

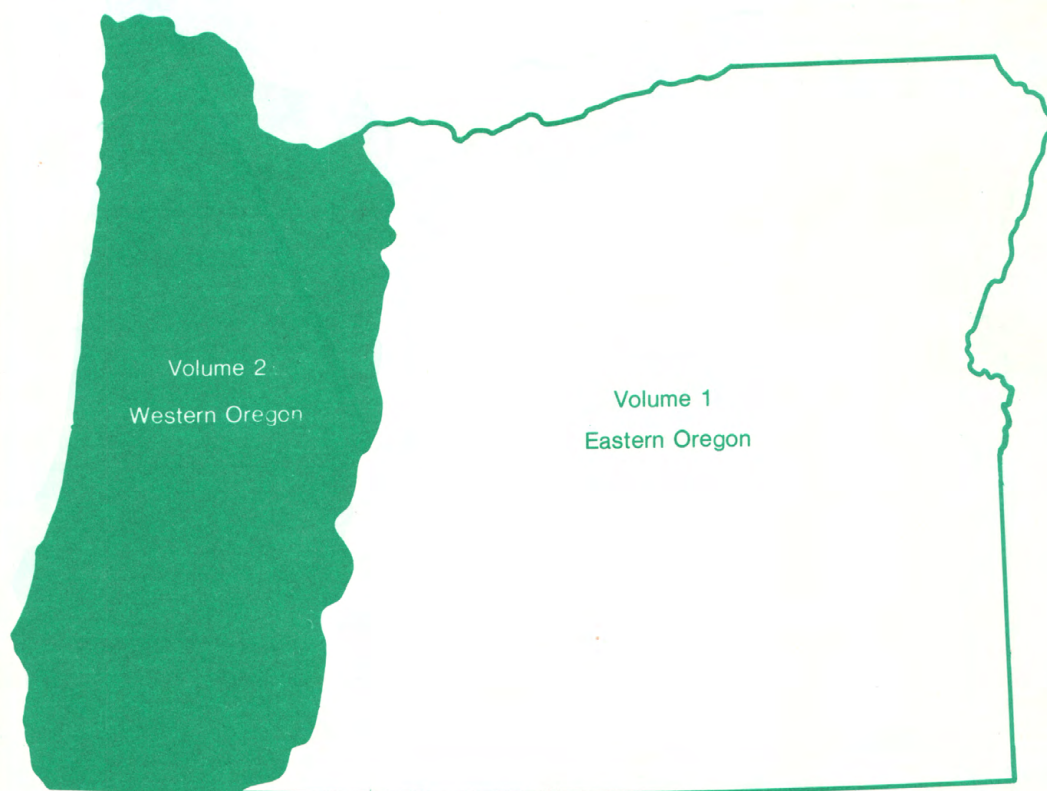
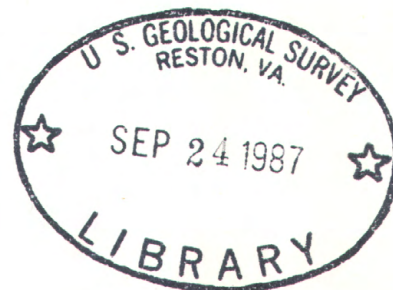
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Water Resources Data Oregon

Water Year 1985

Volume 2. Western Oregon



Volume 2
Western Oregon

Volume 1
Eastern Oregon

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OR-85-2
Prepared in cooperation with the Oregon Water Resources
Department and with other agencies

CALENDAR FOR WATER YEAR 1985

1984

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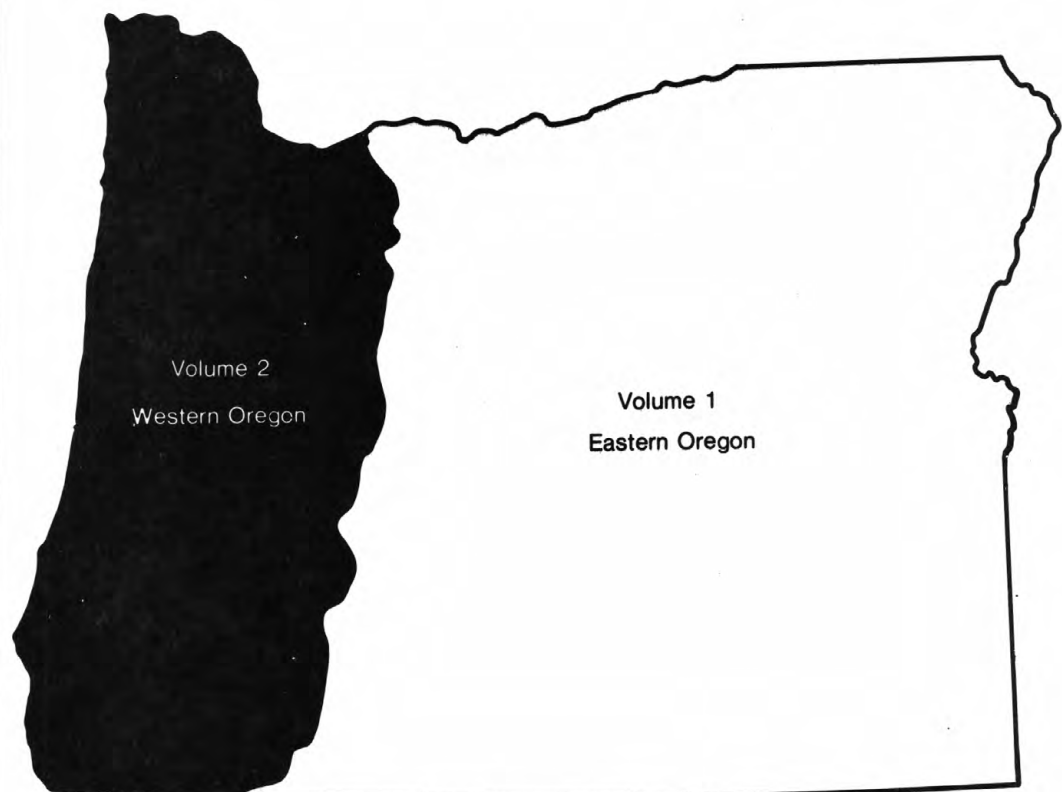
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Water Resources Data Oregon Water Year 1985

Volume 2. Western Oregon

by C.W. Alexander, R.L. Kraus, C.G. Kroll, R.L. Moffatt, and M.L. Smith



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OR-85-2
Prepared in cooperation with the Oregon Water Resources
Department and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

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Portland, Oregon 97232

1987

PREFACE

This volume of the annual Oregon hydrologic data report is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Oregon are contained in two volumes as follows:

Volume 1: Eastern Oregon
Volume 2: Western Oregon

The report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who edited and assembled the reports. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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This report was prepared in cooperation with the State of Oregon and with other agencies under the general supervision of Marvin O. Fretwell, Oregon Office Chief, and T. John Conomos, Regional Hydrologist, Western Region.

REPORT DOCUMENTATION PAGE	1. REPORT NO. USGS/WRD/HD-87/242	2.	3. Recipient's Accession No.
4. Title and Subtitle Water Resources Data for Oregon Water Year 1985 Volume 2. Western Oregon		5. Report Date June 1987	
7. Author(s)		6.	
9. Performing Organization Name and Address U.S. Geological Survey, Water Resources Division 847 N.E. 19th Ave., Suite 300 Portland, Oregon 97232		8. Performing Organization Rept. No. USGS-WDR-OR-85-2	
12. Sponsoring Organization Name and Address U.S. Geological Survey, Water Resources Division 847 N.E. 19th Ave., Suite 300 Portland, Oregon 97232		10. Project/Task/Work Unit No.	
		11. Contract(C) or Grant(G) No. (C) (G)	
15. Supplementary Notes Prepared in cooperation with the State of Oregon and with other agencies.		13. Type of Report & Period Covered Annual - Oct. 1, 1984 to Sept. 30, 1985	
		14.	
16. Abstract (Limit: 200 words) Water Resources Data for the 1985 water year for Oregon consist of records of stage, discharge, and water quality of streams; and stage, contents, and water quality of lakes and reservoirs. This report, in two volumes, contains discharge records for 259 gaging stations; stage only records for 10 gaging stations; stage and contents for 37 lakes and reservoirs; water quality for 82 stations, and water quality for 3 precipitation stations. Also included are 5 crest-stage, partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Oregon.			
17. Document Analysis a. Descriptors *Oregon, *Hydrologic Data, *Surface water, *Water quality, *Gaging stations, Flow rate, Lakes, Reservoirs, Chemical analyses, Sediment, Water temperatures, Sampling sites, Water levels, Water analyses. b. Identifiers/Open-Ended Terms c. COSATI Field/Group			
18. Availability Statement: No restriction on distribution. This report may be purchased from: National Technical Information Service Springfield, VA 22161		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 396
		20. Security Class (This Page) UNCLASSIFIED	22. Price

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WATER RESOURCES DATA FOR OREGON 1985

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with state agencies, obtains a large amount of data pertaining to the water resources of Oregon each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Oregon."

This report includes records on surface water in the State. Specifically, it contains: (1) Discharge records for 259 stream-gaging stations, stage only records for 10 gaging stations, 98 partial-record or miscellaneous streamflow stations, and 5 crest-stage, partial-record streamflow stations; (2) stage and content records for 37 lakes and reservoirs; and (3) water-quality records for 70 streamflow-gaging stations and 12 ungaged streamsites.

This series of annual reports for Oregon began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one or two volumes, data on quantities of surface water, quality of surface and ground water, and ground-water levels. In 1981, the annual report was divided into two volumes: Volume 1 described the activities for Western Oregon, while Volume 2 described the activities for Eastern Oregon. Beginning with the 1985 water year, presentation of ground-water levels in this report was discontinued.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Oregon were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 10, 11, 13, and 14." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." These Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Distribution Branch, Text Products Section, U.S. Geological Survey, 604 South Pickett Street, Alexandria, VA 22304.

Publications similar to this report are published annually by the Geological Survey for all states. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report OR-85-1" and "U.S. Geological Survey Water-Data Report OR-85-2." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the Office Chief at the address given on back of title page or by telephone (503) 231-2009.

COOPERATION

The U.S. Geological Survey and organizations of the State of Oregon have had cooperative agreements for the systematic collection of surface-water records since 1905. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

Oregon Water Resources Department, William F. Young, Director.
Oregon Department of Fish and Wildlife, Jerry Bauer, Director.
Coos Bay-North Bend Water Board, P. Matson, General Manager.
Eugene Water and Electric Board, Jean Reader, General Manager.
Douglas County, John Youngquist, Coordinator.
City of McMinnville, A. H. Jones, General Manager.
City of Portland, Bureau of Water Works, Edward Tenny, Administrator.
The Confederated Tribes of the Umatilla Indian Reservation,
E. H. Patawa, Chairman of the General Council.
The Confederated Tribes of the Warm Springs Indian Reservation,
D. McClelland, Control Manager.

Assistance in the form of funds or services was provided by the Forest Service, U.S. Department of Agriculture; Corps of Engineers, U.S. Army; Bonneville Power Administration, U.S. Department of Energy; Bureau of Land Management, Bureau of Reclamation, Fish and Wildlife Service, National Park Service, U.S. Department of the Interior in collection of records for stage and discharge stations and water-quality stations published in this report.

The following organizations aided in collecting records for stations under Federal Energy Regulatory Commission licenses: Eugene Water & Electric Board; Pacific Power & Light Co.; Portland General Electric Co.; Idaho Power Co., Idaho.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

The hydrology of Oregon is influenced by five mountain ranges with the Cascade Range providing a natural division between western and eastern Oregon. These ranges divide the state into drainage basins and greatly affect the distribution of precipitation. Hydrologic patterns are generally uniform from drainage basin to drainage basin throughout western Oregon; whereas in eastern Oregon, hydrologic patterns vary widely between drainage basins.

Western Oregon, which composes about one-third of the total area of the state, has a climate characterized by moderate temperatures, wet winters, and dry summers. About 80 percent of the precipitation occurs between October and March. Annual precipitation ranges from about 20 inches per year in the lower elevations in the southern part of the area to about 200 inches per year in the Coast and Cascade Ranges. In general, streamflow characteristics are similar, with most of the runoff and flooding on both large and small streams being caused by winter rains. Major floods have occurred when winter rains combine with melting snow.

Eastern Oregon has more complex hydrologic patterns than western Oregon. Precipitation is less than 10 inches per year in the semiarid regions, such as parts of the north-central area, the closed basin in south-central Oregon, and southeastern Oregon. The northeastern part of the state receives as much as 80 inches of precipitation per year, much of it occurring as snowfall. On large streams, flooding can result from winter rains and (or) seasonal snowmelt; in smaller drainage basins, flooding can result from winter rains, seasonal snowmelt, and convection storms.

Surface-water Conditions

Precipitation for water year 1985 was subnormal with accumulations ranging from 78 percent across the Umatilla-Lower John Day Basins and up to 95 percent across the Willamette, Klamath, and Hood-Lower Deschutes Basins. Very heavy precipitation fell during October and November and was followed by mostly subnormal months except for a very wet finish in September. Early snowpack accumulation across Oregon accelerated through January 1, but then the less-than-normal accumulation rates persisted through April 1 and lowered snow water content percentages.

The cooler-than-normal temperatures for the year greatly helped to conserve the high snow water content during the very dry period of January 1 through April 1. Very warm April temperatures removed most of the lower valley snowcover by mid-month. The remaining warm melt season was slowed by alternate cold periods. (Precipitation and temperature summary furnished by the National Weather Service.)

WATER RESOURCES DATA FOR OREGON 1985

Runoff during the 1985 water year was near normal at most of the gaging stations in Oregon (Table 1).

Table 1.--Comparison of mean discharge for the 1985 water year with mean discharge for the period of record at long-term stations

Station number	Station name	Drainage area (mi ²)	Length of record (yrs)	Mean discharge 1985 water year (ft ³ /s)	Long-term mean discharge (ft ³ /s)	Percent of average	Maximum annual mean discharge period of record year	ft ³ /s
10396000	Donner und Blitzen River near Frenchglen	a200	55	131	128	102	1984	273
11502500	Williamson River below Sprague River, near Chiloquin	a3,000	68	1,161	1,059	110	1956	2,187
13181000	Owyhee River near Rome	a8,000	36	899	1,016	88	1984	3,400
13214000	Malheur River near Drewsey	a910	59	182	194	94	1984	474
13331500	Minam River at Minam	a240	21	412	479	86	1974	713
14048000	John Day River at McDonald Ferry	a7,580	80	2,429	2,102	116	1984	4,724
14137000	Sandy River near Marmot	262	74	1,250	1,368	91	1974	1,933
14178000	North Santiam River below Boulder Creek, near Detroit	216	59	1,015	1,010	100	1974	1,506
14301000	Nehalem River near Foss	667	46	2,062	2,721	76	1974	4,235
14321000	Umpqua River near Elkton	3,683	80	6,964	7,541	92	1984	10,030
14325000	South Fork Coquille River at Powers	169	66	669	795	84	1974	1,374

a Approximately.

There were no extreme flood events during the 1985 water year. The snowmelt peaks at a few stations during April reached an exceedance probability of .20 but there was no flooding.

WATER RESOURCES DATA FOR OREGON 1985

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Peak discharges for representative gages are shown in Table 2.

Table 2.--Comparison of peak discharge for the 1985 water year with peak discharge for the period of record at long-term stations

Station number	Station name	Drainage area (mi ²)	Peak discharge 1985 water year Date	ft ³ /s	Exceedance probability	Peak discharge period of record Date	ft ³ /s
10396000	Donner und Blitzen River near Frenchglen	a200	4-01	1,210	.50	4-26-78	4,270
11502500	Williamson River below Sprague River, near Chiloquin	a3,000	4-10	4,000	.20	12-26-64	16,100
13181000	Owyhee River near Rome	a8,000	4-04	11,800	---	12-24-64	33,500
13214000	Malheur River near Drewsey	a910	4-06	1,450	.50	12-23-64	12,000
13331500	Minam River at Minam	a240	5-24	2,750	.50	6-16-74	6,260
14048000	John Day River at McDonald Ferry	a7,580	4-12	14,600	.20	12-24-64	42,800
14137000	Sandy River near Marmot	262	11-03	11,700	.50	12-22-64	61,400
14178000	North Santiam River below Boulder Creek, near Detroit	216	11-03	6,920	.50	12-22-64	26,700
14301000	Nehalem River near Foss	667	11-29	17,700	.80	1-20-72	46,900
14321000	Umpqua River near Elkton	3,683	11-28	79,400	.50	12-23-64	265,000
14325000	South Fork Coquille River at Powers	169	11-27	10,500	.80	12-22-64	48,900

a Approximately.

NOTE.--Exceedance probability refers to the probability that an event will exceed a specific magnitude in a given time period. A flow of 200 ft³/s with an exceedance probability of 0.5 means that there is a 50 percent chance that the flow will exceed 200 ft³/s in any one year.

WATER RESOURCES DATA FOR OREGON 1985

No periods of record low flows were observed during the 1985 water year. The minimum streamflows for representative gages are shown in Table 3.

Table 3.--Comparison of minimum daily discharge for the 1985 water year with minimum discharge for the period of record at long-term stations

Station number	Station name	Drainage area (sq.mi.)	Minimum daily discharge		Non-exceedance probability	Instantaneous discharge		Period of record	
			Date	ft ³ /s		Minimum 1985 Date	ft ³ /s	Date	ft ³ /s
10396000	Donner und Blitzen River near Frenchglen	a200	2-04	45	.50	1-01	39	12-09-72	4.2
11502500	Williamson River below Sprague River, near Chiloquin	a3,000	7-19	509	.50	7-19	502	10-14-20	320
13181000	Owyhee River near Rome	a8,000	8-22	139	.50	9-01	135	several days	42
13214000	Malheur River near Drewsey	a910	7-25	3.8	---	7-25	3.6	many days	0
13331500	Minam River at Minam	a240	1-02	35	.20	1-02	35	12-06-72	10
14048000	John Day River at McDonald Ferry	a7,580	8-30	202	.50	9-29	193	many days	0
14137000	Sandy River near Marmot	262	8-31	314	.50	8-31	306	10-27-52	195
14178000	North Santiam River below Boulder Creek, near Detroit	216	9-30	427	.50	9-29	423	9-13-09	250
14301000	Nehalem River near Foss	667	8-29	93	.50	8-29	91	8-29-67	34
14321000	Umpqua River near Elkton	3,683	8-28	1,030	.50	8-18	1,020	7-18-26	640
14325000	South Fork Coquille River at Powers	169	10-07	24	.50	10-07	23	several days	12

a Approximately.

NOTE.--Non-exceedance probability refers to the probability that an event will not exceed a specific magnitude in a given time period. A flow of 12 ft³/s with a non-exceedance probability of 0.50 means there is a 50 percent chance that the flow will be less than 12 ft³/s in any one year.

SPECIAL NETWORKS AND PROGRAMS

HYDROLOGIC BENCH-MARK NETWORK is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

NATIONAL STREAM QUALITY ACCOUNTING NETWORK (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objective of NASQAN is to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting. The design of the network is intended to provide data for (1) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (2) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (3) a nationally consistent data base useful for water-quality assessment and hydrologic research.

THE NATIONAL TRENDS NETWORK (NTN) is a 150 station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gasses. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

RADIOCHEMICAL PROGRAM is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

TRITIUM NETWORK is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 1985 water year that began October 1, 1984, and ended September 30, 1985. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, and water-quality data for surface water. The locations of the stations where the data were collected are shown in figures 1 and 2. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The two systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for surface-water stations where only miscellaneous measurements are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 14105700, which appears just to the left of the station name, includes the two-digit Part number "14" plus the six-digit downstream-order number "105700." The Part number designates the major river basin; for example, part "14" refers to the Pacific slope basins in Oregon and lower Columbia River basin.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relations between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relation between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the Geological Survey that are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI), Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations an acoustic velocity meter (AVM) is used instead of the slope method. The AVM measures both water-surface elevation and velocity from which discharge can be computed directly.

In computing records of lake or reservoir contents, it is necessary to have information available from surveys, curves, or tables that define the relation of stage to content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relation changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relation. Discharges over lake or reservoir spillways are computed from stage-discharge relations much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the validity of the recorded gage height is so questionable that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages are based on information developed by the Hydraulics and Hydrology Committee of the Pacific Northwest River Basins Commission.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means the instantaneous maximum discharge was revised; "(m)" the instantaneous minimum was revised; and "(P)" the peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see "DEFINITION OF TERMS"), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, special methods of computation, conditions that affect natural flow at the station and, possibly, other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the Oregon office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual state data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under the "REMARKS" paragraph. "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned, are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; the nearest tenth between 1.0 and 10 ft³/s; whole numbers between 10 and 1,000 ft³/s; and 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff because of the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation, or other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, changes in contents of reservoirs, or other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Monthly records for several ungaged sites are given in a separate section following the gaged sites. The accuracy of records for ungaged sites is generally lower than that for gaged sites, depending on the precision of the computation method and the accuracy of data used in the computations.

For most gaging stations, unpublished, detailed information, on file in the Oregon office, includes discharge measurements, gage-height records, and rating tables. Many gaging-station records in Oregon through 1967 have been analyzed to determine several statistical summaries: (1) The number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

Other Federal and State agencies have collected discharge data at other sites in Oregon during the current water year. Although these records have not been published by the U.S. Geological Survey, the National Water Data Exchange, NAWDEX, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintains an index of these sites and will furnish information about them.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of records

Water-quality data for surface-water sites are grouped into one of three classifications. A CONTINUING-RECORD STATION is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A PARTIAL-RECORD STATION is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A MISCELLANEOUS sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 2.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-site Measurements and Sample Collection

In obtaining water-quality data, it is important that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, treating the samples to prevent changes in quality pending analysis, and shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," (TWRI), Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" in this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey Oregon office.

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 mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see "DEFINITION OF TERMS") are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey office whose address is given on the back of the title page of this report.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. 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 recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Oregon office.

Sediment

Suspended-sediment concentrations are determined from samples collected by one of the standard sampling techniques discussed in TWRI, Book 3, Chapter C2, "Field methods for measurement of fluvial sediment." Samples are obtained using standard depth- or point-integrating samplers, or by means of an approved pumping sampler. Mean concentrations for the sampled cross section are in turn determined from these samples.

During periods of rapidly changing flow or rapidly changing suspended-sediment 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 subdivided-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 subdivided-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 loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically. 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 and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, periodic measurements of particle-size distributions for the suspended-sediment, bed-load, and bed-material samples are included for stations where samples were obtained to measure this parameter.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for identification of biological populations, samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)

ACCESS TO WATSTORE DATA

The National WATER Data STorage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's District offices (see address given on the back of the title page).

General Inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

ACRE-FOOT (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

ADENOSINE TRIPHOSPHATE (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

ALGAE are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

ALGAL GROWTH POTENTIAL (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

AQUIFER is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

ARTESIAN means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

BACTERIA are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

TOTAL COLIFORM BACTERIA are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C plus or minus 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters (mL) of sample.

FECAL COLIFORM BACTERIA are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C plus or minus 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

FECAL STREPTOCOCCAL BACTERIA are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C plus or minus 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

BED MATERIAL is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

BIOCHEMICAL OXYGEN DEMAND (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

BIOMASS is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

ASH MASS is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

DRY MASS refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

ORGANIC MASS or volatile mass of the living substance is the difference between the dry mass and the ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash and dry mass.

WET MASS is the mass of living matter plus contained water.

BOTTOM MATERIAL: See Bed material.

CELLS/VOLUME refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

CHEMICAL OXYGEN DEMAND (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

CHLOROPHYLL refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

COLOR UNIT is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

CONTENTS is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

CONTROL designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

CONTROL STRUCTURE as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

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 or 0.02832 cubic meters per second.

CUBIC FOOT PER SECOND-DAY [$(\text{ft}^3/\text{s})/\text{d}$] is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

CUBIC FEET PER SECOND PER SQUARE MILE [$(\text{ft}^3/\text{s})/\text{mi}^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

DISCHARGE is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

MEAN DISCHARGE (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

INSTANTANEOUS DISCHARGE is the discharge at a particular instant of time.

DISSOLVED refers to that material in a representative water sample which passes through a 0.45-um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

DISSOLVED-SOLIDS CONCENTRATION of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

DRAINAGE AREA of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

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 a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

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

GAGING STATION is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

HARDNESS of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

HYDROLOGIC BENCH-MARK NETWORK is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

HYDROLOGIC UNIT is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

LAND-SURFACE DATUM (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

MEASURING POINT (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

METAMORPHIC STAGE refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

METHYLENE BLUE ACTIVE SUBSTANCES (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

MICROGRAMS PER GRAM ($\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

MICROGRAMS PER LITER ($\mu\text{g/L}$, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (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 mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

NATIONAL STREAM QUALITY ACCOUNTING NETWORK (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey office of Water Data Coordination in consultation with the Water Resources Council. The objective of NASQAN is to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting. The design of the network is intended to provide data for (1) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (2) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (3) a nationally consistent data base useful for water-quality assessment and hydrologic research.

NATIONAL TRENDS NETWORK (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

ORGANISM is any living entity.

ORGANISM COUNT/AREA refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

ORGANISM COUNT/VOLUME refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

TOTAL ORGANISM COUNT is the total number of organisms collected and enumerated in any particular sample.

PARAMETER CODE is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

PARTIAL-RECORD STATION is a particular site where limited streamflow and (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 a particle determined by either 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).

PARTICLE-SIZE CLASSIFICATION used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

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

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter 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.

PERCENT COMPOSITION is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population in terms of types, numbers, mass, or volume.

PERIPHYTON is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

PESTICIDES are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

PICOCURIE (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 disintegrations per minute (dpm).

PLANKTON is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

PHYTOPLANKTON is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

BLUE-GREEN ALGAE are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

DIATOMS are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

GREEN ALGAE have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

ZOOPLANKTON is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

PRIMARY PRODUCTIVITY is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

MILLIGRAMS OF CARBON PER AREA OR VOLUME PER UNIT TIME $[(\text{mg C/m}^2)/\text{time}]$ FOR PERIPHYTON AND MACROPHYTES AND $[(\text{mg C/m}^3)/\text{time}]$ FOR PHYTOPLANKTON are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

MILLIGRAMS OF OXYGEN PER AREA OR VOLUME PER UNIT TIME $[(\text{mg O}_2/\text{m}^2)/\text{time}]$ PERIPHYTON AND MACROPHYTES AND $[(\text{mg O}_2/\text{m}^3)/\text{time}]$ FOR PHYTOPLANKTON are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

RADIOCHEMICAL PROGRAM is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

RECOVERABLE FROM BOTTOM MATERIAL is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

RETURN PERIOD is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

RUNOFF IN INCHES (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

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

BED LOAD is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed very close to the bed surface. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

BED LOAD DISCHARGE (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

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

SUSPENDED-SEDIMENT 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.

SUSPENDED-SEDIMENT DISCHARGE (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) $\times$ discharge (ft³/s) $\times$ 0.0027.

SUSPENDED-SEDIMENT LOAD is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

TOTAL-SEDIMENT DISCHARGE (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

TOTAL-SEDIMENT LOAD or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

SEVEN-DAY 10-YEAR LOW FLOW (7 Q₁₀) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

SODIUM-ADSORPTION-RATIO (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

SOLUTE is any substance that is dissolved in water.

SPECIFIC CONDUCTANCE is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

STAGE-DISCHARGE RELATION is the relation between gage height (stage) and the volume of water, per unit of time, flowing in a channel.

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

SUBSTRATE is the physical surface upon which an organism lives.

NATURAL SUBSTRATE refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lives.

ARTIFICIAL SUBSTRATE is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton.

SURFACE AREA of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimeted. All areas shown are those for the stage when the planimeted map was made.

SURFICIAL BED MATERIAL is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

SUSPENDED (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-um filter.

SUSPENDED, RECOVERABLE is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

SUSPENDED, TOTAL is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

TAXONOMY is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom.....	Animal
Phylum.....	Arthropoda
Class.....	Insecta
Order.....	Ephemeroptera
Family.....	Ephemeridae
Genus.....	Hexagenia
Species.....	Hexagenia limbata

THERMOGRAPH is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

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 year.

TONS PER ACRE-FOOT indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

TONS PER DAY (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

TOTAL is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

TOTAL DISCHARGE is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

TOTAL, RECOVERABLE is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses, because different digestion procedures are likely to produce different analytical results.

TRITIUM NETWORK is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

WATER YEAR in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980, is called the "1980 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

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.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Forty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett Street, Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

- 1-D1. WATER TEMPERATURE-INFLUENTIAL FACTORS, FIELD MEASUREMENT, AND DATA PRESENTATION, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI, Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. GUIDELINES FOR COLLECTION AND FIELD ANALYSIS OF GROUND-WATER SAMPLES FOR SELECTED UNSTABLE CONSTITUENTS, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. APPLICATION OF SURFACE GEOPHYSICS TO GROUND-WATER INVESTIGATIONS, by A. A. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-E1. APPLICATION OF BOREHOLE GEOPHYSICS TO WATER-RESOURCES INVESTIGATIONS, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 3-A1. GENERAL FIELD AND OFFICE PROCEDURES FOR INDIRECT DISCHARGE MEASUREMENTS, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. MEASUREMENT OF PEAK DISCHARGE BY THE SLOPE-AREA METHOD, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. MEASUREMENT OF PEAK DISCHARGE AT CULVERTS BY INDIRECT METHODS, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. MEASUREMENT OF PEAK DISCHARGE AT WIDTH CONTRACTIONS BY INDIRECT METHODS, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. MEASUREMENT OF PEAK DISCHARGE AT DAMS BY INDIRECT METHODS, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. GENERAL PROCEDURE FOR GAGING STREAMS, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968. 13 pages.
- 3-A7. STAGE MEASUREMENTS AT GAGING STATIONS, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

- 3-A8. DISCHARGE MEASUREMENTS AT GAGING STATIONS, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. MEASUREMENT OF TIME OF TRAVEL AND DISPERSION IN STREAMS BY DYE TRACING, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A10. DISCHARGE RATINGS AT GAGING STATIONS, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. MEASUREMENT OF DISCHARGE BY MOVING-BOAT METHOD, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A13. COMPUTATION OF CONTINUOUS RECORDS OF STREAMFLOW, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. USE OF FLUMES IN MEASURING DISCHARGE, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. COMPUTATION OF WATER-SURFACE PROFILES IN OPEN CHANNELS, by Jacob Davidian. 1984. 48 pages.
- 3-B1. AQUIFER-TEST DESIGN, OBSERVATION, AND DATA ANALYSIS, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. INTRODUCTION TO GROUND-WATER HYDRAULICS, A PROGRAMED TEXT FOR SELF-INSTRUCTION, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. TYPE CURVES FOR SELECTED PROBLEMS OF FLOW TO WELLS IN CONFINED AQUIFERS, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-C1. FLUVIAL SEDIMENT CONCEPTS, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. FIELD METHODS FOR MEASUREMENT OF FLUVIAL SEDIMENT, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. COMPUTATION OF FLUVIAL-SEDIMENT DISCHARGE, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. SOME STATISTICAL TOOLS IN HYDROLOGY, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. FREQUENCY CURVES, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. LOW-FLOW INVESTIGATIONS, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. STORAGE ANALYSES FOR WATER SUPPLY, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. REGIONAL ANALYSES OF STREAMFLOW CHARACTERISTICS, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. COMPUTATION OF RATE AND VOLUME OF STREAM DEPLETION BY WELLS, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. METHODS FOR DETERMINATION OF INORGANIC SUBSTANCES IN WATER AND FLUVIAL SEDIMENTS, by M. J. Fishman, and L. C. Friedman, editors: USGS--TWRI Book 5, Chapter A1. 1985. 709 pages.
- 5-A2. DETERMINATION OF MINOR ELEMENTS IN WATER BY EMISSION SPECTROSCOPY, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

- 5-A3. METHODS FOR ANALYSIS OF ORGANIC SUBSTANCES IN WATER AND FLUVIAL SEDIMENTS, by R. L. Wershaw, M. J. Fishman, R. R. Grabbe, and L. L. Lowe, editors: USGS--TWRI Book 5, Chapter A3. 1983. 173 pages.
- 5-A4. METHODS FOR COLLECTION AND ANALYSIS OF AQUATIC BIOLOGICAL AND MICROBIOLOGICAL SAMPLES, edited by P. E. Greeson, T. A. Ehike, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. METHODS FOR DETERMINATION OF RADIOACTIVE SUBSTANCES IN WATER AND FLUVIAL SEDIMENTS, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. QUALITY ASSURANCE PRACTICES FOR THE CHEMICAL AND BIOLOGICAL ANALYSES OF WATER AND FLUVIAL SEDIMENTS, by L. C. Friedman and D. E. Erdmann. 1982. 181 pages.
- 5-C1. LABORATORY THEORY AND METHODS FOR SEDIMENT ANALYSIS, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 7-C1. FINITE-DIFFERENCE MODEL FOR AQUIFER SIMULATION IN TWO DIMENSIONS WITH RESULTS OF NUMERICAL EXPERIMENTS, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. COMPUTER MODEL OF TWO-DIMENSIONAL SOLUTE TRANSPORT AND DISPERSION IN GROUND WATER, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. A MODEL FOR SIMULATION OF FLOW IN SINGULAR AND INTERCONNECTED CHANNELS, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. METHODS OF MEASURING WATER LEVELS IN DEEP WELLS, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. INSTALLATION AND SERVICE MANUAL FOR U.S. GEOLOGICAL SURVEY MANOMETERS, by J. D. Craig. 1983. 57 pages.
- 8-B2. CALIBRATION AND MAINTENANCE OF VERTICAL-AXIS TYPE CURRENT METERS, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

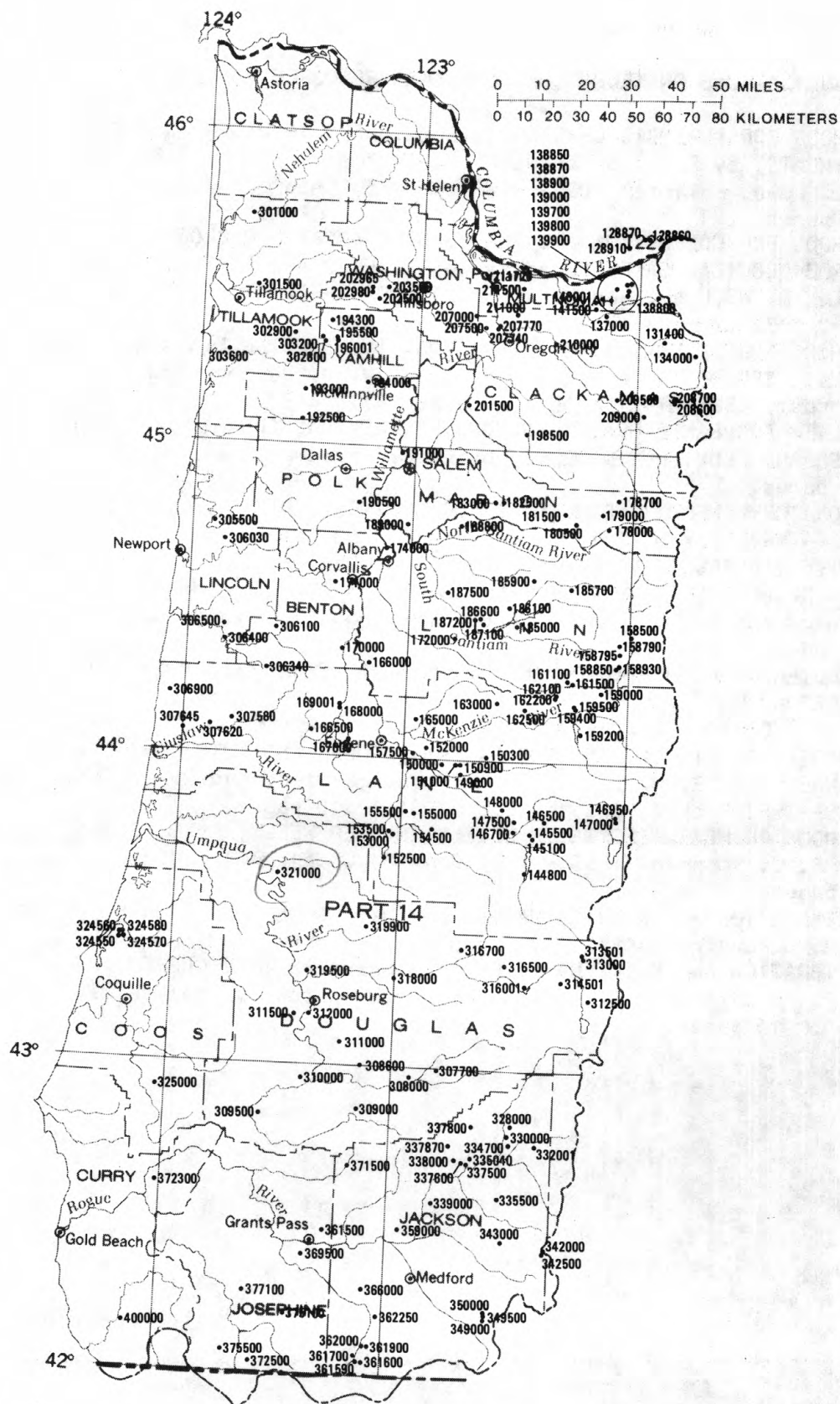


Figure 1. Map of Western Oregon showing location of active gaging stations

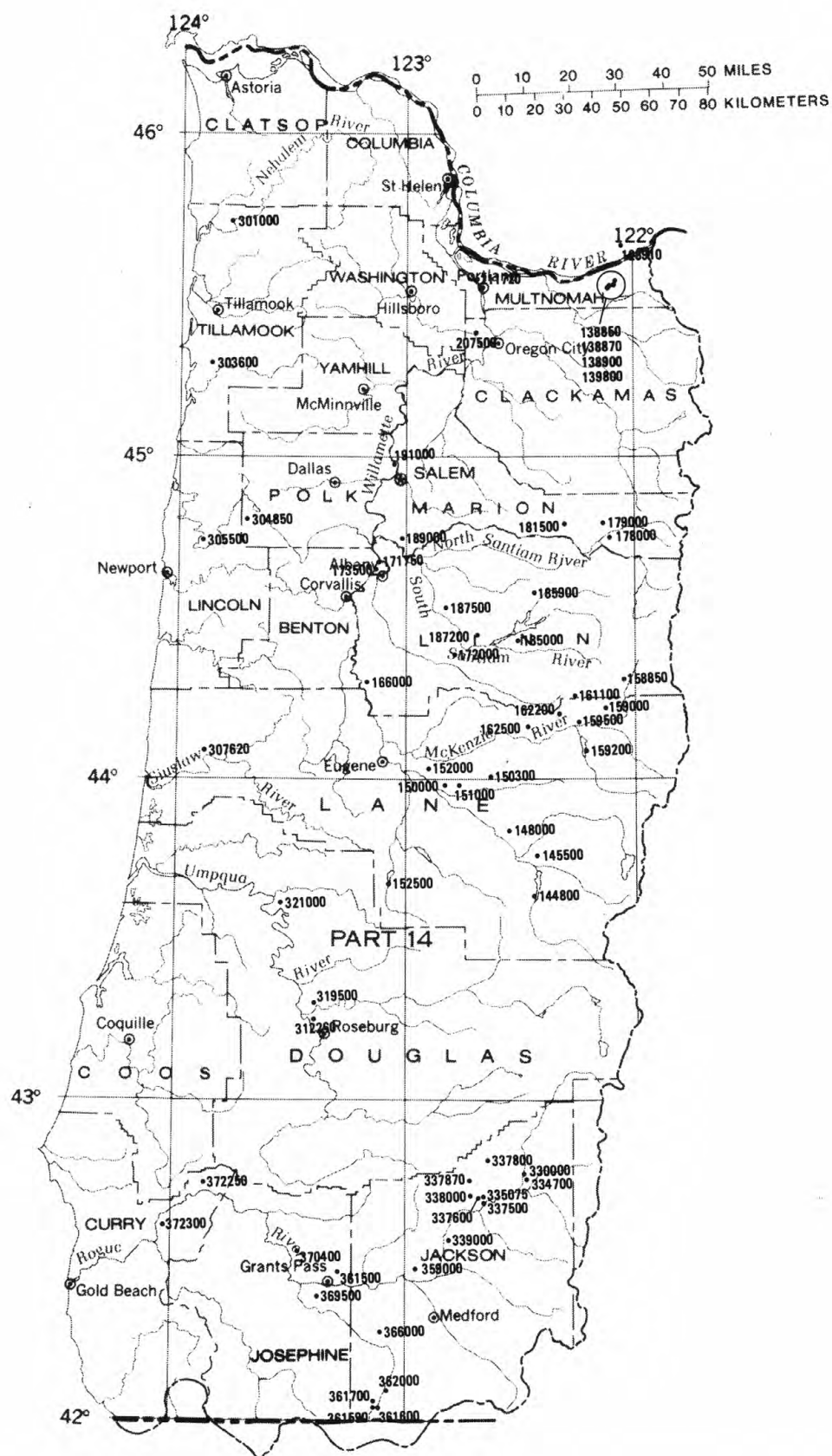


Figure 2. Map of Western Oregon showing sites where water-quality data are obtained

SURFACE-WATER RECORDS

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REMARK CODES.--The following remark codes may appear with the water-quality data in this section:

PRINTED OUTPUT	REMARK
E	Estimated value
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)

COLUMBIA RIVER MAIN STEM

14128860 COLUMBIA RIVER AT BONNEVILLE DAM, OR

LOCATION.--Lat 45°38'36", long 121°56'21", in sec.22, T.2 N., R.7 E., Multnomah County, Hydrologic Unit 17080001, on north shore of Bradford Island, 200 ft upstream from Bonneville Dam, at mile 146.1.

DRAINAGE AREA.--239,900 mi², approximately.

PERIOD OF RECORD.--May 1981 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 77.13 ft Mar. 29, 1984; minimum, 69.65 ft Oct. 25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 76.66 ft July 8; minimum, 71.62 ft Apr. 17.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	75.94	73.95	74.82	76.00	74.34	75.24	76.09	75.51	75.80	76.33	74.93	75.65
2	75.85	74.90	75.48	75.90	74.37	75.21	76.34	74.93	75.51	76.28	74.80	75.57
3	75.35	74.13	74.88	76.05	74.62	75.42	76.20	74.46	75.35	75.51	73.26	74.45
4	75.91	74.72	75.32	75.91	74.29	75.04	74.97	73.11	74.03	75.61	73.49	74.57
5	75.93	74.74	75.35	75.91	75.06	75.59	75.42	72.52	74.22	75.46	73.65	74.74
6	75.94	75.44	75.72	75.91	74.31	75.06	75.43	74.06	74.84	75.53	73.12	74.47
7	75.60	74.69	75.24	75.64	74.95	75.22	74.91	73.49	74.27	76.13	73.92	75.04
8	75.38	74.35	75.01	75.86	74.30	75.14	74.96	73.45	74.18	75.98	74.21	75.31
9	75.42	74.54	75.17	76.48	74.38	75.19	75.86	74.77	75.19	75.74	74.17	74.86
10	75.71	74.33	75.00	76.31	74.83	75.56	76.19	72.61	74.29	76.34	74.47	75.25
11	75.76	74.60	75.15	76.39	74.71	75.59	75.90	73.91	75.12	75.87	73.77	75.08
12	75.70	75.00	75.33	76.14	75.25	75.74	75.85	73.84	74.84	75.42	74.15	74.82
13	76.05	75.02	75.66	76.12	75.19	75.73	76.36	74.00	75.20	76.01	74.31	75.03
14	76.18	75.23	75.82	76.14	75.03	75.56	75.64	73.64	74.64	76.26	74.23	75.30
15	75.90	74.71	75.24	76.36	74.82	75.64	75.45	72.92	74.24	75.83	74.04	74.99
16	75.83	74.60	75.21	76.32	74.19	75.50	75.77	72.57	74.54	75.57	74.10	74.96
17	75.48	74.65	75.13	76.47	74.25	75.56	76.07	73.60	74.78	76.17	73.74	75.09
18	75.77	74.36	75.09	76.34	74.18	75.42	76.39	73.71	75.48	75.48	72.99	74.01
19	76.07	74.22	74.97	75.98	74.14	75.20	76.00	73.28	74.86	76.15	74.50	75.34
20	76.16	75.36	75.71	75.97	74.16	75.08	76.07	74.02	75.01	76.17	73.64	74.93
21	76.31	75.32	75.81	75.99	73.91	75.07	75.88	74.19	74.91	76.11	73.85	74.80
22	76.31	74.75	75.52	76.15	74.29	75.00	75.22	72.54	74.11	75.85	74.57	75.30
23	76.00	74.38	75.44	75.54	74.59	75.11	75.28	73.24	74.07	75.09	73.54	74.41
24	75.78	75.06	75.44	76.02	74.22	74.99	75.32	74.23	74.62	75.84	72.14	73.91
25	76.19	74.53	75.29	76.10	75.30	75.80	75.48	73.30	74.33	75.87	73.63	74.87
26	76.21	75.36	75.83	75.36	74.34	74.91	75.56	74.13	74.98	75.30	72.89	73.87
27	75.95	74.47	75.32	75.41	73.88	74.79	75.77	74.45	75.25	76.24	74.91	75.43
28	75.75	75.01	75.45	76.20	73.99	75.02	75.73	74.62	75.16	75.28	73.17	74.49
29	75.99	74.93	75.50	76.41	74.16	75.42	75.81	74.22	74.90	76.19	74.17	74.97
30	75.44	74.22	74.83	76.02	74.39	75.39	75.88	74.74	75.21	75.90	73.98	74.86
31	75.77	74.98	75.44	---	---	---	75.04	72.84	74.10	75.89	73.05	74.39
MONTH	76.31	73.95	75.33	76.48	73.88	75.31	76.39	72.52	74.78	76.34	72.14	74.86

COLUMBIA RIVER MAIN STEM

14128870 COLUMBIA RIVER BELOW BONNEVILLE DAM, OR

LOCATION.--Lat 45°38'20", long 121°57'16", in sec.21, T.2 N., R.7 E., Multnomah County, Hydrologic Unit 17080001, on left bank 0.4 mi downstream from Bonneville Dam left bank powerhouse, 0.5 mi upstream from Tanner Creek, and at mile 145.0.

DRAINAGE AREA.--239,900 mi², approximately.

PERIOD OF RECORD.--May 1981 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Gage heights for Jan. 17 to Mar. 26 were taken from backup system having less-than-normal precision. Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 30.40 ft June 11, 1981; minimum, 7.00 ft Oct. 4, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 23.74 ft May 6; minimum, 7.12 ft July 29.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.57	9.65	10.68	12.84	10.13	12.06	17.82	16.69	17.53	15.58	12.52	14.13
2	16.37	10.87	14.55	15.71	12.35	14.24	17.11	16.17	16.77	18.44	15.67	16.86
3	15.52	13.91	14.67	15.90	14.71	15.06	17.15	16.67	16.88	16.67	16.01	16.49
4	16.62	14.74	15.54	14.79	11.66	13.41	16.81	15.64	16.28	16.25	15.81	15.99
5	15.59	12.04	14.26	13.02	11.32	12.56	16.47	11.48	14.39	16.37	15.95	16.19
6	11.99	10.62	11.08	13.51	12.67	13.10	16.05	14.71	15.38	15.88	13.44	14.73
7	11.22	9.99	10.72	14.20	13.03	13.50	15.97	14.97	15.56	17.78	15.10	16.31
8	12.52	9.14	11.48	14.17	12.92	13.33	15.00	14.23	14.62	17.72	17.43	17.53
9	13.17	10.29	12.28	15.29	13.79	14.53	15.83	13.95	14.80	17.73	17.23	17.42
10	13.56	12.26	12.87	15.75	14.78	15.11	16.52	15.29	15.85	17.51	16.67	17.33
11	15.04	11.92	13.61	15.80	13.76	14.51	16.59	15.60	16.05	17.75	17.16	17.54
12	15.02	13.39	14.45	14.48	13.55	13.89	16.21	15.70	15.89	17.72	16.49	17.14
13	13.76	12.27	12.98	14.68	14.21	14.43	16.15	15.53	15.81	17.00	15.36	16.48
14	14.43	12.57	13.44	14.73	14.05	14.32	16.51	15.31	15.64	17.57	16.92	17.25
15	14.38	13.85	14.13	16.65	14.16	15.33	17.17	12.08	14.98	17.60	17.27	17.41
16	14.35	13.35	13.96	18.07	15.25	17.01	17.62	12.01	15.13	17.32	16.89	17.14
17	13.74	10.98	12.33	17.64	13.36	15.22	17.14	15.59	16.28	18.70	17.30	17.60
18	12.66	10.54	11.65	17.62	13.41	14.75	17.17	14.14	16.11	18.30	17.10	17.70
19	15.03	12.57	13.67	15.97	13.86	14.55	15.65	14.09	15.16	19.30	16.80	17.80
20	14.36	9.64	11.29	14.93	13.26	14.33	18.78	13.77	16.04	19.20	16.40	17.60
21	13.10	9.47	11.13	16.48	13.11	15.35	17.00	15.21	16.34	17.60	17.30	17.40
22	14.03	13.07	13.58	16.48	11.30	13.29	16.93	15.47	15.85	19.60	17.30	18.70
23	14.09	12.08	13.16	15.77	10.60	13.10	15.75	13.83	14.49	19.70	18.40	17.80
24	13.78	11.30	12.89	15.71	13.78	14.20	14.22	12.52	13.41	18.80	18.40	18.60
25	13.50	10.55	11.29	15.35	13.66	14.59	12.50	11.16	11.69	20.90	18.40	19.20
26	16.22	13.51	14.82	15.38	13.62	14.31	14.24	11.46	13.37	18.50	16.70	17.60
27	15.53	14.00	14.58	16.10	11.34	13.53	14.40	13.87	14.17	18.70	16.00	16.80
28	14.42	11.60	12.43	16.01	14.73	15.37	15.39	13.98	14.68	19.20	16.60	17.50
29	12.48	10.39	11.85	17.21	12.02	14.94	15.90	14.79	15.19	18.00	15.80	16.80
30	12.90	11.30	11.87	17.74	16.99	17.45	15.83	15.44	15.64	16.90	15.20	16.30
31	13.95	12.65	13.21	---	---	---	15.75	12.20	14.04	18.30	15.60	16.70
MONTH	16.62	9.14	12.92	18.07	10.13	14.38	18.78	11.16	15.29	20.90	12.52	17.10

COLUMBIA RIVER MAIN STEM

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14128870 COLUMBIA RIVER BELOW BONNEVILLE DAM, OR--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	20.00	17.70	19.20	19.80	16.20	17.40	17.43	13.75	15.34	21.41	17.68	19.75
2	18.80	15.60	16.70	19.90	16.40	17.70	18.19	17.22	17.78	21.00	18.33	19.45
3	17.70	15.50	16.70	17.70	14.80	16.80	18.25	14.64	16.09	21.55	17.79	19.93
4	20.90	16.70	19.20	17.80	14.40	16.60	18.40	15.70	17.35	21.72	17.85	19.62
5	21.20	19.00	19.90	18.10	15.30	16.60	18.12	15.41	17.32	19.93	17.79	18.49
6	21.10	17.50	18.30	16.30	14.40	15.30	18.36	15.57	17.09	23.74	19.91	21.76
7	17.80	16.50	17.10	18.80	14.20	15.30	17.61	15.08	16.15	22.76	20.04	22.08
8	18.50	17.60	18.10	18.40	15.10	16.40	15.60	14.43	15.19	21.99	19.58	21.12
9	18.50	17.30	17.90	18.50	12.70	15.70	16.51	15.24	15.83	20.76	18.06	19.28
10	18.30	16.60	17.60	17.40	12.40	14.60	17.70	16.05	17.01	20.77	18.68	19.71
11	17.60	16.80	17.10	19.20	17.40	17.90	20.63	17.59	19.04	22.07	19.84	20.85
12	17.20	16.10	16.70	17.70	13.60	15.70	20.76	19.06	20.05	21.70	19.58	20.52
13	18.00	16.10	17.30	15.00	12.10	13.40	19.62	17.25	18.10	21.78	19.72	20.29
14	19.60	17.80	18.50	14.90	12.60	13.50	18.08	17.25	17.60	21.45	19.77	20.70
15	19.70	18.80	19.40	15.40	14.90	15.20	19.61	16.21	17.97	20.89	19.05	19.84
16	18.80	17.50	18.20	15.90	13.80	14.50	20.58	17.39	19.28	19.70	16.97	18.08
17	17.60	16.30	17.10	15.10	13.60	14.00	20.80	19.40	19.85	19.54	17.93	18.85
18	17.40	16.00	16.60	14.30	13.40	13.80	22.55	20.44	21.44	19.59	17.40	18.41
19	18.90	17.10	17.60	17.80	13.40	14.90	22.54	20.63	21.94	19.64	17.88	19.03
20	19.00	17.90	18.50	17.20	15.70	16.80	22.66	18.88	21.11	20.88	18.79	20.03
21	18.20	17.80	18.00	17.90	15.40	16.80	22.73	20.59	21.82	20.04	18.75	19.37
22	18.20	17.50	17.90	18.80	16.30	17.60	22.49	19.70	20.75	21.68	18.60	20.20
23	18.10	16.70	17.30	18.50	16.70	17.70	21.16	16.48	17.79	20.43	18.93	19.69
24	16.90	14.20	15.60	18.60	16.40	17.00	19.03	15.16	16.95	21.53	18.73	20.38
25	18.10	15.20	16.80	19.70	16.00	17.90	22.01	18.79	20.00	20.90	18.96	19.94
26	18.90	13.70	17.30	20.60	17.80	19.10	22.16	---	---	20.86	19.54	20.24
27	19.70	14.10	17.40	17.63	15.86	16.62	---	---	---	20.83	18.50	19.39
28	19.90	16.00	18.00	17.85	15.57	16.67	---	---	---	20.67	19.08	19.74
29	---	---	---	16.39	15.37	15.85	---	---	---	21.29	19.91	20.52
30	---	---	---	16.13	14.46	15.29	20.04	18.35	18.91	21.36	20.03	20.71
31	---	---	---	15.06	13.90	14.48	---	---	---	20.08	19.20	19.76
MONTH	21.20	13.70	17.71	20.60	12.10	16.04	-----	-----	-----	23.74	16.97	19.93
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	19.92	19.22	19.47	13.20	12.39	12.83	11.37	7.62	9.95	9.36	8.42	8.88
2	20.35	19.60	20.07	15.87	12.20	14.42	11.60	10.59	10.95	9.34	8.41	8.92
3	23.09	19.31	20.61	16.51	14.70	15.75	11.54	10.61	10.99	9.65	8.31	9.09
4	21.16	19.69	20.22	14.96	12.60	13.74	11.26	9.78	10.46	9.48	8.21	8.95
5	20.07	16.55	17.61	13.21	12.17	12.71	10.91	9.12	10.16	10.64	8.48	9.32
6	17.61	16.26	17.16	12.82	11.98	12.46	10.97	9.49	10.18	12.18	10.74	11.53
7	21.20	16.25	19.13	12.48	11.88	12.25	11.00	10.38	10.59	11.06	8.60	9.89
8	20.21	17.86	19.16	12.30	10.47	11.38	11.03	7.82	9.71	10.34	8.12	8.66
9	21.19	17.44	19.10	11.86	10.73	11.25	9.04	8.01	8.60	11.67	8.22	9.99
10	21.27	18.00	19.68	13.15	10.07	11.49	9.40	8.52	8.87	12.44	9.06	10.89
11	21.28	18.81	20.08	11.98	10.38	11.39	9.33	8.53	8.88	10.99	8.75	9.88
12	20.72	17.02	18.70	12.74	10.67	11.98	9.40	8.23	8.84	12.25	8.44	10.77
13	18.31	16.39	17.28	13.45	9.95	10.91	9.75	8.53	9.10	11.54	10.70	11.00
14	18.10	15.32	16.64	10.32	9.41	9.87	10.85	9.34	10.26	11.09	9.00	10.01
15	17.85	15.03	16.47	10.19	8.33	9.53	11.46	9.49	10.81	11.13	8.25	9.93
16	17.27	14.96	16.47	10.64	8.34	9.41	10.98	9.49	10.12	10.99	8.74	10.01
17	16.88	15.58	16.29	12.02	8.63	10.35	10.58	8.83	9.60	11.51	8.92	10.54
18	17.42	14.43	16.10	12.63	9.74	11.70	9.69	7.95	8.82	13.16	10.02	11.70
19	18.79	17.13	17.99	12.70	10.84	12.05	11.09	7.94	9.67	13.00	10.39	11.66
20	17.13	15.62	16.51	12.87	10.89	12.12	11.14	8.02	10.01	11.85	10.46	11.00
21	17.93	15.66	17.12	11.78	9.59	10.51	11.21	7.72	9.40	11.74	9.08	10.05
22	17.91	15.25	16.09	12.24	8.44	10.37	10.15	9.19	9.56	10.12	8.80	9.39
23	15.23	13.78	14.67	10.54	8.40	9.74	10.04	8.21	9.21	11.32	9.32	10.69
24	16.94	13.82	14.98	10.42	8.84	9.57	10.03	7.47	8.55	12.10	10.78	11.45
25	14.15	13.49	13.91	10.98	9.35	10.59	8.80	7.49	8.03	12.72	11.74	12.05
26	14.89	13.42	14.21	9.63	7.56	8.83	9.63	7.53	8.95	13.07	11.71	12.32
27	14.27	13.21	13.85	8.93	7.41	8.32	10.30	9.28	9.73	13.12	11.44	12.43
28	13.46	12.61	13.04	8.66	7.19	8.11	10.76	9.36	10.16	11.36	9.49	10.17
29	13.63	12.44	12.91	10.41	7.12	9.35	10.46	8.40	9.66	9.97	9.06	9.46
30	13.29	12.41	12.89	10.09	7.66	8.67	9.29	7.91	8.68	11.56	9.31	10.59
31	---	---	---	9.58	7.18	8.51	9.45	8.51	8.92	---	---	---
MONTH	23.09	12.41	16.95	16.51	7.12	10.97	11.60	7.47	9.59	13.16	8.12	10.37

COLUMBIA RIVER MAIN STEM

14128910 COLUMBIA RIVER AT WARRENDALE, OR
(National stream quality accounting network station)

LOCATION.--Lat 45°36'45", long 122°01'35", in NE1SE1 sec.35, T.2 N., R.6 E., Multnomah County, Hydrologic Unit 17080001, on left bank 0.1 mi downstream from Tumult Creek, 1.0 mi west of Warrendale, 5.1 mi downstream from Bonneville Dam, and at mile 141.0.

