13.5	20.5	16.5	18.5	15.0	15.0	14.0
24	9.5	8.0	12.0	8.5	13.5	11.5	20.0	16.5	18.5	15.5	15.0	13.5
25	9.5	7.5	13.0	9.0	13.5	11.0	19.0	16.0	19.0	15.5	14.5	13.5
26	11.0	7.0	15.0	10.0	16.0	11.0	19.5	15.5	20.0	16.0	15.0	13.5
27	12.5	8.5	16.0	12.0	18.0	13.0	19.5	15.5	20.5	16.5	15.0	13.0
28	10.5	8.0	17.0	12.5	19.5	14.5	20.5	16.0	20.5	17.0	16.5	13.5
29	9.5	6.5	16.0	12.5	19.0	15.0	20.5	16.5	20.0	17.0	17.0	13.5
30	10.5	6.5	15.5	11.5	20.0	9.5	21.0	16.5	18.5	16.0	16.5	14.0
31	---	---	14.0	11.5	---	---	19.0	16.5	18.5	15.0	---	---
MONTH	12.5	6.0	17.0	7.5	20.0	9.0	23.5	10.0	20.5	13.0	19.5	13.0

14171750 WILLAMETTE RIVER ABOVE CALAPOOIA RIVER, AT ALBANY, OREG.

LOCATION.—Lat 44°38'30", long 123°07'00", in NW¼ sec.1, T.11 S., R.4 W., Benton County, temperature recorder on left bank, 0.6 mi (1.0 km) upstream from gaging station at Albany, 0.4 mi (0.6 km) upstream from Calapooia River, and at mile 119.9 (192.9 km).

DRAINAGE AREA.—4,460 mi² (11,600 km²), approximately.

PERIOD OF RECORD.—Water temperatures: October 1963 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 23.0°C July 17; minimum, 3.5°C Dec. 28, 29, Jan. 4, 5, Feb. 3.

Period of record:
Water temperatures: Maximum, 23.0°C July 17, 1922; minimum, 0.5°C Jan. 26, 1969.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	13.5	9.5	9.0	8.0	7.5	6.5	5.5	5.0	4.0	8.0	7.0
2	14.0	14.0	9.5	8.5	7.5	7.0	6.5	5.5	4.5	4.0	7.5	7.0
3	14.5	14.0	9.5	8.5	7.5	7.0	6.0	4.5	4.0	3.5	7.5	7.5
4	15.0	14.5	10.0	9.0	7.5	6.5	4.5	3.5	4.5	4.0	7.5	7.5
5	15.5	15.0	9.0	8.0	8.0	7.0	4.5	3.5	5.0	4.0	9.0	8.0
6	15.5	15.0	8.0	7.0	8.5	7.5	5.5	4.0	6.0	4.5	9.0	8.0
7	15.5	15.5	8.5	7.5	7.5	6.5	5.5	4.5	6.5	5.5	8.5	7.5
8	15.5	15.0	8.5	8.0	7.0	6.0	5.5	4.5	7.0	6.0	8.0	7.0
9	16.0	15.5	9.0	8.0	7.0	6.5	6.0	5.0	7.0	6.0	8.5	7.5
10	16.0	16.0	9.0	8.5	7.0	6.0	6.0	5.0	6.5	5.0	8.5	7.5
11	16.0	15.5	9.5	9.0	6.5	5.5	6.5	5.5	6.5	5.5	9.0	8.0
12	15.5	15.5	9.0	9.0	6.5	5.5	7.0	6.5	7.0	5.5	9.5	9.0
13	15.5	15.0	9.5	9.0	6.0	5.0	7.0	6.0	7.5	6.5	10.0	9.0
14	14.0	13.0	9.0	8.5	6.5	5.5	6.5	5.0	7.0	6.0	9.5	8.5
15	13.0	12.5	8.5	8.5	6.5	5.5	5.5	5.0	7.0	6.0	10.0	8.5
16	12.5	12.0	8.5	8.0	6.5	5.5	6.0	5.0	7.5	7.0	10.0	9.0
17	12.0	11.5	8.0	7.5	6.5	5.5	6.5	5.5	7.5	7.0	10.0	9.0
18	12.0	11.5	8.0	7.5	7.0	6.0	7.5	6.0	8.0	7.0	10.0	9.0
19	12.0	11.5	8.5	7.5	7.0	6.0	8.5	7.0	7.5	7.0	9.5	8.5
20	12.5	11.5	8.5	8.0	6.5	6.0	9.0	8.5	7.5	7.0	9.0	8.0
21	12.0	11.5	9.0	8.5	7.0	6.0	9.0	8.5	7.5	6.5	9.5	8.5
22	12.0	11.5	9.0	8.0	7.0	6.0	8.5	8.0	7.0	6.5	9.0	8.5
23	12.0	11.5	8.5	8.0	6.5	6.0	8.0	7.0	7.0	6.5	9.5	8.5
24	11.5	11.0	9.0	8.0	6.0	5.5	7.5	6.0	7.0	6.5	9.5	8.5
25	11.5	11.0	8.5	8.0	6.0	5.0	6.5	6.0	7.5	6.5	8.5	7.5
26	12.0	11.5	8.5	8.0	5.5	4.5	6.5	5.0	8.0	6.5	7.5	7.0
27	11.5	10.5	9.0	7.5	5.0	4.0	5.0	4.0	8.5	7.5	8.0	6.5
28	10.0	9.0	8.5	8.0	4.0	3.5	4.5	4.0	9.5	9.0	8.5	7.5
29	9.0	8.5	9.0	8.0	4.5	3.5	5.0	4.0	9.0	8.0	9.0	7.5
30	9.0	8.5	9.0	7.5	5.5	4.5	4.5	4.0	---	---	10.0	8.0
31	9.5	9.0	---	---	6.0	5.0	5.0	4.0	---	---	9.5	9.0
MONTH	16.0	8.5	10.0	7.0	8.5	3.5	9.0	3.5	9.5	3.5	10.0	6.5

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

14172000 CALAPOOIA RIVER AT HOLLEY, OREG.

LOCATION.--Lat 44°21'05", long 122°47'10", in SE¼ sec.15, T.14 S., R.1 W., Linn County, temperature recorder at gaging station on right bank, 0.3 mi (0.5 km) southwest of Holley, 5.0 mi (8.0 km) upstream from Brush Creek, and at mile 45.4 (73.0 km).

DRAINAGE AREA.--105 mi^2 (272 km^2).

PERIOD OF RECORD.--Water temperatures: October 1963 to September 1972.

EXTREMES.--1971-1972:
Water temperatures: Maximum, 29.5°C July 17, Aug. 7; minimum not determined, occurred during period Dec. 13 to Apr. 17.

Period of record:
Water temperatures: Maximum, 29.5°C July 17, Aug. 7, 1972; minimum, freezing point Dec. 19, 20, 1965.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.0	7.0	7.0	7.0	---	---	---	---	---	---
2	---	---	8.0	7.0	7.0	6.5	---	---	---	---	---	---
3	---	---	8.0	8.0	6.5	6.0	---	---	---	---	---	---
4	---	---	8.5	8.0	6.0	5.5	---	---	---	---	---	---
5	---	---	9.0	6.5	7.0	6.0	---	---	---	---	---	---
6	---	---	6.5	6.5	7.0	6.5	---	---	---	---	---	---
7	---	---	8.0	6.0	6.5	6.5	---	---	---	---	---	---
8	---	---	7.0	6.5	8.0	6.0	---	---	---	---	---	---
9	---	---	8.5	7.0	8.0	7.0	---	---	---	---	---	---
10	---	---	9.5	8.5	7.0	7.0	---	---	---	---	---	---
11	---	---	9.5	9.0	7.0	6.5	---	---	---	---	---	---
12	---	---	9.5	9.0	8.0	6.5	---	---	---	---	---	---
13	---	---	9.0	8.5	8.0	---	---	---	---	---	---	---
14	---	---	9.0	8.5	---	---	---	---	---	---	---	---
15	---	---	8.5	8.0	---	---	---	---	---	---	---	---
16	---	---	8.0	7.0	---	---	---	---	---	---	---	---
17	---	---	7.0	6.0	---	---	---	---	---	---	---	---
18	9.0	9.0	9.0	6.5	---	---	---	---	---	---	---	---
19	10.0	9.0	9.5	9.0	---	---	---	---	---	---	---	---
20	10.0	9.5	9.5	9.0	---	---	---	---	---	---	---	---
21	10.0	10.0	9.0	8.5	---	---	---	---	---	---	---	---
22	9.5	9.5	9.5	9.0	---	---	---	---	---	---	---	---
23	9.5	9.5	9.5	9.5	---	---	---	---	---	---	---	---
24	10.0	9.5	9.5	8.5	---	---	---	---	---	---	---	---
25	10.0	8.5	9.0	8.0	---	---	---	---	---	---	---	---
26	10.5	9.5	8.0	7.0	---	---	---	---	---	---	---	---
27	10.5	8.5	8.0	8.0	---	---	---	---	---	---	---	---
28	8.5	7.0	8.0	8.0	---	---	---	---	---	---	---	---
29	7.0	5.5	8.0	8.0	---	---	---	---	---	---	---	---
30	6.5	5.5	8.0	7.0	---	---	---	---	---	---	---	---
31	7.0	6.5	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	9.5	6.0	---	---	---	---	---	---	---	---

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

14173500 CALAPOOIA RIVER AT ALBANY, OREG.

LOCATION.—Lat 44°37'15", long 123°07'40", in NW¼ sec.13, T.11 S., R.4 W., Linn County, temperature recorder at gaging station near right bank, on downstream side of bridge on Riverside Drive in Albany, 0.6 mi (1.0 km) downstream from Oak Creek, and at mile 3.0 (4.8 km).

DRAINAGE AREA.—372 mi^2 (963 km^2).

PERIOD OF RECORD.—Water temperatures: January 1964 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 26.5°C July 17; minimum, 2.0°C Jan. 29 to Feb. 1, Feb. 3-6.

Period of record:
Water temperatures: Maximum, 28.5°C Aug. 16, 17, 19-21, 1967; minimum, freezing point sometime during period Jan. 7 to Feb. 18, 1969.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.0	6.5	6.0	8.0	7.0	6.0	5.0	3.0	2.0	6.5	5.5
2	13.0	11.5	7.0	6.5	7.0	7.0	6.0	6.0	3.0	3.0	6.5	5.5
3	13.5	12.0	7.0	6.5	7.0	7.0	6.0	5.0	3.0	2.0	6.5	6.5
4	14.0	13.0	7.0	6.5	7.0	6.5	5.0	4.0	2.0	2.0	6.5	6.5
5	15.0	14.0	7.0	6.5	8.0	6.5	4.0	3.5	2.0	2.0	7.0	6.5
6	15.5	14.5	6.5	5.5	8.0	8.0	4.5	3.5	3.5	2.0	8.0	7.0
7	15.5	15.0	5.5	5.5	8.0	6.5	4.5	4.5	5.0	3.5	8.0	6.0
8	15.5	14.5	6.0	5.0	6.5	6.0	5.0	4.5	5.5	5.0	6.5	6.0
9	16.0	15.0	6.0	6.0	6.5	6.0	5.0	5.0	6.0	5.5	7.0	6.5
10	16.0	15.0	7.0	6.0	6.5	6.0	5.5	5.0	6.0	5.0	8.0	7.0
11	15.5	15.0	8.5	7.0	6.0	5.5	6.0	5.5	5.0	5.0	9.0	8.0
12	15.5	14.5	8.5	8.5	5.5	5.5	6.5	6.0	5.5	5.0	9.5	9.0
13	15.0	14.5	9.5	8.5	5.5	5.5	6.5	5.5	6.5	5.5	9.5	9.5
14	14.5	13.0	8.5	8.5	5.5	5.5	5.5	5.0	6.5	5.5	9.5	9.0
15	13.5	12.0	8.5	8.0	5.5	5.5	5.0	4.5	6.0	5.5	9.0	9.0
16	13.0	11.5	8.0	7.0	5.5	5.5	4.5	4.5	6.5	6.0	10.0	9.0
17	13.0	10.5	7.0	6.5	6.0	5.5	5.5	4.5	6.5	6.5	10.5	9.0
18	10.5	10.0	6.5	6.0	6.0	6.0	6.5	5.5	6.5	6.5	10.5	10.0
19	10.5	10.0	6.5	6.0	6.5	6.0	7.0	6.5	6.5	6.5	10.0	9.0
20	11.0	10.0	6.5	6.5	6.5	6.5	8.5	7.0	6.5	6.5	9.5	9.0
21	11.0	10.0	7.0	6.5	6.5	6.0	8.5	8.5	6.5	6.5	9.0	9.0
22	10.5	10.0	8.0	7.0	6.0	6.0	8.5	7.0	6.5	6.0	10.0	9.0
23	10.0	10.0	7.0	7.0	6.0	5.5	7.0	5.5	6.0	6.0	10.0	8.5
24	10.0	10.0	8.0	7.0	5.5	5.5	5.5	4.5	6.0	5.5	8.5	8.0
25	10.0	9.0	8.0	8.0	5.5	5.5	4.5	4.5	5.5	5.0	8.0	6.5
26	10.0	9.5	8.0	8.0	5.5	5.0	4.5	4.0	6.0	5.0	6.5	5.5
27	10.0	9.5	8.5	8.0	5.0	4.5	4.0	3.5	8.0	6.0	6.0	5.5
28	9.5	8.0	8.0	8.0	4.5	4.0	3.5	3.0	9.0	8.0	6.5	6.0
29	8.0	6.5	8.0	8.0	4.0	3.5	3.0	2.0	9.0	6.5	7.0	6.5
30	6.5	5.5	8.0	8.0	4.5	3.5	2.0	2.0	---	---	8.0	6.5
31	6.0	5.5	---	---	5.0	4.5	2.0	2.0	---	---	8.0	8.0
MONTH	16.0	5.5	9.5	5.0	8.0	3.5	8.5	2.0	9.0	2.0	10.5	5.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	10.5	9.0	19.0	17.0	23.0	20.0	23.5	20.5	22.0	20.0
2	9.0	8.5	12.0	10.5	19.0	17.0	23.5	21.0	22.0	19.5	22.0	20.5
3	9.0	9.0	13.5	12.0	19.0	17.0	24.0	21.0	23.0	19.5	22.0	20.5
4	9.0	9.0	14.5	13.5	18.5	17.0	24.5	21.5	23.5	20.5	22.0	20.5
5	10.5	9.5	15.5	14.0	19.0	17.0	24.5	22.0	24.0	21.0	20.5	19.5
6	10.5	9.5	14.5	14.0	19.0	18.0	24.0	21.0	25.0	23.0	19.5	18.0
7	9.5	7.0	14.0	13.0	19.5	18.5	22.0	20.0	25.5	23.0	19.5	18.5
8	7.0	7.0	13.0	12.0	20.5	18.5	20.5	19.5	25.5	23.5	19.5	18.0
9	7.0	7.0	14.0	11.5	20.5	18.5	19.5	18.0	25.5	23.5	18.0	16.5
10	7.0	7.0	15.0	13.0	18.5	16.5	19.5	18.0	25.5	23.0	17.0	16.0
11	8.0	7.0	16.0	14.0	17.0	16.0	20.0	18.5	24.5	21.5	16.5	15.5
12	8.0	7.0	18.0	15.0	17.0	15.0	22.0	19.5	23.5	21.0	18.0	15.5
13	7.0	7.0	19.0	16.5	19.0	16.0	24.0	21.5	21.0	19.0	18.0	15.5
14	8.0	7.0	20.0	18.0	19.5	18.0	24.0	21.5	20.5	19.0	18.5	16.5
15	8.0	8.0	19.5	18.0	19.5	18.5	24.5	22.0	20.5	19.0	18.5	16.5
16	8.0	7.0	18.0	16.0	18.5	18.0	26.0	23.0	20.5	18.5	18.5	17.0
17	8.0	7.0	16.0	14.0	19.5	18.0	26.5	24.0	19.0	18.0	18.5	18.0
18	8.5	8.0	14.0	13.0	20.0	18.0	26.0	24.0	19.0	17.0	18.0	16.5
19	9.0	8.0	13.0	11.5	21.5	19.0	25.5	23.0	18.5	17.0	16.5	15.5
20	9.5	9.0	14.5	13.0	21.5	20.0	25.0	22.0	19.5	18.5	16.0	15.0
21	9.5	9.5	14.5	13.0	21.0	20.0	24.5	21.5	20.0	19.0	15.5	15.0
22	9.5	9.5	13.0	12.0	21.0	19.5	24.5	22.0	20.5	19.0	15.0	14.0
23	9.5	9.0	12.0	11.5	20.5	19.5	24.5	22.0	21.0	19.0	14.5	13.5
24	10.0	9.5	12.0	11.5	19.5	18.0	24.5	21.5	21.5	19.5	14.0	13.5
25	10.0	9.5	13.0	11.5	18.0	17.0	23.5	20.5	22.0	20.0	14.0	13.0
26	10.0	9.5	15.0	13.0	17.0	16.5	23.0	20.0	22.0	20.5	13.5	12.0
27	10.0	11.5	16.5	14.5	19.5	16.5	23.0	20.0	24.0	21.5	13.0	11.5
28	11.5	11.5	19.0	16.5	21.5	18.5	24.0	20.5	24.0	22.0	13.0	11.0
29	11.5	9.0	19.5	18.0	22.0	19.5	24.0	21.5	24.0	22.0	13.0	11.0
30	9.5	9.0	19.5	18.0	23.0	20.0	24.0	21.5	24.0	21.5	13.5	12.0
31	---	---	19.5	18.0	---	---	24.0	21.0	23.0	20.5	---	---
MONTH	11.5	7.0	20.0	9.0	23.0	15.0	26.5	18.0	25.5	17.0	22.0	11.0

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OREG.

LOCATION.--Lat 44°42'25", long 122°06'00", in SE¼NW¼ sec.17, T.10 S., R.6 E., Marion County, temperature recorder at gaging station on right bank, 0.5 mi (0.8 km) downstream from Boulder Creek, 3.0 mi (4.8 km) southeast of Detroit, and at mile 70.7 (113.8 km).

DRAINAGE AREA.--216 mi^2 (559 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1971 to September 1972.
Water temperatures: April 1951 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 18.0°C Aug. 5.

Period of record:
Water temperatures: Maximum, 19.0°C July 8, 18, 19, 1970; minimum, freezing point Dec. 1, 1954, Mar. 5, Feb. 16, 17, 1956.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	PH (UNITS)	DIS-SOLVED OXYGEN (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TUR-BID-ITY (JTU)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
OCT. 14...	1530	498	10.0	8.2	10.5	43	0	420
DEC. 16...	0830	1080	4.0	6.9	13.2	34	0	180
MAR. 13...	1430	5940	5.0	7.6	12.8	28	32	122
APR. 19...	0945	1110	3.5	8.1	13.4	38	1	34
JUNE 02...	1245	2100	7.5	7.8	10.8	35	3	145
JULY 21...	1100	780	10.2	8.0	10.6	43	2	600

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT. 14...	498	24	4.3	1.5	3.0	.7	28	0	.5

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (P04) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 14...	1.6	.1	.15	0	1	10	2	0	10

DATE	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT. 14...	2	.1	17	0	27	.3	50	.07	67.2

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OREG.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.5	7.0	6.5	6.0	5.5	3.0	3.0	---	---	---	---
2	9.5	8.5	6.5	6.0	5.5	5.5	3.0	2.0	---	---	---	---
3	10.0	8.5	6.5	5.5	5.5	5.0	2.0	1.0	---	---	---	---
4	10.0	9.0	6.5	6.0	5.0	5.0	1.0	0.5	---	---	---	---
5	10.5	9.5	6.5	5.0	5.0	5.0	2.0	1.0	---	---	---	---
6	10.5	10.0	5.0	4.5	5.0	5.0	3.0	2.0	---	---	---	---
7	10.5	9.5	6.0	5.0	5.0	5.0	3.0	3.0	---	---	---	---
8	11.0	10.0	6.0	6.0	5.0	4.0	3.0	2.0	---	---	---	---
9	11.0	10.0	6.5	6.0	5.0	4.5	3.0	2.0	---	---	---	---
10	11.0	10.0	7.0	6.5	4.5	4.5	2.0	1.5	---	---	---	---
11	11.0	10.0	7.0	6.5	4.5	4.5	2.0	1.0	---	---	---	---
12	10.5	9.5	7.0	7.0	4.5	4.0	2.0	1.5	---	---	---	---
13	10.0	9.5	7.0	6.5	4.0	4.0	2.0	2.0	---	---	---	---
14	10.0	9.0	6.5	5.5	4.0	4.0	2.0	1.5	---	---	---	---
15	9.5	9.0	6.5	6.0	4.0	4.0	1.5	1.5	---	---	---	---
16	9.0	8.0	6.5	6.5	3.5	3.5	3.0	1.5	---	---	---	---
17	8.0	6.0	6.5	6.5	3.5	3.5	3.5	3.0	---	---	---	---
18	8.5	8.0	6.5	6.5	3.5	3.5	3.5	3.0	---	---	---	---
19	9.0	8.5	7.0	6.5	3.5	3.5	3.0	3.0	---	---	---	---
20	9.0	8.5	7.0	6.5	3.5	3.5	3.0	2.0	---	---	---	---
21	9.0	8.0	6.5	6.0	3.5	3.5	---	---	---	---	---	---
22	9.5	8.5	6.5	6.5	3.5	3.5	---	---	---	---	---	---
23	9.5	9.5	6.5	6.0	3.5	3.0	---	---	---	---	---	---
24	9.5	8.5	6.5	6.5	3.5	3.0	---	---	---	---	---	---
25	8.5	7.0	6.5	6.0	3.0	2.0	---	---	---	---	---	---
26	9.0	8.5	6.0	6.0	2.0	1.5	---	---	---	---	---	---
27	8.5	6.5	6.0	6.0	1.5	1.0	---	---	---	---	---	---
28	6.5	6.0	6.0	6.0	2.0	1.5	---	---	---	---	---	---
29	6.0	5.0	6.0	6.0	2.0	1.0	---	---	---	---	---	---
30	6.0	5.5	6.0	5.5	3.0	2.0	---	---	---	---	---	---
31	6.5	6.0	---	---	3.0	3.0	---	---	---	---	---	---
MONTH	11.0	5.0	7.0	4.5	6.0	1.0	---	---	---	---	---	---

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

14179000 BREITENBUSH RIVER ABOVE CANYON CREEK, NEAR DETROIT, OREG.

LOCATION.—Lat 44°45'10", long 122°07'40", in SE¼NE¼ sec.36, T.9 S., R.5 E., Marion County, temperature recorder at gaging station on left bank, 600 ft (183 m) upstream from Canyon Creek, 1.5 mi (2.4 km) northeast of Detroit, and at mile 2.0 (3.2 km).

DRAINAGE AREA.—106 mi² (275 km²).

PERIOD OF RECORD.—Chemical analyses: October 1971 to September 1972.
Water temperatures: December 1950 to July 1961, January 1962 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 15.0°C July 16, 17, 31, Aug. 6, 7.

Period of record:
Water temperatures: Maximum, 17.0°C July 28, 29, 1968; minimum, 0.5°C on many days in 1951, 1956, 1963, 1967-69.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	PH (UNITS)	DIS-SOLVED OXYGEN (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TUR-BID-ITY (JTU)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
OCT. 15...	0915	189	9.0	8.1	11.0	50	0	--
DEC. 16...	1100	540	4.2	7.0	13.1	36	1	160
MAR. 14...	1100	3220	4.1	7.3	13.2	32	25	58
APR. 19...	1045	573	4.0	7.7	13.2	43	1	18
JUNE 02...	1345	1060	8.0	7.6	10.6	34	2	125
JULY 21...	1345	250	10.4	8.0	10.6	42	2	32

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT. 15...	189	23	5.1	1.1	4.2	.7	30	0	2.0

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (P04) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 15...	4.0	.1	.12	2	2	0	2	0	10

DATE	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT. 15...	4	.0	17	0	33	.4	55	.07	29.3

14179000 BREITENBUSH RIVER ABOVE CANYON CREEK, NEAR DETROIT, OREG.--Continued

WATER TEMPERATURE (DEG. C) ; WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	13.0	8.0	14.5	10.5	13.0	9.5
2	---	---	---	---	---	---	13.0	8.5	14.0	9.5	13.0	9.5
3	---	---	---	---	9.5	6.5	13.5	8.5	14.0	9.5	13.0	9.5
4	---	---	---	---	9.5	5.5	13.5	8.5	14.5	10.0	12.5	10.0
5	---	---	---	---	10.5	6.0	13.5	9.0	14.5	10.5	12.5	11.0
6	---	---	---	---	10.0	6.5	13.5	9.0	15.0	10.5	11.5	10.0
7	---	---	---	---	9.0	6.5	12.5	8.0	15.0	11.0	12.0	9.5
8	---	---	---	---	9.5	6.5	10.5	8.5	14.5	11.0	11.5	9.5
9	---	---	---	---	9.5	7.0	12.0	8.0	15.0	11.0	11.0	9.5
10	---	---	---	---	7.5	6.0	11.5	7.5	14.5	10.5	10.5	8.5
11	---	---	---	---	8.0	5.5	11.5	9.0	14.0	10.5	9.5	7.5
12	4.0	3.0	---	---	10.5	6.0	14.0	9.0	13.0	10.5	---	---
13	5.0	3.5	---	---	11.5	6.5	14.0	10.0	12.5	9.5	---	---
14	5.0	4.0	---	---	11.5	7.5	14.0	9.0	11.5	9.5	---	---
15	5.5	4.5	---	---	9.0	7.5	14.5	9.5	11.0	9.5	---	---
16	4.5	3.5	---	---	9.0	7.0	15.0	9.5	10.5	9.0	---	---
17	5.0	3.0	---	---	11.0	6.5	15.0	9.5	10.5	9.0	---	---
18	6.0	3.0	---	---	12.0	7.0	14.0	9.5	11.5	8.5	---	---
19	6.5	3.0	---	---	12.0	7.5	13.5	9.5	12.5	9.5	---	---
20	6.0	4.0	---	---	11.5	7.5	11.5	8.5	12.5	9.5	---	---
21	5.5	4.0	---	---	12.0	7.5	12.0	9.0	13.0	9.5	---	---
22	7.0	3.5	---	---	11.5	7.0	13.5	8.5	13.0	10.5	---	---
23	6.5	4.0	---	---	9.0	8.0	13.5	9.0	12.5	9.0	---	---
24	---	---	---	---	8.0	7.0	14.0	9.5	13.0	9.5	---	---
25	---	---	---	---	9.0	7.0	13.5	9.0	13.0	9.5	---	---
26	---	---	---	---	9.0	7.0	14.0	9.0	13.5	10.0	---	---
27	---	---	---	---	12.5	7.5	14.0	9.5	13.5	10.0	---	---
28	---	---	---	---	12.5	8.0	14.5	9.5	14.0	11.0	---	---
29	---	---	---	---	13.0	8.0	14.5	10.0	13.5	10.5	---	---
30	---	---	---	---	12.5	8.0	14.5	10.0	13.0	10.5	---	---
31	---	---	---	---	---	---	15.0	11.0	13.0	9.5	---	---
MONTH	---	---	---	---	13.0	5.5	15.0	7.5	15.0	8.5	---	---

14181500 NORTH SANTIAM RIVER AT NIAGARA, OREG.

LOCATION.--Lat 44°45'10", long 122°17'50", in NE¼NE¼ sec.34, T.9 S., R.4 E., Linn County, temperature recorder at gaging station on left bank, 2.1 mi (3.4 km) east of Niagara, and at mile 57.3 (92.2 km).

DRAINAGE AREA.--453 mi^2 (1,173 km^2).

PERIOD OF RECORD.--Water temperatures: January 1953 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 13.5°C Sept. 27-30.

Period of record:
Water temperatures: Maximum, 16.5°C July 28, 29, 1958; minimum, 1.5°C on several days in 1957 and 1971.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	4.5	4.5	4.0	3.5	5.5	5.5
2	---	---	---	---	---	---	4.5	4.5	3.5	3.0	5.5	5.5
3	---	---	---	---	---	---	4.5	4.0	3.5	3.0	5.5	5.5
4	---	---	---	---	---	---	4.0	4.0	3.5	3.5	5.5	5.5
5	---	---	---	---	---	---	4.0	4.0	4.0	3.5	5.5	5.5
6	---	---	---	---	---	---	4.5	4.0	4.0	4.0	5.5	5.5
7	---	---	---	---	---	---	4.5	4.5	4.0	4.0	5.5	5.5
8	---	---	---	---	---	---	4.5	4.0	4.5	4.0	5.5	5.5
9	---	---	---	---	---	---	4.5	4.0	4.5	4.0	5.5	5.5
10	---	---	---	---	---	---	4.5	4.5	4.5	4.0	5.5	5.5
11	---	---	---	---	---	---	4.5	4.0	4.5	4.0	5.5	5.5
12	---	---	---	---	---	---	4.5	4.5	4.5	4.5	5.5	5.5
13	---	---	---	---	---	---	4.5	4.5	5.0	4.5	---	---
14	---	---	---	---	---	---	4.5	4.0	5.0	5.0	---	---
15	---	---	---	---	---	---	4.0	4.0	5.0	5.0	---	---
16	---	---	---	---	---	---	4.5	4.0	5.5	5.0	---	---
17	---	---	---	---	---	---	4.5	4.5	5.0	5.0	---	---
18	---	---	---	---	---	---	4.5	4.5	5.5	5.0	---	---
19	---	---	---	---	---	---	5.0	5.0	5.5	5.5	---	---
20	---	---	---	---	---	---	6.0	5.0	5.5	5.0	---	---
21	---	---	---	---	---	---	6.0	5.5	5.5	5.0	---	---
22	---	---	---	---	---	---	6.0	6.0	5.5	5.5	---	---
23	---	---	---	---	---	---	6.0	4.5	5.5	5.5	---	---
24	---	---	---	---	4.5	4.5	4.5	4.5	5.5	5.0	---	---
25	---	---	---	---	4.5	4.5	4.5	4.5	5.5	5.5	---	---
26	---	---	---	---	4.5	4.5	4.5	4.5	5.5	5.5	---	---
27	---	---	---	---	4.5	4.0	4.5	4.0	6.0	5.5	---	---
28	---	---	---	---	4.5	4.0	4.5	4.0	6.5	6.0	---	---
29	---	---	---	---	4.5	4.5	4.5	4.0	6.5	6.5	---	---
30	---	---	---	---	4.5	4.5	4.0	4.0	---	---	---	---
31	---	---	---	---	4.5	4.5	4.5	4.0	---	---	---	---
MONTH	---	---	---	---	---	---	6.0	4.0	6.5	3.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	5.0	4.5	6.0	5.0	6.5	6.0	7.0	6.5	10.5	9.5
2	---	---	6.0	5.0	5.5	4.5	6.0	6.0	7.0	6.5	11.0	10.5
3	---	---	5.5	5.0	5.0	5.0	6.0	6.0	7.5	6.5	11.0	10.5
4	---	---	6.0	5.0	5.5	5.0	6.5	6.0	7.5	7.0	11.0	10.5
5	---	---	5.5	5.0	5.5	4.5	6.5	6.0	8.0	7.0	10.5	10.5
6	---	---	5.5	5.0	5.0	5.0	6.0	5.5	8.0	7.5	11.0	10.5
7	---	---	5.0	4.5	5.0	5.0	6.5	6.0	8.0	7.5	11.0	11.0
8	---	---	6.0	5.0	5.0	5.0	6.0	6.0	8.0	7.5	11.0	10.5
9	---	---	5.5	5.0	5.5	4.5	6.0	6.0	8.0	7.5	11.5	10.5
10	---	---	5.5	4.5	8.0	5.5	6.5	5.5	8.0	7.5	11.5	11.0
11	---	---	6.0	5.5	9.0	7.5	6.0	6.0	8.0	8.0	11.5	11.0
12	4.5	4.0	6.5	6.0	8.0	7.0	6.5	6.0	8.0	8.0	12.0	11.5
13	4.0	4.0	8.5	6.0	7.0	4.5	7.0	6.0	8.5	8.0	12.0	11.5
14	4.0	4.0	7.5	6.0	6.0	5.0	7.0	6.5	8.5	8.0	12.5	11.5
15	4.5	4.0	6.5	5.5	6.0	5.5	7.0	6.5	8.0	8.0	12.5	12.5
16	4.5	4.0	7.5	6.0	6.0	5.5	6.5	6.5	8.5	8.0	12.5	12.0
17	4.0	4.0	7.5	5.0	6.0	6.0	6.5	6.0	8.5	8.5	12.5	12.5
18	4.5	4.0	6.5	5.0	8.5	6.0	6.0	6.0	8.5	8.5	12.5	12.5
19	4.5	4.0	8.0	6.5	6.5	6.0	6.0	5.5	9.0	8.5	13.0	12.5
20	5.0	4.5	7.5	7.5	6.5	6.5	6.0	5.5	9.0	8.5	13.0	12.5
21	4.5	4.0	7.5	5.5	6.5	6.5	6.5	6.0	9.0	8.5	13.0	13.0
22	4.5	4.0	7.0	6.0	6.5	6.0	6.5	6.0	9.0	9.0	13.0	13.0
23	5.0	4.5	6.0	5.5	6.5	6.0	6.0	5.5	9.5	9.0	13.0	12.5
24	5.0	4.0	6.0	5.5	6.0	6.0	6.0	6.0	9.5	9.0	13.0	13.0
25	4.5	4.0	6.5	5.5	6.0	5.5	6.5	6.0	9.5	9.0	13.0	13.0
26	5.0	4.0	7.0	6.5	5.5	5.5	6.5	6.0	9.5	9.0	13.0	13.0
27	6.0	4.5	7.5	5.5	6.0	5.5	6.5	6.0	9.5	9.5	13.5	13.5
28	5.0	4.0	5.5	5.0	6.0	5.5	6.5	6.5	9.5	9.5	13.5	13.0
29	4.5	4.0	6.0	5.5	6.0	6.0	7.0	6.5	10.0	10.0	13.5	13.0
30	4.5	4.5	6.5	5.0	6.5	6.0	7.0	6.5	10.0	9.5	13.5	13.0
31	---	---	6.5	5.5	---	---	7.0	6.5	9.5	9.5	---	---
MONTH	---	---	8.5	4.5	9.0	4.5	7.0	5.5	10.0	6.5	13.5	9.5

14184600 SOUTH SANTIAM RIVER ABOVE CASCADIA, OREG.

LOCATION.—Lat 44°24'06", long 122°26'07", in NW¼ sec.34, T.13 S., R.3 E., Linn County, 0.1 mi (0.2 km) upstream from Moose Creek, at bridge on Moose Mountain road, and at mile 52.4 (84.3 km).

DRAINAGE AREA.—84.5 mi^2 (218.9 km^2).

PERIOD OF RECORD.—Chemical analyses: January to September 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	DISSOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	TURBIDITY (JTU)	IMMEDIATE COLIFORM (COL. PER 100 ML)
JAN. 19...	1600	5.5	6.9	12.7	29	3	176
MAR. 10...	1130	6.7	7.4	12.2	29	6	104
APR. 18...	1520	6.5	8.1	12.6	35	2	88
MAY 31...	1500	10.5	7.3	10.4	33	1	245
JULY 19...	1615	20.0	8.2	9.6	54	2	2090

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OREG.

LOCATION.--Lat 44°23'30", long 122°29'50", in SW¼ sec.31, T.13 S., R.3 W., Linn County, temperature recorder 0.7 mi (1.1 km) upstream from gaging station on left bank, 1.0 mi (1.6 km) southwest of Cascadia, and at mile 49.2 (79.2 km).

DRAINAGE AREA.--174 mi² (451 km²) at gaging cable 0.7 mi (1.1 km) upstream.

PERIOD OF RECORD.--Chemical analyses: September 1971 to January 1972.
Water temperatures: June 1962 to July 1967, February 1969 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 21.0°C Aug. 7: minimum, 2.0°C Jan. 28.

Period of record:
Water temperatures: Maximum, 25.0°C July 30, Aug. 7, 1965; minimum, 0.5°C sometime during period Jan. 11-24, 1963.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	PH (UNITS)	DIS-SOLVED OXYGEN (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TUR-BID-ITY (JTU)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
OCT. 14...	1115	126	12.8	8.2	10.8	49	1	1140
DEC. 14...	1510	1700	5.6	7.0	13.1	34	1	800

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT. 14...	15	5.5	1.1	3.4	.2	30	0	.5

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 14...	2.1	.1	.12	0	1	10	1	0	20

DATE	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT. 14...	4	.3	18	0	29	.3	43	.06

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OREG.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	12.0	9.0	---	---	16.5	15.5	19.0	15.5
2	---	---	---	---	13.0	9.0	---	---	16.5	14.5	19.5	15.5
3	---	---	---	---	12.0	10.0	---	---	17.0	14.5	19.5	15.5
4	---	---	---	---	12.0	9.0	---	---	18.5	15.0	18.5	16.0
5	---	---	---	---	13.5	10.0	17.0	15.0	19.0	16.0	17.0	16.5
6	---	---	---	---	12.0	10.0	16.5	14.5	19.5	16.0	17.0	15.5
7	---	---	---	---	12.0	10.0	15.0	13.5	21.0	17.0	16.5	14.5
8	---	---	---	---	11.5	10.0	14.5	11.5	20.0	18.0	16.0	14.5
9	---	---	---	---	10.5	8.5	13.5	11.0	20.5	17.0	15.5	14.5
10	---	---	---	---	8.5	8.0	13.5	11.0	19.5	16.5	14.5	13.0
11	---	---	---	---	9.0	8.0	15.5	13.0	18.5	15.5	15.0	13.0
12	---	---	---	---	11.0	8.0	16.5	13.5	16.0	14.5	16.0	13.0
13	---	---	---	---	---	---	18.0	15.5	16.0	13.5	16.0	13.0
14	---	---	---	---	---	---	17.0	15.0	15.0	13.5	16.5	13.5
15	---	---	---	---	---	---	18.0	14.5	14.0	13.5	16.5	14.0
16	---	---	---	---	---	---	18.5	15.0	13.5	12.0	16.5	13.5
17	---	---	---	---	---	---	19.0	15.5	13.0	12.0	16.0	14.5
18	---	---	---	---	---	---	18.0	15.5	13.5	11.5	14.5	14.0
19	---	---	---	---	---	---	16.5	14.5	15.0	12.0	14.0	13.5
20	---	---	---	---	---	---	15.0	13.0	16.5	14.0	13.5	12.0
21	---	---	---	---	---	---	15.0	12.0	16.5	15.0	13.5	13.5
22	---	---	---	---	---	---	15.5	13.0	18.5	16.0	13.5	11.5
23	---	---	---	---	---	---	15.0	13.0	18.5	15.5	11.5	11.0
24	---	---	---	---	---	---	15.5	13.5	18.5	16.0	11.0	10.5
25	---	---	---	---	---	---	15.0	13.5	19.5	16.0	11.5	10.5
26	---	---	---	---	---	---	15.0	13.5	20.0	16.0	11.5	11.0
27	---	---	---	---	---	---	15.5	13.0	20.5	17.0	11.0	10.5
28	---	---	---	---	---	---	16.0	13.5	21.0	18.5	10.5	9.5
29	---	---	---	---	---	---	16.5	14.0	21.0	18.0	11.5	10.5
30	---	---	---	---	---	---	17.0	14.5	20.0	17.0	12.0	11.0
31	---	---	12.0	10.5	---	---	18.0	15.5	19.5	16.0	---	---
MONTH	---	---	---	---	---	---	19.0	11.0	21.0	11.5	19.5	9.5

14185800 MIDDLE SANTIAM RIVER NEAR CASCADIA, OREG.

LOCATION.--Lat 44°30'55", long 122°22'15", in NE¼ sec.19, T.12 S., R.4 E., Linn County, temperature recorder at gaging station on right bank, 5.6 mi (9.0 km) downstream from Bear Creek, 10 mi (16.1 km) northeast of Cascadia, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--104 mi^2 (269 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1971 to September 1972.
Water temperatures: August 1963 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 21.5°C Aug. 8; minimum, 2.0°C Jan. 4, 27-29, Feb. 2, 3.