DRAINAGE AREA.--240,000 mi², approximately.

WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 30.91 ft June 20, 1972; minimum, 4.49 ft July 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 17.78 ft May 6; minimum, 5.03 ft Aug. 24.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.05	6.29	6.92	9.22	7.45	8.45	14.48	13.74	14.32	10.78	9.26	9.96
2	10.34	7.30	8.96	12.35	8.68	10.56	13.73	13.09	13.34	12.53	10.69	11.48
3	10.17	9.07	9.69	12.70	12.01	12.34	13.39	12.93	13.15	12.15	11.45	11.76
4	10.68	9.27	10.10	12.21	9.96	11.32	12.95	11.91	12.47	11.73	11.13	11.37
5	10.42	8.12	9.63	10.27	9.49	9.92	12.48	9.44	11.04	11.89	11.45	11.72
6	8.09	6.52	7.26	10.92	10.05	10.44	11.93	10.95	11.28	11.46	9.78	10.60
7	7.51	6.40	6.94	11.15	10.33	10.64	11.83	11.58	11.73	13.16	10.60	11.59
8	8.56	6.03	7.52	11.14	10.27	10.60	11.57	11.05	11.29	13.36	12.91	13.07
9	8.82	6.92	8.12	11.68	10.74	11.19	12.00	10.73	11.22	13.31	12.67	12.89
10	9.14	8.00	8.66	12.78	11.33	11.82	12.86	11.61	12.10	13.06	12.44	12.70
11	10.11	7.93	9.08	12.72	11.39	11.96	12.84	12.13	12.43	12.76	12.39	12.58
12	10.09	9.52	9.82	11.92	11.07	11.37	12.75	12.15	12.41	12.80	11.80	12.37
13	9.89	8.41	9.07	12.18	11.59	11.84	12.75	12.03	12.30	11.93	11.13	11.56
14	9.81	8.37	8.96	12.18	11.31	11.67	12.43	11.77	12.05	12.95	11.94	12.46
15	9.80	9.10	9.37	12.70	10.94	11.72	12.73	10.20	11.69	13.07	12.57	12.82
16	9.54	8.86	9.15	13.71	12.40	13.20	13.12	10.18	11.67	12.64	11.91	12.37
17	9.31	7.14	8.17	12.82	10.46	11.73	12.80	11.39	12.02	13.22	12.55	12.89
18	7.63	6.62	7.14	12.87	10.94	11.80	12.70	11.37	12.09	13.42	12.95	13.21
19	9.91	7.65	8.79	11.98	11.07	11.55	11.48	10.65	11.16	14.26	12.56	13.19
20	10.00	7.21	8.51	11.92	10.90	11.36	13.79	10.31	11.66	14.41	12.67	13.52
21	9.02	7.05	7.91	12.81	10.83	11.85	13.11	11.83	12.50	13.09	12.72	12.87
22	10.15	8.88	9.78	12.68	9.40	10.79	12.98	11.86	12.29	14.40	12.62	13.40
23	10.26	9.01	9.75	12.32	8.48	10.05	12.35	10.77	11.40	14.41	13.39	13.90
24	10.18	9.01	9.75	12.25	10.86	11.39	11.17	9.93	10.45	13.98	13.67	13.80
25	9.89	7.94	8.63	12.13	10.81	11.46	9.95	8.55	9.11	14.73	13.55	14.07
26	12.46	9.78	10.92	12.14	10.68	11.13	10.77	8.80	9.82	14.17	12.18	12.80
27	12.30	10.76	11.37	12.26	9.66	10.40	10.92	10.39	10.67	12.69	11.38	11.93
28	11.35	9.14	9.89	13.10	11.89	12.45	11.42	10.45	10.94	13.48	12.30	12.72
29	9.81	8.21	9.12	13.37	10.89	12.33	11.70	11.02	11.37	13.23	11.98	12.58
30	9.50	8.32	8.79	14.39	13.42	14.06	12.10	11.60	11.86	12.19	11.17	11.79
31	9.89	9.13	9.54	---	---	---	11.93	9.36	10.90	12.70	11.31	11.94
MONTH	12.46	6.03	8.95	14.39	7.45	11.38	14.48	8.55	11.70	14.73	9.26	12.45

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	14.67	12.69	13.84	14.11	12.07	12.87	12.65	10.24	11.17	15.54	13.84	14.84
2	14.07	11.46	12.51	13.65	12.49	13.06	13.88	12.61	13.29	15.35	13.74	14.48
3	12.72	11.14	11.86	12.89	11.51	12.42	13.86	11.69	12.66	16.06	14.27	14.99
4	15.07	12.11	13.79	12.89	10.80	12.11	13.65	11.82	12.92	16.34	13.93	15.25
5	15.51	14.41	14.84	12.85	11.95	12.35	13.74	12.48	13.40	14.76	13.53	13.89
6	15.28	13.02	13.88	11.89	10.98	11.46	13.68	12.32	12.98	17.78	14.74	16.22
7	13.42	12.39	12.83	12.49	10.63	11.41	13.16	11.77	12.42	17.56	16.14	17.21
8	13.92	13.06	13.53	13.24	11.02	11.80	12.12	11.36	11.67	16.79	15.53	16.24
9	13.95	13.21	13.62	13.30	10.38	12.10	12.27	11.36	11.86	15.51	13.95	14.80
10	13.80	12.73	13.45	12.00	9.53	10.71	13.21	12.19	12.71	15.29	14.02	14.6
11	13.29	12.70	12.95	13.50	12.04	13.10	15.40	13.19	14.14	16.18	15.25	15.59
12	13.14	12.29	12.77	13.17	10.22	12.00	15.59	14.90	15.28	16.24	14.76	15.53
13	13.19	12.20	12.68	10.42	9.09	9.77	15.16	13.32	13.98	15.62	14.74	15.09
14	14.69	12.92	13.64	10.09	9.19	9.56	13.42	13.03	13.23	16.04	14.92	15.48
15	15.13	14.60	14.85	11.03	10.06	10.67	14.00	12.68	13.44	15.33	14.34	14.91
16	14.58	13.47	14.05	10.92	10.00	10.42	15.33	13.27	14.38	14.44	12.83	13.45
17	13.46	12.48	13.06	10.80	9.85	10.17	15.63	14.86	15.08	14.34	13.80	14.14
18	12.94	11.97	12.36	10.15	9.54	9.92	17.20	15.59	16.23	14.45	13.19	13.74
19	14.11	12.68	13.03	12.43	9.54	10.42	17.25	16.58	17.00	14.69	13.89	14.30
20	14.20	13.69	14.00	12.74	11.80	12.33	17.18	15.01	16.26	15.68	14.30	15.09
21	13.93	13.39	13.60	13.05	11.73	12.52	17.40	16.08	16.75	15.09	14.37	14.75
22	13.72	13.32	13.48	13.68	12.30	12.95	17.39	15.71	16.17	16.19	14.16	15.11
23	13.61	12.64	13.12	13.93	12.56	13.24	16.21	12.80	14.14	15.87	14.73	15.13
24	12.74	10.79	11.89	14.04	12.68	13.11	13.79	11.71	12.59	16.13	14.41	15.33
25	13.07	10.98	12.12	13.99	12.36	13.39	16.26	13.79	14.69	15.84	14.78	15.23
26	13.66	11.36	12.99	15.23	13.72	14.29	16.66	14.51	15.52	15.66	14.99	15.33
27	14.29	11.57	12.80	14.67	12.21	13.09	14.97	12.39	14.19	15.54	14.08	14.84
28	14.17	11.72	13.14	13.25	12.01	12.60	12.94	11.86	12.19	15.34	14.30	14.70
29	---	---	---	12.16	11.44	11.91	14.70	12.93	14.07	15.99	15.21	15.51
30	---	---	---	11.75	10.82	11.41	14.26	13.85	14.09	16.07	15.61	15.86
31	---	---	---	11.03	10.42	10.80	---	---	---	15.61	14.90	15.23
MONTH	15.51	10.79	13.24	15.23	9.09	11.87	17.40	10.24	13.95	17.78	12.83	15.06
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	15.02	14.75	14.89	9.95	8.93	9.37	8.10	5.66	7.18	7.15	5.90	6.52
2	15.56	14.93	15.34	11.39	8.70	10.13	8.61	7.43	7.91	7.06	5.82	6.52
3	17.09	14.90	15.59	12.09	11.18	11.66	8.42	7.38	7.89	7.05	5.89	6.53
4	16.79	15.28	15.86	11.18	9.42	10.43	8.32	7.11	7.57	7.03	5.93	6.37
5	15.42	12.75	13.89	9.80	8.78	9.33	7.85	6.51	7.15	7.71	6.00	6.44
6	13.17	12.39	12.94	9.43	8.60	9.01	7.87	6.64	7.12	8.25	7.63	7.96
7	16.09	12.54	14.38	9.01	8.32	8.74	7.92	7.01	7.37	8.13	6.05	6.98
8	15.65	14.59	15.21	8.88	7.33	8.20	8.02	5.50	6.96	7.14	5.40	6.09
9	15.61	13.87	14.68	8.00	7.57	7.77	6.37	5.40	5.85	7.21	5.62	6.73
10	15.88	14.30	15.15	8.39	7.39	7.90	6.81	5.49	6.04	8.04	6.78	7.62
11	16.07	14.50	15.27	8.22	7.68	7.95	6.60	5.55	5.99	7.66	6.44	7.06
12	15.54	13.48	14.54	8.67	7.69	8.31	6.82	5.66	6.11	8.50	6.18	7.60
13	13.45	12.67	13.03	8.32	6.93	7.61	6.95	5.68	6.27	8.63	7.57	8.06
14	13.03	11.89	12.39	7.68	6.49	7.07	7.72	6.22	7.15	8.56	6.71	7.64
15	12.98	11.44	12.16	7.35	6.16	6.76	8.41	6.93	7.80	8.45	6.28	7.46
16	12.48	11.39	12.07	7.73	5.97	6.82	8.13	6.65	7.42	8.67	6.68	7.63
17	12.38	11.56	12.03	8.39	5.97	7.31	8.16	6.39	7.16	8.76	6.94	8.00
18	12.49	10.83	11.61	8.85	6.81	8.16	7.63	5.64	6.66	9.45	7.67	8.57
19	13.81	12.49	13.25	9.18	7.75	8.62	8.10	5.63	6.86	9.37	7.93	8.65
20	13.42	11.80	12.55	9.23	7.92	8.72	8.13	6.08	7.16	8.64	7.45	7.95
21	13.12	11.52	12.40	8.95	6.86	7.85	8.24	5.88	6.81	8.84	6.44	7.40
22	13.20	11.59	12.12	8.75	6.34	7.54	7.62	6.19	6.75	7.59	6.08	6.69
23	11.62	10.12	10.87	7.40	6.05	6.89	7.48	5.81	6.41	7.59	6.32	7.30
24	11.54	9.80	10.62	7.44	6.36	6.74	7.51	5.03	6.18	8.33	7.45	7.93
25	10.63	9.72	10.03	7.90	6.70	7.39	6.85	5.11	5.80	8.80	7.96	8.35
26	10.39	9.58	10.00	7.29	5.30	6.35	6.87	5.14	6.30	9.41	8.33	8.81
27	10.39	9.71	9.98	6.93	5.29	5.98	7.65	6.36	6.94	9.34	8.19	8.88
28	9.89	8.98	9.43	7.00	5.20	5.96	7.64	6.50	7.18	8.76	6.65	7.48
29	10.04	8.86	9.36	7.50	5.16	6.79	7.86	6.42	7.13	7.48	6.24	6.77
30	9.87	8.72	9.32	7.66	5.87	6.64	7.12	5.69	6.41	8.52	6.49	7.46
31	---	---	---	7.60	5.22	6.36	7.16	5.93	6.52	---	---	---
MONTH	17.09	8.72	12.70	12.09	5.16	7.88	8.61	5.03	6.84	9.45	5.40	7.45
YEAR	17.78	5.03	11.10									

COLUMBIA RIVER MAIN STEM

14128910 COLUMBIA RIVER AT WARRENDALE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to current year.

WATER TEMPERATURES: October 1975 to current year.

INSTRUMENTATION.--Specific conductance and temperature recorders since October 1975.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 242 microsiemens May 15, 1977; minimum, 95 microsiemens June 26, 27, 1982.

WATER TEMPERATURES: Maximum, 22.5°C Aug. 17, 18, 1977, Aug. 11, 1980; minimum recorded, 0.0°C many days in January and February, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 225 microsiemens Dec. 9; minimum, 116 microsiemens June 7, 8.

WATER TEMPERATURES: Maximum recorded, 22.0°C July 28-30; minimum, 1.5°C Feb. 11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLIFORM, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
		MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
OCT 16...	1215	139000	183	8.10	14.0	9.5	K10	42	76	7	21
JAN 24...	1200	247000	201	7.90	3.5	14.1	K1	K8	90	11	25
APR 17...	1130	236000	207	8.00	10.0	11.5	K3	K7	89	11	24
JUL 25...	1015	105000	128	7.90	21.0	8.5	K7	25	57	8	16
OCT 16...	5.7	8.7	1.4	69	13	4.3	.20	.040	.20	.20	.020
JAN 24...	6.6	7.3	1.3	79	17	4.1	.20	.040	.32	.20	.030
APR 17...	6.9	10	1.8	78	17	5.8	.20	.050	.65	.50	.020
JUL 25...	4.0	4.7	1.1	49	9.7	2.3	.10	.030	<.10	<.20	<.010
DATE	AS P	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	TURBIDITY (NTU)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 16...	.020	.030	.030	10	109	110	40900	2.0	11	4130	69
JAN 24...	.020	.030	.030	11	115	120	76700	1.9	5	3330	85
APR 17...	.030	.040	.040	16	131	130	83500	11	24	15300	72
JUL 25...	.010	.040	.040	6.4	70	74	19800	2.4	--	--	--

COLUMBIA RIVER MAIN STEM

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14128910 COLUMBIA RIVER AT WARRENDALE, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 16...	20	1	36	1.0	1	<1	<3	<1	8	2
JAN 24...	10	2	38	<.5	<1	1	<3	2	9	<1
APR 17...	100	1	37	2.4	<1	<1	<3	3	55	4
JUL 25...	20	<1	34	<.5	<1	<1	<3	5	9	1
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 16...	7	3	<.1	<10	<1	<1	<1	110	<6	11
JAN 24...	8	<1	<.1	<10	1	<1	<1	110	<6	18
APR 17...	4	4	<.1	<10	3	<1	1	120	<6	7
JUL 25...	<4	1	<.1	<10	1	<1	<1	79	<6	10

K - Results based on colony count outside acceptable range (non-ideal colony count).

COLUMBIA RIVER MAIN STEM

14128910 COLUMBIA RIVER AT WARRENDALE, OR--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	173	192	188	193	185	193	167	124	127	134	151
2	171	168	196	186	192	186	198	165	124	126	135	150
3	172	164	203	186	190	187	198	161	125	125	135	150
4	172	164	202	187	187	188	198	160	125	125	135	149
5	175	166	201	188	184	189	200	158	128	123	136	150
6	174	171	200	190	186	187	203	156	123	123	137	150
7	173	175	209	195	191	185	203	157	119	122	136	150
8	172	175	218	203	191	183	200	158	118	123	136	150
9	175	177	224	209	190	185	196	158	118	124	137	151
10	180	178	221	210	188	188	190	158	118	124	137	151
11	182	181	210	211	188	190	188	158	117	125	138	152
12	186	184	202	213	188	189	191	158	118	125	139	153
13	186	189	201	206	190	188	199	158	119	124	140	154
14	184	194	203	195	192	185	204	159	119	124	141	156
15	183	196	205	193	192	182	203	158	120	124	142	157
16	184	196	207	193	185	182	202	157	120	124	143	157
17	184	195	201	191	180	185	203	153	119	125	144	157
18	183	199	195	194	179	186	205	151	120	125	143	157
19	181	205	192	197	181	186	209	147	120	127	143	157
20	178	209	192	201	183	186	218	144	123	126	143	158
21	176	213	196	203	187	187	221	142	125	126	144	158
22	176	215	199	199	191	186	212	139	126	127	145	159
23	175	213	196	195	190	185	203	137	128	126	147	162
24	176	210	194	197	191	187	198	134	130	127	148	160
25	177	211	193	198	189	189	192	132	137	128	148	161
26	178	215	194	198	186	190	183	130	137	129	149	162
27	179	219	195	197	185	187	180	129	134	130	151	166
28	177	215	195	197	184	187	176	127	133	132	152	167
29	176	205	196	195	---	189	172	127	130	133	151	169
30	176	194	194	191	---	191	169	126	127	133	151	171
31	175	---	191	191	---	191	---	125	---	134	152	---
MEAN	178	192	201	197	188	187	197	148	124	126	142	157
WTR YR 1985	MEAN	170		MAX	224	MIN	117					

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	16.5	16.0	10.5	9.5	8.0	7.5	4.5	4.0	3.0	3.0	4.5	4.0
2	16.5	16.0	10.0	9.5	7.5	7.0	4.0	3.5	3.0	2.5	4.5	4.0
3	16.0	16.0	10.0	9.5	7.0	7.0	3.5	3.5	2.5	2.5	4.5	4.5
4	16.0	16.0	10.0	9.5	7.0	6.5	3.5	3.5	2.5	2.0	4.5	4.5
5	16.0	16.0	10.0	9.5	6.5	6.5	3.5	3.5	2.5	2.5	4.5	4.5
6	16.0	16.0	10.0	9.5	6.5	6.5	3.5	3.5	2.5	2.5	5.0	4.5
7	16.0	16.0	10.0	9.5	6.5	6.5	3.5	3.5	2.5	2.0	5.0	4.5
8	16.0	16.0	9.5	9.5	6.5	6.5	3.5	3.5	2.0	2.0	5.0	4.5
9	16.0	16.0	9.5	9.5	6.5	6.5	3.5	3.0	2.0	2.0	5.0	5.0
10	16.0	16.0	9.5	9.0	6.5	6.5	3.0	3.0	2.0	2.0	5.0	5.0
11	16.0	15.5	9.0	9.0	6.5	6.5	3.0	2.5	2.0	1.5	5.5	5.0
12	15.5	15.0	9.0	9.0	6.5	6.0	2.5	2.5	2.0	2.0	5.5	5.0
13	15.0	14.5	9.0	9.0	6.5	6.0	2.5	2.5	2.0	2.0	5.5	5.5
14	14.5	14.5	9.0	9.0	6.0	6.0	2.5	2.5	2.0	2.0	5.5	5.5
15	14.5	14.0	9.0	8.5	6.0	6.0	3.0	2.5	2.0	2.0	6.0	5.5
16	14.0	14.0	9.0	8.5	6.0	6.0	3.0	3.0	2.0	2.0	6.0	5.5
17	14.0	14.0	8.5	8.5	6.0	5.5	3.0	3.0	2.5	2.0	6.0	5.5
18	14.0	13.5	8.5	8.5	5.5	4.5	3.0	3.0	2.5	2.0	6.0	6.0
19	13.5	13.5	8.5	8.5	4.5	4.0	3.0	3.0	2.5	2.5	6.0	6.0
20	13.5	13.5	8.5	8.5	4.0	4.0	3.0	3.0	3.0	2.5	6.5	6.0
21	13.5	13.0	8.5	8.5	4.5	4.0	3.5	3.0	3.0	3.0	6.0	6.0
22	13.0	13.0	8.5	8.0	5.0	4.5	3.5	3.5	3.5	3.0	6.0	6.0
23	13.0	12.5	8.0	8.0	5.0	5.0	3.5	3.5	4.0	3.5	6.0	6.0
24	12.5	12.5	8.0	8.0	5.0	5.0	3.5	3.5	4.0	4.0	6.0	6.0
25	12.5	12.5	8.0	8.0	5.0	5.0	3.5	3.0	4.0	4.0	6.5	6.0
26	12.5	12.0	8.0	8.0	5.0	5.0	3.5	3.0	4.0	4.0	6.5	6.0
27	12.0	12.0	8.0	7.5	5.0	5.0	3.0	3.0	4.0	4.0	6.5	6.0
28	12.0	11.5	7.5	7.5	5.0	4.5	3.0	3.0	4.0	4.0	6.5	6.0
29	12.0	11.5	7.5	7.5	4.5	4.5	3.0	3.0	---	---	6.5	6.5
30	11.5	11.0	7.5	7.5	4.5	4.5	3.0	3.0	---	---	6.5	6.5
31	11.0	10.5	---	---	4.5	4.5	3.0	3.0	---	---	7.0	6.5
MONTH	16.5	10.5	10.5	7.5	8.0	4.0	4.5	2.5	4.0	1.5	7.0	4.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	7.5	7.0	10.5	10.0	14.5	14.0	18.5	18.0	21.5	21.0	19.0	19.0
2	7.5	7.0	11.0	10.5	14.5	14.0	19.0	18.0	21.0	21.0	19.0	18.5
3	7.5	7.5	11.0	10.5	14.5	14.5	19.0	18.5	21.5	21.0	19.0	18.5
4	7.5	7.0	11.0	10.5	15.0	14.5	19.5	19.0	21.5	21.0	18.5	18.5
5	7.5	7.0	11.0	10.5	15.0	15.0	19.5	19.0	21.0	21.0	18.5	18.0
6	8.0	7.5	11.0	10.5	15.0	15.0	19.5	19.0	21.5	21.0	18.0	18.0
7	8.0	8.0	11.0	11.0	15.0	14.5	19.5	19.0	21.0	21.0	18.0	18.0
8	8.5	8.0	11.5	11.0	15.0	14.5	19.5	19.5	21.0	20.5	18.0	18.0
9	8.5	8.0	11.5	11.0	15.0	14.5	20.0	19.5	21.0	20.5	18.0	18.0
10	8.5	8.5	11.0	11.0	15.5	15.0	20.0	20.0	20.5	20.5	18.0	18.0
11	8.5	8.5	11.0	10.5	16.0	15.5	20.5	20.0	20.5	20.5	18.0	18.0
12	9.0	8.5	11.0	10.5	16.5	16.0	20.5	20.0	20.5	20.0	18.0	18.0
13	9.5	9.0	11.0	10.5	16.5	16.0	20.0	20.0	20.5	20.0	18.0	18.0
14	10.0	9.5	11.5	11.0	16.5	16.5	20.5	20.0	20.5	20.5	18.0	18.0
15	10.0	10.0	11.5	11.0	16.5	16.5	20.5	20.0	20.5	20.5	18.0	17.5
16	10.0	10.0	12.0	11.5	17.0	16.5	20.5	20.0	20.5	20.5	17.5	17.5
17	10.5	10.0	12.5	12.0	17.0	16.5	20.5	20.0	21.0	20.5	17.5	17.0
18	10.0	10.0	12.5	12.0	17.0	16.5	21.0	20.5	21.0	20.5	17.0	17.0
19	10.0	10.0	13.0	12.5	17.5	17.0	21.5	21.0	20.5	20.0	17.0	17.0
20	10.0	10.0	13.0	12.5	17.5	17.5	21.5	21.0	20.0	19.5	17.0	17.0
21	10.0	10.0	13.5	12.5	18.0	17.5	21.5	21.5	19.5	19.5	17.0	16.5
22	10.5	10.0	13.5	13.0	18.0	17.5	21.5	21.5	19.5	19.0	17.0	16.5
23	10.0	10.0	14.0	13.5	17.5	17.5	21.5	21.0	19.5	19.0	16.5	16.5
24	10.0	9.5	14.0	14.0	17.5	17.5	21.5	21.0	19.5	19.0	17.0	16.5
25	10.0	9.5	14.5	14.0	18.0	17.5	21.0	21.0	20.0	19.0	17.0	16.5
26	9.5	9.5	14.5	14.0	18.0	17.5	21.5	21.0	20.0	19.5	16.5	16.5
27	10.0	9.5	14.5	14.5	18.0	18.0	21.5	21.0	20.0	19.5	16.5	16.5
28	10.0	9.5	15.0	14.5	18.0	18.0	22.0	21.0	19.5	19.5	16.5	15.5
29	10.0	10.0	14.5	14.5	18.0	18.0	22.0	21.5	19.5	19.0	15.5	15.0
30	10.5	10.0	14.5	14.0	18.0	18.0	22.0	21.5	19.5	19.0	15.5	15.0
31	---	---	14.5	14.5	---	---	21.5	21.0	19.5	19.0	---	---
MONTH	10.5	7.0	15.0	10.0	18.0	14.0	22.0	18.0	21.5	19.0	19.0	15.0
YEAR	22.0	1.5										

SANDY RIVER BASIN

14131400 ZIGZAG RIVER NEAR RHODODENDRON, OR

LOCATION.--Lat 45°18'32", long 121°51'31", in NE¼SE¼ sec.18, T.3 S., R.8 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank at bridge, 0.5 mi upstream from Devil Canyon Creek, 1.2 mi downstream from Lady Creek, and 2.8 mi southeast of Rhododendron.

DRAINAGE AREA.--14.8 mi².

PERIOD OF RECORD.--July 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,191.52 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Feb. 4-10, Feb. 22 to Mar. 8. Records good. No regulation. Small diversion for private water supply from Lady Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 438 ft³/s Jan. 6, 1983, gage height, 5.35 ft; minimum, 42 ft³/s Oct. 20, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 25, 1980, reached a stage of 6.0 ft, discharge, 863 ft³/s, from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 220 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	1400	*224	*4.92	No other peak greater than base discharge.			
Minimum recorded discharge, 47 ft ³ /s Jan. 30, Feb. 3, 11.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	54	66	90	66	52	64	84	101	111	89	72	56		
2	54	165	86	64	50	62	92	108	105	89	67	59		
3	54	178	82	63	49	61	94	112	106	88	66	56		
4	55	128	79	61	50	60	87	101	112	87	66	56		
5	55	106	77	60	50	58	82	95	111	84	65	76		
6	54	100	76	59	50	56	85	93	147	82	64	77		
7	54	95	75	58	50	55	93	90	190	83	66	60		
8	54	90	74	58	50	54	98	87	164	84	78	59		
9	54	85	87	57	50	54	104	87	143	84	66	62		
10	55	102	96	56	50	54	110	88	134	83	65	81		
11	57	110	86	55	56	54	109	84	131	79	63	64		
12	68	108	85	55	54	55	105	81	134	78	63	61		
13	72	112	80	55	50	54	106	82	131	77	63	61		
14	66	102	81	55	50	55	111	87	127	76	62	63		
15	60	94	81	56	54	55	113	88	125	75	63	67		
16	58	88	77	57	51	56	109	110	120	75	62	65		
17	56	86	76	62	50	59	100	119	120	73	61	81		
18	56	90	74	64	50	59	96	122	123	72	61	70		
19	56	86	73	64	51	59	92	119	126	73	59	65		
20	57	87	73	63	51	60	86	115	121	73	59	63		
21	56	82	73	62	51	60	83	114	117	72	59	63		
22	55	80	83	59	65	60	82	119	112	71	58	61		
23	55	85	93	59	65	66	90	126	106	72	58	60		
24	59	81	84	56	65	64	83	128	100	71	59	59		
25	80	79	80	56	65	61	79	123	98	69	59	59		
26	89	76	78	55	64	61	80	119	97	69	58	58		
27	71	85	76	55	62	59	88	115	97	68	58	58		
28	70	95	73	54	62	59	95	111	94	67	56	57		
29	68	94	73	54	---	58	92	120	91	67	57	56		
30	67	97	71	53	---	68	93	124	90	70	57	56		
31	65	---	68	52	---	73	---	118	---	83	55	---		
TOTAL	1884	2932	2460	1803	1517	1833	2821	3286	3583	2383	1925	1889		
MEAN	60.8	97.7	79.4	58.2	54.2	59.1	94.0	106	119	76.9	62.1	63.0		
MAX	89	178	96	66	65	73	113	128	190	89	78	81		
MIN	54	66	68	52	49	54	79	81	90	67	55	56		
CFSM	4.11	6.60	5.36	3.93	3.66	3.99	6.35	7.16	8.04	5.20	4.20	4.26		
IN.	4.74	7.37	6.18	4.53	3.81	4.61	7.09	8.26	9.01	5.99	4.84	4.75		
AC-FT	3740	5820	4880	3580	3010	3640	5600	6520	7110	4730	3820	3750		
CAL YR 1984	TOTAL	33318	MEAN	91.0	MAX	252	MIN	54	CFSM	6.15	IN.	83.75	AC-FT	66090
WTR YR 1985	TOTAL	28316	MEAN	77.6	MAX	190	MIN	49	CFSM	5.24	IN.	71.17	AC-FT	56160

14134000 SALMON RIVER NEAR GOVERNMENT CAMP, OR

LOCATION.--Lat 45°15'55", long 121°43'00", in SE¼NW¼ sec.31, T.3 S., R.9 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank near lower end of Red Top Meadows and 3.0 mi southeast of Government Camp.

DRAINAGE AREA.--8.00 mi².

PERIOD OF RECORD.--May 1910 to May 1912, April 1926 to current year. Published as "near Rowe" 1910-12.

REVISED RECORDS.--WSP 1398: 1911-12, 1926-27, 1933(M), 1949. WDR OR-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,445.53 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 21, 1910, nonrecording gage at site 0.2 mi upstream at different datum. Nov. 21, 1910, to May 31, 1912, and Apr. 21, 1926, to Sept. 30, 1933, at site 75 ft upstream from former site at different datums. Oct. 1, 1933, to Sept. 30, 1960, at datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: Dec. 19, 20, Feb. 4-6, Aug. 18 to Sept. 30. Records excellent except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--60 years (water years 1911, 1927-85), 44.5 ft³/s, 75.54 in/yr, 32,240 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,300 ft³/s Dec. 23, 1964, gage height, 4.75 ft, from rating curve extended above 310 ft³/s, on basis of slope-area measurement of peak flow; minimum, 10 ft³/s Nov. 27, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0900	*195	2.16	June 6	2000	193	*2.23

Minimum, 12 ft³/s Feb. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	20	30	33	25	19	24	47	66	86	53	33	24		
2	20	141	32	24	18	22	50	78	83	54	31	25		
3	21	129	31	24	17	21	56	80	82	55	31	24		
4	20	74	30	24	17	21	48	66	86	54	31	30		
5	20	58	29	24	17	20	46	63	85	52	29	40		
6	19	57	29	23	17	19	52	63	133	48	28	40		
7	19	52	29	23	17	19	57	59	152	49	30	30		
8	21	47	30	23	18	19	62	58	115	50	41	28		
9	21	42	38	22	18	19	70	56	100	49	28	35		
10	21	55	45	22	17	19	77	56	93	48	28	42		
11	21	77	35	21	22	20	78	52	91	44	26	35		
12	34	76	35	21	26	20	74	50	93	42	28	30		
13	42	75	33	21	19	20	79	53	89	42	27	29		
14	33	61	32	21	19	21	86	62	88	40	27	30		
15	29	51	32	22	21	22	89	70	87	40	27	33		
16	29	47	29	21	19	24	85	94	81	40	26	32		
17	26	46	29	22	18	26	73	100	82	39	26	42		
18	24	50	29	22	18	27	65	104	84	38	26	35		
19	25	46	28	21	18	27	58	104	83	38	26	30		
20	25	44	28	23	17	28	52	103	79	38	26	28		
21	25	40	28	22	19	27	47	100	73	36	25	27		
22	24	38	38	21	32	25	45	103	71	36	25	26		
23	26	42	46	20	29	25	46	113	66	40	25	26		
24	33	40	35	20	32	25	41	115	63	35	26	26		
25	61	37	32	20	29	23	39	111	61	33	25	25		
26	71	35	30	19	24	23	40	104	61	33	25	25		
27	39	36	30	19	23	22	53	100	61	33	25	25		
28	35	39	29	19	23	21	55	93	58	32	24	25		
29	32	38	28	19	---	20	53	108	57	33	25	24		
30	30	35	27	19	---	32	57	108	54	36	25	24		
31	29	---	25	19	---	42	---	96	---	37	24	---		
TOTAL	895	1638	984	666	583	723	1780	2588	2497	1297	849	895		
MEAN	28.9	54.6	31.7	21.5	20.8	23.3	59.3	83.5	83.2	41.8	27.4	29.8		
MAX	71	141	46	25	32	42	89	115	152	55	41	42		
MIN	19	30	25	19	17	19	39	50	54	32	24	24		
CFSM	3.61	6.82	3.96	2.69	2.60	2.91	7.41	10.4	10.4	5.22	3.42	3.72		
IN.	4.16	7.62	4.58	3.10	2.71	3.36	8.28	12.03	11.61	6.03	3.95	4.16		
AC-FT	1780	3250	1950	1320	1160	1430	3530	5130	4950	2570	1680	1780		
CAL YR 1984	TOTAL	18496	MEAN	50.5	MAX	244	MIN	19	CFSM	6.31	IN.	86.01	AC-FT	36690
WTR YR 1985	TOTAL	15395	MEAN	42.2	MAX	152	MIN	17	CFSM	5.27	IN.	71.59	AC-FT	30540

SANDY RIVER BASIN

14137000 SANDY RIVER NEAR MARMOT, OR

LOCATION.--Lat 45°23'30", long 122°07'40", in SE¼ sec.13, T.2 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, on right bank 0.7 mi southwest of Marmot, 0.8 mi upstream from Sandy River Dam of Portland General Electric Co., 6.6 mi downstream from Salmon River, and at mile 30.9.

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.--August 1911 to current year. Published as "at Marmot" October 1912 to September 1913. Records for January 1916 to June 1919, published as "below dam, near Marmot," obtained by combining records for Sandy River below dam, near Marmot, with records for Sandy River Canal near Marmot.

REVISED RECORDS.--WSP 594: Drainage area. WSP 1288: 1912(M), 1915, 1922, 1924, 1934(M). WSP 1318: 1932(M).

GAGE.--Water-stage recorder. Elevation of gage is 730 ft, from river-profile map. Aug. 15, 1911, to Dec. 20, 1915, and July 2, 1919, to Oct. 19, 1933, nonrecording gage at site 1.0 mi upstream at different datum. Oct. 20, 1933, to Sept. 30, 1958, water-stage recorder at site 0.6 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Feb. 3-5. Records excellent. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--74 years, 1,368 ft³/s, 70.91 in/yr, 991,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,400 ft³/s Dec. 22, 1964, gage height, 17.05 ft, from rating curve extended above 7,000 ft³/s; minimum, 195 ft³/s Nov. 27, 28, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0500	*11,700	*12.59	No other peak greater than base discharge.			
Minimum, 306 ft ³ /s Aug. 31, Sept. 1.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	331	1140	2450	1320	594	1330	2990	2110	1600	702	574	316		
2	329	6400	1850	1160	567	1230	3070	2410	1420	712	438	355		
3	334	9490	1500	1040	582	1120	2890	2560	1340	721	425	326		
4	345	5100	1290	954	520	1120	2450	2180	1410	707	420	326		
5	349	3160	1130	907	560	1010	2030	1830	1440	689	409	442		
6	335	2460	1030	863	542	937	2020	1670	2660	645	389	834		
7	339	2300	974	827	600	868	2240	1550	5910	651	426	465		
8	364	1940	960	792	552	812	2360	1420	4540	664	623	384		
9	372	1740	1340	755	542	777	2570	1350	2920	658	458	372		
10	377	2380	2940	720	528	775	2830	1330	2250	635	402	774		
11	395	2930	1880	690	834	799	2710	1340	1900	596	381	551		
12	506	2850	1850	664	1410	827	2460	1190	1750	574	375	470		
13	961	3130	1730	653	1010	796	2420	1180	1610	557	374	511		
14	1020	3100	1680	654	1020	797	2560	1390	1500	542	367	476		
15	895	2280	1910	688	1670	817	2540	1330	1410	536	362	624		
16	722	1810	1550	693	1430	887	2420	1680	1290	524	360	543		
17	623	1540	1350	965	1200	1040	2020	2030	1200	523	357	1030		
18	572	1550	1170	1180	1070	1050	1830	2060	1190	518	360	1070		
19	554	1440	1050	1090	1100	1030	1690	1930	1180	517	350	735		
20	649	1470	1010	1040	1260	1100	1460	1810	1120	520	348	599		
21	690	1390	1020	987	1220	1180	1380	1680	1020	502	337	534		
22	611	1250	1580	912	2030	1120	1430	1730	971	466	328	489		
23	563	1400	2910	845	2110	1540	2140	1830	910	479	333	448		
24	604	1470	2670	789	2280	1630	1900	1900	850	481	345	423		
25	991	1330	1940	742	2340	1350	1750	1780	809	445	356	405		
26	2750	1210	1620	703	1820	1230	1600	1620	796	446	358	390		
27	2170	1450	1510	675	1500	1170	1840	1510	793	439	341	376		
28	2530	2720	1330	657	1340	1050	2220	1440	771	423	332	360		
29	1990	2930	1310	632	---	992	2030	1730	747	431	325	349		
30	1510	3280	1620	604	---	1320	1940	2010	720	454	335	343		
31	1410	---	1580	593	---	2170	---	1740	---	500	314	---		
TOTAL	26191	76640	49734	25794	32231	33874	65790	53320	48027	17257	11902	15320		
MEAN	845	2555	1604	832	1151	1093	2193	1720	1601	557	384	511		
MAX	2750	9490	2940	1320	2340	2170	3070	2560	5910	721	623	1070		
MIN	329	1140	960	593	520	775	1380	1180	720	423	314	316		
CFSM	3.23	9.75	6.12	3.18	4.39	4.17	8.37	6.56	6.11	2.13	1.47	1.95		
IN.	3.72	10.88	7.06	3.66	4.58	4.81	9.34	7.57	6.82	2.45	1.69	2.18		
AC-FT	51950	152000	98650	51160	63930	67190	130500	105800	95260	34230	23610	30390		
CAL YR 1984	TOTAL	569700	MEAN	1557	MAX	9490	MIN	329	CFSM	5.94	IN.	80.89	AC-FT	1130000
WTR YR 1985	TOTAL	456080	MEAN	1250	MAX	9490	MIN	314	CFSM	4.77	IN.	64.76	AC-FT	904600

SANDY RIVER BASIN

53

14138800 BLAZED ALDER CREEK NEAR RHODODENDRON, OR

LOCATION.--Lat 45°27'10", long 121°53'25", in NW¼SE¼ sec.25, T.1 S., R.7 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank 600 ft below the confluence of Bedrock and Hickman Creeks and 8.6 mi north of Rhododendron.

DRAINAGE AREA.--8.17 mi².

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,540 ft, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 18-21, Jan. 2-6, 10-16, Jan. 26 to Feb. 15. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--22 years, 59.7 ft³/s, 99.23 in/yr, 43,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,610 ft³/s Dec. 22, 1964, gage height, 8.25 ft, from rating curve extended above 330 ft³/s, on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s Sept. 5-10, 28, 29, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0430	*885	*4.57	No other peak greater than base discharge.			
Minimum, 2.8 ft ³ /s July 28-30, Aug. 26-31, Sept. 1, 4, 5.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	4.7	47	80	31	13	36	225	113	64	8.6	8.4	2.8		
2	4.0	517	53	27	12	32	185	140	49	8.1	5.0	3.7		
3	3.9	602	39	22	11	29	166	152	45	7.7	4.2	3.1		
4	4.8	259	31	20	10	27	125	115	57	7.2	3.9	2.8		
5	4.8	127	26	18	10	25	98	85	61	6.8	3.5	11		
6	4.2	113	23	17	11	23	102	74	174	6.6	3.3	57		
7	3.9	125	22	16	12	21	120	66	374	6.3	6.3	18		
8	3.9	94	22	16	11	19	131	56	228	5.9	40	14		
9	4.6	83	66	15	11	18	151	52	118	5.8	13	15		
10	5.6	158	134	14	10	18	171	56	81	5.5	8.5	69		
11	9.4	178	78	13	20	20	157	61	62	5.4	7.0	32		
12	30	175	58	13	36	21	135	47	50	5.1	6.1	27		
13	101	189	42	12	26	20	138	47	43	5.0	5.4	35		
14	109	140	55	12	27	22	148	72	37	4.7	5.0	29		
15	67	89	66	13	65	24	142	71	33	4.6	4.6	56		
16	42	61	47	14	45	28	129	114	28	4.3	4.2	42		
17	30	47	38	17	35	35	99	128	26	4.3	4.0	102		
18	24	76	30	26	29	39	93	112	24	4.2	3.7	88		
19	22	76	24	30	28	39	80	93	22	4.0	4.0	51		
20	26	70	23	31	27	56	60	81	20	3.7	3.9	33		
21	28	55	60	29	26	64	49	74	18	3.6	3.6	25		
22	23	43	145	27	55	48	55	80	16	3.6	3.5	21		
23	21	55	214	25	59	84	120	85	15	3.3	3.3	17		
24	26	51	122	22	89	78	85	80	14	3.3	3.0	15		
25	77	41	76	20	89	52	65	69	13	3.3	3.0	13		
26	234	34	56	19	62	41	56	58	12	3.2	3.0	12		
27	159	53	44	17	45	34	86	50	11	3.0	2.8	11		
28	143	208	35	16	38	28	110	46	11	3.0	2.8	9.8		
29	92	157	38	15	---	26	101	79	9.7	2.8	2.8	9.1		
30	74	135	63	14	---	97	94	110	9.2	3.2	2.9	8.6		
31	61	---	44	14	---	201	---	78	---	7.7	2.8	---		
TOTAL	1442.8	4058	1854	595	912	1305	3476	2544	1724.9	153.8	177.5	832.9		
MEAN	46.5	135	59.8	19.2	32.6	42.1	116	82.1	57.5	4.96	5.73	27.8		
MAX	234	602	214	31	89	201	225	152	374	8.6	40	102		
MIN	3.9	34	22	12	10	18	49	46	9.2	2.8	2.8	2.8		
CFSM	5.69	16.5	7.32	2.35	3.99	5.15	14.2	10.0	7.04	.61	.70	3.40		
IN.	6.57	18.48	8.44	2.71	4.15	5.94	15.83	11.58	7.85	.70	.81	3.79		
AC-FT	2860	8050	3680	1180	1810	2590	6890	5050	3420	305	352	1650		
CAL YR 1984	TOTAL	24111.3	MEAN	65.9	MAX	612	MIN	2.3	CFSM	8.07	IN.	109.78	AC-FT	47820
WTR YR 1985	TOTAL	19075.9	MEAN	52.3	MAX	602	MIN	2.8	CFSM	6.40	IN.	86.86	AC-FT	37840

SANDY RIVER BASIN

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR

LOCATION.--Lat 45°29'50", long 122°00'50", near center of sec.12, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank 1.2 mi upstream from North Fork, 7.0 mi southeast of Multnomah Falls, and at mile 14.8.

DRAINAGE AREA.--47.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,080 ft, from topographic map.

REMARKS.--Estimated daily discharges: Feb. 4, 5. Water-discharge records excellent. Regulation at times since 1915 by Bull Run Lake, usable capacity, 12,270 acre-ft. No diversion upstream from station.

AVERAGE DISCHARGE.--19 years, 423 ft³/s, 119.92 in/yr, 306,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,610 ft³/s Jan. 20, 1972, gage height, 13.22 ft; minimum, 33 ft³/s Sept. 27, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0330	*4,090	*9.45	No other peak greater than base discharge.			
Minimum discharge, 47 ft ³ /s Sept. 1, 4, 5.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	57	402	671	324	115	316	1620	593	424	104	155	47		
2	57	2970	458	263	111	282	1240	677	359	100	113	50		
3	54	3090	350	222	101	253	1070	779	321	96	104	49		
4	62	1430	285	199	96	250	787	612	359	93	101	47		
5	65	779	242	190	92	228	624	484	374	90	97	141		
6	57	725	220	173	102	211	665	423	1360	87	95	458		
7	55	860	207	162	114	193	777	374	2720	84	116	183		
8	55	614	205	154	102	181	797	338	1440	82	369	130		
9	62	578	482	142	98	180	888	316	736	79	184	132		
10	70	1190	925	134	95	187	954	332	497	77	141	443		
11	105	1190	506	122	190	201	936	342	398	76	126	255		
12	272	1020	429	116	395	210	791	294	372	72	115	221		
13	578	1140	381	114	247	198	775	294	327	72	108	308		
14	802	929	445	118	257	206	790	370	297	71	104	246		
15	495	581	541	142	554	220	751	358	270	70	100	382		
16	326	422	389	136	394	267	674	492	245	69	95	364		
17	244	344	318	175	303	314	523	546	227	74	93	827		
18	204	450	259	232	253	318	513	508	216	79	91	589		
19	193	437	225	241	257	304	468	450	207	80	91	367		
20	226	436	212	243	292	397	380	403	194	80	83	266		
21	223	377	310	238	288	443	350	369	180	80	71	214		
22	193	317	1200	230	631	366	421	377	167	80	63	182		
23	175	376	1710	208	553	769	857	392	154	80	58	155		
24	199	376	954	192	750	662	631	388	145	80	55	135		
25	493	329	560	175	663	439	506	353	137	80	53	121		
26	1240	289	438	161	453	352	441	317	129	83	52	111		
27	1170	587	374	150	359	304	649	295	123	87	50	102		
28	1150	1860	311	142	316	264	720	283	117	89	50	94		
29	683	1380	341	136	---	241	609	534	112	89	49	87		
30	539	1200	569	126	---	750	543	784	107	94	48	84		
31	473	---	452	122	---	1460	---	513	---	135	48	---		
TOTAL	10577	26678	14969	5482	8181	10966	21750	13590	12714	2612	3078	6790		
MEAN	341	889	483	177	292	354	725	438	424	84.3	99.3	226		
MAX	1240	3090	1710	324	750	1460	1620	784	2720	135	369	827		
MIN	54	289	205	114	92	180	350	283	107	69	48	47		
CFSM	7.12	18.6	10.1	3.70	6.10	7.39	15.1	9.14	8.85	1.76	2.07	4.72		
IN.	8.21	20.72	11.63	4.26	6.35	8.52	16.89	10.55	9.87	2.03	2.39	5.27		
AC-FT	20980	52920	29690	10870	16230	21750	43140	26960	25220	5180	6110	13470		
CAL YR 1984	TOTAL	163550	MEAN	447	MAX	3720	MIN	53	CFSM	9.33	IN.	127.02	AC-FT	324400
WTR YR 1985	TOTAL	137387	MEAN	376	MAX	3090	MIN	47	CFSM	7.85	IN.	106.70	AC-FT	272500

SANDY RIVER BASIN

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14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1977 to current year.

WATER TEMPERATURES: October 1977 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1977 to current year.

INSTRUMENTATION.--Conductivity/temperature recorder since October 1977. Automatic pumping sediment sampler since October 1977.

REMARKS.--Sediment concentrations and corresponding sediment discharges reported as 0 mg/L or 0 tons should be interpreted as <1 due to the limitations of sampling equipment, analytical methods, rounding errors, and the likelihood of minor amounts of sediment transport occurring at even the lowest of discharges.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality Laboratory and were reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 38 microsiemens July 19, 1979; minimum recorded, 9 microsiemens Jan. 23, 1982.

WATER TEMPERATURES: Maximum, 17.0°C July 19, 20, 1979; minimum, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily, 290 mg/L Dec. 2, 1977; minimum, 0 mg/L on many days.

SEDIMENT DISCHARGE: Maximum daily, 5,930 tons Dec. 2, 1977; minimum, 0 tons on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 29 microsiemens July 27, 31, Aug. 3-5; minimum, 12 microsiemens June 7.

WATER TEMPERATURES: Maximum, 16.0°C July 9; minimum, 0.0°C Dec. 19, 20, Feb. 1, 3-5, 7, 12.

SEDIMENT CONCENTRATIONS: Maximum daily, 12 mg/L Nov., 2, 3, June 7; minimum, 0 mg/L on many days throughout the year.