Period of record:
Water temperatures: Maximum, 21.5°C Aug. 8, 1972; minimum, 0.5°C Dec. 23, 24, 1965.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	PH (UNITS)	DIS-SOLVED OXYGEN (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TUR-BID-ITY (JTU)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
OCT.								
13...	1300	98	13.0	8.3	10.6	53	--	1160
DEC.								
09...	1020	3520	4.5	6.9	13.1	36	1	380
JAN.								
19...	1415	3500	4.6	7.2	13.0	30	1	140
APR.								
18...	0900	674	4.5	7.4	13.5	39	2	54
JUNE								
01...	1030	792	7.0	7.2	10.4	35	2	212
JULY								
10...	1100	94	14.6	8.1	9.8	54	2	550

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT.									
13...	101	15	6.4	1.2	2.8	.3	27	0	1.3

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.									
13...	2.2	.1	.03	4	2	0	2	0	10

DATE	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT.									
13...	2	.0	21	0	22	.3	43	.06	11.7

14185800 MIDDLE SANTIAM RIVER NEAR CASCADIA, OREG.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	5.5	7.0	5.0	11.0	8.0	15.5	13.5	19.0	16.5	17.0	14.5
2	6.5	6.0	8.0	5.5	11.5	9.0	15.5	13.5	19.0	15.5	18.0	15.5
3	6.5	5.5	8.0	6.0	11.5	9.5	16.0	13.5	18.0	15.5	18.0	15.5
4	7.0	6.5	8.5	6.0	11.5	9.0	17.0	14.5	18.5	16.5	16.5	15.5
5	7.0	6.5	8.5	6.0	13.0	10.0	18.0	15.5	19.5	17.0	16.5	15.5
6	6.5	5.5	8.5	6.5	13.0	10.5	17.0	15.5	20.0	18.0	15.5	14.5
7	5.5	4.5	8.0	6.0	12.0	10.5	16.0	14.5	20.5	19.0	15.5	13.5
8	5.5	4.5	6.0	6.0	12.0	10.5	16.0	13.5	21.5	19.0	15.0	14.0
9	4.5	5.0	7.0	6.0	11.0	9.5	14.5	13.0	20.5	18.5	14.5	13.5
10	5.5	4.5	8.0	5.5	9.5	9.0	14.0	13.0	20.5	18.0	14.0	12.0
11	5.5	5.0	8.5	6.0	10.0	9.0	15.5	14.0	20.0	17.0	13.5	11.5
12	5.5	4.5	9.0	6.5	12.0	10.0	17.0	14.5	19.0	16.5	14.0	12.0
13	5.5	4.5	9.0	6.5	13.0	11.0	18.0	16.5	16.5	15.0	13.5	11.5
14	5.5	5.0	9.5	6.5	13.5	11.5	18.5	16.0	16.5	15.0	14.0	12.0
15	5.5	5.5	9.0	6.5	11.5	10.5	19.0	16.5	16.0	15.0	14.5	13.0
16	5.5	5.0	7.0	6.5	11.0	10.0	19.5	17.0	15.0	13.5	14.5	13.0
17	5.0	4.5	6.5	6.5	13.0	11.0	20.0	17.0	14.0	13.5	14.5	14.0
18	5.5	4.5	6.5	5.5	13.5	11.5	19.0	17.0	13.5	12.0	14.5	13.5
19	5.5	4.5	8.5	5.5	14.0	11.5	18.0	16.0	15.5	13.5	13.5	12.0
20	5.5	5.0	8.5	7.0	13.5	11.5	17.0	14.5	15.5	14.5	12.0	11.5
21	5.5	5.5	8.5	7.0	14.0	12.0	16.0	14.5	15.5	14.0	12.0	11.5
22	6.0	5.0	8.5	6.5	13.5	11.5	17.0	15.0	15.5	15.0	11.5	11.0
23	6.5	5.5	7.0	6.5	11.5	10.5	18.0	15.5	15.5	13.5	11.0	10.0
24	6.5	5.5	7.0	6.0	10.5	10.0	18.0	15.5	16.5	14.5	10.0	10.0
25	6.0	5.5	8.5	6.0	10.5	10.0	18.0	15.5	17.0	15.0	10.0	9.0
26	7.0	5.5	9.0	6.0	11.0	10.0	18.0	15.5	18.0	15.5	10.0	9.0
27	8.0	5.5	10.0	7.0	14.0	10.5	18.0	15.0	19.0	15.5	9.5	8.5
28	8.0	5.5	10.0	8.0	15.0	12.0	18.5	15.5	19.5	17.0	9.5	8.5
29	5.5	4.5	11.0	8.0	15.5	13.5	18.5	16.5	19.0	16.5	10.0	9.0
30	6.0	5.0	10.5	8.5	15.5	13.5	19.0	16.5	18.5	16.5	10.5	9.5
31	---	---	10.5	8.0	---	---	19.0	17.0	18.0	15.5	---	---
MONTH	8.0	4.5	11.0	5.0	15.5	8.0	20.0	13.0	21.5	12.0	18.0	8.5

14185900 QUARTZVILLE CREEK NEAR CASCADIA, OREG.

LOCATION.--Lat 44°32'25", long 122°26'05", in NW¼ sec.10, T.12 S., R.3 E., Linn County, temperature recorder at gaging station on right bank, 80 ft (24 m) downstream from Panther Creek, 10 mi (16.1 km) north of Cascadia, and at mile 6.6 (10.6 km).

DRAINAGE AREA.--99.2 mi^2 (256.9 km^2)

PERIOD OF RECORD.--Water temperatures: August 1963 to November 1964, October 1965 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Minimum, 1.0°C Jan. 4.

Period of record:
Water temperatures: Maximum, 25.5°C Aug. 10, 11, 1971; minimum, freezing point on several days in 1969.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	5.0	4.0	6.0	5.0	4.5	3.5	---	---	---	---
2	---	---	5.5	4.5	6.5	6.0	4.5	3.5	---	---	---	---
3	---	---	5.5	4.0	6.0	4.5	3.5	2.0	---	---	---	---
4	---	---	6.0	5.0	5.0	4.5	2.0	1.0	---	---	---	---
5	---	---	4.5	3.5	6.5	5.0	3.5	2.0	---	---	---	---
6	---	---	4.5	3.5	6.5	6.0	4.0	3.5	---	---	---	---
7	---	---	5.5	4.0	6.0	5.0	4.0	4.0	---	---	---	---
8	---	---	5.5	4.5	5.5	4.5	4.0	3.0	---	---	5.0	4.0
9	---	---	5.5	5.0	5.5	5.0	4.5	3.5	---	---	5.5	4.5
10	---	---	5.5	5.5	4.5	4.5	4.5	4.0	---	---	5.0	5.0
11	---	---	6.5	5.5	4.5	4.5	4.5	3.0	---	---	5.0	4.5
12	---	---	6.5	5.5	4.5	3.5	4.5	4.5	---	---	5.0	5.0
13	---	---	6.5	5.5	4.0	3.5	4.5	4.5	---	---	5.0	4.5
14	8.0	6.5	5.5	5.0	3.5	3.5	4.5	3.5	---	---	6.0	5.0
15	7.0	6.0	6.0	5.5	3.5	3.5	4.5	4.0	---	---	6.0	4.5
16	6.5	4.5	6.0	5.0	4.0	3.5	4.5	4.0	---	---	6.0	4.0
17	5.0	3.5	5.5	4.5	4.5	4.0	5.0	4.5	---	---	6.0	4.0
18	5.5	5.0	6.0	5.0	4.5	4.5	5.0	4.5	---	---	6.0	5.5
19	6.0	5.5	6.5	5.5	4.5	4.5	5.0	4.5	---	---	6.0	5.5
20	6.5	5.5	6.5	6.0	4.5	4.5	5.0	5.0	---	---	6.5	4.5
21	6.5	5.0	6.5	5.0	4.5	4.5	---	---	---	---	6.0	5.5
22	7.0	6.0	6.0	5.5	5.0	4.5	---	---	---	---	6.5	6.0
23	7.0	6.5	5.5	5.0	4.5	4.5	---	---	---	---	6.5	6.0
24	7.0	6.0	6.0	6.0	4.5	4.5	---	---	---	---	7.0	6.5
25	6.5	5.0	6.0	4.5	4.5	4.0	---	---	---	---	7.0	6.5
26	6.5	6.0	6.0	5.5	4.0	3.5	---	---	---	---	7.0	6.0
27	6.0	4.0	6.0	6.0	3.5	2.0	---	---	---	---	6.5	6.0
28	4.5	3.0	6.0	6.0	3.0	2.0	---	---	---	---	6.5	5.5
29	4.0	2.0	6.0	6.0	3.0	2.0	---	---	---	---	7.0	4.5
30	4.0	3.0	6.5	6.0	4.0	3.0	---	---	---	---	7.0	4.5
31	4.0	3.0	---	---	4.5	4.0	---	---	---	---	7.0	5.5
MONTH	---	---	6.5	3.5	6.5	2.0	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	6.0	7.0	4.5	---	---	---	---	---	---	---	---
2	6.5	5.0	6.5	4.0	---	---	---	---	---	---	---	---
3	7.0	5.0	5.5	3.5	---	---	---	---	---	---	---	---
4	6.5	5.5	5.5	3.5	---	---	---	---	---	---	---	---
5	6.5	6.0	4.5	2.0	---	---	---	---	---	---	---	---
6	8.0	7.0	4.0	2.0	---	---	---	---	---	---	---	---
7	8.5	8.0	4.0	4.0	---	---	---	---	---	---	---	---
8	8.5	8.0	4.0	3.5	---	---	---	---	---	---	---	---
9	8.5	7.0	---	---	---	---	---	---	---	---	---	---
10	8.5	6.5	---	---	---	---	---	---	---	---	---	---
11	8.0	6.5	---	---	---	---	---	---	---	---	---	---
12	8.0	8.0	---	---	---	---	---	---	---	---	---	---
13	8.0	6.5	---	---	---	---	---	---	---	---	---	---
14	7.0	6.5	---	---	---	---	---	---	---	---	---	---
15	8.0	7.0	---	---	---	---	---	---	---	---	---	---
16	8.5	7.0	---	---	---	---	---	---	---	---	---	---
17	8.5	7.0	---	---	---	---	---	---	---	---	---	---
18	8.5	6.0	---	---	---	---	---	---	---	---	---	---
19	8.5	7.0	---	---	---	---	---	---	---	---	---	---
20	8.0	6.5	---	---	---	---	---	---	---	---	---	---
21	7.0	6.5	---	---	---	---	---	---	---	---	---	---
22	8.0	5.5	---	---	---	---	---	---	---	---	---	---
23	7.0	5.5	---	---	---	---	---	---	---	---	---	---
24	7.0	6.5	---	---	---	---	---	---	---	---	---	---
25	7.0	6.5	---	---	---	---	---	---	---	---	---	---
26	8.0	5.0	---	---	---	---	---	---	---	---	---	---
27	7.0	4.5	---	---	---	---	---	---	---	---	---	---
28	8.0	6.5	---	---	---	---	---	---	---	---	---	---
29	8.0	6.5	---	---	---	---	---	---	---	---	---	---
30	8.0	5.5	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	8.5	4.5	---	---	---	---	---	---	---	---	---	---
YEAR	8.5	1.0										

WILLAMETTE RIVER BASIN

14186700 SOUTH SANTIAM RIVER AT FOSTER, OREG.

LOCATION.--Lat 44°24'50", long 122°40'25", in NE¼NW¼ sec.27, T.13 S., R.1 E., Linn County, temperature recorder at gaging station on left bank, 600 ft (183 m) upstream from Wiley Creek, 0.15 mi (0.2 km) below Foster Dam, 0.5 mi (0.8 km) north of Foster, and at mile 37.5 (60.3 km).

DRAINAGE AREA.--493 mi^2 (1,277 km^2).

PERIOD OF RECORD.--Water temperatures: November 1966 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 13.5°C Aug. 10; minimum, 4.5°C Jan. 28, Jan. 30 to Feb. 7.

Period of record:
Water temperatures: Maximum, 16.0°C Oct. 2, 1967; minimum, 3.5°C sometime during period Dec. 25, 1968 to Feb. 17, 1969.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.5	8.0	7.0	10.5	8.5	---	---	12.5	11.5	11.0	10.5
2	6.5	6.0	8.0	7.0	9.5	8.5	---	---	12.5	12.0	11.0	10.5
3	6.5	6.5	8.5	7.0	9.5	8.5	---	---	12.5	12.0	11.0	10.5
4	8.0	7.0	9.0	7.0	10.0	8.5	---	---	12.5	11.5	11.0	10.5
5	7.5	6.5	9.0	7.5	10.0	9.0	---	---	12.5	11.5	11.0	10.5
6	7.5	6.5	9.0	8.0	10.0	9.0	---	---	12.5	11.5	11.0	10.5
7	7.5	6.5	9.5	8.5	10.5	9.0	---	---	12.5	11.5	11.0	10.5
8	7.5	6.0	9.0	8.0	10.0	9.0	---	---	12.5	11.5	11.5	10.5
9	7.5	6.5	9.0	7.5	10.5	8.5	---	---	13.0	12.0	11.0	10.5
10	7.0	6.0	9.5	7.5	---	---	---	---	13.5	12.5	11.0	10.5
11	7.0	6.5	9.5	7.5	---	---	---	---	13.0	12.0	11.0	10.5
12	6.5	6.5	9.5	7.5	---	---	---	---	12.5	11.5	11.0	10.5
13	7.0	6.5	10.0	8.0	---	---	---	---	12.5	11.5	11.0	10.5
14	7.0	7.0	10.0	8.5	---	---	---	---	12.0	11.5	11.0	10.5
15	7.0	6.5	10.5	9.0	---	---	---	---	12.0	11.5	10.5	10.5
16	6.5	6.0	10.0	9.0	---	---	---	---	13.0	11.5	11.0	10.0
17	7.0	6.5	10.0	9.0	---	---	---	---	12.5	11.5	10.5	10.5
18	7.0	6.5	10.0	8.0	---	---	---	---	12.5	11.5	11.0	10.5
19	7.0	6.5	10.0	8.5	---	---	12.5	11.5	12.0	11.5	11.0	10.0
20	7.0	6.5	10.0	8.0	---	---	12.0	11.5	12.0	11.5	11.5	10.0
21	7.0	6.0	9.5	9.0	---	---	12.0	11.5	12.0	11.0	12.0	10.0
22	7.5	6.5	9.5	8.0	---	---	12.5	11.5	12.0	11.0	11.5	10.0
23	7.5	7.0	9.0	7.5	---	---	12.5	11.5	12.0	11.0	11.5	10.0
24	7.5	6.5	9.0	7.5	---	---	12.5	11.5	11.5	11.0	11.5	10.5
25	7.5	6.5	9.5	7.5	---	---	12.5	11.5	12.0	11.0	11.5	10.0
26	7.5	6.5	9.5	8.0	---	---	12.5	11.5	12.0	11.0	11.0	10.0
27	7.5	6.5	10.0	8.5	---	---	12.5	11.5	12.0	11.0	11.0	10.0
28	8.0	6.5	10.0	8.5	---	---	12.5	11.5	11.5	11.0	11.0	10.0
29	8.0	7.0	10.0	8.5	---	---	12.5	11.5	11.5	11.0	10.5	10.0
30	7.5	7.0	10.5	9.0	---	---	12.5	11.5	12.0	11.0	11.0	9.5
31	---	---	10.5	9.5	---	---	12.5	11.5	11.5	10.5	---	---
MONTH	8.0	6.0	10.5	7.0	---	---	---	---	13.5	10.5	12.0	9.5

14187500 SOUTH SANTIAM RIVER AT WATERLOO, OREG.

LOCATION.—Lat 44°29'55", long 122°49'20", in SW¼NW¼ sec.28, T.12 S., R.1 W., Linn County, temperature recorder at gaging station on left bank, 600 ft (183 m) downstream from highway bridge at Waterloo, 2.1 mi (3.4 km) upstream from Hamilton Creek, and at mile 23.3 (37.5 km).

DRAINAGE AREA.—640 mi² (1,658 km²).

PERIOD OF RECORD.—Water temperatures: October 1963 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 22.0°C July 16-18; minimum, 4.5°C Feb. 1-7.

Period of record:
Water temperatures: Maximum, 26.0°C Aug. 4, 1966; minimum, 1.5°C Dec. 18-20, 1965.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	6.0	9.0	6.5	12.0	10.5	19.0	16.5	18.5	16.5	14.5	11.5
2	6.5	6.0	10.0	7.0	12.0	10.0	20.0	16.5	16.5	15.5	14.5	11.5
3	7.0	5.5	10.5	7.0	11.5	10.5	20.5	17.0	18.5	15.5	14.0	11.5
4	9.0	6.5	11.0	8.0	11.5	10.0	20.5	18.5	19.0	17.0	14.0	11.5
5	9.0	8.0	11.0	8.0	13.0	10.5	19.5	18.0	19.0	18.0	13.5	12.0
6	8.0	6.5	9.5	8.5	11.5	10.5	19.0	16.5	19.0	18.0	13.5	11.5
7	7.0	6.0	9.0	8.5	13.0	11.0	16.5	15.0	19.5	18.0	13.5	11.5
8	7.0	6.0	9.0	8.5	13.5	11.0	16.5	15.0	19.5	18.0	13.0	11.0
9	6.5	6.0	10.5	8.5	12.0	11.0	16.5	14.0	19.0	18.0	12.0	11.0
10	7.0	6.0	11.0	8.0	13.0	11.0	18.0	16.0	18.5	14.5	12.0	10.5
11	7.0	6.0	11.5	8.5	12.0	11.5	19.5	17.0	16.5	14.5	12.0	10.5
12	6.5	6.0	13.0	8.5	14.0	10.5	19.5	18.5	16.5	14.5	13.0	11.0
13	6.5	5.5	11.5	9.0	15.0	11.5	20.5	19.5	16.0	15.0	13.0	10.5
14	6.5	6.0	11.5	9.0	15.0	11.5	20.5	18.5	15.5	15.0	13.0	10.5
15	6.5	6.5	10.0	9.5	14.0	12.0	21.5	18.5	15.0	15.0	13.0	10.5
16	6.5	6.0	9.5	9.5	14.0	11.5	22.0	19.5	15.0	14.5	13.0	10.5
17	6.5	5.5	9.5	9.5	15.0	13.0	22.0	19.5	14.5	13.5	13.0	11.0
18	7.0	6.0	10.0	8.5	15.5	13.0	22.0	19.5	14.0	13.0	11.5	10.5
19	8.0	5.5	10.5	8.0	15.5	13.5	19.5	17.0	15.0	13.0	11.0	10.5
20	8.0	6.0	9.5	9.0	16.0	10.5	19.0	16.5	15.0	13.0	11.0	10.5
21	6.5	6.0	9.5	9.5	16.0	14.5	18.5	16.5	14.0	13.0	10.5	10.5
22	8.0	5.5	9.5	9.0	15.0	13.5	18.5	16.5	15.0	13.0	11.0	10.5
23	7.0	6.5	9.5	9.5	15.0	14.0	18.5	16.5	15.0	12.0	11.0	10.0
24	7.0	6.5	10.0	8.5	14.0	13.0	18.5	16.5	15.0	12.0	10.5	10.0
25	6.5	6.5	11.0	8.5	14.0	13.0	18.0	16.0	15.0	12.0	11.0	10.0
26	8.0	6.5	12.0	9.0	15.0	14.0	18.0	15.5	15.0	13.0	11.0	9.5
27	8.5	6.5	12.0	9.5	18.0	14.5	18.0	16.0	15.0	13.0	11.0	9.5
28	7.0	6.0	13.0	10.0	18.5	16.0	18.5	16.5	15.0	13.0	11.0	9.5
29	7.0	6.0	12.0	10.0	18.5	16.0	18.5	17.0	15.0	13.0	11.0	10.0
30	9.0	6.5	12.0	10.0	19.0	16.0	18.5	17.0	14.5	12.0	12.0	10.0
31	---	---	11.0	10.5	---	---	18.5	17.0	14.0	11.5	---	---
MONTH	9.0	5.5	13.0	6.5	19.0	10.0	22.0	14.0	19.5	11.5	14.5	9.5

14188800 THOMAS CREEK NEAR SCIO, OREG.

LOCATION.--Lat 44°42'40", long 122°45'45", in SE¼ sec.11, T.10 S., R.1 W., Linn County, temperature recorder at gaging station on left bank, 4.2 mi (6.8 km) east of Scio, and at mile 14.6 (23.5 km).

DRAINAGE AREA.--109 mi² (282 km²).

PERIOD OF RECORD.--Water temperatures: October 1962 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 26.5°C Aug. 7, 9; minimum, freezing point Feb. 2, 3.

Period of record:
Water temperatures: Maximum, 28.0°C Aug. 16, 1967, Aug. 10, 11, 1971; minimum, freezing point Feb. 2, 3, 1972.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.0	8.0	7.0	8.0	6.5	6.0	5.5	1.5	0.5	---	---
2	11.5	10.0	8.0	6.5	6.5	6.5	6.0	5.5	0.5	0.0	---	---
3	12.0	10.0	8.0	6.5	6.5	6.5	5.5	3.5	1.0	0.0	---	---
4	13.5	11.0	8.5	8.0	6.5	6.5	3.5	3.0	1.5	1.0	---	---
5	14.0	11.5	8.0	5.5	7.0	6.5	4.5	3.5	3.0	1.5	---	---
6	14.5	13.0	6.0	4.5	7.0	6.5	5.5	4.5	3.0	2.0	---	---
7	14.5	13.5	8.0	5.5	6.5	6.0	5.5	5.5	3.5	2.0	---	---
8	14.5	12.0	8.0	6.5	6.5	6.0	5.5	5.0	3.5	3.0	---	---
9	14.0	13.5	8.5	7.0	6.5	6.0	5.5	5.0	3.5	3.0	---	---
10	14.0	13.5	9.0	8.5	6.0	6.0	5.5	5.0	3.0	2.0	---	---
11	14.5	13.5	9.0	9.0	6.0	6.0	6.0	5.5	4.0	3.0	---	---
12	14.0	13.0	9.0	8.5	6.0	5.5	6.0	5.5	4.5	4.0	---	---
13	13.0	12.0	9.0	8.0	6.0	5.5	6.0	5.5	4.5	3.5	---	---
14	12.0	11.0	8.0	8.0	5.5	5.5	5.5	4.5	4.5	3.5	---	---
15	11.0	10.0	8.0	8.0	6.0	5.5	4.5	4.0	5.0	4.0	---	---
16	10.0	8.0	8.0	6.5	6.0	5.5	5.0	4.0	5.0	4.5	---	---
17	8.5	7.0	7.0	6.5	6.0	6.0	5.5	5.0	5.5	5.0	---	---
18	8.5	7.0	6.5	6.5	6.0	6.0	5.5	5.5	6.5	5.5	---	---
19	9.5	8.5	8.0	6.5	6.0	6.0	5.5	5.5	7.0	6.0	---	---
20	9.5	9.0	8.0	8.0	6.0	6.0	6.0	5.0	7.0	6.0	---	---
21	9.5	8.5	8.0	8.0	6.5	6.0	5.5	5.5	6.5	5.5	---	---
22	9.5	9.0	8.0	6.5	6.5	6.0	5.5	5.5	6.5	6.5	---	---
23	10.0	9.5	8.0	6.5	6.5	6.0	5.5	4.5	6.5	6.0	---	---
24	10.0	9.0	8.0	8.0	6.0	6.0	4.5	4.5	---	---	---	---
25	9.0	7.0	8.0	7.0	6.0	5.5	4.5	4.0	---	---	---	---
26	9.0	9.0	8.0	7.0	5.5	4.5	4.0	2.0	---	---	---	---
27	9.0	7.0	8.0	8.0	4.5	4.0	2.0	1.5	---	---	---	---
28	7.0	5.5	8.0	8.0	4.0	3.5	1.5	1.0	---	---	---	---
29	6.0	4.5	8.0	8.0	4.5	3.5	1.0	0.5	---	---	---	---
30	6.5	5.5	8.0	8.0	5.5	4.5	1.0	0.5	---	---	---	---
31	7.0	6.5	---	---	6.0	5.5	1.5	0.5	---	---	---	---
MONTH	14.5	4.5	9.0	4.5	8.0	3.5	6.0	0.5	7.0	0.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	14.5	14.5	20.0	19.0	23.0	21.0	19.5	18.0
2	---	---	---	---	15.0	14.5	21.0	19.0	22.0	20.0	20.5	19.0
3	---	---	---	---	15.0	15.0	22.0	19.5	23.0	19.5	20.5	19.0
4	---	---	---	---	15.0	14.0	23.5	21.0	24.5	21.0	20.0	19.0
5	---	---	---	---	16.0	15.0	23.0	21.5	24.5	21.5	19.5	19.0
6	---	---	---	---	16.0	15.5	23.0	21.0	25.5	22.0	19.0	17.0
7	---	---	---	---	16.0	15.5	21.0	20.0	26.5	23.5	18.0	17.0
8	---	---	---	---	16.5	15.5	20.0	18.5	25.5	24.0	18.0	17.0
9	---	---	---	---	16.5	15.5	18.5	17.0	26.5	24.0	17.0	16.0
10	---	---	---	---	15.5	14.5	18.5	18.0	26.0	23.0	16.0	15.0
11	---	---	---	---	14.5	14.0	20.0	18.0	25.0	21.5	15.5	14.0
12	6.5	6.0	16.5	12.0	15.5	14.0	21.5	19.5	23.5	21.0	15.0	14.5
13	8.0	6.0	18.0	13.5	16.5	15.5	23.0	21.0	21.0	19.0	15.5	14.5
14	8.0	7.0	18.0	14.0	17.0	16.5	23.0	21.0	21.0	19.5	16.0	15.5
15	8.0	8.0	15.5	13.5	17.0	16.5	23.5	21.0	20.5	20.0	16.0	15.5
16	8.0	6.5	13.5	12.0	16.5	15.5	24.5	21.5	20.5	19.5	16.0	15.5
17	7.0	6.0	12.0	10.5	16.5	15.5	24.5	22.0	19.5	18.5	16.5	16.0
18	8.0	6.0	11.5	9.5	18.0	16.5	24.5	22.0	18.5	18.5	16.5	15.5
19	8.0	6.0	13.5	9.5	19.0	17.0	24.5	21.0	19.5	18.5	15.5	14.5
20	8.0	7.0	13.5	11.5	19.0	18.0	24.5	21.0	20.5	19.5	14.5	14.0
21	8.5	7.0	11.5	10.5	19.0	18.0	23.0	20.5	20.5	20.0	14.0	14.0
22	9.0	6.0	11.0	10.5	18.0	17.0	24.0	20.5	22.0	20.0	14.0	12.0
23	8.5	7.0	11.0	10.0	18.0	16.5	23.5	21.0	21.5	20.5	12.0	12.0
24	8.5	8.5	13.0	9.5	16.5	15.5	23.5	21.0	20.5	20.0	12.0	11.5
25	8.5	7.0	13.5	9.5	15.5	15.0	23.0	20.0	20.5	20.0	11.5	11.0
26	10.0	7.0	15.5	11.0	15.5	15.0	22.0	19.5	21.0	20.0	11.5	10.5
27	11.0	8.5	17.0	13.0	18.0	15.5	22.0	19.5	21.5	21.0	10.5	10.5
28	10.5	7.0	17.0	14.0	19.5	17.0	23.5	20.0	23.0	21.5	10.5	10.5
29	---	6.5	18.0	15.0	20.5	19.0	24.0	20.5	23.0	21.0	11.0	10.5
30	---	---	18.0	13.5	20.0	19.0	24.5	21.0	21.5	20.0	11.0	10.5
31	---	---	16.0	13.5	---	---	24.0	21.0	20.5	19.0	---	---
MONTH	---	---	---	---	20.5	14.0	24.5	17.0	26.5	18.5	20.5	10.5

14189000 SANTIAM RIVER AT JEFFERSON, OREG.

LOCATION.--Lat 44°42'55", long 123°00'40", in SE¼ sec.11, T.10 S., R.3 W., Marion County, temperature recorder at gaging station on right bank, 350 ft (106 m) upstream from Southern Pacific railroad bridge at Jefferson, 2.1 mi (3.4 km) downstream from confluence of North and South Santiam Rivers, and at mile 9.62 (15.47 km).

DRAINAGE AREA.--1,790 mi² (4,640 km²), approximately.

PERIOD OF RECORD.--Water temperatures: October 1963 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum recorded, 22.0°C July 14; minimum recorded, 3.5°C Jan. 4.

Period of record:
Water temperatures: Maximum, 23.5°C Aug. 8, 1971; minimum, 1.0°C Jan. 26, 1969.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	11.5	---	---	---	---	7.0	6.0	---	---	6.0	5.0
2	14.5	12.0	---	---	---	---	6.5	5.5	---	---	6.5	6.0
3	14.5	12.0	---	---	8.0	8.0	5.5	4.0	---	---	7.0	6.0
4	15.0	12.5	---	---	8.0	8.0	4.5	3.5	---	---	7.0	6.0
5	15.5	13.0	---	---	9.0	8.0	5.5	4.5	---	---	8.0	7.0
6	15.5	13.5	---	---	8.5	7.5	6.5	5.5	---	---	7.5	6.0
7	15.5	13.5	---	---	7.5	7.0	6.5	5.5	---	---	6.5	5.0
8	15.5	13.0	---	---	8.0	7.0	6.0	4.5	---	---	---	---
9	15.5	13.5	---	---	7.5	7.0	6.5	6.0	---	---	---	---
10	15.0	13.0	---	---	7.0	6.5	6.0	5.5	---	---	---	---
11	15.0	13.5	---	---	7.0	6.5	6.5	6.0	---	---	---	---
12	14.5	13.0	---	---	7.0	6.5	6.5	6.0	---	---	---	---
13	14.0	13.0	---	---	7.0	6.5	5.5	5.0	---	---	---	---
14	13.0	11.5	---	---	7.0	6.5	5.0	4.5	---	---	---	---
15	13.0	12.0	---	---	7.0	6.5	4.5	4.0	---	---	---	---
16	12.5	11.0	---	---	7.0	7.0	---	---	---	---	---	---
17	12.5	10.5	---	---	7.5	6.5	---	---	---	---	---	---
18	12.5	11.5	---	---	7.5	7.0	---	---	---	---	---	---
19	13.0	12.0	---	---	7.0	6.5	---	---	---	---	---	---
20	12.5	11.0	---	---	7.0	6.5	---	---	---	---	---	---
21	---	---	---	---	6.5	6.5	---	---	---	---	---	---
22	---	---	---	---	6.5	6.0	---	---	---	---	---	---
23	---	---	---	---	6.5	6.0	---	---	---	---	---	---
24	---	---	---	---	6.5	6.0	---	---	5.5	5.0	---	---
25	---	---	---	---	6.5	6.0	---	---	6.5	4.5	---	---
26	---	---	---	---	5.5	5.0	---	---	6.5	6.0	---	---
27	---	---	---	---	5.0	4.0	---	---	8.0	6.5	---	---
28	---	---	---	---	4.5	4.0	---	---	7.5	7.0	---	---
29	---	---	---	---	5.5	4.5	---	---	7.0	5.5	---	---
30	---	---	---	---	6.0	5.5	---	---	---	---	---	---
31	---	---	---	---	7.0	6.0	---	---	---	---	---	---
MONTH	---	---	---	---	9.0	4.0	---	---	---	---	---	---

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

14191000 WILLAMETTE RIVER AT SALEM, OREG.

LOCATION.--Lat 44°56'40", long 123°02'30", in SW¼ sec.22, T.7 S., R.3 W., Marion County, at bridge on State Highway 22, 300 ft (91 m) downstream from gaging station at Salem, and at mile 84.16 (135.41 km).

DRAINAGE AREA.--7,280 mi² (18,900 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: August to December 1910, August 1911 to August 1912, February 1951 to September 1972.
Water temperatures: February 1951 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum daily, 82 micromhos/cm July 18; minimum daily, 37 micromhos/cm Jan. 22-23, 25.
Water temperatures: Maximum, 22.0°C July 17, 19; minimum, 3.5°C Jan. 28, Feb. 2-5.

Period of record:
Specific conductance: Maximum daily, 141 micromhos/cm Sept. 17, 1966; minimum daily, 30 micromhos/cm Jan. 29, 1965.
Water temperatures: Maximum, 25.5°C July 23, 1959; minimum, freezing point on several days in 1956.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
06...	15200	16	40	6.3	1.4	3.9	.6	30	0	2.5	3.2	.2
DEC.												
22...	54300	15	220	5.4	2.0	3.2	1.0	20	0	3.2	3.1	.0
MAR.												
22...	55000	15	40	4.2	1.5	2.9	.5	22	0	2.6	1.0	.1
APR.												
26...	35800	14	40	4.1	1.3	2.5	.6	22	0	3.7	3.1	.4
JUNE												
08...	7640	15	90	4.6	1.5	3.4	.5	23	0	3.4	2.0	.2
AUG.												
15...	8480	16	200	5.3	1.6	4.9	.7	18	0	7.3	4.1	.1

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	TEMPER-ATURE (DEG C)	PH (UNITS)
OCT.												
06...	.44	.07	51	.07	2090	21	0	57	.4	28	--	6.8
DEC.												
22...	.45	.09	45	.06	6600	22	5	61	.3	23	--	6.2
MAR.												
22...	.17	.09	39	.05	5790	17	0	47	.3	27	7.0	6.7
APR.												
26...	.17	--	41	.06	3960	16	0	46	.3	25	11.0	6.9
JUNE												
08...	.17	--	43	.06	887	18	0	52	.4	29	--	7.6
AUG.												
15...	1.0	--	53	.07	1210	20	5	65	.5	34	--	6.2

14191000 WILLAMETTE RIVER AT SALEM, OREG.--Oreg.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED NATURAL URANIUM (U) (UG/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
ANALYSES OF ADDITIONAL SAMPLES												
OCT. 06...	.02	.04	<.5	<.2	1.3	1.6	47	<.4	<.1	.5	.5	10
NOV. 17...	.02	.02	<.4	<.1	.9	1.1	45	<.4	<.1	<.4	<.5	16
MAR. 22...	.02	.02	<.4	<.1	1.1	1.4	43	2.4	.8	2.1	2.6	37
APR. 26...	.02	.02	<.4	<.1	.7	.9	39	.9	.3	.6	.8	22
JUNE 07...	.03	.02	<.4	<.1	.9	1.2	42	<.4	<.1	<.4	<.4	7
AUG. 15...	.04	--	1.0	.3	1.0	1.3	56	<.4	<.1	<.4	<.4	15

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	ENDRIN (UG/L)	DI-ELDRIN (UG/L)	HEPTA-CHLOR (UG/L)
MAR. 22...	.00	.00	.01	.02	.00	.00	.00

DATE	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	CHLOR-DANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
MAR. 22...	.00	.00	.0	.00	.00	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
RANDOM (INSTANTANEOUS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	57	48	70	44	58	51	50	48	68	72	67
2	56	57	46	68	44	58	68	55	49	71	72	66
3	57	53	48	67	49	43	63	59	48	69	74	63
4	57	52	48	68	49	41	62	53	48	68	74	63
5	57	53	51	68	46	41	45	53	51	71	73	---
6	59	56	54	68	57	42	45	62	49	67	73	60
7	57	57	53	70	48	44	67	63	48	71	74	62
8	58	57	51	64	43	44	67	52	52	67	74	62
9	60	57	48	64	54	44	56	57	51	73	77	60
10	58	57	48	63	54	45	65	56	54	72	74	61
11	59	62	48	45	43	42	65	57	53	72	68	60
12	58	55	48	45	61	41	54	63	53	72	69	62
13	58	55	47	45	61	42	60	---	53	76	69	62
14	61	54	53	44	60	41	56	63	53	76	77	61
15	61	57	53	49	46	44	77	56	51	77	---	63
16	68	54	53	45	48	46	59	55	51	77	---	63
17	60	55	51	59	48	48	55	53	67	79	---	64
18	58	54	55	47	41	47	60	56	68	82	---	62
19	60	55	55	46	45	43	60	48	72	74	---	60
20	60	54	56	45	44	44	71	53	68	79	---	62
21	61	56	56	46	61	48	67	50	71	71	---	62
22	60	54	57	37	43	47	67	45	70	77	---	61
23	57	56	54	37	44	49	67	48	71	75	---	62
24	59	55	57	39	50	47	55	45	71	76	---	63
25	59	55	56	37	50	42	56	48	70	70	---	61
26	59	55	57	43	51	52	55	59	67	71	---	61
27	59	50	59	43	58	---	50	57	71	72	---	---
28	55	49	59	42	57	64	67	50	72	71	---	67
29	56	49	59	44	57	62	50	49	70	73	---	58
30	58	46	58	43	---	64	50	---	71	71	70	60
31	57	---	59	41	---	60	---	50	---	73	66	---
MONTH	59	55	53	51	50	48	60	54	60	73	---	62

14191000 WILLAMETTE RIVER AT SALEM, OREG.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	13.0	9.0	9.0	8.5	8.0	5.5	5.5	4.0	4.0	---	---
2	13.5	13.0	9.0	9.0	8.0	8.0	6.0	5.5	4.0	3.5	---	---
3	13.5	13.0	9.0	9.0	8.0	8.0	6.0	5.0	3.5	3.5	---	---
4	14.0	13.5	9.5	9.0	8.0	8.0	5.0	4.0	3.5	3.5	---	---
5	14.5	14.0	9.5	8.5	8.0	8.0	4.0	4.0	4.0	3.5	---	---
6	14.5	14.0	8.5	8.0	8.0	8.0	4.5	4.0	4.5	4.0	7.0	7.0
7	14.5	14.5	8.0	8.0	8.0	7.0	5.0	4.5	5.0	4.5	7.0	6.0
8	14.5	14.0	8.5	8.0	7.0	6.5	5.0	5.0	5.0	4.5	6.0	6.0
9	15.0	14.5	8.5	8.5	7.0	6.5	5.0	5.0	5.5	5.0	6.0	6.0
10	15.0	14.5	9.0	8.5	7.0	6.5	5.0	5.0	5.5	5.0	6.5	6.0
11	14.5	14.0	9.0	9.0	6.5	6.5	5.5	5.0	5.0	5.0	6.5	6.5
12	14.5	14.5	9.0	9.0	6.5	6.5	5.5	5.5	5.5	5.0	7.0	6.5
13	14.5	14.0	9.0	9.0	6.5	6.0	5.5	5.5	5.5	5.5	8.5	7.0
14	14.0	13.0	9.0	9.0	6.0	6.0	5.5	5.0	5.5	5.5	8.5	8.5
15	13.0	12.0	9.0	9.0	6.0	6.0	5.0	5.0	5.5	5.5	8.5	8.5
16	13.0	12.0	9.0	8.5	6.0	6.0	5.0	5.0	6.0	5.5	8.5	8.5
17	12.0	11.5	8.5	8.0	6.0	5.5	5.5	5.0	6.0	6.0	8.5	8.5
18	11.5	11.0	8.0	8.0	6.0	6.0	6.0	5.5	6.0	6.0	8.5	8.5
19	12.0	11.5	8.0	8.0	6.0	6.0	6.5	6.0	6.0	6.0	8.5	8.0
20	11.5	11.5	8.5	8.0	6.0	6.0	7.0	6.5	6.0	6.0	8.0	7.0
21	11.5	11.5	8.5	8.5	6.0	6.0	7.0	7.0	6.0	5.5	8.5	8.0
22	11.5	11.5	8.5	8.5	6.0	6.0	7.0	7.0	5.5	5.5	8.5	8.5
23	11.5	11.0	8.5	8.0	6.0	6.0	7.0	6.5	5.5	5.5	8.5	8.5
24	11.5	11.5	8.5	8.0	6.0	5.5	6.5	6.0	5.5	5.5	8.5	8.5
25	11.5	11.0	8.5	8.0	5.5	5.5	6.0	5.5	5.5	5.5	8.5	8.0
26	11.0	11.0	8.5	8.0	5.5	5.0	6.0	5.5	6.0	5.5	8.0	7.0
27	11.0	10.5	8.5	8.0	5.0	5.0	5.5	4.5	6.5	6.0	7.0	7.0
28	10.5	9.5	8.5	8.0	5.0	5.0	4.5	3.5	7.0	6.5	8.0	7.0
29	9.5	9.0	8.5	8.0	5.0	4.5	4.0	4.0	---	---	8.5	8.0
30	9.0	9.0	8.5	8.0	5.0	4.5	---	---	---	---	9.0	8.5
31	9.0	9.0	---	---	5.5	5.0	4.0	4.0	---	---	9.5	9.0
MONTH	15.0	9.0	9.5	8.0	8.5	4.5	7.0	3.5	7.0	3.5	9.5	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.5	10.0	9.5	14.0	13.5	19.0	18.5	21.0	20.0	18.0	16.5
2	9.5	9.5	11.0	10.0	14.0	13.5	19.0	18.5	20.5	19.5	17.0	16.5
3	9.5	9.5	12.0	11.0	14.0	13.5	19.5	18.5	19.5	19.0	18.0	16.5
4	10.0	9.5	13.0	12.0	13.5	13.5	20.0	19.0	20.0	19.5	18.0	16.5
5	10.5	10.0	13.5	13.0	14.5	13.5	20.0	19.5	21.0	20.0	17.0	16.0
6	10.5	10.0	13.5	12.0	14.5	14.5	20.0	19.0	21.0	20.5	16.0	15.5
7	10.0	9.0	13.0	11.5	14.5	14.0	19.5	18.5	21.5	21.0	15.5	15.5
8	9.0	9.0	11.5	11.0	14.5	14.0	18.5	17.0	21.5	21.0	15.5	15.5
9	9.0	8.5	11.0	10.5	14.5	13.5	17.0	16.0	21.5	21.0	15.5	15.0
10	8.5	8.0	12.0	11.0	14.0	13.0	16.5	15.5	21.0	20.0	15.5	15.0
11	8.5	8.0	13.5	12.0	13.0	12.0	16.5	15.5	20.0	19.0	15.5	15.0
12	8.5	8.5	14.5	13.5	13.5	13.0	19.5	16.5	19.0	18.5	15.5	15.0
13	8.5	8.5	15.0	14.5	14.5	13.5	20.5	19.5	18.5	17.0	15.5	15.0
14	8.5	8.5	15.0	14.5	15.5	14.5	21.0	20.5	18.0	16.5	15.5	15.5
15	9.0	8.5	15.0	13.5	15.5	15.0	21.5	20.5	17.0	16.5	16.0	15.5
16	9.0	9.0	13.5	11.0	15.0	14.5	21.5	21.0	17.0	16.0	16.0	16.0
17	9.0	8.5	11.0	10.5	15.5	15.0	22.0	21.5	16.0	15.0	16.0	16.0
18	9.0	9.0	10.5	10.0	16.5	15.5	21.0	21.5	15.5	15.0	16.0	15.5
19	9.0	9.0	11.0	10.5	18.0	16.5	22.0	21.5	15.5	15.5	15.5	14.5
20	9.5	9.0	12.0	11.0	18.0	17.0	21.5	20.5	16.0	15.5	14.5	14.5
21	10.0	9.5	12.0	11.0	18.0	17.0	21.0	20.5	16.5	15.5	14.5	14.5
22	10.0	9.5	11.0	10.5	18.0	16.5	20.5	20.0	17.0	16.0	14.5	14.5
23	9.5	9.5	10.5	10.5	17.0	16.5	20.0	19.5	17.0	16.5	14.5	14.0
24	9.5	9.5	10.5	10.0	16.5	15.5	20.0	19.5	18.0	17.0	14.5	14.0
25	9.5	9.5	11.0	10.5	15.5	14.5	19.5	18.5	18.0	17.0	14.0	13.5
26	10.0	9.5	12.0	11.0	15.0	14.5	19.0	18.5	18.0	18.0	13.5	13.5
27	10.5	10.0	14.0	12.0	16.0	14.5	19.0	18.5	19.0	18.0	13.5	13.5
28	10.5	10.5	14.5	14.0	18.0	16.0	19.5	19.0	19.5	18.5	13.5	13.5
29	10.5	10.0	15.0	14.5	19.0	18.0	20.0	19.5	19.5	19.0	13.5	13.5
30	10.0	9.5	14.5	14.0	19.0	18.5	21.0	20.0	19.0	18.5	14.0	13.5
31	---	---	14.0	14.0	---	---	21.0	20.5	18.5	17.0	---	---
MONTH	10.5	8.0	15.0	9.5	19.0	12.0	22.0	15.5	21.5	15.0	18.0	13.5

14211805 WILLAMETTE RIVER ABOVE ST. JOHNS BRIDGE, AT PORTLAND, OREG.

LOCATION.--Lat 45°34'54", long 122°38'09", in NW¼SW¼ sec.12, T.1 N., R.1 W., Multnomah County, temperature recorder on left bank, on U.S. Corps of Engineers dock, 0.4 mi (0.6 km) upstream from St. Johns Bridge in North Portland, and at mile 6.4 (10.3 km).