SEDIMENT DISCHARGE: Maximum daily, 111 tons Nov. 3; minimum, .15 tons Oct. 1-3, 6-8.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

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

SANDY RIVER BASIN

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	---	---	5.5	4.0	4.5	4.0	2.5	2.0	1.5	.0	4.0	3.0
2	---	---	6.0	5.5	4.0	3.0	2.5	1.0	1.0	.5	3.5	2.5
3	---	---	6.0	5.5	3.0	2.0	1.0	1.0	.5	.0	3.5	2.5
4	---	---	6.5	5.5	2.0	1.5	1.5	.5	.0	.0	3.0	2.0
5	---	---	6.0	5.0	1.5	1.5	2.5	1.5	.5	.0	3.5	2.5
6	---	---	6.0	5.5	2.5	1.5	2.5	1.5	2.0	.5	3.5	2.5
7	---	---	6.0	5.0	3.0	2.5	2.5	1.5	1.5	.0	3.0	2.0
8	---	---	5.5	4.5	4.0	3.0	2.5	2.0	1.0	.5	4.0	2.5
9	---	---	5.5	5.0	4.0	3.5	2.0	1.5	1.5	1.0	4.5	3.0
10	---	---	6.0	5.0	3.5	2.5	1.5	1.0	1.5	.5	4.5	3.0
11	---	---	6.5	6.0	3.5	2.5	1.0	.5	1.5	.5	4.5	3.0
12	9.0	---	6.5	6.0	2.5	2.0	1.0	.5	2.0	.0	4.0	3.5
13	9.0	7.5	6.5	5.5	3.5	2.5	1.5	1.0	2.5	1.5	4.0	2.5
14	7.5	7.0	5.5	5.0	4.0	3.0	2.0	1.0	3.0	2.0	4.5	3.0
15	7.0	6.5	5.0	4.5	3.5	3.0	2.5	2.0	3.0	2.5	4.5	2.5
16	6.5	6.0	5.0	4.5	3.0	3.0	3.0	2.5	2.5	2.0	5.5	3.5
17	6.0	5.5	5.0	4.5	3.0	2.0	3.0	2.5	2.5	1.5	5.0	4.0
18	6.5	5.5	6.0	5.0	2.0	.5	3.0	2.5	3.0	2.0	5.0	3.0
19	6.5	6.0	6.0	5.0	.5	.0	3.5	2.5	2.5	2.0	4.5	3.0
20	6.0	5.5	5.5	5.5	.5	.0	3.5	3.0	3.0	2.0	4.5	2.5
21	6.0	5.0	5.5	4.5	1.5	.5	3.5	3.0	3.5	3.0	2.5	2.0
22	5.5	4.5	4.5	4.0	3.5	1.5	3.5	2.5	3.5	3.0	3.0	1.5
23	6.0	5.0	5.0	3.5	4.0	3.5	2.5	2.0	4.0	3.5	3.5	2.5
24	7.5	6.0	4.0	3.5	4.0	3.5	2.0	1.5	3.5	3.0	3.5	2.0
25	8.0	7.0	3.5	3.5	4.0	3.5	1.5	1.0	3.5	3.0	3.5	2.5
26	7.5	5.5	4.0	3.5	3.5	3.5	1.5	1.0	4.0	2.5	3.0	2.0
27	6.0	5.5	4.0	3.0	3.5	2.0	2.0	1.0	4.0	2.5	3.5	2.0
28	6.0	5.5	4.5	3.5	2.5	2.0	2.0	1.5	4.0	2.5	4.5	3.0
29	6.0	5.5	4.5	4.0	3.0	2.5	2.0	1.5	---	---	4.0	3.0
30	5.5	5.0	4.5	4.0	3.5	3.0	2.0	1.5	---	---	4.0	3.0
31	5.0	4.5	---	---	3.5	2.5	2.0	1.5	---	---	4.5	3.5
MONTH	---	---	6.5	3.0	4.5	.0	3.5	.5	4.0	.0	5.5	1.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	5.5	3.5	8.0	5.0	6.5	6.0	13.5	9.5	12.5	11.0	12.5	11.5
2	6.0	3.5	8.0	5.0	8.0	6.0	14.0	11.0	12.5	10.5	12.0	11.0
3	5.0	4.0	6.0	4.5	8.5	6.5	14.5	11.5	14.0	10.0	12.0	10.5
4	5.0	3.5	5.5	4.0	9.0	8.0	14.5	12.0	13.5	11.0	12.5	11.5
5	6.5	4.0	7.0	4.0	8.5	7.5	14.5	12.0	13.5	10.5	12.5	12.0
6	6.5	3.5	6.5	5.0	8.0	7.5	14.5	11.5	13.5	10.5	12.0	10.5
7	6.5	4.0	6.0	4.5	7.5	7.0	15.0	12.0	13.0	11.0	11.0	9.5
8	7.0	4.0	7.0	4.5	9.0	6.0	15.5	12.5	12.0	11.0	10.5	9.5
9	7.0	4.0	6.5	4.5	10.0	6.5	16.0	13.0	12.5	10.5	10.0	9.0
10	6.5	4.0	6.0	5.0	10.5	6.5	15.5	13.0	11.5	10.5	10.0	9.0
11	5.0	4.5	5.5	4.0	11.5	7.0	15.5	12.5	13.0	10.0	9.5	8.5
12	7.0	4.0	7.0	3.5	12.0	8.5	15.0	13.0	13.5	10.5	10.0	9.5
13	7.5	4.0	6.5	4.5	11.5	9.0	15.0	12.0	14.0	11.5	10.5	9.5
14	7.0	4.0	6.0	5.0	11.0	9.5	15.5	12.5	14.0	11.5	10.0	9.5
15	7.0	4.5	9.0	4.0	12.5	9.5	15.0	13.0	14.0	11.5	10.0	9.5
16	5.5	4.5	10.0	6.0	12.0	8.5	15.0	12.5	14.5	12.0	9.5	8.5
17	5.5	4.5	9.5	5.5	13.0	9.5	15.0	12.5	14.5	12.0	9.5	8.5
18	5.0	3.5	9.0	6.0	14.5	10.0	15.0	12.0	13.5	12.0	9.5	8.5
19	3.5	2.5	7.5	6.0	14.5	11.0	15.5	12.0	12.0	11.5	10.0	9.0
20	4.0	2.5	7.0	6.5	13.5	11.0	15.5	12.0	11.5	11.0	10.0	8.0
21	4.5	3.0	9.5	5.5	13.5	9.5	14.5	12.0	11.0	10.0	10.0	9.5
22	5.0	3.5	9.5	6.0	13.0	10.0	13.5	11.5	12.5	10.0	10.0	8.0
23	4.5	3.5	9.0	7.0	11.0	9.0	13.5	11.0	13.5	11.5	10.0	8.5
24	4.5	3.5	8.0	7.5	10.0	8.0	14.0	11.5	13.5	12.5	10.0	9.0
25	4.5	3.0	8.0	7.0	12.0	7.5	14.0	10.5	14.0	12.5	10.5	9.5
26	5.0	4.0	7.5	7.0	13.0	9.0	14.0	11.0	14.0	12.5	10.5	9.0
27	6.5	4.5	7.5	7.0	12.0	9.5	13.5	10.5	13.5	12.5	10.0	9.0
28	5.5	4.5	7.5	7.0	12.0	8.5	13.5	10.0	13.0	12.0	9.5	8.0
29	7.0	3.5	7.0	6.0	11.5	9.5	13.0	11.0	13.0	11.5	8.0	7.0
30	7.5	4.0	8.0	6.0	12.5	9.5	12.5	10.5	12.5	12.0	8.5	7.0
31	---	---	7.0	6.5	---	---	12.0	10.0	12.5	11.5	---	---
MONTH	7.5	2.5	10.0	3.5	14.5	6.0	16.0	9.5	14.5	10.0	12.5	7.0

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	
OCTOBER												
1	1	.15	3	3.3	2	3.6	---	1.7	---	.31	---	.85
2	1	.15	12	103	1	1.2	---	1.4	---	.30	---	.76
3	1	.15	12	111	---	.95	---	.60	---	.27	---	.68
4	1	.17	3	12	---	.77	---	.54	---	.26	---	1.4
5	1	.18	3	6.3	---	.65	---	.51	---	.25	---	1.8
6	1	.15	3	5.9	---	.59	---	.47	---	.28	---	1.7
7	1	.15	2	4.6	---	.56	---	.44	---	.31	4	2.1
8	1	.15	3	5.0	---	.55	2	.83	---	.28	4	2.0
9	1	.17	2	3.1	---	2.6	2	.77	---	.26	3	1.5
10	1	.19	4	13	---	5.0	2	.72	---	.26	4	2.0
11	1	.28	3	9.6	---	2.7	2	.66	---	.51	2	1.1
12	2	1.5	3	8.3	1	1.2	2	.63	---	2.1	2	1.1
13	2	3.1	4	12	1	1.0	2	.62	---	.67	2	1.1
14	3	6.5	2	5.0	3	3.6	2	.64	---	.69	2	1.1
15	2	2.7	1	1.6	1	1.5	2	.77	---	3.0	3	1.8
16	1	.88	2	2.3	2	2.1	2	.73	---	2.1	3	2.2
17	1	.66	2	1.9	1	.86	2	.95	---	.82	3	2.5
18	1	.55	2	2.4	1	.70	3	1.9	---	.68	2	1.7
19	1	.52	2	2.4	---	.61	1	.65	---	1.4	2	1.6
20	1	.61	2	2.4	---	.57	1	.66	---	.79	2	2.1
21	1	.60	1	1.0	---	.84	1	.64	---	.78	2	2.4
22	1	.52	1	.86	---	13	1	.62	---	3.4	2	2.0
23	1	.47	2	2.0	---	23	---	.56	---	3.0	4	8.3
24	1	.54	2	2.0	---	7.7	---	.52	---	4.1	3	5.4
25	2	2.7	1	.89	---	1.5	---	.47	---	3.6	3	3.6
26	4	13	1	.78	---	1.2	---	.43	---	2.4	3	2.9
27	4	13	2	3.2	---	1.0	---	.41	---	1.9	3	2.5
28	3	9.3	4	20	---	.84	---	.38	---	.85	2	1.4
29	2	3.7	2	7.5	---	.92	---	.37	---	---	1	.65
30	2	2.9	2	6.5	---	3.1	---	.34	---	---	4	8.1
31	4	5.1	---	---	---	2.4	---	.33	---	---	---	12
TOTAL	---	70.74	---	359.83	---	86.81	---	21.26	---	35.57	---	80.34
OCTOBER												
NOVEMBER												
DECEMBER												
JANUARY												
FEBRUARY												
MARCH												
APRIL												
MAY												
JUNE												
JULY												
AUGUST												
SEPTEMBER												
1	---	22	9	14	---	3.4	5	1.4	6	2.5	---	.51
2	---	10	11	20	---	3.9	5	1.4	5	1.5	---	.54
3	---	5.8	6	13	---	3.5	5	1.3	5	1.4	---	.53
4	---	6.4	4	6.6	---	4.8	6	1.5	5	1.4	---	.51
5	---	8.4	6	7.8	---	5.0	6	1.5	5	1.3	---	2.3
6	---	11	7	8.0	10	48	6	1.4	5	1.3	---	8.7
7	---	15	9	9.1	12	92	7	1.6	5	1.6	---	2.0
8	---	15	8	7.3	7	27	7	1.5	9	9.0	---	1.1
9	---	19	7	6.0	6	12	7	1.5	4	2.0	---	1.1
10	---	23	8	7.2	7	9.4	7	1.5	3	1.1	---	6.0
11	---	20	6	5.5	3	3.2	6	1.2	3	1.0	---	2.8
12	---	15	7	5.6	2	2.0	5	.97	4	1.2	---	2.4
13	---	15	5	4.0	4	3.5	6	1.2	4	1.2	---	4.2
14	---	19	3	3.0	4	3.2	8	1.5	5	1.4	---	2.7
15	---	16	3	2.9	6	4.4	9	1.7	5	1.4	---	6.2
16	---	15	5	6.6	8	5.3	10	1.9	6	1.5	4	3.9
17	---	13	5	7.4	10	6.1	9	1.8	6	1.5	5	11
18	---	11	7	9.6	9	5.2	9	1.9	5	1.2	3	4.8
19	---	6.3	9	11	8	4.5	9	1.9	4	.98	3	3.0
20	---	6.2	8	8.7	6	3.1	9	1.9	4	.90	3	2.2
21	---	3.8	7	7.0	6	2.9	9	1.9	---	.77	2	1.2
22	---	2.3	8	8.1	6	2.7	8	1.7	---	.68	2	.98
23	---	9.3	6	6.4	8	3.3	7	1.5	---	.63	---	.84
24	---	5.1	4	4.2	9	3.5	5	1.1	---	.59	---	.73
25	---	8.2	3	2.9	9	3.3	4	.86	---	.57	---	.65
26	---	4.8	5	4.3	8	2.8	3	.67	---	.56	---	.60
27	---	8.8	7	5.6	6	2.0	4	.94	---	.54	---	.55
28	---	7.8	6	4.6	6	1.9	5	1.2	---	.54	---	.51
29	---	8.2	5	7.2	5	1.5	6	1.4	---	.53	---	.47
30	---	10	---	11	5	1.4	6	1.5	---	.52	---	.45
31	---	---	---	2.8	---	---	7	2.6	---	.52	---	---
TOTAL	---	340.4	---	227.4	---	274.8	---	45.94	---	41.83	---	73.47

SANDY RIVER BASIN

14138870 FIR CREEK NEAR BRIGHTWOOD, OR

LOCATION.--Lat 45°28'56", long 122°01'36", in NE¼SE¼ sec.14, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, on right bank, 6.4 mi north of Brightwood and 0.6 mi above Bull Run Reservoir Number One.

DRAINAGE AREA.--5.46 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

REVISED RECORDS.--WDR OR-78-1: 1976. WDR OR-82-2: 1976(P), 1978-79(P), 1981.

GAGE.--Water-stage recorder. Elevation of gage is 1,440 ft, from topographic map.

REMARKS.--Estimated daily discharges: Feb. 3-5 and May 20-26. Water-discharge records good. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--10 years, 35.4 ft³/s, 88.05 in/yr, 25,650 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,290 ft³/s Dec. 2, 1977, gage height, 5.64 ft; minimum, 1.9 ft³/s Aug. 17-23, 1977, Sept. 16-18, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	1130	*384	*4.33				

Minimum discharge, 2.6 ft³/s Aug. 31, Sept. 1, 4, 5, gage height, 1.36 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	3.7	41	74	33	11	29	152	47	34	7.2	8.3	3.0		
2	3.7	293	50	29	10	26	109	51	29	6.9	4.9	4.0		
3	3.6	269	39	25	9.5	24	87	59	26	6.7	4.1	2.9		
4	4.7	123	32	22	9.0	23	62	47	31	6.5	4.0	2.6		
5	4.2	68	28	21	8.5	21	49	38	32	6.3	3.9	12		
6	3.7	65	25	20	8.7	20	50	34	134	6.0	3.7	42		
7	3.5	71	23	18	9.9	18	55	31	284	5.8	6.3	17		
8	3.9	55	22	17	8.5	17	55	28	143	5.7	28	11		
9	4.4	50	47	16	8.0	17	60	27	68	5.5	12	13		
10	5.8	110	79	15	7.8	17	64	27	47	5.3	8.0	42		
11	9.1	107	46	14	19	18	65	27	37	5.1	6.6	24		
12	20	90	40	14	34	18	55	24	33	5.0	5.8	22		
13	41	107	38	13	23	17	53	24	30	4.9	5.3	29		
14	48	87	46	13	28	18	53	27	26	4.7	4.8	24		
15	36	55	55	14	65	18	50	28	24	4.6	4.5	30		
16	27	41	39	15	41	21	46	34	21	4.5	4.3	29		
17	21	34	32	21	31	23	36	37	20	4.5	4.0	57		
18	18	41	27	27	26	23	38	34	18	4.5	3.9	45		
19	18	38	24	26	26	22	34	31	17	4.3	3.9	30		
20	24	41	22	26	29	28	30	28	15	4.2	3.9	24		
21	24	37	28	23	31	30	29	26	14	4.1	3.6	19		
22	21	32	96	22	80	27	34	25	13	4.0	3.5	17		
23	19	37	155	20	63	65	66	25	12	4.0	3.4	14		
24	20	36	96	18	75	59	50	24	11	4.0	3.3	13		
25	39	34	56	17	63	40	42	24	9.9	4.0	3.2	11		
26	93	30	44	16	43	33	40	24	9.5	3.9	3.0	9.9		
27	101	72	36	15	34	30	55	22	8.9	3.9	2.9	9.1		
28	113	189	31	14	30	27	61	21	8.4	3.7	2.9	8.1		
29	67	147	34	13	---	24	51	46	7.9	3.7	2.8	7.5		
30	49	131	50	12	---	63	45	62	7.6	4.1	2.8	7.0		
31	43	---	43	11	---	123	---	41	---	6.2	2.7	---		
TOTAL	892.3	2531	1457	580	831.9	939	1676	1023	1171.2	153.8	164.3	579.1		
MEAN	28.8	84.4	47.0	18.7	29.7	30.3	55.9	33.0	39.0	4.96	5.30	19.3		
MAX	113	293	155	33	80	123	152	62	284	7.2	28	57		
MIN	3.5	30	22	11	7.8	17	29	21	7.6	3.7	2.7	2.6		
CFSM	5.27	15.5	8.61	3.42	5.44	5.55	10.2	6.04	7.14	.91	.97	3.53		
IN.	6.08	17.24	9.93	3.95	5.67	6.40	11.42	6.97	7.98	1.05	1.12	3.95		
AC-FT	1770	5020	2890	1150	1650	1860	3320	2030	2320	305	326	1150		
CAL YR 1984	TOTAL	14963.3	MEAN	40.9	MAX	372	MIN	2.9	CFSM	7.49	IN.	101.95	AC-FT	29680
WTR YR 1985	TOTAL	11998.6	MEAN	32.9	MAX	293	MIN	2.6	CFSM	6.03	IN.	81.75	AC-FT	23800

SANDY RIVER BASIN

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14138870 FIR CREEK NEAR BRIGHTWOOD, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1977 to current year.

WATER TEMPERATURES: October 1977 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1977 to current year.

INSTRUMENTATION.--Conductivity/temperature recorder since October 1977. Automatic pumping sediment sampler since October 1977.

REMARKS.--Sediment concentrations and corresponding sediment discharges reported as 0 mg/L or 0 tons should be interpreted as <1 due to the limitations of sampling equipment, analytical methods, rounding errors, and the likelihood of minor amounts of sediment transport occurring at even the lowest of discharges.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality laboratory and were reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 30 microsiemens Aug. 5, 12, 13, 17-19, 27, Sept. 10, 11, 16-18, 1980; minimum, 9 microsiemens Dec. 4, 1978.

WATER TEMPERATURES: Maximum recorded, 15.0°C Aug. 8, 9, 1978, Aug. 9-11, 1981, July 18-20, 1985; minimum recorded, 0.0°C on several days in 1978-80, 1983.

SEDIMENT CONCENTRATIONS: Maximum, 200 mg/L Jan. 23, Feb. 20, 1982; minimum, 0 mg/L on many days.

SEDIMENT DISCHARGE: Maximum, 345 tons Dec. 2, 1977; minimum, 0 tons on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 28 microsiemens July 30, 31, Aug. 4, 7, 19, Sept. 5; minimum, 14 microsiemens Jan. 6, 7.

WATER TEMPERATURES: Maximum, 15.0°C July 18-20; minimum, 0.0°C Feb. 1, 3-5, 7.

SEDIMENT CONCENTRATIONS: Maximum daily, 10 mg/L June 6, 7; minimum, 0 mg/L many days throughout the year.

SEDIMENT DISCHARGE: Maximum daily, 8.2 tons June 7; minimum, .01 tons on several days throughout the year.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

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

SANDY RIVER BASIN

14138870 FIR CREEK NEAR BRIGHTWOOD, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.5	8.0	5.5	5.0	4.5	4.5	3.5	3.0	2.0	.0	3.5	3.5
2	8.5	8.0	5.5	5.0	4.5	4.0	3.5	2.5	1.5	1.0	3.5	3.0
3	9.0	8.5	6.0	5.5	4.0	3.5	2.5	2.5	1.0	.0	3.5	3.0
4	9.0	8.5	6.0	5.5	3.5	3.0	3.0	2.0	.0	.0	3.0	2.5
5	9.0	8.5	6.0	5.5	3.0	2.5	3.5	3.0	1.0	.0	3.5	3.0
6	9.5	8.5	6.0	5.5	3.5	3.0	3.5	3.0	2.0	1.0	3.5	3.0
7	9.5	9.0	6.0	5.0	4.0	3.5	3.5	3.0	1.5	.0	3.0	2.5
8	9.5	9.0	5.5	5.0	4.5	4.0	3.5	3.0	1.5	1.0	3.5	2.5
9	9.5	9.0	5.5	5.0	4.0	3.5	3.0	2.5	1.5	.5	4.0	3.0
10	9.5	9.0	6.0	5.5	4.0	3.0	3.0	2.5	1.5	.5	3.5	3.0
11	9.0	8.0	---	---	4.0	3.0	2.5	1.5	1.5	.5	3.5	3.0
12	8.0	7.5	---	---	3.5	3.0	2.0	1.5	2.0	1.0	4.0	3.0
13	8.0	7.0	---	---	4.0	3.5	2.5	1.5	2.5	2.0	3.5	2.5
14	7.0	6.5	---	---	4.0	3.0	3.0	2.0	3.0	2.5	3.5	3.0
15	6.5	6.0	---	---	4.0	3.5	3.5	3.0	3.0	2.5	3.5	3.0
16	6.0	5.5	---	---	4.0	3.5	3.5	3.0	3.0	3.0	4.0	3.0
17	6.0	5.5	---	---	3.5	2.5	3.0	3.0	3.0	2.5	4.5	3.5
18	6.0	5.5	---	---	2.5	1.0	3.5	3.0	3.0	2.5	4.0	3.0
19	6.0	5.5	---	---	1.5	1.0	4.0	3.0	3.0	2.5	---	3.0
20	6.0	5.5	---	---	1.5	1.0	4.0	3.5	3.5	2.5	---	---
21	6.0	5.0	5.5	4.5	2.5	1.5	3.5	3.5	3.5	3.5	---	---
22	5.5	5.0	4.5	4.5	3.5	2.5	3.5	3.0	3.5	3.0	---	---
23	6.0	5.0	5.5	4.0	4.0	3.5	3.0	2.5	4.0	3.5	---	---
24	7.0	6.0	4.5	4.0	4.0	4.0	2.5	2.0	4.0	3.0	---	---
25	7.5	6.5	4.5	4.0	4.5	4.0	2.0	2.0	3.5	3.5	---	---
26	7.0	5.5	4.5	3.5	4.0	4.0	2.0	2.0	3.5	3.0	---	---
27	6.0	6.0	4.5	3.5	4.0	2.5	2.5	1.5	3.5	3.0	---	---
28	6.0	5.5	5.0	3.5	3.5	3.0	2.5	2.0	4.0	3.0	---	---
29	6.0	5.5	5.0	4.5	3.5	3.0	2.5	2.0	---	---	---	---
30	6.0	5.0	5.0	4.5	4.0	3.5	2.0	1.5	---	---	---	---
31	5.5	5.0	---	---	4.0	3.5	2.0	2.0	---	---	---	---
MONTH	9.5	5.0	---	---	4.5	1.0	4.0	1.5	4.0	.0	---	---
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	6.5	4.5	6.0	5.5	11.5	8.5	12.0	11.0	11.0	10.5
2	---	---	6.0	4.5	7.0	5.5	12.0	9.5	12.0	11.0	10.5	10.0
3	---	---	5.0	4.0	7.0	6.0	12.5	10.0	13.0	11.0	10.5	9.5
4	---	---	5.0	4.0	7.5	7.0	12.5	10.5	13.0	11.5	11.0	10.0
5	---	---	6.0	4.0	7.0	6.5	12.0	10.5	12.5	11.0	10.5	10.5
6	---	---	5.5	4.5	7.0	6.5	12.5	10.0	13.0	11.0	10.5	9.5
7	---	---	5.5	4.5	7.0	6.0	13.0	10.5	12.0	10.5	10.0	9.0
8	---	---	5.5	4.5	7.5	6.0	13.5	11.0	11.0	10.5	9.5	8.5
9	---	---	6.0	4.5	8.0	6.0	14.0	11.5	11.5	10.0	9.0	8.0
10	5.0	---	5.0	4.5	8.5	6.5	13.5	11.5	10.5	10.0	9.0	8.5
11	4.5	4.0	5.0	4.0	9.0	7.0	---	11.5	11.5	9.5	9.0	8.0
12	5.0	4.0	5.5	3.5	9.5	7.5	14.0	---	11.5	10.0	9.0	8.5
13	5.5	4.0	6.0	4.5	9.5	8.0	13.5	11.5	12.5	10.5	9.0	8.5
14	5.5	4.0	5.5	4.5	9.0	8.0	14.0	11.5	12.5	10.5	9.0	8.5
15	5.5	4.0	7.0	4.0	9.5	8.5	---	12.0	12.5	11.0	9.0	8.5
16	4.5	4.5	7.5	5.5	10.0	7.5	14.0	12.5	13.0	11.5	8.5	8.0
17	5.0	4.0	7.5	5.5	11.0	8.5	14.5	12.5	13.0	11.5	8.5	8.0
18	4.5	3.0	7.0	5.5	12.0	9.0	15.0	12.5	12.0	11.0	8.5	8.0
19	3.5	2.5	7.0	6.0	12.0	10.0	15.0	13.0	11.0	10.5	8.5	8.0
20	3.5	3.0	6.0	5.5	11.5	9.5	15.0	13.0	10.5	10.0	8.5	7.5
21	4.0	3.0	7.5	5.0	11.5	8.5	14.5	13.0	10.5	9.0	8.5	8.0
22	4.5	3.5	8.0	6.0	11.0	9.0	14.0	13.0	11.0	9.0	8.5	7.5
23	4.0	3.5	7.0	6.5	10.0	8.0	13.5	12.5	12.0	10.0	8.5	7.5
24	4.0	3.5	7.0	6.5	8.5	7.5	13.5	12.0	12.0	11.0	8.5	8.0
25	4.5	3.5	6.5	6.0	10.0	7.0	13.5	11.5	12.5	11.0	9.0	8.5
26	4.5	4.0	6.5	6.0	11.0	8.0	14.0	12.0	12.5	11.0	9.0	8.5
27	5.0	4.0	6.5	6.0	9.5	8.5	13.5	12.0	11.5	11.0	9.0	8.0
28	4.5	4.0	6.5	6.0	10.5	7.5	14.0	12.0	12.0	11.0	8.0	7.5
29	5.5	3.5	6.0	5.5	9.5	8.5	14.0	12.5	11.5	10.0	7.5	7.0
30	6.0	4.0	6.5	5.0	10.5	8.5	13.0	11.5	11.0	10.5	7.5	7.0
31	---	---	6.0	5.5	---	---	12.0	11.0	11.0	10.0	---	---
MONTH	---	---	8.0	3.5	12.0	5.5	---	---	13.0	9.0	11.0	7.0

14138870 FIR CREEK NEAR BRIGHTWOOD, OR--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2	.02	1	.11	1	.20	2	.18	1	.03	0	.08
2	2	.02	7	5.2	1	.14	2	.16	2	.05	0	.07
3	1	.01	2	1.5	1	.11	1	.07	2	.05	0	.06
4	1	.01	---	.33	2	.17	1	.06	2	.05	0	.06
5	1	.01	---	.18	2	.15	0	.06	1	.02	1	.06
6	---	.01	0	.18	1	.07	0	.05	1	.02	1	.05
7	2	.02	0	.19	1	.06	1	.05	1	.03	0	.05
8	2	.02	0	.15	1	.06	1	.05	1	.02	0	.05
9	2	.02	1	.14	1	.13	4	.17	1	.02	2	.09
10	3	.05	1	.30	2	.43	4	.16	---	.02	2	.09
11	2	.05	1	.29	2	.25	2	.08	---	.05	1	.05
12	3	.16	1	.24	2	.22	2	.08	1	.09	1	.05
13	3	.33	0	.29	2	.21	1	.04	1	.06	2	.09
14	---	.26	0	.23	1	.12	1	.04	2	.15	2	.10
15	2	.19	1	.15	1	.15	2	.08	1	.18	---	.05
16	2	.15	1	.11	1	.11	2	.08	1	.11	---	.06
17	1	.06	1	.09	1	.09	2	.11	1	.08	---	.06
18	1	.05	1	.11	1	.07	2	.15	1	.07	---	.06
19	2	.10	1	.10	1	.06	2	.14	1	.07	1	.06
20	1	.06	1	.11	1	.06	2	.14	1	.08	1	.08
21	1	.06	1	.10	1	.08	1	.06	1	.08	1	.08
22	1	.06	1	.09	2	.52	1	.06	2	.43	1	.07
23	1	.05	2	.20	3	1.3	2	.11	1	.17	2	.35
24	2	.11	2	.19	2	.52	2	.10	0	.20	1	.16
25	2	.21	1	.09	1	.15	1	.05	0	.17	1	.11
26	2	.50	1	.08	1	.12	1	.04	0	.12	1	.09
27	2	.55	1	.19	1	.10	0	.04	0	.09	1	.08
28	1	.31	2	1.0	2	.17	0	.04	0	.08	1	.07
29	---	.18	1	.40	2	.18	4	.14	---	---	1	.06
30	1	.13	1	.35	2	.27	4	.13	---	---	2	.34
31	1	.12	---	---	1	.12	1	.03	---	---	1	.33
TOTAL	---	3.88	---	12.69	---	6.39	---	2.75	---	2.59	---	3.06
DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	.41	---	.13	---	.09	2	.04	3	.07	---	.01
2	---	.29	---	.14	---	.08	2	.04	3	.04	1	.01
3	---	.23	---	.16	---	.07	2	.04	2	.02	1	.01
4	---	.17	---	.13	---	.17	---	.04	2	.02	1	.01
5	---	.13	---	.10	3	.26	---	.03	2	.02	---	.03
6	---	.14	---	.09	10	5.1	---	.03	3	.03	3	.34
7	---	.15	---	.08	10	8.2	---	.03	3	.05	1	.05
8	---	.15	---	.08	3	1.2	---	.03	4	.30	1	.03
9	---	.16	---	.07	2	.37	---	.03	2	.06	1	.04
10	0	.17	---	.07	1	.13	---	.03	2	.04	3	.34
11	0	.18	---	.07	2	.20	---	.03	2	.04	1	.06
12	0	.15	---	.06	3	.27	---	.03	2	.03	1	.06
13	0	.14	---	.06	2	.16	---	.03	2	.03	---	.08
14	0	.14	---	.07	1	.07	---	.03	2	.03	1	.06
15	1	.14	---	.08	2	.13	3	.04	2	.02	1	.08
16	1	.12	---	.09	3	.17	3	.04	3	.03	1	.08
17	0	.10	---	.10	2	.11	3	.04	3	.03	1	.15
18	0	.10	---	.09	3	.15	3	.04	3	.03	1	.12
19	1	.09	---	.08	3	.14	3	.03	1	.01	1	.08
20	1	.08	---	.08	3	.12	3	.03	1	.01	1	.06
21	1	.08	---	.07	3	.11	3	.03	1	.01	1	.05
22	1	.09	---	.07	2	.07	2	.02	2	.02	3	.14
23	1	.18	---	.07	2	.06	2	.02	2	.02	3	.11
24	1	.14	---	.06	2	.06	2	.02	2	.02	3	.11
25	1	.11	---	.06	2	.05	2	.02	0	.01	4	.12
26	1	.11	---	.06	3	.08	2	.02	0	.01	4	.11
27	1	.15	---	.06	3	.07	2	.02	0	.01	4	.10
28	1	.16	---	.06	2	.05	3	.03	0	.01	3	.07
29	1	.14	---	.37	2	.04	3	.03	0	.01	3	.06
30	---	.12	---	.33	2	.04	3	.03	0	.01	3	.06
31	---	---	---	.11	---	---	3	.05	0	.01	---	---
TOTAL	---	4.52	---	3.15	---	17.82	---	0.97	---	1.05	---	2.63

SANDY RIVER BASIN

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR

LOCATION.--Lat 45°29'40", long 122°02'05", near line between SE¼ and SW¼ sec.11, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, Mount Hood National Forest, on left bank 7.0 mi southeast of Multnomah Falls and at mouth.

DRAINAGE AREA.--8.32 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,060 ft, from topographic map. Prior to Oct. 1, 1978, at site 700 ft upstream at datum 18.7 ft higher.

REMARKS.--No estimated daily discharges. Records excellent. Regulation at times since 1958 by North Fork dam, capacity, about 1,030 acre-ft. No diversion upstream from station.

AVERAGE DISCHARGE.--20 years, 77.3 ft³/s, 126.17 in/yr, 56,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,700 ft³/s, probably affected by surge from release of water temporarily impounded by landslide upstream from station, Jan. 20, 1972, gage height, 9.89 ft, from floodmark, from rating curve extended above 850 ft³/s on basis of estimate of peak flow from slope-area survey; minimum, 9.1 ft³/s Oct. 2-14, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0100	*660	*5.77				
Minimum, 14 ft ³ /s Aug. 26 to Sept. 1.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	16	86	148	68	26	58	294	99	81	21	29	15		
2	16	488	103	56	25	51	219	106	65	21	19	16		
3	16	489	78	48	24	47	181	123	55	21	18	15		
4	20	231	64	43	23	48	134	100	61	20	16	15		
5	20	142	54	41	24	43	112	87	59	20	16	46		
6	17	148	48	38	24	41	116	77	226	20	16	98		
7	16	174	44	36	26	38	126	67	462	19	22	35		
8	18	126	44	34	25	36	126	61	243	19	61	26		
9	20	126	108	32	25	36	131	57	144	19	25	27		
10	26	255	146	30	24	37	133	68	99	19	21	85		
11	36	199	86	29	46	38	157	62	76	19	19	42		
12	75	175	86	28	73	37	139	54	64	18	18	45		
13	78	205	81	28	52	36	127	61	55	18	18	66		
14	133	164	107	28	53	37	122	70	50	18	17	47		
15	84	110	117	31	92	38	114	67	45	18	16	66		
16	58	82	80	31	66	44	103	83	41	18	16	79		
17	45	70	65	38	52	48	83	85	37	18	15	166		
18	40	102	53	42	46	48	91	80	34	18	15	96		
19	40	82	49	40	49	45	77	72	32	17	16	61		
20	52	90	46	41	59	61	63	65	30	17	16	47		
21	45	71	77	39	66	61	57	59	29	16	15	40		
22	38	60	228	38	117	55	71	57	28	16	15	35		
23	35	82	271	35	93	135	133	56	26	16	15	30		
24	36	73	166	33	122	124	101	57	25	17	15	28		
25	77	66	105	31	103	85	83	53	25	16	15	25		
26	164	59	87	29	72	72	81	49	24	16	14	24		
27	207	152	79	28	60	65	134	45	24	16	14	23		
28	189	420	66	28	57	57	125	43	23	16	14	22		
29	110	296	78	27	---	52	103	115	23	16	14	21		
30	100	255	125	27	---	155	95	156	22	18	15	20		
31	87	---	97	26	---	283	---	94	---	23	15	---		
TOTAL	1914	5078	2986	1103	1524	2011	3631	2328	2208	564	570	1361		
MEAN	61.7	169	96.3	35.6	54.4	64.9	121	75.1	73.6	18.2	18.4	45.4		
MAX	207	489	271	68	122	283	294	156	462	23	61	166		
MIN	16	59	44	26	23	36	57	43	22	16	14	15		
CFSM	7.42	20.3	11.6	4.28	6.54	7.80	14.5	9.03	8.85	2.19	2.21	5.46		
IN.	8.56	22.70	13.35	4.93	6.81	8.99	16.23	10.41	9.87	2.52	2.55	6.09		
AC-FT	3800	10070	5920	2190	3020	3990	7200	4620	4380	1120	1130	2700		
CAL YR 1984	TOTAL	30898	MEAN	84.4	MAX	582	MIN	15	CFSM	10.1	IN.	138.15	AC-FT	61290
WTR YR 1985	TOTAL	25278	MEAN	69.3	MAX	489	MIN	14	CFSM	8.33	IN.	113.02	AC-FT	50140

SANDY RIVER BASIN

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14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1978 to current year.

pH: October 1980 to September 1981.

WATER TEMPERATURES: October 1978 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1978 to current year.

INSTRUMENTATION.--Water-quality monitor, prior to October 1980, conductivity/temperature recorder. Automatic pumping sediment sampler since October 1978.

COOPERATION.--Chemical data were analyzed by the city of Portland Water Quality Laboratory and were reviewed by the U.S. Geological Survey.

REMARKS.--Sediment concentrations and corresponding sediment discharges reported as 0 mg/L or 0 tons should be interpreted as <1 due to the limitations of sampling equipment, analytical methods, rounding errors, and the likelihood of minor amounts of sediment transport occurring at even the lowest of discharges.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 103 microsiemens Jan. 13, 1981 (cement spill); minimum, 9 microsiemens Dec. 25, 1980, Jan. 6, 1983.

pH: Maximum, 9.8 units Jan. 13, 1981 (cement spill); minimum, 6.3 units, June 19, 1981.

WATER TEMPERATURES: Maximum recorded, 14.0°C July 18-20, 1979, July 27, Aug. 9, 1981; minimum, 0.0°C on several days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily, 205 mg/L Dec. 25, 1980; minimum, 0 mg/L on many days each year.

SEDIMENT DISCHARGE: Maximum daily, 633 tons Dec. 25, 1980; minimum, 0 tons on many days each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 42 microsiemens July 28, Aug. 6, 7, 24-30, Sept. 1; minimum recorded, 13 microsiemens Nov. 2, 3, June 7.

WATER TEMPERATURES: Maximum, 13.5°C June 18, 19, July 9, 19, 20; minimum, 0.0°C Feb. 4.

SEDIMENT CONCENTRATIONS: Maximum daily, 12 mg/L June 7; minimum, 0 mg/L on many days throughout the year.

SEDIMENT DISCHARGE: Maximum daily, 17 tons June 7; minimum, .04 tons on many days throughout the year.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	20	17	21	31	23	---	17	20	35	36	41
2	---	14	18	22	31	23	---	17	21	36	39	40
3	24	14	19	23	31	24	---	16	22	36	40	41
4	24	16	20	24	32	24	17	17	22	37	40	41
5	21	17	21	25	31	24	18	18	22	36	41	35
6	21	18	22	26	31	25	18	19	18	37	41	25
7	23	17	23	26	30	25	17	19	14	37	39	29
8	24	18	23	27	31	26	17	20	16	37	30	31
9	25	18	21	27	31	26	17	20	18	38	34	29
10	25	16	17	28	31	26	17	20	20	38	36	24
11	24	16	19	29	28	26	16	20	21	38	37	27
12	24	17	19	29	23	26	16	21	23	38	38	27
13	25	16	20	29	24	26	16	21	24	39	39	25
14	26	17	19	29	24	26	17	20	25	39	40	26
15	26	18	18	28	21	26	17	20	25	39	40	24
16	23	19	20	29	22	25	17	20	26	39	40	24
17	19	20	21	27	23	24	18	19	27	39	40	19
18	17	19	22	26	24	24	18	20	28	39	40	21
19	17	20	23	26	24	24	18	20	29	39	40	23
20	---	19	23	26	23	23	19	21	29	40	40	25
21	---	20	21	26	23	---	20	22	30	39	40	26
22	---	21	16	26	20	---	19	22	31	39	40	28
23	---	20	15	27	20	---	17	22	31	39	41	29
24	---	20	16	29	19	---	18	22	32	39	41	30
25	---	21	18	31	19	---	18	22	32	40	41	31
26	---	21	19	29	21	---	19	23	33	40	41	32
27	---	18	20	29	22	---	17	23	33	41	41	33
28	---	14	21	29	23	---	17	24	33	41	41	33
29	---	15	20	29	---	---	17	20	34	41	41	34
30	---	15	18	30	---	---	18	18	34	40	41	34
31	20	---	19	31	---	---	---	19	---	38	41	---
MEAN	--	18	20	27	25	--	--	20	26	38	39	30

SANDY RIVER BASIN

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.0	8.0	5.5	4.5	4.5	3.5	3.0	2.5	2.5	1.0	3.5	3.0
2	9.0	8.0	6.0	5.0	4.0	3.0	3.0	2.5	2.0	1.5	3.5	2.5
3	---	---	6.0	5.5	3.0	2.5	2.5	2.0	1.5	.5	3.5	2.5
4	8.5	7.0	6.0	5.5	3.0	2.0	3.0	2.0	1.0	.0	3.0	2.0
5	7.0	6.5	6.0	5.0	2.5	2.0	3.0	2.5	2.0	1.0	3.5	3.0
6	7.0	6.0	6.0	5.5	3.0	2.5	3.0	2.5	2.5	2.0	3.5	2.5
7	6.5	5.5	6.0	5.0	3.5	3.0	3.5	3.0	2.5	1.0	3.5	2.5
8	6.0	5.5	5.5	5.0	4.0	3.5	3.5	3.0	2.0	1.5	4.0	2.5
9	6.5	6.0	5.5	5.0	4.0	3.0	3.0	2.5	2.0	1.5	4.5	3.0
10	6.5	5.5	6.0	5.0	3.5	2.5	3.0	2.5	2.5	1.5	4.5	3.0
11	6.0	5.5	6.5	6.0	3.5	2.5	2.5	2.0	2.5	1.5	4.5	3.0
12	6.0	5.0	7.0	6.0	3.0	2.5	2.5	2.0	2.5	1.5	4.0	3.0
13	6.0	5.0	6.5	5.5	3.5	3.0	2.5	2.0	3.0	2.0	4.5	2.5
14	6.0	5.0	5.5	5.0	4.0	2.5	3.0	2.5	3.0	2.5	4.5	3.0
15	7.0	6.0	5.0	5.0	3.5	3.0	3.5	3.0	3.0	2.5	4.5	3.0
16	8.0	6.5	5.5	4.5	3.0	3.0	3.5	3.0	3.0	2.0	5.0	3.5
17	7.5	5.5	5.5	5.0	3.0	2.0	4.0	3.0	3.0	2.0	4.5	3.5
18	6.0	5.5	5.5	5.5	2.0	1.0	4.0	3.0	3.0	2.5	4.5	3.0
19	6.0	5.5	6.0	5.5	1.5	.5	4.0	3.0	3.0	2.5	4.5	3.5
20	---	---	5.5	5.5	1.5	.5	4.0	3.5	3.0	2.5	4.0	2.5
21	---	---	5.5	4.5	2.0	1.5	4.0	3.5	3.5	3.0	---	---
22	---	---	4.5	4.0	3.5	2.0	3.5	3.0	3.5	3.0	---	---
23	---	---	5.0	3.5	3.5	3.5	3.5	3.0	4.0	3.5	---	---
24	---	---	4.0	3.5	4.0	3.5	3.0	2.5	3.5	3.0	---	---
25	---	---	4.0	3.5	3.5	3.5	3.0	2.5	3.5	3.0	---	---
26	---	---	4.0	3.5	3.5	3.5	2.5	2.0	4.0	3.0	---	---
27	---	---	4.0	3.5	3.5	2.0	2.5	2.0	4.0	2.5	---	---
28	---	---	4.0	3.0	2.5	2.5	3.0	2.0	4.0	3.0	---	---
29	---	---	4.5	3.5	3.0	2.5	3.0	2.5	---	---	---	---
30	---	---	4.0	4.0	3.5	3.0	2.5	2.0	---	---	---	---
31	---	---	---	---	3.5	2.5	3.0	2.5	---	---	---	---
MONTH	---	---	7.0	3.0	4.5	.5	4.0	2.0	---	---	---	---
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	7.5	5.0	7.0	6.5	11.5	8.5	12.0	10.5	10.0	9.0
2	---	---	7.5	5.5	8.0	6.5	12.0	9.5	11.0	10.0	9.5	8.5
3	4.0	---	6.5	4.0	8.5	7.0	12.0	9.5	12.5	9.5	10.0	8.0
4	4.0	3.0	5.0	4.0	9.0	8.5	12.5	10.0	12.5	10.0	10.0	9.0
5	5.5	3.5	6.0	4.0	9.0	8.0	12.5	10.0	12.0	9.5	11.0	9.0
6	5.5	3.0	6.0	5.5	9.0	8.5	12.5	9.5	12.0	9.5	11.0	9.5
7	5.5	3.5	6.0	5.0	8.5	7.5	13.0	10.0	10.5	10.0	10.0	8.5
8	6.0	3.5	6.5	5.0	9.5	6.5	13.0	10.0	11.5	10.0	9.0	8.5
9	6.0	3.5	7.0	5.0	10.0	7.5	13.5	11.0	11.5	10.0	9.0	8.0
10	5.5	4.0	6.0	4.5	10.0	7.5	13.0	10.5	10.0	9.0	9.5	8.5
11	4.5	4.0	5.0	4.0	11.0	8.5	13.0	10.5	11.0	8.5	9.5	8.5
12	6.0	3.5	6.5	4.0	12.0	10.0	13.0	10.0	11.5	9.0	9.5	8.5
13	6.5	4.0	6.5	5.0	11.5	9.5	12.5	9.5	12.0	9.5	9.5	9.0
14	6.5	4.0	6.0	5.0	11.0	10.0	13.0	10.0	12.0	9.5	9.5	9.0
15	6.0	4.0	8.0	5.0	12.0	9.5	12.5	10.0	12.0	9.5	9.5	8.5
16	5.0	4.5	9.5	7.0	11.5	8.5	11.5	10.0	12.0	10.0	9.5	8.5
17	5.0	4.5	9.5	7.0	12.0	9.5	12.5	10.0	12.0	9.5	9.5	8.5
18	5.0	3.0	9.5	8.0	13.5	10.0	13.0	10.0	10.5	9.5	9.5	8.5
19	3.0	2.0	9.0	8.0	13.5	11.0	13.5	10.5	9.5	9.0	9.5	8.5
20	3.5	2.5	8.0	7.5	12.5	10.0	13.5	11.0	9.5	8.5	9.5	8.0
21	3.5	3.0	9.0	6.5	12.0	9.5	12.5	10.5	9.0	7.5	9.5	8.5
22	4.0	3.5	10.0	7.5	12.0	9.5	12.0	10.5	10.5	8.0	9.5	8.0
23	4.0	3.5	9.5	8.5	10.5	8.5	12.0	10.0	11.0	9.0	9.5	8.0
24	4.0	3.0	9.0	8.5	9.0	8.0	12.5	10.0	10.5	9.5	9.5	8.0
25	4.0	3.0	8.5	8.5	10.5	7.5	12.5	9.5	12.0	9.5	10.0	8.5
26	4.5	3.5	8.5	8.0	11.5	8.5	12.5	10.0	11.5	9.5	9.5	8.0
27	5.5	4.0	8.5	8.0	9.5	8.5	12.5	10.0	10.5	9.0	9.5	8.0
28	5.0	4.5	8.0	7.5	11.0	7.5	12.5	10.0	11.0	9.0	8.5	7.5
29	6.0	3.5	7.5	7.0	10.0	9.0	12.5	10.5	10.5	8.5	8.0	6.5
30	6.5	4.0	8.0	6.5	11.0	8.5	11.0	10.0	10.5	9.0	8.0	6.5
31	---	---	8.0	7.0	---	---	11.5	10.0	10.0	8.5	---	---
MONTH	---	---	10.0	4.0	13.5	6.5	13.5	8.5	12.5	7.5	11.0	6.5

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1	.04	1	.23	1	.40	2	.37	0	.07	0	.16
2	0	.04	10	14	1	.28	---	.15	0	.07	0	.14
3	1	.04	4	5.9	1	.21	---	.13	0	.06	0	.13
4	1	.05	---	.62	0	.17	---	.12	0	.06	0	.13
5	1	.05	1	.38	0	.15	---	.11	0	.06	0	.12
6	0	.05	1	.40	1	.13	---	.10	---	.06	0	.11
7	0	.04	1	.47	1	.12	---	.10	---	.07	0	.10
8	1	.05	1	.34	1	.12	---	.09	---	.07	0	.10
9	1	.05	1	.34	1	.29	1	.09	---	.07	0	.10
10	0	.07	1	.69	1	.39	---	.08	---	.06	0	.10
11	0	.10	1	.54	0	.23	1	.08	---	.12	0	.10
12	2	.41	1	.47	1	.23	1	.08	---	.20	0	.10
13	1	.21	1	.55	1	.22	1	.08	---	.14	0	.10
14	1	.36	2	.89	1	.29	1	.08	---	.14	0	.10
15	1	.23	1	.30	1	.32	1	.08	---	.25	0	.10
16	0	.16	1	.22	0	.22	0	.08	---	.18	0	.12
17	3	.36	1	.19	0	.18	0	.10	---	.14	0	.13
18	1	.11	2	.55	---	.14	---	.11	---	.12	1	.13
19	1	.11	1	.22	0	.13	0	.11	---	.13	1	.12
20	1	.14	1	.24	0	.12	0	.11	---	.16	3	.49
21	0	.12	1	.19	1	.21	2	.21	---	.18	2	.33
22	0	.10	0	.16	1	.62	2	.21	---	.32	2	.30
23	1	.09	2	.44	2	1.5	1	.09	---	.25	2	.73
24	1	.10	1	.20	2	.90	1	.09	---	.33	1	.33
25	1	.21	0	.18	1	.28	1	.08	---	.28	2	.46
26	---	1.3	1	.16	1	.23	1	.08	---	.19	1	.19
27	2	1.1	1	.41	1	.21	1	.08	1	.16	1	.18
28	1	.51	6	6.3	2	.36	1	.08	0	.15	2	.31
29	---	.30	2	1.6	2	.42	1	.07	---	---	2	.28
30	1	.27	0	.69	2	.68	1	.07	---	---	3	1.3
31	0	.23	---	---	1	.26	1	.07	---	---	4	3.1
TOTAL	---	7.00	---	37.87	---	10.01	---	3.38	---	4.09	---	10.19
DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2	1.6	1	.27	1	.22	3	.17	3	.23	1	.04
2	2	1.2	2	.57	1	.18	1	.06	1	.05	0	.04
3	0	.49	3	1.0	1	.15	1	.06	1	.05	0	.04
4	1	.36	---	.81	1	.16	2	.11	1	.04	0	.04
5	2	.60	2	.47	3	.48	2	.11	2	.09	12	2.3
6	1	.31	1	.21	7	4.8	2	.11	2	.09	5	1.3
7	1	.34	1	.18	12	17	2	.10	2	.12	1	.09
8	2	.68	2	.33	3	2.0	1	.05	6	.99	1	.07
9	1	.35	2	.31	2	.78	0	.05	1	.07	2	.15
10	1	.36	2	.37	3	.80	0	.05	2	.11	5	1.2
11	1	.42	2	.33	2	.41	0	.05	2	.10	0	.11
12	1	.38	2	.29	2	.35	0	.05	1	.05	1	.12
13	2	.69	2	.33	2	.30	0	.05	1	.05	1	.18
14	3	.99	2	.38	2	.27	0	.05	1	.05	1	.13
15	1	.31	3	.54	2	.24	1	.05	1	.04	2	.36
16	1	.28	2	.45	3	.33	1	.05	0	.04	2	.43
17	3	.67	2	.46	2	.20	1	.05	0	.04	1	.45
18	3	.74	2	.43	2	.18	0	.05	0	.04	2	.52
19	2	.42	2	.39	2	.17	0	.05	0	.04	2	.33
20	2	.34	2	.35	2	.16	0	.05	0	.04	1	.13
21	1	.15	1	.16	1	.08	1	.04	0	.04	3	.32
22	1	.19	1	.15	1	.08	1	.04	0	.04	2	.19
23	1	.36	1	.15	1	.07	1	.04	0	.04	2	.16
24	1	.27	1	.15	1	.07	2	.09	0	.04	2	.15
25	1	.22	1	.14	2	.14	1	.04	0	.04	2	.14
26	1	.22	2	.26	2	.13	1	.04	0	.04	3	.19
27	1	.36	1	.12	2	.13	1	.04	0	.04	3	.19
28	1	.34	1	.12	2	.12	2	.09	0	.04	4	.24
29	1	.28	4	1.2	3	.19	0	.04	0	.04	3	.17
30	1	.26	4	1.7	3	.18	1	.05	0	.04	3	.16
31	---	---	1	.25	---	---	3	.19	0	.04	---	---
TOTAL	---	14.18	---	12.87	---	30.37	---	2.07	---	2.77	---	9.94

SANDY RIVER BASIN

14139000 BULL RUN RESERVOIR NUMBER ONE NEAR BULL RUN, OR

LOCATION.--Lat 45°28'50", long 122°04'50", in NW¼SW¼ sec.16, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, in Mount Hood National Forest, in control house of Bear Creek Dam on Bull Run River, 8.2 mi northeast of Bull Run, and at mile 11.2.

DRAINAGE AREA.--74.6 mi².

PERIOD OF RECORD.--October 1928 to current year. Prior to October 1937, published as Bull Run Reservoir. October 1937 to September 1967, published as Lake Ben Morrow. Prior to October 1975, monthend contents only.

REVISED RECORDS.--WSP 814: 1935(M). WSP 1935: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Portland Water Bureau). Prior to Oct. 9, 1930, Oct. 1, 1962, to Dec. 31, 1975, nonrecording gage and Oct. 9, 1930, to Sept. 30, 1962, water-stage recorder at present site and datum.

REMARKS.--Lake is formed by concrete dam completed in March 1929 for water supply of city of Portland. Storage began about Apr. 29, 1929; first filling occurred May 15, 1929. Capacity, 26,930 acre-ft at crest of spillway, elevation, 1,036.0 ft; capacity increased in October 1954 to 30,140 acre-ft at elevation 1,044.0 ft by installation of three gates 40 ft wide and 8 ft high. No dead storage. Water is used for power generation by Portland General Electric Co. and municipal supply for city of Portland.

COOPERATION.--Capacity table furnished by Portland Water Bureau.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 31,600 acre-ft Mar. 31, 1931, elevation, 1,047.40 ft; minimum observed, 169 acre-ft Jan. 10, 1960, elevation, 887.5 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 30,740 acre-ft June 6, elevation, 1,045.40 ft; minimum, 14,820 acre-ft May 1, elevation, 999.36 ft.