DRAINAGE AREA.--11,450 mi² (29,700 km²), approximately.

PERIOD OF RECORD.--Water temperatures: October 1971 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 24.0°C July 23-28, Aug. 6-10; minimum, 3.0°C Jan. 29-31.

WATER TEMPERATURE (DEG. C) • WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	15.0	8.5	8.0	8.0	8.0	4.5	4.0	3.5	3.5	8.5	8.5
2	15.0	14.5	8.0	8.0	8.0	7.5	5.0	4.5	3.5	3.5	8.0	7.5
3	14.5	14.5	8.0	7.5	7.5	7.5	5.0	5.0	3.5	3.5	7.5	7.0
4	14.5	14.0	7.5	7.0	7.0	7.0	5.0	5.0	3.5	3.5	7.5	7.0
5	14.0	13.5	8.5	7.5	7.0	7.0	5.0	5.0	3.5	3.5	8.0	7.5
6	13.5	13.5	8.5	8.0	7.0	7.0	5.0	4.5	4.0	4.0	8.5	8.0
7	14.0	13.5	8.5	8.0	7.0	7.0	4.5	4.0	4.5	4.5	8.5	8.5
8	14.0	13.5	8.5	8.0	7.0	6.5	4.5	4.0	5.5	4.5	8.5	8.0
9	14.0	14.0	8.5	8.0	6.5	6.0	4.5	4.5	6.0	5.5	8.0	8.0
10	14.5	14.0	8.0	7.5	6.0	6.0	5.0	4.5	6.5	6.0	8.5	8.0
11	15.0	15.0	8.0	7.5	6.0	6.0	5.0	5.0	6.5	6.5	9.0	8.5
12	16.0	15.5	8.5	8.0	6.0	5.5	6.0	5.0	6.5	6.5	9.5	9.0
13	16.0	16.0	9.0	8.5	5.5	5.5	6.0	6.0	7.0	6.5	9.5	9.5
14	16.0	15.5	9.0	9.0	5.5	5.5	6.0	6.0	7.0	6.5	10.0	9.5
15	16.0	15.5	9.0	8.5	5.5	5.5	6.0	5.5	7.0	6.5	10.0	10.0
16	16.0	15.0	9.0	8.5	6.0	5.5	5.5	5.0	7.0	7.0	10.0	10.0
17	15.5	15.5	8.5	8.5	6.0	6.0	5.5	5.0	7.5	7.0	10.5	10.0
18	15.5	15.5	8.5	8.0	6.0	6.0	5.5	5.0	7.5	7.5	10.5	10.5
19	15.5	15.5	8.5	8.0	6.0	6.0	6.5	5.5	7.5	7.5	10.5	10.5
20	15.5	14.0	8.0	8.0	6.5	6.0	7.0	6.5	7.5	7.5	10.5	10.0
21	14.0	13.5	8.0	8.0	6.5	6.0	7.0	7.0	7.5	7.5	10.0	9.5
22	14.0	13.0	8.0	8.0	6.5	6.0	7.5	7.0	7.5	7.5	10.0	10.0
23	13.5	12.5	8.5	8.0	6.0	6.0	7.5	7.5	7.5	7.0	10.0	9.5
24	12.5	11.5	8.0	8.0	6.0	6.0	7.5	7.0	7.0	7.0	9.5	9.5
25	11.5	11.0	8.0	8.0	6.0	5.5	7.0	6.0	7.0	7.0	9.5	9.0
26	11.0	10.5	8.0	8.0	5.5	5.5	6.0	5.0	7.0	7.0	9.0	9.0
27	10.5	10.0	8.0	8.0	5.5	5.0	5.0	4.5	7.5	7.0	9.0	8.5
28	10.0	9.5	8.0	8.0	5.0	4.5	4.5	3.5	8.5	7.5	8.5	8.5
29	9.5	9.5	8.0	8.0	4.5	4.0	3.5	3.0	8.5	8.5	8.5	8.0
30	9.5	9.5	8.0	8.0	4.0	4.0	3.0	3.0	---	---	8.5	8.5
31	9.0	9.0	---	---	4.0	4.0	3.0	3.0	---	---	9.0	8.5
MONTH	16.0	9.0	9.0	7.0	8.0	4.0	7.5	3.0	8.5	3.5	10.5	7.0

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

14211000 CLACKAMAS RIVER NEAR CLACKAMAS, OREG.

LOCATION.--Lat 45°23'36", long 122°31'54", in NE¼SW¼ sec.14, T.2 S., R.2 E., Clackamas County, temperature recorder at gaging station on left bank, 0.8 mi (1.3 km) upstream from Johnson Creek, 2.1 mi (3.4 km) southeast of Clackamas, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--930 mi² (2,408 km²) at gage, 936 mi² (2,424 km²) at Gladstone Bridge 3.6 mi (5.8 km) downstream, where high-flow discharge measurements are made.

PERIOD OF RECORD.--Water temperatures: May 1963 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum recorded, 18.5°C Aug. 8, 9; minimum recorded, 3.5°C Dec. 27-30.

Period of record:
Water temperatures: Maximum, 22.0°C Aug. 13, 14, 1967; minimum, 1.0°C Dec. 30, 31, 1968, Jan. 2, 30, 1969, Jan. 5-8, 1971.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	16.0	12.0	---	---	15.5	14.0
2	---	---	---	---	---	---	16.5	13.0	---	---	15.5	14.5
3	---	---	---	---	---	---	17.0	13.5	---	---	15.5	14.0
4	---	---	---	---	---	---	18.0	14.0	---	---	15.5	14.5
5	---	---	---	---	---	---	18.0	14.0	---	---	15.5	14.5
6	---	---	---	---	---	---	17.0	13.5	---	---	14.5	13.5
7	---	---	---	---	13.0	11.0	15.5	14.0	---	---	13.5	13.5
8	---	---	---	---	13.5	11.5	15.5	14.0	18.5	16.0	13.5	13.0
9	---	---	---	---	13.0	11.5	15.5	13.5	18.5	15.5	13.5	13.5
10	---	---	---	---	13.5	11.5	15.0	13.5	18.0	15.5	13.5	10.5
11	---	---	---	---	12.0	11.5	14.5	13.5	17.0	15.5	13.5	11.5
12	---	---	---	---	13.0	11.0	16.0	13.5	17.0	15.5	13.5	11.5
13	---	---	---	---	13.5	11.0	16.0	14.5	17.0	15.5	13.5	12.0
14	---	---	---	---	13.0	11.0	16.0	14.0	16.0	15.5	13.5	11.5
15	---	---	---	---	12.0	11.5	16.5	13.5	15.5	15.0	13.5	11.5
16	---	---	---	---	13.5	11.0	18.0	14.5	15.0	15.0	13.5	12.0
17	---	---	---	---	14.5	11.5	18.0	14.5	15.5	15.0	13.5	13.5
18	---	---	---	---	15.0	11.5	16.5	15.0	15.5	14.5	13.5	11.5
19	---	---	---	---	15.5	11.5	18.0	15.0	16.5	15.0	11.5	11.5
20	---	---	---	---	14.5	12.0	17.0	15.0	16.5	15.0	11.5	11.5
21	---	---	---	---	13.5	13.0	17.0	15.0	15.5	15.0	11.5	11.5
22	---	---	---	---	14.0	12.0	18.0	15.0	15.5	14.5	11.5	10.5
23	---	---	---	---	14.0	13.0	17.0	15.0	16.0	14.0	11.0	10.0
24	---	---	---	---	13.5	12.0	17.0	15.0	16.0	14.5	10.5	9.5
25	---	---	---	---	13.0	12.0	16.5	14.5	15.5	14.5	10.5	9.0
26	---	---	---	---	13.0	11.5	16.5	14.5	16.0	14.5	10.0	8.5
27	---	---	---	---	15.5	11.5	16.5	14.5	16.5	14.5	9.0	8.0
28	---	---	---	---	15.5	12.0	17.0	15.0	16.5	15.5	9.0	8.5
29	---	---	---	---	15.5	12.0	18.0	15.0	16.5	15.0	10.0	8.5
30	---	---	---	---	15.5	12.0	18.0	15.5	16.0	14.5	10.0	9.0
31	---	---	---	---	---	---	---	---	15.5	14.0	---	---
MONTH	---	---	---	---	15.5	11.0	18.0	12.0	---	---	15.5	8.0

14222890 COLUMBIA RIVER NEAR COLUMBIA CITY, OREG.

LOCATION.--Lat 45°54'55", long 122°48'54", in SW¼ sec.16, T.5 N., R.1 W., Columbia County, at head of Deer Island, 1.8 mi (2.9 km) northwest of Columbia City, and at mile 82.4 (132.6 km).

DRAINAGE AREA.--253,900 mi² (657,600 km²), approximately.

PERIOD OF RECORD.--Water temperatures: October 1968 to September 1972 (discontinued).

EXTREMES.--1971-72:
Water temperatures: Maximum, 21.5°C Aug. 8, 9; minimum, 2.0°C Feb. 5, 6.

Period of record:
Water temperatures: Maximum, 23.0°C Aug. 11, 12, 1971; minimum, freezing point Jan. 31, 1969.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.5	10.5	10.0	14.5	14.0	16.0	15.0	20.0	19.0	20.5	20.0
2	8.5	7.5	11.0	10.5	15.0	14.5	16.5	15.5	19.5	18.5	20.5	20.0
3	8.5	8.0	11.0	10.5	15.0	14.5	17.0	16.0	19.5	18.5	21.0	20.0
4	8.5	8.0	11.0	10.5	15.0	14.5	17.0	16.5	20.0	18.5	21.0	20.5
5	8.5	8.0	11.5	11.0	15.0	14.5	17.0	16.5	20.0	19.0	21.0	20.5
6	8.5	8.0	12.0	11.5	15.0	15.0	17.0	16.5	20.5	19.5	20.5	20.0
7	9.0	8.0	12.0	11.5	15.0	15.0	17.0	16.5	21.0	20.0	20.0	20.0
8	9.0	8.5	12.0	12.0	15.0	14.5	17.0	16.5	21.5	20.5	20.0	19.5
9	9.0	8.5	12.0	11.5	15.0	14.5	17.0	16.5	21.5	20.5	19.5	19.5
10	9.0	8.5	12.0	11.5	15.0	14.5	16.5	16.5	21.0	20.0	19.5	19.0
11	8.5	8.5	12.5	12.0	14.5	14.5	17.0	16.5	21.0	20.0	19.0	18.5
12	8.5	8.0	13.0	12.5	14.5	14.0	17.0	16.5	20.5	20.0	19.0	18.5
13	8.5	8.5	13.0	12.5	14.5	14.5	18.0	17.0	20.5	20.0	19.0	18.5
14	8.5	8.5	13.0	12.5	14.5	14.5	18.0	17.5	20.0	19.5	19.0	18.5
15	8.5	8.5	13.0	13.0	14.5	14.0	18.5	17.5	20.0	19.5	19.0	18.5
16	8.5	8.5	13.0	12.5	14.0	14.0	18.5	18.0	20.0	19.0	19.0	18.5
17	8.5	8.0	13.0	12.5	14.5	14.0	19.0	18.0	19.5	19.0	18.5	18.0
18	8.5	8.0	13.0	12.5	14.5	14.0	19.0	18.5	19.5	19.0	18.0	18.0
19	9.0	8.5	13.0	13.0	15.0	14.5	19.0	18.5	20.0	19.0	18.0	17.0
20	9.0	8.5	13.0	12.5	15.0	14.5	19.0	18.5	20.0	19.5	17.0	16.5
21	8.5	8.5	12.5	12.0	15.0	15.0	19.0	18.5	20.0	19.5	16.5	16.5
22	9.0	8.5	12.5	12.0	15.0	14.5	19.0	18.5	20.0	19.5	16.5	16.5
23	9.5	9.0	12.0	12.0	15.0	14.5	19.5	18.5	20.5	20.0	16.5	16.0
24	9.5	8.5	12.0	12.0	15.0	14.5	19.0	18.5	20.5	20.0	16.0	16.0
25	9.5	8.5	12.0	11.5	15.0	14.5	19.0	18.0	20.5	19.5	16.0	15.5
26	9.5	9.0	12.5	11.5	15.0	14.5	19.0	18.0	20.0	19.5	15.5	15.0
27	10.5	9.0	12.5	12.0	15.5	15.0	19.0	18.0	20.5	20.0	15.0	14.5
28	11.0	10.0	13.0	12.0	15.5	15.0	19.5	18.5	20.5	20.0	14.5	14.5
29	10.0	9.5	13.5	12.5	15.5	15.5	19.5	18.5	21.0	20.0	---	---
30	10.5	9.5	14.0	13.5	16.0	15.0	20.0	19.0	20.5	20.0	---	---
31	---	---	14.0	13.5	---	---	20.0	19.0	20.5	20.0	---	---
MONTH	11.0	7.5	14.0	10.0	16.0	14.0	20.0	15.0	21.5	18.5	21.0	14.5

14222910 COLUMBIA RIVER AT KALAMA, WASH.

LOCATION.—Lat 46°01'13", long 122°51'30", in NW¼ sec.7, T.6 N., R.1 W., Cowlitz County, temperature recorder on right bank at dock of Dow Chemical Company, 1.0 mi (1.6 km) northwest of Kalama, and at mile 74.3 (119.5 km).

DRAINAGE AREA.—254,000 mi² (657,900 km²), approximately.

PERIOD OF RECORD.—Water temperatures: September 1968 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 21.0°C Aug. 8; minimum, 1.0°C Feb. 4-7.

Period of record:
Water temperatures: Maximum, 22.5°C Aug. 10-13, 1971; minimum, 0.5°C on several days in 1969.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	15.5	11.5	10.5	8.5	8.5	5.0	4.5	2.0	1.5	5.5	4.5
2	16.0	15.5	11.5	11.0	8.5	8.0	5.0	4.5	2.5	2.0	5.0	4.5
3	16.0	16.0	11.0	10.5	8.0	7.5	4.5	4.5	2.0	1.5	5.0	4.5
4	16.0	16.0	11.0	10.5	8.0	7.5	4.5	4.5	1.5	1.0	5.0	5.0
5	16.0	16.0	11.0	10.5	8.0	7.5	4.5	4.5	1.0	1.0	---	---
6	16.0	16.0	10.5	10.0	8.0	7.5	4.5	4.5	1.0	1.0	5.0	5.0
7	16.5	16.0	10.0	9.5	7.5	7.5	4.5	4.5	1.5	1.0	5.5	5.0
8	16.5	16.0	9.5	9.0	7.5	7.0	5.0	4.5	2.0	1.5	5.5	5.0
9	16.5	16.0	9.5	9.5	7.0	6.5	5.0	4.5	2.5	2.0	5.5	5.5
10	16.5	16.0	9.5	9.5	7.0	6.5	4.5	4.5	2.5	2.0	5.5	5.5
11	16.5	16.0	9.5	9.0	6.5	6.5	4.5	4.5	2.5	2.0	5.5	5.5
12	16.5	16.0	9.5	9.5	6.5	6.5	4.5	4.5	2.5	2.0	6.0	5.5
13	16.0	16.0	10.0	9.5	6.5	6.0	4.5	4.5	3.0	2.5	6.0	5.5
14	16.0	15.0	10.0	9.5	6.5	6.0	---	---	3.0	2.5	6.0	6.0
15	15.0	15.0	9.5	9.5	6.5	6.0	---	---	3.0	2.5	6.5	6.0
16	15.0	14.5	9.5	9.5	6.5	6.0	---	---	3.5	3.0	6.5	6.5
17	14.5	14.5	9.5	9.0	6.5	6.5	4.0	4.0	3.5	3.5	7.0	6.5
18	14.5	14.0	9.0	9.0	6.5	6.5	4.5	4.0	---	---	7.0	6.5
19	14.0	13.5	9.0	9.0	6.5	6.5	4.5	4.5	---	---	7.0	6.5
20	14.0	13.5	9.0	9.0	6.5	6.0	5.5	4.5	---	---	7.0	6.5
21	13.5	13.5	9.0	9.0	6.5	6.0	5.5	5.0	---	---	7.5	7.0
22	13.5	13.0	9.0	8.5	6.0	6.0	5.0	5.0	3.5	3.5	7.5	7.5
23	13.5	13.0	9.0	8.5	6.0	6.0	5.0	5.0	3.5	3.5	7.5	7.5
24	13.5	13.0	9.0	8.5	6.0	5.5	5.0	4.5	3.5	3.5	7.5	7.5
25	13.5	13.0	8.5	8.5	5.5	5.5	4.5	4.0	4.0	3.5	7.5	7.0
26	13.5	13.0	8.5	8.5	5.5	5.0	4.0	3.5	4.0	4.0	7.0	7.0
27	13.0	12.5	8.5	8.5	5.0	5.0	3.5	2.0	5.0	4.0	7.0	7.0
28	12.5	12.0	8.5	8.5	5.0	4.5	2.0	1.5	5.5	5.0	7.0	7.0
29	12.0	11.5	8.5	8.0	4.5	4.0	2.0	1.5	5.5	5.5	7.0	7.0
30	11.5	11.5	8.5	8.0	4.0	4.0	2.5	2.0	---	---	7.0	7.0
31	11.5	11.0	---	---	4.5	4.0	2.5	1.5	---	---	7.0	7.0
MONTH	16.5	11.0	11.5	8.0	8.5	4.0	5.5	1.5	5.5	1.0	7.5	4.5

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

14223600 KALAMA RIVER ABOVE SPENCER CREEK, NEAR KALAMA, WASH.

LOCATION.--Lat 46°02'51", long 122°50'11", SE¼NW¼ sec.32, T.7 N., R.1 W., Cowlitz County, on right bank at Modrow Road Bridge, 2.1 mi (3.4 km) north of Kalama city limits, 0.6 mi (1.0 km) upstream from Spencer Creek, and at mile 2.8 (4.5 km).

DRAINAGE AREA.--202 mi^2 (325 km^2), approximately.

PERIOD OF RECORD.--Water temperatures: May to November 1970, July 1971 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 19.0°C July 17; minimum, 1.5°C Feb. 1, 2.

Period of record:
Water temperatures: Maximum, 21.0°C July 4, 1970; minimum, 1.5°C Feb. 1, 2, 1972.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

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

14245295 COLUMBIA RIVER AT RAINIER, OREG.

LOCATION.--Lat 46°06'02", long 122°57'47", in SE¼SW¼ sec.8, T.7 N., R.2 W., Columbia County, temperature recorder on left bank 1.2 mi (1.9 km) downstream from Nice Creek, 500 ft (152 m) upstream from Interstate bridge, and at mile 66.1 (106.4 km).

DRAINAGE AREA.--256,700 mi^2 (664,500 km^2), approximately.

PERIOD OF RECORD.--Water temperatures: October 1971 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 21.5°C Aug. 24, 29; minimum, 2.5°C Feb. 1, 3-7.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.5	10.5	10.0	14.5	14.0	16.0	15.5	19.5	19.0	21.0	20.5
2	8.0	7.5	11.0	10.5	15.0	14.5	16.5	16.0	19.0	19.0	21.0	20.5
3	8.0	7.5	11.5	10.5	15.0	14.5	17.0	16.0	19.0	18.5	21.0	20.0
4	8.0	8.0	12.0	11.0	15.0	14.5	17.0	16.5	19.5	18.5	21.0	20.5
5	8.0	8.0	12.0	11.0	15.5	15.0	17.0	16.5	20.0	19.0	20.5	20.5
6	8.0	8.0	12.0	12.0	15.5	15.0	17.5	17.0	20.5	19.5	20.5	20.5
7	8.5	8.0	12.5	12.0	15.5	15.0	17.0	16.5	20.5	20.0	20.5	20.0
8	8.5	8.0	12.5	12.0	15.5	15.0	17.0	16.5	21.0	20.5	20.0	20.0
9	9.0	8.5	12.5	12.0	15.0	14.5	16.5	16.5	21.0	20.5	20.0	19.5
10	9.0	8.5	13.0	12.0	15.0	14.5	16.5	16.5	20.5	20.5	20.0	19.5
11	8.5	8.5	13.0	12.5	14.5	14.5	16.5	16.5	21.0	20.5	20.0	19.5
12	8.5	8.5	13.5	13.0	14.5	14.5	17.0	16.5	21.0	20.5	20.0	19.5
13	8.5	8.5	14.0	13.0	15.0	14.5	17.5	17.0	20.5	20.5	20.0	19.5
14	8.5	8.5	14.0	13.5	14.5	14.5	18.0	17.5	20.5	20.0	20.5	20.0
15	9.0	8.5	13.5	13.5	14.5	14.5	18.5	17.5	20.0	19.5	20.0	20.0
16	9.0	8.5	13.5	13.5	14.5	14.0	18.5	18.0	20.0	19.5	20.0	19.5
17	9.0	8.5	13.5	13.0	14.5	14.0	19.0	18.0	20.0	19.5	20.0	19.5
18	9.0	8.5	13.5	13.0	15.0	14.5	18.5	18.5	20.0	19.5	20.0	19.5
19	9.0	8.5	13.5	13.0	15.0	14.5	19.0	18.5	20.0	19.5	19.5	19.0
20	9.0	9.0	13.5	13.0	15.0	15.0	19.0	18.5	20.5	20.0	19.5	18.5
21	9.0	9.0	13.0	13.0	15.0	15.0	19.0	18.5	20.5	20.0	18.5	18.5
22	9.5	8.5	13.0	13.0	15.0	14.5	19.0	18.5	21.0	20.5	18.5	18.0
23	9.5	9.0	13.0	12.5	15.0	14.5	19.0	18.5	21.0	20.5	18.5	17.5
24	9.5	9.0	13.0	12.5	15.0	14.5	19.0	18.5	21.5	20.5	18.0	16.5
25	9.5	9.0	13.0	12.5	15.0	14.5	18.5	18.5	21.0	20.5	17.5	17.5
26	10.0	9.5	13.0	12.5	15.0	15.0	18.5	18.0	21.0	20.5	17.0	16.5
27	10.5	9.5	13.0	13.0	15.5	15.0	19.0	18.5	21.0	20.5	16.5	16.0
28	10.5	10.0	13.5	13.0	16.0	15.0	19.0	18.5	21.0	20.5	16.0	15.5
29	10.5	10.0	13.5	13.0	16.0	15.5	19.0	18.5	21.5	21.0	15.5	15.0
30	10.5	10.0	14.0	13.5	16.0	15.5	19.5	19.0	21.0	21.0	15.0	15.0
31	---	---	14.5	14.0	---	---	19.5	19.0	21.0	20.5	---	---
MONTH	10.5	7.5	14.5	10.0	16.0	14.0	19.5	15.5	21.5	18.5	21.0	15.0

14245300 COLUMBIA RIVER AT LONGVIEW, WASH.

LOCATION.--Lat 46°06'22", long 122°57'34", in SE¼NW¼ sec.8, T.7 N., R.2 W., Cowlitz County, temperature recorder on right pier of Longview bridge, 1.0 mi (1.6 km) south of Longview, 2.0 mi (3.2 km) downstream from Cowlitz River, and at mile 66.0 (106.2 km).

DRAINAGE AREA.--256,700 mi^2 (664,500 km^2), approximately.

PERIOD OF RECORD.--Water temperatures: August 1967 to September 1972 (discontinued).

EXTREMES.--1971-72:
Water temperatures: Maximum, 22.0°C Aug. 21.

Period of record:
Water temperatures: Maximum, 23.0°C Aug. 16, 21-23, 1967; minimum, freezing point Jan. 31, Feb. 1, 1969, and probably during period of no record Jan. 21-30, 1969.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	11.0	10.5	8.5	8.5	---	---	---	---	5.5	5.0
2	---	---	---	---	---	---	---	---	---	---	5.0	5.0
3	---	---	---	---	---	---	4.5	4.5	---	---	5.0	4.5
4	---	---	---	---	---	---	---	---	---	---	5.0	5.0
5	---	---	---	---	---	---	---	---	---	---	5.5	5.0
6	---	---	---	---	---	---	---	---	---	---	5.5	5.0
7	---	---	---	---	---	---	---	---	---	---	6.0	5.5
8	---	---	---	---	---	---	---	---	---	---	6.0	5.5
9	---	---	---	---	---	---	---	---	---	---	6.0	6.0
10	---	---	---	---	---	---	---	---	---	---	6.0	5.5
11	---	---	---	---	---	---	---	---	---	---	6.0	6.0
12	---	---	---	---	---	---	---	---	---	---	6.5	6.0
13	---	---	---	---	---	---	---	---	---	---	6.5	6.0
14	---	---	---	---	---	---	---	---	---	---	6.5	6.5
15	---	---	---	---	---	---	---	---	---	---	7.0	6.5
16	---	---	---	---	---	---	---	---	---	---	7.5	7.0
17	---	---	---	---	---	---	---	---	---	---	7.5	7.0
18	---	---	---	---	---	---	---	---	---	---	7.5	7.0
19	---	---	---	---	---	---	---	---	---	---	7.0	7.0
20	---	---	---	---	---	---	---	---	---	---	8.0	7.0
21	---	---	---	---	---	---	---	---	---	---	8.0	7.5
22	---	---	---	---	---	---	---	---	---	---	8.0	7.5
23	---	---	---	---	---	---	---	---	---	---	8.0	7.5
24	---	---	---	---	---	---	---	---	---	---	8.0	8.0
25	---	---	---	---	---	---	---	---	---	---	8.0	7.5
26	---	---	---	---	---	---	---	---	---	---	7.5	7.5
27	---	---	---	---	---	---	---	---	---	---	7.5	7.5
28	---	---	---	---	---	---	---	---	6.0	5.0	7.5	7.5
29	---	---	---	---	---	---	---	---	6.0	5.5	7.5	7.0
30	---	---	---	---	---	---	---	---	---	---	7.5	7.5
31	---	---	---	---	---	---	2.5	2.0	---	---	7.5	7.5
MONTH	---	---	---	---	---	---	---	---	---	---	8.0	4.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.5	10.0	9.0	13.5	13.5	15.5	15.5	19.5	19.0	20.5	20.0
2	7.5	7.0	10.5	9.5	14.0	13.5	16.5	15.5	19.5	17.5	20.0	19.5
3	7.5	7.5	11.0	10.5	14.5	13.0	17.0	16.5	19.5	18.5	20.0	19.5
4	7.5	7.0	11.5	11.0	14.5	13.5	17.0	17.0	19.5	18.5	20.0	19.5
5	7.5	7.5	11.5	11.0	14.5	14.0	17.0	17.0	20.0	19.5	20.0	19.5
6	8.0	7.5	11.5	11.5	14.5	14.0	17.5	17.0	20.5	20.0	20.0	19.5
7	8.0	7.5	11.5	11.5	14.5	14.0	17.0	17.0	21.0	20.5	19.5	19.0
8	8.0	7.5	12.0	11.5	14.5	13.0	18.0	17.0	21.5	21.0	19.0	18.5
9	8.0	8.0	11.5	11.5	15.0	13.0	18.0	17.5	21.5	21.0	19.0	18.5
10	8.5	8.0	12.0	11.5	14.0	13.0	17.5	17.0	21.5	21.0	18.5	18.5
11	8.5	8.0	12.5	12.0	17.0	13.0	17.5	17.0	21.5	21.0	18.5	18.0
12	8.5	8.0	13.0	12.0	17.0	15.0	17.5	17.0	21.5	21.0	18.5	18.0
13	8.5	8.5	13.0	12.5	15.0	14.5	18.0	17.5	21.0	20.5	19.0	18.5
14	8.5	8.5	13.0	13.0	15.0	14.5	18.5	18.0	21.0	20.5	19.0	18.5
15	9.0	8.5	13.0	12.5	14.5	14.5	18.5	18.0	20.5	20.5	19.0	18.5
16	9.0	8.5	12.5	12.5	14.5	14.0	19.0	18.0	20.5	20.5	19.0	18.5
17	8.5	8.5	12.5	12.5	15.0	14.5	19.0	17.5	20.5	20.0	19.0	18.5
18	8.5	8.5	12.5	12.5	15.0	14.5	19.5	17.5	21.0	20.5	18.5	18.0
19	9.0	8.5	12.5	12.5	15.5	15.0	19.0	17.5	21.5	21.0	18.0	17.5
20	9.0	8.5	12.5	12.5	15.5	15.0	19.5	17.5	21.5	21.0	18.0	17.0
21	9.0	8.5	12.5	12.5	15.5	15.0	19.5	17.5	22.0	21.5	17.5	16.5
22	9.0	8.5	12.5	12.0	15.0	15.0	19.5	17.5	22.0	21.5	17.5	17.0
23	9.0	9.0	12.5	12.0	15.0	15.0	19.5	17.5	21.5	21.0	17.0	16.5
24	9.0	9.0	12.0	12.0	15.0	15.0	19.5	17.5	21.5	21.0	17.0	16.0
25	9.0	9.0	12.0	12.0	15.0	15.0	19.5	17.5	21.0	21.0	16.5	16.0
26	9.5	9.0	12.5	12.0	15.0	14.5	19.0	17.5	21.0	21.0	16.0	15.5
27	10.0	9.5	12.5	12.5	15.0	14.5	19.5	17.5	21.0	21.0	16.0	15.0
28	10.5	10.0	13.0	12.5	15.5	15.0	19.5	17.5	21.0	21.0	15.0	15.0
29	10.0	9.5	13.5	13.0	15.5	15.0	19.5	17.5	21.0	21.0	---	---
30	10.0	9.5	13.5	13.0	15.5	15.0	19.5	19.0	21.0	20.5	---	---
31	---	---	13.5	13.5	---	---	19.5	19.0	21.0	20.5	---	---
MONTH	10.5	7.0	13.5	9.0	17.0	13.0	19.5	15.5	22.0	17.5	20.5	15.0

14247295 COLUMBIA RIVER AT WAUNA, OREG.

LOCATION.--Lat 46°09'40", long 123°24'30", in SE¼ sec.22, T.8 N., R.6 W., Clatsop County, temperature recorder at gaging station on left bank, at northwest end of Crown-Zellerbach wood-pulp processing plant at Wauna, and at mile 41.0 (66.0 km).

DRAINAGE AREA.--257,000 mi^2 (665,600 km^2), approximately.

PERIOD OF RECORD.--Water temperatures: October 1971 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 21.0°C Aug. 7, 28; minimum, 2.5°C Feb. 5-8.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	14.0	13.5	16.0	15.5	19.5	18.5	20.5	20.0
2	---	---	---	---	14.5	14.0	16.5	15.5	19.0	18.5	20.5	20.0
3	---	---	---	---	14.5	14.0	16.5	16.0	19.5	18.5	20.5	19.5
4	---	---	---	---	15.0	14.5	17.0	16.5	19.0	18.5	20.0	19.5
5	---	---	---	---	15.0	14.5	17.0	16.5	20.0	18.5	19.5	19.5
6	---	---	12.0	11.5	15.5	14.5	17.0	16.5	20.5	19.0	19.5	19.5
7	---	---	---	---	15.0	14.5	17.0	16.5	21.0	19.5	20.0	19.5
8	---	---	---	---	15.0	14.5	17.0	16.5	20.5	20.0	19.5	19.0
9	---	---	---	---	15.0	14.5	16.5	16.5	20.5	20.0	19.5	19.0
10	---	---	---	---	14.5	14.0	16.5	16.0	20.5	20.0	19.5	18.5
11	---	---	---	---	14.5	14.0	16.5	16.0	20.5	20.0	19.0	18.5
12	---	---	---	---	14.0	14.0	16.5	16.0	20.5	20.0	19.5	18.5
13	---	---	---	---	14.5	14.0	17.5	16.5	20.0	19.5	19.5	18.5
14	---	---	---	---	14.5	14.0	18.0	17.0	20.0	19.0	19.5	18.5
15	---	---	---	---	14.0	14.0	18.0	17.5	19.5	19.5	19.5	18.5
16	---	---	---	---	14.0	14.0	18.5	18.0	20.0	19.5	19.5	18.5
17	---	---	---	---	14.5	14.0	19.0	18.0	19.5	19.0	19.0	18.5
18	---	---	---	---	14.5	14.0	19.0	18.0	19.5	19.0	19.0	18.0
19	---	---	---	---	15.0	14.0	18.5	18.0	19.5	19.0	18.5	17.5
20	---	---	---	---	14.5	14.5	19.5	18.5	19.5	19.0	18.0	17.0
21	---	---	---	---	14.5	14.5	19.0	18.5	20.0	19.0	17.5	17.0
22	---	---	---	---	14.5	14.5	19.0	18.5	20.0	19.5	17.0	16.0
23	---	---	---	---	14.5	14.5	19.5	18.5	20.5	19.5	16.5	15.5
24	---	---	12.0	12.0	14.5	14.5	19.0	18.5	20.5	20.0	16.5	15.5
25	---	---	12.5	12.0	14.5	14.5	19.0	18.5	20.5	20.0	16.0	15.5
26	---	---	13.0	12.0	15.0	14.5	19.0	18.0	20.5	20.0	16.0	15.0
27	---	---	13.0	12.5	15.0	14.5	19.0	18.0	20.5	20.0	15.5	15.0
28	---	---	13.5	12.5	15.5	15.0	19.0	18.5	21.0	20.0	15.5	14.5
29	---	---	13.5	13.0	15.5	15.0	19.0	18.5	20.5	20.0	15.5	14.5
30	---	---	14.0	13.0	15.5	15.0	19.5	18.5	20.5	20.0	15.5	15.0
31	---	---	14.0	13.5	---	---	19.5	19.0	20.5	20.0	---	---
MONTH	---	---	---	---	15.5	13.5	19.5	15.5	21.0	18.5	20.5	14.5

14248600 COLUMBIA RIVER AT ALTOONA, WASH.

LOCATION.--Lat 46°15'55", long 123°39'13", in SW¼NE¼ sec.15, T.19 N., R.8 W., Wahkiakum County, temperature recorder on right bank, on Bumblebee Canning Company dock, at Altoona, and at mile 27.3 (43.9 km).

DRAINAGE AREA.--258,000 mi² (668,200 km²), approximately.

PERIOD OF RECORD.--Water temperatures: October 1971 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum recorded, 20.0°C July 21, 28-30, Sept. 7-11; minimum, 1.5°C Feb. 5-7.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

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

14248700 BEAR CREEK NEAR SVENSEN, OREG.

LOCATION.--Lat 46°06'48", long 123°37'55", in NE¼NE¼ sec.11, T.7 N., R.8 W., Clatsop County, temperature recorder at gaging station on right bank, 0.5 mi (0.8 km) upstream from Astoria Reservoir Dam, 3.8 mi (6.1 km) southeast of Svensen, and at mile 5.4 (8.7 km).

DRAINAGE AREA.--3.33 mi^2 (8.62 km^2).

PERIOD OF RECORD.--Water temperatures: August 1965 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 14.5°C Aug. 6-8, 25-28; minimum, 3.5°C Jan. 27, 28, Feb. 2.

Period of record:
Water temperatures: Maximum, 18.5°C Aug. 22, 1967; minimum, 1.5°C Jan. 24, 25, 1969.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.5	9.0	6.5	10.5	8.5	11.0	9.0	11.0	10.0	13.5	13.0
2	7.0	6.0	9.0	8.0	10.5	8.5	12.0	10.0	10.5	10.0	14.0	13.0
3	7.0	6.0	10.0	8.0	10.5	9.0	12.0	11.0	13.0	10.5	13.0	12.0
4	8.0	7.0	10.0	8.5	9.5	8.5	12.0	10.5	13.0	11.5	13.0	13.0
5	8.0	8.0	10.0	8.5	10.0	8.5	12.0	11.0	13.5	11.0	13.0	12.0
6	8.0	6.5	9.0	8.5	10.5	9.0	11.0	10.0	14.5	12.0	13.0	12.0
7	6.5	6.0	8.5	8.0	10.5	9.0	10.5	10.0	14.5	13.0	13.5	12.0
8	6.0	5.5	8.5	8.0	10.0	8.5	10.5	10.0	14.5	13.5	13.5	13.0
9	6.5	5.5	8.5	8.0	10.0	9.0	10.5	10.0	14.0	13.0	13.5	12.0
10	6.5	6.0	9.5	7.0	9.0	8.0	10.5	9.5	13.5	12.0	13.0	12.0
11	6.5	5.5	10.0	8.0	9.0	8.5	10.5	10.0	12.0	11.0	13.0	11.5
12	6.5	5.0	11.0	9.0	9.0	8.5	11.0	10.5	13.0	11.0	13.0	11.5
13	6.5	5.5	11.0	9.5	10.0	8.5	11.0	11.0	11.5	11.0	13.5	11.5
14	6.5	6.0	11.0	9.5	10.0	9.0	12.0	10.5	11.5	10.5	13.5	12.0
15	7.0	6.5	11.0	10.0	9.0	9.0	12.0	10.5	11.0	10.5	13.5	12.0
16	7.0	6.5	10.0	9.5	---	---	13.5	11.5	12.0	11.5	13.5	13.0
17	6.5	6.0	9.5	8.5	---	---	14.0	12.0	12.0	12.0	13.5	11.5
18	8.0	6.0	9.0	8.0	---	---	14.0	11.5	13.0	11.0	13.0	11.5
19	8.0	6.5	10.5	8.5	---	---	12.0	10.5	13.0	12.0	12.0	11.5
20	8.0	7.0	10.5	9.5	---	---	12.0	10.5	13.0	12.0	11.5	11.5
21	8.0	6.5	10.0	9.5	---	---	12.0	10.5	13.0	12.0	12.0	11.5
22	8.0	6.0	9.5	9.0	---	---	12.0	10.5	13.5	12.0	11.5	11.5
23	8.0	7.0	9.0	8.5	9.5	9.0	12.0	11.0	13.5	12.0	11.5	10.0
24	8.0	7.0	8.5	8.0	9.5	9.0	11.0	10.5	13.5	13.0	10.5	10.0
25	8.0	7.0	9.0	7.0	9.5	9.0	11.0	10.5	14.5	13.5	10.5	9.0
26	9.0	7.0	10.5	9.0	10.0	9.0	11.0	10.5	14.5	13.0	10.0	8.0
27	9.0	8.0	11.5	10.0	10.5	9.5	11.5	10.5	14.5	13.5	8.5	6.5
28	9.0	8.0	11.5	10.0	11.0	9.5	11.5	10.0	14.5	13.0	8.0	7.0
29	8.0	6.5	11.5	10.0	11.0	10.0	11.5	10.0	14.0	12.0	9.0	8.0
30	8.0	6.0	11.0	9.5	11.0	9.0	11.5	10.0	13.5	11.0	9.5	8.5
31	---	---	11.0	9.5	---	---	11.5	10.5	13.0	11.5	---	---
MONTH	9.0	5.0	11.5	6.5	---	---	14.0	9.0	14.5	10.0	14.0	6.5

14303600 NESTUCCA RIVER NEAR BEAVER, OREG.

LOCATION.--Lat 45°16'00", long 123°50'45", in SE¼NE¼ sec.36, T.3 S., R.10 W., Tillamook County, temperature recorder at gaging station on right bank, 150 ft (46 m) upstream from Saling Creek, 1.2 mi (1.9 km) southwest of Beaver, and at mile 13.5 (21.7 km).

DRAINAGE AREA.--180 mi^2 (466 km^2).

PERIOD OF RECORD.--Water temperatures: October 1964 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Minimum recorded, 3.5°C Jan. 3, 4.

Period of record:
Water temperatures: Maximum, 24.0°C July 1-3, 1967; minimum, 1.0°C sometime during period Dec. 28, 1968, to Feb. 8, 1969.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.0	9.5	9.0	8.0	7.0	5.0	5.0	6.5	6.5	6.5	6.5
2	11.0	10.5	9.5	9.0	7.0	7.0	5.0	5.0	6.5	6.5	---	---
3	11.5	11.0	9.5	9.0	7.0	6.5	5.0	3.5	7.0	6.5	---	---
4	12.0	11.0	9.5	9.0	6.5	6.5	3.5	3.5	7.0	7.0	---	---
5	13.5	12.0	9.0	7.0	7.0	6.5	---	---	7.0	7.0	---	---
6	13.5	13.5	7.0	7.0	7.0	7.0	---	---	7.0	7.0	---	---
7	14.0	13.5	8.0	6.5	7.0	6.5	---	---	7.0	7.0	---	---
8	14.5	13.5	8.0	8.0	6.5	6.5	---	---	7.0	7.0	---	---
9	14.5	13.5	8.5	8.0	6.5	6.5	---	---	7.0	7.0	---	---
10	14.0	13.5	9.0	8.5	6.5	6.5	---	---	7.0	7.0	---	---
11	14.5	14.0	9.0	9.0	6.5	6.5	---	---	7.0	7.0	---	---
12	14.5	13.5	9.0	9.0	6.5	5.5	---	---	7.0	7.0	---	---
13	14.0	13.5	9.0	9.0	6.0	6.0	---	---	7.0	7.0	---	---
14	13.5	12.0	9.0	9.0	6.0	6.0	6.5	6.5	7.0	7.0	---	---
15	12.0	11.5	9.0	9.0	6.0	6.0	6.5	6.5	7.0	6.5	---	---
16	11.5	9.5	9.0	8.5	6.0	6.0	6.5	6.5	6.5	6.5	---	---
17	9.5	9.0	8.5	8.0	6.0	6.0	6.5	6.5	6.5	6.5	---	---
18	9.5	9.0	8.5	8.5	6.0	6.0	6.5	6.5	6.5	6.5	---	---
19	10.5	9.5	9.0	8.5	6.0	6.0	6.5	6.5	6.5	6.5	---	---
20	10.5	10.5	9.0	9.0	6.0	6.0	6.5	6.0	6.5	6.5	10.0	10.0
21	10.5	10.0	9.0	9.0	6.0	6.0	6.0	6.0	6.5	6.5	10.0	9.0
22	10.5	10.0	9.0	8.5	6.0	6.0	6.0	6.0	6.5	6.5	9.5	9.5
23	10.5	10.5	8.5	8.0	6.0	6.0	6.0	6.0	6.5	6.5	9.5	8.5
24	10.5	9.5	8.5	8.0	6.0	6.0	6.0	6.0	6.5	6.5	9.0	8.5
25	9.5	9.5	8.5	8.0	6.0	6.0	6.0	6.0	6.5	6.5	8.5	7.0
26	10.0	9.5	8.0	8.0	6.0	6.0	6.0	6.0	6.5	6.5	8.0	7.0
27	10.0	8.5	8.0	8.0	6.0	5.5	6.0	6.0	6.5	6.5	8.0	8.0
28	8.5	7.0	8.0	8.0	5.5	5.5	6.0	6.0	6.5	6.5	8.5	8.0
29	7.0	7.0	8.0	8.0	5.5	5.0	6.5	6.0	6.5	6.5	8.5	8.5
30	8.0	7.0	8.0	8.0	5.0	5.0	6.5	6.5	---	---	9.0	8.5
31	9.0	8.0	---	---	5.0	5.0	6.5	6.5	---	---	9.0	9.0
MONTH	14.5	7.0	9.5	6.5	8.0	5.0	---	---	7.0	6.5	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	9.0	---	---	---	---	---	---	---	---	---	---
2	9.0	9.0	---	---	---	---	---	---	---	---	---	---
3	9.0	9.0	---	---	---	---	---	---	---	---	---	---
4	9.0	9.0	---	---	---	---	---	---	---	---	---	---
5	9.0	9.0	---	---	---	---	---	---	---	---	---	---
6	9.0	9.0	---	---	---	---	---	---	---	---	---	---
7	9.0	8.5	---	---	---	---	---	---	---	---	---	---
8	8.5	8.0	---	---	---	---	---	---	---	---	---	---
9	8.0	7.0	---	---	---	---	---	---	---	---	---	---
10	8.0	7.0	---	---	---	---	---	---	---	---	---	---
11	8.0	7.0	---	---	---	---	---	---	---	---	---	---
12	8.5	7.0	---	---	---	---	---	---	---	---	---	---
13	8.5	8.0	---	---	---	---	---	---	---	---	---	---
14	8.5	8.5	---	---	---	---	---	---	---	---	---	---
15	9.5	8.5	---	---	---	---	---	---	---	---	---	---
16	9.5	8.0	---	---	---	---	---	---	---	---	---	---
17	9.5	7.0	---	---	---	---	---	---	---	---	---	---
18	8.5	7.0	---	---	---	---	---	---	---	---	---	---
19	8.5	8.0	---	---	---	---	---	---	---	---	---	---
20	8.5	8.5	---	---	---	---	---	---	---	---	---	---
21	9.0	8.5	---	---	---	---	---	---	---	---	---	---
22	9.5	7.0	---	---	---	---	---	---	---	---	---	---
23	9.5	8.5	---	---	---	---	---	---	---	---	---	---
24	9.0	9.0	---	---	---	---	---	---	---	---	---	---
25	9.5	8.5	---	---	---	---	---	---	---	---	---	---
26	10.5	8.5	---	---	---	---	---	---	---	---	---	---
27	10.5	7.0	---	---	---	---	---	---	---	---	---	---
28	10.5	9.0	---	---	---	---	---	---	---	---	---	---
29	9.0	7.0	---	---	---	---	---	---	---	---	---	---
30	9.5	7.0	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	10.5	7.0	---	---	---	---	---	---	---	---	---	---

14306700 NEEDLE BRANCH NEAR SALADO, OREG.

LOCATION.--Lat 44°30'35", long 123°51'20", in SW¼ sec.24, T.12 S., R.10 W., Lincoln County, at gaging station on right bank, 500 ft (152 m) upstream from mouth, 4.6 mi (7.4 km) southwest of Salado, and 8.5 mi (13.7 km) southeast of Toledo.

DRAINAGE AREA.--0.27 mi^2 (0.70 km^2) computed as 174.64 acres (70.68 hm^2) on basis of field survey by Oregon State University.

PERIOD OF RECORD.--Water temperatures: October 1958 to September 1972.
Sediment records: November 1958 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 16.0°C July 3, 4, 14-17, Aug. 7, 9, 27, 28, Sept. 3; minimum, 4.5°C Jan. 28-30.
Sediment concentrations: Maximum daily, 384 mg/l Jan. 11; minimum daily, 0 mg/l Nov. 18-20.
Sediment discharge: Maximum daily, 46 tons (42 tonnes) Jan. 11; minimum daily, 0 tons (0 tonnes) on many days.

Period of record:
Water temperatures: Maximum, 26.0°C July 1, 1967; minimum, 1.5°C Jan. 30, 1963, Jan. 14, 15, 1971.
Sediment concentrations: Maximum daily, 1,260 mg/l Feb. 18, 1968; minimum daily, 0 mg/l on many days in 1958-63, 1965, 1968, 1970, and 1972.
Sediment discharge: Maximum daily, 46 tons (42 tonnes) Jan. 11, 1972; minimum daily, 0 tons on many days in 1968-72.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.0	11.5	7.0	14.5	10.5	14.5	11.5	15.0	13.0	15.5	10.0
2	11.0	6.5	12.0	8.0	14.5	9.5	15.5	11.5	14.5	12.0	15.5	11.0
3	10.0	6.5	14.0	8.5	12.5	11.0	16.0	13.0	15.5	12.0	16.0	12.5
4	12.0	9.5	14.0	9.0	14.5	10.0	16.0	13.5	15.5	12.5	15.5	13.0
5	10.5	9.5	10.5	9.0	15.0	9.5	15.5	13.5	15.0	11.5	14.0	12.5
6	9.5	8.0	11.5	8.5	14.5	11.0	14.5	13.0	15.5	12.0	14.5	12.0
7	8.5	8.0	11.0	8.5	14.5	11.5	15.0	13.0	16.0	12.5	14.0	12.5
8	9.0	8.0	10.5	8.0	13.5	11.5	13.5	13.0	15.5	12.5	13.5	11.0
9	9.0	8.0	11.5	8.0	12.5	11.0	14.0	12.5	16.0	13.0	12.5	11.5
10	9.0	7.0	13.5	8.0	11.0	9.5	12.5	11.0	15.0	11.5	12.0	10.0
11	9.0	7.0	14.5	8.0	12.5	10.5	14.5	12.5	14.0	10.5	12.0	9.5
12	8.0	7.0	15.5	9.0	14.0	10.0	15.5	13.0	14.0	10.0	12.5	9.0
13	9.0	8.0	15.5	10.0	15.0	11.0	15.5	14.5	13.5	9.5	13.0	9.0
14	9.0	8.5	15.5	10.0	13.5	12.5	16.0	13.5	11.5	9.5	13.5	9.5
15	9.0	8.5	12.5	11.5	12.5	12.0	16.0	13.0	12.0	10.5	13.0	9.5
16	8.5	7.0	11.5	11.0	13.0	10.0	16.0	13.0	11.0	10.0	13.5	9.5
17	9.0	6.5	10.5	9.5	14.0	10.5	16.0	13.5	13.5	11.0	13.0	11.5
18	9.0	6.5	11.0	9.0	15.0	11.5	15.0	13.5	13.0	10.5	12.0	11.0
19	10.0	6.5	14.0	8.5	15.0	12.0	15.5	13.0	13.5	11.0	12.0	10.5
20	9.0	7.5	11.5	10.0	14.5	12.0	15.0	11.5	14.0	11.5	12.0	11.5
21	9.5	7.5	10.5	10.0	14.0	12.5	14.5	11.5	15.0	13.0	12.0	12.0
22	11.0	6.5	10.5	9.0	14.0	11.0	15.0	12.0	14.5	12.5	11.5	10.5
23	9.5	7.0	10.5	8.5	13.0	12.5	15.5	12.5	15.0	12.0	11.5	10.5
24	9.0	8.0	10.5	8.0	12.5	12.0	15.0	13.0	15.5	12.5	11.5	10.0
25	9.0	8.0	12.5	8.0	12.0	12.0	14.5	12.5	14.5	11.0	10.5	9.0
26	11.0	7.5	14.0	8.5	12.5	11.5	14.0	11.0	15.5	12.0	9.5	8.0
27	10.0	8.0	15.0	9.5	15.0	12.0	13.5	10.0	16.0	12.0	8.5	6.5
28	8.5	7.5	15.5	10.5	15.5	13.0	14.5	11.5	16.0	12.5	8.5	6.5
29	10.5	7.0	15.0	11.5	15.5	13.0	15.5	12.0	15.5	11.5	10.5	8.0
30	11.0	6.5	14.5	10.0	15.5	12.5	15.0	11.5	14.5	10.0	10.5	8.0
31	---	---	15.0	11.5	---	---	13.5	13.0	15.0	10.0	---	---
MONTH	12.0	6.5	15.5	7.0	15.5	9.5	16.0	10.0	16.0	9.5	16.0	6.5

14306700 NEEDLE BRANCH NEAR SALADO, OREG.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.21	1	0	4.1	32	.35	4.7	6	.08
2	.19	1	0	2.9	4	.03	3.6	2	.02
3	.17	1	0	2.2	3	.02	3.8	6	.06
4	.13	1	0	2.0	4	.02	5.7	22	.46
5	.12	1	0	1.6	2	.01	20	53	2.8
6	.12	1	0	1.4	2	.01	14	23	.96
7	.10	1	0	2.0	13	.07	6.2	10	.17
8	.10	1	0	2.0	2	.01	5.5	29	.52
9	.09	1	0	2.3	33	.24	12	85	3.0
10	.09	1	0	2.9	8	.06	8.8	40	.95
11	.08	1	0	3.4	7	.06	7.2	10	.19
12	.08	7	0	3.0	6	.05	13	24	.84
13	.12	2	0	6.7	92	3.1	10	22	.59
14	.14	1	0	15	97	5.6	10	18	.49
15	.13	1	0	6.5	4	.07	7.4	22	.44
16	.09	1	0	4.0	8	.09	5.2	7	.10
17	.08	1	0	2.8	4	.03	4.0	6	.06
18	.10	2	0	2.2	0	0	3.0	7	.06
19	1.7	30	.16	1.7	0	0	2.4	4	.03
20	.88	5	.01	1.5	0	0	2.4	3	.02
21	.57	4	.01	1.3	1	0	13	95	3.6
22	.52	4	.01	1.1	2	.01	19	63	3.3
23	.47	4	.01	1.3	4	.01	16	53	2.4
24	.42	4	0	1.7	5	.02	14	33	1.2
25	.38	4	0	3.2	26	.39	8.5	8	.18
26	.88	11	.03	23	150	10	6.2	10	.17
27	1.0	3	.01	9.3	23	.58	4.4	6	.07
28	.96	2	.01	9.3	24	.60	3.2	5	.04
29	.78	2	0	11	12	.36	2.7	4	.03
30	.71	2	0	7.4	20	.40	2.2	11	.07
31	.78	2	0	--	--	--	2.0	7	.04
TOTAL	12.19	--	.25	138.8	--	22.19	240.1	--	22.94

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.7	14	.06	.81	2	0	11	128	6.1
2	1.6	3	.01	.71	2	0	19	70	3.8
3	1.4	4	.02	.63	2	0	7.9	9	.19
4	1.3	3	.01	.60	2	0	4.2	8	.09
5	1.2	4	.01	.54	2	0	3.4	8	.07
6	1.1	3	.01	.54	2	0	4.9	8	.11
7	1.1	6	.02	.52	2	0	4.0	3	.03
8	2.7	34	.27	.49	2	0	2.8	1	.01
9	5.5	30	.43	.47	2	0	2.4	1	.01
10	5.0	8	.11	.44	2	0	3.1	2	.02
11	46	384	46	.49	2	0	4.6	2	.02
12	20	120	6.7	1.0	15	.04	4.9	3	.04
13	7.2	23	.45	2.7	3	.02	6.0	8	.13
14	4.4	12	.14	2.4	2	.01	4.9	2	.03
15	3.2	32	.28	3.2	5	.04	3.3	2	.02
16	2.5	11	.07	6.9	48	.93	2.4	2	.01
17	2.4	8	.05	6.0	16	.26	1.7	2	.01
18	14	87	3.3	4.0	5	.05	1.5	2	.01
19	14	20	.76	2.9	3	.02	1.3	2	.01
20	33	167	15	2.2	4	.02	1.1	2	.01
21	24	65	4.8	1.8	5	.02	1.3	2	.01
22	6.2	6	.10	1.8	2	.01	1.6	2	.01
23	3.8	4	.04	2.0	2	.01	2.0	2	.01
24	3.2	2	.02	2.8	3	.02	2.0	2	.01
25	3.1	2	.02	3.8	3	.03	1.8	2	.01
26	2.8	2	.02	3.2	3	.03	1.8	2	.01
27	2.3	2	.01	6.7	64	1.2	1.8	2	.01
28	1.8	2	.01	7.2	20	.39	1.7	2	.01
29	1.5	2	.01	6.4	8	.14	1.5	2	.01
30	1.2	2	.01	--	--	--	1.2	2	.01
31	.96	2	.01	--	--	--	1.1	2	.01
TOTAL	220.16	--	78.75	73.24	--	3.24	112.2	--	10.83

14306700 NEEDLE BRANCH NEAR SALADO, OREG.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.0	2	.01	1.4	2	.01	.40	1	0
2	.81	2	0	1.2	2	.01	.38	1	0
3	.74	2	0	1.1	2	.01	.38	1	0
4	.78	3	.01	.92	2	0	.36	1	0
5	1.4	18	.07	.84	2	0	.32	1	0
6	2.5	19	.13	.78	2	0	.32	1	0
7	4.4	15	.18	.71	2	0	.31	1	0
8	6.4	22	.38	.68	2	0	.29	1	0
9	4.9	5	.07	.63	2	0	.36	1	0
10	3.4	2	.02	.57	2	0	.36	1	0
11	2.7	11	.13	.52	2	0	.40	1	0
12	5.2	103	1.5	.49	2	0	.27	1	0
13	4.7	10	.13	.47	2	0	.26	1	0
14	3.8	3	.03	.44	2	0	.26	1	0
15	2.9	1	.01	.44	2	0	.26	1	0
16	2.3	1	.01	.74	2	0	.24	1	0
17	1.8	1	0	.71	2	0	.22	1	0
18	1.5	1	0	.96	2	.01	.21	1	0
19	1.3	1	0	.96	2	.01	.21	1	0
20	1.4	1	0	.84	2	0	.20	1	0
21	2.0	1	.01	.78	2	0	.20	1	0
22	1.9	1	.01	.74	2	0	.19	1	0
23	1.7	1	0	.68	2	0	.19	1	0
24	1.7	1	0	.63	2	0	.20	1	0
25	2.0	1	.01	.60	2	0	.21	1	0
26	2.1	1	.01	.57	2	0	.19	1	0
27	1.9	1	.01	.54	2	0	.16	1	0
28	1.8	1	0	.52	2	0	.14	1	0
29	1.7	1	0	.47	1	0	.14	1	0
30	1.5	1	0	.44	1	0	.13	1	0
31	--	--	--	.42	1	0	--	--	--
TOTAL	72.23	--	2.73	21.79	--	.05	7.76	--	0

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.13	3	0	.05	5	0	.01	5	0
2	.10	3	0	.04	5	0	.01	5	0
3	.09	3	0	.03	5	0	.01	5	0
4	.09	3	0	.03	5	0	.01	5	0
5	.10	3	0	.02	5	0	.01	5	0
6	.10	3	0	.02	5	0	.01	5	0
7	.10	3	0	.02	5	0	.01	5	0
8	.12	3	0	.02	5	0	.01	5	0
9	.10	3	0	.02	5	0	.02	5	0
10	.10	3	0	.02	5	0	.02	5	0
11	.12	3	0	.02	5	0	.01	5	0
12	.10	3	0	.02	5	0	.01	5	0
13	.10	3	0	.02	5	0	.01	5	0
14	.08	3	0	.03	5	0	.01	5	0
15	.07	3	0	.03	5	0	.01	5	0
16	.07	3	0	.04	5	0	.01	5	0
17	.06	3	0	.05	5	0	.01	5	0
18	.08	3	0	.03	5	0	.01	5	0
19	.07	3	0	.02	5	0	.07	12	0
20	.05	3	0	.04	5	0	.03	5	0
21	.05	3	0	.03	5	0	.60	16	.03
22	.05	3	0	.02	5	0	.36	8	.01
23	.05	3	0	.02	5	0	.27	6	0
24	.05	3	0	.01	5	0	.24	5	0
25	.05	3	0	.01	5	0	.10	4	0
26	.05	3	0	.01	5	0	.08	1	0
27	.04	3	0	.01	5	0	.06	1	0
28	.04	3	0	.01	5	0	.06	1	0
29	.04	3	0	.01	5	0	.04	1	0
30	.03	3	0	.01	5	0	.04	1	0
31	.04	3	0	.01	5	0	--	--	--
TOTAL	2.32	--	0	.72	--	0	2.15	--	.04

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 903.66
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 141.02

14306800 FLYNN CREEK NEAR SALADO, OREG.

LOCATION.--Lat 44°32'20", long 123°51'05", in SW¼ sec.12, T.12 S., R.10 W., Lincoln County, at gaging station on right bank, 1,000 ft (305 m) upstream from mouth, 3.4 mi (5.5 km) west of Salado, and 6.9 mi (11.1 km) southeast of Toledo.

DRAINAGE AREA.--0.78 mi^2 (2.02 km^2) computed as 501.96 acres (203.14 hm^2) on basis of field survey by Oregon State University.

PERIOD OF RECORD.--Water temperatures: September 1958 to September 1972.
Sediment records: November 1958 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 15.0°C July 17, Aug. 7-9; minimum, 4.5°C Feb. 1-3.
Sediment concentrations: Maximum daily, 1,530 mg/l Jan. 11; minimum daily, 0 mg/l on many days.
Sediment discharge: Maximum daily, 425 tons (386 tonnes) Jan. 11; minimum daily, 0 tons (0 tonnes) on many days.

Period of record:
Water temperatures: Maximum, 16.5°C Aug. 3, 20, 21, Sept. 4, 1961; minimum, 2.0°C Jan. 30, 1963.
Sediment concentrations: Maximum daily, 1,580 mg/l Jan. 28, 1965; minimum daily, 0 mg/l on many days in 1972.
Sediment discharge: Maximum daily, 491 tons (445 tonnes) Jan. 28, 1965; minimum daily, 0 tons (0 tonnes) on many days in 1968-72.

REVISIONS.--Revised figures of sediment concentration in mg/l and sediment discharge in tons, for water years 1970 and 1971, superseding those published in WRD Oreg. 1970 and WRD Oreg. 1971, are given herein.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.5	8.5	8.0	8.5	8.0	8.0	7.0	5.5	4.5	8.5	7.0
2	9.0	8.5	8.0	7.0	8.5	8.0	8.0	6.5	4.5	4.5	8.5	8.5
3	9.0	8.5	8.5	8.0	8.0	8.0	6.5	6.0	5.0	4.5	8.5	8.0
4	9.5	9.0	8.5	7.0	8.5	8.0	6.0	5.5	5.0	5.0	8.5	8.0
5	10.0	9.5	7.0	6.5	9.0	8.5	7.0	6.0	5.5	5.0	8.5	8.5
6	10.5	10.0	7.0	6.5	8.5	8.0	7.0	6.5	6.0	5.0	8.5	7.0
7	10.5	10.0	8.0	7.0	8.0	8.0	7.0	6.5	6.5	6.0	8.5	7.0
8	11.0	10.5	8.0	7.0	8.5	8.0	7.0	6.5	6.5	6.0	8.5	8.0
9	11.0	10.5	8.5	8.0	8.5	8.5	7.0	7.0	6.5	6.5	8.5	8.5
10	10.5	10.5	9.0	8.5	8.5	8.0	8.0	7.0	7.0	6.0	9.0	8.5
11	10.5	10.5	9.0	9.0	8.0	8.0	8.0	8.0	7.0	7.0	9.0	9.0
12	10.5	10.0	9.0	8.5	8.0	8.0	8.0	8.0	8.5	7.0	9.0	9.0
13	10.5	9.5	9.0	8.5	8.5	8.0	8.0	7.0	8.5	7.0	9.0	9.0
14	9.5	9.0	8.5	8.5	8.5	8.5	7.0	7.0	8.0	7.0	9.0	8.5
15	9.0	8.5	8.5	8.5	8.5	8.5	7.0	6.5	8.5	8.0	9.0	8.5
16	8.5	6.5	8.5	8.0	8.5	8.5	7.0	6.5	8.5	8.5	9.5	9.0
17	7.0	6.0	8.0	7.0	8.5	8.5	7.0	6.5	8.5	8.5	9.5	9.0
18	8.5	7.0	8.0	8.0	8.5	8.5	8.0	7.0	8.5	8.0	9.0	9.0
19	9.0	8.5	8.5	8.0	8.5	8.0	8.0	8.0	8.5	8.0	9.0	8.5
20	9.0	8.5	9.0	8.5	8.5	8.5	8.0	8.0	8.0	7.0	9.0	8.0
21	8.5	8.0	8.5	8.0	8.5	8.0	8.0	8.0	8.5	7.0	9.0	9.0
22	9.0	8.5	8.0	7.0	8.5	8.0	8.0	8.0	8.0	7.0	9.0	8.0
23	9.0	8.5	8.5	7.0	8.0	8.0	8.0	7.0	7.0	7.0	8.5	8.0
24	8.5	7.0	8.5	8.0	8.5	8.0	7.0	7.0	7.0	6.0	8.0	6.5
25	8.0	6.5	8.5	8.0	8.5	8.0	7.0	5.5	8.0	6.5	7.0	6.0
26	8.5	8.0	9.0	8.5	8.0	8.0	6.0	5.5	8.5	7.0	7.0	6.5
27	8.0	7.0	9.0	9.0	8.0	8.0	5.5	5.0	8.5	8.5	8.0	6.5
28	6.5	6.0	9.0	9.0	8.0	7.0	5.5	5.0	8.5	8.0	8.0	6.5
29	6.0	5.5	9.0	9.0	7.0	7.0	5.5	5.0	8.0	7.0	8.0	6.5
30	7.0	6.0	9.0	8.0	8.0	7.0	5.5	5.0	---	---	8.5	6.5
31	8.0	7.0	---	---	8.5	8.0	5.5	5.5	---	---	8.0	7.0
MONTH	11.0	5.5	9.0	6.5	9.0	7.0	8.0	5.0	8.5	4.5	9.5	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.0	9.0	6.5	10.0	8.5	12.0	10.5	13.5	12.0	14.0	12.0
2	8.5	6.5	9.5	8.0	10.0	8.5	13.0	10.5	13.0	11.0	14.5	13.0
3	9.0	7.0	10.0	8.5	10.0	9.5	13.5	11.5	13.5	11.5	14.0	13.0
4	9.5	9.0	10.0	9.0	10.0	9.0	13.0	11.5	13.5	12.0	13.5	13.0
5	9.0	8.5	9.5	9.0	10.5	9.0	12.0	11.5	13.5	11.5	13.5	13.0
6	8.5	7.0	9.0	8.5	10.5	9.5	11.5	11.0	14.5	13.0	13.0	12.0
7	8.0	7.0	9.0	8.5	11.0	10.0	11.5	11.0	15.0	13.5	13.5	13.0
8	8.0	7.0	9.0	8.0	10.5	10.0	11.0	11.0	15.0	13.5	13.0	11.5
9	8.0	7.0	9.0	8.0	10.0	9.5	11.5	10.5	15.0	14.0	13.0	12.0
10	8.0	7.0	9.5	8.0	9.5	8.5	11.0	10.0	14.0	12.0	12.0	11.0
11	8.0	7.0	10.0	8.0	10.0	9.0	11.5	10.5	13.5	11.5	12.0	10.5
12	7.0	6.0	10.5	9.0	10.0	8.5	12.0	11.5	13.0	11.5	12.0	10.5
13	8.0	7.0	11.0	9.5	11.0	8.5	13.0	12.0	12.0	11.0	12.0	11.0
14	8.5	8.0	11.0	10.0	10.0	10.0	13.5	11.5	12.0	11.0	13.0	11.5
15	8.5	8.0	10.0	10.0	10.0	9.5	14.0	12.0	12.0	11.5	13.0	11.5
16	8.0	6.5	10.0	10.0	10.0	9.0	14.5	12.0	11.5	11.0	12.0	11.0
17	7.0	6.0	10.0	9.0	10.5	9.0	15.0	13.0	12.0	11.5	13.0	12.0
18	8.0	6.5	9.0	9.0	11.0	9.5	14.0	13.0	12.0	11.0	12.0	11.5
19	8.0	6.5	10.0	8.5	11.0	9.5	13.5	11.5	13.0	11.5	11.5	11.0
20	8.0	7.0	10.0	9.5	11.0	10.0	14.0	12.0	13.0	12.0	12.0	11.5
21	8.0	6.5	9.5	9.5	10.5	10.0	13.5	12.0	13.5	13.0	12.0	12.0
22	8.0	6.0	9.5	9.0	10.5	9.0	13.5	12.0	13.5	13.0	12.0	11.5
23	8.0	7.0	9.0	8.5	10.0	10.0	13.5	12.0	14.0	12.0	11.5	11.0
24	8.0	8.0	8.5	8.0	10.0	10.0	13.5	12.0	14.0	13.0	11.0	10.5
25	8.0	7.0	9.0	7.0	10.0	10.0	13.0	12.0	13.5	12.0	10.5	9.5
26	9.0	6.5	9.5	8.0	10.5	10.0	13.0	11.0	14.0	12.0	10.0	9.0
27	8.5	8.0	10.0	9.0	11.5	10.5	13.0	10.5	14.5	13.5	9.5	8.0
28	8.0	6.5	10.5	9.5	12.0	11.0	13.0	11.0	14.5	13.5	9.0	8.0
29	8.0	6.5	10.5	9.5	13.0	11.0	13.5	11.5	14.5	13.0	10.0	9.0
30	8.5	6.5	10.0	9.0	12.0	10.5	13.5	11.5	13.5	12.0	10.0	9.0
31	---	---	10.5	9.5	---	---	13.0	12.0	13.5	11.5	---	---
MONTH	9.5	6.0	11.0	6.5	13.0	8.5	15.0	10.0	15.0	11.0	14.5	8.0

14306800 FLYNN CREEK NEAR SALADO, OREG.--Continued

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

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.81	5	.01	.72	1	0	1.3	1	0
2	.60	1	0	.67	1	0	1.2	1	0
3	.47	1	0	.64	1	0	1.3	1	0
4	.39	1	0	6.4	44	1.0	1.2	1	0
5	.34	1	0	6.6	8	.14	1.1	1	0
6	.30	1	0	5.2	4	.06	1.2	1	0
7	.57	1	0	4.6	2	.02	1.1	1	0
8	.52	1	0	4.0	2	.02	1.4	1	0
9	.49	1	0	3.5	1	.01	1.6	1	0
10	.46	1	0	3.0	2	.02	1.9	2	.01
11	.40	1	0	2.7	6	.04	6.3	41	.99
12	.36	1	0	2.3	3	.02	9.0	14	.34
13	.33	1	0	2.1	1	.01	9.8	30	.98
14	.31	1	0	1.9	4	.02	17	56	2.6
15	.51	1	0	1.5	4	.02	13	13	.46
16	.72	1	0	1.7	4	.02	9.0	10	.24
17	.69	1	0	1.5	2	.01	6.6	7	.12
18	.57	1	0	1.4	2	.01	5.6	3	.05
19	.51	1	0	1.4	1	0	5.1	2	.03
20	.46	1	0	1.5	2	.01	5.2	4	.06
21	.43	1	0	1.7	2	.01	11	11	.33
22	.41	1	0	1.6	2	.01	12	11	.36
23	.39	1	0	1.8	2	.01	13	10	.35
24	.40	1	0	1.7	2	.01	12	5	.16
25	.38	1	0	1.7	1	0	10	6	.16
26	.49	1	0	1.7	1	0	13	13	.46
27	1.1	3	.01	1.6	1	0	14	8	.30
28	1.0	1	0	1.5	1	0	11	4	.12
29	.96	4	.01	1.4	1	0	8.5	3	.07
30	.87	1	0	1.4	1	0	6.8	2	.04
31	.79	1	0	--	--	--	5.4	2	.03
TOTAL	17.03	--	.03	69.43	--	1.47	216.6	--	8.26

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.5	2	.02	9.9	6	.16	2.2	2	.01
2	3.9	2	.02	9.3	5	.13	2.1	2	.01
3	3.5	3	.03	8.7	3	.07	2.0	1	.01
4	3.1	1	.01	7.6	3	.06	1.8	1	0
5	2.7	1	.01	7.7	5	.10	1.7	1	0
6	2.5	2	.01	15	26	1.3	2.3	4	.02
7	2.3	1	.01	18	13	.63	2.7	2	.01
8	2.3	2	.01	14	6	.23	2.5	1	.01
9	4.1	6	.07	10	4	.11	2.4	1	.01
10	4.5	4	.05	7.9	5	.11	2.3	2	.01
11	4.0	4	.04	6.4	4	.07	2.6	2	.01
12	5.3	13	.19	5.3	3	.04	2.7	2	.01
13	8.4	14	.32	4.4	6	.07	2.9	1	.01
14	11	12	.36	3.7	2	.02	4.0	1	.01
15	12	10	.32	4.1	6	.07	4.9	2	.03
16	11	14	.42	15	41	1.8	5.6	2	.03
17	20	65	3.8	18	17	.83	5.6	1	.02
18	40	223	25	14	6	.23	5.1	2	.03
19	41	90	10	11	6	.18	4.5	1	.01
20	36	42	4.1	8.6	8	.19	3.9	1	.01
21	25	34	2.3	7.0	2	.04	3.4	1	.01
22	25	47	3.7	5.7	2	.03	3.0	1	.01
23	39	74	8.1	4.7	2	.03	2.7	1	.01
24	27	29	2.1	3.9	2	.02	2.4	1	.01
25	26	23	1.6	3.4	2	.02	2.2	1	.01
26	33	57	5.5	3.0	2	.02	2.1	2	.01
27	40	45	4.9	2.7	1	.01	1.9	1	.01
28	24	18	1.2	2.4	2	.01	1.8	1	0
29	16	12	.52	--	--	--	1.7	1	0
30	12	8	.26	--	--	--	1.6	1	0
31	11	12	.36	--	--	--	1.5	1	0
TOTAL	500.1	--	75.33	231.4	--	6.58	88.1	--	.33

14306800 FLYNN CREEK NEAR SALADO, OREG.--Continued

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

DAY	APRIL MEAN DISCHARGE (CFS)	APRIL MEAN CONCENTRATION (MG/L)	APRIL SEDIMENT DISCHARGE (TONS/DAY)	MAY MEAN DISCHARGE (CFS)	MAY MEAN CONCENTRATION (MG/L)	MAY SEDIMENT DISCHARGE (TONS/DAY)	JUNE MEAN DISCHARGE (CFS)	JUNE MEAN CONCENTRATION (MG/L)	JUNE SEDIMENT DISCHARGE (TONS/DAY)
1	1.6	1	0	4.3	1	.01	1.1	1	0
2	1.4	1	0	3.9	1	.01	1.0	1	0
3	1.3	1	0	3.5	1	.01	.99	1	0
4	1.3	1	0	3.2	1	.01	.96	1	0
5	1.2	1	0	2.9	1	.01	.92	1	0
6	1.7	2	.01	2.7	1	.01	.88	1	0
7	1.4	1	0	2.5	1	.01	.84	1	0
8	1.3	1	0	3.1	1	.01	.85	1	0
9	4.8	9	.12	3.1	1	.01	1.0	3	.01
10	8.5	7	.16	3.7	4	.04	.83	3	.01
11	6.9	2	.04	4.2	1	.01	.82	3	.01
12	6.0	2	.03	4.0	2	.02	.74	3	.01
13	5.3	1	.01	3.7	2	.02	.72	3	.01
14	4.6	4	.05	3.5	2	.02	.70	3	.01
15	4.0	1	.01	3.2	2	.02	.72	3	.01
16	3.5	2	.02	3.0	2	.02	.67	3	.01
17	3.1	1	.01	2.7	2	.01	.63	3	.01
18	3.5	3	.03	2.5	2	.01	.61	3	0
19	3.4	1	.01	2.3	2	.01	.58	3	0
20	3.3	1	.01	2.1	2	.01	.55	3	0
21	3.2	1	.01	2.0	2	.01	.53	3	0
22	3.2	1	.01	1.9	1	.01	.51	3	0
23	3.2	1	.01	1.8	1	0	.49	3	0
24	4.1	3	.03	1.6	1	0	.48	3	0
25	5.2	3	.04	1.6	1	0	.46	3	0
26	6.7	2	.04	1.5	1	0	.44	3	0
27	6.6	2	.04	1.4	1	0	.45	3	0
28	6.0	1	.02	1.3	1	0	.43	3	0
29	5.4	1	.01	1.3	1	0	.42	3	0
30	5.0	3	.04	1.2	1	0	.43	3	0
31	--	--	--	1.1	1	0	--	--	--
TOTAL	116.7	--	.76	80.8	--	.30	20.75	--	.09