Capacity table (elevation, in feet, and capacity, in acre-feet)

870	0	970	8,050
890	213	990	12,370
910	1,130	1,010	17,950
930	2,680	1,030	24,680
950	4,900	1,048	31,860

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1014.20	1034.87	1034.99	1034.49	1034.56	1034.79	1037.41	1003.15	1043.33	1043.22	1023.28	1012.31
2	1013.79	1039.11	1034.84	1034.75	1034.46	1034.76	1035.28	1009.24	1043.15	1042.78	1024.09	1012.07
3	1013.46	1038.13	1033.89	1034.68	1034.48	1034.18	1035.97	1015.66	1043.68	1042.20	1023.51	1011.35
4	1014.14	1037.61	1034.21	1034.60	1034.48	1034.30	1035.49	1020.73	1043.37	1041.60	1023.17	1010.60
5	1012.99	1037.56	1034.36	1034.91	1034.49	1035.07	1035.53	1024.70	1043.34	1041.18	1022.68	1011.96
6	1013.57	1035.44	1034.34	1034.46	1034.52	1034.01	1035.71	1028.05	1045.02	1040.71	1022.09	1016.04
7	1012.82	1035.04	1034.52	1034.81	1034.55	1034.44	1035.47	1030.99	1044.73	1040.21	1022.25	1016.39
8	1012.52	1034.74	1034.36	1034.74	1034.46	1034.73	1035.48	1033.58	1044.23	1039.57	1024.80	1016.77
9	1012.24	1034.76	1034.91	1034.58	1034.31	1034.66	1035.67	1035.97	1043.80	1038.56	1026.08	1017.26
10	1012.58	1035.69	1034.99	1035.33	1034.60	1034.71	1035.25	1038.24	1043.69	1038.18	1025.55	1020.75
11	1013.70	1035.39	1034.53	1034.30	1034.68	1034.78	1035.43	1040.61	1043.37	1036.76	1026.45	1022.76
12	1014.34	1035.50	1034.35	1035.31	1034.93	1034.68	1035.19	1042.73	1043.20	1036.19	1026.52	1024.59
13	1018.99	1035.68	1034.87	1034.42	1034.30	1034.57	1035.16	1043.77	1043.41	1035.44	1025.82	1027.12
14	1025.14	1034.92	1034.60	1035.44	1034.96	1034.74	1035.25	1042.61	1043.41	1034.56	1025.22	1029.08
15	1029.15	1034.55	1034.67	1034.30	1035.05	1034.57	1035.24	1042.85	1043.40	1033.69	1024.55	1030.93
16	1031.80	1034.11	1034.81	1035.45	1034.32	1034.41	1034.94	1043.16	1043.55	1032.69	1024.02	1033.57
17	1033.78	1034.35	1034.43	1034.45	1034.57	1034.48	1034.47	1042.99	1044.16	1032.22	1023.29	1035.85
18	1035.39	1034.81	1034.19	1034.41	1034.81	1034.70	1034.95	1042.51	1043.55	1031.56	1022.63	1033.60
19	1035.84	1034.43	1034.73	1034.90	1034.76	1034.80	1034.15	1042.67	1043.69	1030.52	1022.28	1027.97
20	1035.12	1034.45	1034.79	1035.55	1034.74	1034.48	1034.40	1043.01	1044.32	1029.45	1021.84	1023.23
21	1034.91	1034.17	1035.05	1034.11	1034.46	1034.31	1034.39	1042.84	1044.56	1028.38	1021.09	1023.04
22	1034.68	1034.33	1035.70	1034.44	1035.32	1034.66	1036.03	1043.06	1044.34	1027.94	1020.43	1023.00
23	1034.70	1034.31	1036.42	1034.81	1035.17	1035.68	1039.95	1042.82	1044.55	1027.19	1019.37	1022.88
24	1034.78	1034.38	1035.31	1034.69	1035.30	1035.32	1042.18	1043.21	1044.73	1026.75	1018.73	1022.64
25	1035.08	1034.23	1035.04	1034.56	1034.97	1034.71	1043.06	1043.29	1044.72	1026.06	1017.90	1022.35
26	1035.57	1034.46	1034.55	1034.51	1034.45	1035.52	1038.98	1043.37	1044.87	1025.23	1017.28	1021.61
27	1035.75	1035.49	1034.65	1034.55	1034.68	1034.59	1030.57	1043.42	1044.52	1024.48	1016.05	1021.07
28	1034.82	1037.66	1034.48	1034.53	1034.72	1034.65	1020.88	1043.30	1044.23	1023.79	1015.54	1020.12
29	1034.82	1036.50	1035.00	1034.50	---	1034.66	1010.17	1044.05	1043.79	1023.09	1014.81	1019.27
30	1034.70	1035.37	1035.16	1034.53	---	1035.66	1000.84	1043.49	1044.25	1022.41	1013.64	1020.03
31	1034.37	---	1034.53	1034.55	---	1036.19	---	1043.39	---	1023.40	1013.04	---
MAX	1035.84	1039.11	1036.42	1035.55	1035.32	1036.19	1043.06	1044.05	1045.02	1043.22	1026.52	1035.85
MIN	1012.24	1034.11	1033.89	1034.11	1034.30	1034.01	1000.84	1003.15	1043.15	1022.41	1013.04	1010.60
(+)	26310	26690	26370	26380	26440	27000	15240	29880	30250	22340	18900	21190
(#)	+6930	+380	-320	+10	+60	+560	-11760	+14640	+370	-7910	-3440	+2290
CAL YR 1984	MAX	1044.94	MIN	1008.95	AC-FT#	-1730						
WTR YR 1985	MAX	1045.02	MIN	1000.84	AC-FT#	+1810						

† Contents in acre-feet, at 2400, on last day of month.

Change in contents, in acre-feet.

SANDY RIVER BASIN

67

14139700 CEDAR CREEK NEAR BRIGHTWOOD, OR

LOCATION.--Lat 45°27'30", long 122°01'50", in NE¼ sec.26, T.1 S., R.6 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank 5.8 mi north of Brightwood and at mile 2.5.

DRAINAGE AREA.--7.93 mi².

PERIOD OF RECORD.--July to November 1964, June 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,960 ft, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 31 to Feb. 7. Records good except for estimated daily discharges, and those above 200 ft³/s, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--20 years, 68.3 ft³/s, 116.96 in/yr, 49,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,990 ft³/s Dec. 22, 1964, gage height, 7.20 ft, from rating curve extended above 320 ft³/s on basis of slope-area measurement of peak flow; minimum, 6.9 ft³/s Oct. 9-13, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0500	*711	*4.31	June 7	1400	512	3.73

Minimum, 11.0 ft³/s Oct. 3, 4, 7, 8, Sept. 1, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	12	71	142	61	20	53	281	83	51	18	22	11		
2	12	397	88	50	19	47	219	87	44	17	17	14		
3	11	552	63	43	18	42	184	106	39	17	16	12		
4	13	276	50	38	17	47	131	81	45	17	15	11		
5	13	141	42	35	18	39	102	64	48	17	14	32		
6	12	125	36	33	18	36	106	56	174	17	14	127		
7	11	152	33	31	19	33	118	49	411	16	21	39		
8	12	103	31	30	19	31	117	44	259	16	77	28		
9	13	98	74	28	19	31	126	41	129	16	28	27		
10	16	195	158	26	18	32	128	43	81	16	22	96		
11	24	207	83	26	33	33	125	43	60	16	19	49		
12	47	193	71	25	62	33	103	37	49	16	18	46		
13	98	222	65	24	39	32	102	38	42	16	17	62		
14	120	174	74	24	41	33	99	46	37	16	16	47		
15	77	102	89	27	111	35	92	42	34	15	16	70		
16	51	71	61	27	74	41	80	50	31	15	15	57		
17	39	56	51	36	55	48	63	53	29	15	14	147		
18	34	83	43	47	46	48	78	49	27	15	14	108		
19	34	68	38	47	49	45	65	45	26	15	14	66		
20	51	73	35	47	54	68	53	41	24	14	14	48		
21	44	63	56	45	56	67	54	38	23	14	14	38		
22	35	51	196	41	125	56	80	38	22	14	13	33		
23	31	65	283	37	99	154	160	37	21	14	13	28		
24	33	65	182	34	136	112	116	36	21	14	13	25		
25	83	55	104	31	113	74	89	34	21	14	12	23		
26	219	47	81	30	78	59	80	31	20	14	12	21		
27	228	103	65	28	61	53	96	30	19	14	12	19		
28	268	317	52	26	53	46	104	30	19	14	12	18		
29	157	283	62	25	---	41	89	70	19	14	12	17		
30	116	268	112	24	---	141	80	93	19	15	12	16		
31	99	---	88	22	---	247	---	58	---	18	12	---		
TOTAL	2013	4676	2608	1048	1470	1857	3320	1593	1844	479	540	1335		
MEAN	64.9	156	84.1	33.8	52.5	59.9	111	51.4	61.5	15.5	17.4	44.5		
MAX	268	552	283	61	136	247	281	106	411	18	77	147		
MIN	11	47	31	22	17	31	53	30	19	14	12	11		
CFSM	8.18	19.7	10.6	4.26	6.62	7.55	14.0	6.48	7.76	1.95	2.19	5.61		
IN.	9.44	21.94	12.23	4.92	6.90	8.71	15.57	7.47	8.65	2.25	2.53	6.26		
AC-FT	3990	9270	5170	2080	2920	3680	6590	3160	3660	950	1070	2650		
CAL YR 1984	TOTAL	28452.6	MEAN	77.7	MAX	771	MIN	9.8	CFSM	9.80	IN.	133.47	AC-FT	56440
WTR YR 1985	TOTAL	22783	MEAN	62.4	MAX	552	MIN	11	CFSM	7.87	IN.	106.88	AC-FT	45190

SANDY RIVER BASIN

14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN, OR

LOCATION.--Lat 45°26'38", long 122°06'20", in NE¼NE¼ sec.31, T.1 S., R.6 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank 6.2 mi northeast of Bull Run, and at mile 0.6.

DRAINAGE AREA.--15.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 990 ft from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-11, 25, Nov. 3, 4, 23, 24, Dec. 10, 11, 15, 24, Jan. 24 to Feb. 27, Aug. 8. Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--11 years, 110 ft³/s, 97.00 in/yr, 79,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,520 ft³/s Dec. 2, 1977, gage height, 8.32 ft, from rating curve extended above 810 ft³/s; minimum, 8.0 ft³/s Oct. 12, 13, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0600	*1,070	*6.16				

Minimum daily, 17 ft³/s Oct. 7, Aug. 27 to Sept. 1, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	19	138	248	124	34	99	397	135	97	27	31	17		
2	18	563	174	105	33	89	299	140	84	26	23	20		
3	18	790	131	90	30	81	257	157	74	25	21	18		
4	21	343	106	79	29	87	207	136	81	25	20	17		
5	21	231	88	72	28	77	164	114	84	24	20	40		
6	18	190	75	67	30	71	159	103	241	24	19	143		
7	17	219	67	61	32	65	172	92	684	24	22	70		
8	18	173	61	57	30	60	172	82	407	23	81	50		
9	20	163	94	53	30	58	179	77	217	23	43	44		
10	25	261	215	50	30	57	185	75	152	23	33	133		
11	32	287	145	47	60	59	185	76	117	22	30	92		
12	60	263	130	44	120	60	159	68	98	22	28	84		
13	117	297	128	42	75	58	153	66	84	22	26	104		
14	151	270	131	41	80	59	151	77	73	22	24	89		
15	131	183	152	45	170	59	144	73	65	22	24	113		
16	101	134	118	45	120	65	132	85	58	21	23	101		
17	79	109	100	52	95	76	111	93	51	21	22	204		
18	68	126	85	67	80	79	120	87	46	21	21	186		
19	63	114	75	72	80	78	115	79	42	20	21	128		
20	87	120	69	75	90	99	97	73	40	20	21	98		
21	87	121	85	76	90	111	95	67	38	20	20	79		
22	75	106	244	74	180	101	122	66	35	20	20	66		
23	65	118	392	65	170	204	214	65	34	20	19	55		
24	63	119	280	62	220	189	186	64	33	20	19	47		
25	106	112	197	56	200	138	155	62	32	20	18	42		
26	280	100	154	52	140	117	139	56	31	20	18	38		
27	319	157	131	48	114	107	152	53	30	19	17	35		
28	408	423	110	46	103	94	163	49	30	19	17	32		
29	269	409	110	44	---	85	150	104	29	19	17	30		
30	198	405	171	41	---	162	136	150	28	19	17	28		
31	178	---	162	38	---	299	---	113	---	24	17	---		
TOTAL	3132	7044	4428	1890	2493	3043	5070	2737	3115	677	752	2203		
MEAN	101	235	143	61.0	89.0	98.2	169	88.3	104	21.8	24.3	73.4		
MAX	408	790	392	124	220	299	397	157	684	27	81	204		
MIN	17	100	61	38	28	57	95	49	28	19	17	17		
CFSM	6.56	15.3	9.29	3.96	5.78	6.38	11.0	5.73	6.75	1.42	1.58	4.77		
IN.	7.57	17.02	10.70	4.57	6.02	7.35	12.25	6.61	7.52	1.64	1.82	5.32		
AC-FT	6210	13970	8780	3750	4940	6040	10060	5430	6180	1340	1490	4370		
CAL YR 1984	TOTAL	46791	MEAN	128	MAX	1250	MIN	16	CFSM	8.31	IN.	113.03	AC-FT	92810
WTR YR 1985	TOTAL	36584	MEAN	100	MAX	790	MIN	17	CFSM	6.49	IN.	88.37	AC-FT	72560

SANDY RIVER BASIN

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14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1978 to current year.

pH: November 1980 to September 1981.

WATER TEMPERATURES: October 1978 to current year.

SEDIMENT DISCHARGE: October 1978 to current year.

INSTRUMENTATION.--Water-quality monitor, prior to October 1980 conductivity/temperature recorder. Automatic pumping sampler since October 1978.

REMARKS.--Sediment concentrations and corresponding sediment discharges reported as 0 mg/L or 0 tons should be interpreted as <1 due to the limitations of sampling equipment, analytical methods, rounding errors, and the likelihood of minor amounts of sediment transport occurring at even the lowest of discharges.

COOPERATION.--Chemical data were analyzed by the city of Portland Water Quality Laboratory and were reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 44 microsiemens Sept. 16-19, 1981; minimum, 9 microsiemens Jan. 4, 1983.

WATER TEMPERATURES: Maximum, 17.0°C July 18-20, 1979, Aug. 9-12, 1981, July 19, 20, 1985; minimum, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum, 52 mg/L Jan. 23, 1982; minimum, 0 mg/L on many days throughout each year.

SEDIMENT DISCHARGE: Maximum, 265 tons Jan. 23, 1982; minimum, 0 tons on many days throughout each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 43 microsiemens Sept. 1, 2; minimum, 13 microsiemens Jan. 24.

WATER TEMPERATURES: Maximum, 17.0°C July 19, 20; minimum, 0.0°C Feb. 1, 3-5, 7.

SEDIMENT CONCENTRATIONS: Maximum daily, 12 mg/L June 6; minimum, 0 mg/L on many days throughout the year.

SEDIMENT DISCHARGE: Maximum daily, 23 tons Nov. 3; minimum, .05 tons on many days throughout the year.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	21	19	21	28	23	18	20	22	34	39	40
2	36	18	20	22	28	23	18	20	23	35	40	40
3	36	17	21	22	29	23	18	19	24	35	42	40
4	36	19	22	23	29	23	19	19	24	36	42	40
5	36	20	23	24	29	23	20	20	24	35	42	38
6	37	21	24	24	29	24	20	21	22	36	42	25
7	37	21	24	25	28	24	19	21	16	37	41	26
8	37	21	25	25	29	25	19	22	18	37	30	28
9	37	22	24	26	29	25	19	22	20	38	31	29
10	36	21	19	26	30	26	19	23	21	38	34	25
11	35	20	20	27	28	25	19	22	23	38	35	24
12	32	20	21	27	23	25	19	23	24	38	36	25
13	28	20	22	27	24	25	19	23	24	38	37	25
14	25	20	22	28	24	25	19	23	25	39	38	25
15	24	21	21	27	21	25	19	23	26	39	38	24
16	24	22	22	27	21	---	20	23	27	39	38	24
17	24	23	22	27	22	---	20	21	28	39	39	21
18	25	23	23	25	23	---	20	21	28	40	39	20
19	26	23	23	24	23	---	20	22	29	40	39	---
20	25	23	24	24	23	---	21	22	29	---	39	---
21	25	23	23	24	23	21	21	23	30	---	39	---
22	25	23	18	24	20	22	21	23	30	41	39	---
23	25	23	16	24	20	20	19	23	30	41	40	---
24	26	23	17	24	20	19	19	23	31	41	40	---
25	25	23	19	25	20	20	19	24	31	41	40	---
26	21	24	20	25	21	21	20	24	32	42	40	---
27	20	22	20	26	21	22	20	25	32	42	40	---
28	19	18	21	26	22	23	20	25	33	42	40	---
29	20	18	21	27	---	23	20	23	33	42	40	30
30	20	18	20	27	---	21	20	20	34	42	40	30
31	20	---	20	28	---	18	---	21	---	41	40	---
MEAN	28	21	21	25	25	--	19	22	26	--	39	--

14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	9.5	9.0	6.5	5.5	5.0	4.5	3.5	3.0	2.0	.0	4.0	3.5				
2	9.5	9.0	6.5	6.5	4.5	4.0	3.5	3.0	1.5	1.0	3.5	3.0				
3	10.0	9.0	6.5	6.5	4.0	3.5	3.0	2.5	1.0	.0	4.0	3.0				
4	10.0	9.5	7.0	6.0	3.5	3.0	3.5	2.5	.0	.0	3.5	2.5				
5	10.0	9.0	7.0	6.0	3.0	2.5	3.5	3.0	.5	.0	4.0	3.0				
6	10.0	9.5	7.0	6.5	3.5	3.0	3.5	3.0	1.5	.5	4.0	3.0				
7	10.5	10.0	6.5	6.0	4.0	3.0	3.5	3.5	1.5	.0	3.5	3.0				
8	10.5	10.0	6.0	5.5	4.5	4.0	3.5	3.0	1.0	.5	3.5	3.0				
9	10.5	10.0	6.5	6.0	4.5	4.0	3.0	2.5	1.0	.5	4.0	3.0				
10	10.5	10.0	7.0	6.0	4.0	3.0	2.5	2.0	1.5	1.0	4.0	3.5				
11	10.0	8.5	7.0	6.5	4.0	3.5	2.0	1.5	1.5	.5	4.0	3.0				
12	9.0	8.5	7.0	7.0	3.5	3.0	2.0	1.5	2.0	1.0	4.0	3.5				
13	9.0	8.0	7.0	6.5	4.5	3.5	2.0	1.5	2.0	1.5	4.0	3.0				
14	8.0	7.5	6.5	6.0	4.5	3.5	3.0	2.0	3.0	2.0	4.0	3.0				
15	7.5	7.0	6.0	5.5	4.0	3.5	3.5	3.0	3.0	2.5	4.0	3.0				
16	7.0	6.5	6.0	5.5	4.0	4.0	3.5	3.0	3.0	2.5	4.5	3.5				
17	6.5	6.0	6.0	5.5	4.0	3.0	3.0	3.0	3.0	2.5	4.5	4.0				
18	7.0	6.0	6.5	6.0	3.0	1.5	3.5	3.0	3.0	2.5	4.5	3.5				
19	7.0	6.5	6.5	6.0	1.5	1.0	4.0	3.0	3.0	3.0	4.5	3.5				
20	7.0	6.5	6.5	6.0	1.5	1.0	4.0	3.5	3.5	2.5	4.5	3.0				
21	6.5	6.0	6.0	5.0	2.5	1.5	3.5	3.5	4.0	3.5	3.0	2.5				
22	6.5	5.5	5.0	4.5	4.0	2.5	3.5	3.0	4.0	3.5	3.0	2.5				
23	6.5	5.5	5.5	4.5	4.0	4.0	3.0	2.5	4.5	3.5	3.5	2.5				
24	7.5	6.5	5.0	4.5	4.5	4.0	2.5	2.0	4.0	3.5	3.5	2.5				
25	8.0	7.5	5.0	4.5	4.5	4.0	2.0	2.0	4.0	3.5	4.0	3.0				
26	8.0	6.5	4.5	4.0	4.5	4.0	2.0	1.5	4.0	3.5	3.5	3.0				
27	6.5	6.5	5.0	4.5	4.0	3.0	2.0	1.5	4.0	3.0	3.5	2.5				
28	6.5	6.0	5.0	5.0	3.5	3.0	2.5	2.0	4.5	3.5	4.5	3.5				
29	6.5	6.0	5.0	5.0	3.5	3.5	2.5	2.0	---	---	4.0	4.0				
30	6.5	5.5	5.0	5.0	4.0	3.5	2.0	1.5	---	---	4.0	3.5				
31	6.0	5.5	---	---	4.0	3.0	2.0	2.0	---	---	4.5	3.5				
MONTH	10.5	5.5	7.0	4.0	5.0	1.0	4.0	1.5	4.5	.0	4.5	2.5				
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN				
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER						
1	5.0	3.5	7.5	5.5	7.0	7.0	13.5	11.0	13.0	12.0	12.5	11.5				
2	5.5	4.0	7.5	5.5	8.5	6.5	14.0	12.0	13.5	12.5	11.5	11.0				
3	5.5	4.5	6.5	5.0	8.5	7.0	14.5	12.5	14.5	12.0	11.5	10.5				
4	5.0	4.0	6.0	5.0	9.0	8.0	15.0	13.0	14.5	13.0	12.0	11.0				
5	6.0	4.0	7.0	4.5	9.0	8.0	15.0	13.0	14.5	12.5	11.5	11.5				
6	6.5	4.0	6.5	5.5	8.5	8.0	15.0	12.5	14.5	12.5	11.5	10.5				
7	6.5	4.5	6.5	5.5	8.0	7.5	15.5	13.0	13.5	12.0	10.5	9.5				
8	6.5	4.5	6.5	5.5	9.0	7.0	16.0	13.5	12.0	11.0	10.0	9.5				
9	6.5	4.5	7.0	5.5	10.0	7.0	16.5	14.0	12.5	11.0	9.5	9.0				
10	6.0	4.5	6.5	5.5	10.0	7.5	16.5	14.0	12.0	11.0	10.0	9.0				
11	5.5	5.0	6.0	5.0	11.0	8.0	16.5	14.0	12.5	10.5	9.5	9.0				
12	6.5	4.5	7.0	4.5	11.5	9.0	16.0	14.0	13.0	11.0	10.0	9.0				
13	7.0	4.5	6.5	5.5	11.5	9.5	15.5	13.5	13.5	11.5	10.0	9.5				
14	7.0	4.5	6.5	5.5	11.0	10.0	16.0	13.5	14.0	12.0	9.5	9.0				
15	6.5	5.0	8.5	5.0	12.0	10.0	16.0	13.5	14.0	12.0	10.0	9.0				
16	6.0	5.0	10.0	7.0	12.0	9.5	15.0	14.0	14.0	12.5	9.5	8.5				
17	5.5	5.0	9.5	7.5	13.0	10.5	15.5	13.5	14.5	12.5	9.5	9.0				
18	5.5	3.5	9.0	7.5	14.5	11.5	16.5	14.0	13.5	12.5	9.5	8.5				
19	3.5	3.0	8.5	7.5	14.5	12.5	17.0	14.0	12.5	11.5	9.5	9.0				
20	4.0	3.0	8.0	7.5	14.0	12.5	17.0	14.5	12.0	11.0	9.5	8.0				
21	4.5	3.5	9.5	7.0	13.5	11.5	16.5	14.5	11.5	10.0	9.5	9.0				
22	4.5	4.0	9.5	8.0	13.5	11.5	16.0	14.5	12.0	10.0	9.0	8.5				
23	4.5	4.0	9.5	8.5	12.0	10.5	15.5	14.0	12.5	11.0	9.0	8.5				
24	4.5	3.5	9.0	8.5	11.0	10.0	15.5	14.0	13.0	12.0	9.5	8.5				
25	5.0	3.5	8.5	8.0	12.0	9.0	15.5	13.5	13.5	12.0	9.5	9.0				
26	5.0	4.0	8.5	8.0	13.0	10.0	16.0	13.5	13.5	12.0	9.5	9.0				
27	6.0	4.5	8.5	8.0	12.0	10.5	15.5	13.5	13.0	12.0	9.5	9.0				
28	5.5	5.0	8.5	8.0	12.5	9.5	16.0	13.5	12.5	12.0	9.0	8.0				
29	6.5	4.0	8.0	6.5	12.0	11.0	15.5	14.0	12.5	11.0	8.0	7.5				
30	7.5	4.5	8.0	6.5	13.0	10.5	14.5	13.0	12.5	11.5	8.0	7.5				
31	---	---	7.5	7.0	---	---	13.5	12.5	12.5	11.0	---	---				
MONTH	7.5	3.0	10.0	4.5	14.5	6.5	17.0	11.0	14.5	10.0	12.5	7.5				
YEAR	17.0	.0														

14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN, OR--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	.05	1	.37	---	1.3	---	.33	---	.09	---	.27
2	1	.05	8	12	---	.47	---	.28	---	.09	---	.24
3	1	.05	---	23	---	.35	---	.24	---	.08	---	.22
4	1	.06	---	2.8	---	.29	---	.21	---	.08	---	.23
5	1	.06	---	1.2	---	.24	---	.19	---	.08	---	.21
6	1	.05	---	.51	---	.20	---	.18	---	.08	---	.19
7	1	.05	---	.59	---	.18	---	.16	---	.09	---	.18
8	1	.05	---	.47	---	.16	---	.15	---	.08	---	.16
9	1	.05	---	.44	---	.25	---	.14	---	.08	---	.16
10	1	.07	---	.70	---	1.7	---	.14	---	.08	---	.15
11	3	.26	---	.77	---	.39	---	.13	---	.16	---	.16
12	---	.49	---	.71	---	.35	---	.12	---	.32	---	.16
13	---	.63	---	2.4	---	.35	---	.11	---	.20	---	.16
14	---	.82	---	1.5	---	.35	---	.11	---	.22	---	.16
15	---	.35	---	.49	---	.41	---	.12	---	.46	---	.16
16	---	.27	---	.36	---	.32	---	.12	---	.32	---	.18
17	---	.21	---	.29	---	.27	---	.14	---	.26	---	.21
18	1	.18	---	.34	---	.23	---	.18	---	.22	---	.21
19	1	.17	---	.31	---	.20	---	.19	---	.22	---	.21
20	0	.23	---	.32	---	.19	---	.20	---	.24	---	.27
21	0	.23	---	.33	---	.46	---	.21	---	.24	1	.30
22	0	.20	---	.29	---	1.3	---	.20	---	.49	1	.27
23	0	.18	---	.32	---	3.2	---	.18	---	.46	3	1.7
24	1	.17	---	.32	---	1.5	---	.17	---	.59	3	1.5
25	3	.86	---	.30	---	.53	---	.15	---	.54	2	.75
26	4	3.0	---	.27	---	.42	---	.14	---	.38	2	.63
27	3	2.6	---	.42	---	.35	---	.13	---	.31	2	.58
28	---	2.2	---	5.7	---	.30	---	.12	---	.28	2	.51
29	1	.73	---	4.4	---	.30	---	.12	---	---	2	.46
30	---	.53	---	4.4	---	.46	---	.11	---	---	2	.87
31	1	.48	---	---	---	.44	---	.10	---	---	3	2.4
TOTAL	---	15.33	---	66.32	---	17.46	---	5.07	---	6.74	---	13.86
DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4	4.3	---	.36	---	.52	8	.58	---	.08	---	.14
2	2	1.6	1	.38	---	.45	8	.56	---	.06	---	.16
3	2	1.4	1	.42	1	.20	8	.54	---	.06	---	.10
4	2	1.1	1	.37	1	.22	4	.27	---	.05	---	.09
5	1	.44	1	.31	1	.23	4	.26	0	.05	---	.22
6	1	.43	1	.28	12	9.7	4	.26	0	.05	---	1.5
7	1	.46	1	.25	---	22	10	.65	0	.06	---	.57
8	1	.46	2	.44	---	2.2	10	.62	5	1.1	---	.41
9	1	.48	2	.42	---	1.2	10	.62	---	.58	---	.24
10	1	.50	2	.41	---	.41	10	.62	---	.45	1	.36
11	1	.50	2	.41	---	.32	0	.06	---	.41	---	.25
12	1	.43	1	.18	---	.26	0	.06	---	.38	---	.23
13	1	.41	1	.18	1	.23	0	.06	---	.42	---	.28
14	---	.41	2	.42	1	.20	0	.06	---	.39	---	.24
15	---	.39	---	.39	1	.18	1	.06	---	.39	---	.31
16	---	.36	---	.46	3	.47	1	.06	6	.37	---	.27
17	---	.30	---	.50	3	.41	1	.06	6	.36	---	5.0
18	---	.32	---	.47	4	.50	---	.06	6	.34	9	4.5
19	---	.31	---	.43	4	.45	---	.05	---	.34	9	3.1
20	---	.26	---	.39	4	.43	---	.05	---	.34	9	2.4
21	---	.26	2	.36	10	1.0	---	.05	---	.27	12	2.6
22	---	.33	2	.36	10	.95	---	.05	---	.27	13	2.3
23	---	.58	2	.35	10	.92	---	.05	---	.26	14	2.1
24	---	.50	2	.35	5	.45	---	.05	5	.26	14	1.8
25	---	.42	---	.33	5	.43	---	.05	5	.24	13	1.5
26	---	.38	---	.30	5	.42	---	.05	5	.24	12	1.2
27	---	.41	---	.29	5	.49	---	.05	---	.23	11	1.0
28	---	.44	---	.26	7	.57	---	.05	---	.18	10	.86
29	---	.41	---	.56	7	.55	---	.05	---	.18	9	.73
30	---	.37	---	.81	7	.53	---	.05	---	.18	---	.60
31	---	---	---	.61	---	---	---	.06	---	.14	---	---
TOTAL	---	18.96	---	12.05	---	46.89	---	6.12	---	8.73	---	35.06

SANDY RIVER BASIN

14139900 BULL RUN RESERVOIR NUMBER TWO NEAR BULL RUN, OR

LOCATION.--Lat 45°26'55", long 122°08'45", on line between secs.25 and 26, T.1 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on headworks dam on Bull Run River, 4.4 mi northeast of Bull Run, and at mile 6.5.

DRAINAGE AREA.--102 mi².

PERIOD OF RECORD.--December 1961 to current year. Prior to October 1975, monthend contents only.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Portland Water Bureau). Prior to Dec. 31, 1975, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earth and rockfill dam with concrete spillway built by Portland Water Bureau. Storage began about Dec. 20, 1961; first filling occurred Dec. 24, 1961. Capacity, 20,990 acre-ft at crest of spillway, elevation, 860.0 ft. Dead storage negligible. Water is used for power generation by Portland General Electric Co. and municipal supply for city of Portland.

COOPERATION.--Capacity table furnished by Portland Water Bureau.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 23,660 acre-ft Dec. 22, 1964, elevation, 866.00 ft; no contents at times during low-flow periods.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 21,990 acre-ft Nov. 3, elevation, 862.25 ft; minimum, 19,350 acre-ft Jan. 15, elevation, 856.24 ft.

Capacity table (elevation, in feet, and capacity in acre-feet)

752	0	830	10,000
770	234	850	16,800
790	1,860	870	25,500
810	5,070		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	859.79	859.27	860.05	859.94	858.22	859.72	861.05	858.78	859.87	859.85	859.71	858.73
2	859.79	861.94	859.64	859.36	858.33	859.85	860.60	858.87	859.85	859.84	859.21	858.52
3	859.80	861.67	859.78	859.34	858.17	859.88	859.96	859.15	859.61	859.76	859.56	858.73
4	859.20	860.84	859.65	859.46	858.07	859.90	859.40	859.33	859.89	859.76	859.67	858.73
5	859.87	859.93	859.80	859.32	857.99	859.18	859.51	859.42	859.98	859.75	859.70	858.19
6	859.45	859.25	859.81	859.53	857.93	859.87	859.23	859.41	861.54	859.76	859.66	858.25
7	859.77	859.76	859.58	858.97	858.15	859.20	859.25	859.27	861.83	859.62	859.49	858.67
8	859.70	859.25	859.75	858.62	858.24	858.71	859.31	859.08	860.68	859.54	859.60	858.63
9	859.70	858.93	859.91	858.32	858.46	858.44	859.72	858.83	859.75	859.63	859.06	858.55
10	859.61	860.75	860.08	857.53	858.11	858.05	859.77	858.71	859.71	859.21	859.62	858.84
11	859.20	860.48	859.59	858.35	859.02	858.28	859.78	858.42	859.92	859.68	858.88	858.65
12	860.03	860.36	859.66	857.21	858.92	858.90	859.18	858.10	859.93	859.52	858.58	858.43
13	860.10	860.89	859.85	857.80	859.68	859.67	859.46	858.63	859.81	859.49	858.77	858.35
14	860.08	860.38	859.87	856.59	859.25	859.36	859.39	859.88	859.79	859.49	858.69	858.09
15	860.08	859.16	859.90	857.35	859.92	859.17	859.34	859.58	859.70	859.45	858.74	858.82
16	859.96	859.79	859.65	856.45	859.72	859.42	859.35	859.84	859.45	859.66	858.73	858.69
17	859.77	859.88	859.88	857.94	859.91	859.64	859.43	859.66	859.05	859.62	858.65	860.16
18	859.50	859.78	859.78	858.94	859.80	859.57	859.44	859.74	859.84	859.39	858.75	859.41
19	860.09	858.72	859.67	859.55	859.79	859.50	859.41	859.74	859.88	859.39	858.71	859.73
20	860.67	859.72	859.63	859.90	859.45	859.82	859.56	859.71	859.40	859.47	858.72	859.57
21	860.64	859.93	859.86	859.89	859.86	859.71	858.99	859.67	859.40	859.66	858.78	859.41
22	859.97	859.88	860.74	859.33	859.77	859.68	857.96	859.86	859.40	859.51	858.81	859.68
23	859.87	859.50	860.97	858.89	859.20	860.10	859.40	859.84	859.40	859.42	858.87	859.73
24	859.88	859.87	860.21	859.17	859.65	859.45	859.12	859.88	859.80	859.21	858.72	859.73
25	859.74	859.80	859.31	859.32	859.44	859.38	859.43	859.73	859.73	859.41	858.74	859.68
26	860.48	859.48	859.37	859.35	859.36	859.33	860.47	859.76	859.33	859.41	858.50	859.81
27	860.76	860.40	859.61	859.27	859.80	859.73	861.00	859.61	859.55	859.34	858.72	859.74
28	860.55	861.34	859.87	859.16	859.69	859.65	861.00	859.64	859.73	859.49	858.56	859.83
29	859.47	861.08	859.73	858.97	---	859.62	860.94	859.89	859.87	859.44	858.46	859.80
30	859.14	860.86	859.38	858.60	---	860.31	860.30	859.54	859.26	859.69	858.76	858.63
31	859.12	---	859.52	858.21	---	860.77	---	859.77	---	859.20	858.76	---
MAX	860.76	861.94	860.97	859.94	859.92	860.77	861.05	859.89	861.83	859.85	859.71	860.16
MIN	859.12	858.72	859.31	856.45	857.93	858.05	857.96	858.10	859.05	859.20	858.46	858.09
(†)	20610	21380	20790	20210	20860	21340	21130	20900	20670	20650	20450	20400
(‡)	-300	+770	-590	-580	+650	+480	-210	-230	-230	-20	-200	-50

CAL YR 1984 MAX 862.46 MIN 858.03 AC-FT‡ -690
WTR YR 1985 MAX 861.94 MIN 856.45 AC-FT‡ -510

† Contents in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14140001 BULL RUN RIVER NEAR BULL RUN, OR

LOCATION.--Lat 45°26'15", long 122°10'40", in NE¼SW¼ sec.34, T.1 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on left bank 1.8 mi downstream from Bull Run Reservoir Number Two, 2.7 mi northeast of Bull Run, and at mile 4.7.

DRAINAGE AREA.--107 mi².

PERIOD OF RECORD.--September 1907 to current year. Records for January 1895 to August 1907, published in WSP 370, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1288: 1910-11, 1913, 1920-23, 1926, 1929. WSP 1318: 1919(M). WSP 1568: 1952. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 567.90 ft above National Geodetic Vertical Datum of 1929 (levels by Portland Water Bureau). Prior to July 27, 1909, nonrecording gage at site 1.5 mi upstream at different datum. July 27, 1909, to Sept. 30, 1959, water-stage recorder at site 2.5 mi upstream at different datums.

REMARKS.--No estimated daily discharges. Records good except those below 10 ft³/s, which are fair. Flow regulated since 1915 by Bull Run Lake, capacity, 12,270 acre-ft, since 1929 by Bull Run Reservoir Number One (see station 14139000), since 1958 by North Fork Reservoir, capacity, 1,030 acre-ft, and since 1961 by Bull Run Reservoir Number Two (see station 14139900). All records given herein include flow diverted from Bull Run Reservoir Number Two for city of Portland, and that used by Portland General Electric Co. for power generation, which returns to Bull Run River downstream from station. Total diversion, 185,600 acre-ft of which 57,830 acre-ft was used for power generation and returned to Bull Run River.

COOPERATION.--Records of daily diversion furnished by Portland Water Bureau.

AVERAGE DISCHARGE.--78 years, 780 ft³/s, 98.99 in/yr, 565,100 acre-ft/yr, adjusted for storage in Bull Run Reservoir Number One since 1929 and Bull Run Reservoir Number Two since 1961.

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 24,800 ft³/s Dec. 22, 1964, gage height, 17.21 ft, from rating curve extended above 8,800 ft³/s on basis of computation of peak flow over dam; minimum, 1.1 ft³/s Oct. 4, 1974.

Combined flow, maximum discharge, 25,100 ft³/s Dec. 22, 1964; minimum daily, 63 ft³/s Aug. 13-16, 1926.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 6,580 ft³/s Nov. 3, gage height, 10.72 ft; minimum, 3.8 ft³/s July 21, 25.

Combined flow, maximum discharge, 6,730 ft³/s Nov. 3; minimum daily, 132 ft³/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	788	2000	712	323	666	2540	1150	765	229	155	200
2	183	3320	1400	788	236	576	2730	228	716	294	146	221
3	176	5990	1090	607	236	671	1900	174	527	296	149	189
4	182	3460	707	488	295	558	1670	166	601	305	162	194
5	170	1990	595	453	234	531	1150	155	673	266	163	214
6	167	1520	567	448	242	511	1230	155	1320	259	240	188
7	132	1660	517	442	245	507	1360	156	4780	274	254	178
8	184	1400	488	458	237	461	1270	164	3250	298	183	187
9	191	1280	755	447	228	456	1280	179	1900	320	184	189
10	170	1640	1780	359	240	473	1530	176	1140	317	183	195
11	148	2060	1340	326	252	340	1460	170	969	324	190	168
12	177	1970	1170	330	720	334	1480	170	712	302	218	168
13	177	2020	947	330	504	270	1180	166	635	294	239	168
14	204	2210	1220	337	571	376	1240	482	581	292	242	171
15	223	1670	1270	351	984	402	1210	643	517	302	312	171
16	175	914	1090	338	1080	446	1130	594	469	314	242	172
17	177	775	799	253	608	487	952	943	389	230	290	633
18	165	886	720	239	592	522	889	872	323	274	279	1720
19	168	1230	483	233	665	520	999	668	324	325	203	1720
20	506	713	555	254	825	662	612	600	288	324	240	1400
21	545	836	613	665	727	821	810	720	266	322	204	468
22	619	720	1730	494	1280	638	779	491	265	204	252	313
23	435	999	2780	426	1450	1130	322	675	208	285	247	325
24	365	797	2360	334	1380	1570	811	506	178	224	275	334
25	798	881	1560	331	1490	1100	716	598	263	187	245	321
26	1750	779	1140	325	1130	709	1560	473	258	231	227	325
27	2040	1000	916	319	662	841	2640	487	252	281	277	322
28	2600	2970	790	311	721	678	2970	455	194	249	236	326
29	1780	3280	823	317	---	608	2850	717	240	228	229	332
30	1280	3110	1350	327	---	985	2510	1570	237	278	251	322
31	1190	---	1180	329	---	2270	---	890	---	168	202	---
TOTAL	17289	52868	34735	12371	18157	21119	43780	15593	23240	8496	6919	11834
MEAN	558	1762	1120	399	648	681	1459	503	775	274	223	394
MAX	2600	5990	2780	788	1490	2270	2970	1570	4780	325	312	1720
MIN	132	713	483	233	228	270	322	155	178	168	146	168
AC-FT	34290	104900	68900	24540	36010	41890	86840	30930	46100	16850	13720	23470
MEAN†	665	1782	1106	390	661	698	1258	737	777	145	164	432
CFSM†	6.21	16.7	10.3	3.64	6.18	6.52	11.8	6.89	7.26	1.36	1.53	4.04
IN.†	7.17	18.59	11.92	4.20	6.44	7.52	13.12	7.94	8.10	1.56	1.77	4.51
AC-FT†	40920	106050	67990	23970	36720	42930	74870	45340	46240	8920	10080	25710

CAL YR 1984 TOTAL 342888 MEAN 937 MAX 6730 MIN 132 AC-FT 680100 MEAN† 933 CFSM† 8.72 IN.† 118.78 AC-FT† 677680
WTR YR 1985 TOTAL 266401 MEAN 730 MAX 5990 MIN 132 AC-FT 528400 MEAN† 732 CFSM† 6.84 IN.† 92.84 AC-FT† 529700

† Adjusted for change in Bull Run Reservoir Number One and Bull Run Reservoir Number Two.

SANDY RIVER BASIN

14141500 LITTLE SANDY RIVER NEAR BULL RUN, OR

LOCATION.--Lat 45°24'55", long 122°10'20", in NE¼NE¼ sec.10, T.2 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on left bank 0.25 mi upstream from Portland General Electric Co. dam and tunnel from Sandy River, 3.0 mi east of Bull Run, and at mile 1.95.

DRAINAGE AREA.--22.3 mi².

PERIOD OF RECORD.--May to July 1911, October 1911 to March 1912, June 1912 to April 1913, July 1919 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1154: 1949. WSP 1248: Drainage area. WSP 1288: 1912, 1920-21(M), 1922-23, 1931, 1945. WSP 1318: 1920. WDR OR-82-2: 1972(P), 1974-76(P), 1978-81(P).

GAGE.--Water-stage recorder. Elevation of gage is 720 ft, from topographic map. May 23, 1911, to Apr. 29, 1913, nonrecording gage at site 0.85 mi downstream at different datum, 0.5 mi downstream from Sandy River diversion tunnel. July 1, 1919, to Sept. 30, 1931, water-stage recorder at site 0.1 mi downstream at different datum. Oct 1, 1931, to Nov. 3, 1967, at site 0.1 mi downstream at datum 712 ft above National Geodetic Vertical Datum of 1929. Nov. 4, 1967, to Aug. 8, 1971, water-stage recorder at site 0.1 mi downstream at datum 697.44 ft above National Geodetic Vertical Datum of 1929 (Portland General Electric Co. bench mark).

REMARKS.--Estimated daily discharges: Feb. 4, 5, July 26-31, Aug. 21 to Sept. 4. Records excellent except for estimated daily discharges, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--66 years (water years 1920-85), 146 ft³/s, 88.91 in/yr, 105,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,320 ft³/s Nov. 20, 1921, gage height, 9.18 ft, site and datum then in use, from rating curve extended above 2,200 ft³/s; minimum, 8 ft³/s Aug. 20, Sept. 16, 17, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	1230	*1,060	*4.46				

Minimum daily, 13 ft³/s Aug. 28-31, Sept. 1, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	21	140	264	142	46	127	499	187	127	32	42	13		
2	21	717	199	126	45	112	366	203	107	31	28	16		
3	20	838	158	111	42	102	307	216	96	30	22	14		
4	21	468	134	100	40	111	233	174	114	28	20	13		
5	24	266	115	93	40	98	187	141	124	27	19	65		
6	21	219	103	86	42	91	192	129	376	27	18	184		
7	20	239	94	81	51	84	213	117	777	26	24	74		
8	21	186	89	76	46	79	218	106	422	25	106	47		
9	23	170	153	72	45	76	231	102	236	25	48	40		
10	27	293	309	68	44	75	234	106	166	24	31	163		
11	35	330	199	63	82	77	224	111	131	23	25	94		
12	77	302	195	60	155	79	194	93	111	22	22	79		
13	164	367	193	59	111	74	195	95	96	22	20	108		
14	196	321	199	59	113	75	198	128	86	21	19	86		
15	142	211	226	66	238	77	186	115	79	21	18	139		
16	102	160	175	66	181	86	169	151	70	21	17	104		
17	81	134	147	77	140	97	136	152	63	21	17	320		
18	74	161	124	91	116	97	150	134	59	20	16	229		
19	69	147	111	88	115	94	145	116	55	19	17	131		
20	111	162	103	87	129	117	116	108	51	19	17	93		
21	111	151	117	84	139	136	108	98	49	19	16	73		
22	86	130	350	78	357	115	131	101	46	18	16	62		
23	72	152	551	72	274	200	239	100	44	18	16	52		
24	77	158	337	67	345	210	211	98	43	19	16	44		
25	177	142	220	63	290	160	181	90	41	18	14	39		
26	403	127	186	59	195	140	167	80	38	16	14	35		
27	309	177	166	56	153	127	201	75	37	16	14	32		
28	372	398	148	54	132	111	221	75	36	15	13	30		
29	264	371	143	51	---	104	190	211	35	15	13	27		
30	192	395	172	48	---	155	175	265	33	22	13	26		
31	170	---	166	47	---	348	---	158	---	32	13	---		
TOTAL	3503	8032	5846	2350	3706	3634	6217	4035	3748	692	704	2432		
MEAN	113	268	189	75.8	132	117	207	130	125	22.3	22.7	81.1		
MAX	403	838	551	142	357	348	499	265	777	32	106	320		
MIN	20	127	89	47	40	74	108	75	33	15	13	13		
CFSM	5.07	12.0	8.48	3.40	5.92	5.25	9.28	5.83	5.61	.00	1.02	3.64		
IN.	5.84	13.40	9.75	3.92	6.18	6.06	10.37	6.73	6.25	1.15	1.17	4.06		
AC-FT	6950	15930	11600	4660	7350	7210	12330	8000	7430	1370	1400	4820		
CAL YR 1984	TOTAL	58444	MEAN	160	MAX	1510	MIN	14	CFSM	7.17	IN.	97.49	AC-FT	115900
WTR YR 1985	TOTAL	44899	MEAN	123	MAX	838	MIN	13	CFSM	5.52	IN.	74.90	AC-FT	89060

SANDY RIVER BASIN

75

14142500 SANDY RIVER BELOW BULL RUN RIVER, NEAR BULL RUN, OR

LOCATION.--Lat 45°26'57", long 122°14'38", in SW¼ sec.30, T.1 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, on left bank 0.1 mi downstream from Bull Run River, 0.2 mi downstream from Dodge Park, 400 ft below city of Portland water conduit crossing Sandy River, and at mile 18.4.

DRAINAGE AREA.--436 mi².

PERIOD OF RECORD.--April 1910 to September 1914, October 1929 to September 1966, May 1984 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Elevation of gage is 240 ft, from topographic map. April 1910 to September 1914, staff gage at present site at different datum. October 1929 to September 1966, water-stage recorder at site 0.8 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 12 to Apr. 4, May 16 to June 7, Sept. 9-30. Records excellent except for estimated daily discharges, which are fair. Flow regulated since 1915 by Bull Run Lake, since 1929 by Bull Run Reservoir Number One (see sta 14139000), and since 1961 by Bull Run Reservoir Number Two (see sta 14139900). Some fluctuation caused by Bull Run powerplant of Portland General Electric Company. Portland Water Bureau diverted 93,490 acre-ft from Bull Run River during the 1985 water year, of which 29,240 acre-ft were used for power generation by Portland General Electric Company and returned to Bull Run River.

AVERAGE DISCHARGE.--42 years (water years 1911-14, 1930-66, 1985) 2,348 ft³/s, 1,701,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84400 ft³/s Dec. 22, 1964, gage height, 22.3 ft, site and datum then in use; minimum, 45 ft³/s Sept. 26, 1962, minimum daily, 63 ft³/s Oct. 12, Nov. 9, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,600 ft³/s Nov. 3, gage height, 15.93 ft; minimum recorded, 317 ft³/s Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	357	1990	4980	2100	860	2000	6000	3500	2600	800	712	356
2	340	9940	3670	2000	820	1800	6200	2810	2400	792	523	414
3	348	16200	2910	1700	780	1800	4600	2960	2000	801	490	376
4	367	8940	2260	1450	720	1700	3700	2590	2100	788	488	368
5	370	5480	1920	1350	680	1600	3200	2200	2300	772	479	492
6	359	4220	1760	1250	680	1500	3520	2050	4500	716	462	1110
7	348	4210	1620	1200	750	1400	3880	1900	12000	720	482	596
8	364	3650	1550	1150	860	1350	3940	1720	8320	738	838	460
9	399	3210	2030	1100	790	1300	4010	1650	5250	733	591	435
10	406	4190	5260	1000	700	1200	4500	1610	3680	709	481	1040
11	436	5680	3900	960	1000	1200	4250	1660	2920	671	459	731
12	573	5170	3300	920	2500	1100	3980	1470	2550	642	443	592
13	1160	5400	3000	880	1700	1050	3640	1440	2320	625	449	680
14	1280	5740	3100	900	1600	1200	3910	2040	2100	601	431	602
15	1160	4280	3500	930	2500	1350	3850	2020	1970	609	427	828
16	863	3010	3000	930	2700	1400	3660	2400	1780	580	429	706
17	714	2440	2400	1150	1900	1550	3090	3000	1530	593	424	2000
18	611	2630	1950	1500	1700	1700	2720	3000	1370	584	416	3100
19	612	2890	1550	1350	1800	1700	2970	2650	1340	579	427	2450
20	1050	2350	1600	1200	2000	1800	2240	2450	1280	576	408	1900
21	1210	2430	1650	1700	1700	2100	2320	2400	1180	565	423	740
22	1170	2160	3200	1450	3700	1700	2480	2400	1110	519	387	600
23	904	2590	6200	1300	3800	2500	2690	2600	1050	550	386	550
24	911	2580	5100	1100	4000	3500	2960	2550	976	551	409	520
25	1600	2460	3700	1050	4200	2700	2760	2500	939	512	408	500
26	4700	2220	3000	1000	3000	2100	3400	2250	952	500	416	480
27	4440	2650	2600	1000	2200	2100	4780	2150	899	499	390	460
28	5490	6070	2300	980	2100	1800	5620	2000	879	481	388	440
29	4070	6680	2300	930	---	1700	5290	2650	847	483	371	430
30	2930	6880	3200	900	---	2700	4820	3900	822	513	387	410
31	2720	---	2900	880	---	4300	---	3100	---	572	360	---
TOTAL	42262	138340	91410	37310	51740	56900	114980	73620	73964	19374	14184	24366
MEAN	1363	4611	2949	1204	1848	1835	3833	2375	2465	625	458	812
MAX	5490	16200	6200	2100	4200	4300	6200	3900	12000	801	838	3100
MIN	340	1990	1550	880	680	1050	2240	1440	822	481	360	356
AC-FT	83830	274400	181300	74000	102600	112900	228100	146000	146700	38430	28130	48330
WTR YR 1985	TOTAL	738450	MEAN	2023	MAX	16200	MIN	340	AC-FT	1465000		

WILLAMETTE RIVER BASIN

14144800 MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE, OR

LOCATION.--Lat 43°35'50", long 122°27'20", in NW¼NE¼ sec.9, T.23 S., R.3 E., Lane County, Hydrologic Unit 17090001, in Willamette National Forest, on right bank 0.2 mi upstream from Windfall Creek, 8.3 mi upstream from Hills Creek Dam, 10.2 mi south of Oakridge, and at mile 240.8.