DAY	JULY MEAN DISCHARGE (CFS)	JULY MEAN CONCENTRATION (MG/L)	JULY SEDIMENT DISCHARGE (TONS/DAY)	AUGUST MEAN DISCHARGE (CFS)	AUGUST MEAN CONCENTRATION (MG/L)	AUGUST SEDIMENT DISCHARGE (TONS/DAY)	SEPTEMBER MEAN DISCHARGE (CFS)	SEPTEMBER MEAN CONCENTRATION (MG/L)	SEPTEMBER SEDIMENT DISCHARGE (TONS/DAY)
1	.42	3	0	.20	1	0	.14	1	0
2	.40	3	0	.19	1	0	.14	1	0
3	.38	3	0	.19	1	0	.23	1	0
4	.37	3	0	.20	1	0	.25	1	0
5	.36	3	0	.19	1	0	.18	1	0
6	.34	3	0	.18	1	0	.41	1	0
7	.34	3	0	.18	1	0	.78	1	0
8	.33	3	0	.18	1	0	.24	1	0
9	.32	3	0	.17	1	0	.19	1	0
10	.31	3	0	.17	1	0	.17	1	0
11	.30	3	0	.16	1	0	.16	1	0
12	.29	1	0	.16	1	0	.15	1	0
13	.28	1	0	.17	1	0	.15	1	0
14	.28	1	0	.16	1	0	.14	1	0
15	.27	1	0	.16	1	0	.15	1	0
16	.27	1	0	.16	1	0	.14	1	0
17	.26	1	0	.15	1	0	.16	1	0
18	.25	1	0	.15	1	0	.24	1	0
19	.24	1	0	.15	1	0	.79	23	.18
20	.23	1	0	.15	1	0	.83	1	0
21	.23	1	0	.15	1	0	.34	1	0
22	.22	1	0	.15	1	0	.33	1	0
23	.22	1	0	.16	1	0	.31	1	0
24	.21	1	0	.15	1	0	.23	1	0
25	.22	1	0	.15	1	0	.20	1	0
26	.23	1	0	.14	1	0	.19	1	0
27	.23	1	0	.14	1	0	.18	1	0
28	.21	1	0	.14	1	0	.17	1	0
29	.20	1	0	.14	1	0	.17	1	0
30	.20	1	0	.14	1	0	.17	1	0
31	.19	1	0	.14	1	0	--	--	--
TOTAL	8.60	--	0	5.02	--	0	7.93	--	.18

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1362.46
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 93.33

14306800 FLYNN CREEK NEAR SALADO, OREG.--Continued

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

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.16	1	0	.60	2	0	8.2	1	.02
2	.16	1	0	.55	2	0	9.7	1	.03
3	.15	1	0	.52	2	0	19	41	2.6
4	.15	1	0	.57	1	0	18	13	.63
5	.19	1	0	.64	1	0	13	6	.21
6	.18	1	0	.77	1	0	11	4	.12
7	.16	1	0	.68	1	0	15	6	.24
8	.16	1	0	.83	1	0	13	2	.07
9	.19	1	0	.99	1	0	10	6	.16
10	.18	1	0	1.1	2	.01	8.2	5	.11
11	.17	1	0	3.4	15	.19	6.7	2	.04
12	.16	1	0	3.7	2	.02	5.8	2	.03
13	.15	1	0	2.6	2	.01	5.1	2	.03
14	.15	1	0	2.0	1	.01	5.5	4	.06
15	.14	1	0	2.6	14	.10	9.4	19	.48
16	.14	1	0	5.1	14	.19	16	12	.52
17	.15	2	0	4.1	2	.02	14	5	.19
18	.76	10	.02	3.7	2	.02	11	4	.12
19	.30	3	0	3.2	2	.02	8.1	2	.04
20	.55	3	0	3.0	4	.03	7.2	2	.04
21	1.4	7	.03	2.7	3	.02	5.9	4	.06
22	1.9	6	.03	2.4	2	.01	5.0	2	.03
23	3.4	6	.06	8.1	124	5.5	4.3	2	.02
24	2.4	2	.01	26	87	7.7	3.8	1	.01
25	2.2	3	.02	16	14	.60	3.4	1	.01
26	1.8	2	.01	13	13	.46	3.2	1	.01
27	1.4	3	.01	15	6	.24	3.4	11	.10
28	1.1	4	.01	12	1	.03	6.7	22	.60
29	.89	4	.01	9.1	7	.17	11	8	.24
30	.76	4	.01	8.2	4	.09	33	229	32
31	.66	3	.01	--	--	--	37	120	12
TOTAL	22.26	--	.23	153.15	--	15.44	330.6	--	50.82

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	19	45	2.3	5.1	9	.12	6.0	1	.02
2	13	14	.49	4.3	3	.03	6.5	24	.42
3	9.3	8	.20	3.8	6	.06	11	12	.36
4	8.6	2	.05	6.9	15	.28	12	4	.13
5	7.8	3	.06	6.2	2	.03	10	3	.08
6	4.7	8	.10	5.4	2	.03	8.9	2	.05
7	4.0	4	.04	4.9	3	.04	8.5	5	.11
8	4.8	18	.23	4.4	4	.05	8.6	1	.02
9	12	30	.97	4.6	13	.16	8.4	1	.02
10	17	25	1.1	4.8	9	.12	14	28	1.5
11	18	8	.39	4.5	6	.07	22	33	2.0
12	14	10	.38	4.2	3	.03	22	20	1.2
13	11	2	.06	4.0	3	.03	19	11	.56
14	9.3	4	.10	5.0	15	.20	16	5	.22
15	24	44	2.9	5.9	6	.10	12	6	.19
16	41	120	16	6.7	4	.07	11	10	.30
17	35	47	4.4	6.3	9	.15	9.0	2	.05
18	23	31	1.9	6.1	7	.12	7.2	6	.12
19	30	50	4.1	5.5	6	.09	5.9	10	.16
20	26	26	1.8	5.0	4	.05	4.9	7	.09
21	17	13	.60	4.7	4	.05	4.3	5	.06
22	14	10	.38	4.7	4	.05	4.2	3	.03
23	21	32	1.8	4.3	2	.02	4.9	4	.05
24	27	55	4.0	5.5	3	.04	6.5	2	.04
25	39	79	9.1	6.3	3	.05	6.5	6	.11
26	29	29	2.3	6.9	4	.07	7.8	4	.08
27	19	10	.51	7.8	5	.11	8.9	3	.07
28	13	5	.18	7.1	4	.08	8.7	7	.16
29	9.7	4	.10	--	--	--	7.8	3	.06
30	7.7	4	.08	--	--	--	7.6	1	.02
31	6.2	2	.03	--	--	--	6.0	1	.02
TOTAL	534.1	--	56.65	150.9	--	2.30	296.1	--	8.30

14306800 FLYNN CREEK NEAR SALADO, OREG.--Continued

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

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.1	9	.15	2.6	7	.05	1.1	1	0
2	5.5	9	.13	2.3	7	.04	1.0	1	0
3	4.8	6	.08	2.2	7	.04	1.0	1	0
4	4.2	5	.06	2.1	7	.04	.96	1	0
5	3.7	4	.04	2.1	7	.04	.93	1	0
6	3.4	10	.09	1.9	7	.04	.92	1	0
7	3.2	14	.12	1.8	7	.03	.91	1	0
8	4.4	14	.17	1.7	7	.03	.85	1	0
9	19	85	5.6	1.6	7	.03	.86	1	0
10	22	20	1.2	1.6	7	.03	.94	1	0
11	18	22	1.1	1.5	7	.03	.85	1	0
12	16	10	.43	1.5	7	.03	.82	1	0
13	12	9	.29	1.4	7	.03	.99	5	.01
14	9.5	8	.21	1.3	7	.02	.89	2	0
15	7.6	6	.12	1.7	8	.04	.79	2	0
16	6.0	6	.10	1.7	9	.04	.73	2	0
17	6.0	8	.13	1.4	1	0	.73	2	0
18	5.1	8	.11	1.3	1	0	.86	2	0
19	4.6	2	.02	1.4	1	0	.76	2	0
20	4.8	5	.06	1.3	1	0	.73	2	0
21	4.4	5	.06	1.2	1	0	.69	2	0
22	4.2	5	.06	1.2	1	0	.72	2	0
23	4.4	3	.04	1.1	1	0	.79	2	0
24	4.1	3	.03	1.1	1	0	1.5	15	.06
25	3.8	2	.02	1.2	1	0	3.7	21	.21
26	3.5	2	.02	1.3	1	0	2.1	5	.03
27	3.4	2	.02	1.2	1	0	1.7	1	0
28	3.2	4	.03	1.1	1	0	1.6	1	0
29	2.9	4	.03	1.1	1	0	1.5	1	0
30	2.7	10	.07	1.1	1	0	1.4	1	0
31	--	--	--	1.1	1	0	--	--	--
TOTAL	202.5	--	10.59	47.1	--	.56	33.32	--	.31

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.3	1	0	.39	1	0	1.7	14	.06
2	1.2	1	0	.38	1	0	4.2	10	.11
3	1.2	1	0	.37	1	0	1.3	2	.01
4	1.1	1	0	.37	1	0	.89	2	0
5	1.1	1	0	.36	1	0	.84	2	0
6	1.0	1	0	.34	1	0	.70	2	0
7	.96	1	0	.33	1	0	.61	2	0
8	.95	1	0	.32	1	0	.56	2	0
9	1.0	1	0	.31	1	0	.53	2	0
10	.93	1	0	.30	1	0	.49	2	0
11	.88	1	0	.30	1	0	.50	2	0
12	.80	1	0	.29	1	0	.44	2	0
13	.76	1	0	.29	1	0	.41	2	0
14	.72	1	0	.28	1	0	.40	2	0
15	.69	1	0	.27	1	0	.38	2	0
16	.66	1	0	.26	1	0	.35	2	0
17	.63	1	0	.26	1	0	.34	2	0
18	.60	1	0	.25	1	0	.32	2	0
19	.57	1	0	.25	1	0	.32	2	0
20	.55	1	0	.30	1	0	.31	2	0
21	.53	1	0	.35	1	0	.30	2	0
22	.51	1	0	.39	1	0	.28	2	0
23	.49	1	0	.28	1	0	.29	2	0
24	.48	1	0	.25	1	0	.32	2	0
25	.46	1	0	.23	1	0	.65	17	.03
26	.45	1	0	.22	1	0	.43	3	0
27	.44	1	0	.23	1	0	.34	1	0
28	.44	1	0	.23	1	0	.64	7	.01
29	.43	1	0	.22	1	0	.82	5	.01
30	.43	1	0	.23	1	0	.62	1	0
31	.42	1	0	.59	12	.02	--	--	--
TOTAL	22.68	--	0	9.44	--	.02	20.28	--	.23

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1822.43
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 145.45

14306800 FLYNN CREEK NEAR SALADO, OREG.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.50	1	0	6.6	16	.29	14	8	.30
2	.44	1	0	5.4	2	.03	11	5	.15
3	.41	1	0	4.1	1	.01	9.5	4	.10
4	.39	1	0	3.8	4	.04	10	9	.24
5	.37	1	0	3.2	2	.02	29	77	6.2
6	.35	1	0	2.7	1	.01	31	57	5.1
7	.35	1	0	3.2	4	.03	19	24	1.2
8	.33	1	0	2.9	1	.01	16	12	.52
9	.33	1	0	3.7	6	.06	23	16	.99
10	.33	1	0	5.0	1	.01	19	15	.77
11	.31	1	0	6.7	3	.05	16	12	.52
12	.31	1	0	6.6	1	.02	21	19	1.1
13	.39	1	0	11	48	2.6	21	18	1.0
14	.37	1	0	25	48	3.4	22	28	1.7
15	.39	1	0	16	11	.48	19	16	.82
16	.33	1	0	10	4	.11	16	8	.35
17	.31	1	0	7.4	3	.06	13	4	.14
18	.37	1	0	5.7	2	.03	9.9	11	.29
19	3.7	38	.47	4.6	0	0	8.1	7	.15
20	2.0	9	.05	3.9	0	0	7.8	4	.08
21	1.5	3	.01	3.3	0	0	25	74	5.7
22	1.3	1	0	2.9	0	0	31	43	3.7
23	1.3	0	0	3.2	4	.03	27	24	1.7
24	1.1	0	0	3.4	4	.04	27	17	1.2
25	1.1	0	0	4.9	8	.11	22	10	.59
26	1.9	16	.08	27	126	10	18	13	.63
27	1.9	4	.02	20	10	.54	14	12	.45
28	1.9	2	.01	18	14	.68	11	8	.24
29	1.8	0	0	21	14	.79	9.3	2	.05
30	1.8	0	0	18	9	.44	7.8	4	.08
31	1.9	0	0	--	--	--	6.7	6	.11
TOTAL	29.78	--	.64	259.2	--	19.89	534.1	--	36.17

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.8	8	.13	4.4	1	.01	26	55	4.9
2	5.2	4	.06	3.8	1	.01	45	102	13
3	4.6	3	.04	3.4	1	.01	30	64	5.4
4	4.2	6	.07	3.2	2	.02	20	42	2.3
5	3.9	6	.06	3.0	1	.01	16	30	1.3
6	3.6	4	.04	3.0	0	0	17	30	1.4
7	3.4	8	.07	2.9	0	0	16	10	.43
8	4.9	22	.29	2.7	0	0	12	4	.13
9	7.1	21	.40	2.6	0	0	10	6	.16
10	8.1	14	.31	2.5	0	0	11	8	.24
11	74	1530	425	2.5	1	.01	14	10	.38
12	50	421	67	3.4	4	.04	16	10	.43
13	25	96	6.7	5.7	1	.02	19	20	1.0
14	17	70	3.2	5.7	2	.03	18	8	.39
15	12	34	1.1	7.8	3	.06	13	6	.21
16	9.3	20	.50	16	38	1.8	10	5	.14
17	8.1	20	.44	17	22	1.0	7.9	4	.09
18	21	99	6.0	14	21	.79	6.9	3	.06
19	30	116	9.8	11	16	.48	5.8	2	.03
20	66	588	126	8.4	11	.25	5.0	2	.03
21	68	435	95	6.9	6	.11	4.9	2	.03
22	32	92	8.7	6.4	7	.12	5.1	1	.01
23	21	22	1.2	5.8	5	.08	5.5	1	.01
24	16	10	.43	7.8	8	.17	5.4	1	.01
25	14	10	.38	10	9	.24	5.2	1	.01
26	11	6	.18	9.9	9	.24	5.1	1	.01
27	9.5	3	.08	20	50	3.0	4.9	1	.01
28	8.1	3	.07	25	30	2.0	4.6	1	.01
29	6.9	2	.04	22	15	.89	4.2	1	.01
30	5.8	2	.03	--	--	--	3.9	1	.01
31	5.1	1	.01	--	--	--	3.6	1	.01
TOTAL	560.6	--	753.33	236.8	--	11.39	371.0	--	32.15

14306800 FLYNN CREEK NEAR SALADO, OREG.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.6	1	.01	4.2	5	.06	1.3	2	.01
2	3.2	1	.01	3.9	5	.05	1.2	2	.01
3	3.0	1	.01	3.6	5	.05	1.2	2	.01
4	2.9	1	.01	3.2	5	.04	1.1	2	.01
5	3.8	4	.04	3.1	5	.04	1.1	2	.01
6	5.1	8	.11	2.8	5	.04	1.0	2	.01
7	8.4	15	.34	2.6	5	.04	.99	2	.01
8	12	14	.45	2.4	5	.03	.95	2	.01
9	12	8	.26	2.2	5	.03	1.1	4	.01
10	9.7	5	.13	2.1	5	.03	1.1	1	0
11	7.9	3	.06	2.0	5	.03	1.2	1	0
12	11	7	.21	1.9	5	.03	.95	1	0
13	11	3	.09	1.8	5	.02	.91	1	0
14	11	2	.06	1.7	5	.02	.91	1	0
15	8.8	2	.05	1.7	5	.02	.87	1	0
16	7.4	2	.04	2.1	8	.05	.83	1	0
17	6.3	2	.03	2.1	6	.03	.79	1	0
18	5.4	2	.03	2.4	8	.05	.75	1	0
19	4.6	2	.02	2.1	2	.01	.71	1	0
20	4.5	5	.06	1.9	2	.01	.71	1	0
21	4.9	7	.09	1.9	2	.01	.68	1	0
22	4.6	4	.05	1.9	2	.01	.65	1	0
23	4.4	5	.06	1.8	2	.01	.68	1	0
24	4.6	6	.07	1.8	2	.01	.68	1	0
25	4.7	5	.06	1.7	2	.01	.75	1	0
26	4.7	4	.05	1.6	2	.01	.65	1	0
27	4.6	5	.06	1.6	2	.01	.62	1	0
28	5.0	7	.09	1.5	2	.01	.59	1	0
29	4.7	4	.05	1.4	2	.01	.56	1	0
30	4.5	3	.04	1.4	2	.01	.53	1	0
31	--	--	--	1.3	2	.01	--	--	--
TOTAL	188.3	--	2.64	67.7	--	.79	26.06	--	.09

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.53	1	0	.23	0	0	.14	0	0
2	.50	1	0	.23	0	0	.13	0	0
3	.47	1	0	.21	0	0	.14	0	0
4	.47	1	0	.21	0	0	.14	0	0
5	.44	1	0	.21	0	0	.15	0	0
6	.44	1	0	.20	0	0	.15	0	0
7	.41	1	0	.19	0	0	.14	0	0
8	.44	1	0	.19	0	0	.15	0	0
9	.41	1	0	.19	0	0	.15	0	0
10	.41	1	0	.19	0	0	.14	0	0
11	.41	1	0	.18	0	0	.13	0	0
12	.39	1	0	.18	0	0	.13	0	0
13	.39	1	0	.18	0	0	.13	0	0
14	.37	1	0	.18	0	0	.12	0	0
15	.35	1	0	.18	0	0	.12	0	0
16	.35	1	0	.19	0	0	.12	0	0
17	.33	1	0	.23	0	0	.12	0	0
18	.33	1	0	.19	0	0	.13	5	0
19	.31	1	0	.18	0	0	.23	4	0
20	.31	1	0	.21	0	0	.18	5	0
21	.29	1	0	.19	0	0	1.4	35	.21
22	.29	1	0	.18	0	0	.65	12	.04
23	.29	1	0	.17	0	0	.71	4	.01
24	.29	1	0	.17	0	0	.71	8	.02
25	.27	1	0	.17	0	0	.33	1	0
26	.27	1	0	.16	0	0	.25	1	0
27	.25	1	0	.16	0	0	.20	1	0
28	.25	1	0	.15	0	0	.18	1	0
29	.25	1	0	.15	0	0	.17	1	0
30	.23	1	0	.15	0	0	.16	1	0
31	.23	1	0	.15	0	0	--	--	--
TOTAL	10.97	--	0	5.75	--	0	7.60	--	.28

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 2297.86
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 857.37

14306810 DEER CREEK NEAR SALADO, OREG.

LOCATION.—Lat 44°32'05", long 123°52'35", in SW¼ sec.11, T.12 S., R.10 W., Lincoln County, at gaging station on right bank, 1,000 ft (305 m) upstream from mouth, 4.6 mi (7.4 km) west of Salado, and 6.5 mi (10.5 km) southeast of Toledo.

DRAINAGE AREA.—1.17 mi^2 (3.03 km^2), computed as 749.5 acres (303.3 hm^2) on basis of field survey by Oregon State University.

PERIOD OF RECORD.—Water temperatures: September 1958 to September 1972.
Sediment records: November 1958 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 17.0°C Aug. 7-9; minimum, 5.5°C Jan. 4, 5, 8, Feb. 2, 3.
Sediment concentrations: Maximum daily, 2,450 mg/l Jan. 11; minimum daily, 0 mg/l on many days.
Sediment discharge: Maximum daily, 972 tons (882 tonnes) Jan. 11; minimum daily, 0 tons (0 tonnes) on many days.

Period of record:
Water temperatures: Maximum, 18.0°C Aug. 12-15, 17, 1967; minimum, 1.0°C Jan. 30, 1963.
Sediment concentrations: Maximum daily, 2,450 mg/l Jan. 11, 1972; minimum daily, 0 mg/l Dec. 22, 1970, and on many days in 1972.
Sediment discharge: Maximum daily, 972 tons (882 tonnes) Jan. 11, 1972; minimum daily, 0 tons (0 tonnes) on many days in 1969-72.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.0	9.0	8.5	8.5	8.5	8.0	7.0	6.5	6.0	7.0	6.5
2	9.5	8.5	8.5	8.5	8.5	8.5	7.0	6.5	6.0	5.5	7.0	7.0
3	10.0	8.5	9.0	8.5	8.5	8.0	6.5	6.0	6.0	5.5	7.0	7.0
4	10.5	9.0	9.0	8.0	8.5	8.5	6.0	5.5	6.5	6.0	8.0	7.0
5	11.0	10.0	8.0	7.0	9.0	8.5	6.5	5.5	6.5	6.5	8.5	8.0
6	11.0	10.5	8.0	7.0	9.0	8.5	6.5	6.0	6.5	6.5	8.5	7.0
7	11.5	10.0	9.0	8.0	8.5	8.0	6.5	6.0	8.0	6.5	8.0	7.0
8	12.0	11.0	8.5	8.0	8.5	8.0	6.0	5.5	8.0	7.0	9.0	7.0
9	12.0	11.0	8.5	8.5	8.5	8.5	6.5	6.0	8.0	7.0	8.5	8.5
10	11.5	11.0	9.0	8.5	8.5	8.5	6.5	6.0	---	---	8.5	8.5
11	11.5	11.0	9.0	9.0	8.5	8.0	7.0	6.5	---	---	8.5	8.5
12	11.5	10.5	9.0	9.0	8.0	8.0	7.0	7.0	---	---	9.0	8.5
13	11.0	10.0	9.0	8.5	8.5	8.0	7.0	7.0	---	---	9.0	8.5
14	10.0	9.0	9.0	9.0	8.5	8.5	7.0	7.0	---	---	9.0	8.5
15	9.5	9.0	9.0	9.0	8.5	8.5	7.0	6.5	---	---	10.0	9.0
16	9.0	7.0	9.0	8.5	8.5	8.5	7.0	6.5	8.5	8.5	10.5	9.0
17	8.0	6.5	8.5	8.0	9.0	8.5	7.0	7.0	8.5	8.5	10.5	9.0
18	9.0	8.0	8.5	8.0	8.5	8.0	8.0	7.0	8.5	8.0	9.5	9.0
19	9.5	9.0	9.0	8.5	8.0	7.0	8.5	8.0	8.5	8.5	9.0	8.5
20	9.5	9.0	9.0	9.0	8.0	8.0	9.0	8.5	8.5	8.0	10.0	8.0
21	9.5	8.5	9.0	9.0	8.0	7.0	9.0	9.0	8.0	8.0	9.5	9.0
22	9.5	9.5	9.0	8.0	8.0	8.0	9.0	9.0	8.0	8.0	9.0	8.0
23	9.5	9.5	9.0	8.0	8.0	8.0	9.0	8.5	8.0	8.0	9.0	8.0
24	9.5	8.5	9.0	8.5	8.0	8.0	8.5	8.5	8.0	6.5	8.5	7.0
25	9.0	7.0	8.5	8.0	8.0	8.0	8.5	6.5	7.0	6.5	7.0	6.5
26	9.5	9.0	9.0	8.5	8.0	7.0	6.5	6.5	8.0	6.5	7.0	6.5
27	9.0	8.0	9.0	9.0	7.0	7.0	6.5	6.0	8.0	7.0	8.0	6.5
28	8.0	6.5	9.0	9.0	7.0	7.0	6.5	6.0	8.5	7.0	8.5	6.5
29	7.0	6.5	9.0	9.0	7.0	7.0	6.0	6.0	7.0	6.5	9.5	6.5
30	8.0	7.0	9.0	8.5	7.0	7.0	6.0	6.0	---	---	10.5	7.0
31	8.5	8.0	---	---	8.0	7.0	6.5	6.0	---	---	9.0	8.0
MONTH	12.0	6.5	9.0	7.0	9.0	7.0	9.0	5.5	8.5	5.5	10.5	6.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.5	11.0	8.0	13.0	9.5	14.0	10.5	15.0	13.5	15.5	13.0
2	10.5	7.0	11.5	8.5	13.0	9.5	15.0	11.0	14.5	12.0	16.0	13.5
3	10.0	8.0	12.0	9.0	12.0	11.0	15.0	12.0	15.5	13.0	15.5	14.0
4	11.5	9.5	13.0	9.5	13.0	9.5	15.0	11.5	15.5	13.5	15.0	14.0
5	10.5	9.0	10.0	9.5	13.5	10.0	14.5	12.0	15.5	12.0	14.5	14.0
6	9.0	8.0	11.0	9.0	13.5	11.0	13.0	11.5	16.0	13.5	14.0	13.0
7	8.5	8.0	10.0	9.0	13.5	11.0	13.5	11.5	17.0	15.0	15.0	14.0
8	8.5	8.0	10.0	8.5	12.0	11.0	13.0	11.5	17.0	15.0	14.0	13.0
9	9.0	8.0	11.5	8.5	11.5	10.5	13.0	11.5	17.0	15.0	14.0	13.0
10	8.5	7.0	12.0	8.5	10.5	9.5	13.0	10.5	15.5	13.5	14.0	12.0
11	8.5	8.0	13.0	8.5	11.5	10.0	13.5	11.0	15.0	13.0	13.5	11.0
12	8.0	7.0	14.0	9.5	13.0	9.5	14.0	13.0	14.0	12.0	13.5	11.0
13	9.0	7.0	13.5	10.0	13.5	10.5	---	---	14.0	11.5	14.0	11.0
14	8.5	8.5	13.5	10.5	13.0	11.5	15.0	13.0	13.5	12.0	14.5	13.0
15	9.0	8.5	11.5	10.5	11.5	11.0	15.5	13.0	13.5	12.0	14.5	12.0
16	8.5	7.0	11.0	10.5	12.0	10.0	16.0	13.0	13.0	11.5	14.0	11.5
17	8.5	6.5	10.5	10.0	13.5	10.0	16.0	13.5	14.0	12.0	14.5	13.5
18	9.0	7.0	10.5	9.5	14.0	11.0	15.5	13.5	14.0	11.5	13.5	13.0
19	9.0	7.0	12.0	9.0	14.5	11.0	15.0	11.5	14.0	12.0	13.0	12.0
20	9.0	8.0	11.0	10.5	14.0	11.5	15.0	12.0	14.5	13.0	13.5	13.0
21	9.0	8.0	10.5	10.0	13.5	11.5	14.5	12.0	15.0	14.0	13.5	13.5
22	10.0	6.5	10.0	9.5	13.5	10.5	15.0	12.0	15.0	14.0	13.5	12.0
23	9.0	8.0	10.0	9.0	11.5	10.5	15.5	13.5	15.0	13.0	13.0	11.5
24	9.0	8.5	10.0	8.5	11.0	10.5	15.0	13.5	15.5	14.0	12.0	11.0
25	9.0	8.5	11.0	8.0	11.0	10.5	14.5	13.5	15.0	13.0	11.5	10.0
26	11.0	8.0	12.0	9.0	11.0	10.5	14.5	11.5	16.0	13.5	11.0	9.5
27	9.5	8.5	13.5	9.5	14.0	10.5	14.5	11.0	16.5	14.0	10.0	8.5
28	9.0	8.0	13.5	10.0	14.0	11.5	14.5	11.5	16.0	14.5	10.0	9.0
29	9.0	7.0	13.5	10.5	14.5	11.5	15.0	12.0	15.5	14.0	12.0	10.0
30	10.0	7.0	13.5	10.0	14.0	10.5	15.0	12.0	14.5	13.0	12.0	10.0
31	---	---	13.5	10.5	---	---	14.5	14.0	15.0	12.0	---	---
MONTH	11.5	6.5	14.0	8.0	14.5	9.5	16.0	10.5	17.0	11.5	16.0	8.5

14306810 DEER CREEK NEAR SALADO, OREG.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCTOBER MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCEN-TRATION (MG/L)	OCTOBER SEDIMENT DISCHARGE (TONS/DAY)	NOVEMBER MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCEN-TRATION (MG/L)	NOVEMBER SEDIMENT DISCHARGE (TONS/DAY)	DECEMBER MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCEN-TRATION (MG/L)	DECEMBER SEDIMENT DISCHARGE (TONS/DAY)
1	1.4	1	0	11	57	1.7	15	6	.24
2	1.3	1	0	9.3	7	.18	12	4	.13
3	1.2	1	0	7.0	2	.04	11	8	.24
4	1.1	1	0	6.1	2	.03	13	10	.35
5	1.0	1	0	5.0	2	.03	51	118	17
6	.99	1	0	4.3	2	.02	45	53	7.2
7	.96	1	0	5.1	4	.06	22	30	1.8
8	.89	1	0	4.6	4	.05	19	19	1.2
9	.88	1	0	5.6	5	.08	35	61	7.2
10	.86	1	0	7.3	5	.10	23	15	.93
11	.83	1	0	9.8	6	.16	20	18	.97
12	.80	1	0	9.2	4	.10	29	20	1.6
13	.94	1	0	14	48	3.5	27	16	1.2
14	.97	1	0	35	66	7.0	31	28	2.3
15	1.0	1	0	18	10	.49	24	30	1.9
16	.86	1	0	11	14	.42	17	18	.83
17	.81	1	0	8.1	12	.26	13	20	.70
18	.86	3	.01	6.5	10	.18	11	12	.36
19	6.9	79	1.6	5.5	7	.10	9.2	6	.15
20	5.8	18	.28	4.6	11	.14	9.5	14	.36
21	4.1	1	.01	4.1	6	.07	47	98	14
22	3.5	1	.01	3.7	4	.04	43	59	7.3
23	3.1	1	.01	4.3	6	.07	38	38	3.9
24	2.8	1	.01	4.8	5	.06	40	25	2.7
25	2.5	3	.02	7.0	8	.15	32	25	2.2
26	4.3	5	.06	49	137	21	25	16	1.1
27	4.3	2	.02	27	20	1.5	18	4	.19
28	3.9	2	.02	24	19	1.2	14	8	.30
29	3.5	2	.02	28	24	1.8	12	14	.45
30	3.3	2	.02	22	9	.53	9.6	3	.08
31	3.4	2	.02	--	--	--	8.7	16	.38
TOTAL	69.05	--	2.11	360.9	--	41.06	724.0	--	79.26

DAY	JANUARY MEAN DISCHARGE (CFS)	JANUARY MEAN CONCEN-TRATION (MG/L)	JANUARY SEDIMENT DISCHARGE (TONS/DAY)	FEBRUARY MEAN DISCHARGE (CFS)	FEBRUARY MEAN CONCEN-TRATION (MG/L)	FEBRUARY SEDIMENT DISCHARGE (TONS/DAY)	MARCH MEAN DISCHARGE (CFS)	MARCH MEAN CONCEN-TRATION (MG/L)	MARCH SEDIMENT DISCHARGE (TONS/DAY)
1	7.8	9	.19	6.5	4	.07	38	90	14
2	7.4	3	.06	5.9	4	.06	74	122	26
3	6.7	3	.05	5.4	4	.06	42	34	3.9
4	6.1	3	.05	5.1	4	.06	26	10	.70
5	5.6	3	.05	4.9	4	.05	21	16	.91
6	5.2	3	.04	5.2	4	.06	29	32	2.5
7	5.0	3	.04	5.3	4	.06	23	8	.50
8	6.9	3	.06	5.2	4	.06	16	4	.17
9	11	6	.18	5.0	4	.05	13	4	.14
10	12	6	.19	4.7	4	.05	16	11	.48
11	131	2450	972	4.7	4	.05	23	10	.62
12	72	356	80	6.5	10	.18	27	16	1.2
13	30	65	5.3	12	8	.26	32	24	2.1
14	19	28	1.4	11	6	.18	24	5	.32
15	13	8	.28	15	12	.49	17	2	.09
16	11	6	.18	29	95	8.3	13	2	.07
17	9.4	8	.20	27	12	.87	11	2	.06
18	34	132	13	18	6	.29	9.6	2	.05
19	44	105	12	13	4	.14	8.4	2	.05
20	105	530	190	10	2	.05	7.6	2	.04
21	101	430	144	9.0	1	.02	7.6	2	.04
22	42	174	21	8.9	2	.05	8.4	2	.05
23	27	22	1.6	8.5	2	.05	9.1	2	.05
24	22	16	.95	12	6	.19	9.0	2	.05
25	19	10	.51	17	4	.18	8.2	2	.04
26	16	16	.69	15	4	.16	7.8	2	.04
27	13	8	.28	38	91	10	7.2	2	.04
28	11	7	.21	41	45	5.0	6.9	2	.04
29	9.2	6	.15	30	16	1.3	6.3	2	.03
30	8.1	5	.11	--	--	--	5.8	2	.03
31	7.4	4	.08	--	--	--	5.3	2	.03
TOTAL	817.8	--	1444.85	378.8	--	28.34	552.2	--	54.34

14306810 DEER CREEK NEAR SALADO, OREG.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.4	2	.03	6.2	3	.05	1.8	1	0
2	4.6	2	.02	5.6	3	.05	1.7	1	0
3	4.4	1	.01	5.0	3	.04	1.7	1	0
4	4.4	1	.01	4.5	3	.04	1.6	1	0
5	6.2	3	.05	4.2	3	.03	1.5	1	0
6	8.6	6	.14	3.9	3	.03	1.4	1	0
7	13	6	.21	3.6	3	.03	1.4	1	0
8	18	10	.49	3.4	3	.03	1.3	1	0
9	15	5	.20	3.2	3	.03	1.6	1	0
10	11	4	.12	3.0	3	.02	1.5	1	0
11	9.3	2	.05	2.8	3	.02	1.7	1	0
12	14	4	.15	2.6	3	.02	1.4	1	0
13	14	3	.11	2.5	3	.02	1.3	1	0
14	13	3	.11	2.3	3	.02	1.3	1	0
15	10	3	.08	2.3	3	.02	1.2	1	0
16	8.8	3	.07	3.1	3	.03	1.2	1	0
17	7.8	3	.06	3.1	3	.03	1.1	1	0
18	6.9	3	.06	3.5	3	.03	1.1	1	0
19	6.3	3	.05	3.2	3	.03	1.0	1	0
20	6.4	3	.05	3.0	3	.02	1.0	1	0
21	7.4	3	.06	3.0	3	.02	.96	1	0
22	7.3	3	.06	3.1	3	.03	.96	1	0
23	6.9	3	.06	2.9	3	.02	.92	1	0
24	7.1	3	.06	2.8	3	.02	.96	1	0
25	7.3	3	.06	2.6	3	.02	1.1	1	0
26	7.2	3	.06	2.4	3	.02	.96	1	0
27	6.9	3	.06	2.3	3	.02	.88	1	0
28	7.3	3	.06	2.2	3	.02	.81	1	0
29	7.1	3	.06	2.1	3	.02	.78	1	0
30	6.8	3	.06	2.0	3	.02	.75	1	0
31	--	--	--	1.8	3	.01	--	--	--
TOTAL	258.4	--	2.67	98.2	--	.81	36.88	--	0

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.72	1	0	.38	0	0	.19	0	0
2	.68	1	0	.36	0	0	.19	0	0
3	.65	1	0	.36	0	0	.19	0	0
4	.65	1	0	.34	0	0	.21	0	0
5	.65	1	0	.34	0	0	.22	0	0
6	.65	1	0	.32	0	0	.22	0	0
7	.62	1	0	.32	0	0	.21	0	0
8	.65	1	0	.32	0	0	.22	0	0
9	.62	1	0	.30	0	0	.24	0	0
10	.62	1	0	.30	0	0	.22	0	0
11	.65	1	0	.30	0	0	.21	0	0
12	.59	1	0	.30	0	0	.21	0	0
13	.59	1	0	.30	0	0	.19	0	0
14	.56	1	0	.30	0	0	.18	0	0
15	.53	1	0	.30	0	0	.18	0	0
16	.51	1	0	.32	0	0	.18	0	0
17	.48	1	0	.38	0	0	.18	0	0
18	.51	1	0	.34	0	0	.19	0	0
19	.48	1	0	.30	0	0	.32	0	0
20	.45	1	0	.34	0	0	.28	0	0
21	.45	1	0	.32	0	0	1.8	20	.17
22	.45	1	0	.30	0	0	1.3	11	.08
23	.43	1	0	.28	0	0	1.5	7	.03
24	.43	1	0	.26	0	0	1.6	6	.04
25	.43	1	0	.24	0	0	.92	1	0
26	.40	1	0	.24	0	0	.65	1	0
27	.40	1	0	.22	0	0	.53	1	0
28	.38	1	0	.22	0	0	.45	1	0
29	.38	1	0	.21	0	0	.40	1	0
30	.36	1	0	.21	0	0	.38	1	0
31	.38	1	0	.21	0	0	--	--	--
TOTAL	16.35	--	0	9.23	--	0	13.76	--	.32

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 3335.57
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1653.76

14307620 SIUSLAW RIVER NEAR MAPLETON, OREG.

LOCATION.—Lat 44°03'45", long 123°52'55", in SW¼NW¼ sec.27, T.17 S., R.10 W., Lane County, at gaging station on right bank 250 ft (76 m) upstream from Shoemaker Creek, 2.5 mi (4.0 km) northwest of Mapleton, and at mile 23.7 (38.1 km).

DRAINAGE AREA.—588 mi² (1,523 km²).

PERIOD OF RECORD.—Water temperatures: November 1967 to September 1972.
Sediment records: November 1967 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 27.0°C July 16, 17; minimum, 4.0°C Jan. 4.
Sediment concentrations: Maximum daily, 788 mg/l Jan. 21; minimum daily, 1 mg/l on several days.
Sediment discharge: Maximum daily, 91,400 tons (82,900 tonnes) Jan. 21; minimum daily, 0.33 ton (0.30 tonnes) Aug. 10.

Period of record:
Water temperatures: Maximum, 27.0°C July 16, 17, 1972; minimum, 0.5°C Jan. 26, 1969.
Sediment concentrations: Maximum daily, 788 mg/l Jan. 21, 1972; minimum daily, 1 mg/l on many days each year.
Sediment discharge: Maximum daily, 91,400 tons (82,900 tonnes) Jan. 21, 1972; minimum daily, 0.21 ton (0.19 tonnes) Oct. 14, 1970.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	11.5	9.5	8.0	9.0	8.5	6.5	6.5	5.0	5.0	8.0	8.0
2	14.0	12.0	9.5	9.0	8.5	8.5	6.5	6.5	5.0	4.5	8.5	8.0
3	14.5	13.0	9.0	8.5	8.5	8.0	6.5	4.5	5.0	4.5	8.5	8.0
4	16.0	14.0	9.5	9.0	8.5	8.0	4.5	4.0	5.5	5.0	8.5	8.0
5	16.5	14.5	9.5	9.0	9.0	8.5	4.5	4.5	5.5	5.5	9.0	8.5
6	17.0	15.5	8.0	6.5	9.0	8.5	5.0	4.5	6.0	5.5	9.0	8.5
7	17.0	16.0	8.0	6.5	8.5	8.0	5.5	5.0	6.5	6.0	9.0	8.0
8	17.0	15.5	8.5	8.0	8.0	6.5	5.5	5.5	7.0	6.5	8.5	8.0
9	16.5	15.5	8.5	8.0	7.0	6.5	6.0	5.5	7.0	6.5	9.0	8.5
10	15.5	15.0	9.0	8.5	7.0	6.5	6.0	6.0	7.0	6.5	9.5	9.0
11	15.5	14.5	10.0	9.5	7.0	6.5	7.0	6.0	6.5	6.5	9.5	9.5
12	15.5	14.5	10.0	9.5	6.5	6.5	7.0	7.0	8.0	6.5	9.5	9.5
13	15.5	14.5	9.5	9.0	7.0	6.5	7.0	6.5	8.5	8.0	9.5	9.5
14	14.0	12.0	9.0	8.5	7.0	7.0	6.5	6.5	8.0	8.0	9.5	9.0
15	13.0	11.5	9.0	9.0	7.0	7.0	6.5	6.0	8.5	8.0	9.5	9.0
16	12.0	10.5	9.0	9.0	7.0	7.0	6.5	6.0	8.5	8.5	10.0	9.5
17	11.0	9.5	9.0	8.5	7.0	7.0	7.0	6.5	9.0	8.5	10.0	10.0
18	11.0	10.5	8.5	8.0	7.0	7.0	8.0	7.0	9.0	9.0	10.0	10.0
19	11.5	10.5	8.5	8.0	7.0	7.0	8.5	8.0	9.0	9.0	10.0	9.0
20	11.5	11.0	8.5	8.5	7.0	6.5	9.0	8.5	9.0	8.5	10.0	9.0
21	11.0	10.5	8.5	8.5	6.5	6.5	8.5	8.5	8.5	8.0	10.0	9.5
22	11.0	10.5	8.5	8.0	7.0	6.5	8.5	8.5	8.0	8.0	9.5	9.0
23	11.5	11.0	8.5	8.0	7.0	6.5	8.5	8.0	8.0	7.0	9.5	8.5
24	11.0	10.5	9.0	8.5	6.5	6.5	8.5	8.0	7.0	7.0	9.5	9.0
25	10.5	9.5	9.0	8.5	6.5	6.5	8.0	7.0	8.0	7.0	9.0	8.0
26	11.0	10.0	9.0	8.5	6.5	6.5	7.0	6.5	8.0	8.0	8.0	7.0
27	10.5	9.0	9.0	9.0	6.5	5.5	6.5	6.0	9.0	8.0	8.5	7.0
28	9.0	8.0	9.0	9.0	5.5	5.5	6.0	5.0	9.0	8.5	8.5	8.0
29	7.0	6.0	9.0	9.0	5.5	5.5	5.0	5.0	8.5	8.0	9.5	8.5
30	7.0	6.5	9.0	9.0	6.0	5.5	5.0	4.5	---	---	9.5	8.5
31	8.0	7.0	---	---	6.5	6.0	5.0	4.5	---	---	9.5	9.0
MONTH	17.0	6.0	10.0	6.5	9.0	5.5	9.0	4.0	9.0	4.5	10.0	7.0

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

14307620 SIUSLAW RIVER NEAR MAPLETON, OREG.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	385	7	7.3	1130	51	156	6260	65	1100
2	332	2	1.8	1320	38	135	4560	24	295
3	293	8	6.3	1050	33	94	3890	20	210
4	266	11	7.9	912	22	54	4440	13	156
5	247	15	10	799	22	47	11900	129	5230
6	234	48	30	699	33	62	16500	146	6950
7	223	53	32	747	37	75	9570	47	1210
8	213	65	37	790	3	6.4	6920	51	953
9	206	72	40	898	14	34	11600	69	2170
10	202	78	43	3010	88	747	11400	33	1020
11	200	17	9.2	2910	42	330	9910	28	749
12	196	40	21	2480	38	254	11600	80	2510
13	193	18	9.4	2620	33	274	11800	36	1150
14	196	48	25	5630	100	1530	11700	50	1580
15	227	55	34	4040	26	284	11400	26	800
16	232	42	26	2620	17	120	8710	24	564
17	212	28	16	1930	8	42	6380	30	517
18	205	20	11	1550	8	33	5040	23	313
19	607	27	60	1310	11	39	4110	19	211
20	1300	22	77	1140	6	18	3540	14	134
21	955	35	90	1020	13	36	4400	30	356
22	736	26	52	929	7	18	6000	32	518
23	730	25	49	1010	8	22	7920	52	1210
24	704	26	49	1630	12	53	11400	54	1660
25	626	33	56	2480	15	100	8250	33	735
26	614	21	35	15800	271	12700	6480	18	315
27	661	31	55	12400	119	4220	5010	27	365
28	673	23	42	11100	100	3140	4020	20	217
29	610	29	48	14200	72	2760	3500	17	161
30	582	27	42	9540	32	824	3100	16	134
31	625	36	61	--	--	--	2800	14	106
TOTAL	13685	--	1082.9	107694	--	28207.4	234110	--	33599

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2560	15	104	2790	26	196	15000	194	8710
2	2350	16	102	2480	10	67	24000	333	21600
3	2180	14	82	2250	21	128	18200	112	5500
4	2020	11	60	2110	7	40	12000	92	2980
5	1900	11	56	2070	14	78	8730	78	1840
6	1780	14	67	2060	11	61	7770	57	1200
7	1700	14	64	2060	12	67	6480	32	560
8	2000	14	76	1960	20	106	5280	30	428
9	3200	16	138	1840	9	45	4500	21	255
10	3800	12	123	1740	24	113	4300	33	383
11	14000	210	7450	1680	16	73	6180	52	868
12	15000	181	8290	1790	22	106	7280	50	983
13	10700	75	2170	3670	25	248	8170	35	772
14	7200	25	486	3770	17	173	7000	39	737
15	5240	34	481	4310	24	279	5500	25	371
16	4160	23	258	6090	62	1020	4540	21	257
17	3800	18	185	7160	43	831	3790	32	327
18	9000	80	1940	5810	28	439	3430	17	157
19	16000	128	5530	4480	22	266	3010	25	203
20	27800	450	40000	3650	19	187	2660	11	79
21	41900	788	91400	3060	12	99	2570	4	28
22	25600	325	22500	3100	23	193	3720	12	121
23	18500	170	8490	4240	33	378	3930	7	74
24	13300	115	4130	6240	73	1230	3370	10	91
25	10600	94	2690	7350	58	1150	3010	8	65
26	8190	82	1810	6390	36	621	2870	5	39
27	6380	41	706	12400	269	11800	2770	6	45
28	5010	43	582	17600	248	11800	2610	8	56
29	4080	44	485	13900	105	3940	2400	6	39
30	3470	44	412	--	--	--	2210	10	60
31	3100	45	377	--	--	--	2040	8	44
TOTAL	276520	--	201244	138050	--	35734	189320	--	48872

14307620 SIUSLAW RIVER NEAR MAPLETON, OREG.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	APRIL MEAN DISCHARGE (CFS)	APRIL MEAN CONCEN-TRATION (MG/L)	APRIL SEDIMENT DISCHARGE (TONS/DAY)	MAY MEAN DISCHARGE (CFS)	MAY MEAN CONCEN-TRATION (MG/L)	MAY SEDIMENT DISCHARGE (TONS/DAY)	JUNE MEAN DISCHARGE (CFS)	JUNE MEAN CONCEN-TRATION (MG/L)	JUNE SEDIMENT DISCHARGE (TONS/DAY)
1	1940	4	21	1610	14	61	637	6	10
2	1850	3	15	1510	26	106	617	5	8.3
3	1740	6	28	1430	10	39	593	8	13
4	1720	11	51	1360	12	44	583	9	14
5	1980	10	53	1280	7	24	561	8	12
6	3240	19	166	1220	5	16	539	6	8.7
7	5240	60	849	1170	1	3.2	524	8	11
8	7880	154	3280	1130	2	6.1	519	6	8.4
9	8150	63	1390	1100	8	24	544	6	8.8
10	6000	27	437	1040	4	11	595	8	13
11	4630	21	263	1000	6	16	706	10	19
12	4940	10	133	959	8	21	688	6	11
13	5100	17	234	914	4	9.9	589	5	8.0
14	4400	12	143	872	2	4.7	536	4	5.8
15	3660	13	128	846	8	18	512	4	5.5
16	3250	17	149	1010	10	27	492	12	16
17	2960	7	56	1440	9	35	470	14	18
18	2630	9	64	1470	11	44	446	12	14
19	2370	8	51	1340	8	29	426	6	6.9
20	2190	21	124	1170	12	38	404	2	2.2
21	2280	21	129	1110	14	42	388	1	1.0
22	2090	14	79	1090	6	18	379	2	2.0
23	1960	15	79	1020	8	22	372	1	1.0
24	2040	24	132	965	6	16	374	6	6.1
25	2300	15	93	909	10	25	389	10	11
26	2190	22	130	856	7	16	395	8	8.5
27	2000	74	400	791	8	17	377	8	8.1
28	1930	24	125	764	8	17	357	14	13
29	1850	18	90	722	8	16	334	10	9.0
30	1730	12	56	690	14	26	320	8	6.9
31	--	--	--	657	5	8.9	--	--	--
TOTAL	96240	--	8948	33445	--	800.8	14666	--	280.2

DAY	JULY MEAN DISCHARGE (CFS)	JULY MEAN CONCEN-TRATION (MG/L)	JULY SEDIMENT DISCHARGE (TONS/DAY)	AUGUST MEAN DISCHARGE (CFS)	AUGUST MEAN CONCEN-TRATION (MG/L)	AUGUST SEDIMENT DISCHARGE (TONS/DAY)	SEPTEMBER MEAN DISCHARGE (CFS)	SEPTEMBER MEAN CONCEN-TRATION (MG/L)	SEPTEMBER SEDIMENT DISCHARGE (TONS/DAY)
1	308	12	10	160	8	3.5	82	2	.44
2	297	9	7.2	158	8	3.4	81	2	.44
3	284	7	5.4	151	5	2.0	76	2	.41
4	275	7	5.2	148	2	.80	74	3	.60
5	271	8	5.9	141	4	1.5	74	13	2.6
6	262	6	4.2	138	6	2.2	78	3	.63
7	259	3	2.1	135	6	2.2	83	2	.45
8	259	4	2.8	130	6	2.1	82	2	.44
9	267	4	2.9	125	4	1.4	90	3	.73
10	267	6	4.3	122	1	.33	99	4	1.1
11	262	7	5.0	117	2	.63	97	5	1.3
12	256	4	2.8	115	3	.93	89	6	1.4
13	244	1	.66	115	2	.62	107	6	1.7
14	232	2	1.3	115	2	.62	97	6	1.6
15	227	2	1.2	119	2	.64	88	4	.95
16	215	2	1.2	125	2	.68	84	2	.45
17	208	2	1.1	141	2	.76	80	4	.86
18	200	3	1.6	167	2	.90	80	4	.86
19	194	4	2.1	154	2	.83	97	3	.79
20	191	3	1.5	161	2	.87	155	3	1.3
21	183	2	.99	168	2	.91	231	15	9.4
22	176	4	1.9	161	2	.87	379	27	28
23	175	6	2.8	147	2	.79	302	10	8.2
24	175	5	2.4	139	1	.38	280	4	3.0
25	172	4	1.9	127	2	.69	260	4	2.8
26	171	7	3.2	122	2	.66	240	3	1.9
27	167	10	4.5	115	2	.62	220	3	1.8
28	165	8	3.6	110	3	.89	190	4	2.1
29	159	6	2.6	102	2	.55	170	4	1.8
30	155	5	2.1	97	2	.52	165	3	1.3
31	152	7	2.9	89	3	.72	--	--	--
TOTAL	6828	--	97.35	4114	--	34.51	4230	--	79.35

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1118902
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 358979.51

14308600 SOUTH UMPQUA RIVER AT DAYS CREEK, OREG.

LOCATION.—Lat 42°58'03", long 123°09'59", in NW¼NW¼ sec.15, T.30 S., R.4 W., Douglas County, temperature recorder on left bank 0.3 mi (0.5 km) above Days Creek, at town of Days Creek.

DRAINAGE AREA.—641 mi² (1,660 km²).

PERIOD OF RECORD.—Water temperatures: October 1970 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 28.5°C Aug. 6-9; minimum, 1.0°C Jan. 4-6, 30, Feb. 2, 3.

Period of record:
Water temperatures: Maximum, 28.5°C Aug. 6-9, 1972; minimum, 1.0°C sometime during period Dec. 17, 1970 to Jan. 25, 1971, Jan. 4-6, 30, Feb. 2, 3, 1972.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.5	6.5	5.5	7.0	6.0	4.0	3.5	3.0	2.0	5.5	4.5
2	12.0	11.5	6.5	5.0	6.5	6.0	4.5	3.5	2.0	1.0	6.0	5.0
3	13.0	12.0	6.5	5.0	6.0	5.0	3.5	2.0	3.0	1.0	6.5	6.0
4	14.0	13.0	6.0	5.0	5.5	5.0	2.0	1.0	4.5	3.0	6.5	6.0
5	14.0	13.0	6.5	4.5	6.5	5.0	1.5	1.0	5.0	4.5	7.0	7.0
6	14.0	13.5	6.0	4.5	6.5	6.5	2.0	1.0	5.5	5.0	7.0	7.0
7	14.5	13.5	5.0	4.0	6.5	5.5	3.5	2.0	5.5	5.0	7.0	7.0
8	15.0	14.0	5.0	4.5	5.5	5.5	3.5	3.0	5.5	5.0	7.0	7.0
9	14.5	14.0	6.0	5.0	6.0	5.5	4.0	3.5	5.0	4.5	7.0	7.0
10	14.5	14.0	6.5	6.0	6.0	5.5	4.0	3.5	5.0	4.5	7.0	7.0
11	---	---	7.0	6.5	5.5	5.5	4.0	3.5	5.0	4.5	8.0	7.0
12	---	---	8.5	7.0	5.5	4.5	5.0	3.5	5.5	5.0	8.0	7.0
13	---	---	8.0	6.5	4.5	4.5	4.5	4.5	6.0	4.5	8.0	6.5
14	---	---	6.5	5.5	5.0	4.5	4.5	4.0	5.5	5.0	7.0	6.5
15	11.0	10.5	6.0	5.0	5.0	4.5	4.0	3.5	5.5	5.0	8.0	7.0
16	10.5	10.0	5.0	5.0	5.0	4.5	4.0	3.5	6.0	5.5	8.0	8.0
17	10.0	9.0	5.5	5.0	5.0	5.0	4.5	4.0	6.0	5.5	8.5	8.0
18	10.0	9.0	5.5	5.0	5.0	5.0	4.5	4.5	6.0	5.5	8.5	6.5
19	10.0	9.5	6.5	5.5	5.0	5.0	6.0	5.0	6.5	6.0	6.5	6.5
20	10.5	9.5	7.0	6.0	5.0	5.0	6.0	6.0	6.0	5.5	8.0	6.5
21	10.0	8.5	7.0	7.0	5.0	4.5	6.0	5.5	5.5	5.0	8.0	6.5
22	10.0	9.0	8.0	6.5	5.5	5.0	6.0	5.5	6.0	5.0	8.0	6.0
23	10.5	9.0	8.0	6.5	5.0	5.0	6.0	5.0	5.0	5.0	6.5	6.0
24	10.5	8.5	8.0	7.0	5.5	5.0	5.0	5.0	5.0	5.0	6.5	6.0
25	9.5	8.5	7.0	7.0	5.0	4.0	5.0	4.5	5.0	5.0	5.5	4.5
26	9.0	7.0	8.0	6.5	4.5	3.5	4.5	3.5	6.5	5.0	4.5	4.5
27	7.0	6.0	8.0	8.0	4.0	3.5	3.5	1.5	6.5	6.0	5.5	4.5
28	6.5	5.0	8.0	7.0	4.0	3.0	1.5	2.0	7.0	6.5	6.5	5.0
29	6.5	5.0	8.0	7.0	3.5	3.0	3.0	1.5	6.5	5.5	6.5	5.0
30	5.5	5.0	8.0	7.0	4.0	3.5	1.5	1.0	---	---	8.0	6.0
31	6.5	5.5	---	---	4.0	3.5	3.0	1.5	---	---	7.0	6.5
MONTH	15.0	5.0	8.5	4.0	7.0	3.0	6.0	1.0	7.0	1.0	8.5	4.5

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

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OREG.

LOCATION.--Lat 43°13'20", long 123°24'45", in NW¼SE¼ sec.16, T.27 S., R.6 W., Douglas County, on left bank, 3.7 mi (6.0 km) west of Roseburg, and at mile 117.7 (189.4 km).

DRAINAGE AREA.--1,798 mi^2 (4,657 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1972.
Specific conductance: October 1970 to September 1972.
PH: August 1971 to September 1972.
Dissolved oxygen: October 1970 to September 1972.
Water temperatures: October 1970 to September 1972.

EXTREMES.--1971-72:
Specific conductance: Maximum, 220 micromhos/cm Sept. 20; minimum, 41 micromhos/cm Mar. 2, 3.
PH: Maximum, 9.5 units Aug. 13; minimum, 5.9 units June 29.
Dissolved oxygen: Maximum, 14.8 mg/l Sept. 8; minimum, 3.5 mg/l Aug. 23.
Water temperatures: Maximum, 29.0°C July 4, Aug. 9; minimum, 2.0°C Feb. 3.

Period of record:
Specific conductance: Maximum, 423 micromhos/cm Sept. 18, 1971; minimum, 41 micromhos/cm Mar. 2, 3, 1972.
PH: Maximum, 10.0 units Sept. 8, 9, 1971; minimum, 5.0 units Sept. 29, 1971.
Dissolved oxygen: Maximum, 15.7 mg/l Oct. 26, 1971; minimum, 2.4 mg/l Aug. 28, 1971.
Water temperature: Maximum, 30.5°C July 20-22, 1971; minimum, 1.5°C Jan. 6, 1971.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT.									
21...	--	--	16	6.8	--	--	77	0	--
NOV.									
23...	--	--	11	4.2	--	--	56	0	--
DEC.									
29...	--	--	8.1	3.9	--	--	45	--	--
JAN.									
26...	17	40	9.0	3.1	3.3	.8	37	0	4.7
FEB.									
23...	--	--	8.9	3.8	--	--	42	--	--
MAR.									
22...	--	--	8.2	3.5	--	--	48	--	--
APR.									
19...	--	--	9.2	4.2	--	--	50	--	--
JUNE									
01...	--	--	9.9	3.3	--	--	45	0	--
29...	--	--	12	4.7	--	--	75	0	--
JULY									
25...	--	--	14	6.0	--	--	73	0	--
AUG.									
24...	9.8	150	16	7.1	10	1.3	67	7	12
SEP.									
21...	--	--	18	7.8	--	--	82	0	--

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.									
21...	--	--	--	.18	184	.25	68	5	63
NOV.									
23...	--	--	.70	--	100	.14	45	0	45
DEC.									
29...	--	--	.35	.07	85	.12	36	0	37
JAN.									
26...	3.7	.0	--	.06	--	.08	35	5	30
FEB.									
23...	--	--	--	.13	82	.11	38	3	34
MAR.									
22...	--	--	--	--	72	.10	35	0	39
APR.									
19...	--	--	--	.08	71	.10	40	0	41
JUNE									
01...	--	--	.09	.08	62	.08	38	1	37
29...	--	--	--	.17	92	.13	49	0	62
JULY									
25...	--	--	--	.29	116	.16	60	0	60
AUG.									
24...	14	.1	--	.00	--	.15	69	3	67
SEP.									
21...	--	--	--	.38	134	.18	77	10	67

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OREG.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	DISSOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	IMMEDIATE COLIFORM (COL. PER 100 ML)
OCT.						
21...	1230	9.8	7.1	--	175	--
NOV.						
23...	1245	8.0	7.4	11.2	117	16400
DEC.						
29...	1030	4.0	--	11.8	95	1600
29...	1100	4.0	--	--	90	--
JAN.						
26...	1400	5.0	7.2	--	71	--
26...	1600	5.0	7.2	12.2	67	3200
FEB.						
23...	1230	6.5	7.6	12.4	79	10600
MAR.						
22...	1330	10.4	7.1	10.1	95	14000
APR.						
19...	1130	8.0	7.1	--	95	1000
JUNE						
01...	1100	18.8	6.9	8.7	93	1420
29...	1430	25.5	8.0	10.9	136	1300
JULY						
05...	1300	23.7	--	9.2	173	3100
25...	1400	23.6	8.0	--	166	--
AUG.						
24...	1155	25.0	8.4	--	192	--
24...	1500	23.5	8.2	9.8	195	10800
29...	1155	23.0	--	--	--	--
SEP.						
17...	1200	19.5	6.8	2.3	250	5100
21...	1330	18.0	7.0	--	209	--

DATE	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	ENDRIN (UG/L)	DIELDRIN (UG/L)	HEPTACHLOR (UG/L)
NOV.							
23...	.00	.00	.00	.00	.00	.00	.00
FEB.							
23...	.00	.00	.00	.00	.00	.00	.00
JUNE							
29...	.00	.00	.00	.00	.00	.00	.00
AUG.							
29...	.00	.00	.00	.00	.00	.00	.00
SEP.							
21...	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTACHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	CHLORDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
NOV.						
23...	.00	.00	.0	.00	.00	.00
FEB.						
23...	.00	.00	.0	.00	.00	.00
JUNE						
29...	.00	.00	.0	.00	.00	.00
AUG.						
29...	.00	.00	.0	.00	.00	.00
SEP.						
21...	.00	.00	.0	.00	.01	.00

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OREG.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	90	86	60	53
2	---	---	---	---	---	---	---	---	91	87	55	41
3	---	---	---	---	---	---	---	---	93	90	48	41
4	---	---	---	---	---	---	---	---	95	92	55	48
5	---	---	---	---	---	---	---	---	97	93	59	55
6	---	---	---	---	---	---	---	---	95	86	62	59
7	---	---	---	---	---	---	---	---	87	78	---	---
8	---	---	---	---	---	---	---	---	85	77	---	---
9	---	---	---	---	---	---	---	---	77	75	---	---
10	---	---	---	---	---	---	---	---	77	75	---	---
11	---	---	---	---	---	---	---	---	77	75	66	61
12	---	---	---	---	---	---	---	---	77	75	64	60
13	---	---	---	---	---	---	---	---	79	77	63	56
14	---	---	---	---	---	---	---	---	78	62	60	57
15	---	---	---	---	---	---	---	---	67	63	65	60
16	---	---	---	---	---	---	---	---	68	66	69	65
17	---	---	---	---	---	---	---	---	66	52	70	65
18	---	---	---	---	---	---	---	---	58	52	71	67
19	---	---	---	---	---	---	---	---	63	58	72	68
20	---	---	---	---	---	---	---	---	64	59	76	70
21	---	---	---	---	---	---	---	---	64	59	82	78
22	---	---	---	---	---	---	---	---	73	65	93	89
23	---	---	---	---	---	---	---	---	71	66	89	70
24	---	---	---	---	---	---	---	---	68	66	77	72
25	---	---	---	---	---	---	---	---	68	59	81	76
26	---	---	---	---	---	---	76	69	70	68	82	80
27	---	---	---	---	---	---	78	76	69	57	84	82
28	---	---	---	---	---	---	81	78	59	48	86	79
29	---	---	---	---	---	---	85	80	53	50	88	83
30	---	---	---	---	---	---	87	84	---	---	90	86
31	---	---	---	---	---	---	88	86	---	---	91	90
MONTH	---	---	---	---	---	---	---	---	97	48	93	41

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	93	87	96	91	95	87	147	137	186	173	210	179
2	95	91	98	93	95	88	146	134	188	173	211	110
3	95	91	99	94	97	91	145	134	189	173	201	148
4	93	89	101	93	99	93	146	134	190	169	211	195
5	96	92	102	93	101	93	---	---	191	173	214	207
6	96	90	101	92	102	97	144	137	191	171	216	194
7	92	84	98	94	104	98	149	140	189	169	217	168
8	87	82	98	92	106	100	151	148	190	175	214	198
9	83	80	97	88	112	106	154	144	193	177	210	198
10	84	81	98	90	119	110	154	134	195	173	211	197
11	88	81	101	92	112	106	145	134	197	104	212	193
12	95	86	102	93	111	105	145	134	197	128	213	198
13	90	88	102	93	114	106	145	136	196	146	215	174
14	91	88	101	91	115	112	146	137	201	180	210	140
15	91	89	97	92	107	89	147	138	206	191	195	106
16	91	86	101	92	91	72	151	137	204	195	212	180
17	89	86	103	97	83	73	151	140	206	190	212	202
18	90	88	100	94	88	79	153	145	205	195	216	204
19	94	89	102	95	92	84	157	147	210	197	218	207
20	96	92	104	98	96	88	159	147	204	192	220	206
21	99	96	106	104	102	95	160	148	199	189	218	210
22	100	96	106	97	107	99	163	147	202	194	218	207
23	102	99	99	90	115	109	164	151	203	192	215	208
24	102	99	98	90	120	114	165	153	203	193	214	210
25	102	98	99	91	125	118	175	167	205	194	214	208
26	99	92	100	90	130	122	179	165	206	191	214	208
27	97	92	99	90	135	126	180	165	203	185	214	206
28	99	97	99	90	140	129	181	166	201	142	212	206
29	99	93	99	91	144	137	180	164	200	189	210	202
30	95	90	98	89	148	139	181	165	205	191	209	199
31	---	---	95	88	---	---	181	169	208	191	---	---
MONTH	102	80	106	88	148	72	181	134	210	104	220	106

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OREG.--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	7.9	7.7	7.4	6.9
2	---	---	---	---	---	---	---	---	7.9	7.6	7.1	6.5
3	---	---	---	---	---	---	---	---	7.8	7.6	7.2	6.7
4	---	---	---	---	---	---	---	---	7.8	7.6	7.3	6.8
5	---	---	---	---	---	---	---	---	7.8	7.6	7.2	6.9
6	---	---	---	---	---	---	---	---	7.7	7.5	7.2	6.9
7	---	---	---	---	---	---	---	---	7.7	7.4	---	---
8	---	---	---	---	---	---	---	---	7.4	7.2	---	---
9	---	---	---	---	---	---	---	---	7.8	7.2	---	---
10	---	---	---	---	---	---	---	---	7.7	7.5	---	---
11	---	---	---	---	---	---	---	---	7.7	7.5	7.1	6.8
12	---	---	---	---	---	---	---	---	7.6	7.5	7.1	6.8
13	---	---	---	---	---	---	7.2	6.8	7.8	7.5	7.2	6.8
14	---	---	---	---	---	---	7.2	6.8	7.7	7.4	7.2	6.8
15	---	---	---	---	---	---	7.3	6.9	7.6	7.4	7.2	6.8
16	---	---	---	---	---	---	7.3	6.6	7.6	7.4	7.1	6.9
17	---	---	---	---	---	---	7.4	7.0	7.6	7.3	7.2	6.9
18	---	---	---	---	---	---	7.3	6.8	7.5	7.3	7.2	6.9
19	---	---	---	---	---	---	7.2	6.8	7.5	7.3	7.2	6.9
20	---	---	---	---	---	---	7.2	6.9	7.6	7.4	7.2	6.9
21	---	---	---	---	---	---	7.1	6.7	7.6	7.4	7.2	7.0
22	---	---	---	---	---	---	7.0	6.7	7.6	7.5	7.5	7.2
23	---	---	---	---	---	---	7.1	6.7	7.7	7.2	7.4	7.2
24	---	---	---	---	---	---	---	---	7.7	7.1	7.4	7.3
25	---	---	---	---	---	---	---	---	7.6	7.2	7.4	7.1
26	---	---	---	---	---	---	7.8	7.4	7.5	7.1	7.5	7.3
27	---	---	---	---	---	---	7.9	7.6	7.5	7.3	7.5	7.3
28	---	---	---	---	---	---	7.8	7.6	7.5	7.0	7.6	7.4
29	---	---	---	---	---	---	7.8	7.6	7.3	7.0	7.5	7.3
30	---	---	---	---	---	---	7.8	7.6	---	---	7.6	7.3
31	---	---	---	---	---	---	7.9	7.6	---	---	7.7	7.4
MONTH	---	---	---	---	---	---	---	---	7.9	7.0	7.7	6.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.8	7.1	7.8	7.3	8.2	7.0	8.2	6.7	8.7	7.1	9.2	7.3
2	7.7	7.5	7.9	7.3	8.2	7.0	8.3	6.8	8.7	7.1	9.1	7.2
3	7.7	7.5	7.8	7.2	8.1	7.0	8.4	6.8	8.9	7.1	9.3	7.3
4	7.7	7.5	7.8	7.1	8.1	7.0	8.5	6.8	8.8	7.1	9.1	7.3
5	7.7	7.5	7.8	7.2	8.1	7.1	8.2	6.9	9.0	7.0	8.3	7.2
6	7.7	7.5	7.8	7.2	7.9	7.0	---	---	9.1	7.2	9.1	7.2
7	7.6	7.4	7.7	7.1	7.9	7.0	8.9	7.4	9.0	7.2	9.0	7.3
8	7.5	7.3	7.7	7.1	7.9	6.9	8.6	7.5	9.3	7.1	8.7	7.2
9	7.6	7.4	7.8	7.1	7.3	6.8	9.0	7.5	9.3	7.5	8.9	7.3
10	7.7	7.5	7.8	7.2	7.5	6.8	8.9	7.6	9.4	7.5	9.0	7.3
11	7.6	7.1	7.8	7.2	7.9	7.0	8.8	7.4	9.3	7.3	9.2	7.4
12	7.5	7.1	7.8	7.1	8.0	7.1	8.8	7.4	9.2	7.4	9.1	7.4
13	7.6	7.4	7.8	7.1	7.9	7.0	8.8	7.3	9.5	7.4	9.2	7.3
14	7.6	7.4	7.9	7.1	7.8	7.4	8.8	7.3	9.3	7.5	9.2	7.4
15	7.6	7.5	7.8	7.1	8.1	7.2	8.9	7.3	9.4	7.7	9.1	7.3
16	8.0	7.2	7.4	7.0	7.8	7.0	8.9	7.3	9.0	7.6	9.1	7.3
17	7.7	7.4	7.4	7.0	7.9	6.9	8.8	7.3	9.4	7.4	8.8	7.3
18	7.7	7.3	7.8	7.2	8.0	7.0	8.8	7.1	9.3	7.8	8.7	7.2
19	7.8	7.1	8.0	7.4	8.0	6.4	8.8	7.2	9.2	7.8	8.8	7.3
20	7.7	7.3	7.8	7.4	8.0	6.8	9.0	7.1	9.0	7.7	8.7	7.3
21	7.8	7.4	7.8	7.3	8.0	6.6	9.0	7.1	8.7	7.5	7.8	7.3
22	7.8	7.4	7.9	7.3	8.0	6.6	9.0	7.1	7.9	7.2	8.5	7.3
23	7.7	7.3	8.0	7.4	7.9	6.6	9.1	7.2	8.0	7.2	8.2	7.4
24	7.8	7.4	8.0	7.3	8.0	6.5	9.0	7.2	8.6	7.3	8.3	7.4
25	7.9	7.4	8.0	7.3	8.2	6.6	9.1	7.2	8.8	7.4	8.4	7.5
26	7.9	7.4	8.0	7.3	8.2	6.6	9.2	7.4	8.8	7.3	8.5	7.6
27	7.8	7.3	8.1	7.2	8.3	6.5	9.2	7.3	8.9	7.3	8.6	7.7
28	7.8	7.3	8.1	7.2	8.3	6.4	9.2	7.3	8.9	7.2	8.5	7.7
29	7.8	7.3	8.1	7.1	8.6	5.9	9.3	7.4	9.0	7.1	8.7	7.7
30	7.8	7.2	8.1	7.1	8.1	6.6	9.3	7.3	9.2	7.3	8.7	7.6
31	---	---	8.1	7.1	---	---	9.2	7.3	9.1	7.3	---	---
MONTH	8.0	7.1	8.1	7.0	8.6	5.9	9.3	6.7	9.5	7.0	9.3	7.2

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OREG.--Continued

DISSOLVED OXYGEN (MG/L) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.8	7.3	8.5	11.6	9.6	10.4	---	---	---	---	---	---
2	10.3	7.0	9.0	10.7	9.5	9.9	---	---	---	---	---	---
3	11.8	8.4	10.1	10.6	9.4	9.9	---	---	---	---	---	---
4	9.1	7.5	8.4	10.4	9.6	9.9	---	---	---	---	---	---
5	9.7	7.3	8.9	11.0	9.9	10.3	---	---	---	---	---	---
6	9.7	8.1	8.9	11.5	10.3	10.7	---	---	---	---	---	---
7	10.3	7.6	8.8	11.8	10.3	11.0	---	---	---	---	---	---
8	9.5	7.8	8.6	12.0	10.5	11.1	---	---	---	---	---	---
9	8.8	7.2	7.8	11.6	10.7	11.1	---	---	---	---	---	---
10	7.8	6.5	7.1	---	---	---	---	---	---	---	---	---
11	7.8	6.3	7.0	---	---	---	---	---	---	---	---	---
12	7.7	6.3	6.9	---	---	---	---	---	---	---	---	---
13	11.4	6.0	7.4	---	---	---	---	---	---	---	---	---
14	9.8	8.0	8.8	---	---	---	---	---	---	12.5	11.5	12.0
15	8.9	7.7	8.3	---	---	---	---	---	---	12.7	12.4	12.6
16	9.1	7.9	8.5	---	---	---	---	---	---	12.7	12.6	12.7
17	9.2	7.8	8.4	---	---	---	---	---	---	12.7	12.5	12.6
18	9.1	7.6	8.2	---	---	---	---	---	---	12.7	12.5	12.6
19	8.2	7.3	---	---	---	---	---	---	---	12.7	12.6	12.7
20	7.8	6.8	7.2	---	---	---	---	---	---	12.6	12.5	12.6
21	11.2	6.4	5.8	---	---	---	---	---	---	12.9	12.5	12.7
22	10.7	9.7	10.2	---	---	---	---	---	---	12.7	11.5	12.4
23	10.5	9.6	9.9	---	---	---	---	---	---	12.6	11.3	12.1
24	10.4	9.3	9.7	---	---	---	---	---	---	12.6	12.4	12.5
25	10.4	9.1	9.7	---	---	---	---	---	---	12.5	12.3	12.4
26	9.9	8.9	9.3	---	---	---	---	---	---	13.0	12.0	12.5
27	9.5	8.4	8.9	---	---	---	---	---	---	13.1	12.9	13.0
28	11.3	8.5	9.7	---	---	---	---	---	---	13.3	13.1	13.2
29	11.5	10.5	11.0	---	---	---	---	---	---	13.3	13.2	13.3
30	11.3	10.6	10.9	---	---	---	---	---	---	13.2	13.1	13.2
31	10.6	10.5	10.6	---	---	---	---	---	---	13.1	13.0	13.1
MONTH	11.8	6.0	8.8	---	---	---	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.0	12.9	13.0	11.8	11.4	11.7	11.3	11.0	11.2	11.0	10.3	10.6
2	13.0	12.9	13.0	11.8	11.0	11.2	11.1	10.8	11.0	10.7	9.9	10.3
3	13.2	13.0	13.1	11.7	10.8	11.2	10.9	10.4	10.7	10.3	9.4	9.9
4	13.2	12.9	13.1	11.0	10.7	10.8	10.8	10.3	10.5	10.2	9.2	9.7
5	12.9	12.6	12.8	11.0	10.8	10.9	10.5	10.2	10.3	10.2	9.4	9.8
6	12.7	12.6	12.6	11.9	10.5	10.9	10.5	10.2	10.4	10.1	9.3	9.7
7	12.7	12.4	12.6	---	---	---	11.0	10.5	10.8	10.2	9.5	9.8
8	12.4	12.2	12.3	---	---	---	11.1	11.0	11.0	10.6	9.8	10.2
9	12.5	12.3	12.4	---	---	---	11.4	11.1	11.2	10.6	9.8	10.2
10	12.4	12.3	12.3	---	---	---	11.4	11.0	11.3	10.4	9.5	10.0
11	12.6	12.4	12.5	11.7	11.5	11.6	11.1	10.8	10.9	10.1	9.2	9.7
12	12.6	12.4	12.5	11.5	11.2	11.4	10.8	10.6	10.7	9.9	8.9	9.4
13	12.4	12.2	12.3	11.5	11.2	11.3	11.0	10.8	10.9	9.7	8.7	9.2
14	12.4	12.2	12.3	11.4	11.3	11.4	10.9	10.5	10.7	9.6	8.7	9.1
15	12.5	12.4	12.5	11.4	10.9	11.1	10.5	10.4	10.5	9.5	8.7	9.1
16	12.5	12.4	12.4	10.9	10.5	10.7	10.5	10.3	10.4	9.4	8.9	9.1
17	12.4	12.2	12.4	10.5	10.3	10.4	10.8	10.4	10.6	10.1	9.3	9.8
18	12.4	12.2	12.3	10.3	10.2	10.3	11.0	10.7	10.9	10.3	9.3	9.8
19	12.3	12.2	12.3	10.4	10.3	10.3	11.8	10.9	11.3	10.4	9.6	10.0
20	12.5	12.3	12.4	10.7	10.4	10.6	11.5	11.0	11.3	9.8	9.3	9.6
21	12.5	12.2	12.4	10.5	10.1	10.3	11.3	10.8	11.1	10.2	9.4	9.8
22	12.4	12.0	12.2	11.0	10.1	10.5	11.3	10.6	11.0	10.6	9.9	10.2
23	12.8	12.3	12.5	11.3	10.9	11.1	10.9	10.4	10.6	10.8	10.0	10.4
24	12.4	12.0	12.2	11.3	11.2	11.3	10.8	10.3	10.6	10.7	9.8	10.2
25	12.2	11.9	12.1	11.5	10.8	11.4	11.0	10.4	10.7	10.4	9.6	10.0
26	12.0	11.7	11.8	11.9	11.5	11.7	10.9	10.3	10.6	10.1	9.1	9.6
27	11.7	11.3	11.5	11.9	11.7	11.8	10.6	9.9	10.3	9.7	8.7	9.2
28	11.7	11.2	11.5	11.8	11.7	11.7	10.4	9.8	10.1	9.5	8.5	9.0
29	11.8	11.5	11.6	11.8	11.4	11.6	10.9	10.1	10.5	9.4	8.2	8.8
30	---	---	---	11.6	11.3	11.4	11.0	10.3	10.7	9.5	8.3	8.8
31	---	---	---	11.3	11.0	11.3	---	---	---	9.5	8.3	8.9
MONTH	13.2	11.2	12.4	11.9	10.1	11.1	11.8	9.8	10.8	11.0	8.2	9.7

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OREG.--Continued

DISSOLVED OXYGEN (MG/L) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.8	8.7	9.6	---	---	---	7.7	6.8	7.1	14.3	6.1	9.9
2	10.8	9.4	10.1	---	---	---	7.7	7.1	7.3	14.0	6.0	9.8
3	10.9	9.5	10.2	---	---	---	7.7	7.0	7.3	14.6	6.4	10.0
4	11.3	9.8	10.5	---	---	---	7.6	6.9	7.2	13.3	6.8	9.3
5	11.4	9.9	10.6	---	---	---	7.6	6.8	7.2	10.1	6.2	7.8
6	11.3	9.9	10.6	---	---	---	7.4	6.7	7.0	12.8	6.3	9.0
7	11.5	10.0	10.7	---	---	---	7.3	6.5	6.8	12.6	6.8	9.5
8	11.4	10.1	10.7	---	---	---	7.4	6.4	6.8	14.8	4.3	9.2
9	10.8	10.2	10.4	---	---	---	7.3	6.5	6.8	12.0	4.9	8.5
10	10.8	10.2	10.5	---	---	---	7.4	6.6	6.9	13.0	4.6	8.1
11	12.0	8.9	9.8	---	---	---	7.7	6.8	7.2	13.4	5.0	8.7
12	10.7	9.1	9.9	---	---	---	7.8	7.1	7.4	11.6	4.6	8.0
13	10.6	8.8	9.3	---	---	---	8.3	7.5	7.8	11.9	4.1	7.8
14	11.3	9.2	10.2	---	---	---	8.3	7.6	7.9	14.4	5.7	9.6
15	---	---	---	---	---	---	8.6	8.0	8.2	13.5	5.4	9.2
16	---	---	---	---	---	---	8.5	8.1	8.3	12.5	5.2	8.8
17	10.0	8.4	9.2	---	---	---	13.6	8.4	10.0	11.9	5.4	8.2
18	10.0	8.3	9.1	---	---	---	14.0	5.4	9.5	11.0	5.2	7.6
19	10.0	8.2	9.2	---	---	---	13.9	6.0	9.9	10.3	4.6	7.3
20	10.0	7.8	8.9	---	---	---	12.0	5.8	8.6	12.8	4.9	7.9
21	10.0	7.5	8.7	---	---	---	11.4	4.6	7.7	10.0	3.6	6.7
22	10.0	8.3	9.1	---	---	---	8.0	4.0	5.7	10.2	4.0	6.7
23	10.1	8.1	9.0	---	---	---	7.6	3.5	5.4	8.7	4.7	6.6
24	10.7	8.2	9.5	---	---	---	10.6	3.6	6.3	8.4	5.9	7.0
25	10.8	8.7	9.7	7.6	7.0	7.3	11.0	4.8	7.7	9.6	6.4	7.9
26	11.0	8.8	9.6	7.7	6.9	7.2	11.0	4.8	7.7	10.4	6.7	8.5
27	11.0	8.6	9.6	7.6	6.8	7.1	11.6	4.8	7.9	10.8	7.2	8.9
28	11.1	8.3	9.5	7.5	6.8	7.1	12.0	4.9	8.0	13.1	6.9	9.8
29	11.2	8.1	9.6	7.3	6.7	7.0	13.3	4.7	8.5	13.3	9.5	11.3
30	---	---	---	7.4	6.7	7.0	14.7	5.2	9.1	13.0	9.1	10.8
31	---	---	---	7.4	6.7	7.0	14.0	6.2	9.7	---	---	---
MONTH	12.0	7.5	9.8	---	---	---	14.7	3.5	7.7	14.8	3.6	8.6

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OREG.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

14319500 NORTH UMPQUA RIVER AT WINCHESTER, OREG.

LOCATION.—Lat 43°16'20", long 123°24'40", in NW¼NE¼ sec.33, T.26 S., R.6 W., Douglas County, on left bank 400 ft (122 m) downstream from county bridge, 3.0 mi (4.8 km) west of Winchester, and at mile 1.8 (2.9 km).