DRAINAGE AREA.--258 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,556.83 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 21, 1967, at site 0.5 mi upstream at different datums. June 22, 1967, to June 23, 1971, water-stage recorder at same site at datum 5.00 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--27 years, 823 ft³/s, 43.32 in/yr, 596,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,800 ft³/s Dec. 22, 1964, gage height, 16.96 ft, from floodmark, site and datum then in use, from rating curve extended above 5,100 ft³/s on basis of slope-area measurement of peak flow; minimum, 187 ft³/s Sept. 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0530	3,820	8.48	Nov. 30	0600	3,760	8.44
Nov. 12	1630	*6,300	*9.89				

Minimum, 285 ft³/s Aug. 26 to Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	321	545	1790	650	496	673	1440	1200	832	440	355	291		
2	317	2110	1280	612	485	650	1760	1380	805	429	334	332		
3	315	3400	1060	603	475	611	1690	1450	784	421	317	318		
4	317	2070	921	632	445	612	1500	1210	841	414	312	304		
5	322	1340	834	686	447	579	1420	1070	854	408	311	302		
6	319	1360	774	735	441	562	1520	1030	1420	399	309	315		
7	314	1440	750	789	646	539	1910	996	1850	390	307	324		
8	314	1230	762	770	764	514	1990	948	1800	382	310	322		
9	356	1200	825	725	625	504	1950	923	1370	375	307	338		
10	341	2150	1990	674	551	505	2120	889	1160	367	305	341		
11	458	3090	1560	636	1000	510	2030	837	1030	362	305	326		
12	460	5120	1460	604	2180	512	1770	787	977	355	302	323		
13	612	3790	1220	583	1370	507	1700	791	938	348	298	328		
14	517	2720	1050	586	1180	516	1900	839	881	341	292	385		
15	493	1890	1040	585	1330	532	2000	841	833	340	294	384		
16	438	1430	929	587	1220	571	1860	933	789	336	292	358		
17	406	1190	847	707	1040	616	1540	994	744	335	291	370		
18	405	1200	785	837	907	626	1330	1110	736	332	293	384		
19	626	1100	720	828	851	634	1160	1180	725	326	316	356		
20	746	1180	684	782	801	650	1010	1170	686	321	308	341		
21	615	1120	662	735	740	661	970	1110	639	317	303	334		
22	539	986	629	691	763	628	951	1130	600	317	296	330		
23	491	986	617	657	783	849	1160	1220	572	316	293	325		
24	486	1030	604	634	779	1290	1050	1300	545	315	291	322		
25	478	944	591	611	764	1010	932	1180	520	312	289	318		
26	746	865	583	584	719	931	856	1090	496	307	288	314		
27	756	1150	594	562	667	887	865	1020	482	306	286	315		
28	870	2500	594	548	645	823	968	985	475	308	286	312		
29	775	1940	591	533	---	787	1000	904	463	315	287	309		
30	646	2960	753	509	---	783	1060	799	453	344	287	309		
31	583	---	711	499	---	1020	---	846	---	347	288	---		
TOTAL	15382	54036	28210	20174	23114	21092	43412	32162	25300	10925	9352	9930		
MEAN	496	1801	910	651	826	680	1447	1037	843	352	302	331		
MAX	870	5120	1990	837	2180	1290	2120	1450	1850	440	355	385		
MIN	314	545	583	499	441	504	856	787	453	306	286	291		
CFSM	1.92	6.98	3.53	2.52	3.20	2.64	5.61	4.02	3.27	1.36	1.17	1.28		
IN.	2.22	7.79	4.07	2.91	3.33	3.04	6.26	4.64	3.65	1.58	1.35	1.43		
AC-FT	30510	107200	55950	40020	45850	41840	86110	63790	50180	21670	18550	19700		
CAL YR 1984	TOTAL	380714	MEAN	1040	MAX	8250	MIN	314	CFSM	4.03	IN.	54.89	AC-FT	755100
WTR YR 1985	TOTAL	293089	MEAN	803	MAX	5120	MIN	286	CFSM	3.11	IN.	42.26	AC-FT	581300

WILLAMETTE RIVER BASIN

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14144800 MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1958 to January 1959, September 1959 to current year.

INSTRUMENTATION.--Temperature recorder October 1958 to January 1959, September 1959 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 23.0°C July 15, 1970; minimum, 0.0°C on several days during winter period most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 19.0°C July 11; minimum, 0.0°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	8.5	7.0	5.0	6.0	4.5	4.0	2.5	3.0	2.0	5.5	4.0
2	12.0	7.5	8.0	6.5	5.5	4.5	4.0	2.5	3.5	2.0	5.5	3.0
3	12.0	8.0	7.5	6.5	6.0	5.0	4.5	2.5	4.0	2.5	4.5	2.5
4	10.5	8.5	7.5	5.5	5.0	4.0	4.5	3.0	2.5	.0	5.5	3.5
5	11.0	8.5	7.5	5.5	5.0	3.5	5.0	3.5	4.0	1.5	5.5	3.0
6	12.5	9.0	7.5	6.5	5.0	3.5	5.5	4.0	4.5	2.5	5.5	3.0
7	13.0	8.5	7.5	6.0	5.5	3.5	6.0	4.5	4.0	3.0	5.0	2.5
8	11.5	8.5	6.5	5.0	5.5	4.0	5.5	4.0	3.5	2.5	5.5	2.5
9	12.0	8.5	6.5	5.5	6.0	5.0	4.5	3.0	3.0	2.0	6.5	2.5
10	10.0	9.0	7.5	6.0	6.0	4.5	4.0	2.5	4.5	1.5	7.5	3.0
11	10.5	8.5	7.5	7.0	5.0	4.0	4.0	2.5	4.0	3.0	7.5	3.0
12	9.0	8.0	7.5	7.0	5.0	4.0	4.0	2.5	5.5	4.0	7.5	4.0
13	9.5	8.5	7.5	6.5	5.5	4.5	4.0	2.0	5.0	3.5	7.0	3.0
14	8.5	7.5	7.0	6.0	4.5	3.5	4.5	2.5	5.5	3.5	7.5	3.5
15	9.0	6.5	7.0	5.5	5.0	4.0	4.5	3.0	6.0	4.5	8.0	3.5
16	8.0	6.5	7.0	5.5	4.0	3.5	4.5	2.5	5.5	4.5	8.0	3.5
17	8.0	6.5	7.0	5.0	4.5	3.5	5.0	3.0	5.5	3.5	8.0	4.5
18	7.0	6.0	7.5	6.0	4.0	2.0	5.0	3.5	5.0	2.5	8.0	4.0
19	8.0	6.5	7.0	5.5	2.5	1.0	5.0	3.0	4.5	3.0	8.0	3.5
20	8.5	7.0	6.0	5.5	3.0	1.5	5.5	4.0	5.5	3.0	7.5	5.0
21	9.0	6.5	6.0	5.0	4.5	3.0	5.0	3.5	6.0	3.5	6.5	3.5
22	8.5	5.5	5.5	4.5	5.0	3.5	4.5	2.5	7.0	4.5	4.0	3.0
23	7.5	5.0	6.0	4.5	5.0	4.0	4.5	2.5	6.5	4.0	5.5	4.0
24	10.0	7.5	5.0	4.5	4.5	3.5	4.5	3.0	6.5	4.0	6.0	3.0
25	8.5	6.5	5.0	4.5	4.0	2.5	4.0	2.0	6.5	4.0	6.5	3.5
26	8.0	6.5	5.0	4.0	5.0	3.5	3.5	1.5	5.5	3.0	3.5	3.0
27	7.0	6.0	5.5	4.5	4.5	3.5	3.5	1.5	6.0	3.0	4.5	3.0
28	7.5	6.0	6.5	5.5	4.5	3.5	4.0	3.0	6.5	3.0	6.5	3.0
29	7.5	6.0	6.0	5.5	4.5	3.5	4.0	3.0	---	---	6.0	3.5
30	7.0	5.0	6.5	5.5	5.0	3.5	4.0	2.5	---	---	6.0	4.5
31	7.5	5.5	---	---	5.0	3.5	4.5	2.5	---	---	8.5	4.5
MONTH	13.0	5.0	8.0	4.0	6.0	1.0	6.0	1.5	7.0	.0	8.5	2.5

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

WILLAMETTE RIVER BASIN

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14145100 HILLS CREEK LAKE NEAR OAKRIDGE, OR

LOCATION.--Lat 43°42'30", long 122°25'25", in NW¼ sec.35, T.21 S., R.3 E., Lane County, Hydrologic Unit 17090001, in Willamette National Forest, near right end of Hills Creek Dam on Middle Fork Willamette River, 600 ft downstream from Hills Creek, 3.5 mi southeast of Oakridge, and at mile 232.5.

DRAINAGE AREA.--389 mi².

PERIOD OF RECORD.--August 1961 to current year. Prior to October 1971, published as Hills Creek Reservoir near Oakridge.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway completed in 1961 by the Corps of Engineers; storage began August 1961. Total capacity is 355,600 acre-ft at elevation 1,543.0 ft, top of spillway gates, and usable capacity is 248,900 acre-ft between elevations 1,414.0 ft, minimum power pool, and 1,543.0 ft. Reservoir used for flood control and power generation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 354,200 acre-ft June 25, 1971, elevation, 1,542.52 ft; minimum, 104,800 acre-ft Jan. 2, 1969, elevation, 1,412.52 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 350,700 acre-ft June 10, 11, elevation, 1,541.25 ft; minimum, 157,000 acre-ft Jan. 16, 17, elevation, 1,449.06 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,410	101,500	1,460	174,900	1,520	297,200
1,420	114,600	1,480	211,000	1,540	347,300
1,440	143,000	1,500	251,900	1,544	358,500

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1509.48	1482.28	1462.61	1449.72	1453.64	1484.55	1506.18	1533.26	1540.71	1540.97	1541.07	1536.91
2	1508.42	1484.94	1461.44	1449.68	1454.06	1485.20	1508.24	1533.83	1540.71	1540.97	1541.03	1536.27
3	1507.35	1488.85	1459.75	1449.59	1454.46	1485.80	1510.09	1534.27	1540.71	1540.97	1541.03	1535.58
4	1506.30	1490.18	1458.62	1449.56	1454.82	1486.41	1511.65	1534.42	1540.72	1540.97	1541.03	1534.88
5	1505.23	1490.40	1457.87	1449.62	1455.19	1486.95	1513.04	1534.43	1540.79	1540.97	1541.03	1534.19
6	1504.16	1490.53	1456.99	1449.78	---	1487.45	1514.51	1534.52	1540.95	1540.96	1541.03	1533.54
7	1503.09	1490.70	1456.06	1449.95	1456.42	1487.94	1516.32	1534.80	1541.00	1540.96	1541.03	1532.86
8	1502.03	1490.66	1455.19	1449.97	1457.46	---	1518.25	1535.24	1540.98	1540.96	1541.03	1532.20
9	1501.06	1489.97	1454.41	1449.92	1458.25	1488.82	1520.03	1535.70	1541.19	1540.98	1541.03	1531.56
10	1500.03	1490.21	1455.46	1449.72	1458.88	1489.26	1521.35	1536.20	1541.25	1541.01	1541.02	1530.77
11	1499.06	1491.89	1456.01	1449.57	1460.65	1489.68	1522.17	1536.72	1541.17	1541.01	1541.02	1529.86
12	1498.11	1497.42	1456.60	1449.45	1464.46	1490.09	1522.74	1537.21	1541.04	1541.02	1541.01	1528.95
13	1497.36	1499.89	1456.77	1449.28	1466.71	1490.52	1523.25	1537.74	1540.95	1541.02	1541.00	1528.09
14	1496.49	1498.55	1456.59	1449.18	1468.50	1490.97	1523.93	1538.27	1540.88	1541.02	1540.99	1527.28
15	1495.57	1495.84	1456.37	1449.13	1470.57	1491.41	1524.67	1538.82	1540.85	1541.02	1540.99	1526.45
16	1494.57	1492.35	1455.87	1449.06	1472.37	1491.90	1525.27	1539.49	1540.86	1541.01	1540.99	1525.55
17	1493.54	1488.55	1455.20	1449.17	1473.76	1492.49	1525.76	1539.99	1540.88	1541.01	1541.00	1524.70
18	1492.55	1484.67	1454.36	1449.50	1474.90	1493.05	1526.29	1540.49	1540.90	1541.01	1541.00	1523.82
19	1491.84	1480.52	1453.40	1449.80	1475.97	1493.61	1526.74	1540.99	1540.92	1541.01	1541.01	1522.89
20	1491.28	1476.59	1452.37	1450.03	1476.91	1494.23	1527.00	1541.14	1540.91	1541.02	1541.02	1521.95
21	1490.53	1472.62	1451.53	1450.15	1477.78	1494.81	1527.28	1541.07	1540.91	1541.04	1541.02	1520.99
22	1489.69	1469.94	1450.89	1450.20	1478.73	1495.40	1527.68	1541.01	1540.91	1541.05	1541.01	1520.02
23	1488.72	1467.28	1450.24	1450.45	1479.71	---	1528.43	1541.01	1540.95	1541.02	1540.95	1519.00
24	1487.76	1464.79	1449.87	1450.81	1480.63	1497.36	1529.07	1541.03	1540.97	1541.01	1540.82	1518.01
25	1486.75	1462.38	1449.69	1451.10	1481.53	1498.75	1529.57	1540.92	1540.97	1541.00	1540.68	1517.01
26	1486.29	1460.10	1449.51	1451.36	1482.34	1499.85	1530.07	1540.76	1540.97	1541.00	1540.53	1515.98
27	1485.75	1458.74	1449.39	1451.54	1483.09	1500.87	1530.64	1540.71	1540.97	1541.00	1540.22	1514.98
28	1485.36	1459.84	1449.26	1451.74	1483.79	1501.72	1531.32	1540.73	1540.97	1541.00	1539.66	1513.96
29	1484.80	1460.00	1449.14	1452.23	---	1502.50	1532.01	1540.69	1540.97	1541.01	1538.98	1512.92
30	1484.04	1462.69	1449.46	---	---	1503.27	1532.65	1540.61	1540.97	1541.06	1538.28	1511.88
31	1483.17	---	1449.69	1453.14	---	1504.42	---	1540.68	---	1541.10	1537.59	---
MAX	1509.48	1499.89	1462.61	---	---	---	1532.65	1541.14	1541.25	1541.10	1541.07	1536.91
MIN	1483.17	1458.74	1449.14	---	---	---	1506.18	1533.26	1540.71	1540.96	1537.59	1511.88
(†)	217100	179500	158100	163600	218400	261500	328300	349200	349900	350300	341000	278300
(‡)	-58100	-37600	-21400	+5500	+54800	+43100	+66800	+20900	+700	+400	-9300	-62700
CAL YR 1984	MAX	1541.37	MIN	1449.14	AC-FT‡	-17100						
WTR YR 1985	MAX	-----	MIN	-----	AC-FT‡	+3100						

† Contents, in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

WILLAMETTE RIVER BASIN

14145500 MIDDLE FORK WILLAMETTE RIVER ABOVE SALT CREEK, NEAR OAKRIDGE, OR

LOCATION.--Lat 43°43'20", long 122°26'15", in NW¼NE¼ sec.27, T.21 S., R.3 E., Lane County, Hydrologic Unit 17090001, in Willamette National Forest, on right bank 90 ft upstream from highway bridge, 0.4 mi upstream from Salt Creek, 1.1 mi downstream from Hills Creek Dam, 2.3 mi southeast of Oakridge, and at mile 231.4.

DRAINAGE AREA.--392 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1913 to September 1914, September 1935 to current year. Monthly discharge only September 1935, published in WSP 1318.

REVISED RECORDS.--WSP 1248: 1914.

GAGE.--Water-stage recorder. Datum of gage is 1,208.01 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 3, 1913, to Sept. 30, 1914, nonrecording gage and Sept. 1, 1935, to Aug. 18, 1960, water-stage recorder at sites 400 ft and 1,000 ft downstream, respectively, at different datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since 1961 by Hills Creek Lake (see station 14145100). No diversions upstream from station.

AVERAGE DISCHARGE.--51 years, 1,160 ft³/s, 40.19 in/yr, 840,400 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft³/s Dec. 28, 1945, gage height, 12.06 ft, site and datum then in use, from rating curve extended above 13,000 ft³/s; minimum observed, 0.70 ft³/s Sept. 8-11, 13, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,530 ft³/s Nov. 20, gage height, 7.44 ft; minimum, 85 ft³/s Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1590	1580	3060	1010	267	263	280	831	1030	542	514	1260
2	1590	1610	3030	1010	270	292	255	1050	1030	534	459	1260
3	1580	1610	3010	1010	270	297	259	1280	1030	513	376	1250
4	1580	1620	2310	1010	271	290	257	1360	1030	511	365	1250
5	1580	1670	1800	1010	274	288	307	1360	990	516	363	1250
6	1580	1730	1790	1010	269	287	305	1170	1740	501	364	1250
7	1580	1720	1790	1110	269	286	305	885	2330	490	369	1250
8	1580	1710	1790	1180	274	285	194	620	2420	453	368	1250
9	1490	2440	1790	1180	270	283	275	545	1480	431	369	1250
10	1580	2960	1790	1180	267	281	994	466	1460	431	367	1390
11	1570	2970	1800	1060	274	281	1500	357	1460	432	368	1520
12	1570	2320	1800	975	296	282	1490	320	1450	432	367	1510
13	1570	3450	1810	977	285	281	1480	315	1330	430	371	1510
14	1570	5930	1800	932	282	286	1480	314	1190	430	341	1510
15	1570	5970	1810	894	270	285	1480	313	1090	428	330	1510
16	1570	5960	1800	894	267	281	1490	310	956	428	327	1520
17	1570	5910	1800	894	269	282	1290	574	885	410	327	1530
18	1580	5910	1800	916	270	284	1050	762	883	416	327	1540
19	1570	5920	1790	926	272	288	960	791	875	394	327	1560
20	1570	5860	1790	926	271	292	968	1280	876	353	341	1550
21	1570	5530	1590	926	273	311	968	1480	811	361	378	1550
22	1520	4080	1370	933	267	302	844	1470	705	395	354	1540
23	1580	3930	1370	687	263	304	738	1470	658	427	449	1560
24	1570	3740	1160	584	264	308	753	1540	630	391	533	1560
25	1580	3460	993	587	265	312	699	1600	631	384	535	1560
26	1590	3180	992	588	264	280	600	1520	603	363	531	1560
27	1590	2940	993	591	263	254	528	1300	581	363	737	1550
28	1590	2980	994	592	262	280	521	1220	595	365	1090	1550
29	1590	3000	993	292	---	296	523	1200	573	366	1250	1550
30	1590	3080	998	269	---	294	656	1090	557	378	1250	1550
31	1580	---	1000	283	---	306	---	1030	---	452	1260	---
TOTAL	48790	104770	52613	26436	7578	8941	23449	29823	31879	13320	15707	43450
MEAN	1574	3492	1697	853	271	288	782	962	1063	430	507	1448
MAX	1590	5970	3060	1180	296	312	1500	1600	2420	542	1260	1560
MIN	1490	1580	992	269	262	254	194	310	557	353	327	1250
AC-FT	96770	207800	104400	52440	15030	17730	46510	59150	63230	26420	31150	86180
MEAN†	629	2860	1348	944	1257	989	1904	1302	1074	436	355	395
CFSM†	1.60	7.30	3.44	2.41	3.21	2.52	4.86	3.32	2.74	1.11	0.91	1.01
IN.†	1.85	8.14	3.97	2.78	3.34	2.91	5.42	3.83	3.06	1.28	1.05	1.12
AC-FT†	38670	170200	82900	58040	69830	60830	113310	80050	63930	26820	21850	23480

CAL YR 1984 TOTAL 567410 MEAN 1550 MAX 5970 MIN 304 AC-FT 1125000 MEAN† 1526 CFSM† 3.89 IN.† 53.00 AC-FT† 1107800
WTR YR 1985 TOTAL 406756 MEAN 1114 MAX 5970 MIN 194 AC-FT 806800 MEAN† 1119 CFSM† 2.85 IN.† 38.74 AC-FT† 809900

† Adjusted for change in contents in Hills Creek Lake.

WILLAMETTE RIVER BASIN

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14145500 MIDDLE FORK WILLAMETTE RIVER ABOVE SALT CREEK, NEAR OAKRIDGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1960 to current year.

INSTRUMENTATION.--Temperature recorder since October 1960.

REMARKS.--Water-temperature recorder malfunction Mar. 27 to July 10.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 25.0°C Sept. 4, 1960; minimum, 1.5°C Jan. 4, 1961.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 15.5°C Oct. 11; minimum, 4.0°C on several days in January and February.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14145500 MIDDLE FORK WILLAMETTE RIVER ABOVE SALT CREEK, NEAR OAKRIDGE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

14146500 SALMON CREEK NEAR OAKRIDGE, OR

LOCATION.--Lat 43°45'45", long 122°22'18", in NE¼ sec.7, T.21 S., R.4 E., Lane County, Hydrologic Unit 17090001, in Willamette National Forest, on right bank 190 ft upstream from Salmon Creek Falls, 0.1 mi upstream from Needle Creek, 4.6 mi east of Oakridge, and at mile 5.84.

DRAINAGE AREA.--117 mi², at measuring cable 0.25 mi downstream from gage.

PERIOD OF RECORD.--October to November 1909 (gage heights and one discharge measurement only), February 1913 to October 1919, October 1933 to September 1985 (discontinued). Monthly discharge only for some periods, published in WSP 1318. Published as Kelsey River near Hazeldell and Salmon Creek near Hazeldell, 1909.

REVISED RECORDS.--WSP 794: 1934(M). WSP 814: Drainage area. WSP 1124: 1935, 1942(M), 1943, 1946(M). WSP 1248: 1915, 1918. WDR OR-71-1: 1968, 1969(M,P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,462.36 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1914, nonrecording gage at several sites within 4 mi of present site at various datums. Oct. 1, 1914, to Oct. 14, 1919, water-stage recorder at site 1.8 mi downstream at different datum. Nov. 5, 1933, to Oct. 27, 1964, water-stage recorder at site 0.8 mi downstream at datum 40.53 ft lower. Oct. 28, 1964, to Aug. 27, 1965, nonrecording gage at site 0.6 mi downstream at different datum.

REMARKS.--Estimated daily discharges: July 19 to Sept. 11. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. All records given herein are for measuring cable site.

AVERAGE DISCHARGE.--58 years (water years 1914-19, 1934-85), 429 ft³/s, 49.79 in/yr, 310,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft³/s Dec. 22, 1964, gage height, 9.15 ft, from floodmark, site and datum then in use, from rating curve extended above 2,100 ft³/s on basis of slope-area measurement of peak flow; minimum, 63 ft³/s Jan. 8, 1937.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0200	*2,250	*4.31	Nov. 12	1730	2,060	4.14

Minimum daily discharge, 117 ft³/s Aug. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	154	335	892	364	281	415	717	692	441	228	195	144		
2	154	1330	691	344	272	400	878	770	433	222	182	142		
3	153	1900	589	340	263	379	887	805	421	218	174	137		
4	152	1230	518	351	248	375	820	693	441	214	167	132		
5	154	873	468	375	247	354	767	615	448	211	161	147		
6	153	759	433	399	243	344	785	573	601	207	157	157		
7	150	703	417	432	283	328	899	541	848	203	160	160		
8	150	633	416	433	298	311	929	504	922	200	163	155		
9	164	611	448	415	277	306	917	483	732	197	155	160		
10	161	899	690	390	260	302	976	468	627	194	150	165		
11	193	1150	651	368	337	302	938	445	558	192	146	160		
12	206	1730	686	354	634	303	842	418	524	190	140	156		
13	272	1790	636	343	543	301	809	410	495	188	137	166		
14	249	1460	569	342	519	302	863	430	460	186	136	197		
15	237	1110	569	343	606	310	886	432	434	182	135	204		
16	211	878	514	345	605	325	829	484	412	182	134	179		
17	196	730	471	394	545	346	714	524	385	180	134	221		
18	198	690	438	459	489	351	648	583	377	178	133	218		
19	371	627	404	466	465	355	592	619	369	177	133	185		
20	447	637	384	444	447	360	520	603	346	175	132	172		
21	370	601	369	423	424	368	503	571	323	173	130	165		
22	311	544	355	400	454	352	509	573	305	172	129	158		
23	273	534	349	380	467	403	674	604	289	170	127	154		
24	268	520	344	369	473	485	608	631	277	169	124	153		
25	266	484	341	352	480	438	556	577	264	168	122	149		
26	541	452	336	338	457	420	512	538	255	164	120	145		
27	541	539	327	321	429	411	519	510	248	160	118	145		
28	560	816	335	314	413	389	594	496	241	160	117	144		
29	500	845	332	302	---	372	606	477	237	165	117	142		
30	412	1230	395	288	---	387	635	429	233	185	117	142		
31	370	---	395	283	---	547	---	456	---	204	119	---		
TOTAL	8537	26640	14762	11471	11459	11341	21932	16954	12946	5814	4364	4854		
MEAN	275	888	476	370	409	366	731	547	432	188	141	162		
MAX	560	1900	892	466	634	547	976	805	922	228	195	221		
MIN	150	335	327	283	243	301	503	410	233	160	117	132		
CFSM	2.35	7.59	4.07	3.16	3.50	3.13	6.25	4.68	3.69	1.61	1.21	1.38		
IN.	2.71	8.47	4.69	3.65	3.64	3.61	6.97	5.39	4.12	1.85	1.39	1.54		
AC-FT	16930	52840	29280	22750	22730	22490	43500	33630	25680	11530	8660	9630		
CAL YR 1984	TOTAL	202826	MEAN	554	MAX	3060	MIN	150	CFSM	4.74	IN.	64.49	AC-FT	402300
WTR YR 1985	TOTAL	151074	MEAN	414	MAX	1900	MIN	117	CFSM	3.54	IN.	48.03	AC-FT	299700

WILLAMETTE RIVER BASIN

14146700 GRAY CREEK NEAR OAKRIDGE, OR

LOCATION.--Lat 43°43'48", long 122°30'38", in NE¼SE¼ sec.24, T.21 S., R.2 E., Lane County, Hydrologic Unit 17090001, Willamette National Forest, on left bank 0.9 mi upstream from La Duke Road bridge, and 1.5 mi southwest of Oakridge.

DRAINAGE AREA.--5.06 mi².

PERIOD OF RECORD.--July 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,300 ft, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--7 years, 14.6 ft³/s, 39.18 in/yr, 10,580 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,230 ft³/s Dec. 6, 1981, gage height, 7.05 ft, from rating curve extended above 160 ft³/s on basis of slope-area measurement of peak flow, result of release of water from bursting logjam; minimum, 0.14 ft³/s Sept. 8, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 140 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1500	258	3.04	Nov. 30	0730	*281	*3.12

Minimum discharge, 0.18 ft³/s Aug. 30, 31, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	.40	3.1	80	35	2.0	11	31	12	3.8	.97	4.3	.23		
2	.40	159	51	29	2.1	9.8	26	10	4.9	.89	1.6	.47		
3	.39	128	36	30	1.9	8.5	21	8.9	3.5	.82	.99	.43		
4	.40	54	24	32	1.5	8.2	17	7.7	3.0	.79	.76	.35		
5	.42	20	17	34	1.7	7.6	15	6.6	2.8	.75	.65	.32		
6	.41	17	12	33	1.6	7.4	15	5.9	10	.77	.57	.82		
7	.39	20	15	31	8.4	6.8	16	5.1	19	.73	.54	.85		
8	.38	15	21	24	14	6.1	15	4.5	19	.67	.67	.55		
9	.38	25	31	19	9.0	5.7	14	4.2	12	.66	.57	.63		
10	.50	85	75	16	6.5	6.2	14	4.0	8.0	.61	.49	.75		
11	1.0	87	68	13	21	6.6	12	4.3	6.0	.60	.47	.52		
12	1.8	106	98	12	59	6.6	11	3.8	4.8	.58	.46	.42		
13	11	91	79	11	36	6.2	11	3.5	4.0	.55	.41	.48		
14	9.7	74	64	11	36	6.4	10	3.8	3.5	.54	.39	1.3		
15	9.6	36	63	11	45	6.7	9.3	3.4	3.1	.53	.37	1.3		
16	7.8	18	54	10	33	8.2	7.7	3.2	2.8	.53	.36	.92		
17	7.2	11	47	15	21	9.1	6.3	3.0	2.6	.53	.34	3.3		
18	11	19	41	15	16	8.3	6.1	2.8	2.3	.51	.35	5.3		
19	70	21	34	12	15	7.7	6.4	2.5	2.1	.47	.37	2.3		
20	64	19	30	9.6	17	7.9	5.6	2.3	1.9	.44	.39	1.4		
21	46	18	27	7.9	16	7.7	8.3	2.0	1.8	.42	.38	.99		
22	23	12	26	6.3	19	6.3	16	1.9	1.6	.41	.35	.78		
23	7.4	11	30	5.3	19	12	27	1.8	1.5	.42	.33	.68		
24	.82	12	32	4.9	17	19	20	1.7	1.5	.40	.32	.58		
25	.79	9.9	30	4.3	16	15	17	1.6	1.4	.38	.28	.52		
26	49	8.6	27	3.7	13	15	14	1.4	1.4	.36	.25	.47		
27	31	42	28	3.1	11	16	16	1.3	1.3	.32	.25	.43		
28	49	98	30	2.8	10	14	16	1.4	1.2	.32	.25	.40		
29	34	73	28	2.5	---	13	14	1.6	1.2	.34	.24	.37		
30	8.2	185	54	2.2	---	14	13	1.3	1.1	.57	.22	.35		
31	3.3	---	47	2.1	---	26	---	2.3	---	3.1	.21	---		
TOTAL	449.68	1477.6	1299	447.7	468.7	309.0	430.7	119.8	133.1	19.98	18.13	28.21		
MEAN	14.5	49.3	41.9	14.4	16.7	9.97	14.4	3.86	4.44	.64	.58	.94		
MAX	70	185	98	35	59	26	31	12	19	3.1	4.3	5.3		
MIN	.38	3.1	12	2.1	1.5	5.7	5.6	1.3	1.1	.32	.21	.23		
CFSM	2.87	9.74	8.28	2.85	3.30	1.97	2.85	.76	.88	.13	.11	.19		
IN.	3.31	10.86	9.55	3.29	3.45	2.27	3.17	.88	.98	.15	.13	.21		
AC-FT	892	2930	2580	888	930	613	854	238	264	40	36	56		
CAL YR 1984	TOTAL	7530.98	MEAN	20.6	MAX	271	MIN	.38	CFSM	4.07	IN.	55.37	AC-FT	14940
WTR YR 1985	TOTAL	5201.60	MEAN	14.3	MAX	185	MIN	.21	CFSM	2.83	IN.	38.24	AC-FT	10320

WILLAMETTE RIVER BASIN

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14147500 NORTH FORK OF MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE, OR

LOCATION.--Lat 43°45'25", long 122°30'15", in SW¼ sec.7, T.21 S., R.3 E., Lane County, Hydrologic Unit 17090001, on left bank 2.5 mi northwest of Oakridge and at mile 1.0.

DRAINAGE AREA.--246 mi², at measuring section 0.5 mi downstream.

PERIOD OF RECORD.--October 1909 to March 1916, September 1935 to September 1985 (discontinued). Monthly discharge only for some periods, published in WSP 1318. Prior to October 1912, published as "near Hazeldell."

REVISED RECORDS.--WSP 1248: 1914-16.

GAGE.--Water-stage recorder. Datum of gage is 1,029.6 ft above National Geodetic Vertical Datum of 1929 (river profile survey). Oct. 1, 1909, to March 31, 1916, water-stage recorder or nonrecording gage at several sites within 0.8 mi of present site at various datums. Sept. 10, 1935, to Oct. 3, 1938, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Dec. 30 to Jan. 23. Records good except for estimated daily discharges, which are fair. Slight regulation by Waldo Lake; occasional fluctuations during low-water periods caused by log-ponds upstream from station. No diversions upstream from station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--56 years (water years 1910-15, 1936-85), 795 ft³/s, 43.89 in/yr, 576,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,400 ft³/s Dec. 22, 1964, gage height, 19.14 ft, from floodmark, from rating curve extended above 7,100 ft³/s on basis of slope-area measurement of peak flow; minimum, 22 ft³/s Aug. 20, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0130	*4,530	*6.91	Nov. 12	1930	3,980	6.46

Minimum, 128 ft³/s Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	154	550	1970	700	493	801	1470	1300	777	304	225	133		
2	152	2360	1480	690	478	779	1830	1410	748	294	191	162		
3	150	4020	1230	700	464	733	1880	1470	716	285	180	154		
4	152	2470	1070	720	426	728	1730	1320	738	278	173	142		
5	156	1640	954	770	437	689	1590	1160	742	270	170	138		
6	152	1420	873	810	421	664	1640	1070	1060	264	167	171		
7	149	1390	824	850	516	627	1880	1000	1440	256	166	174		
8	147	1230	804	840	578	593	1920	934	1620	249	176	158		
9	165	1190	863	800	530	576	1870	891	1270	244	170	163		
10	159	2260	1570	760	492	571	1970	857	1050	237	164	173		
11	212	2870	1430	720	657	575	1860	850	914	233	159	158		
12	242	3610	1510	690	1440	576	1650	783	834	228	155	152		
13	402	3700	1380	680	1150	568	1600	757	773	224	153	157		
14	401	3170	1200	680	1060	574	1690	793	717	220	149	195		
15	383	2320	1170	690	1200	594	1720	782	671	214	147	240		
16	297	1780	1040	710	1160	635	1600	841	628	211	147	206		
17	258	1450	946	760	1030	690	1380	911	583	210	145	239		
18	254	1370	885	860	932	707	1240	981	550	205	144	282		
19	569	1260	802	900	892	716	1170	1040	521	200	148	218		
20	751	1240	780	840	870	726	1020	1030	494	195	147	186		
21	552	1150	748	780	822	752	977	970	460	192	145	171		
22	445	1030	728	740	859	716	1010	959	435	190	141	165		
23	379	1000	692	700	892	839	1350	977	414	185	138	157		
24	365	1020	684	673	904	1080	1250	1010	390	183	136	152		
25	359	952	695	645	925	931	1160	947	376	180	135	147		
26	937	889	668	613	875	878	1060	889	360	178	134	144		
27	959	1080	646	584	819	846	1040	841	347	175	133	141		
28	1030	1900	633	562	793	815	1190	802	336	174	132	138		
29	903	1950	665	539	---	791	1190	798	323	175	132	136		
30	705	2810	800	510	---	816	1230	735	312	187	132	133		
31	625	---	780	498	---	1110	---	764	---	220	133	---		
TOTAL	12564	55081	30520	22014	22115	22696	44167	29872	20599	6860	4767	5085		
MEAN	405	1836	985	710	790	732	1472	964	687	221	154	170		
MAX	1030	4020	1970	900	1440	1110	1970	1470	1620	304	225	282		
MIN	147	550	633	498	421	568	977	735	312	174	132	133		
CFSM	1.65	7.46	4.00	2.89	3.21	2.98	5.98	3.92	2.79	.90	.63	.69		
IN.	1.90	8.33	4.62	3.33	3.34	3.43	6.68	4.52	3.11	1.04	.72	.77		
AC-FT	24920	109300	60540	43660	43870	45020	87610	59250	40860	13610	9460	10090		
CAL YR 1984	TOTAL	374700	MEAN	1024	MAX	7710	MIN	147	CFSM	4.16	IN.	56.66	AC-FT	743200
WTR YR 1985	TOTAL	276340	MEAN	757	MAX	4020	MIN	132	CFSM	3.08	IN.	41.79	AC-FT	548100

14148000 MIDDLE FORK WILLAMETTE RIVER BELOW NORTH FORK, NEAR OAKRIDGE, OR

LOCATION.--Lat 43°48'05", long 122°33'35", in SW¼ sec.27, T.20 S., R.2 E., Lane County, Hydrologic Unit 17090001, on left bank 0.5 mi downstream from Whitehead Creek, 4.2 mi downstream from North Fork of Middle Fork Willamette River, 7.0 mi northwest of Oakridge, and at mile 220.2.

DRAINAGE AREA.--924 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1911 to September 1912, July 1923 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "near Hazeldell" 1911-12 and as "at Eula" 1923-50.

REVISED RECORDS.--WSP 694: 1925-28. WSP 814: Drainage area at Eula. WSP 1248: 1924, 1925(M), 1926-28, 1929(M), 1930, 1933, 1946(M). WSP 1398: 1927(M). WSP 1638: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 934.76 ft above National Geodetic Vertical Datum of 1929. Mar. 22, 1911, to Sept. 30, 1912, nonrecording gage at site 4.0 mi upstream, just downstream from North Fork at different datum. July 1, 1923, to Aug. 11, 1935, nonrecording gage and Aug. 12, 1935, to Sept. 30, 1950, water-stage recorder at site 4.0 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since 1961 by Hills Creek Lake (see sta 14145100); slight regulation at times by logponds upstream from station. No diversion upstream from station.

AVERAGE DISCHARGE.--63 years, 2,792 ft³/s, 2,023,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,800 ft³/s Dec. 28, 1945, gage height, 18.8 ft, from floodmark, site and datum then in use, from rating curve extended above 39,000 ft³/s; minimum, 322 ft³/s Aug. 30, 1961, caused by closing outlet gates at Hills Creek Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1861 and prior to beginning of record, 17.0 ft in February 1890 at site used 1923-50, from information by local resident, discharge, about 55,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,600 ft³/s Nov. 13, gage height, 6.32 ft; minimum, 746 ft³/s Aug. 17, 18, 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2150	2930	7750	2740	1370	1970	3240	3390	2700	1350	1140	1740
2	2130	6870	6450	2600	1360	1950	3750	3860	2650	1320	1040	1810
3	2130	10100	5820	2530	1330	1860	3760	4260	2590	1280	911	1780
4	2140	6740	4870	2530	1250	1850	3510	4030	2630	1270	876	1750
5	2140	5180	3990	2580	1270	1780	3330	3710	2640	1250	863	1750
6	2120	4760	3780	2630	1250	1740	3370	3400	4020	1230	853	1810
7	2110	4630	3660	2790	1450	1670	3750	2980	5710	1200	859	1820
8	2110	4310	3620	2870	1670	1610	3760	2560	6160	1160	885	1800
9	2060	4860	3700	2800	1560	1570	3680	2370	4530	1110	865	1820
10	2140	7110	4940	2700	1470	1550	4580	2250	3950	1090	851	1950
11	2250	8270	4820	2530	1740	1560	5050	2120	3640	1080	839	2080
12	2290	9740	5100	2350	3620	1560	4730	1930	3470	1080	834	2060
13	2620	10700	4930	2310	2960	1530	4600	1870	3240	1070	829	2070
14	2580	12100	4540	2270	2720	1540	4780	1950	2950	1050	795	2160
15	2560	10300	4480	2220	3040	1570	4860	1930	2740	1040	765	2210
16	2400	9280	4190	2220	2920	1630	4710	2060	2510	1030	760	2160
17	2320	8590	3970	2380	2590	1710	4110	2380	2310	1020	756	2260
18	2320	8430	3800	2630	2340	1740	3580	2790	2260	1000	753	2350
19	2940	8220	3600	2660	2240	1750	3320	2950	2210	973	769	2220
20	3370	8210	3510	2600	2200	1760	3040	3380	2150	918	775	2150
21	2980	7780	3290	2520	2100	1830	2980	3560	2000	913	820	2110
22	2680	6390	2930	2450	2180	1760	3000	3550	1830	940	788	2100
23	2590	6130	2920	2200	2230	1960	3560	3630	1720	981	846	2090
24	2560	6050	2740	1990	2230	2510	3370	3820	1640	939	977	2080
25	2540	5670	2470	1930	2260	2270	3110	3750	1590	920	976	2060
26	3730	5320	2440	1870	2150	2150	2800	3540	1530	882	969	2040
27	3870	5440	2450	1820	2030	2110	2680	3200	1470	872	1140	2040
28	4020	7200	2490	1790	1960	2070	2920	3040	1460	873	1510	2030
29	3750	7360	2480	1510	---	2020	2910	2980	1420	877	1720	2020
30	3290	10500	2920	1400	---	2030	3060	2700	1390	925	1720	2020
31	3100	---	2930	1390	---	2590	---	2690	---	1060	1740	---
TOTAL	81990	219170	121580	71810	57490	57200	109900	92630	81110	32703	30224	60340
MEAN	2645	7306	3922	2316	2053	1845	3663	2988	2704	1055	975	2011
MAX	4020	12100	7750	2870	3620	2590	5050	4260	6160	1350	1740	2350
MIN	2060	2930	2440	1390	1250	1530	2680	1870	1390	872	753	1740
AC-FT	162600	434700	241200	142400	114000	113500	218000	183700	160900	64870	59950	119700
CAL YR 1984	TOTAL	1413495	MEAN	3862	MAX	17400	MIN	927	AC-FT	2804000		
WTR YR 1985	TOTAL	1016147	MEAN	2784	MAX	12100	MIN	753	AC-FT	2016000		

WILLAMETTE RIVER BASIN

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14148000 MIDDLE FORK WILLAMETTE RIVER BELOW NORTH FORK, NEAR OAKRIDGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: September 1950 to October 1960, June 1961 to current year.

INSTRUMENTATION.--Temperature recorder since September 1950.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 23.5°C Aug. 3, 1961; minimum, 0.0°C Jan. 20-22, 1962, Feb. 2, 1979, Jan. 28-30, 1980.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 18.5°C July 19, 20, 26; minimum, 1.0°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14148000 MIDDLE FORK WILLAMETTE RIVER BELOW NORTH FORK, NEAR OAKRIDGE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

14149000 LOOKOUT POINT LAKE NEAR LOWELL, OR

LOCATION.--Lat 43°54'50", long 122°45'00", in SE¼ sec.13, T.19 S., R.1 W., Lane County, Hydrologic Unit 17090001, in elevator house at right end of spillway section of dam on Middle Fork Willamette River, 1.5 mi east of Lowell, and at mile 206.9.

DRAINAGE AREA.--991 mi².

PERIOD OF RECORD.--November 1953 to current year. Prior to October 1971, published as Lookout Point Reservoir near Lowell.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Nov. 7, 1953, to Dec. 4, 1954, approximate elevations obtained from reference marks and Dec. 5, 1954, to Feb. 4, 1955, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earthfill dam with concrete gate and spillway section, completed in 1954 by Corps of Engineers. Planned storage began in November 1953. Total capacity is 455,800 acre-ft at elevation 929 ft, and usable capacity is 349,200 acre-ft between elevations 819 ft and 929 ft, top of spillway gates. Reservoir used for flood control, improvement of navigation, power generation, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 464,900 acre-ft Dec. 26, 1964, elevation, 931.09 ft; minimum observed since first filling, 91,450 acre-ft Dec. 1, 1954, elevation, 811.00 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 451,600 acre-ft May 21, elevation, 928.01 ft; minimum, 118,100 acre-ft Dec. 29, elevation, 824.66 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)

820	108,600	860	205,500	900	338,900
830	129,500	870	235,500	910	377,400
840	152,500	880	267,800	920	417,800
850	177,700	890	302,300	930	460,200

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	894.76	869.53	853.57	825.99	829.63	854.01	870.49	913.38	925.24	926.01	922.16	907.09
2	893.66	870.99	852.09	826.04	829.79	854.58	872.26	914.68	925.25	925.97	921.89	906.52
3	892.52	875.48	850.04	826.18	829.94	855.15	873.91	916.27	925.19	925.98	921.59	905.92
4	891.43	876.08	847.21	826.11	830.01	855.71	875.44	917.64	925.21	925.95	921.26	905.32
5	890.37	873.80	843.60	826.32	829.98	856.20	876.80	918.85	925.29	925.93	920.95	904.74
6	889.21	871.30	839.68	826.34	829.99	856.65	878.18	919.91	925.85	925.90	920.66	904.21
7	888.11	868.57	835.81	826.67	830.59	856.99	879.68	920.77	926.75	925.86	920.33	903.66
8	887.00	865.55	833.39	826.68	831.32	857.36	881.24	921.42	926.93	925.82	919.97	903.08
9	885.86	863.06	830.99	826.63	832.06	857.63	882.68	921.97	926.23	925.77	919.56	902.53
10	884.82	864.37	829.38	826.47	832.43	857.43	884.70	922.52	925.99	925.72	919.17	902.02
11	883.75	866.32	828.00	826.34	833.26	856.85	886.92	922.97	925.77	925.64	918.77	901.35
12	882.70	869.38	827.24	826.17	836.00	857.09	888.91	923.31	925.71	925.56	918.35	900.43
13	881.87	871.99	827.83	825.96	838.22	857.31	890.84	923.62	925.70	925.47	918.00	899.62
14	881.03	873.81	828.43	825.70	839.68	857.53	892.84	923.91	925.56	925.35	917.50	898.83
15	880.19	874.12	828.83	825.64	841.46	857.76	894.84	924.25	925.49	925.25	917.07	897.97
16	879.11	872.87	829.17	825.77	843.15	858.16	896.75	924.63	925.31	925.12	916.61	897.12
17	878.03	871.26	829.13	826.01	844.39	858.52	898.34	925.20	924.99	925.01	916.05	896.22
18	876.96	869.69	828.72	826.45	845.41	858.89	899.70	925.97	925.08	924.92	915.47	895.39
19	876.32	867.92	827.99	826.87	846.33	859.36	900.90	926.80	925.33	924.81	914.85	894.51
20	875.92	866.25	827.42	827.28	847.20	859.88	901.91	927.62	925.67	924.64	914.25	893.60
21	875.26	864.29	826.67	827.51	847.99	860.44	902.94	927.58	925.99	924.48	913.66	892.59
22	874.42	861.17	826.48	827.42	848.80	860.92	903.99	927.25	926.01	924.32	913.08	891.58
23	873.52	857.88	826.31	827.87	849.64	861.70	905.39	926.99	925.99	924.19	912.52	890.58
24	872.53	854.70	825.87	828.15	850.49	862.96	906.67	926.70	925.97	924.04	911.99	889.64
25	871.61	851.48	825.46	828.40	851.35	863.92	907.77	926.59	925.97	923.87	911.48	888.77
26	871.55	848.65	825.01	828.59	852.19	864.81	908.70	926.33	926.02	923.69	910.95	888.03
27	871.51	846.49	825.07	828.76	852.84	865.67	909.49	925.76	926.03	923.41	910.28	887.39
28	871.63	846.34	825.09	828.88	853.39	866.46	910.43	925.45	926.05	923.09	909.56	886.73
29	871.48	846.18	825.12	829.25	---	867.28	911.37	925.42	926.05	922.80	909.00	886.14
30	870.83	851.99	825.61	829.40	---	867.95	912.32	925.16	926.04	922.52	908.33	885.52
31	870.38	---	826.09	829.44	---	869.00	---	925.22	---	922.35	907.70	---
MAX	894.76	876.08	853.57	829.44	853.39	869.00	912.32	927.62	926.93	926.01	922.16	907.09
MIN	870.38	846.18	825.01	825.64	829.63	854.01	870.49	913.38	924.99	922.35	907.70	885.52
(†)	236700	183100	121100	128200	186900	232400	386600	439700	443200	427600	368400	286600
(‡)	-86300	-53600	-62000	+7100	+58700	+45500	+154200	+53100	+3500	-15600	-59200	-81800

CAL YR 1984 MAX 928.70 MIN 824.73 AC-FT‡ -14400
WTR YR 1985 MAX 927.62 MIN 825.01 AC-FT‡ -36400

† Contents, in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

WILLAMETTE RIVER BASIN

14150000 MIDDLE FORK WILLAMETTE RIVER NEAR DEXTER, OR

LOCATION.--Lat 43°56'45", long 122°50'10", in SE¼NW¼ sec.5, T.19 S., R.1 W., Lane County, Hydrologic Unit 17090001, on right bank 0.6 mi upstream from Lost Creek, 2.0 mi northwest of Dexter, 2.6 mi downstream from Dexter Dam, and at mile 201.2.

DRAINAGE AREA.--1,001 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to September 1954 (published as "at Lowell"), June 1955 to current year. Monthly discharge only for October 1954 to June 1955, published in WSP 1738.

REVISED RECORDS.--WSP 1638: 1948(P).

GAGE.--Water-stage recorder. Datum of gage is 592.30 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Aug. 23, 1950, nonrecording gage and Aug. 23, 1950, to Sept. 30, 1954, at site 4.0 mi upstream at different datum, and June 9, 1955, to Feb. 18, 1977, at datum 3.00 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since 1953 by Lookout Point Lake (see sta 14149000), since 1955 by Dexter Lake (re-regulating), and since 1961 by Hills Creek Lake (see sta 14145100).

AVERAGE DISCHARGE.--39 years, 3,185 ft³/s, 2,308,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62,600 ft³/s Jan. 18, 1953, gage height, 12.46 ft, site and datum then in use, from rating curve extended above 33,000 ft³/s; minimum daily, 100 ft³/s Nov. 25, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 13.9 ft Dec. 28, 1945, former site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,700 ft³/s Nov. 16, gage height, 9.73 ft; minimum, 1,140 ft³/s Mar. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4030	4340	6380	2660	1290	1230	1210	1180	2570	1380	1560	2880
2	4020	5170	8770	2670	1290	1210	1200	1220	2570	1380	1570	2840
3	4030	4610	8750	2510	1290	1220	1200	1230	2580	1310	1560	2860
4	4030	6050	8730	2530	1300	1210	1200	1230	2420	1260	1560	2870
5	4070	8890	8500	2520	1300	1210	1200	1230	2360	1250	1570	2850
6	4020	8900	8450	2430	1300	1210	1190	1230	3100	1260	1580	2860
7	4010	8950	8180	2440	1300	1210	1190	1240	4290	1250	1580	2870
8	4020	9000	6810	2930	1300	1230	1200	1240	5720	1260	1690	2860
9	4040	9050	6720	2800	1310	1220	1200	1230	6560	1260	1700	2870
10	4040	6980	6690	2740	1300	1760	1210	1230	4460	1250	1710	2910
11	4030	6100	6700	2400	1290	2430	1210	1240	4090	1260	1700	3480
12	4040	6300	6530	2460	1290	1230	1210	1240	3470	1270	1710	3680
13	4060	7020	4230	2550	1300	1230	1190	1240	3080	1270	1710	3610
14	4090	10100	4210	2550	1290	1220	1200	1260	3050	1270	1710	3830
15	4150	10300	4210	2270	1320	1220	1200	1260	2850	1270	1720	3820
16	4150	11500	4190	2120	1310	1220	1200	1260	2860	1260	1720	3850
17	4150	11400	4190	2050	1280	1190	1200	1270	2840	1240	1930	4110
18	4060	11200	4200	2050	1290	1180	1200	1260	1910	1210	1990	3890
19	4030	11300	4220	2040	1280	1180	1200	1260	1530	1210	1990	3870
20	4020	11300	4230	2300	1250	1180	1190	1880	1380	1270	2020	3900
21	4040	11200	4220	2340	1240	1180	1200	3010	1410	1300	2000	3930
22	4020	11200	3270	2290	1240	1170	1210	4450	1610	1290	2000	3940
23	4020	11200	3170	1680	1230	1180	1220	4200	1630	1290	1990	3910
24	4040	10800	3160	1640	1230	1180	1210	4110	1650	1280	1990	3960
25	4050	10300	2950	1660	1230	1210	1200	4110	1660	1310	2000	3630
26	4090	9420	2990	1680	1240	1200	1200	4060	1530	1310	2000	3240
27	4080	8480	2280	1680	1220	1200	1170	4080	1510	1510	2410	3160
28	4080	8480	2530	1680	1230	1190	1170	3960	1380	1520	2820	3080
29	4100	8470	2700	1340	---	1220	1180	3140	1370	1520	2780	3130
30	4130	5370	2670	1180	---	1220	1180	2960	1380	1560	2840	3160
31	3800	---	2660	1270	---	1220	---	2610	---	1570	2880	---
TOTAL	125540	263380	157490	67460	35740	39160	35940	66120	78820	40850	59990	101850
MEAN	4050	8779	5080	2176	1276	1263	1198	2133	2627	1318	1935	3395
MAX	4150	11500	8770	2930	1320	2430	1220	4450	6560	1570	2880	4110
MIN	3800	4340	2280	1180	1220	1170	1170	1180	1370	1210	1560	2840
AC-FT	249000	522400	312400	133800	70890	77670	71290	131100	156300	81030	119000	202000
CAL YR 1984	TOTAL	1485388	MEAN	4058	MAX	11600	MIN	878	AC-FT	2946000		
WTR YR 1985	TOTAL	1072340	MEAN	2938	MAX	11500	MIN	1170	AC-FT	2127000		

WILLAMETTE RIVER BASIN

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14150000 MIDDLE FORK WILLAMETTE RIVER NEAR DEXTER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1955 to current year.

INSTRUMENTATION.--Temperature recorder since August 1955.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 18.5°C Sept. 17, 21, 22, 24, 25, 1961; minimum, 3.0°C Jan. 2, 7-9, Feb. 2-4, 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 16.0°C Oct. 7, July 19, 25, Sept. 25-30; minimum, 3.5°C Feb. 3-5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14150000 MIDDLE FORK WILLAMETTE RIVER NEAR DEXTER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14150300 FALL CREEK NEAR LOWELL, OR

LOCATION.--Lat 43°58'15", long 122°38'15", in SW¼ sec.25, T.18 S., R.1 E., Lane County, Hydrologic Unit 17090001, on right bank 0.1 mi downstream from North Fork, 8.0 mi northeast of Lowell, and at mile 14.4.