DRAINAGE AREA.—1,344 mi^2 (3,480 km^2).

PERIOD OF RECORD.—Chemical analyses: August 1967 to June 1969.
Water temperatures: January 1971 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 26.5°C Aug. 10; minimum, 1.5°C Jan. 4, 5, Feb. 3.

Period of record:
Water temperatures: Maximum, 26.5°C Aug. 10, 1972; minimum, freezing point Jan. 6, 1971.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.5	6.5	5.0	6.5	6.5	4.5	4.0	3.5	2.5	6.0	5.5
2	11.5	10.0	6.5	5.5	7.0	6.5	4.5	4.0	3.0	2.0	7.0	6.0
3	12.0	10.5	6.0	5.0	6.5	6.0	4.0	3.0	2.5	1.5	7.0	6.5
4	13.0	11.0	5.5	5.0	5.5	5.5	3.0	1.5	3.5	2.5	7.0	6.5
5	13.5	11.5	5.0	4.5	7.5	5.5	2.0	1.5	5.5	3.5	8.0	7.0
6	14.0	12.5	5.0	4.5	7.5	7.0	3.0	2.0	6.0	5.0	8.0	7.5
7	14.0	13.0	5.0	4.5	6.5	5.0	3.5	3.0	6.5	5.5	7.5	7.0
8	14.5	13.0	4.5	4.0	5.5	5.0	4.0	2.5	6.5	5.5	7.5	6.5
9	14.5	13.0	5.5	4.5	6.5	5.5	4.0	4.0	6.0	5.0	8.0	7.0
10	13.5	13.0	7.0	5.5	6.0	5.5	5.0	4.0	5.5	4.5	8.0	7.5
11	13.0	12.0	8.0	7.0	5.5	5.0	5.5	.5.0	5.5	4.5	8.0	7.5
12	13.0	11.5	8.0	7.5	5.5	4.5	6.0	5.5	6.5	5.0	8.5	8.0
13	13.0	12.5	8.0	7.5	4.5	4.0	6.0	5.5	7.0	6.5	9.0	8.0
14	12.5	10.5	7.5	7.0	5.0	4.5	5.5	4.5	6.5	5.5	8.0	7.5
15	10.5	9.5	7.0	6.0	5.0	5.0	4.5	4.5	6.5	5.5	9.5	6.0
16	9.5	8.5	6.0	5.0	5.5	5.0	5.0	4.0	7.0	6.5	10.0	8.5
17	9.0	8.0	5.5	5.0	5.5	5.0	5.5	5.0	7.5	7.0	10.0	8.5
18	9.0	8.0	5.5	5.0	5.5	5.0	6.5	5.5	7.5	6.0	10.0	9.0
19	9.0	8.0	6.0	5.0	5.5	4.5	7.0	6.5	7.5	7.0	8.5	7.5
20	8.5	8.0	6.0	5.0	5.0	4.5	7.0	7.0	7.5	6.0	9.0	7.0
21	8.5	8.0	6.0	5.0	5.0	5.0	7.0	7.0	6.5	5.5	8.5	7.5
22	8.5	8.0	6.0	6.0	5.5	5.0	7.0	7.0	6.5	6.0	9.0	8.0
23	8.5	8.0	6.5	6.0	5.0	5.0	7.0	5.5	6.0	5.5	8.0	7.5
24	9.5	6.0	7.0	6.5	5.5	5.0	5.5	5.0	5.5	5.0	7.5	7.0
25	9.0	8.0	7.0	6.5	5.0	4.5	5.5	5.0	6.5	5.5	7.0	5.5
26	9.0	8.0	8.0	6.5	4.5	3.5	4.5	4.0	6.5	6.0	5.5	5.0
27	8.0	7.0	8.0	7.5	3.5	3.0	3.5	3.5	7.5	6.5	6.5	5.0
28	7.0	6.0	7.5	7.5	2.5	2.0	3.5	3.5	7.5	7.0	7.0	5.0
29	6.0	5.0	7.5	7.5	3.0	2.0	3.5	3.0	7.5	6.0	7.5	5.5
30	5.0	4.5	7.5	7.0	4.0	3.0	2.5	2.0	---	---	8.5	6.0
31	5.0	4.5	---	---	4.5	4.0	2.5	2.0	---	---	8.0	7.0
MONTH	14.5	4.5	8.0	4.0	7.5	2.0	7.0	1.5	7.5	1.5	10.0	5.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	7.5	11.0	8.0	16.5	14.5	20.0	19.5	22.5	22.0	20.5	17.5
2	10.0	8.0	13.0	9.5	17.0	15.0	19.5	19.5	22.5	22.5	20.5	18.0
3	11.0	9.5	14.0	11.0	17.0	15.0	20.0	20.0	22.5	22.5	20.5	18.0
4	11.5	9.5	14.5	12.0	17.5	15.5	20.0	20.0	22.5	22.5	19.5	18.0
5	11.5	11.0	14.5	12.0	18.0	15.5	20.0	20.0	22.5	22.5	19.0	17.5
6	10.5	9.5	13.5	12.0	18.0	16.0	20.0	20.0	22.5	22.5	18.0	16.0
7	9.0	8.0	12.5	11.5	18.5	16.5	20.0	20.0	22.5	22.0	18.5	15.5
8	8.0	7.5	11.0	9.5	18.5	16.5	20.0	20.0	22.0	21.5	18.0	16.0
9	8.0	7.0	12.5	9.5	17.5	15.0	20.5	20.5	22.0	21.5	17.5	16.0
10	8.5	6.5	13.5	11.0	14.5	14.0	20.5	20.5	26.5	24.5	16.5	14.5
11	8.5	7.5	14.5	11.5	14.5	13.5	20.5	20.5	22.0	20.0	16.5	14.5
12	8.0	7.5	15.0	12.5	16.5	13.5	20.5	20.5	21.0	19.5	16.5	14.5
13	7.5	6.5	16.0	13.5	18.0	15.5	21.0	21.0	20.5	18.0	16.5	14.0
14	9.0	7.0	16.0	14.0	19.5	17.0	21.0	21.0	19.5	18.5	17.5	14.5
15	9.0	8.0	14.0	13.5	19.0	17.5	21.0	21.0	19.0	17.5	17.5	15.0
16	9.5	8.0	13.0	11.5	17.5	16.0	21.0	21.0	18.0	17.5	17.5	15.0
17	8.5	6.0	11.5	10.5	18.5	16.5	21.0	21.0	18.0	16.0	17.0	15.5
18	8.0	6.0	11.5	10.0	19.5	17.5	21.0	21.0	18.0	16.5	17.0	15.5
19	9.0	6.0	12.5	10.0	20.0	18.0	21.0	21.0	18.5	16.5	16.0	15.5
20	9.5	7.5	12.5	11.0	20.5	18.5	21.5	21.0	19.5	17.0	15.5	14.5
21	9.5	8.0	11.5	10.5	20.0	19.0	21.5	21.5	20.5	18.0	14.5	13.5
22	10.5	7.5	11.5	9.5	19.5	18.0	21.5	21.5	20.0	18.0	14.5	13.5
23	10.0	8.5	12.5	10.5	19.5	18.0	21.5	21.5	20.5	17.5	14.0	13.5
24	10.0	8.5	13.0	10.0	18.0	17.0	21.5	21.5	20.5	18.0	13.5	13.0
25	9.5	8.5	13.5	11.0	18.5	17.5	21.5	21.5	21.0	18.0	13.5	12.5
26	10.5	6.0	15.5	12.0	19.5	17.5	22.0	22.0	21.0	18.5	13.0	12.0
27	12.5	9.5	17.0	14.0	20.0	8.5	22.0	22.0	22.0	19.0	13.0	11.0
28	12.0	10.0	17.5	15.0	20.0	19.5	22.0	21.5	22.0	19.0	12.5	11.0
29	10.0	8.0	17.5	15.5	20.0	19.5	22.0	22.0	22.0	19.0	13.0	11.0
30	9.5	7.0	17.0	15.0	20.0	19.5	22.0	22.0	21.0	18.5	13.5	12.0
31	---	---	16.5	14.5	---	---	22.0	22.0	20.0	18.0	---	---
MONTH	12.5	6.0	17.5	8.0	20.5	8.5	22.0	19.5	26.5	16.0	20.5	11.0

14321000 UMPQUA RIVER NEAR ELKTON, OREG.

LOCATION.—Lat 43°35'10", long 123°33'30", in NW¼ sec.8, T.23 S., R.7 W., Douglas County, on right bank 3.5 mi (5.6 km) south of Elkton, 1.9 mi (3.1 km) upstream from Mehl Creek, and at mile 56.9 (91.6 km).

DRAINAGE AREA.—3,683 mi² (9,539 km²).

PERIOD OF RECORD.—Chemical analyses: December 1965 to September 1972.
Water temperatures: April 1971 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 26.5°C July 17, Aug. 7-9; minimum. 3.0°C Jan. 5-8, Jan. 31 to Feb. 3.

Period of record:
Water temperatures: Maximum 30.0°C July 14, 1971; minimum, 3.0°C Jan. 5-8. Jan. 31 to Feb. 3, 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
12...	1400	20	20	7.6	2.6	5.0	1.0	41	0	3.3	3.6	.3
JAN.												
18...	37300	16	30	7.1	2.6	3.8	.9	40	0	3.7	4.9	.1
FEB.												
18...	31000	15	30	5.7	1.5	3.1	.5	26	0	3.0	2.8	.0
APR.												
17...	13400	17	60	7.1	2.8	4.3	.7	36	0	6.4	3.2	.0
MAY												
16...	6700	18	90	7.7	2.2	3.2	.8	33	0	3.5	1.6	.0
JUNE												
29...	2500	20	130	6.9	2.3	7.8	1.3	42	0	4.1	4.4	.0
AUG.												
08...	1100	20	10	5.7	2.2	5.1	1.2	40	0	4.5	2.6	.2

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	TEMPER-ATURE (DEG C)	PH (UNITS)
OCT.												
12...	.11	.06	64	.09	242	30	0	80	.4	26	15.0	7.1
JAN.												
18...	.14	.12	60	.08	6040	28	0	70	.3	22	6.5	7.0
FEB.												
18...	.04	.28	46	.06	3850	20	0	50	.3	24	8.0	6.8
APR.												
17...	.00	.10	59	.08	2140	29	0	69	.3	24	9.0	7.2
MAY												
16...	.04	.04	54	.07	977	28	1	61	.3	19	16.0	7.1
JUNE												
29...	.04	.04	68	.09	459	27	0	79	.7	37	21.0	7.6
AUG.												
08...	.01	.06	61	.08	181	23	0	74	.5	31	--	7.7

14321000 UMPQUA RIVER NEAR ELKTON, OREG.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

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

14324500 WEST FORK MILLICOMA RIVER NEAR ALLEGANY, OREG.

LOCATION.--Lat 43°28'35", long 124°03'20", in SW¼NW¼ sec.19, T.24 S., R.11 W., Coos County, at gaging station on left bank at highway bridge, 40 ft (12 m) upstream from Daggett Creek, 3.8 mi (6.1 km) north of Allegany, and at mile 6.82 (10.97 km).

DRAINAGE AREA.--46.9 mi² (121.5 km²).

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
DEC.												
20...	233	10	20	3.1	.8	4.1	1.0	12	0	1.8	7.4	.0
JAN.												
31...	160	9.9	50	3.3	.6	3.2	.5	16	0	2.0	5.2	.0
FEB.												
02...	4310	8.6	30	4.8	.5	3.0	.5	8	0	3.0	8.1	.0
APR.												
17...	204	8.6	20	2.6	.6	3.8	.5	12	0	2.4	5.1	.0
MAY												
30...	31	7.8	60	7.1	1.1	4.0	.7	16	0	3.7	8.0	.0
JULY												
13...	9.8	6.8	70	4.0	1.2	5.1	.8	18	0	2.9	5.0	.2
AUG.												
29...	6.4	4.7	120	6.7	1.5	5.6	1.1	23	0	11	5.9	.1

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	TEMPER-ATURE (DEG C)	PH (UNITS)
DEC.											
20...	.65	37	.05	23.3	11	1	42	.5	42	6.7	7.0
JAN.											
31...	.55	35	.05	15.1	11	0	37	.4	38	6.0	7.2
FEB.											
02...	.44	34	.05	396	14	7	31	.3	31	8.5	7.4
APR.											
17...	.47	32	.04	17.6	9	0	35	.6	46	8.0	6.8
MAY											
30...	.32	42	.06	3.52	22	9	43	.4	27	20.0	8.1
JULY											
13...	.04	35	.05	.93	15	0	50	.6	41	22.0	7.6
AUG.											
29...	.00	48	.07	.83	23	4	56	.5	33	21.0	7.7

ANALYSES OF ADDITIONAL SAMPLES

DATE	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)
OCT.				
03...	69	12.0	5	0
17...	28	10.0	0	1
24...	145	9.0	0	0
31...	202	7.0	5	0
NOV.				
07...	211	6.0	5	1
14...	1290	8.0	5	1
21...	135	8.0	0	0
DEC.				
06...	1570	8.0	5	1
12...	1490	8.0	5	1
19...	322	7.0	0	0
26...	626	6.0	0	2
JAN.				
06...	155	6.0	0	0
09...	--	7.0	5	0
16...	322	6.0	5	0
22...	1520	8.0	5	2
30...	250	3.0	5	0
FEB.				
06...	208	7.0	5	0
13...	1145	8.0	10	4
20...	416	8.0	5	1
28...	1560	9.0	5	3
MAR.				
05...	658	10.0	10	3
11...	682	10.0	10	1
26...	271	--	5	0
APR.				
09...	642	8.0	5	1
12...	155	10.0	5	1
16...	259	9.0	5	1
23...	155	9.0	5	1
MAY				
02...	182	14.0	0	2
07...	110	13.0	0	2

14324500 WEST FORK MILLICOMA RIVER NEAR ALLEGANY, OREG.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972--Continued

DATE	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)
ANALYSES OF ADDITIONAL SAMPLES				
MAY				
21...	73	13.0	5	1
29...	--	20.0	5	2
JUNE				
11...	46	14.0	5	2
19...	25	23.0	5	1
28...	19	23.0	5	2
JULY				
12...	19	24.0	5	2
22...	9.4	22.0	5	2
30...	7.8	22.0	5	2
AUG.				
09...	6.1	23.0	10	2
16...	11	18.0	5	2
22...	8.6	20.0	5	3
SEP.				
05...	4.5	18.0	5	2
09...	6.4	18.0	5	5
15...	9.4	17.0	5	1

14324700 SOUTH FORK COQUILLE RIVER NEAR ILLAHE, OREG.

LOCATION.—Lat 42°43'30", long 124°00'40", in NW¼ sec.16, T.33 S., R.11 W., Coos County, in Siskiyou National Forest, on left bank, 1.0 mi (1.6 km) downstream from Lockhart Creek, and 7.0 mi (11.3 km) north of Illahe, and at mile 85.1 (136.9 km).

DRAINAGE AREA.—40.6 mi² (65.3 km²), at measuring section 1.2 mi (1.9 km) upstream from gage.

PERIOD OF RECORD.—Water temperatures: October 1970 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 23.5°C July 16, 17; minimum, 1.5°C Feb. 1-3.

Period of record:
Water temperatures: Maximum, 23.5°C July 16, 17, 1972; minimum, 0.5°C Jan. 13, 14, Feb. 27, 28, 1971.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.5	6.0	9.5	6.0	17.0	13.5	21.0	18.0	20.5	18.0	17.0	15.0
2	9.0	6.5	10.5	7.0	18.0	13.0	22.0	18.0	20.5	17.0	18.0	16.0
3	9.0	7.0	11.0	8.5	18.0	14.0	22.0	18.0	20.0	16.5	18.0	16.0
4	10.0	8.5	12.0	9.0	18.0	13.0	23.0	19.0	20.0	17.0	17.0	16.5
5	9.5	8.0	12.0	9.0	18.5	13.5	22.0	19.0	21.0	17.0	17.0	16.0
6	8.0	5.5	12.0	9.0	18.5	15.0	21.0	18.5	21.5	18.0	16.0	14.5
7	6.0	5.5	10.0	9.0	19.0	15.0	20.5	17.0	21.5	19.0	15.5	14.0
8	6.0	5.0	10.0	8.5	18.5	15.0	19.0	16.5	21.5	19.0	15.5	13.5
9	6.0	5.0	11.5	8.5	17.0	13.5	18.5	14.5	21.0	18.5	15.0	13.5
10	6.0	5.0	13.0	9.5	13.5	11.5	19.5	15.0	21.0	18.0	14.5	12.0
11	6.0	5.5	13.5	9.5	13.5	11.0	20.5	17.0	20.0	16.5	13.5	11.5
12	5.5	3.0	14.5	10.5	16.0	10.5	21.0	16.5	19.0	16.0	13.5	11.5
13	5.5	4.0	15.5	11.5	17.0	12.0	21.5	18.0	17.0	14.5	13.5	11.5
14	6.5	5.0	15.5	11.5	18.0	14.0	22.0	18.5	17.0	15.0	14.0	12.0
15	6.5	5.0	13.5	11.5	16.5	14.0	23.0	19.0	15.0	13.0	14.5	13.0
16	6.5	5.0	12.0	10.0	16.5	12.0	23.5	19.0	14.0	13.0	14.5	13.0
17	5.5	4.5	10.5	9.5	17.0	13.5	23.5	19.0	15.0	12.0	15.0	14.0
18	5.5	4.5	9.5	8.5	18.0	13.5	21.5	18.5	16.5	13.0	14.5	14.0
19	6.0	4.0	12.0	8.0	19.0	14.5	21.0	17.0	16.5	14.5	14.0	13.0
20	7.0	5.0	11.5	10.0	19.0	15.0	20.5	17.0	18.0	15.0	13.5	11.5
21	7.0	6.0	10.0	9.5	19.5	16.0	20.0	16.5	18.5	16.0	13.0	12.0
22	6.5	4.5	10.0	9.5	18.5	15.0	20.5	16.5	18.0	15.0	12.0	10.5
23	6.5	6.0	13.0	9.0	17.0	15.0	20.0	17.0	18.0	15.0	11.5	11.0
24	6.0	5.0	13.5	9.5	17.0	13.5	20.0	17.0	18.0	15.0	11.5	10.5
25	6.0	5.0	14.5	10.0	17.0	14.5	20.0	17.0	18.0	15.0	11.0	9.5
26	8.0	5.0	16.0	10.5	18.5	14.0	20.0	17.0	19.0	15.5	11.0	10.0
27	9.0	6.0	18.0	12.0	20.0	15.0	20.5	16.5	19.5	16.5	10.5	8.5
28	8.5	5.0	18.5	14.0	20.5	16.5	20.5	17.0	19.5	17.0	10.0	8.5
29	6.5	4.5	18.5	14.0	21.0	17.0	21.0	18.0	19.5	16.5	11.5	9.0
30	8.0	5.0	18.0	13.5	21.0	17.0	21.0	18.0	18.5	16.0	12.0	10.0
31	---	---	17.0	14.0	---	---	21.0	18.0	17.0	15.0	---	---
MONTH	10.0	3.0	18.5	6.0	21.0	10.5	23.5	14.5	21.5	12.0	18.0	8.5

14330000 ROGUE RIVER BELOW PROSPECT, OREG.

LOCATION.—Lat 42°43'50", long 122°20'55", in SE¼NW¼ sec.6, T.33 S., R.3 E., Jackson County, temperature recorder at gaging station on right bank 500 ft (152 m) downstream from Prospect No. 1 powerplant, 2.0 mi (3.2 km) southwest of Prospect, 2.1 mi (3.4 km) upstream from South Fork Rogue River, and at mile 169.4 (272.6 km).

DRAINAGE AREA.—379 mi² (982 km²).

PERIOD OF RECORD.—Water temperatures: October 1968 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 14.5°C July 16-20; minimum, 3.0°C Jan. 28, Mar. 2, 7, 8.

Period of record:
Water temperatures: Maximum, 15.0°C July 5, 1970; minimum, freezing point Jan. 1, 2, 4, 5, 1970, Mar. 1, 1971.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	6.0	5.0	6.0	4.5	5.0	3.5
2	---	---	---	---	---	---	6.5	3.5	6.5	6.0	4.5	3.0
3	---	---	---	---	---	---	6.0	4.0	7.0	6.5	4.5	4.0
4	---	---	---	---	---	---	6.0	3.5	8.0	6.5	5.0	4.0
5	---	---	---	---	---	---	6.0	4.0	8.0	6.0	5.5	4.5
6	---	---	---	---	---	---	6.5	6.0	8.0	5.0	5.0	3.5
7	---	---	---	---	---	---	6.5	6.0	7.0	4.5	5.0	3.0
8	---	---	---	---	---	---	6.5	6.5	6.5	5.0	5.0	3.0
9	---	---	---	---	---	---	6.5	6.5	6.5	5.0	5.5	4.0
10	---	---	---	---	---	---	6.5	6.0	6.5	4.5	6.0	4.5
11	---	---	---	---	---	---	6.0	6.0	7.0	6.5	6.0	4.5
12	9.5	7.0	---	---	---	---	6.5	6.0	7.0	6.5	6.0	5.5
13	9.5	8.0	---	---	---	---	6.5	4.0	7.0	6.5	5.5	4.0
14	9.5	7.0	---	---	---	---	6.0	3.5	7.0	6.5	6.0	4.5
15	8.5	8.0	---	---	---	---	6.0	3.5	6.0	6.0	6.0	4.0
16	8.0	5.5	---	---	---	---	6.5	6.0	6.5	6.0	6.0	3.5
17	---	---	---	---	6.0	4.5	6.5	6.0	6.0	4.0	6.0	4.0
18	---	---	---	---	6.5	5.0	6.5	6.0	6.5	5.0	6.0	5.5
19	---	---	6.0	3.5	7.0	5.5	6.5	6.0	6.5	4.5	6.0	4.5
20	---	---	6.0	5.5	7.0	6.5	7.0	6.5	6.5	5.5	6.0	4.5
21	---	---	---	---	7.0	6.0	7.0	6.5	6.5	6.5	6.5	4.5
22	---	---	---	---	7.0	6.5	7.0	6.5	6.0	5.0	6.5	6.0
23	---	---	---	---	7.0	6.5	7.0	5.5	5.0	4.5	6.5	4.5
24	---	---	---	---	7.0	5.0	6.5	5.0	5.5	4.5	6.5	6.0
25	---	---	---	---	6.5	6.5	5.5	3.5	5.5	4.5	6.0	4.5
26	---	---	---	---	6.5	4.5	6.0	4.0	5.5	5.0	5.0	4.5
27	---	---	---	---	6.0	4.5	6.5	3.5	5.5	5.0	5.0	3.5
28	---	---	---	---	5.0	4.0	6.0	3.0	5.5	4.0	5.5	4.5
29	---	---	---	---	6.0	5.0	6.0	4.5	5.5	4.5	5.5	4.0
30	---	---	---	---	6.0	4.0	6.0	4.0	---	---	6.0	4.0
31	---	---	---	---	6.5	3.5	6.5	3.5	---	---	6.0	5.0
)NTH	---	---	---	---	---	---	7.0	3.0	8.0	4.0	6.5	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	5.5	7.0	4.5	10.5	6.5	13.5	10.5	13.5	10.5	11.0	8.5
2	7.0	5.0	8.0	5.0	10.5	7.0	13.5	10.0	13.5	10.0	11.0	8.5
3	7.0	5.0	8.0	5.0	10.5	7.0	13.5	9.5	13.5	10.0	11.0	9.0
4	6.5	5.0	8.5	5.0	11.0	6.5	14.0	10.5	13.5	10.5	11.5	9.5
5	6.5	6.0	8.5	4.5	10.5	7.0	14.0	11.0	13.5	10.5	11.0	9.5
6	6.5	6.0	8.0	4.5	11.5	8.0	14.0	11.0	13.5	11.0	11.0	9.5
7	6.5	5.0	8.0	6.0	10.5	7.0	13.5	10.5	13.5	10.5	10.0	8.5
8	6.0	5.0	6.5	4.5	11.0	8.5	13.0	10.5	13.5	11.0	10.0	8.0
9	6.0	5.0	7.0	4.5	10.5	8.5	12.0	10.0	13.0	10.5	10.0	8.5
10	6.0	4.5	8.0	4.5	9.5	8.0	12.0	9.5	13.0	10.5	9.5	8.0
11	6.5	5.5	8.5	4.5	9.5	7.0	13.0	10.0	13.0	11.0	9.0	7.0
12	6.0	4.5	8.5	4.0	10.0	7.0	14.0	10.5	12.0	11.0	9.0	6.5
13	6.0	4.5	8.5	4.0	11.0	8.0	14.0	11.0	12.0	11.0	10.0	7.0
14	6.5	4.5	8.5	4.5	11.5	9.0	14.0	11.0	11.5	10.5	10.0	7.0
15	6.5	4.5	8.5	4.0	12.0	10.0	14.0	11.0	11.0	10.0	10.0	7.0
16	6.5	6.0	8.5	5.5	11.5	10.0	14.5	10.5	11.0	9.0	10.0	8.0
17	6.0	5.0	7.0	6.0	11.5	9.0	14.5	11.5	11.0	9.0	9.5	8.0
18	5.5	4.0	7.0	5.5	11.5	9.0	14.5	11.5	11.0	10.0	9.5	8.0
19	8.0	6.5	7.0	4.0	12.0	9.5	14.5	11.0	11.0	9.5	9.5	8.5
20	6.5	6.0	6.0	4.5	12.0	9.5	14.5	10.0	11.5	10.0	9.5	8.0
21	7.0	6.0	6.0	5.0	12.0	9.5	12.0	9.5	11.5	10.0	9.0	8.5
22	8.5	5.5	7.0	6.0	12.0	9.5	13.0	9.5	11.5	9.5	9.0	7.0
23	7.0	5.0	8.5	5.5	11.5	10.0	13.0	10.0	11.5	9.5	8.5	8.0
24	6.5	6.0	8.5	6.0	11.5	9.0	13.0	10.5	12.0	9.5	8.5	7.0
25	6.5	5.0	9.5	6.0	11.5	9.5	13.0	10.0	12.0	9.5	8.0	6.5
26	7.0	4.5	9.5	5.5	11.5	9.0	13.0	9.5	11.5	9.5	8.0	7.0
27	8.0	4.5	10.0	5.5	11.5	9.0	13.0	9.5	11.5	9.0	8.0	6.0
28	8.5	5.5	10.0	5.0	13.5	10.0	13.0	10.0	11.5	9.5	8.0	6.0
29	6.0	4.0	10.0	6.0	13.5	10.5	13.0	10.5	11.5	10.0	7.0	4.5
30	6.0	4.0	10.0	4.5	13.5	10.5	13.0	10.5	11.5	9.0	8.0	5.0
31	---	---	10.5	6.5	---	---	13.5	10.5	11.0	9.0	---	---
NTH	8.5	4.0	10.5	4.0	13.5	6.5	14.5	9.5	13.5	9.0	11.5	4.5

14334700 SOUTH FORK ROGUE RIVER SOUTH OF PROSPECT, OREG.

LOCATION.—Lat 42°42'45", long 122°30'20", in NW¼SE¼ sec.7, T.33 S., R.3 E., Jackson County, temperature recorder at gaging station on right bank, 2.8 mi (4.5 km) southwest of Prospect, and at mile 2.4 (3.9 km).

DRAINAGE AREA.—246 mi² (396 km²).

PERIOD OF RECORD.—Water temperatures: October 1968 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 15.5°C Aug. 6-8; minimum, 1.5°C Jan. 27, 28, 31.

Period of record:
Water temperatures: Maximum, 18.0°C Aug. 12, 13, 1971; minimum, 1.5°C Jan. 27, 28, 31, 1972.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	5.5	8.0	6.5	9.5	8.0	11.5	10.5	14.5	10.5	12.0	9.0
2	7.0	6.5	8.5	7.0	9.5	8.0	11.5	10.5	14.0	10.5	12.0	9.5
3	7.0	6.5	9.0	8.0	9.0	8.0	11.5	10.5	14.5	10.5	12.0	9.5
4	8.0	7.0	9.5	8.5	9.0	7.0	11.5	10.5	14.5	11.0	12.0	10.0
5	8.0	8.0	9.5	8.5	9.5	8.0	11.5	10.5	15.0	11.0	11.5	10.0
6	8.0	8.0	9.0	8.0	9.5	8.5	12.0	10.5	15.5	11.5	11.5	9.0
7	8.0	6.5	9.0	8.0	9.0	8.0	11.5	10.0	15.5	11.5	11.0	9.0
8	6.5	6.5	8.0	6.5	8.5	7.0	11.5	10.0	15.5	11.5	11.0	9.0
9	6.5	6.0	8.0	6.5	8.5	8.5	10.5	9.5	14.0	11.0	11.0	9.5
10	6.0	5.5	8.5	6.5	8.5	7.0	10.0	8.5	14.0	11.0	11.0	8.0
11	6.0	6.0	8.5	6.5	8.5	7.0	11.0	9.0	13.5	10.5	10.0	7.0
12	6.0	5.5	9.0	7.0	9.5	7.0	11.5	10.0	13.0	10.0	9.5	7.0
13	5.5	5.5	9.0	8.0	10.0	8.5	11.5	10.0	13.0	9.0	9.5	7.0
14	6.5	5.5	9.5	8.5	10.0	9.5	12.0	10.5	12.0	9.0	11.0	8.0
15	6.5	6.0	9.5	8.0	10.0	9.0	12.0	11.0	11.0	9.5	11.0	9.0
16	6.5	6.5	8.5	7.0	10.0	9.0	13.0	11.0	10.5	9.0	11.0	9.0
17	6.5	5.5	8.0	7.0	10.0	8.5	13.5	11.5	11.0	9.0	11.0	9.5
18	5.5	5.0	7.0	7.0	10.0	8.5	14.5	11.0	11.0	9.0	11.0	9.5
19	6.0	5.0	7.0	6.5	10.0	9.0	14.0	10.5	11.0	9.0	11.0	10.0
20	6.5	5.5	7.0	7.0	10.5	9.0	14.0	10.0	11.0	9.5	10.5	8.5
21	6.5	6.5	7.0	7.0	10.5	9.0	13.0	9.5	12.0	9.5	10.0	9.0
22	6.5	5.5	8.0	7.0	10.5	9.0	13.5	9.5	12.0	9.5	9.0	8.5
23	6.5	6.0	9.0	8.0	9.5	9.0	14.0	10.0	12.0	9.0	9.0	8.5
24	6.5	6.5	9.0	7.0	9.5	8.5	14.0	11.0	12.0	9.0	8.5	8.0
25	6.5	6.0	9.5	8.0	9.5	8.5	14.0	10.5	12.0	9.0	8.5	6.5
26	7.0	5.5	10.0	8.5	10.0	8.5	14.0	10.5	13.0	9.5	7.0	6.5
27	8.0	6.5	10.0	9.0	10.5	9.5	14.0	10.5	13.0	10.0	8.0	6.5
28	8.0	7.0	10.0	8.5	11.5	10.0	14.5	11.0	13.0	10.0	8.0	6.0
29	7.0	5.5	10.0	8.5	11.5	10.5	14.5	11.0	13.0	10.0	8.5	6.0
30	6.5	5.5	9.5	8.5	11.5	10.5	15.0	11.0	13.0	9.5	9.0	6.5
31	---	---	9.5	8.5	---	---	15.0	11.0	12.0	9.0	---	---
MONTH	8.0	5.0	10.0	6.5	11.5	7.0	15.0	8.5	15.5	9.0	12.0	6.0

14337500 BIG BUTTE CREEK NEAR MCLEOD, OREG.

LOCATION.--Lat 42°39'05", long 122°41'25", in NE¼NW¼ sec.3, T.34 S., R.1 E., Jackson County, temperature recorder at gaging station on right bank, 225 ft (69 m) upstream from county road bridge, 0.9 mi (1.4 km) south of McLeod, and at mile 0.64 (1.03 km).

DRAINAGE AREA.--245 mi^2 (394 km^2).

PERIOD OF RECORD.--Water temperatures: August 1970 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 23.0°C July 16, Aug. 5; minimum, freezing point Feb. 2.

Period of record:
Water temperatures: Maximum, 23.0°C July 16, Aug. 5, 1972; minimum, freezing point Feb. 28 to Mar. 2, 1971, Feb. 2, 1972.