DRAINAGE AREA.--118 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 844.42 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 20, 23, 27, 28, 30. Water-discharge records good. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--22 years, 417 ft³/s, 47.99 in/yr, 302,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft³/s Jan. 21, 1972, which may have been caused by release from breakup of temporary logjam 12 mi upstream, gage height, 11.84 ft; minimum, 16 ft³/s Oct. 3, 4, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1730	4,200	6.93	Nov. 30	0700	*6,120	*8.34
Minimum, 26 ft ³ /s Aug. 27-31, Sept. 1.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	39	332	2030	641	147	327	1410	415	224	78	80	26		
2	38	2560	1220	528	147	302	1240	383	213	73	60	39		
3	38	3090	845	509	143	272	942	382	177	71	48	37		
4	41	1640	644	505	127	306	713	362	184	68	42	31		
5	45	921	515	507	130	292	579	303	172	66	41	31		
6	40	702	434	500	127	283	535	275	575	65	39	100		
7	38	781	395	492	441	263	522	252	1110	63	37	65		
8	39	689	383	431	526	243	467	232	1170	58	47	42		
9	50	961	416	376	357	233	435	220	631	57	45	39		
10	47	2430	954	330	285	231	425	216	423	55	39	44		
11	79	1770	792	296	530	228	382	241	322	54	36	40		
12	106	1790	1440	273	1550	221	338	207	264	53	35	37		
13	222	1960	1240	257	938	208	319	193	226	52	35	41		
14	252	1950	915	258	913	202	313	200	199	50	34	66		
15	254	1160	926	257	1260	200	304	191	180	49	32	100		
16	125	776	713	247	945	206	278	189	164	48	31	70		
17	91	586	578	290	671	212	245	189	154	47	31	131		
18	85	566	489	306	521	207	259	187	146	46	31	164		
19	400	535	412	274	490	200	308	184	140	45	32	87		
20	558	651	370	249	534	207	283	178	133	43	34	61		
21	260	672	369	231	513	239	360	168	124	42	33	51		
22	171	547	377	213	553	248	760	161	119	42	31	45		
23	131	544	433	199	538	661	1330	157	111	41	30	41		
24	121	625	495	187	514	995	1090	153	106	40	29	39		
25	124	574	457	176	492	708	950	149	101	39	28	37		
26	1020	539	418	167	420	625	791	142	96	39	28	35		
27	784	958	452	161	365	649	682	135	92	38	27	34		
28	1550	2010	505	157	332	583	643	135	90	36	27	33		
29	908	1970	507	152	---	563	528	182	84	37	27	31		
30	503	4630	946	143	---	647	457	149	81	38	27	31		
31	433	---	845	142	---	1200	---	213	---	59	26	---		
TOTAL	8592	38919	21515	9454	14509	11961	17888	6743	7811	1592	1122	1628		
MEAN	277	1297	694	305	518	386	596	218	260	51.4	36.2	54.3		
MAX	1550	4630	2030	641	1550	1200	1410	415	1170	78	80	164		
MIN	38	332	369	142	127	200	245	135	81	36	26	26		
CFSM	2.35	11.0	5.88	2.58	4.39	3.27	5.05	1.85	2.20	.44	.31	.46		
IN.	2.71	12.27	6.78	2.98	4.57	3.77	5.64	2.13	2.46	.50	.35	.51		
AC-FT	17040	77200	42680	18750	28780	23720	35480	13370	15490	3160	2230	3230		
CAL YR 1984	TOTAL	208630	MEAN	570	MAX	6680	MIN	38	CFSM	4.83	IN.	65.77	AC-FT	413800
WTR YR 1985	TOTAL	141734	MEAN	388	MAX	4630	MIN	26	CFSM	3.29	IN.	44.68	AC-FT	281100

WILLAMETTE RIVER BASIN

14150300 FALL CREEK NEAR LOWELL, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1963 to current year.

INSTRUMENTATION.-- Temperature recorder since August 1963.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 25.0°C Aug. 1, 1979; minimum, 0.0°C at times in 1972, 1976-80.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 22.5°C July 20; minimum, 0.5°C Feb. 4, 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14150300 FALL CREEK NEAR LOWELL, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14150900 FALL CREEK LAKE NEAR LOWELL, OR

LOCATION.--Lat 43°56'40", long 122°45'20", in SW¼ sec.1, T.19 S., R.1 W., Lane County, Hydrologic Unit 17090001, in regulating tower near the center of Fall Creek Dam on Fall Creek, 2.2 mi northeast of Lowell, and at mile 7.2.

DRAINAGE AREA.--184 mi².

PERIOD OF RECORD.--January 1966 to current year. Prior to October 1971, published as Fall Creek Reservoir near Lowell.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete gate and spillway section, completed in 1965 by Corps of Engineers; storage began January 1966. Total capacity is 125,100 acre-ft at elevation 834 ft and usable capacity is 115,500 acre-ft between elevation 728 ft and 834 ft. Reservoir used for flood control, conservation, and recreation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 123,200 acre-ft May 30, 31, 1972; maximum elevation, 832.98 ft May 31, 1972; minimum, no contents Nov. 7 to Dec. 6, 1969, Nov. 14-16, 1970, Nov. 18-25, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 118,600 acre-ft June 8, elevation, 830.46 ft; minimum, 204 acre-ft Dec. 15, elevation, 682.37 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)

670.4	0	725	8,340	785	53,120
679	59	735	13,270	795	64,590
685	366	745	19,480	805	77,880
695	1,400	755	26,130	815	97,750
705	2,850	765	33,770	825	109,200
715	5,200	775	42,580	833	123,200

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	791.76	750.41	734.44	728.00	731.12	784.15	810.57	824.02	829.96	829.99	829.91	830.05
2	790.34	755.42	725.53	727.78	731.72	784.92	810.71	824.53	829.96	830.06	829.96	830.05
3	789.12	762.05	712.80	727.92	732.33	785.58	810.61	825.01	829.98	---	829.95	830.01
4	788.03	760.57	713.16	728.02	732.74	786.33	810.98	825.46	830.00	---	829.95	829.87
5	786.87	754.49	712.91	727.91	733.19	787.01	811.53	825.85	830.05	---	830.15	829.77
6	785.70	747.15	712.97	727.72	733.64	787.66	812.03	826.12	830.03	---	830.15	829.74
7	784.51	741.49	713.04	727.64	736.39	788.27	812.67	826.41	830.22	---	830.17	829.67
8	783.32	739.05	712.85	727.65	739.51	788.76	813.22	826.64	830.36	---	830.16	829.57
9	782.13	738.58	712.96	727.68	741.50	789.29	813.78	826.85	830.01	---	830.14	829.46
10	780.92	746.44	713.86	727.69	742.96	789.79	814.39	827.11	830.02	---	830.13	829.17
11	779.71	748.68	713.01	727.64	745.29	790.29	814.93	827.39	830.02	---	830.13	828.44
12	778.59	750.58	715.00	727.81	752.13	790.68	815.37	827.62	830.02	829.69	830.13	827.58
13	777.81	754.30	711.06	728.01	755.93	791.12	815.82	827.83	829.98	829.69	830.13	826.64
14	777.11	755.94	697.16	728.13	759.27	791.57	816.25	828.02	830.06	829.76	830.13	825.77
15	776.40	753.38	693.91	728.18	763.64	791.89	816.63	828.24	830.07	829.77	830.13	824.95
16	775.30	747.91	706.89	728.19	766.84	792.38	816.93	828.46	830.06	829.78	830.13	824.00
17	774.12	741.95	713.28	728.23	768.93	792.77	817.22	828.63	830.03	829.83	830.13	823.11
18	772.91	736.30	717.54	728.25	770.49	793.22	817.57	828.89	830.00	829.83	830.13	822.24
19	772.73	727.44	720.63	728.11	771.88	793.52	818.07	829.09	829.93	829.87	830.13	821.08
20	772.95	728.49	723.12	728.04	773.41	793.99	818.45	829.26	829.91	829.89	830.13	819.76
21	772.32	727.89	725.43	728.12	774.81	794.51	818.99	829.36	829.96	829.89	830.13	818.42
22	---	728.01	727.65	728.04	776.30	795.05	820.17	829.43	830.01	829.89	830.13	817.07
23	770.19	728.27	728.57	728.22	777.78	796.47	821.79	829.49	830.04	829.87	830.13	815.68
24	767.94	728.00	728.44	728.49	779.16	798.72	822.33	829.55	830.04	829.87	830.13	814.25
25	765.55	727.73	728.28	728.69	780.49	800.33	822.15	829.59	830.05	829.88	830.13	812.84
26	765.60	725.06	728.29	728.84	781.58	801.65	821.94	829.61	830.02	829.88	830.11	811.20
27	763.98	717.08	728.36	728.94	782.50	803.13	821.76	829.62	830.00	829.89	830.10	809.42
28	763.92	711.48	728.29	729.03	783.35	804.42	822.09	829.73	829.98	829.89	830.09	807.61
29	761.88	702.58	728.27	729.46	---	805.58	822.79	829.85	829.96	829.89	830.05	805.69
30	758.49	735.53	728.76	730.04	---	806.88	823.42	829.89	829.96	829.88	830.05	803.75
31	754.76	---	728.12	730.55	---	809.01	---	830.03	---	829.90	830.05	---
MAX	---	762.05	734.44	730.55	783.35	809.01	823.42	830.03	830.36	---	830.17	830.05
MIN	---	702.58	693.91	727.64	731.12	784.15	810.57	824.02	829.91	---	829.91	803.75
(†)	25960	13580	9680	10870	51310	83660	106500	117900	117800	117700	117900	76130
(‡)	-36420	-12380	-3900	+1190	+40440	+32350	+22840	+11400	-100	-100	+200	-41770

CAL YR 1984 AC-FT† +1840

WTR YR 1985 AC-FT† +13750

† Contents, in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

14151000 FALL CREEK BELOW WINBERRY CREEK, NEAR FALL CREEK, OR

LOCATION.--Lat 43°56'40", long 122°46'25", in NW¼SE¼ sec.2, T.19 S., R.1 W., Lane County, Hydrologic Unit 17090001, on right bank 10 ft upstream from highway bridge, 1.1 mi downstream from Fall Creek Dam, 2.3 mi southeast of town of Fall Creek, and at mile 6.1.

DRAINAGE AREA.--186 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October to December 1911 (published as Big Fall Creek near Fall Creek; gage heights and discharge measurements only), September 1935 to current year.

REVISED RECORDS.--WSP 1094: 1946(M). WSP 1248: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 637.81 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Oct. 1 to Dec. 31, 1911, nonrecording gage at site 0.25 mi downstream at different datum. Sept. 9, 1935, to Aug. 3, 1950, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since 1966 by Fall Creek Lake (see sta 14150900). No diversion upstream from station.

AVERAGE DISCHARGE.--50 years, 586 ft³/s, 42.78 in/yr, 424,600 acre-ft/yr, adjusted for storage in Fall Creek Lake since January 1965.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,700 ft³/s Dec. 11, 1956, gage height, 18.80 ft, from rating curve extended above 9,700 ft³/s; minimum, 1.5 ft³/s Oct. 7, 8, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,900 ft³/s Nov. 29, gage height, 7.44 ft; minimum daily, 24 ft³/s July 8-13, 17-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	853	1960	3070	954	100	84	660	130	368	68	75	29
2	848	2020	3710	809	102	142	1490	130	302	68	75	29
3	728	1640	3410	676	102	140	1290	130	266	68	50	85
4	674	2710	833	673	101	142	664	130	225	47	30	137
5	670	3430	741	710	100	117	388	130	225	32	30	137
6	670	3360	582	710	100	49	329	130	793	32	30	137
7	670	2770	524	679	116	48	248	130	1430	32	55	137
8	661	1640	537	590	122	80	222	130	1380	28	78	137
9	660	1370	532	511	122	49	175	130	1190	24	59	137
10	674	903	1230	448	119	48	136	120	564	24	36	299
11	683	1590	1260	421	115	48	136	104	421	24	28	684
12	685	1830	1580	342	128	99	136	104	368	24	28	892
13	680	1260	2330	305	124	52	136	93	300	24	28	859
14	676	2060	2650	328	125	48	136	137	206	25	29	860
15	675	2450	1580	340	129	82	136	76	206	25	29	863
16	675	2880	58	340	128	47	136	75	205	25	29	909
17	670	2690	61	383	127	46	136	125	203	24	29	970
18	666	2290	64	421	126	45	136	75	203	24	29	970
19	664	3010	65	421	105	103	137	74	198	24	29	1070
20	660	711	65	366	91	45	138	73	149	24	29	1170
21	660	1180	65	340	91	45	138	139	86	24	29	1160
22	845	823	66	319	103	45	138	164	67	24	29	1150
23	953	805	394	238	70	49	327	164	84	24	29	1160
24	1090	1090	704	202	69	55	983	164	95	25	29	1150
25	1170	1020	672	200	61	53	1460	163	104	25	29	1150
26	1290	1450	589	199	78	116	1220	163	115	25	29	1310
27	1750	2920	619	199	48	57	1050	162	114	25	29	1370
28	1970	3700	713	204	48	56	667	163	114	25	29	1360
29	2000	3640	706	128	---	53	130	164	94	25	29	1380
30	1990	681	1140	86	---	51	130	164	73	25	29	1380
31	1950	---	1330	96	---	51	---	221	---	72	29	---
TOTAL	29510	59883	31880	12638	2850	2145	13208	4057	10148	985	1124	23091
MEAN	952	1996	1028	408	102	69.2	440	131	338	31.8	36.3	770
MAX	2000	3700	3710	954	129	142	1490	221	1430	72	78	1380
MIN	660	681	58	86	48	45	130	73	67	24	28	29
AC-FT	58530	118800	63230	25070	5650	4250	26200	8050	20130	1950	2230	45800
MEAN†	359	1788	965	427	830	595	824	316	337	30	40	68
CFSM†	1.93	9.61	5.19	2.30	4.46	3.20	4.43	1.70	1.81	0.16	0.21	0.36
IN.†	2.22	10.73	5.98	2.65	4.65	3.69	4.94	1.96	2.02	0.19	0.24	0.41
AC-FT†	22110	106400	59330	26260	46090	36600	49040	19450	20030	1850	2430	4030

CAL YR 1984 TOTAL 296022 MEAN 809 MAX 3800 MIN 57 AC-FT 587200 MEAN† 811 CFSM† 4.36 IN.† 59.34 AC-FT† 589040
WTR YR 1985 TOTAL 191519 MEAN 525 MAX 3710 MIN 24 AC-FT 379900 MEAN† 544 CFSM† 2.92 IN.† 39.69 AC-FT† 393600

† Adjusted for change in contents in Fall Creek Lake.

WILLAMETTE RIVER BASIN

14151000 FALL CREEK BELOW WINBERRY CREEK, NEAR FALL CREEK, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1950 to current year.

INSTRUMENTATION.--Temperature recorder since August 1950.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 26.0°C July 28, 1958; minimum recorded, 0.5°C on several days in 1962 and 1965.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 19.5°C Sept. 3, 4, 6, 7; minimum, 2.5°C Feb. 4, 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

WILLAMETTE RIVER BASIN

14152000 MIDDLE FORK WILLAMETTE RIVER AT JASPER, OR

LOCATION.--Lat 43°59'55", long 122°54'20", in SW¼SW¼ sec.14, T.18 S., R.2 W., Lane County, Hydrologic Unit 17090001, on right bank 25 ft downstream from highway bridge at Jasper, 0.1 mi downstream from Hills Creek, and at mile 195.0.

DRAINAGE AREA.--1,340 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1905 to February 1912, July 1913 to March 1917, October 1952 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1288: 1907-8, 1910-12, 1914-16, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 513.45 ft above National Geodetic Vertical Datum of 1929. September 1905 to February 1912 and July 1913 to March 1917, nonrecording gage at approximately same site at datum about 1.5 ft higher Oct. 22, 1952, to Sept. 30, 1953, nonrecording gage at site 25 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. Flow regulated since 1953 by Lookout Point Lake (see station 14149000), since 1961 by Hills Creek Lake (see station 14145100), and since 1966 by Fall Creek Lake (see station 14150900).

AVERAGE DISCHARGE.--42 years (water years 1906-11, 1914-16, 1953-85), 4,136 ft³/s, 2,997,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 94,000 ft³/s Nov. 23, 1909, gage height, 17.4 ft, datum then in use, from graph based on gage readings, from rating curve extended above 42,000 ft³/s; minimum, 366 ft³/s Dec. 5, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,500 ft³/s Nov. 30, gage height, 9.29 ft; minimum, 1,290 ft³/s July 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5160	6710	12000	4640	1610	1720	2870	1670	3390	1590	1770	3070
2	5140	9480	15000	4390	1670	1680	3720	1680	3340	1590	1750	3050
3	5040	9250	14300	4010	1690	1660	3500	1690	3290	1520	1720	3100
4	4990	10200	11100	3940	1660	1710	2730	1690	3080	1420	1680	3170
5	5010	13900	10400	3950	1650	1730	2270	1650	2980	1390	1690	3150
6	4970	13700	10000	3820	1640	1690	2140	1630	4200	1390	1700	3200
7	4950	13300	9490	3770	2630	1670	2010	1620	6700	1390	1710	3200
8	4970	12000	7980	4120	2990	1700	1920	1600	7870	1400	1870	3180
9	4980	12100	7810	3920	2620	1640	1850	1590	8490	1380	1880	3190
10	5000	11000	9260	3760	2310	2190	1770	1580	5690	1370	1860	3330
11	5020	8920	9220	3360	2390	3020	1740	1570	5040	1380	1840	4240
12	5040	10900	9540	3290	3520	1670	1710	1560	4400	1380	1840	4700
13	5120	9420	7910	3330	2740	1610	1670	1530	3920	1380	1830	4620
14	5120	14800	7980	3340	2500	1580	1660	1580	3730	1380	1820	4860
15	5170	14200	7220	3100	2870	1600	1650	1540	3520	1380	1820	4880
16	5130	16100	5290	2890	2610	1560	1630	1530	3510	1370	1830	4940
17	5110	15700	5120	2840	2350	1520	1610	1590	3470	1350	2040	5240
18	5040	14700	5050	2880	2190	1510	1630	1510	2520	1310	2140	5100
19	5120	15800	4970	2860	2100	1560	1740	1510	2000	1300	2150	5120
20	5160	13300	4930	3060	2080	1490	1700	2120	1740	1360	2180	5210
21	5090	13800	4910	3080	2000	1540	1710	3410	1680	1390	2150	5230
22	5180	13300	4060	3010	2010	1550	1950	4960	1870	1380	2160	5230
23	5290	13400	4200	2270	1940	2100	2380	4770	1920	1380	2140	5200
24	5400	13600	4580	2110	1910	2730	2960	4670	1950	1360	2140	5220
25	5510	12900	4360	2130	1880	2350	3470	4660	1960	1400	2140	4940
26	6020	12300	4270	2150	1850	2310	3160	4610	1830	1400	2150	4670
27	6430	13200	3630	2140	1760	2390	2850	4630	1800	1600	2560	4690
28	7150	15700	4030	2150	1730	2310	2480	4580	1670	1640	3000	4600
29	6900	15300	4210	1740	---	2190	1750	3760	1620	1640	2970	4650
30	6690	13000	4950	1460	---	2150	1700	3560	1600	1690	3020	4670
31	6260	---	5160	1560	---	2320	---	3280	---	1770	3060	---
TOTAL	167160	381980	222930	95070	60900	58450	65930	79330	100780	44680	64610	129650
MEAN	5392	12730	7191	3067	2175	1885	2198	2559	3359	1441	2084	4322
MAX	7150	16100	15000	4640	3520	3020	3720	4960	8490	1770	3060	5240
MIN	4950	6710	3630	1460	1610	1490	1610	1510	1600	1300	1680	3050
AC-FT	331600	757700	442200	188600	120800	115900	130800	157400	199900	88620	128200	257200
CAL YR 1984	TOTAL	2055550	MEAN	5616	MAX	16600	MIN	1360	AC-FT	4077000		
WTR YR 1985	TOTAL	1471470	MEAN	4031	MAX	16100	MIN	1300	AC-FT	2919000		

WILLAMETTE RIVER BASIN

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14152000 MIDDLE FORK WILLAMETTE RIVER AT JASPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1953 to December 1962, October 1963 to current year.

INSTRUMENTATION.--Temperature recorder October 1953 to December 1962, October 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 21.0°C June 1, 2, 1978; minimum, 1.5°C Jan. 25-27, 1969.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 19.0°C July 18, 19; minimum, 2.5°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14152000 MIDDLE FORK WILLAMETTE RIVER AT JASPER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14152500 COAST FORK WILLAMETTE RIVER AT LONDON, OR

LOCATION.--Lat 43°38'30", long 123°05'05", in SW¼ sec.20, T.22 S., R.3 W., Lane County, Hydrologic Unit 17090002, on left bank 0.6 mi north of London, 11.0 mi south of Cottage Grove, and at mile 35.9.

DRAINAGE AREA.--72.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1935 to current year.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 852.58 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Sept. 18 to Oct. 17, 1935, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. No regulation. Diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--50 years, 202 ft³/s, 38.05 in/yr, 146,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s Dec. 22, 1964, gage height, 13.37 ft, from rating curve extended above 3,200 ft³/s, on basis of slope-area measurement of peak flow; minimum, 6.8 ft³/s Aug. 18, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	1430	2,490	6.37	Nov. 30	0630	*4,740	*9.16

Minimum, 11 ft³/s Aug. 26 to Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	14	75	1210	303	86	145	455	137	84	31	28	11		
2	14	833	707	259	97	138	397	128	81	31	24	14		
3	14	1070	530	231	100	128	326	125	70	29	19	14		
4	17	529	414	211	90	149	269	118	73	28	17	12		
5	19	288	340	198	86	145	232	105	71	28	17	13		
6	16	236	289	189	84	140	213	99	162	27	16	16		
7	15	249	254	184	396	134	208	94	384	27	17	17		
8	16	280	228	172	471	125	193	88	365	22	19	14		
9	24	438	223	158	338	121	179	83	206	21	17	14		
10	27	754	441	144	263	117	171	84	142	21	15	16		
11	35	755	427	134	446	112	156	86	109	21	14	15		
12	29	891	566	127	1130	106	143	79	89	21	14	15		
13	59	894	553	121	557	101	135	75	76	21	14	19		
14	62	792	438	116	416	98	131	76	67	19	13	28		
15	57	490	445	111	468	95	126	72	61	19	13	29		
16	34	334	371	107	393	94	118	70	57	19	13	22		
17	28	273	315	106	317	93	108	69	53	19	12	23		
18	33	302	277	111	265	91	115	66	49	19	13	28		
19	85	282	243	107	246	89	147	65	45	17	14	20		
20	116	372	220	102	253	90	136	63	43	16	15	18		
21	79	392	212	98	244	102	150	60	41	16	14	16		
22	52	310	200	94	234	110	227	57	38	16	13	16		
23	40	328	194	90	219	312	365	56	37	16	12	15		
24	35	398	188	86	205	572	335	59	37	16	12	15		
25	32	393	182	83	190	405	282	56	36	16	12	14		
26	157	356	174	80	175	416	234	53	35	15	11	14		
27	209	825	204	77	161	522	202	51	34	15	11	13		
28	309	2180	242	80	149	453	184	59	34	15	11	13		
29	205	1300	232	78	---	430	163	62	33	15	11	12		
30	126	2970	426	74	---	396	147	55	32	18	11	12		
31	94	---	371	79	---	452	---	109	---	25	11	---		
TOTAL	2052	19589	11116	4110	8079	6481	6247	2459	2644	639	453	498		
MEAN	66.2	653	359	133	289	209	208	79.3	88.1	20.6	14.6	16.6		
MAX	309	2970	1210	303	1130	572	455	137	384	31	28	29		
MIN	14	75	174	74	84	89	108	51	32	15	11	11		
CFSM	.92	9.06	4.98	1.84	4.01	2.90	2.88	1.10	1.22	.29	.20	.23		
IN.	1.06	10.11	5.74	2.12	4.17	3.34	3.22	1.27	1.36	.33	.23	.26		
AC-FT	4070	38850	22050	8150	16020	12860	12390	4880	5240	1270	899	988		
CAL YR 1984	TOTAL	89771	MEAN	245	MAX	3010	MIN	13	CFSM	3.40	IN.	46.32	AC-FT	178100
WTR YR 1985	TOTAL	64367	MEAN	176	MAX	2970	MIN	11	CFSM	2.44	IN.	33.21	AC-FT	127700

WILLAMETTE RIVER BASIN

14152500 COAST FORK WILLAMETTE RIVER AT LONDON, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: July 1960 to September 1965, June 1967 to current year.

INSTRUMENTATION.--Temperature recorder July 1960 to September 1965 and since June 1967.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 25.5°C July 7, 1968, Aug. 11, 1971; minimum, 0.0°C Jan. 9, 1974, and several days each winter 1976 through 1980.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 23.5°C July 19, 20; minimum, 2.5°C Feb. 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

WILLAMETTE RIVER BASIN

14153000 COTTAGE GROVE LAKE NEAR COTTAGE GROVE, OR

LOCATION.--Lat 43°43'00", long 123°02'55", in NE¼ sec.28, T.21 S., R.3 W., Lane County, Hydrologic Unit 17090002, in east abutment of dam on Coast Fork Willamette River 5.8 mi south of Cottage Grove, and at mile 29.7.

DRAINAGE AREA.--104 mi².

PERIOD OF RECORD.--October 1942 to current year. Prior to October 1971, published as Cottage Grove Reservoir near Cottage Grove.

REVISED RECORDS.--WSP 1218: 1950.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by earthfill dam with concrete spillway completed by Corps of Engineers in 1942; storage began Oct. 31, 1942. Capacity, 32,930 acre-ft between elevation 719.0 ft, outlet conduit, and 791.0 ft, crest of spillway. Dead storage negligible. Reservoir used for flood control and improvement of navigation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 36,750 acre-ft Dec. 24, 1964, elevation, 794.23 ft; minimum since first filling, no contents Sept. 26 to Oct. 19, 1966, and Nov. 14, 15, Nov. 20 to Dec. 8, 1969.

EXTREMES FOR CURRENT YEAR.-- Maximum contents, 29,420 acre-ft June 14-16, elevation, 787.87 ft; minimum, 932 acre-ft Dec. 7, elevation, 740.04 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)

710.9	0	755	4,860	780	21,460
730	151	760	7,150	785	26,370
740	926	765	9,970	790	31,780
745	1,840	770	13,260	793	35,270
750	3,140	775	17,070		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	771.54	749.90	763.70	749.86	751.38	766.61	777.65	784.80	785.32	786.80	784.59	781.94
2	771.14	751.96	758.46	749.14	751.67	766.89	777.82	784.93	785.34	786.75	784.53	781.86
3	770.73	753.20	752.01	748.92	751.96	767.16	778.03	785.08	785.36	786.70	784.46	781.47
4	770.35	749.39	746.05	749.25	752.15	767.51	778.27	785.18	785.37	786.65	784.38	780.67
5	769.95	747.23	742.22	749.37	752.32	767.79	778.64	785.26	785.40	786.59	784.30	779.62
6	769.55	747.70	740.11	749.38	752.54	768.07	779.07	785.32	785.65	786.53	784.22	778.54
7	769.13	748.28	741.65	749.52	755.14	768.31	779.48	785.38	786.49	786.47	784.15	777.43
8	768.75	749.22	744.54	749.66	756.90	768.52	779.82	785.42	787.18	786.41	784.08	776.29
9	768.36	750.73	746.89	749.67	756.73	768.71	780.12	785.46	787.50	786.34	783.99	775.10
10	768.02	753.45	748.42	749.81	756.65	768.88	780.39	785.51	787.68	786.27	783.90	773.86
11	767.54	755.52	749.98	749.98	757.95	769.04	780.62	785.55	787.78	786.20	783.81	772.94
12	766.87	757.98	751.52	750.08	760.66	769.16	780.82	785.56	787.84	786.13	783.73	772.56
13	766.36	757.97	751.48	750.13	759.48	769.28	780.98	785.58	787.86	786.05	783.64	772.37
14	765.81	755.43	750.29	750.14	759.16	769.38	781.14	785.59	787.87	785.98	783.56	772.21
15	764.99	751.43	749.45	750.17	759.33	769.47	781.28	785.59	787.87	785.90	783.47	772.06
16	763.95	750.05	749.17	750.29	759.34	769.56	781.40	785.58	787.85	785.82	783.38	771.84
17	762.89	750.02	749.38	750.41	759.98	769.63	781.50	785.58	787.83	785.74	783.28	771.63
18	761.83	750.65	749.39	750.53	761.07	769.71	781.66	785.56	787.79	785.67	783.20	771.41
19	760.92	750.78	749.25	750.62	762.02	769.77	781.90	785.55	787.73	785.59	783.12	771.18
20	760.16	750.88	749.47	750.68	762.94	769.88	782.07	785.52	787.67	785.51	783.03	770.95
21	759.21	750.01	749.79	750.70	763.74	770.02	782.33	785.49	787.60	785.43	782.95	770.69
22	758.12	749.38	749.72	750.72	764.35	770.22	782.78	785.45	787.53	785.34	782.86	770.45
23	756.85	750.21	749.32	750.77	764.76	771.22	783.57	785.40	787.44	785.26	782.77	770.19
24	755.47	750.27	749.13	750.78	765.09	773.16	783.90	785.37	787.36	785.17	782.68	769.94
25	754.09	749.90	749.31	750.78	765.33	774.38	783.89	785.33	787.28	785.08	782.60	769.67
26	---	749.51	749.58	750.75	765.63	775.30	784.00	785.27	787.20	784.99	782.50	769.45
27	---	750.93	749.98	750.71	765.96	776.29	784.08	785.22	787.13	784.90	782.41	769.24
28	---	756.73	750.46	750.77	766.27	776.81	784.23	785.20	787.05	784.81	782.30	769.02
29	---	757.34	750.84	750.91	---	777.09	784.46	785.18	786.95	784.73	782.21	768.80
30	751.13	766.61	750.97	751.02	---	777.21	784.64	785.16	786.87	784.66	782.12	768.58
31	750.76	---	750.26	751.16	---	777.45	---	785.29	---	784.63	782.02	---
MEAN	---	752.09	749.44	750.22	759.30	770.73	781.35	785.37	787.06	785.78	783.36	773.40
MAX	---	766.61	763.70	751.16	766.27	777.45	784.64	785.59	787.87	786.80	784.59	781.94
MIN	---	747.23	740.11	748.92	751.38	766.61	777.65	784.80	785.32	784.63	782.02	768.58
(+)	3370	10980	3220	3490	10760	19160	26000	26670	28340	25990	23390	12270
(+)	-11300	+7610	-7760	+270	+7270	+8400	+6840	+670	+1670	-2350	-2600	-11120
CAL YR 1984	AC-FT#											
WTR YR 1985	AC-FT#											

† Contents in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

WILLAMETTE RIVER BASIN

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14153500 COAST FORK WILLAMETTE RIVER BELOW COTTAGE GROVE DAM, OR

LOCATION.--Lat 43°43'15", long 123°02'55", in NE¼ sec.28, T.21 S., R.3 W., Lane County, Hydrologic Unit 17090002, on right bank at bridge 0.3 mi downstream from Cottage Grove Dam, 5.5 mi south of Cottage Grove, and at mile 29.4.

DRAINAGE AREA.--104 mi².

PERIOD OF RECORD.--January 1939 to current year. Prior to October 1944, published as "near Cottage Grove."

REVISED RECORDS.--WSP 1448: 1949(M).

GAGE.--Water-stage recorder. Datum of gage is 711.00 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Jan. 1 to Oct. 12, 1939, nonrecording gage and Oct. 13, 1939, to Sept. 30, 1944, water-stage recorder at several sites and datums 0.8 mi downstream.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1942 by Cottage Grove Lake (see station 14153000). Small diversions for irrigation upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--46 years, 276 ft³/s, 36.04 in/yr, 200,000 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,910 ft³/s Dec. 24, 1964, gage height, 11.83 ft; no flow July 5-7, 1945, and for part of Aug. 24, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,640 ft³/s Dec. 1, gage height, 8.22 ft; minimum, 50 ft³/s Aug. 5 through Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	225	2580	491	88	89	504	77	73	64	51	50
2	155	841	2410	469	88	90	443	77	72	52	51	50
3	155	1170	2040	368	90	90	336	77	72	52	51	191
4	155	1260	1320	270	90	90	240	76	72	53	51	381
5	155	643	826	270	90	90	131	77	72	52	51	487
6	154	310	572	274	90	90	74	77	74	52	50	503
7	153	314	268	236	96	90	74	77	76	52	50	496
8	153	318	83	219	370	90	74	77	76	52	50	490
9	153	467	91	219	602	90	76	77	76	52	50	494
10	153	638	438	179	458	90	76	73	76	52	50	499
11	199	649	431	160	346	90	76	75	76	52	50	367
12	250	672	579	160	796	90	76	77	76	52	50	172
13	247	1200	776	160	1060	92	76	77	76	52	50	102
14	247	1610	784	160	662	92	77	77	76	51	50	101
15	319	1380	738	147	617	92	77	77	76	51	50	101
16	347	674	568	127	557	92	77	77	76	51	50	101
17	345	426	442	128	312	92	77	77	75	51	50	102
18	342	381	413	129	108	92	77	77	74	51	50	101
19	337	402	378	129	108	92	77	77	75	51	50	101
20	334	560	299	129	110	88	77	77	76	51	50	101
21	330	698	272	129	110	86	78	77	76	51	50	100
22	326	550	303	123	143	86	75	77	75	51	50	99
23	336	435	332	114	177	88	74	77	74	51	50	99
24	340	612	294	114	179	94	264	77	74	51	50	99
25	334	648	228	114	179	94	349	77	74	51	50	99
26	330	581	207	114	145	274	239	77	74	51	50	88
27	452	880	245	112	114	428	197	77	75	51	50	81
28	539	1600	304	103	100	480	141	77	75	51	50	81
29	294	1630	305	88	---	506	72	75	76	51	50	81
30	101	1450	580	88	---	505	74	72	76	51	50	81
31	173	---	627	88	---	503	---	74	---	51	50	---
TOTAL	8065	23224	19733	5611	7885	4955	4358	2370	2244	1607	1555	5898
MEAN	260	774	637	181	282	160	145	76.5	74.8	51.8	50.2	197
MAX	539	1630	2580	491	1060	506	504	77	76	64	51	503
MIN	101	225	83	88	88	86	72	72	72	51	50	50
AC-FT	16000	46060	39140	11130	15640	9830	8640	4700	4450	3190	3080	11700
MEAN†	76.4	902	510	185	413	296	260	87.3	103	13.7	7.81	9.75
CFSM†	0.73	8.67	4.90	1.78	3.97	2.85	2.50	0.84	0.99	0.13	0.08	0.09
IN.†	0.85	9.68	5.66	2.06	4.13	3.29	2.79	0.97	1.10	0.15	0.09	0.10
AC-FT†	4700	53670	31380	11400	22910	18230	15480	5370	6120	840	480	580

CAL YR 1984 TOTAL 121389 MEAN 332 MAX 2580 MIN 43 AC-FT 240800 MEAN† 333 CFSM† 3.20 IN.† 43.47 AC-FT† 241060
WTR YR 1985 TOTAL 87505 MEAN 240 MAX 2580 MIN 50 AC-FT 173600 MEAN† 236 CFSM† 2.27 IN.† 30.87 AC-FT† 171200

† Adjusted for change in contents in Cottage Grove Lake.

WILLAMETTE RIVER BASIN

14154500 ROW RIVER ABOVE PITCHER CREEK, NEAR DORENA, OR

LOCATION.--Lat 43°44'10", long 122°52'20", in NE¼ sec.24, T.21 S., R.2 W., Lane County, Hydrologic Unit 17090002, on right bank 0.5 mi upstream from Pitcher Creek, 1.2 mi northwest of Dorena, and at mile 13.2.

DRAINAGE AREA.--211 mi².

PERIOD OF RECORD.--September 1935 to current year. Prior to October 1949, published as "at Strr."

GAGE.--Water-stage recorder. Datum of gage is 856.16 ft above National Geodetic Vertical Datum of 1929. Sept. 16, 1935, to Oct. 17, 1938, nonrecording gage at site 450 ft upstream at datum 1.00 ft higher.

REMARKS.--No estimated daily discharges. Records excellent. Slight regulation caused by upstream logponds. No diversion upstream from station.

AVERAGE DISCHARGE.--50 years, 605 ft³/s, 38.94 in/yr, 438,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,100 ft³/s Dec. 22, 1964, gage height, 18.19 ft, from rating curve extended above 12,000 ft³/s, on basis of slope-area measurement of peak flow; minimum, 10 ft³/s Sept. 24, 25, 1951, Oct. 7, 8, 1958.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1530	9,020	9.97	Nov. 30	0730	*11,400	*10.90

Minimum, 18 ft³/s Aug. 31, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	28	329	3150	826	190	507	2160	650	360	67	68	19		
2	28	5430	1760	719	199	472	2070	605	388	63	54	24		
3	28	4820	1310	784	205	409	1490	542	314	60	40	31		
4	31	2230	1020	848	177	415	1070	447	283	57	34	26		
5	36	1140	829	826	181	390	862	374	258	54	32	24		
6	33	951	706	807	178	370	835	340	906	53	29	29		
7	31	1080	657	794	699	348	889	310	1870	50	29	47		
8	29	891	639	665	1070	322	780	280	1820	47	35	35		
9	34	1100	656	557	647	307	698	259	973	45	33	33		
10	37	2950	1720	478	489	311	707	256	641	42	31	36		
11	73	3330	1430	421	1090	322	609	276	472	42	28	33		
12	71	4230	1920	387	3190	323	509	240	377	41	26	31		
13	189	3620	1670	375	1690	306	491	223	314	39	25	32		
14	189	2970	1260	388	1620	301	512	242	268	38	24	57		
15	278	1650	1380	382	2120	304	496	230	234	37	23	77		
16	134	1080	1070	364	1570	327	429	240	206	36	22	62		
17	95	803	843	482	1090	358	345	247	185	35	22	93		
18	94	839	696	542	824	343	323	251	166	34	22	224		
19	447	820	574	474	734	327	364	251	150	33	23	103		
20	772	878	505	410	761	328	321	234	135	32	25	67		
21	440	966	471	363	734	351	388	208	122	31	25	53		
22	266	795	449	323	878	322	808	205	113	31	24	47		
23	174	768	466	297	906	694	1430	211	106	30	22	43		
24	144	971	510	277	818	1510	1260	207	97	30	21	40		
25	130	864	502	257	743	1010	1030	193	94	28	21	37		
26	889	773	498	238	630	930	858	175	89	28	20	35		
27	937	1900	525	221	537	1020	845	160	83	27	19	34		
28	1290	4840	582	212	491	859	962	158	81	26	19	33		
29	991	3170	561	203	---	807	788	193	75	27	19	32		
30	552	7410	1180	187	---	772	694	159	71	30	19	31		
31	413	---	1070	187	---	1370	---	254	---	43	19	---		
TOTAL	8883	63598	30609	14294	24461	16735	25023	8620	11251	1236	853	1468		
MEAN	287	2120	987	461	874	540	834	278	375	39.9	27.5	48.9		
MAX	1290	7410	3150	848	3190	1510	2160	650	1870	67	68	224		
MIN	28	329	449	187	177	301	321	158	71	26	19	19		
CFSM	1.36	10.0	4.68	2.18	4.14	2.56	3.95	1.32	1.78	.19	.13	.23		
IN.	1.57	11.21	5.40	2.52	4.31	2.95	4.41	1.52	1.98	.22	.15	.26		
AC-FT	17620	126100	60710	28350	48520	33190	49630	17100	22320	2450	1690	2910		
CAL YR 1984	TOTAL	298862	MEAN	817	MAX	11400	MIN	28	CFSM	3.87	IN.	52.69	AC-FT	592800
WTR YR 1985	TOTAL	207031	MEAN	567	MAX	7410	MIN	19	CFSM	2.69	IN.	36.50	AC-FT	410600

WILLAMETTE RIVER BASIN

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14155000 DORENA LAKE NEAR COTTAGE GROVE, OR

LOCATION.--Lat 43°47'10", long 122°57'15", in SE¼ sec.32, T.20 S., R.2 W., Lane County, Hydrologic Unit 17090002, on left end of Dorena Dam on Row River, 5.0 mi east of Cottage Grove, and at mile 7.61.

DRAINAGE AREA.--265 mi².

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1971, published as Dorena Reservoir near Cottage Grove.

REVISED RECORDS.--WRD OR-78-1: 1969.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete outlet and spillway, completed in 1949 by Corps of Engineers; controlled storage began Oct. 11, 1949. Capacity, 77,580 acre-ft between elevations 739.0 ft, sill of outlet gates, and 835.0 ft, crest of spillway. Dead storage, 18 acre-ft below elevation 739.0 ft. Reservoir used for flood control and improvement of navigation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 95,550 acre-ft Dec. 23, 1964, elevation, 844.03 ft; minimum observed since first filling, 159 acre-ft Dec. 14, 1970, elevation, 743.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 75,060 acre-ft June 8, elevation, 833.64 ft; minimum, 2,250 acre-ft Jan. 8, 9, elevation, 758.01 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)

760	2,810	780	12,530	800	28,490	820	52,480
765	4,560	785	15,850	805	33,700	825	60,060
770	6,840	790	19,580	810	39,380	830	68,470
775	9,540	795	23,780	815	45,620	835	77,600

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	802.86	770.51	801.40	770.45	771.79	794.87	815.16	824.44	828.57	831.85	829.68	826.81
2	802.31	785.89	798.35	767.83	772.27	795.72	815.09	824.96	828.84	831.81	829.64	826.72
3	801.74	794.04	794.01	765.07	772.88	796.40	814.12	825.40	829.04	831.77	829.58	826.48
4	801.22	793.11	788.32	763.52	773.25	797.11	813.95	825.69	829.19	831.73	829.51	825.96
5	800.67	787.77	780.85	762.93	773.53	797.73	814.38	825.87	829.33	831.68	829.43	825.29
6	800.12	780.43	773.10	762.35	773.77	798.32	814.89	826.07	830.26	831.63	829.34	824.31
7	799.54	773.77	770.39	758.45	776.95	798.85	815.62	826.29	832.38	831.58	829.28	822.77
8	798.99	769.80	770.73	758.01	780.15	799.30	816.22	826.45	833.63	831.52	829.21	821.05
9	798.39	770.59	770.59	758.01	780.68	799.71	816.75	826.61	833.16	831.45	829.14	819.31
10	797.81	780.17	771.34	760.97	780.86	800.12	817.32	826.76	832.77	831.39	829.06	817.52
11	797.29	788.84	771.33	764.14	783.13	800.52	817.77	826.92	832.78	831.32	828.96	816.17
12	796.64	798.15	772.80	766.47	789.05	800.94	818.14	827.03	832.82	831.24	828.88	815.44
13	796.06	801.21	771.00	768.37	787.96	801.29	818.50	827.13	832.84	831.17	828.78	814.95
14	795.48	798.60	770.89	770.07	788.34	801.63	818.97	827.24	832.83	831.09	828.70	814.50
15	794.73	792.73	771.61	770.85	789.72	801.97	819.46	827.33	832.82	831.01	828.61	814.10
16	793.48	784.51	770.97	770.96	789.86	802.36	819.88	827.43	832.82	830.93	828.52	813.62
17	792.15	775.17	770.88	771.29	789.81	802.79	820.20	827.54	832.84	830.86	828.41	813.23
18	790.84	770.47	770.77	771.70	790.01	803.20	820.53	827.64	832.85	830.77	828.30	813.02
19	790.32	771.00	770.68	771.72	790.29	803.58	820.98	827.75	832.83	830.69	828.20	812.51
20	790.38	771.92	770.60	771.49	790.72	803.97	821.30	827.83	832.79	830.60	828.10	811.87
21	789.58	772.24	770.61	770.48	791.15	804.40	821.83	827.87	832.73	830.52	828.00	811.12
22	788.06	771.18	770.86	770.27	791.96	804.82	822.99	827.92	832.67	830.43	827.90	810.38
23	786.08	771.25	770.97	770.47	792.48	806.28	824.43	827.97	832.58	830.33	827.80	809.65
24	783.98	772.04	770.94	770.67	792.54	809.21	824.32	828.02	832.49	830.24	827.70	808.90
25	781.81	771.43	770.71	770.75	792.83	809.76	823.49	828.06	832.41	830.14	827.59	808.14
26	782.17	770.99	770.49	770.77	793.12	810.09	822.87	828.06	832.32	830.05	827.48	807.45
27	781.38	773.97	770.79	770.71	793.42	811.13	822.45	828.06	832.23	829.95	827.37	806.78
28	780.49	783.53	771.24	770.69	793.99	811.61	822.62	828.08	832.13	829.87	827.26	806.12
29	778.57	785.92	771.42	771.00	---	812.05	823.26	828.11	832.02	829.79	827.14	805.45
30	774.98	801.19	772.79	771.26	---	812.32	823.85	828.14	831.92	829.73	827.01	804.77
31	771.90	---	772.26	771.52	---	813.56	---	828.32	---	829.69	826.91	---
MEAN	791.61	781.08	774.64	767.85	785.23	803.41	819.38	827.13	831.96	830.87	828.44	815.15
MAX	802.86	801.21	801.40	771.72	793.99	813.56	824.43	828.32	833.63	831.85	829.68	826.81
MIN	771.90	769.80	770.39	758.01	771.79	794.87	813.95	824.44	828.57	829.69	826.91	804.77
(†)	7830	29690	8030	7630	22890	43760	58240	65550	71910	67930	63170	33450
(‡)	-24180	+21860	-21660	-400	+15260	+20870	+14480	+7310	+6360	-3980	-4760	-29720

CAL YR 1984 MEAN 806.80 MAX 836.04 MIN 769.80 AC-FT† -680
WTR YR 1985 MEAN 804.81 MAX 833.63 MIN 758.01 AC-FT† +1440

† Contents in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

WILLAMETTE RIVER BASIN

14155500 ROW RIVER NEAR COTTAGE GROVE, OR

LOCATION.--Lat 43°47'35", long 122°59'25", in NE¼ sec.36, T.20 S., R.3 W., Lane County, Hydrologic Unit 17090002, on right bank 1.7 mi upstream from Mosby Creek, 2.1 mi downstream from Dorena Dam, 3.5 mi east of Cottage Grove, and at mile 5.5.

DRAINAGE AREA.--270 mi².

PERIOD OF RECORD.--January 1939 to current year. Prior to October 1947, published as "near Dorena."

GAGE.--Water-stage recorder. Datum of gage is 685.24 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Jan. 5 to Oct. 12, 1939, nonrecording gage at site 180 ft upstream at datum 1.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since October 1949 by Dorena Lake (see station 14155000). No diversion upstream from station.

AVERAGE DISCHARGE.--46 years, 760 ft³/s, 38.23 in/yr, 550,600 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,400 ft³/s Dec. 28, 1945, gage height, 18.20 ft; minimum, 0.20 ft³/s Sept. 25 to Oct. 7, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,140 ft³/s Nov. 13, gage height, 8.12 ft; minimum, 67 ft³/s Jan. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	683	4080	1470	180	254	1340	270	180	135	97	99
2	314	1390	3990	1410	183	205	2360	270	179	101	97	99
3	314	2350	3840	1380	186	205	2420	272	180	101	96	209
4	313	3280	3850	1210	186	205	1410	273	179	101	97	412
5	310	3790	3940	1030	188	205	700	275	180	100	97	545
6	310	3880	3270	968	188	197	625	222	182	101	96	798
7	307	3370	1440	1290	210	190	509	179	186	100	95	1220
8	305	2040	686	1250	594	190	473	179	912	101	95	1340
9	317	1260	804	475	824	190	426	180	1570	101	95	1320
10	332	872	1850	102	686	186	393	182	1090	100	95	1300
11	328	551	1770	112	523	186	365	182	499	100	94	948
12	389	602	1930	103	1680	182	317	182	373	100	94	508
13	484	2660	2500	107	2670	182	299	182	316	100	94	381
14	479	5050	1630	110	1850	182	243	182	296	100	94	379
15	611	4930	1540	276	2100	182	194	182	262	100	94	379
16	683	4860	1480	384	1970	182	179	182	209	99	94	379
17	678	4180	1080	439	1420	184	169	182	183	99	94	377
18	672	2230	893	491	972	186	170	182	172	99	94	374
19	759	857	725	531	819	186	172	182	172	97	94	428
20	820	959	639	554	819	187	172	182	172	97	94	484
21	820	1170	583	547	774	186	173	182	172	97	94	480
22	918	1240	503	395	753	187	173	182	172	97	94	479
23	974	1030	544	289	892	190	555	182	172	97	97	474
24	962	1110	633	270	992	191	1590	182	172	97	97	473
25	937	1320	652	272	789	952	1950	182	172	97	97	469
26	925	1140	650	275	661	1060	1530	182	172	97	97	423
27	1430	1580	590	274	538	678	1310	182	172	97	98	393
28	1830	2890	634	239	365	777	975	181	172	97	99	392
29	1840	3210	673	179	---	835	413	179	172	97	99	388
30	1740	2660	1110	179	---	832	323	179	172	97	99	387
31	1230	---	1500	180	---	836	---	181	---	97	99	---
TOTAL	22646	67144	50009	16791	24012	10590	21928	6116	9212	3099	2970	16337
MEAN	731	2238	1613	542	858	342	731	197	307	100	95.8	545
MAX	1840	5050	4080	1470	2670	1060	2420	275	1570	135	99	1340
MIN	305	551	503	102	180	182	169	179	172	97	94	99
AC-FT	44920	133200	99190	33300	47630	21010	43490	12130	18270	6150	5890	32400
MEAN†	337	2606	1261	535	1132	681	974	316	414	35.3	18.4	45.0
CFSM†	1.25	9.65	4.67	1.98	4.19	2.52	3.61	1.17	1.53	0.13	0.07	0.17
IN.†	1.44	10.77	5.39	2.29	4.37	2.91	4.03	1.35	1.71	0.15	0.08	0.19
AC-FT†	20740	155060	77530	32900	62890	41880	57970	19440	24630	2170	1130	2680

CAL YR 1984 TOTAL 377625 MEAN 1032 MAX 5310 MIN 92 AC-FT 749000 MEAN† 1034 CFSM† 3.83 IN.† 51.98 AC-FT† 748300
WTR YR 1985 TOTAL 250854 MEAN 687 MAX 5050 MIN 94 AC-FT 497600 MEAN† 689 CFSM† 2.55 IN.† 34.66 AC-FT† 499000

† Adjusted for change in contents in Dorena Lake.

WILLAMETTE RIVER BASIN

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14157500 COAST FORK WILLAMETTE RIVER NEAR GOSHEN, OR

LOCATION.--Lat 43°58'50", long 122°57'55", in NW¼ sec.29, T.18 S., R.2 W., Lane County, Hydrologic Unit 17090002, on right bank at downstream side of bridge on State Highway 58, 2.5 mi southeast of Goshen, and at mile 6.4.

DRAINAGE AREA.--642 mi².

PERIOD OF RECORD.--August 1905 to February 1912, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1218: Drainage area. WSP 1248: 1905-12. WSP 1935: 1956.

GAGE.--Water-stage recorder. Datum of gage is 473.80 ft above National Geodetic Vertical Datum of 1929. Aug. 23, 1905, to Feb. 7, 1912, nonrecording gage at site 600 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records excellent. Flow regulated since 1942 by Cottage Grove Lake (see station 14153000) and since 1949 by Dorena Lake (see station 14155000). Several small diversions for logponds and irrigation upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years (water years 1906-11, 1951-85), 1,657 ft³/s, 1,200,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58,500 ft³/s Nov. 22, 1909, gage height, 19.5 ft, site and datum then in use, from rating curve extended above 15,000 ft³/s; minimum, 36 ft³/s Sept. 29, 30, Oct. 11, 12, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,200 ft³/s Nov. 30, gage height, 13.49 ft; minimum, 130 ft³/s Aug. 15, 16, 27, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	506	1270	9960	2940	508	741	2720	643	430	277	169	132
2	502	3890	8230	2690	606	633	3470	615	460	197	167	140
3	500	7080	7390	2510	703	596	3600	609	422	186	161	201
4	510	5780	6310	2170	614	634	2640	596	411	172	158	656
5	505	5490	5650	1940	576	633	1510	559	394	167	153	1040
6	501	4580	4950	1810	574	615	1270	523	567	164	145	1260
7	497	4530	2840	1940	2060	584	1120	430	1180	166	145	1710
8	505	3400	1500	2110	4150	561	1010	414	1760	164	148	1910
9	510	3140	1610	1370	4160	545	946	403	2190	161	149	1910
10	539	5650	3610	682	2890	532	869	402	1790	156	145	1910
11	551	3950	4110	618	2450	518	826	396	969	155	143	1640
12	671	4540	3900	559	5250	505	735	392	718	154	141	963
13	863	5290	4970	540	5980	488	671	382	609	154	138	582
14	889	8780	4010	536	3980	474	629	383	532	156	137	572
15	986	7670	3610	611	4240	469	529	380	491	157	134	570
16	1150	6470	3370	781	3910	463	503	373	420	152	133	557
17	1130	5510	2580	794	2950	462	466	368	360	151	134	559
18	1130	4420	2190	899	2040	457	454	364	330	152	134	561
19	1220	2280	1920	918	1720	448	555	362	312	153	142	567
20	1430	3040	1630	944	1760	446	565	358	305	149	142	659
21	1370	3520	1550	927	1660	481	541	352	302	150	140	655
22	1370	3040	1380	829	1580	502	723	344	300	151	138	653
23	1450	2820	1410	629	1680	1100	1050	340	296	150	136	646
24	1430	3590	1470	578	1760	2350	2200	340	293	148	137	639
25	1390	3700	1420	564	1600	2070	2950	344	290	147	139	634
26	1530	3240	1360	557	1320	2670	2430	339	288	148	136	606
27	2000	3960	1450	550	1170	3400	2000	333	286	146	132	522
28	2870	9510	1760	571	919	3270	1800	341	289	147	132	516
29	2700	8300	1750	460	---	2820	913	351	284	147	134	511
30	2130	12100	2870	449	---	2560	777	343	284	155	134	507
31	1800	---	3440	477	---	2490	---	429	---	166	132	---
TOTAL	35135	150540	104200	33953	62810	34517	40472	12808	17562	4998	4408	23988
MEAN	1133	5018	3361	1095	2243	1113	1349	413	585	161	142	800
MAX	2870	12100	9960	2940	5980	3400	3600	643	2190	277	169	1910
MIN	497	1270	1360	449	508	446	454	333	284	146	132	132
AC-FT	69690	298600	206700	67350	124600	68460	80280	25400	34830	9910	8740	47580
CAL YR 1984	TOTAL	748388	MEAN	2045	MAX	12900	MIN	141	AC-FT	1484000		
WTR YR 1985	TOTAL	525391	MEAN	1439	MAX	12100	MIN	132	AC-FT	1042000		

WILLAMETTE RIVER BASIN

14158500 MCKENZIE RIVER AT OUTLET OF CLEAR LAKE, OR

LOCATION.--Lat 44°21'40", long 121°59'40", in SE¼ sec.8, T.14 S., R.7 E., Linn County, Hydrologic Unit 17090004, Willamette National Forest, on west bank of Clear Lake in narrow channel, 150 ft upstream from outlet and at mile 89.6.