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	7.0	---	---	5.5	4.5	4.0	3.5	1.0	0.5	4.0	2.0
2	11.0	7.0	7.0	5.0	5.5	4.5	4.5	3.5	1.0	0.0	5.5	3.5
3	12.0	8.0	7.0	4.5	4.5	4.0	3.5	1.5	3.5	1.5	6.5	5.0
4	13.0	9.0	6.5	4.5	4.5	4.0	2.0	0.5	4.5	3.0	6.0	5.0
5	13.5	9.0	7.0	5.0	5.0	3.5	3.5	1.5	5.5	4.0	8.0	5.5
6	12.0	9.5	6.0	3.0	5.5	5.0	4.0	2.0	5.5	4.0	8.0	5.5
7	12.0	9.5	7.0	4.5	5.0	4.5	4.5	3.5	5.0	4.0	8.0	4.5
8	12.0	9.5	6.5	5.0	5.0	4.5	4.5	4.0	5.5	4.0	8.5	4.5
9	12.0	9.5	7.0	5.5	5.0	4.5	5.5	4.5	5.0	3.0	8.5	6.5
10	12.0	9.5	9.0	7.0	5.5	4.5	5.0	4.0	5.0	3.0	7.0	6.0
11	12.0	9.5	9.0	8.0	5.5	5.0	4.5	4.5	5.0	3.5	9.0	6.5
12	12.0	9.5	9.0	7.0	5.0	4.5	4.5	3.5	5.5	4.0	8.5	7.0
13	11.5	9.5	8.5	7.0	4.5	3.5	4.5	3.5	6.5	5.5	9.0	8.0
14	10.5	8.5	8.0	6.0	4.0	3.0	4.5	4.5	5.0	4.5	9.0	6.0
15	9.0	7.0	6.5	5.0	3.5	2.0	4.5	3.5	5.5	4.5	9.5	7.0
16	9.0	6.0	6.0	4.5	4.0	2.0	4.5	4.0	5.5	4.5	9.5	6.5
17	7.0	5.0	5.5	4.0	4.5	4.0	4.0	4.0	6.5	5.0	9.5	7.0
18	9.0	6.5	6.0	4.5	4.5	4.5	4.5	4.0	5.0	3.5	9.0	7.0
19	9.0	8.5	6.0	4.0	6.0	4.5	4.5	4.0	6.0	4.5	8.0	6.0
20	10.0	8.0	8.0	5.5	6.0	5.5	4.5	4.0	6.0	4.5	8.5	5.5
21	8.5	6.0	8.0	6.0	6.0	5.0	4.5	4.0	5.5	3.5	9.5	6.5
22	10.0	8.5	9.0	7.0	5.5	5.5	5.5	4.5	5.5	4.5	9.0	6.5
23	9.5	9.0	7.0	5.5	5.5	4.5	5.5	4.5	4.5	2.0	9.0	6.0
24	9.0	8.0	8.5	7.0	5.5	4.5	4.5	3.5	4.5	3.0	8.5	7.0
25	9.0	5.5	8.0	7.0	4.5	3.0	4.5	3.5	4.5	3.0	6.0	5.0
26	9.0	7.0	8.0	6.5	3.5	2.0	3.5	3.0	6.0	4.0	6.0	4.5
27	8.0	6.0	7.0	6.5	4.0	2.0	3.5	2.0	6.0	5.0	7.0	4.5
28	6.0	3.5	6.5	5.5	3.0	1.5	3.5	2.0	6.5	5.0	---	---
29	5.0	3.5	6.5	5.5	4.0	3.0	2.0	1.0	5.5	4.0	8.0	5.5
30	5.5	4.5	6.5	5.5	4.5	4.0	2.0	1.0	---	---	9.0	4.5
31	7.0	5.5	---	---	4.0	3.5	3.0	1.0	---	---	8.0	5.5
MONTH	13.5	3.5	9.0	3.0	6.0	1.5	5.5	0.5	6.5	0.0	9.5	2.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	7.0	13.0	7.0	17.0	11.5	19.0	13.5	21.0	15.0	18.5	13.5
2	10.5	7.0	13.5	8.5	18.0	12.0	19.0	13.0	21.5	15.0	19.0	14.0
3	10.0	7.0	14.5	9.0	18.5	13.0	19.5	13.5	21.5	15.5	19.0	14.0
4	11.5	9.0	15.0	9.5	18.0	11.5	20.5	14.5	22.0	16.0	16.5	15.0
5	10.5	9.5	14.5	10.0	19.0	13.0	21.0	15.0	23.0	16.5	17.0	14.0
6	10.0	8.5	14.5	10.0	18.5	14.0	21.0	15.5	22.0	16.0	16.0	11.5
7	9.0	6.5	12.0	9.0	17.0	13.5	20.0	14.0	20.5	14.5	16.0	11.0
8	9.5	6.0	10.5	7.0	16.5	13.5	18.5	13.5	19.0	14.0	16.0	11.0
9	7.0	5.0	12.0	8.0	14.0	11.5	21.0	15.5	19.5	14.0	15.5	12.0
10	8.5	5.0	14.0	8.5	13.0	10.0	21.0	15.5	19.5	13.0	14.0	10.0
11	8.0	6.5	14.5	9.0	15.0	10.0	20.5	15.0	20.5	14.0	13.5	9.0
12	7.0	5.5	15.5	10.0	16.5	10.0	20.5	14.5	19.0	14.5	14.0	9.0
13	7.0	4.5	16.0	11.0	18.0	11.0	21.0	15.0	18.5	13.5	14.5	9.0
14	9.5	5.0	16.5	11.5	18.5	13.0	21.5	15.5	16.5	13.5	14.5	9.5
15	10.0	6.0	15.5	11.0	18.5	13.5	22.0	16.0	16.5	13.5	14.5	10.0
16	9.5	6.5	13.5	10.0	17.0	13.0	23.0	16.0	15.0	13.0	15.0	10.0
17	8.0	5.0	11.0	9.5	18.0	11.5	22.0	16.0	17.0	11.5	15.0	10.5
18	8.5	4.0	11.5	9.0	18.5	12.0	21.0	16.0	15.5	12.0	14.5	10.5
19	9.0	4.5	11.5	8.0	18.5	13.0	20.0	14.0	17.0	13.0	14.0	11.0
20	10.0	6.0	10.5	9.0	16.0	11.5	19.5	13.5	18.0	13.5	11.0	7.0
21	10.5	8.5	9.5	8.5	17.0	12.0	19.5	13.5	19.0	13.5	10.0	8.5
22	10.5	6.0	11.0	9.0	18.0	12.0	19.5	13.5	19.0	14.0	12.0	8.5
23	10.0	7.0	14.5	9.5	17.0	13.0	19.0	13.5	18.5	13.0	10.5	9.0
24	9.0	7.0	14.5	8.5	17.0	11.5	18.5	14.5	18.5	13.0	10.5	8.5
25	10.0	7.0	14.5	9.5	17.0	11.5	18.5	14.0	19.0	13.5	9.5	8.0
26	11.5	6.5	16.0	10.0	18.0	11.5	18.5	13.5	19.5	14.0	9.5	8.0
27	13.0	8.5	17.0	11.5	18.0	13.0	19.0	13.5	19.5	14.0	10.0	6.5
28	11.5	8.0	18.5	13.0	18.5	14.0	20.0	14.0	19.5	14.5	10.5	6.5
29	10.5	6.0	18.5	13.5	19.5	14.0	21.0	14.5	19.5	14.5	11.5	7.0
30	11.0	5.5	18.5	12.0	19.5	14.5	21.0	14.5	19.0	14.0	12.0	8.0
31	---	---	18.5	12.0	---	---	21.0	15.0	18.5	13.5	---	---
MONTH	13.0	4.0	18.5	7.0	19.5	10.0	23.0	13.0	23.0	11.5	19.0	6.5

14337600 ROGUE RIVER NEAR MCLEOD, OREG.

LOCATION.—Lat 42°39'20", long 122°42'50", in SW¼ sec.33, T.33 S., R.1 E., Jackson County, temperature recorder at gaging station on left bank at Obstinate J Ranch, 1.3 mi (2.1 km) downstream from Butte Creek, 1.6 mi (2.6 km) southwest of McLeod, and at mile 154.0 (247.7 km).

DRAINAGE AREA.—938 mi² (2,429 km²).

PERIOD OF RECORD.—Water temperatures: August 1970 to September 1972.

EXTREMES.—1971-72:
Water temperatures: Maximum, 13.5°C July 18; minimum, 1.5°C Jan. 4, 5.

Period of record:
Water temperatures: Maximum, 16.0°C Aug. 13, 14, 1971; minimum, 0.5°C Jan. 3-5, 14; 15, 1971.

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	5.5	4.5	4.0	4.5	4.0	3.0	3.0	3.5	3.0	4.0	3.5
2	6.0	5.5	4.5	4.0	4.0	4.0	3.0	3.0	3.5	2.0	3.5	2.0
3	6.5	5.5	4.5	4.0	4.0	4.0	3.0	2.0	3.5	3.0	3.5	3.0
4	7.0	6.0	4.0	3.5	4.0	3.5	2.0	1.5	3.5	3.0	4.0	3.5
5	7.0	6.0	4.0	3.5	4.0	3.5	2.0	1.5	4.0	3.5	4.5	4.0
6	8.0	7.0	4.0	3.0	4.5	4.0	2.0	2.0	4.5	4.0	4.5	4.0
7	7.0	6.5	4.0	3.5	4.5	4.5	3.0	2.0	4.5	4.0	4.5	4.0
8	8.0	6.5	4.0	4.0	4.5	4.0	3.0	3.0	4.5	4.0	4.5	4.0
9	8.0	6.5	4.0	4.0	4.5	4.0	3.5	3.0	4.5	4.0	5.0	4.5
10	8.0	6.5	5.0	4.0	4.5	3.5	3.5	3.5	4.5	4.0	5.0	4.5
11	8.0	7.0	5.0	5.0	3.5	3.5	3.5	3.5	4.0	3.5	5.0	4.5
12	8.0	6.5	5.0	5.0	3.5	3.5	3.5	3.5	4.0	4.0	5.0	5.0
13	8.0	6.5	5.0	5.0	3.5	3.5	3.5	3.5	4.0	3.5	5.0	4.5
14	7.0	6.5	5.0	4.5	3.5	3.5	3.5	3.5	4.0	4.0	5.0	4.5
15	6.5	6.0	4.5	4.0	3.5	3.0	3.5	3.0	4.0	3.5	5.0	4.5
16	5.5	4.5	4.0	3.5	3.0	3.0	3.0	3.0	4.0	4.0	5.5	4.5
17	4.5	4.0	3.5	3.5	3.5	3.0	3.5	3.0	4.0	4.0	5.5	4.5
18	4.5	4.0	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	5.5	5.0
19	5.0	4.5	4.0	3.5	3.5	3.5	4.5	3.5	3.5	3.5	5.5	4.5
20	5.5	5.0	4.5	4.0	3.5	3.5	4.5	4.5	4.0	3.5	5.5	4.5
21	5.0	4.5	4.5	4.5	3.5	3.5	4.5	4.0	4.0	3.5	5.5	5.0
22	5.0	4.5	5.0	4.5	4.0	3.5	4.0	4.0	4.0	4.0	5.5	5.5
23	5.5	5.0	5.0	4.5	4.0	3.5	4.0	3.5	4.0	3.5	5.5	5.0
24	5.5	5.0	5.0	4.5	4.0	3.5	4.5	3.5	4.0	3.5	5.5	5.0
25	5.0	3.5	5.0	5.0	4.0	3.5	4.5	4.5	4.0	3.5	5.5	5.0
26	4.0	4.0	5.0	4.5	3.5	3.0	4.5	4.5	4.0	3.5	5.0	4.5
27	4.0	4.0	5.0	4.5	3.0	2.0	4.5	4.0	4.0	4.0	4.5	4.0
28	4.0	3.0	5.0	4.5	2.0	2.0	4.0	4.0	4.5	4.0	4.5	4.0
29	3.5	2.0	5.0	4.5	2.0	2.0	4.0	3.5	4.5	4.0	4.5	3.5
30	3.5	3.5	4.5	4.5	3.0	2.0	3.5	3.0	---	---	4.5	3.5
31	4.0	3.5	---	---	3.0	3.0	3.5	3.0	---	---	4.5	4.0
MONTH	8.0	2.0	5.0	3.0	4.5	2.0	4.5	1.5	4.5	2.0	5.5	2.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5.0	4.5	6.5	6.0	9.5	9.0	12.0	11.0	11.5	11.0	11.0	10.0
2	5.5	4.5	7.0	6.0	9.5	9.0	12.0	11.0	11.5	10.5	11.0	10.0
3	5.5	5.0	7.0	6.5	9.5	9.0	12.0	11.0	11.5	10.5	11.0	10.0
4	5.5	5.0	8.0	6.5	10.0	9.0	12.0	11.0	11.5	10.5	10.5	10.0
5	6.0	5.5	8.0	6.5	10.0	9.0	12.0	11.0	11.5	11.0	10.0	9.5
6	6.0	6.0	8.0	6.5	10.0	9.5	13.0	11.5	12.0	11.0	10.5	9.5
7	6.0	5.0	7.0	6.5	10.0	9.5	13.0	11.5	12.0	11.0	10.0	9.0
8	5.5	5.0	6.5	6.0	10.0	9.5	12.0	11.0	12.0	11.5	9.5	9.0
9	5.5	4.5	6.5	5.5	10.0	9.5	11.5	11.0	12.0	11.0	9.5	9.0
10	5.0	4.5	6.5	6.0	9.5	9.0	11.5	10.5	12.0	11.0	9.5	8.5
11	5.0	5.0	6.5	6.0	9.0	8.5	11.5	10.5	12.0	11.0	9.0	8.0
12	5.0	5.0	7.0	6.0	9.5	8.5	11.5	11.0	12.0	11.0	8.5	7.0
13	5.0	4.5	7.0	6.5	10.0	9.0	12.0	11.0	11.5	10.5	8.5	7.0
14	5.0	4.0	8.0	6.5	10.5	9.5	12.0	11.0	11.0	10.5	8.5	7.0
15	5.5	4.5	8.0	6.5	11.0	10.0	13.0	11.5	10.5	10.0	8.5	7.0
16	5.5	5.5	8.0	7.0	11.0	10.5	13.0	11.5	10.5	10.0	8.5	8.0
17	5.5	5.0	7.0	6.5	11.0	10.0	13.0	12.0	10.0	9.5	8.5	8.0
18	5.0	4.5	7.0	6.5	11.0	10.0	13.5	12.0	10.0	9.5	9.0	8.0
19	5.0	5.5	7.0	6.5	11.0	10.5	13.0	11.5	10.0	9.5	9.0	8.5
20	5.5	5.0	7.0	7.0	11.0	10.5	12.0	11.0	10.0	10.0	9.0	8.0
21	6.0	5.5	7.0	6.5	11.5	10.5	11.5	10.5	10.5	10.0	9.0	8.0
22	6.0	5.0	7.0	6.5	11.0	10.5	11.5	10.5	10.5	10.0	8.0	7.0
23	6.0	5.5	8.0	7.0	11.0	10.5	11.5	10.5	11.0	10.0	8.5	8.0
24	6.0	6.0	8.0	7.0	11.0	10.0	12.0	11.0	11.0	10.0	8.0	7.0
25	6.0	5.5	8.0	7.0	11.0	10.0	12.0	11.0	11.0	10.0	8.0	6.5
26	6.0	5.0	8.5	7.0	10.5	9.5	12.0	11.0	11.0	10.0	7.0	6.5
27	6.5	5.5	8.5	8.0	10.5	9.5	12.0	11.0	11.0	10.0	7.0	6.0
28	7.0	6.5	9.0	8.0	11.0	10.0	12.0	11.0	11.0	10.0	7.0	6.0
29	7.0	5.5	9.0	8.5	11.5	10.5	12.0	11.0	11.0	10.5	6.5	6.0
30	6.0	5.5	9.0	8.5	11.5	10.5	11.0	10.5	11.5	10.5	6.5	6.0
31	---	---	9.0	8.5	---	---	11.5	11.0	11.0	10.0	---	---
MONTH	7.0	4.0	9.0	5.5	11.5	8.5	13.5	10.5	12.0	9.5	11.0	6.0

14372300 ROGUE RIVER NEAR AGNESS, OREG.

LOCATION.--Lat 42°34'50", long 124°03'30", in NE¼NW¼ sec.6, T.35 S., R.11 W., Curry County, at gaging station on left bank, 0.8 mi (1.3 km) upstream from Shasta Costa Creek, 1.5 mi (2.4 km) north of Agness, 2.6 mi (4.2 km) upstream from Illinois River, and at mile 29.7 (47.8 km).

DRAINAGE AREA.--3,939 mi^2 (10,202 km^2).

PERIOD OF RECORD.--Chemical analyses: January 1966 to September 1972.
Water temperatures: October 1960 to September 1972.

EXTREMES.--1971-72:
Water temperatures: Maximum, 25.5°C July 18, Aug. 8-10; minimum recorded, 4.0°C Jan. 6-9, Feb. 3.

Period of record:
Water temperatures: Maximum, 26.5°C on several days in 1962; minimum, 1.0°C Jan. 22-25, 1962.

WATER QUALITY DATA, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
07...	1970	26	40	12	4.1	5.7	1.4	63	0	3.0	2.8	.1
DEC.												
22...	9780	19	60	10	3.9	3.9	.9	49	0	4.2	3.5	.1
JAN.												
24...	53900	17	40	7.8	2.9	3.0	.8	40	0	3.2	3.8	.0
MAR.												
01...	35300	19	30	8.9	3.2	2.7	.5	40	0	2.6	3.2	.1
APR.												
19...	1200	22	40	9.7	4.2	4.5	.9	55	0	3.3	3.0	.0
JUNE												
01...	6050	20	100	7.8	2.9	3.4	1.0	45	0	3.6	2.0	.1
JULY												
12...	2060	27	30	8.3	3.3	4.9	1.3	48	0	3.4	2.0	.2
AUG.												
19...	1600	25	110	9.5	3.3	6.0	1.2	55	0	4.7	3.3	.1

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	TEMPER-ATURE (DEG C)	PH (UNITS)
OCT.											
07...	.06	86	.12	457	47	0	116	.4	20	14.5	7.0
DEC.											
22...	.15	70	.10	1850	41	1	91	.3	17	6.0	7.3
JAN.											
24...	.11	59	.08	8590	31	0	71	.2	17	42.0	7.1
MAR.											
01...	.14	61	.08	5810	35	3	75	.2	14	4.5	7.3
APR.											
19...	.04	75	.10	243	41	0	95	.3	19	8.0	7.5
JUNE											
01...	.03	63	.09	1030	31	0	76	.3	18	19.0	7.4
JULY											
12...	.00	74	.10	412	34	0	89	.4	23	21.0	7.6
AUG.											
19...	.02	80	.11	346	37	0	101	.4	25	21.1	7.9

14372300 ROGUE RIVER NEAR AGNESS, OREG.--Continued

WATER TEMPERATURE (DEG. C) , WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	12.0	8.0	7.0	8.0	8.0	5.5	5.5	---	---	7.0	6.5
2	13.0	12.0	8.0	7.0	8.0	7.0	5.5	5.5	---	---	6.5	6.5
3	13.5	12.0	8.0	7.0	7.0	7.0	5.5	5.5	4.5	4.0	7.0	6.5
4	14.0	12.0	8.0	7.0	7.0	6.5	5.5	4.5	4.5	4.5	8.0	7.0
5	14.0	13.5	7.0	6.5	7.0	6.5	4.5	4.5	5.0	4.5	8.0	7.0
6	14.5	14.0	6.5	6.5	6.5	6.0	4.5	4.0	5.5	5.0	8.0	8.0
7	15.5	14.5	6.5	6.5	6.0	6.0	4.0	4.0	6.5	5.5	8.0	8.0
8	15.5	15.5	6.5	6.5	6.0	6.0	4.5	4.0	6.5	6.5	8.0	8.0
9	15.5	15.5	6.5	6.5	6.0	6.0	4.5	4.0	6.5	6.0	8.0	8.0
10	15.5	15.5	8.0	6.5	6.0	6.0	5.0	4.5	6.5	6.0	8.0	8.0
11	15.5	15.5	8.0	8.0	6.0	6.0	5.0	5.0	6.5	6.0	8.0	8.0
12	15.5	15.5	8.0	7.0	6.0	6.0	5.5	5.0	6.5	6.5	8.5	8.0
13	15.5	15.0	8.0	8.0	6.0	6.0	5.5	5.5	7.0	6.5	9.0	8.5
14	15.0	14.5	8.0	8.0	6.0	6.0	5.5	5.0	8.0	7.0	9.0	9.0
15	14.5	13.5	8.0	7.0	6.0	6.0	5.0	5.0	8.0	8.0	9.0	9.0
16	13.5	12.0	7.0	6.5	6.0	6.0	5.0	4.5	8.0	7.0	10.0	9.0
17	12.0	11.0	6.5	6.0	6.0	6.0	5.0	4.5	7.0	7.0	10.0	10.0
18	11.0	10.5	6.5	6.0	6.0	6.0	5.5	5.0	7.0	7.0	10.0	10.0
19	10.5	10.5	6.0	6.0	6.0	6.0	5.5	5.5	7.0	7.0	10.0	10.0
20	11.0	10.5	6.5	6.0	6.0	5.5	6.5	5.5	7.0	7.0	10.0	9.5
21	10.5	10.5	6.5	6.0	5.5	5.5	6.5	6.5	7.0	7.0	9.5	9.5
22	10.5	10.5	7.0	6.5	5.5	5.5	6.5	6.5	7.0	6.5	9.5	9.5
23	10.5	10.5	7.0	7.0	6.0	5.5	6.5	6.0	6.5	6.0	9.5	9.0
24	11.0	10.5	8.0	7.0	6.5	6.0	---	---	6.0	5.5	9.0	9.0
25	10.5	10.5	8.0	7.0	6.5	6.0	---	---	5.5	5.5	9.0	9.0
26	10.5	10.5	8.0	7.0	6.0	5.5	---	---	6.0	6.0	9.0	8.0
27	10.5	10.0	8.0	8.0	5.5	5.5	---	---	7.0	6.0	8.0	8.0
28	10.0	9.0	8.0	8.0	5.5	5.0	---	---	7.0	7.0	8.0	8.0
29	9.0	8.0	8.0	8.0	5.0	5.0	---	---	7.0	7.0	8.0	8.0
30	8.0	8.0	8.0	8.0	5.5	5.0	---	---	---	---	8.5	8.0
31	8.0	7.0	---	---	5.5	5.0	---	---	---	---	9.0	8.0
MONTH	15.5	7.0	8.0	6.0	8.0	5.0	---	---	8.0	4.0	10.0	6.5

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

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
MALHEUR AND HARNEY LAKES BASIN											
10395000 - EAST FORK SILVIES RIVER NR LAWEN,OREG. (LAT 43 25 35 LONG 118 48 03)											
MAR., 1972											
31...	36	70	29	8.2	18	4.9	160	0	12	2.7	.2
JUNE											
22...	31	40	50	16	59	8.8	349	0	32	8.3	.5
10395500 - WEST FORK SILVIES RIVER NR LAWEN,OREG. (LAT 43 223 00 LONG 118 50 00)											
MAR., 1972											
31...	36	100	29	7.9	26	5.5	165	0	17	3.4	.3
JUNE											
22...	30	60	46	13	37	2.0	258	0	34	3.3	.3
10401500 - DONNER UND BLITZEN RIVER NR VOLTAGE OREGON (LAT 43 15 04 LONG 118 51 23)											
MAR., 1972											
31...	29	110	11	4.8	9.2	1.9	73	0	4.0	2.1	.1
JUNE											
22...	24	150	16	6.9	11	1.3	102	0	8.7	1.2	.1
10401810 - MALHEUR LAKE ON WEST SIDE OF COLE IS. DIKE (LAT 43 16 40 LONG 118 47 30)											
MAR., 1972											
29...	27	130	18	8.8	43	5.6	177	0	12	8.6	.4
JUNE											
21...	7.1	100	46	25	78	12	457	0	15	15	.9
10401820 - MALHEUR LAKE ON EAST SIDE OF COLE IS.DIKE (LAT 43 16 35 LONG 118 47 20)											
MAR., 1972											
29...	27	80	11	17	450	50	921	83	160	63	1.1
JUNE											
21...	39	70	18	25	590	68	1410	113	190	84	1.3
10401830 - MALHEUR LAKE AT END OF COLE ISLAND DIKE (LAT 43 19 55 LONG 118 43 58)											
MAR., 1972											
29...	6.1	40	61	20	36	11	364	0	8.7	7.1	.6
JUNE											
21...	2.1	60	49	28	84	20	478	0	34	14	.8
10402000 - MALHEUR LAKE AT NARROWS NEAR BURNS, OREG. (LAT 43 16 30 LONG 118 57 45)											
MAR., 1972											
31...	19	50	36	16	36	9.1	266	0	13	7.7	.5
JUNE											
22...	13	110	48	21	41	8.9	354	0	7.6	5.2	.6
431910118492500 - MALHEUR LAKE(SITE NO.12) (LAT 43 19 10 LONG 118 49 25)											
MAR., 1972											
28...	14	30	31	8.7	14	3.5	177	0	4.1	2.8	.3
JUNE											
21...	1.7	30	45	13	24	4.9	262	0	7.8	4.0	.3
431920118470500 - MALHEUR LAKE(SITE NO. 14) (LAT 43 19 20 LONG 118 47 05)											
MAR., 1972											
28...	14	20	34	8.2	15	3.6	174	0	4.0	3.2	.3
432045118424000 - MALHEUR LAKE(SITE NO.9) (LAT 43 20 45 LONG 118 42 40)											
MAR., 1972											
28...	13	80	43	20	52	11	338	0	17	9.4	.6
JUNE											
21...	14	60	43	31	110	25	569	0	40	19	.8
432045118454500 - MALHEUR LAKE(SITE NO. 11) (LAT 43 20 45 LONG 118 45 45)											
MAR., 1972											
28...	29	100	35	13	35	8.7	237	0	19	6.4	.4
JUNE											
21...	1.5	40	45	17	43	9.6	313	0	20	6.6	.5
432115118435500 - MALHEUR LAKE(SITE NO. 13) (LAT 43 21 15 LONG 118 43 55)											
MAR., 1972											
28...	21	60	41	18	51	11	308	0	21	9.9	.5
JUNE											
21...	18	30	49	24	56	14	383	0	22	9.7	.7

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
				MALHEUR AND HARNEY LAKES BASIN						
10395000 - EAST FORK SILVIES RIVER NR LAWEN,OREG. (LAT 43 25 35 LONG 118 48 03)										
MAR., 1972										
31...	.01	--	--	--	--	110	0	190	279	7.6
JUNE										
22...	.00	1.9	1.9	.03	.23	190	0	377	593	8.0
10395500 - WEST FORK SILVIES RIVER NR LAWEN,OREG. (LAT 43 223 00 LONG 118 50 00)										
MAR., 1972										
31...	.00	--	--	--	--	100	0	206	296	7.6
JUNE										
22...	.03	.67	.70	.05	.12	170	0	293	458	7.4
10401500 - DONNER UND BLITZEN RIVER NR VOLTAGE OREGON (LAT 43 15 04 LONG 118 51 23)										
MAR., 1972										
31...	.07	--	--	--	--	47	0	98	124	7.5
JUNE										
22...	.05	.51	.56	.03	.12	68	0	120	170	7.6
10401810 - MALHEUR LAKE ON WEST SIDE OF COLE IS. DIKE (LAT 43 16 40 LONG 118 47 30)										
MAR., 1972										
29...	.00	--	--	--	--	81	0	211	304	7.6
JUNE										
21...	.00	1.7	1.7	.01	.15	220	0	424	713	8.3
10401820 - MALHEUR LAKE ON EAST SIDE OF COLE IS.DIKE (LAT 43 16 35 LONG 118 47 20)										
MAR., 1972										
29...	.00	--	--	--	--	97	0	1320	2040	8.7
JUNE										
21...	.00	3.0	3.0	.11	.36	150	0	1820	2640	8.8
10401830 - MALHEUR LAKE AT END OF COLE ISLAND DIKE (LAT 43 19 55 LONG 118 43 58)										
MAR., 1972										
29...	.01	.78	.79	--	.05	230	0	330	573	7.5
JUNE										
21...	.01	1.6	1.6	.01	.08	240	0	467	788	7.8
10402000 - MALHEUR LAKE AT NARROWS NEAR BURNS, OREG. (LAT 43 16 30 LONG 118 57 45)										
MAR., 1972										
31...	.02	--	--	--	--	160	0	268	442	7.6
JUNE										
22...	.01	.95	.96	.01	.05	210	0	320	555	7.6
431910118492500 - MALHEUR LAKE(SITE NO.12) (LAT 43 19 10 LONG 118 49 25)										
MAR., 1972										
28...	.00	.48	.48	--	.05	110	0	166	280	7.6
JUNE										
21...	.03	.86	.89	.00	.04	170	0	230	394	8.1
431920118470500 - MALHEUR LAKE(SITE NO. 14) (LAT 43 19 20 LONG 118 47 05)										
MAR., 1972										
28...	.00	--	--	--	--	120	0	168	282	7.6
432045118424000 - MALHEUR LAKE(SITE NO.9) (LAT 43 20 45 LONG 118 42 40)										
MAR., 1972										
28...	.01	--	--	--	.09	190	0	333	560	7.8
JUNE										
21...	.03	1.6	1.6	.02	.12	230	0	563	936	8.1
432045118454500 - MALHEUR LAKE(SITE NO. 11) (LAT 43 20 45 LONG 118 45 45)										
MAR., 1972										
28...	.00	--	--	--	--	140	0	263	416	7.6
JUNE										
21...	.00	1.1	1.1	.00	.02	180	0	297	513	8.1
432115118435500 - MALHEUR LAKE(SITE NO. 13) (LAT 43 21 15 LONG 118 43 55)										
MAR., 1972										
28...	.01	--	--	--	--	180	0	325	522	7.9
JUNE										
21...	.01	1.5	1.5	.00	.09	220	0	382	623	8.2

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BARIUM (BA) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MALHEUR AND HARNEY LAKES BASIN										
431910118492500 - MALHEUR LAKE(SITE NO.12) (LAT 43 19 10 LONG 118 49 25)										
MAR., 1972										
28...	0	0	0	0	0	0	7	3	3	20
432045118424000 - MALHEUR LAKE(SITE NO.9) (LAT 43 20 45 LONG 118 42 40)										
MAR., 1972										
28...	200	9	0	0	0	1	3	2	2	20

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
REAR CREEK BASIN												
14248700 - REAR CREEK NEAR SVENSEN, OREG. (LAT 46 06 48 LONG 123 37 55)												
NOV., 1971												
18...	18	27	80	5.6	1.9	5.4	1.7	27	0	3.8	4.5	.1
MAY , 1972												
04...	18	29	60	5.6	2.1	4.8	2.2	31	0	4.2	4.4	.1
14248810 - WATERWORKS CR. NR SVENSEN, OREG.-SITE NO.1 (LAT 46 06 17 LONG 123 35 52)												
NOV., 1971												
18...	1.5	25	680	6.1	1.9	5.0	1.2	24	0	12	4.8	.0
MAY , 1972												
04...	5.0	25	240	4.7	2.1	4.8	1.8	26	0	8.2	5.0	.1
14248830 - WATERWORKS CR. NR SVENSEN, OREG.-SITE NO.3 (LAT 46 06 55 LONG 123 37 35)												
NOV., 1971												
18...	6.9	29	130	6.8	3.1	5.5	1.7	30	0	14	4.3	.2
MAY , 1972												
04...	.98	28	100	6.6	2.8	4.5	2.5	28	0	13	4.3	.1

DATE	DIS-SOLVED ORTHO PHOS-PHATE (P04) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	PERCENT SODIUM	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	ALKA-LINITY AS CACO3 (MG/L)	TEMPER-ATURE (DEG C)	PH (UNITS)
14248700 - REAR CREEK NEAR SVENSEN, OREG. (LAT 46 06 48 LONG 123 37 55)											
NOV., 1971											
18...	--	64	.09	22	0	.5	33	68	22	6.0	7.4
MAY , 1972											
04...	.06	68	.09	23	0	.4	29	66	25	8.0	7.1
14248810 - WATERWORKS CR. NR SVENSEN, OREG.-SITE NO.1 (LAT 46 06 17 LONG 123 35 52)											
NOV., 1971											
18...	--	69	.09	23	3	.5	31	73	20	7.0	7.2
MAY , 1972											
04...	.12	65	.09	20	0	.5	32	69	21	12.0	7.2
14248830 - WATERWORKS CR. NR SVENSEN, OREG.-SITE NO.3 (LAT 46 06 55 LONG 123 37 35)											
NOV., 1971											
18...	--	80	.11	30	5	.4	27	98	25	7.0	7.3
MAY , 1972											
04...	.06	76	.10	28	5	.4	24	84	23	--	7.1

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
SANDY RIVER BASIN					
14138850 - BULL RUN R NR MULTNOMAH FALLS, OREG. (LAT 45 29 50 LONG 122 00 50)					
NOV., 1971					
11...	1300	5.5	513	9	12
DEC.					
14...	1230	1.5	450	3	3.6
21...	1200	3.0	575	5	7.8
JAN., 1972					
12...	1255	--	1520	9	37
19...	1350	--	3520	27	257
31...	1210	1.0	255	0	.00
FEB.					
17...	1335	3.5	3660	49	484
17...	1510	3.5	3800	26	267
MAR.					
03...	1230	3.0	1470	6	24
APR.					
19...	1500	--	294	2	1.6
JUNE					
06...	1350	6.0	394	2	2.1
AUG.					
18...	1500	11.0	56	2	.30
BEAR CREEK BASIN					
14248700 - BEAR CREEK NEAR SVENSEN, OREG. (LAT 46 06 48 LONG 123 37 55)					
MAY , 1972					
04...	1145	8.5	21	5	.28
14248810 - WATERWORKS CREEK NR SVENSEN OREGON SITE NO 1 (LAT 46 06 15 LONG 123 35 55)					
MAY , 1972					
04...	1330	12.5	.89	8	.02
14248830 - WATERWORKS CREEK NR SVENSEN OREGON SITE NO 3 (LAT 46 06 55 LONG 123 37 25)					
MAY , 1972					
04...	1230	13.0	5.1	8	.11
UMPQUA RIVER BASIN					
14310000 - COW CREEK NEAR RIDDLE, OREG. (LAT 42 55 25 LONG 123 25 40)					
OCT., 1971					
14...	1340	13.0	54	25	3.6
NOV.					
18...	1400	6.0	287	26	20
DEC.					
23...	1625	5.5	5100	93	1280
FEB., 1972					
03...	1400	3.5	954	9	23
MAR.					
10...	1225	9.0	1620	14	61
APR.					
17...	1535	8.5	1330	4	14
MAY					
31...	1530	20.5	183	3	1.5
JULY					
17...	1330	27.5	53	5	.72
14311200 - OLALLA CREEK NEAR TENMILE, OREG. (LAT 43 02 20 LONG 123 32 35)					
JAN., 1972					
10...	1050	5.5	152	46	19
MAR.					
22...	1000	10.0	65	7	1.2
14311500 - LOOKINGGLASS CREEK AT BROCKWAY, OREGON (LAT 43 07 50 LONG 123 27 50)					
JAN., 1972					
10...	1150	6.0	381	27	28
FEB.					
09...	1540	7.0	265	7	5.0
14...	1045	7.0	245	14	9.3
22...	1150	7.0	475	47	60
MAR.					
20...	1015	10.5	175	15	7.1
22...	1115	11.0	217	23	13
APR.					
04...	1105	14.0	125	6	2.0
07...	0955	9.0	554	121	181
12...	1030	6.5	1560	654	2760
MAY					
17...	0945	15.0	103	24	6.7
25...	1005	14.0	19	4	.21

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
			UMPQUA RIVER BASIN		
14312000 - SOUTH UMPQUA RIVER NEAR BROCKWAY, OREG. (LAT 43 08 00 LONG 123 23 50					
JAN., 1972					
13...	1545	5.0	1610	44	191
FEB.					
07...	1020	6.5	4400	20	238
14...	1110	6.5	6050	81	1320
22...	0845	6.5	5180	22	308
MAR.					
20...	1115	10.5	3860	11	115
22...	1145	10.0	3670	14	139
APR.					
04...	1130	13.5	2730	9	66
07...	1025	9.5	5520	48	715
12...	1125	9.5	5640	163	2480
MAY					
17...	1025	14.0	2000	11	59
SEP.					
24...	0950	18.0	91	23	5.7
14316700 - STEAMBOAT CREEK NEAR GLIDE, OREGON (LAT 43 21 00 LONG 122 43 40)					
OCT., 1971					
12...	1440	13.0	60	6	.97
NOV.					
17...	1100	5.0	411	19	21
DEC.					
15...	1600	4.0	790	22	47
FEB., 1972					
01...	1530	1.5	393	8	8.5
MAR.					
09...	1130	6.0	2260	7	43
APR.					
12...	1500	4.5	1070	2	5.8
MAY					
25...	1900	11.5	616	5	8.3
JULY					
18...	1410	24.0	83	4	.90
14319500 - NORTH UMPQUA R. AT WINCHESTER, OREG. (LAT 43 16 20 LONG 123 24 40)					
JAN., 1972					
10...	1400	5.5	4220	17	194
FEB.					
07...	1125	5.5	4960	9	121
14...	1230	6.0	10460	71	2010
22...	1050	--	7800	21	442
MAR.					
22...	1305	9.0	8500	45	1030
APR.					
04...	1235	--	4640	3	38
07...	1110	9.0	6960	23	432
12...	1230	8.5	6810	53	975
MAY					
17...	1110	10.5	5750	22	342
14320700 - CALAPOOYA CREEK NEAR OAKLAND, OREGON (LAT 43 24 10 LONG 123 21 45)					
DEC., 1971					
14...	1150	6.5	3480	291	2740
30...	1420	7.0	1550	68	285
FEB., 1972					
07...	1250	7.5	4750	23	295
14...	1340	6.5	1100	65	193
22...	1335	7.5	1070	102	295
MAR.					
20...	1410	11.0	406	36	39
22...	1335	10.5	720	251	488
APR.					
04...	1320	14.5	357	33	32
07...	1200	9.5	900	118	287
12...	1330	--	1560	182	767
MAY					
17...	1200	13.5	339	43	39
14321000 - UMPQUA RIVER NEAR ELKTON, OREG. (LAT 43 35 10 LONG 123 33 0)					
DEC., 1971					
14...	1050	6.0	24000	103	6680
31...	1030	6.5	31960	221	19100
31...	1100	6.5	32580	304	26700
31...	1120	6.5	33280	354	31800
JAN., 1972					
11...	1050	5.5	7160	19	367
FEB.					
07...	1350	8.0	24000	38	2460
14...	1425	8.0	16140	135	5890
23...	0900	6.5	17030	43	1980
MAR.					
21...	1410	13.0	10890	10	294
22...	1440	9.5	13220	15	535
APR.					
04...	1405	13.5	7600	6	123
07...	1250	9.5	12030	29	942
12...	1440	8.5	11760	25	794
MAY					
17...	1250	15.0	27600	7	522

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
UMPQUA RIVER BASIN					
14322000 - ELK CREEK NEAR DRAIN, OREG. (LAT 43 38 30 LONG 123 17 50)					
DEC., 1971					
14...	0935	6.5	1580	116	495
31...	0940	6.5	2940	166	1320
JAN., 1972					
11...	0920	6.5	1200	295	956
FEB.					
07...	1515	8.0	173	18	8.4
14...	0905	8.0	367	37	37
22...	1440	7.0	613	140	232
MAR.					
21...	1520	11.0	160	13	5.6
22...	1510	10.0	468	83	105
APR.					
04...	1445	14.5	142	11	4.2
07...	1400	9.5	623	63	106
12...	1540	8.0	1130	97	296
MAY					
17...	1400	14.5	183	56	28

INDEX

	Page
Balm Fork near Heppner	24
Bear Creek near Svensen	92,132,133
Big Butte Creek near McLeod	126
Blue River, below Tidbits Creek, near Blue River	52
at Blue River	54
Breitenbush River above Canyon Creek, near Detroit	67
Bull Run River near Multnomah Falls	133
Calapooia River, at Albany	64
at Holley	63
Calapooya Creek near Oakland	134
Clackamas River near Clackamas	84
Collection and examination of data	8
Columbia River, at Altoona, Wash.	91
at Kalama, Wash.	86
at Longview, Wash.	89
at Rainier	88
at Warrendale	38
at Wauna	90
near Columbia City	85
near The Dalles	36
Cooperation	2
Coquille River, South Fork, near Illahe	123
Cow Creek, near Riddle	133
Crater Lake near Crater Lake	17
Crooked River below Opal Springs, near Culver	32
Deer Creek near Salado	104
Definition of terms	2
Deschutes River, at Benham Falls, near Bend	30
at Moody, near Biggs	35
near Culver	31
near Madras	34
Donner und Blitzen River near Voltage	130
Downstream order and station number	7
Elk Creek near Drain	135
Fall Creek, below Winberry Creek, near Fall Creek	46
near Lowell	44
Flynn Creek near Salado	97
Hills Creek above Hills Creek Lake, near Oakridge	40
Introduction	1
Kalama River above Spencer Creek, near Kalama, Wash.	87
Lookingglass Creek near Brockway	133
Lookout Creek near Blue River	53
Malheur Lake	130
McKenzie River, near Coburg	56
near Vida	55
South Fork, above Cougar Lake, near Rainbow	50
near Rainbow	51
Metolius River near Grandview	33
Millicoma River, West Fork, near Allegany	121
Minam River at Minam	19
Needle Branch near Salado	94
Nestucca River near Beaver	93
Olalla Creek near Tenmile	133
Quartzville Creek near Cascadia	75
Rogue River, below Prospect	124
near Agness	128
near McLeod	127
South Fork, south of Prospect	125
Santiam River, at Jefferson	79
Middle, near Cascadia	73
North, at Niagara	69
below Boulder Creek, near Detroit	65
South, at Foster	76
at Waterloo	77
above Cascadia	70
below Cascadia	71
Sediment	10
Selective references	13
Silvies River, East Fork, near Lawen	130
West Fork, near Lawen	130
Solutes	10
Special networks and programs	7
Steamboat Creek near Glide	134
Siuslaw River near Mapleton	107
Temperature	10
Thomas Creek near Scio	78
Umatilla River, above Meacham Creek, near Gibbon	22
Umpqua River, near Elkton	119,134
North, at Winchester	118,134
South, at Days Creek	110
near Brockway	134
near Roseburg	111
Water-supply papers	13
Waterworks Creek, near Svensen (site no. 1)	132,133
near Svensen (site no. 3)	132,133
Willamette River, above Calapooia River, at Albany	62
at Harrisburg	57
at Salem	80
above St. Johns Bridge, at Portland	83
Coast Fork, at London	48
near Goshen	49
Middle Fork, above Salt Creek, near Oakridge	41
at Jasper	47
below North Fork, near Oakridge	42
near Dexter	43
near Oakridge	39
Willow Creek, at Heppner	25
at Ione	29
at Lexington	28
below Hinnton Creek, near Heppner	27
near Heppner	23
Winberry Creek near Lowell	45

U. S. DEPARTMENT OF THE INTERIOR
Geological Survey
P. O. Box 3202
830 N. E. Holladay Street
Portland, Oregon 97208

POSTAGE AND
U.S. DEPARTMENT O
INT 413