DRAINAGE AREA.--92.4 mi², hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--June 1912 to September 1915, October 1947 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1288: 1949. WSP 1318: 1915(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,015.32 ft above National Geodetic Vertical Datum of 1929 (levels by Eugene Water and Electric Board). June 20, 1912, to July 31, 1915, nonrecording gage at site 1.0 mi north at different datum.

REMARKS.--Estimated daily discharges: Apr. 9-13. Records good. Flow regulated by natural storage in lake. At high stages an undetermined flow enters numerous sinkholes in lava rock along south edge of lake upstream from station.

AVERAGE DISCHARGE.--41 years, 471 ft³/s, 69.22 in/yr, 341,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,300 ft³/s Dec. 23, 1964, gage height, 8.15 ft; minimum, 137 ft³/s Sept. 23, 1977, Nov. 4, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,060 ft³/s Nov. 12, gage height, 4.28 ft; minimum, 223 ft³/s Sept. 27, 28, 30..

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	278	383	507	333	266	287	359	649	596	413	314	251		
2	275	462	489	327	263	289	367	693	578	410	312	251		
3	273	668	467	321	259	289	377	746	565	408	309	248		
4	272	784	453	315	256	293	390	732	560	406	307	245		
5	270	686	441	308	256	292	404	696	554	405	304	245		
6	268	661	434	303	254	291	420	689	591	403	302	247		
7	266	692	427	300	261	289	439	692	697	399	300	243		
8	265	707	421	295	260	285	475	690	729	396	298	242		
9	264	721	420	289	256	283	490	685	662	394	295	242		
10	262	779	436	284	251	281	520	680	627	391	292	242		
11	263	925	418	280	255	279	575	672	622	389	290	241		
12	265	1020	421	276	257	278	660	653	627	387	288	241		
13	271	1050	409	272	255	274	740	642	627	385	285	241		
14	270	971	407	269	255	273	811	639	614	380	283	241		
15	271	872	406	269	257	273	876	630	597	377	282	241		
16	272	815	402	266	260	275	898	641	578	374	280	238		
17	274	778	398	264	263	279	859	671	556	371	279	243		
18	277	778	395	263	265	283	819	698	538	367	278	240		
19	287	758	389	265	270	289	799	712	523	365	276	239		
20	290	730	387	270	272	298	764	709	510	361	273	241		
21	292	692	384	274	271	311	738	699	495	355	268	241		
22	300	655	379	277	273	316	718	699	480	351	265	240		
23	308	632	376	280	274	329	732	708	468	348	264	238		
24	313	612	371	280	277	337	709	725	462	344	263	236		
25	317	581	364	279	279	339	675	708	454	341	261	234		
26	333	553	359	276	280	349	643	687	445	336	259	233		
27	342	546	360	273	283	353	622	670	434	332	257	230		
28	357	551	354	272	284	351	625	651	427	327	256	227		
29	366	542	353	270	---	350	624	645	422	323	255	226		
30	374	529	348	267	---	353	630	624	417	321	253	224		
31	379	---	339	267	---	356	---	607	---	318	252	---		
TOTAL	9114	21133	12514	8784	7412	9424	18758	21042	16455	11477	8700	7191		
MEAN	294	704	404	283	265	304	625	679	549	370	281	240		
MAX	379	1050	507	333	284	356	898	746	729	413	314	251		
MIN	262	383	339	263	251	273	359	607	417	318	252	224		
CFSM	3.18	7.62	4.37	3.06	2.87	3.29	6.76	7.35	5.94	4.00	3.04	2.60		
IN.	3.67	8.51	5.04	3.54	2.98	3.79	7.55	8.47	6.62	4.62	3.50	2.90		
AC-FT	18080	41920	24820	17420	14700	18690	37210	41740	32640	22760	17260	14260		
CAL YR 1984	TOTAL	197784	MEAN	540	MAX	1050	MIN	262	CFSM	5.84	IN.	79.63	AC-FT	392300
WTR YR 1985	TOTAL	152004	MEAN	416	MAX	1050	MIN	224	CFSM	4.50	IN.	61.20	AC-FT	301500

WILLAMETTE RIVER BASIN

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14158790 SMITH RIVER ABOVE SMITH RIVER RESERVOIR, NEAR BELKNAP SPRINGS, OR

LOCATION.--Lat 44°20'05", long 122°02'45", in SW¼SW¼ sec.24, T.14 S., R.6 E., Linn County, Hydrologic Unit 17090004, in Willamette National Forest, on right bank 200 ft upstream from Smith River Reservoir, 0.7 mi downstream from Browder Creek, 10 mi north of town of Belknap Springs, and at mile 4.4.

DRAINAGE AREA.--16.2 mi².

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WDR OR 80-2: 1978(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,610.00 ft above National Geodetic Vertical Datum of 1929 (levels by Eugene Water and Electric Board). Prior to Sept. 10, 1964, at datum 1.56 ft higher.

REMARKS.--Estimated daily discharges: Feb. 4. Records fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--25 years, 92.2 ft³/s, 77.29 in/yr, 66,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,160 ft³/s Dec. 22, 1964, gage height, 11.9 ft, from floodmark, from rating curve extended above 560 ft³/s, on basis of slope-area measurement of peak flow; minimum, 2.5 ft³/s Sept. 15-18, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1230	*1,060	*7.91	No other peak greater than base discharge.			
Minimum, 3.7 ft ³ /s Aug. 29 to Sept. 1.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	5.4	46	64	27	32	68	153	229	96	18	6.4	3.9		
2	5.4	823	56	26	29	65	216	269	90	16	6.4	5.4		
3	5.3	709	50	25	27	60	232	287	89	15	6.1	4.3		
4	5.6	343	45	24	30	56	210	227	97	15	5.8	4.1		
5	5.5	221	41	25	33	51	199	187	97	14	5.8	4.9		
6	5.4	212	39	25	27	46	238	170	253	13	5.6	12		
7	5.2	198	39	25	27	42	288	155	311	13	6.1	5.8		
8	5.4	157	40	25	28	39	294	140	248	11	6.6	4.9		
9	5.9	132	73	24	24	38	319	133	176	11	5.6	5.4		
10	6.1	306	185	24	22	39	355	128	135	10	5.1	6.4		
11	12	426	119	24	48	41	329	120	119	10	4.9	5.8		
12	18	467	103	23	95	44	298	113	114	10	4.9	6.1		
13	35	414	86	23	61	45	306	116	100	9.6	4.7	7.5		
14	26	292	79	25	59	51	331	125	88	9.6	4.5	10		
15	19	204	77	27	78	60	343	133	81	9.2	4.5	11		
16	16	151	67	30	73	76	298	174	68	8.9	4.3	7.5		
17	13	128	61	54	65	93	234	207	60	8.2	4.3	21		
18	14	155	53	77	59	98	193	223	58	7.8	4.3	20		
19	44	139	49	73	56	99	162	215	52	7.8	4.7	12		
20	48	123	46	72	51	102	134	194	44	7.8	4.5	9.2		
21	38	105	43	67	47	102	118	175	41	7.5	4.3	8.2		
22	29	92	41	61	55	91	111	174	34	7.2	4.1	7.5		
23	25	97	42	56	60	107	168	184	33	6.9	4.1	6.9		
24	27	92	40	52	67	120	136	175	28	6.9	4.1	6.4		
25	35	81	38	47	72	101	116	150	26	6.9	4.1	6.1		
26	105	72	36	44	67	90	103	134	25	6.6	3.9	5.6		
27	71	80	36	41	62	79	117	121	24	6.4	3.9	5.4		
28	62	97	34	38	63	69	148	111	21	6.6	3.9	5.1		
29	52	92	33	35	---	60	166	108	20	6.4	3.9	4.9		
30	45	79	31	33	---	65	186	99	19	6.6	3.9	4.9		
31	41	---	28	32	---	101	---	100	---	6.9	3.9	---		
TOTAL	830.2	6533	1774	1184	1417	2198	6501	5076	2647	299.8	149.2	228.2		
MEAN	26.8	218	57.2	38.2	50.6	70.9	217	164	88.2	9.67	4.81	7.61		
MAX	105	823	185	77	95	120	355	287	311	18	6.6	21		
MIN	5.2	46	28	23	22	38	103	99	19	6.4	3.9	3.9		
CFSM	1.65	13.5	3.53	2.36	3.12	4.38	13.4	10.1	5.44	.60	.30	.47		
IN.	1.91	15.00	4.07	2.72	3.25	5.05	14.93	11.66	6.08	.69	.34	.52		
AC-FT	1650	12960	3520	2350	2810	4360	12890	10070	5250	595	296	453		
CAL YR 1984	TOTAL	40145.5	MEAN	110	MAX	823	MIN	5.2	CFSM	6.79	IN.	92.19	AC-FT	79630
WTR YR 1985	TOTAL	28837.4	MEAN	79.0	MAX	823	MIN	3.9	CFSM	4.88	IN.	66.22	AC-FT	57200

WILLAMETTE RIVER BASIN

14158795 SMITH RIVER RESERVOIR NEAR BELKNAP SPRINGS, OR

LOCATION.--Lat 44°18'20", long 122°02'40", in SW¼SW¼ sec.36, T.14 S., R.6 E., Linn County, Hydrologic Unit 17090004, Willamette National Forest, in intake tower near left end of Smith River Dam on Smith River, 800 ft upstream from Bunchgrass Creek, 8 mi north of town of Belknap Springs, and at mile 2.1.

DRAINAGE AREA.--18.2 mi².

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Eugene Water and Electric Board).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway completed in 1963 by Eugene Water and Electric Board; storage began Mar. 18, 1963. Total capacity is 15,000 acre-ft at elevation 2,605.0 ft, top of spillway gates, and usable capacity is 9,900 acre-ft between elevations 2,525.0 ft, minimum power pool, and 2,605.0 ft. Storage of 5,100 acre-ft, below elevation 2,525.0 ft, not normally available for release. Water used for power generation. Figures herein represent total contents.

COOPERATION.--Elevations and area-volume curves furnished by Eugene Water and Electric Board.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 15,610 acre-ft Apr. 9, 1985, elevation, 2,608.87 ft; minimum, 5,700 acre-ft Apr. 11, 14, 1964, elevation, 2,532.90 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,610 acre-ft Apr. 9, elevation, 2,608.87 ft; minimum, 5,940 acre-ft Mar. 12, elevation, 2,535.44 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30.....	2,602.75	14,570	-
Oct. 31.....	2,601.87	14,420	-150
Nov. 30.....	2,595.99	13,460	-960
Dec. 31.....	2,592.38	12,880	-580
CAL YR 1984.....	-	-	-200
Jan. 31.....	2,595.56	13,390	+510
Feb. 29.....	2,589.45	12,420	-970
Mar. 31.....	2,598.57	13,870	+1,450
Apr. 30.....	2,598.88	13,920	+50
May 31.....	2,601.89	14,420	+500
June 30.....	2,601.66	14,380	-40
July 31.....	2,602.29	14,490	+110
Aug. 31.....	2,601.90	14,420	-70
Sept.30.....	2,602.19	14,470	+50
WTR YR 1985.....	-	-	-100

WILLAMETTE RIVER BASIN

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14158850 MCKENZIE RIVER BELOW TRAIL BRIDGE DAM, NEAR BELKNAP SPRINGS, OR

LOCATION.--Lat 44°16'05", long 122°02'55", in T.15 S., R.6 E., (unsurveyed), Linn County, Hydrologic Unit 17090004, in Willamette National Forest, on left bank 0.4 mi downstream from Trail Bridge Dam, 0.5 mi upstream from Anderson Creek, 5 mi north of town of Belknap Springs, and at mile 81.5.

DRAINAGE AREA.--184 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,980.00 ft above National Geodetic Vertical Datum of 1929 (levels by Eugene Water and Electric Board). Prior to Oct. 11, 1963, at datum 5.60 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since 1963 by Smith River Reservoir (see station 14158795). Diurnal fluctuations by powerplants and by Trail Bridge reregulating reservoir upstream. Water is diverted from McKenzie River in SW $\frac{1}{4}$ sec.20, T.14 S., R.7 E., to Smith River Reservoir and returned to river upstream from station.

AVERAGE DISCHARGE.--26 years, 1,034 ft³/s, 76.31 in/yr, 749,100 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,200 ft³/s Dec. 22, 1964, gage height, 12.45 ft, from rating curve extended above 3,700 ft³/s on basis of slope-area measurement of peak flow; minimum, 185 ft³/s Feb. 3, 1963; minimum daily, 425 ft³/s Nov. 23, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,350 ft³/s Nov. 2, gage height, 8.28 ft; minimum, 473 ft³/s Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	750	872	1110	856	762	813	1030	1360	1190	874	752	658
2	758	1990	1100	842	799	846	1150	1400	1180	925	737	666
3	758	1890	1100	821	758	836	1160	1420	1160	871	755	657
4	731	1410	1030	821	749	841	1150	1410	1140	877	751	652
5	719	1310	1010	824	744	833	1110	1360	1120	854	722	677
6	719	1330	1000	822	755	814	1150	1360	1300	853	719	677
7	719	1380	998	835	787	784	1230	1340	1320	842	722	658
8	718	1270	961	827	918	777	1290	1300	1320	842	743	640
9	725	1300	961	806	907	771	1320	1290	1280	859	734	664
10	730	1570	1210	791	770	772	1450	1260	1240	842	721	673
11	767	1740	1090	790	841	771	1470	1270	1230	843	716	644
12	760	1920	1050	791	869	770	1400	1260	1170	842	716	652
13	770	1980	980	787	788	772	1500	1250	1190	835	701	654
14	739	1880	1020	766	789	772	1550	1240	1150	816	697	669
15	740	1690	1020	781	838	771	1630	1200	1140	812	705	653
16	739	1580	1020	771	841	770	1610	1210	1150	811	707	644
17	740	1500	988	827	803	770	1510	1250	1090	817	703	683
18	737	1470	946	834	784	771	1460	1300	1070	820	701	657
19	819	1410	937	830	786	760	1460	1360	1070	798	708	635
20	820	1410	945	781	824	839	1430	1340	1050	791	685	657
21	781	1360	921	775	823	851	1360	1300	1040	816	686	631
22	781	1310	925	774	804	839	1360	1300	991	809	680	647
23	755	1300	944	789	803	887	1440	1300	1000	785	674	639
24	767	1270	944	854	806	962	1400	1340	1000	765	693	625
25	786	1220	928	850	843	881	1350	1310	945	757	713	647
26	895	1180	923	849	847	842	1280	1270	942	778	696	619
27	873	1180	910	798	797	856	1310	1270	940	777	681	617
28	894	1230	945	770	778	895	1330	1250	952	772	654	622
29	866	1260	990	758	---	891	1330	1240	912	743	655	608
30	840	1220	944	751	---	877	1300	1220	859	752	668	616
31	839	---	884	737	---	978	---	1170	---	770	682	---
TOTAL	24035	43432	30734	24908	22613	25612	40520	40150	33141	25348	21877	19441
MEAN	775	1448	991	803	808	826	1351	1295	1105	818	706	648
MAX	895	1990	1210	856	918	978	1630	1420	1320	925	755	683
MIN	718	872	884	737	744	760	1030	1170	859	743	654	608
AC-FT	47670	86150	60960	49410	44850	50800	80370	79640	65740	50280	43390	38560
MEAN†	773	1432	982	812	790	850	1352	1303	1104	820	705	649
CFSM†	4.20	7.78	5.34	4.41	4.29	4.62	7.35	7.08	6.00	4.45	3.83	3.53
IN.†	4.84	8.68	6.15	5.09	4.47	5.32	8.19	8.17	6.69	5.13	4.41	3.93
AC-FT†	47520	85190	60380	49920	43880	52250	80420	80140	65700	50390	43320	38610

CAL YR 1984 TOTAL 413986 MEAN 1131 MAX 2320 MIN 718 AC-FT 821100 MEAN† 1131 CFSM† 6.15 IN.† 83.65 AC-FT† 820900
WTR YR 1985 TOTAL 351811 MEAN 964 MAX 1990 MIN 608 AC-FT 697800 MEAN† 964 CFSM† 5.24 IN.† 71.10 AC-FT† 697700

† Adjusted for change in contents in Smith River Reservoir.

WILLAMETTE RIVER BASIN

14158850 MCKENZIE RIVER BELOW TRAIL BRIDGE DAM, NEAR BELKNAP SPRINGS, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1976 to September 1985 (discontinued).

WATER TEMPERATURES: November 1976 to September 1985 (discontinued).

INSTRUMENTATION.--Dual conductivity-temperature recorder November 1976 to September 1980. Water-quality mini-monitor since September 1980.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 67 microsiemens Nov. 9, 10, 1977; minimum recorded, 35 microsiemens Dec. 15, 1977.

WATER TEMPERATURES: Maximum recorded, 12.0°C Aug. 1, 1977; minimum, 2.0°C Dec. 24, 25, 1983.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 61 microsiemens Oct. 6, 8-10; minimum, 43 microsiemens Apr. 16-20, May 6, 7.

WATER TEMPERATURES: Maximum, 10.0°C July 15, 20-28; minimum, 3.5°C Dec. 18-22, 29, 30, Jan. 1-4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
APR 11...	1015	1460	45	7.30	5.0	12.7	15	0	3.6	1.5	3.2	1.0
	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SILICA, DIS- SOLVED (MG/L AS SiO2)	TUR- BID- ITY (NTU)
DATE	AS F)	AS N)	AS N)	AS N)	AS N)	AS N)	AS P)	AS P)	AS C)	AS C)	AS SiO2)	(NTU)
APR 11...	<.10	.030	.50	<.10	.020	<.10	.040	.030	1.2	.10	19	.50
	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIIUM, DIS- SOLVED (UG/L AS BA)	BARIIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
DATE	AS AS)	AS BA)	AS BA)	AS CD)	AS CD)	AS CR)	AS CR)	AS CO)	AS CO)	AS CU)	AS CU)	AS FE)
APR 11...	<1	12	200	<1	<1	10	20	<1	1	<1	2	7
	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
DATE	AS FE)	AS PB)	AS PB)	AS MN)	AS MN)	AS HG)	AS NI)	AS SE)	AS AG)	AS AG)	AS ZN)	AS ZN)
APR 11...	10	<1	<1	<1	<10	<.1	1	<1	<1	<1	<3	<10

WILLAMETTE RIVER BASIN

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14158850 MCKENZIE RIVER BELOW TRAIL BRIDGE DAM, NEAR BELKNAP SPRINGS, OR--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	58	48	51	53	54	52	46	47	51	56	57
2	59	56	48	51	53	53	51	46	47	51	56	57
3	59	54	49	51	53	54	50	45	47	52	56	57
4	59	52	49	51	53	54	50	45	47	52	56	57
5	59	50	49	51	53	53	50	45	47	52	56	57
6	59	50	49	52	54	53	49	44	47	52	56	57
7	59	51	49	51	54	53	49	45	46	52	56	57
8	60	51	50	52	53	54	48	45	46	53	56	57
9	59	51	50	52	53	54	48	45	46	53	56	57
10	59	50	49	52	53	54	47	45	46	53	56	56
11	59	49	49	52	54	54	46	45	46	53	56	57
12	59	48	49	52	53	54	46	46	46	53	56	56
13	59	46	49	52	53	54	46	46	47	53	56	57
14	59	46	49	52	54	54	45	46	47	54	56	57
15	59	46	49	53	54	54	45	46	47	54	56	57
16	59	46	49	53	53	54	44	46	47	54	57	56
17	59	47	49	52	53	54	44	46	48	54	56	56
18	58	47	49	52	53	54	44	46	48	55	56	56
19	59	47	49	52	54	54	44	46	48	55	57	56
20	59	47	49	53	53	53	45	46	48	55	56	56
21	59	47	50	53	53	53	45	45	48	55	56	57
22	59	48	50	53	54	53	45	45	49	55	56	57
23	59	48	50	53	54	53	45	46	49	55	57	56
24	59	48	50	52	53	52	45	45	49	55	57	57
25	59	48	50	52	54	52	45	45	49	55	57	57
26	58	48	50	52	53	52	45	46	50	55	57	57
27	58	48	50	53	53	52	46	46	50	55	57	56
28	58	48	50	53	54	52	46	46	50	56	57	57
29	58	48	50	53	---	52	46	45	51	56	57	57
30	58	48	50	53	---	52	46	46	51	55	57	57
31	58	---	51	53	---	52	---	46	---	56	57	---
MEAN	59	49	49	52	53	53	47	46	48	54	56	57
WTR YR 1985	MEAN	52		MAX	60		MIN	44				

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.5	7.0	5.5	5.5	4.5	4.5	4.0	3.5	4.0	4.0	4.5	4.5
2	7.5	7.0	5.5	5.5	4.5	4.5	4.0	3.5	4.0	4.0	4.5	4.5
3	7.5	7.0	5.5	5.5	4.5	4.0	4.0	3.5	4.0	3.5	4.5	4.5
4	7.5	7.0	6.0	5.5	4.5	4.0	4.0	3.5	3.5	3.5	4.5	4.5
5	7.0	7.0	5.5	5.5	4.0	4.0	4.0	4.0	4.0	3.5	4.5	4.5
6	7.5	7.0	5.5	5.5	4.0	4.0	4.0	4.0	4.0	4.0	4.5	4.5
7	7.5	7.0	5.5	5.5	4.5	4.0	4.0	4.0	4.0	3.5	4.5	4.5
8	7.5	7.0	5.5	5.0	4.5	4.0	4.0	4.0	4.0	3.5	4.5	4.5
9	7.5	7.0	5.5	5.0	4.5	4.0	4.0	4.0	3.5	3.5	5.0	4.5
10	7.5	7.0	5.0	5.0	4.5	4.0	4.0	4.0	4.0	3.5	5.0	4.5
11	7.0	7.0	5.5	5.0	4.0	4.0	4.0	4.0	4.0	3.5	5.0	4.5
12	7.0	6.5	5.5	5.0	4.0	4.0	4.0	4.0	4.0	3.5	5.0	4.5
13	7.5	6.5	5.5	5.0	4.5	4.0	4.0	4.0	4.0	4.0	5.0	4.5
14	7.0	6.5	5.5	5.0	4.5	4.0	4.0	4.0	4.0	4.0	5.0	4.5
15	7.0	6.5	5.0	5.0	4.5	4.0	4.5	4.0	4.0	4.0	5.5	5.0
16	7.0	6.5	5.5	5.0	4.5	4.0	4.5	4.0	4.0	4.0	5.5	5.0
17	6.5	6.0	5.0	5.0	4.0	4.0	4.0	4.0	4.5	4.0	5.0	5.0
18	6.5	6.0	5.5	5.0	4.0	3.5	4.0	4.0	4.0	4.0	5.0	5.0
19	6.5	6.0	5.0	5.0	3.5	3.5	4.0	4.0	4.0	4.0	5.5	5.0
20	6.5	6.0	5.0	5.0	4.0	3.5	4.5	4.0	4.0	4.0	5.0	5.0
21	6.5	6.0	5.0	5.0	4.0	3.5	4.5	4.0	4.5	4.0	5.0	4.5
22	6.5	6.0	5.0	5.0	4.0	3.5	4.5	4.0	4.5	4.0	4.5	4.5
23	6.0	6.0	5.0	5.0	4.0	4.0	4.5	4.0	4.5	4.5	4.5	4.5
24	6.0	6.0	5.0	5.0	4.0	4.0	4.5	4.0	4.5	4.5	4.5	4.5
25	6.0	6.0	5.0	5.0	4.0	4.0	4.0	4.0	4.5	4.0	4.5	4.5
26	6.0	6.0	5.0	4.5	4.0	4.0	4.0	4.0	4.5	4.5	4.5	4.0
27	6.0	6.0	4.5	4.5	4.0	4.0	4.0	4.0	5.0	4.5	4.5	4.0
28	6.0	5.5	4.5	4.5	4.0	4.0	4.0	4.0	4.5	4.5	5.0	4.5
29	6.0	5.5	4.5	4.5	4.0	3.5	4.5	4.0	---	---	4.5	4.5
30	6.0	5.5	4.5	4.5	4.0	3.5	4.0	4.0	---	---	4.5	4.5
31	5.5	5.5	---	---	4.0	4.0	4.0	4.0	---	---	5.0	4.5
MONTH	7.5	5.5	6.0	4.5	4.5	3.5	4.5	3.5	5.0	3.5	5.5	4.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.0	4.5	6.0	5.5	7.0	6.5	9.0	8.5	9.0	8.0	8.5	7.5
2	5.5	5.0	6.0	5.5	7.5	6.5	9.5	8.5	9.0	8.0	8.5	7.5
3	5.0	5.0	6.0	5.5	7.0	6.5	9.5	8.5	9.0	8.0	9.0	8.0
4	5.5	5.0	6.0	5.5	7.5	7.0	9.5	8.5	9.0	8.0	8.5	7.5
5	5.5	5.0	6.0	5.5	7.5	7.0	9.5	8.5	9.0	8.0	8.5	7.5
6	5.5	5.0	6.0	5.5	7.5	7.0	9.5	8.5	9.0	8.0	8.5	7.5
7	5.5	5.0	6.0	5.5	7.5	7.0	9.5	8.5	9.0	8.5	8.5	7.5
8	6.0	5.0	6.0	5.5	7.5	7.0	9.5	8.5	9.0	8.0	8.0	7.5
9	6.0	5.0	6.0	5.5	7.5	7.0	9.5	8.5	9.0	8.0	8.0	7.5
10	5.5	5.0	6.0	5.5	7.5	7.0	9.5	8.5	9.0	8.0	8.0	7.5
11	5.5	5.0	6.0	5.5	7.5	7.0	9.5	8.5	8.5	8.0	8.0	7.0
12	6.0	5.0	6.0	5.5	8.0	7.0	9.5	8.5	9.0	8.0	8.0	7.0
13	5.5	5.0	6.5	6.0	8.0	7.0	9.5	8.5	9.0	8.0	7.5	7.0
14	6.0	5.0	6.5	6.0	8.0	7.5	9.5	8.5	9.0	8.0	7.5	7.0
15	5.5	5.0	6.5	6.0	8.0	7.5	10.0	8.5	9.0	8.0	7.5	7.0
16	5.5	5.5	6.5	6.0	8.0	7.5	9.5	8.5	9.0	8.0	7.5	7.0
17	5.5	5.5	6.5	6.0	8.5	7.5	9.5	8.5	9.0	8.0	8.0	7.0
18	5.5	5.0	7.0	6.5	8.5	8.0	9.5	8.5	9.0	8.0	7.5	7.0
19	5.5	5.0	7.0	6.5	8.5	8.0	9.5	8.5	9.0	8.0	7.5	7.0
20	5.5	5.0	7.0	6.5	8.5	8.0	10.0	8.5	9.0	8.5	7.5	7.0
21	5.0	5.0	7.0	6.5	9.0	8.0	10.0	8.5	9.0	8.5	7.5	7.0
22	5.5	5.0	7.0	6.5	9.0	8.0	10.0	8.5	9.0	8.0	7.5	7.0
23	5.5	5.0	7.5	6.5	9.0	8.0	10.0	8.5	9.5	8.0	7.5	7.0
24	5.5	5.0	7.0	6.5	9.0	8.0	10.0	8.5	9.0	8.0	7.5	7.0
25	5.5	5.0	7.5	6.5	9.0	8.0	10.0	8.5	9.0	8.0	7.5	7.0
26	5.5	5.0	7.5	6.5	9.0	8.0	10.0	8.5	9.5	8.5	7.5	7.0
27	5.5	5.0	7.5	6.5	9.5	8.0	10.0	8.5	9.0	8.5	7.5	7.0
28	5.5	5.0	7.5	6.5	9.0	8.5	10.0	8.5	9.0	7.0	7.5	7.0
29	5.5	5.0	7.0	6.5	9.5	8.5	9.5	8.5	8.5	7.5	7.5	7.0
30	6.0	5.5	7.0	6.5	9.0	8.0	9.5	8.5	8.5	8.0	7.0	7.0
31	---	---	7.0	6.5	---	---	9.5	8.0	8.5	7.5	---	---
MONTH	6.0	4.5	7.5	5.5	9.5	6.5	10.0	8.0	9.5	7.0	9.0	7.0
YEAR	10.0	3.5										

WILLAMETTE RIVER BASIN

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14158930 BUDWORM CREEK NEAR BELKNAP SPRINGS, OR

LOCATION.--Lat 44°15'29", long 122°03'40", T.15 S., R.6 E., (unsurveyed), Linn County, Hydrologic Unit 17090004,
Willamette National Forest, on right bank 0.1 mi upstream from Deer Creek, 4.8 mi north of town of Belknap Springs.

DRAINAGE AREA.--3.00 mi².

PERIOD OF RECORD.--July 1978 to March 1983, October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,040 ft, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--6 years (water years 1979-82, 1984-85) 13.8 ft³/s, 62.47 in/yr, 10,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 688 ft³/s Dec. 25, 1980, gage height, 3.78 ft, from rating curve
extended above 180 ft³/s; maximum gage height, 3.82 ft Jan. 12, 1980; minimum discharge, 0.45 ft³/s Oct. 8-10, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*), from rating curve
extended above 100 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1400	*350	*3.49	No other peak greater than base discharge.			

Minimum discharge, 0.60 ft³/s Aug. 28 to Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	.93	9.8	16	6.6	5.9	14	49	26	8.1	1.8	1.0	.65		
2	.92	205	13	6.1	5.5	14	64	28	7.8	1.6	1.0	.92		
3	.88	184	10	5.9	5.2	13	52	28	7.5	1.6	.98	.76		
4	.88	61	9.1	5.8	5.1	11	37	20	8.1	1.6	.93	.68		
5	.91	30	8.1	6.0	5.1	10	31	17	7.9	1.5	.92	.76		
6	.88	27	7.6	6.7	4.9	9.5	36	15	26	1.5	.87	2.4		
7	.87	28	7.8	7.7	5.8	8.6	42	14	32	1.5	1.0	1.2		
8	.86	22	8.6	7.8	6.0	7.9	38	13	23	1.5	1.5	.90		
9	.98	19	14	7.6	5.3	7.5	40	12	16	1.4	1.1	1.1		
10	.98	63	50	7.3	4.9	7.4	44	12	12	1.4	.99	1.3		
11	1.6	86	26	7.0	12	7.9	35	11	9.4	1.3	.92	.98		
12	4.5	87	20	6.5	26	8.4	29	10	8.2	1.3	.88	1.1		
13	10	78	15	6.3	17	8.7	30	10	7.2	1.2	.86	1.6		
14	7.1	51	14	7.1	17	9.3	35	11	6.4	1.2	.83	3.8		
15	5.2	28	15	8.1	24	10	34	12	5.7	1.2	.79	4.3		
16	3.8	19	13	9.7	21	13	27	16	5.1	1.1	.78	2.5		
17	3.1	16	12	21	16	16	20	18	4.7	1.1	.74	3.6		
18	3.0	22	10	26	14	16	18	18	4.3	1.0	.75	3.5		
19	9.4	21	9.4	21	13	15	15	17	3.9	1.0	.74	2.4		
20	11	17	8.6	17	12	15	13	14	3.7	.98	.74	1.7		
21	9.0	14	7.9	15	11	15	13	13	3.4	.98	.73	1.5		
22	6.6	13	7.6	13	12	14	13	14	3.2	.96	.69	1.3		
23	5.3	13	8.6	12	14	21	25	15	3.0	.99	.67	1.2		
24	5.8	14	9.0	11	16	27	20	14	2.8	.98	.67	1.0		
25	7.0	12	8.5	9.6	18	20	16	11	2.7	.97	.66	.96		
26	37	10	7.9	8.8	15	16	14	10	2.4	.93	.64	.93		
27	23	14	7.7	8.1	14	14	17	9.3	2.4	.93	.63	.87		
28	24	32	7.2	7.5	13	12	24	8.7	2.3	.93	.63	.81		
29	17	27	6.8	7.0	---	11	24	9.4	2.2	.97	.61	.78		
30	13	22	7.2	6.4	---	14	23	8.1	2.1	1.0	.61	.74		
31	11	---	7.4	6.0	---	28	---	8.5	---	1.1	.60	---		
TOTAL	226.49	1244.8	373.0	301.6	338.7	414.2	878	443.0	233.5	37.52	25.46	46.24		
MEAN	7.31	41.5	12.0	9.73	12.1	13.4	29.3	14.3	7.78	1.21	.82	1.54		
MAX	37	205	50	26	26	28	64	28	32	1.8	1.5	4.3		
MIN	.86	9.8	6.8	5.8	4.9	7.4	13	8.1	2.1	.93	.60	.65		
CFSM	2.44	13.8	4.00	3.24	4.03	4.47	9.77	4.77	2.59	.40	.27	.51		
IN.	2.81	15.44	4.63	3.74	4.20	5.14	10.89	5.49	2.90	.47	.32	.57		
AC-FT	449	2470	740	598	672	822	1740	879	463	74	50	92		
CAL YR 1984	TOTAL	6206.31	MEAN	17.0	MAX	349	MIN	.79	CFSM	5.67	IN.	76.96	AC-FT	12310
WTR YR 1985	TOTAL	4562.51	MEAN	12.5	MAX	205	MIN	.60	CFSM	4.17	IN.	56.58	AC-FT	9050

WILLAMETTE RIVER BASIN

14159000 MCKENZIE RIVER AT MCKENZIE BRIDGE, OR

LOCATION.--Lat 44°10'45", long 122°07'45", on line between NE¼ and NW¼ sec.18, T.16 S., R.6 E., Lane County, Hydrologic Unit 17090004, Willamette National Forest, on left bank 1.0 mi upstream from Glen Creek, 1.7 mi east of town of McKenzie Bridge, and at mile 69.9.

DRAINAGE AREA.--348 mi² at cableway 1.2 mi upstream, where all discharge measurements are made.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1910 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "near McKenzie Bridge" August 1910 to September 1911 and October 1914 to September 1916.

REVISED RECORDS.--WSP 1248: 1911-16, 1920-25. WSP 1448: 1919. WSP 1638: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,419.04 ft above National Geodetic Vertical Datum of 1929. Prior to June 2, 1932, nonrecording gage at several sites within 2 mi of present site at various datums.

REMARKS.--Estimated daily discharges: Mar. 11 to Apr. 11, Apr. 25 to June 6. Water-discharge records excellent except for estimated daily discharges, which are good. Flow regulated since March 1963 by Smith River Reservoir (Carmen-Smith Project) 12 mi upstream (see station 14158795). No diversion upstream from station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--75 years, 1,689 ft³/s, 1,224,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,100 ft³/s Dec. 22, 1964, gage height, 10.36 ft, from rating curve extended above 7,100 ft³/s on basis of slope-area measurement of peak flow; minimum, 805 ft³/s Oct. 20, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,440 ft³/s Nov. 2, gage height, 4.01 ft; minimum, 1,010 ft³/s Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	1520	2250	1560	1330	1500	1900	2400	2050	1560	1320	1170
2	1230	4150	2140	1540	1360	1530	2000	2400	2050	1610	1290	1180
3	1230	4510	2060	1500	1330	1510	2000	2400	2050	1570	1300	1160
4	1210	3040	1950	1500	1290	1510	2000	2400	2100	1560	1300	1150
5	1190	2540	1870	1500	1290	1490	2000	2400	2300	1530	1270	1180
6	1180	2460	1840	1500	1300	1470	2100	2350	2430	1510	1260	1210
7	1180	2500	1810	1510	1370	1410	2200	2300	2350	1500	1270	1170
8	1180	2290	1760	1500	1490	1390	2300	2300	2300	1490	1300	1140
9	1190	2300	1760	1470	1510	1380	2400	2250	2170	1500	1280	1170
10	1200	3040	2340	1440	1320	1380	2650	2250	2050	1480	1260	1190
11	1250	3560	2070	1430	1440	1400	2650	2200	2020	1470	1250	1150
12	1290	3830	2010	1420	1670	1400	2560	2200	1930	1470	1250	1160
13	1360	3880	1870	1420	1500	1400	2610	2150	1940	1460	1230	1170
14	1300	3550	1880	1390	1500	1400	2740	2100	1880	1440	1220	1200
15	1270	3090	1910	1400	1610	1400	2830	2100	1860	1430	1230	1190
16	1260	2810	1870	1390	1610	1400	2760	2100	1860	1430	1230	1150
17	1250	2610	1820	1490	1540	1380	2540	2200	1780	1420	1220	1220
18	1250	2600	1750	1530	1490	1380	2440	2300	1760	1420	1220	1200
19	1400	2490	1700	1520	1490	1380	2390	2350	1760	1390	1230	1150
20	1440	2460	1700	1460	1510	1500	2320	2300	1720	1380	1200	1170
21	1360	2330	1660	1430	1500	1500	2210	2250	1730	1400	1200	1140
22	1340	2240	1660	1420	1490	1550	2210	2250	1670	1390	1200	1150
23	1300	2230	1680	1420	1500	1650	2490	2300	1690	1360	1190	1140
24	1310	2180	1680	1480	1520	1600	2380	2300	1700	1340	1200	1120
25	1340	2100	1660	1470	1580	1500	2300	2250	1640	1330	1220	1140
26	1780	2010	1640	1460	1570	1500	2300	2200	1640	1350	1210	1120
27	1660	2090	1630	1400	1500	1520	2300	2200	1630	1350	1190	1120
28	1710	2330	1640	1360	1470	1550	2300	2150	1650	1340	1160	1120
29	1630	2420	1700	1340	---	1550	2300	2150	1620	1310	1160	1110
30	1540	2440	1680	1330	---	1600	2300	2100	1560	1320	1170	1110
31	1510	---	1610	1310	---	1700	---	2050	---	1330	1180	---
TOTAL	41560	81600	56600	44890	41080	45830	70480	69650	56890	44440	38210	34750
MEAN	1341	2720	1826	1448	1467	1478	2349	2247	1896	1434	1233	1158
MAX	1780	4510	2340	1560	1670	1700	2830	2400	2430	1610	1320	1220
MIN	1180	1520	1610	1310	1290	1380	1900	2050	1560	1310	1160	1110
AC-FT	82430	161900	112300	89040	81480	90900	139800	138200	112800	88150	75790	68930
CAL YR 1984	TOTAL	729200	MEAN	1992	MAX	5790	MIN	1180	AC-FT	1446000		
WTR YR 1985	TOTAL	625980	MEAN	1715	MAX	4510	MIN	1110	AC-FT	1242000		

WILLAMETTE RIVER BASIN

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14159000 MCKENZIE RIVER AT MCKENZIE BRIDGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1976 to September 1985 (discontinued).

WATER TEMPERATURES: November 1976 to September 1985 (discontinued).

INSTRUMENTATION.--Dual conductivity-temperature recorder since November 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 78 microsiemens Jan. 2, 1977; minimum, 22 microsiemens Nov. 25, 1977.

WATER TEMPERATURES: Maximum recorded, 13.5°C Aug. 1, 3, 1977; minimum, 1.5°C Dec. 24, 1983.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 64 microsiemens Sept. 19, 23, 26, 30; minimum, 40 microsiemens Nov. 2, 3, Apr. 16.

WATER TEMPERATURES: Maximum, 12.0°C July 14, 15, 19, 20, 23-26; minimum, 2.5°C Feb. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
APR 11...	1315	2600	44	7.30	6.0	12.4	16	0	3.6	1.6	3.3
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
APR 11...	0.9	0.8	0.8	<0.1	0.02	0.2	<0.10	0.02	0.1	<0.10	0.04
DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)
APR 11...	0.04	1.5	0.1	19	41	42	0.7	<1	15	200	<1
DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	
APR 11...	<1	10	20	<1	1	5	51	4	50	3	
DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	
APR 11...	10	4	<10	<0.1	2	<1	<1	<1	8	<10	

WILLAMETTE RIVER BASIN

14159000 MCKENZIE RIVER AT MCKENZIE BRIDGE, OR--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	55	49	55	56	54	48	44	48	52	57	58
2	57	45	50	55	55	53	46	44	49	52	57	59
3	58	42	51	55	56	54	46	43	49	52	57	59
4	57	46	51	55	56	54	47	44	49	53	57	59
5	58	47	52	55	56	54	47	44	48	53	57	59
6	58	48	52	55	56	54	46	44	46	53	57	59
7	58	48	52	55	55	54	45	45	44	53	57	59
8	58	48	52	55	55	54	45	45	45	53	57	59
9	58	49	52	56	55	55	---	46	46	53	58	59
10	58	46	49	56	55	55	---	46	47	53	58	59
11	57	44	50	56	55	55	---	46	47	54	58	59
12	57	43	51	56	52	55	43	46	47	54	58	59
13	56	43	51	55	53	55	43	47	48	54	58	59
14	56	44	51	56	54	55	42	46	48	54	58	58
15	57	45	51	56	53	54	42	47	48	54	58	58
16	57	46	52	56	53	54	42	46	49	55	58	60
17	57	47	52	55	53	53	43	45	49	55	58	60
18	57	47	53	54	54	53	43	45	49	55	58	60
19	56	47	53	58	54	53	43	45	50	55	58	61
20	56	47	53	57	54	52	44	45	50	55	58	60
21	56	48	53	55	54	52	45	46	50	55	58	61
22	57	49	54	54	54	52	45	46	50	55	59	61
23	57	49	53	55	54	51	43	45	50	55	58	61
24	57	49	53	55	53	50	44	45	51	55	58	61
25	56	49	54	54	53	50	45	46	51	56	58	61
26	52	50	54	55	53	51	45	46	51	56	58	61
27	53	49	54	55	54	52	45	47	52	56	59	61
28	53	48	54	56	54	52	45	47	51	56	59	61
29	54	48	54	55	---	52	45	47	51	56	59	61
30	55	48	54	55	---	52	45	48	52	56	59	61
31	55	---	54	55	---	50	---	48	---	56	59	---
MEAN	56	47	52	55	54	53	---	46	49	54	58	60

14159000 MCKENZIE RIVER AT MCKENZIE BRIDGE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14159200 SOUTH FORK MCKENZIE RIVER ABOVE COUGAR LAKE, NEAR RAINBOW, OR

LOCATION.--Lat 44°02'50", long 122°13'00", in T.17 S., R.5 E., (unsurveyed), Lane County, Hydrologic Unit 17090004, in Willamette National Forest, on right bank 100 ft upstream from Tipsoo Creek, 8.0 mi south of Rainbow, 9.0 mi southeast of town of Blue River, and at mile 10.4.

DRAINAGE AREA.--160 mi² at cableway 0.2 mi downstream, where all discharge measurements are made.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1971, published as South Fork McKenzie River above Cougar Reservoir.

REVISED RECORDS.--WSP 1638: Drainage area. WSP 1935: 1958(M).

GAGE.--Water-stage recorder. Datum of gage is 1,709.51 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--No estimated daily discharges. Water-discharge records good. No regulation or diversion upstream from station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--28 years, 644 ft³/s, 54.66 in/yr, 466,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s Dec. 22, 1964, gage height, 20.06 ft, from floodmark, from rating curve extended above 7,600 ft³/s, on basis of slope-area measurement of peak flow; minimum, 171 ft³/s Sept. 16, 17, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	2200	*3,730	*9.17	Nov. 12	1830	2,920	8.29

Minimum, 222 ft³/s Aug. 29, 31, Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	243	454	1060	463	402	585	1080	1010	721	315	260	229		
2	242	2400	859	443	391	570	1360	1130	700	309	256	252		
3	241	3060	755	431	381	543	1310	1220	683	303	251	236		
4	241	1760	682	429	360	538	1170	1070	706	298	249	231		
5	242	1190	628	445	364	509	1090	964	710	294	247	233		
6	240	1090	588	481	359	491	1150	907	1040	291	246	261		
7	238	1060	569	515	420	469	1360	855	1370	287	248	246		
8	240	943	576	512	421	451	1380	804	1390	283	252	240		
9	247	893	651	495	392	442	1410	772	1100	279	248	251		
10	250	1580	1030	474	370	440	1520	741	929	276	245	259		
11	299	2100	874	458	534	443	1450	710	827	274	243	247		
12	355	2650	841	445	886	445	1320	673	770	271	242	242		
13	458	2610	755	441	735	440	1310	671	723	269	240	247		
14	413	2080	701	459	724	444	1420	713	672	267	238	272		
15	369	1530	707	472	846	457	1470	714	631	265	237	289		
16	332	1210	655	495	802	497	1370	801	590	264	236	263		
17	305	1020	610	689	710	543	1170	888	549	262	235	298		
18	302	1000	571	802	646	552	1060	998	522	261	237	303		
19	488	928	532	734	626	551	950	1060	499	258	239	266		
20	593	883	515	683	600	556	840	1030	469	256	238	252		
21	477	806	500	637	570	563	790	979	440	255	236	245		
22	410	741	483	591	597	542	762	992	417	254	234	241		
23	373	734	481	555	611	651	1020	1050	397	253	232	238		
24	371	725	474	529	634	749	884	1070	380	253	231	234		
25	381	679	464	504	647	663	788	981	368	251	230	232		
26	850	634	455	481	618	634	728	927	354	249	229	231		
27	716	733	462	462	581	602	764	865	344	248	228	229		
28	754	1100	452	449	566	572	889	808	336	249	228	227		
29	676	1090	451	433	---	542	887	773	328	249	227	225		
30	553	1460	503	415	---	562	916	717	322	260	227	225		
31	496	---	494	406	---	743	---	742	---	264	226	---		
TOTAL	12395	39143	19378	15828	15793	16789	33618	27635	19287	8367	7415	7444		
MEAN	400	1305	625	511	564	542	1121	891	643	270	239	248		
MAX	850	3060	1060	802	886	749	1520	1220	1390	315	260	303		
MIN	238	454	451	406	359	440	728	671	322	248	226	225		
CFSM	2.50	8.16	3.91	3.19	3.52	3.39	7.01	5.57	4.02	1.69	1.49	1.55		
IN.	2.88	9.10	4.51	3.68	3.67	3.90	7.82	6.43	4.48	1.95	1.72	1.73		
AC-FT	24590	77640	38440	31390	31330	33300	66680	54810	38260	16600	14710	14770		
CAL YR 1984	TOTAL	290824	MEAN	795	MAX	5150	MIN	238	CFSM	4.97	IN.	67.62	AC-FT	576800
WTR YR 1985	TOTAL	223092	MEAN	611	MAX	3060	MIN	225	CFSM	3.82	IN.	51.87	AC-FT	442500

WILLAMETTE RIVER BASIN

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14159200 SOUTH FORK MCKENZIE RIVER ABOVE COUGAR LAKE, NEAR RAINBOW, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1957 to current year.

INSTRUMENTATION.--Temperature recorder since November 1957.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 17.0°C July 8, 1968, July 19, 20, 1979; minimum, 0.0°C Dec. 7-11, 1972, Dec. 30, 1978, Jan. 1, 1979, Jan. 4, 1982, Dec. 24, 1983.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 15.5°C July 7-12, 14, 18-20, 23, 26; minimum, 0.5°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14159200 SOUTH FORK MCKENZIE RIVER ABOVE COUGAR LAKE, NEAR RAINBOW, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14159400 COUGAR LAKE NEAR RAINBOW, OR

LOCATION.--Lat 44°07'40", long 122°14'25", in SE¼SE¼ sec.31, T.16 S., R.5 E., Lane County, Hydrologic Unit 17090004, Willamette National Forest, in intake tower near left end of Cougar Dam on South Fork McKenzie River, 2.7 mi south of Rainbow, and at mile 4.5.

DRAINAGE AREA.--207 mi².

PERIOD OF RECORD.--October 1963 to current year. Prior to October 1971, published as Cougar Reservoir near Rainbow.

GAGE.--Water-stage recorder. Datum gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by earthfill dam with concrete spillway completed in 1963 by the Corps of Engineers; storage began September 1963. Total capacity is 219,100 acre-ft at elevation 1,699 ft, maximum pool, and usable capacity is 164,800 acre-ft between elevations 1,516 ft, minimum power pool, and 1,699 ft. Lake used for flood control and power generation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 214,100 acre-ft June 29, 1977, elevation, 1,695.06 ft; minimum, 33,690 acre-ft Oct. 31 to Nov. 2, 1965, elevation, 1,475.40 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 211,800 acre-ft June 9, elevation, 1,693.26 ft; minimum, 64,220 acre-ft Jan. 14, elevation, 1,532.50 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,510	50,920	1,650	162,300
1,550	75,940	1,696	215,300
1,600	114,800		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1613.24	1575.15	1548.60	1535.00	1541.08	1569.10	1601.64	1675.31	1689.15	1690.09	1678.40	1643.32
2	1611.55	1583.23	1548.06	1534.27	1541.16	1570.24	1605.65	1677.45	1689.19	1690.09	1677.36	1642.18
3	1609.83	1593.47	1546.77	1534.32	1541.19	1571.23	1609.34	1679.72	1689.16	1690.07	1676.32	1641.50
4	1608.14	1597.59	1545.85	1534.38	1541.18	1572.27	1612.45	1681.56	1689.16	1690.04	1675.30	1640.22
5	1606.41	1596.52	1544.71	1534.54	1541.16	1573.14	1615.16	1683.09	1689.17	1690.04	1674.24	1638.99
6	1604.64	1592.43	1543.41	1534.83	1541.10	1573.95	1618.05	1683.92	1689.37	1690.04	1673.18	1637.87
7	1602.85	1588.15	1542.01	1535.25	1541.56	1574.65	1621.57	1684.28	1690.71	1690.04	1672.15	1636.65
8	1601.08	1583.97	1540.59	1535.67	1541.92	1575.30	1625.04	1684.76	1692.84	1690.05	1671.11	1635.42
9	1599.24	1581.22	1539.62	1536.02	1542.09	1575.90	1628.51	1685.46	1692.39	1690.05	1670.05	1634.26
10	1597.30	1583.56	1540.65	1536.25	1542.14	1576.51	1632.20	1686.38	1690.99	1689.96	1668.97	1633.08
11	1595.92	1585.74	1540.79	1536.40	1543.01	1577.09	1635.54	1687.27	1690.32	1689.76	1667.89	1631.85
12	1594.46	1589.68	1541.02	1535.37	1545.46	1577.69	1638.54	1688.08	1690.07	1689.55	1666.80	1630.60
13	1593.41	1593.92	1540.69	1533.60	1547.14	1578.06	1641.40	1688.61	1689.97	1689.34	1665.72	1629.40
14	1592.19	1593.25	1540.04	1532.51	1548.80	1578.65	1644.50	1689.07	1689.94	1689.12	1664.60	1628.26
15	1590.72	1588.95	1539.41	1532.69	1550.59	1579.28	1647.64	1689.52	1689.89	1688.91	1663.50	1627.12
16	1589.09	1582.22	1538.44	1532.93	1552.58	1580.05	1650.39	1689.97	1689.84	1688.69	1662.38	1625.90
17	1587.32	1574.50	1537.23	1534.01	1554.10	1581.01	1652.58	1690.38	1689.87	1688.47	1661.22	1624.90
18	1585.75	1566.54	1536.01	1535.65	1555.32	1581.97	1654.55	1690.48	1689.97	1688.24	1660.08	1623.85
19	1585.18	1561.35	1534.98	1536.98	1556.53	1582.93	1656.22	1690.09	1690.02	1687.86	1658.94	1622.65
20	1584.58	1558.40	1534.71	1538.03	1557.58	1583.98	1657.55	1689.88	1690.03	1687.24	1657.78	1621.39
21	1583.50	1555.06	1534.93	1538.85	1558.52	1585.00	1658.84	1689.79	1690.03	1686.62	1656.60	1620.12
22	1582.10	1551.37	1535.13	1539.44	1559.71	1586.00	1661.34	1689.75	1690.03	1685.99	1655.39	1618.81
23	1580.53	1547.69	1535.39	1539.85	1561.08	1587.54	1663.46	1689.96	1689.99	1685.36	1654.20	1617.48
24	1578.94	1544.71	1535.61	1540.15	1562.58	1589.39	1665.05	1690.11	1689.96	1684.75	1653.01	1616.13
25	1577.44	1542.30	1535.76	1540.35	1564.11	1590.84	1666.35	1689.99	1689.96	1684.14	1651.82	1614.77
26	1578.15	1540.52	1535.90	1540.46	1565.52	1592.21	1667.48	1689.73	1689.96	1683.51	1650.62	1613.40
27	1578.19	1540.15	1536.17	1540.49	1566.75	1593.39	1668.70	1689.53	1689.95	1682.87	1649.43	1612.01
28	1578.55	1541.90	1536.38	1540.49	1567.89	1594.46	1670.25	1689.37	1689.94	1682.24	1648.21	1610.60
29	1578.35	1543.59	1536.66	1540.56	---	1595.43	1671.81	1689.16	1689.97	1681.37	1646.99	1609.20
30	1577.55	1547.26	1537.27	1540.75	---	1596.58	1673.44	1689.04	1690.03	1680.40	1645.78	1607.56
31	1576.50	---	1536.63	1540.89	---	1598.52	---	1689.09	---	1679.42	1644.55	---
MAX	1613.24	1597.59	1548.60	1540.89	1567.89	1598.52	1673.44	1690.48	1692.84	1690.09	1678.40	1643.32
MIN	1576.50	1540.15	1534.71	1532.51	1541.08	1569.10	1601.64	1675.31	1689.15	1679.42	1644.55	1607.56
(†)	95470	74040	66890	69710	88880	113500	188000	206600	207800	195000	156700	121400
(‡)	-32530	-21430	-7150	+2820	+19170	+24620	+74500	+18600	+1200	-12800	-38300	-35300
CAL YR 1984	MAX	1692.08	MIN	1532.10	AC-FT‡	-4490						
WTR YR 1985	MAX	1692.84	MIN	1532.51	AC-FT‡	-6600						

† Contents, in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

14159500 SOUTH FORK MCKENZIE RIVER NEAR RAINBOW, OR

LOCATION.--Lat 44°08'10", long 122°14'50", in NE¼ sec.31, T.16 S., R.5 E., Lane County, Hydrologic Unit 17090004, in Willamette National Forest, on right bank 0.2 mi upstream from Cougar Creek, 0.6 mi downstream from Cougar Dam, 2.1 mi south of Rainbow, and at mile 3.9.

DRAINAGE AREA.--208 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1947 to current year.

REVISED RECORDS.--WSP 1638: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,236.42 ft above National Geodetic Vertical Datum of 1929 (Federal Highway Administration bench mark). Oct. 1 to Nov. 4, 1947, nonrecording gage at site 40 ft upstream at datum 0.80 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since 1963 by Cougar Lake (see sta 14159400), usable capacity, 165,000 acre-ft. No diversion upstream from station.

AVERAGE DISCHARGE.--38 years, 870 ft³/s, 56.80 in/yr, 630,300 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft³/s Dec. 11, 1956, gage height, 8.66 ft, from rating curve extended above 8,100 ft³/s; maximum gage height, 8.90 ft Dec. 22, 1955 (backwater from debris); minimum discharge, 17 ft³/s Nov. 18, 1965; minimum daily, 85 ft³/s Apr. 26-28, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 24,500 ft³/s Dec. 28, 1945, gage height, 8.8 ft, from floodmarks, at Corps of Engineers gage at site 40 ft upstream at datum 0.80 ft higher; gage height at present site and datum, about 9.3 ft, computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,170 ft³/s Nov. 17, gage height, 4.40 ft; minimum, 44 ft³/s Apr. 12; minimum daily, 267 ft³/s Apr. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	951	1050	1100	1050	449	316	332	320	871	323	837	847
2	955	1030	1360	746	455	317	334	323	868	365	840	846
3	958	1020	1360	517	453	327	333	324	867	367	831	593
4	956	1010	1130	521	442	336	333	324	872	351	825	859
5	963	2160	1110	522	438	335	335	325	874	330	823	860
6	969	3080	1100	524	435	327	316	630	1380	327	825	863
7	968	3050	1110	544	435	325	321	801	1210	316	854	851
8	972	2800	1110	539	438	322	323	671	660	319	855	847
9	984	2240	1080	534	435	321	324	513	1720	321	846	849
10	987	1490	1090	534	436	321	311	382	1980	384	844	846
11	875	2310	1120	534	441	324	318	328	1410	425	847	846
12	988	2150	1130	866	441	333	267	329	1070	424	846	847
13	988	2000	1130	1050	435	337	310	479	887	424	842	851
14	996	3140	1120	865	437	337	318	579	800	422	848	852
15	998	3690	1120	533	443	331	321	583	753	421	848	854
16	998	4100	1130	546	436	333	321	686	686	421	845	857
17	1010	4110	1090	546	437	336	319	802	576	420	853	852
18	939	4100	1090	546	429	326	321	1170	534	424	857	848
19	882	2890	930	546	432	324	320	1480	535	496	857	847
20	1010	2100	674	546	432	328	321	1330	538	628	859	844
21	1010	2090	536	549	417	331	320	1200	500	629	858	844
22	1020	2080	526	552	375	331	323	1170	477	631	842	846
23	1020	2090	528	552	332	331	328	1130	477	625	857	848
24	1030	1830	528	547	333	331	327	1180	443	618	856	847
25	1030	1590	525	544	326	324	323	1250	422	616	851	848
26	1050	1320	524	544	319	322	321	1260	424	621	845	846
27	1050	1120	528	547	313	328	321	1150	422	621	844	848
28	1050	1130	524	545	318	333	321	1070	380	622	848	846
29	1050	1130	528	482	---	332	321	1080	342	742	846	845
30	1040	1120	529	443	---	336	319	952	336	821	843	847
31	1040	---	840	443	---	337	---	868	---	823	845	---
TOTAL	30737	65020	28200	18357	11512	10192	9622	24689	23314	15277	26217	25224
MEAN	992	2167	910	592	411	329	321	796	777	493	846	841
MAX	1050	4110	1360	1050	455	337	335	1480	1980	823	859	863
MIN	875	1010	524	443	313	316	267	320	336	316	823	593
AC-FT	60970	129000	55930	36410	22830	20220	19090	48970	46240	30300	52000	50030
MEAN†	463	1808	793	638	756	729	1573	1099	797	285	223	248
CFSM†	2.22	8.69	3.81	3.07	3.64	3.51	7.56	5.28	3.83	1.37	1.07	1.19
IN.†	2.56	9.70	4.40	3.54	3.79	4.04	8.44	6.09	4.28	1.58	1.23	1.33
AC-FT†	28440	107570	48780	39230	42000	44840	93590	67570	47440	17500	13700	14730

CAL YR 1984 TOTAL 374185 MEAN 1022 MAX 4110 MIN 333 AC-FT 742200 MEAN† 1020 CFSM† 4.90 IN.† 66.51 AC-FT† 737700
WTR YR 1985 TOTAL 288361 MEAN 790 MAX 4110 MIN 267 AC-FT 572000 MEAN† 781 CFSM† 3.75 IN.† 50.99 AC-FT† 565400

† Adjusted for change in contents in Cougar Lake.

WILLAMETTE RIVER BASIN

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14159500 SOUTH FORK MCKENZIE RIVER NEAR RAINBOW, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: July 1955 to current year.

INSTRUMENTATION.--Temperature recorder since July 1955.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 20.0°C July 28, 1958; minimum, 0.5°C Jan. 20-23, 1962.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 13.5°C Sept. 18; minimum recorded, 3.5°C on many days in December, January, and March.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14159500 SOUTH FORK MCKENZIE RIVER NEAR RAINBOW, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

14161100 BLUE RIVER BELOW TIDBITS CREEK, NEAR BLUE RIVER, OR

LOCATION.--Lat 44°13'05", long 122°15'50", in SE¼NE¼ sec.36, T.15 S., R.4 E., Lane County, Hydrologic Unit 17090004, in Willamette National Forest, on left bank 0.2 mi downstream from Tidbits Creek, 5.5 mi northeast of town of Blue River, and at mile 8.5.

DRAINAGE AREA.--45.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,386.90 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Estimated daily discharges: June 26 to July 19, Aug. 3-7. Water-discharge records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--22 years, 261 ft³/s, 77.39 in/yr, 189,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s Dec. 22, 1964, gage height, 15.32 ft, from floodmarks, from rating curve extended above 2,800 ft³/s on basis of slope-area measurement of peak flow; minimum, 8.2 ft³/s Sept. 28, 29, Oct. 2-4, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1400	*3,600	*8.36	No other peak greater than base discharge.			

Minimum, 12 ft³/s Oct. 2-4, 6-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	13	158	411	161	109	299	927	366	120	45	20	17		
2	12	2460	313	146	102	266	1120	385	117	43	20	15		
3	12	2080	255	142	95	230	949	391	106	41	20	13		
4	12	940	215	145	88	213	721	328	117	40	19	15		
5	13	515	187	162	90	188	610	270	117	38	18	51		
6	13	440	171	190	86	175	707	247	497	36	18	26		
7	12	463	166	219	125	159	786	227	601	35	21	18		
8	12	390	178	211	126	147	707	207	485	34	25	21		
9	15	427	339	191	103	143	698	192	316	33	21	30		
10	14	1230	942	175	93	157	702	187	237	31	19	21		
11	28	1280	497	165	271	184	598	181	191	30	18	20		
12	77	1200	410	155	597	200	506	168	165	29	18	26		
13	177	1160	334	151	359	193	510	162	145	28	17	43		
14	123	887	300	173	338	205	539	169	129	27	16	67		
15	100	546	336	190	446	234	516	175	117	26	16	41		
16	73	384	275	209	378	291	430	213	107	25	15	71		
17	57	315	234	341	303	330	336	237	98	24	15	68		
18	58	380	200	392	259	317	292	240	91	23	17	45		
19	222	358	177	327	247	298	265	218	86	23	17	34		
20	207	328	162	289	236	296	225	204	81	22	16	28		
21	154	292	153	256	220	299	216	185	76	22	15	24		
22	108	254	151	228	273	254	235	183	71	21	15	22		
23	87	264	175	210	318	428	550	183	67	20	14	20		
24	85	273	193	199	347	533	424	175	64	20	14	18		
25	95	243	177	181	367	364	337	156	61	19	13	17		
26	522	214	163	165	306	306	292	144	56	18	13	16		
27	368	504	163	151	263	262	300	136	54	17	13	16		
28	438	1020	153	139	262	232	360	124	51	17	13	15		
29	287	724	151	129	---	221	341	122	49	18	13	15		
30	203	573	180	118	---	290	338	120	47	19	13	15		
31	185	---	188	111	---	598	---	120	---	21	13	---		
TOTAL	3782	20302	7949	6021	6807	8312	15537	6415	4519	845	515	848		
MEAN	122	677	256	194	243	268	518	207	151	27.3	16.6	28.3		
MAX	522	2460	942	392	597	598	1120	391	601	45	25	71		
MIN	12	158	151	111	86	143	216	120	47	17	13	13		
CFSM	2.66	14.8	5.59	4.24	5.31	5.85	11.3	4.52	3.30	.60	.36	.62		
IN.	3.07	16.49	6.46	4.89	5.53	6.75	12.62	5.21	3.67	.69	.42	.69		
AC-FT	7500	40270	15770	11940	13500	16490	30820	12720	8960	1680	1020	1680		
CAL YR 1984	TOTAL	110214	MEAN	301	MAX	3890	MIN	12	CFSM	6.57	IN.	89.52	AC-FT	218600
WTR YR 1985	TOTAL	81852	MEAN	224	MAX	2460	MIN	12	CFSM	4.89	IN.	66.48	AC-FT	162400

WILLAMETTE RIVER BASIN

14161100 BLUE RIVER BELOW TIDBITS CREEK, NEAR BLUE RIVER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: September 1963 to current year.

INSTRUMENTATION.--Temperature recorder since September 1963.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 23.0°C Aug. 3, 4, 1974, July 20, 1979; minimum, 0.0°C on several days in 1969, 1971-74, 1976, 1979-80, 1983.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 20.5°C July 20, 26; minimum, 0.5°C Feb. 1, 4, 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14161100 BLUE RIVER BELOW TIDBITS CREEK, NEAR BLUE RIVER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14161500 LOOKOUT CREEK NEAR BLUE RIVER, OR

LOCATION.--Lat 44°12'35", long 122°15'20", in T.15 or 16 S., R.5 E. (unsurveyed), Lane County, Hydrologic Unit 17090004, in Willamette National Forest, on left bank 6.0 mi northeast of town of Blue River, and at mile 0.5.

DRAINAGE AREA.--24.1 mi².

PERIOD OF RECORD.--August 1949 to September 1955, September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,377.76 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Estimated daily discharges: Oct. 19-21, 25-29, Dec. 23-26, Jan. 2 to Feb. 26. Water-discharge records good except those for Jan. 2 to Feb. 26, which are poor. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--28 years, 127 ft³/s, 71.56 in/yr, 92,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,660 ft³/s Dec. 22, 1964, gage height, 8.88 ft, from rating curve extended above 1,300 ft³/s, on basis of slope-area measurement of peak flow; minimum, 4.8 ft³/s Sept. 16, 17, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1330	*1,130	*5.30	No other peak greater than base discharge.			
Minimum, 7.6 ft ³ /s Aug. 29 to Sept. 1.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	79	251	109	65	121	351	180	77	28	9.9	8.2
2	12	736	186	94	62	117	416	197	74	27	9.6	13
3	12	865	148	88	58	109	390	207	72	26	8.8	10
4	12	467	129	88	55	107	323	160	80	25	9.8	8.6
5	12	293	115	98	52	100	283	140	77	23	12	9.2
6	12	258	103	110	52	95	292	131	179	22	11	30
7	11	250	96	130	68	89	317	125	216	21	14	16
8	12	215	94	130	69	83	298	117	188	20	21	12
9	14	241	122	120	64	79	300	111	140	19	15	16
10	13	545	264	110	58	77	310	107	117	18	13	22
11	23	561	233	104	120	78	279	102	101	17	12	14
12	48	568	208	98	210	79	249	94	90	17	11	13
13	69	555	176	94	160	77	243	94	82	16	11	17
14	53	434	159	104	160	78	257	97	74	15	10	33
15	47	301	169	115	200	83	253	103	68	14	10	37
16	35	227	145	130	160	94	216	126	63	14	9.8	25
17	28	180	131	150	140	109	168	130	58	13	9.5	32
18	28	191	120	180	120	113	149	134	54	13	9.9	33
19	60	168	110	165	110	112	138	131	50	12	11	23
20	85	160	101	150	100	114	123	121	47	12	11	18
21	65	145	95	140	95	118	116	113	44	11	9.8	15
22	51	133	93	130	105	110	120	115	41	11	9.4	14
23	43	133	110	120	120	178	233	118	39	11	9.0	13
24	44	131	115	112	130	230	185	115	38	11	8.8	12
25	47	124	110	104	145	175	154	101	36	10	8.6	11
26	180	117	105	98	136	152	137	93	34	9.8	8.4	11
27	140	188	97	92	125	137	136	86	33	9.3	8.1	11
28	160	387	94	85	119	128	150	81	31	9.2	8.1	10
29	120	327	95	80	---	124	153	82	30	9.1	8.0	10
30	101	316	118	74	---	162	157	75	29	10	7.9	10
31	90	---	126	68	---	280	---	80	---	11	7.9	---
TOTAL	1639	9295	4218	3470	3058	3708	6896	3666	2262	484.4	323.3	507.0
MEAN	52.9	310	136	112	109	120	230	118	75.4	15.6	10.4	16.9
MAX	180	865	264	180	210	280	416	207	216	28	21	37
MIN	11	79	93	68	52	77	116	75	29	9.1	7.9	8.2
CFSM	2.20	12.9	5.64	4.65	4.52	4.98	9.54	4.90	3.13	.65	.43	.70
IN.	2.53	14.35	6.51	5.36	4.72	5.72	10.64	5.66	3.49	.75	.50	.78
AC-FT	3250	18440	8370	6880	6070	7350	13680	7270	4490	961	641	1010

CAL YR 1984	TOTAL	52085	MEAN	142	MAX	1670	MIN	11	CFSM	5.89	IN.	80.40	AC-FT	103300
WTR YR 1985	TOTAL	39526.7	MEAN	108	MAX	865	MIN	7.9	CFSM	4.48	IN.	61.01	AC-FT	78400

WILLAMETTE RIVER BASIN

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14162100 BLUE RIVER LAKE NEAR BLUE RIVER, OR

LOCATION.--Lat 44°10'20", long 122°19'40", in SE¼SE¼ sec.16, T.16 S., R.4 E., Lane County, Hydrologic Unit 17090004, in intake tower near left end of Blue River Dam on Blue River, 1.4 mi north of town of Blue River, and at mile 1.7.

DRAOMAGE AREA.--87.3 mi².

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1971, published as Blue River Reservoir near Blue River.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete gate and spillway section, completed in 1968 by Corps of Engineers; storage began October 1968. Total capacity is 89,520 acre-ft at elevation 1,357 ft, maximum pool, and usable capacity is 85,550 acre-ft between elevations 1,180 ft, minimum flood control pool, and 1,357 ft, maximum pool. Reservoir used for flood control. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 85,680 acre-ft June 12, 13, 1977, elevation, 1,353.02 ft; minimum observed since first filling in 1968, 305 acre-ft Dec. 7, 1973, elevation, 1,125.47 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 83,310 acre-ft June 6, elevation, 1,350.52 ft; minimum, 3,730 acre-ft Jan. 1, elevation, 1,178.11 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,120	136	1,160	1,880	1,250	19,260
1,130	437	1,180	3,970	1,290	36,960
1,140	764	1,200	7,030	1,340	73,710
1,150	1,210	1,220	11,040	1,354	86,620

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1290.38	1221.87	1211.45	1179.27	1194.44	1279.38	1323.50	1342.50	1349.93	1350.15	1317.13	1267.90
2	1290.03	1240.72	1195.46	1179.87	1196.66	1281.03	1324.33	1343.51	1349.89	1350.20	1315.80	1265.63
3	1289.68	1254.54	1180.21	1179.95	1198.59	1282.45	1323.44	1344.36	1349.90	1350.27	1314.46	1263.20
4	1289.35	1252.87	1179.89	1180.07	1200.17	1283.79	1323.71	1344.70	1350.02	1350.30	1313.11	1260.72
5	1289.00	1243.05	1180.04	1180.32	1201.94	1284.93	1324.67	1344.95	1350.15	1350.30	1311.75	1258.25
6	1288.65	1231.21	1180.21	1180.49	1203.46	1285.99	1325.74	1345.46	1349.93	1350.02	1310.36	1256.03
7	1288.30	1221.10	1180.43	1180.18	1207.29	1286.90	1326.66	1346.11	1349.96	1349.49	1309.03	1253.59
8	1287.98	1210.20	1180.61	1179.74	1210.88	1287.72	1327.06	1346.79	1350.33	1348.81	1307.91	1250.95
9	1287.64	1202.28	1182.79	1179.57	1213.10	1288.50	1327.93	1347.43	1350.19	1348.07	1306.80	1248.33
10	1287.35	1218.31	1185.30	1179.81	1214.79	1289.32	1329.21	1348.09	1350.08	1347.09	1305.67	1245.67
11	1287.16	1224.12	1180.49	1180.02	1219.58	1290.26	1330.05	1348.68	1350.03	1345.91	1304.52	1243.74
12	1287.21	1227.71	1180.65	1179.94	1230.06	1291.25	1330.67	1349.18	1350.00	1344.73	1303.36	1243.14
13	1287.21	1237.48	1179.88	1180.13	1235.53	1292.18	1331.39	1349.70	1350.00	1343.54	1302.18	1243.14
14	1286.98	1239.67	1181.59	1180.47	1240.00	1293.14	1332.30	1350.00	1350.02	1342.35	1300.80	1243.34
15	1286.29	1234.24	1182.30	1180.50	1245.30	1294.25	1333.19	1350.06	1350.00	1341.13	1299.28	1243.32
16	1285.11	1225.11	1180.29	1180.74	1249.32	1295.58	1333.72	1350.27	1349.99	1339.91	1297.72	1243.03
17	1283.39	1212.17	1180.00	1181.09	1252.30	1297.27	1333.84	1350.30	1349.99	1338.69	1296.16	1243.17
18	1281.36	1197.40	1180.26	1180.60	1254.70	1298.73	1334.43	1350.25	1349.97	1337.38	1294.59	1243.22
19	1280.05	1183.33	1180.02	1179.98	1257.02	1300.09	1335.14	1350.11	1349.95	1336.02	1293.01	1243.03
20	1278.25	1179.57	1180.11	1179.89	1259.29	1301.47	1335.57	1349.98	1349.96	1334.64	1291.40	1242.91
21	1275.94	1179.73	1179.99	1179.66	1261.34	1302.90	1336.02	1349.89	1349.95	1333.25	1289.75	1242.85
22	1273.20	1180.00	1180.10	1179.71	1263.75	1304.15	1336.68	1349.91	1349.94	1331.85	1288.08	1242.76
23	1270.24	1181.13	1180.36	1180.67	1266.36	1306.55	1338.59	1350.03	1350.01	1330.44	1286.26	1242.67
24	1266.60	1181.15	1180.32	1181.56	1269.06	1309.45	1338.62	1350.05	1350.06	1328.95	1284.36	1242.56
25	1262.34	1180.59	1180.18	1181.75	1271.77	1311.34	1338.25	1349.99	1350.12	1327.45	1282.41	1242.43
26	1261.41	1180.40	1179.89	1182.13	1273.96	1313.01	1338.47	1349.97	1350.12	1325.99	1280.43	1242.30
27	1257.36	1185.80	1180.43	1182.54	1275.75	1314.41	1338.98	1349.96	1350.07	1324.51	1278.41	1242.15
28	1254.01	1192.14	1179.98	1183.22	1277.47	1315.65	1339.85	1349.94	1350.01	1323.03	1276.37	1241.99
29	1248.22	1194.45	1179.96	1185.96	---	1316.84	1340.63	1349.96	1350.02	1321.53	1274.29	1241.83
30	1241.07	1208.38	1181.25	1189.12	---	1318.70	1341.48	1349.91	1350.08	1320.00	1272.18	1241.95
31	1232.15	---	1179.50	1191.86	---	1321.18	---	1349.93	---	1318.51	1270.05	---
MAX	1290.38	1254.54	1211.45	1191.86	1277.47	1321.18	1341.48	1350.30	1350.33	1350.30	1317.13	1267.90
MIN	1232.15	1179.57	1179.50	1179.27	1194.44	1279.38	1323.44	1342.50	1349.89	1318.51	1270.05	1241.83
(†)	14020	8580	3900	5690	30290	58150	75020	82750	82900	56110	26850	16750
(‡)	-23350	-5440	-4680	+1790	+24600	+27860	+16870	+7730	+150	-26790	-29260	-10100
CAL YR 1984	MAX	1352.12	MIN	1179.50	AC-FT‡	-3080						
WTR YR 1985	MAX	1350.33	MIN	1179.27	AC-FT‡	-20620						

† Contents, in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

WILLAMETTE RIVER BASIN

14162200 BLUE RIVER AT BLUE RIVER, OR

LOCATION.--Lat 44°09'45", long 122°19'55", in NW¼SE¼ sec.21, T.16 S., R.4 E., Lane County, Hydrologic Unit 17090004, on right bank 0.3 mi upstream from Simmonds Creek, 0.7 mi north of town of Blue River, 0.8 mi downstream from Blue River Dam, and at mile 0.9.

DRAINAGE AREA.--87.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,056.53 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Aug. 25, 1966, nonrecording gage at datum 0.80 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since October 1968 by Blue River Lake (see sta 14162100). No diversion upstream from station. Discharge not adjusted for storage or release from Blue River Lake as losses from reservoir at times exceed natural flow.

AVERAGE DISCHARGE.--19 years, 475 ft³/s, 344,100 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,270 ft³/s Feb. 23, 1968, gage height, 8.93 ft; minimum, 0.80 ft³/s Oct. 8, 10, 11, 1968; minimum daily, 3.7 ft³/s Oct. 8, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,060 ft³/s Dec. 2, gage height, 7.65 ft; minimum, 10 ft³/s Feb. 5; minimum daily, 39 ft³/s Feb. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	1440	724	378	42	51	789	221	223	50	527	475
2	124	1330	1840	293	44	52	1600	244	223	50	495	498
3	124	1480	1310	293	44	52	1980	337	184	50	495	507
4	123	2160	444	289	45	52	1140	387	163	50	490	498
5	122	2740	363	299	39	52	683	333	163	78	490	495
6	122	2560	323	339	47	53	741	212	944	180	486	491
7	122	2090	304	396	58	53	911	112	1010	281	486	485
8	122	1820	317	382	64	52	968	63	652	333	416	489
9	122	1510	442	341	61	52	793	63	577	359	384	494
10	122	1010	1510	301	61	53	654	63	427	456	391	486
11	122	1670	1170	282	62	53	654	63	339	532	390	349
12	164	1820	886	277	74	53	619	63	286	532	387	139
13	311	975	745	259	58	53	571	63	232	529	384	51
14	297	1400	543	276	50	53	534	167	211	528	446	51
15	364	1850	654	310	51	53	511	266	211	528	486	121
16	407	1860	621	320	51	53	512	284	181	527	483	119
17	512	1890	457	494	50	54	511	368	165	525	480	93
18	587	1820	373	633	50	54	293	419	164	558	478	108
19	716	1460	343	553	50	54	197	430	148	573	474	102
20	796	779	305	474	51	54	223	388	133	571	471	77
21	786	550	297	429	51	56	222	343	133	571	467	58
22	775	460	289	370	51	58	226	291	110	571	465	58
23	765	445	350	307	51	64	330	263	79	571	490	57
24	882	515	398	285	51	67	746	296	79	593	507	56
25	963	484	354	285	51	63	733	292	79	592	503	56
26	1170	425	331	257	51	56	414	254	105	575	498	56
27	1580	571	333	238	51	56	298	232	116	571	494	56
28	1690	1570	360	211	51	54	262	223	116	571	492	56
29	1650	1380	344	99	---	53	262	223	72	571	487	56
30	1590	541	444	42	---	55	233	223	50	567	483	56
31	1600	---	535	42	---	362	---	223	---	565	479	---
TOTAL	18954	40605	17709	9754	1460	2000	18610	7409	7575	13608	14504	6693
MEAN	611	1354	571	315	52.1	64.5	620	239	253	439	468	223
MAX	1690	2740	1840	633	74	362	1980	430	1010	593	527	507
MIN	122	425	289	42	39	51	197	63	50	50	384	51
AC-FT	37600	80540	35130	19350	2900	3970	36910	14700	15030	26990	28770	13280
CAL YR 1984	TOTAL	208327	MEAN	569	MAX	2740	MIN	55	AC-FT	413200		
WTR YR 1985	TOTAL	158881	MEAN	435	MAX	2740	MIN	39	AC-FT	315100		

WILLAMETTE RIVER BASIN

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14162200 BLUE RIVER AT BLUE RIVER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1966 to current year.

INSTRUMENTATION.--Temperature recorder since August 1966.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 26.0°C July 6, 1968; minimum, 0.0°C Jan. 5-9, 1974, Dec. 23, 24, 1983.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 20.0°C Sept. 3-7; minimum, 2.0°C Dec. 20-22.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14162200 BLUE RIVER AT BLUE RIVER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14162500 MCKENZIE RIVER NEAR VIDA, OR

LOCATION.--Lat 44°07'30", long 122°28'10", in NE¼NE¼ sec.5, T.17 S., R.3 E., Lane County, Hydrologic Unit 17090004, on right bank 0.4 mi downstream from Mason Creek, 5.4 mi east of Vida, and at mile 47.7.

DRAINAGE AREA.--930 mi² at cableway 0.4 mi downstream, where all discharge measurement are made.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1910 to March 1911 (published as "at Martins Rapids, near Vida"), September 1924 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 855.71 ft above National Geodetic Vertical Datum of 1929 (levels by Eugene Water and Electric Board). July 1, 1910, to Mar. 31, 1911, nonrecording gage at site 3 mi downstream at different datum. Sept. 1, 1924, to Nov. 16, 1928, nonrecording gage at site 20 ft upstream at datum 0.15 ft lower. Nov. 17, 1928, to Sept. 23, 1968, water-stage recorder at present site on left bank at datum 0.15 ft lower.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. Flow regulated since 1963 by Smith River Reservoir (see sta 14158795) and Cougar Lake (see sta 14159400), and since 1968 by Blue River Lake (see sta 14162100). No diversion upstream from station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--61 years (water years 1925-85), 4,061 ft³/s, 2,942,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 64,400 ft³/s Dec. 28, 1945, gage height, 17.70 ft, site and datum then in use, from rating curve extended above 32,000 ft³/s; minimum, 1,260 ft³/s Nov. 7, 1930, Sept. 17, Oct. 4, 8, 9, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1923 reached a stage of 17.2 ft, from floodmarks, discharge, 62,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,800 ft³/s Nov. 2, gage height, 5.74 ft; minimum, 2,200 ft³/s Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2720	4850	7020	4330	2400	2800	5460	4120	3890	2400	3190	2830
2	2740	10200	7380	3830	2420	2820	6510	4330	3850	2480	3090	2880
3	2750	12300	6750	3400	2400	2740	6720	4650	3760	2500	3070	2620
4	2730	9480	5120	3370	2300	2780	5570	4470	3760	2440	3070	2830
5	2700	9270	4740	3380	2290	2700	4770	4140	3770	2400	3040	2850
6	2700	9860	4510	3460	2300	2660	4850	4160	5780	2460	3000	2990
7	2700	9470	4400	3570	2790	2570	5310	4250	7120	2540	3010	2960
8	2710	8670	4330	3500	3050	2480	5410	3930	5850	2580	3030	2910
9	2740	8180	4480	3350	2900	2450	5270	3690	5950	2630	2950	2920
10	2760	9520	7040	3210	2580	2420	5370	3480	5980	2750	2920	2940
11	2720	10700	6280	3140	2990	2420	5310	3380	5100	2900	2900	2780
12	3020	11700	6110	3360	4490	2430	5040	3280	4480	2900	2890	2540
13	3490	10600	5680	3610	3590	2420	4880	3370	4180	2880	2870	2410
14	3400	11700	5200	3500	3480	2410	5150	3680	3930	2860	2870	2450
15	3390	11100	5390	3110	4010	2390	5240	3740	3800	2840	2920	2550
16	3280	10800	5120	3120	3750	2450	5140	3920	3670	2830	2920	2530
17	3330	10400	4740	3480	3390	2510	4740	4320	3430	2810	2920	2570
18	3370	10300	4440	3800	3160	2520	4350	4850	3320	2830	2920	2660
19	3870	8800	4140	3670	3110	2520	4150	5400	3320	2870	2940	2520
20	4310	7110	3810	3450	3160	2570	3970	5190	3210	3040	2920	2460
21	3980	6620	3530	3330	3090	2760	3850	4840	3140	3030	2910	2380
22	3820	6260	3440	3210	3130	2680	4010	4740	2990	3040	2860	2330
23	3730	6270	3570	3110	3080	3300	5150	4710	2910	3010	2850	2330
24	3840	6240	3690	3100	3080	4020	5130	4840	2870	2990	2870	2330
25	3970	5670	3570	3070	3130	3400	4870	4800	2750	2970	2930	2320
26	5690	5220	3480	3010	3020	3230	4170	4640	2720	2960	2920	2320
27	5680	5620	3570	2910	2860	3250	4020	4460	2730	2960	2890	2320
28	6440	8150	3690	2810	2770	3200	4140	4260	2700	2950	2870	2320
29	5710	7940	3770	2610	---	3160	4120	4230	2610	3020	2850	2320
30	5210	8540	4340	2420	---	3310	4020	4020	2480	3170	2830	2300
31	5080	---	4410	2390	---	4450	---	3910	---	3230	2830	---
TOTAL	114580	261540	147740	101610	84720	87820	146690	131800	116050	87270	91050	77470
MEAN	3696	8718	4766	3278	3026	2833	4890	4252	3868	2815	2937	2582
MAX	6440	12300	7380	4330	4490	4450	6720	5400	7120	3230	3190	2990
MIN	2700	4850	3440	2390	2290	2390	3850	3280	2480	2400	2830	2300
AC-FT	227300	518800	293000	201500	168000	174200	291000	261400	230200	173100	180600	153700
CAL YR 1984	TOTAL	1863860	MEAN	5093	MAX	16000	MIN	2620	AC-FT	3697000		
WTR YR 1985	TOTAL	1448340	MEAN	3968	MAX	12300	MIN	2290	AC-FT	2873000		

WILLAMETTE RIVER BASIN

14162500 MCKENZIE RIVER NEAR VIDA, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1976 to September 1985 (discontinued).

WATER TEMPERATURES: June 1961 to September 1985 (discontinued).

INSTRUMENTATION.--Graphic temperature recorder June 1961 to November 1976. Dual conductivity-temperature recorder since November 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 72 microsiemens Nov. 20, 1980; minimum recorded, 24 microsiemens Nov. 25, 1977.

WATER TEMPERATURES: Maximum, 16.0°C July 6, 7, 28, 1968; minimum recorded, 0.5°C Jan. 1, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 56 microsiemens Sept. 30; minimum, 34 microsiemens Nov. 3, 4.

WATER TEMPERATURES: Maximum, 14.5°C July 4, 9, Aug. 26, Sept. 3; minimum, 1.5°C Feb. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
APR 11...	1500	5270	41	7.30	7.5	12.4	15	0	3.6	1.4	3.0
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)
APR 11...	.80	.80	.9	<.10	.020	.40	<.10	.020	<.10	.030	.020
DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	
APR 11...	1.4	.20	18	37	41	1.0	<1	12	200	<1	
DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	
APR 11...	<1	10	20	<1	1	2	9	7	40	<1	
DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	
APR 11...	2	2	<10	<.1	3	<1	<1	1	9	<10	

WILLAMETTE RIVER BASIN

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14162500 MCKENZIE RIVER NEAR VIDA, OR--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	47	43	48	52	49	42	43	42	50	47	50
2	44	44	43	49	52	48	39	42	42	49	47	51
3	45	35	45	49	52	49	38	41	42	50	46	51
4	46	36	47	49	52	49	39	42	42	49	45	50
5	47	37	48	50	52	49	41	43	42	50	46	50
6	46	39	47	49	53	49	40	44	40	49	47	50
7	45	39	49	48	51	50	39	42	41	49	47	50
8	46	41	48	49	49	50	39	41	43	48	47	50
9	46	43	48	49	50	50	39	42	43	47	46	50
10	47	40	45	49	52	50	37	44	45	47	46	50
11	47	39	45	49	52	50	38	44	45	47	47	51
12	47	36	46	48	47	50	39	45	45	46	47	52
13	46	36	47	48	46	50	38	45	45	46	47	52
14	46	36	48	48	46	50	38	44	45	46	46	52
15	45	36	46	49	44	50	38	44	46	45	47	52
16	46	36	46	49	46	49	38	43	46	46	44	52
17	46	36	47	48	47	49	39	41	46	45	43	52
18	44	36	47	46	48	49	40	41	46	45	43	53
19	47	37	48	46	49	49	41	39	45	45	45	53
20	47	39	49	47	48	49	42	39	46	45	45	53
21	47	40	49	47	49	47	42	40	47	46	45	54
22	46	41	50	47	49	48	42	39	48	46	45	54
23	46	41	49	48	49	47	41	39	50	46	44	53
24	44	42	49	49	49	45	42	39	51	46	44	53
25	45	43	49	49	49	47	42	39	51	46	45	53
26	44	44	50	49	49	47	44	40	50	46	46	53
27	43	43	49	50	49	47	44	40	50	47	47	53
28	44	40	49	50	49	48	44	41	51	47	48	54
29	44	44	49	51	---	48	44	41	50	46	49	54
30	46	42	47	52	---	48	44	41	50	46	49	55
31	46	---	47	52	---	45	---	41	---	47	50	---
MEAN	46	40	47	49	49	49	40	42	46	47	46	52
WTR YR 1985	MEAN	46		MAX	55		MIN	35				

14162500 MCKENZIE RIVER NEAR VIDA, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

14163000 GATE CREEK AT VIDA, OR

LOCATION.--Lat 44°08'45", long 122°34'15", in SW¼ sec.28, T.16 S., R.2 E., Lane County, Hydrologic Unit 17090004, on right bank 300 ft downstream from bridge on State Highway 126, at Vida, and at mile 0.2.

DRAINAGE AREA.--47.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1951 to September 1957; annual maximums, water years 1958-65; August 1966 to current year.

REVISED RECORDS.--WDR OR-83-2: 1976(M,P), 1978(M,P), 1979(M,P), 1980(M), 1981(M,P), 1982(M,P).

GAGE.--Water-stage recorder. Datum of gage is 764.56 ft above National Geodetic Vertical Datum of 1929. June 11, 1951, to Sept. 30, 1957, water-stage recorder, and Oct. 1, 1957, to Aug. 1, 1966, crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 29 to Jan. 2, Feb. 7, 8, 11-17, 19-25. Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--25 years (water years 1952-57, 1967-85), 215 ft³/s, 61.34 in/yr, 155,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,140 ft³/s Dec. 22, 1964, gage height, 12.18 ft, from slope-area measurement of peak flow; minimum, 12 ft³/s Nov. 26, 27, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 30	0630	*1,910	*6.22	No other peak greater than base discharge.			
Minimum, 14 ft ³ /s Aug. 26, 27, 31, Sept. 1.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	23	125	849	320	94	211	737	144	70	40	30	15		
2	22	1120	565	270	92	196	639	135	68	39	26	22		
3	22	1040	419	264	88	178	511	146	60	37	23	18		
4	24	617	333	255	81	195	402	134	70	36	22	16		
5	24	364	277	246	82	185	339	123	65	35	22	19		
6	23	279	238	240	82	178	312	116	226	35	20	56		
7	22	323	215	236	230	165	292	109	345	34	26	30		
8	22	301	202	212	250	153	259	103	304	32	35	22		
9	27	480	216	193	170	147	238	99	188	31	27	22		
10	27	988	508	177	143	145	223	98	139	30	23	21		
11	38	744	373	165	240	144	205	99	115	30	21	20		
12	65	600	498	156	540	141	187	90	100	30	20	23		
13	114	679	459	149	360	134	174	87	89	29	19	28		
14	94	638	385	150	350	130	164	87	81	28	18	37		
15	100	434	419	150	460	129	154	82	75	27	17	68		
16	54	326	335	143	380	131	143	79	71	27	17	37		
17	42	269	285	150	300	133	133	76	66	26	17	64		
18	48	263	248	153	259	132	143	74	62	26	17	65		
19	170	239	220	143	249	127	161	71	59	25	19	37		
20	144	270	205	137	240	131	146	70	56	24	20	29		
21	91	273	204	131	220	147	163	67	54	23	18	25		
22	65	235	206	125	250	147	242	65	52	23	17	23		
23	51	246	241	119	260	461	460	63	50	23	16	22		
24	51	261	274	115	275	519	329	64	49	23	16	21		
25	55	251	240	109	290	352	259	62	48	22	16	20		
26	328	247	219	105	250	332	219	59	46	22	15	19		
27	328	544	245	101	222	346	198	58	45	21	15	18		
28	579	1070	264	99	210	304	189	60	45	21	15	17		
29	291	915	280	99	---	295	169	63	43	22	15	16		
30	178	1520	415	92	---	401	155	58	42	27	15	16		
31	153	---	375	91	---	714	---	71	---	31	15	---		
TOTAL	3275	15661	10212	5095	6667	7103	7945	2712	2783	879	612	846		
MEAN	106	522	329	164	238	229	265	87.5	92.8	28.4	19.7	28.2		
MAX	579	1520	849	320	540	714	737	146	345	40	35	68		
MIN	22	125	202	91	81	127	133	58	42	21	15	15		
CFSM	2.23	11.0	6.91	3.45	5.00	4.81	5.57	1.84	1.95	.60	.41	.59		
IN.	2.56	12.24	7.98	3.98	5.21	5.55	6.21	2.12	2.17	.69	.48	.66		
AC-FT	6500	31060	20260	10110	13220	14090	15760	5380	5520	1740	1210	1680		
CAL YR 1984	TOTAL	95055	MEAN	260	MAX	2630	MIN	22	CFSM	5.46	IN.	74.29	AC-FT	188500
WTR YR 1985	TOTAL	63790	MEAN	175	MAX	1520	MIN	15	CFSM	3.68	IN.	49.85	AC-FT	126500

WILLAMETTE RIVER BASIN

14165000 MOHAWK RIVER NEAR SPRINGFIELD, OR

LOCATION.--Lat 44°05'34", long 122°57'20", in SE¼NW¼ sec.17, T.17 S., R.2 W., Lane County, Hydrologic Unit 17090004, on left bank 50 ft downstream from bridge, 1.3 mi northeast of Springfield, and at mile 1.59.

DRAINAGE AREA.--177 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1935 to September 1952, October 1963 to current year. Prior to October 1935 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1248: 1939. WSP 1738: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 442.47 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1935, to Sept. 30, 1952, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 5, 6, 8-10, 15, 18, 19, Dec. 2, 3, Apr. 3, 4. Records good. Many diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--39 years, 540 ft³/s, 41.43 in/yr, 391,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s Dec. 22, 1964, gage height, 22.60 ft; minimum, 8.2 ft³/s Sept. 9, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached at stage of 22.9 ft, from floodmark, probably affected by backwater from McKenzie River, discharge, 9,200 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 30	1200	*4,910	*12.84	No other peak greater than base discharge.			
Minimum, 14 ft ³ /s Aug. 27-29.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	35	181	3020	1040	290	479	1170	294	140	84	87	15		
2	35	1910	2070	911	335	462	1100	277	136	79	58	18		
3	34	2470	1600	806	347	432	970	283	119	75	29	23		
4	37	1500	1310	726	301	554	850	274	126	70	27	19		
5	45	910	1080	668	298	493	745	245	119	68	25	18		
6	41	800	912	625	290	474	667	233	265	68	23	33		
7	38	928	800	591	1010	446	608	220	618	66	21	44		
8	37	750	720	552	1690	419	562	210	569	63	29	26		
9	51	1200	699	522	1250	399	522	208	380	59	28	26		
10	53	3000	1260	495	962	378	493	205	308	57	24	33		
11	91	2430	1170	465	997	361	460	212	240	58	22	27		
12	85	2550	1220	442	2460	347	421	191	208	57	21	31		
13	177	2160	1220	419	1600	329	392	183	190	53	20	75		
14	130	2020	1090	409	1270	314	370	187	173	49	20	71		
15	130	1530	1180	394	1390	303	359	173	162	49	18	76		
16	86	1280	1030	371	1200	303	337	164	153	46	18	54		
17	70	1090	913	361	1010	293	308	159	142	45	18	66		
18	75	1100	841	358	876	285	311	154	132	44	18	75		
19	212	910	738	346	807	277	399	147	124	42	20	47		
20	210	1160	682	331	793	280	350	144	120	38	23	38		
21	137	1170	672	320	717	387	322	138	115	34	22	35		
22	107	972	633	311	689	399	380	130	112	33	19	33		
23	90	1030	626	300	661	1050	462	125	107	34	18	31		
24	87	1350	628	290	638	1550	455	127	103	34	18	29		
25	88	1200	603	280	613	1140	448	126	102	33	16	27		
26	346	1060	587	272	574	1080	410	118	99	31	16	26		
27	373	1550	689	266	529	1360	384	117	96	29	14	26		
28	553	3110	802	270	503	1320	358	124	98	28	14	26		
29	443	2750	753	279	---	1100	335	124	92	27	14	24		
30	271	4220	1240	269	---	1050	310	117	88	33	15	23		
31	225	---	1200	269	---	1170	---	158	---	65	15	---		
TOTAL	4392	48291	31988	13958	24100	19234	15258	5567	5436	1551	730	1095		
MEAN	142	1610	1032	450	861	620	509	180	181	50.0	23.5	36.5		
MAX	553	4220	3020	1040	2460	1550	1170	294	618	84	87	76		
MIN	34	181	587	266	290	277	308	117	88	27	14	15		
CFSM	.80	9.10	5.83	2.54	4.86	3.50	2.88	1.02	1.02	.28	.13	.21		
IN.	.92	10.15	6.72	2.93	5.07	4.04	3.21	1.17	1.14	.33	.15	.23		
AC-FT	8710	95790	63450	27690	47800	38150	30260	11040	10780	3080	1450	2170		
CAL YR 1984	TOTAL	258600	MEAN	707	MAX	8270	MIN	34	CFSM	3.99	IN.	54.35	AC-FT	512900
WTR YR 1985	TOTAL	171600	MEAN	470	MAX	4220	MIN	14	CFSM	2.66	IN.	36.07	AC-FT	340400

WILLAMETTE RIVER BASIN

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14166000 WILLAMETTE RIVER AT HARRISBURG, OR

LOCATION.--Lat 44°16'14", long 123°10'21", in NW¼NE¼ sec.16, T.15 S., R.4 W., Linn County, Hydrologic Unit 17090003, on right bank 75 ft north of intersection of First Street and Kesling Street in Harrisburg and at mile 161.0.

DRAINAGE AREA.--3,420 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to current year. Gage-height records collected at same site in 1927-28, 1931, 1934, are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 288.39 ft above National Geodetic Vertical Datum of 1929. Oct 1 to Nov. 14, 1944, nonrecording gage at bridge 1,110 ft upstream at different datum. Nov. 15, 1944, to Aug. 15, 1973, at site 1,100 ft upstream at datum 2.00 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated by 8 reservoirs upstream from station (see elsewhere in this report). Many small diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--41 years, 12,270 ft³/s, 8,890,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 210,000 ft³/s Dec. 29, 1945, gage height, 19.69 ft, from rating curve extended above 115,000 ft³/s; minimum, 1,990 ft³/s Oct 30, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood stage of 20.5 ft was reached in December 1861, and 20.1 ft in February 1890 (information from Corps of Engineers). Flood of Jan. 1, 1943, reached a stage of 19.1 ft from National Weather Service.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 49,100 ft³/s Nov. 30, gage height, 12.07 ft; minimum, 3,940 ft³/s July 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8960	13900	36700	15100	5420	6700	13000	7230	7990	4360	5270	5870
2	8940	18900	36000	13800	5700	6580	15400	7280	7980	4290	5030	5940
3	8910	36700	34500	12500	5890	6330	16900	7460	7770	4320	4940	5990
4	8870	30900	28000	11700	5660	6480	14500	7680	7570	4130	4860	6060
5	8860	31900	24500	11200	5490	6480	11000	7210	7380	4020	4830	6690
6	8850	31300	22600	10900	5470	6350	10200	6850	7970	4000	4760	7080
7	8750	31400	20000	10800	7340	6140	9930	6930	15500	4090	4740	7570
8	8780	28200	16700	11200	14500	5980	9930	6710	16200	4110	4910	7720
9	8870	26800	15800	10500	13600	5860	9650	6330	17100	4050	4970	7730
10	8950	34100	19600	9450	11100	5880	9240	6090	15500	4130	4900	7830
11	9100	28400	25000	8720	9610	6730	9160	5950	12200	4310	4930	8410
12	9160	36600	22100	8330	16400	6130	8860	5760	10500	4360	4930	8400
13	9920	27500	23300	8620	17200	5550	8340	5640	9420	4350	4930	7820
14	10300	40700	21300	8610	13700	5420	8370	5860	8740	4340	4930	7920
15	10300	38100	20100	8260	14000	5370	8310	6060	8370	4300	4930	8150
16	10300	38100	17700	7980	14100	5410	8270	5960	8020	4260	4930	8080
17	10100	36000	15600	7870	12000	5400	7900	6230	7720	4250	4930	8280
18	10200	33900	14500	8400	10200	5380	7500	6560	6920	4210	4970	8560
19	10500	31500	13500	8490	9110	5350	7560	7200	6120	4210	5060	8280
20	11900	27800	12600	8430	9120	5330	7420	7480	5640	4280	5100	8310
21	11400	27900	12000	8310	8820	5690	7080	8230	5370	4400	5050	8300
22	11000	26100	11200	8180	8550	5880	7580	9610	5230	4440	5030	8250
23	11100	24900	10600	7360	8520	7390	8700	9800	5200	4410	4990	8220
24	11000	27600	11500	6740	8470	12300	10900	9660	5160	4350	4980	8180
25	11400	26100	11200	6650	8440	11000	12800	9810	5070	4410	5030	8100
26	12900	24700	10900	6620	7950	10800	11400	9630	4940	4290	5030	7540
27	14900	24300	10500	6490	7560	12100	10000	9490	4810	4400	5150	7580
28	17500	37000	11300	6440	7040	12300	9720	9320	4760	4530	5630	7440
29	18000	40700	11500	6170	---	11200	8170	8740	4620	4540	5750	7400
30	15700	43400	13900	5470	---	10600	7570	8280	4490	4780	5760	7420
31	14500	---	16100	5320	---	11400	---	8030	---	5150	5830	---
TOTAL	339920	925400	570800	274610	270960	229510	295360	233070	244260	134070	157080	229120
MEAN	10970	30850	18410	8858	9677	7404	9845	7518	8142	4325	5067	7637
MAX	18000	43400	36700	15100	17200	12300	16900	9810	17100	5150	5830	8560
MIN	8750	13900	10500	5320	5420	5330	7080	5640	4490	4000	4740	5870
AC-FT	674200	1836000	1132000	544700	537400	455200	585800	462300	484500	265900	311600	454500
CAL YR 1984	TOTAL	5295950	MEAN	14470	MAX	44800	MIN	4410	AC-FT	10505000		
WTR YR 1985	TOTAL	3904160	MEAN	10700	MAX	43400	MIN	4000	AC-FT	7744000		

WILLAMETTE RIVER BASIN

14166000 WILLAMETTE RIVER AT HARRISBURG, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

INSTRUMENTATION.--Temperature recorder since October 1970.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 24.0°C Aug. 12, 1973; minimum, 0.0°C Jan. 8, 9, 1973.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 20.5°C July 19, 20; minimum, 2.5°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14166000 WILLAMETTE RIVER AT HARRISBURG, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14166500 LONG TOM RIVER NEAR NOTI, OR

LOCATION.--Lat 44°03'00", long 123°25'30", in sec.33, T.17 S., R.6 W., Lane County, Hydrologic Unit 17090003, on left bank 0.2 mi upstream from Southern Pacific Railroad bridge, 0.8 mi downstream from Noti Creek, 1.3 mi southeast of Noti, and at mile 37.4.

DRAINAGE AREA.--89.3 mi².

PERIOD OF RECORD.--October 1935 to current year.

REVISED RECORDS.--WSP 1318: 1936(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 389.05 ft above National Geodetic Vertical Datum of 1929 (levels by National Weather Service). Prior to Nov. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Apr. 10 to May 2, May 20-29. Records fair. Slight regulation caused by logpond upstream from Noti. No diversion upstream from station.

AVERAGE DISCHARGE.--50 years, 234 ft³/s, 35.58 in/yr, 169,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,990 ft³/s Dec. 22, 1955, gage height, 20.17 ft; minimum, 0.04 ft³/s Aug. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 10	1630	1,660	12.14	Nov. 28	1830	*1,810	*12.64
Nov. 12	1900	1,790	12.59				

Minimum, 9.7 ft³/s Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	17	79	1090	499	112	169	417	107	80	35	32	15		
2	17	942	796	412	123	163	364	101	67	31	26	14		
3	18	1100	628	352	119	158	325	101	59	29	22	15		
4	19	626	500	311	108	176	292	100	57	29	19	14		
5	23	327	420	286	105	202	266	97	55	28	19	12		
6	24	246	361	268	102	185	248	96	143	28	17	14		
7	23	303	323	254	242	172	228	94	399	28	17	15		
8	22	271	301	236	642	162	203	90	282	27	18	16		
9	33	398	297	218	618	154	198	87	167	24	19	18		
10	38	1360	359	204	579	152	191	85	122	24	16	21		
11	70	1130	422	192	525	128	179	84	100	23	15	19		
12	78	1470	445	184	760	131	179	82	88	23	15	21		
13	91	1270	512	175	599	130	167	80	79	22	15	31		
14	84	801	455	167	466	126	155	79	72	22	15	28		
15	80	514	424	164	390	119	155	77	66	22	13	27		
16	78	413	373	158	323	123	191	77	62	21	13	24		
17	53	342	331	152	292	118	144	75	58	20	13	22		
18	42	413	304	149	266	114	144	75	54	20	14	22		
19	100	422	280	145	248	111	144	75	50	19	16	20		
20	110	476	253	138	257	113	144	75	47	18	16	18		
21	81	505	251	132	238	138	130	69	44	17	16	17		
22	65	431	241	129	222	155	144	63	43	17	14	18		
23	50	376	231	125	202	316	144	63	41	18	13	19		
24	43	411	222	120	204	612	144	51	40	17	13	15		
25	41	417	214	116	189	482	130	51	40	16	13	14		
26	67	424	212	115	181	415	118	52	40	16	13	12		
27	132	646	231	112	179	681	118	52	38	15	12	13		
28	187	1600	306	112	174	808	118	52	36	14	18	13		
29	159	1480	329	109	---	595	107	62	35	15	16	15		
30	109	1290	818	106	---	491	107	58	35	16	12	13		
31	92	---	709	105	---	465	---	79	---	27	12	---		
TOTAL	2046	20483	12638	5945	8465	8064	5594	2389	2499	681	502	535		
MEAN	66.0	683	408	192	302	260	186	77.1	83.3	22.0	16.2	17.8		
MAX	187	1600	1090	499	760	808	417	107	399	35	32	31		
MIN	17	79	212	105	102	111	107	51	35	14	12	12		
CFSM	.74	7.65	4.57	2.15	3.38	2.91	2.08	.86	.93	.25	.18	.20		
IN.	.85	8.53	5.26	2.48	3.53	3.36	2.33	.00	1.04	.28	.21	.22		
AC-FT	4060	40630	25070	11790	16790	15990	11100	4740	4960	1350	996	1060		
CAL YR 1984	TOTAL	95622	MEAN	261	MAX	3330	MIN	15	CFSM	2.92	IN.	39.83	AC-FT	189700
WTR YR 1985	TOTAL	69841	MEAN	191	MAX	1600	MIN	12	CFSM	2.14	IN.	29.09	AC-FT	138500

WILLAMETTE RIVER BASIN

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14167000 COYOTE CREEK NEAR CROW, OR

LOCATION.--Lat 44°01'19", long 123°15'17", in SW¼NE¼ sec.11, T.18 S., R.5 W., Lane County, Hydrologic Unit 17090003, on right bank 1.0 mi downstream from Spencer Creek, 4.3 mi northeast of Crow, and at mile 3.8.

DRAINAGE AREA.--95.1 mi².

PERIOD OF RECORD.--July 1940 to current year.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 374.0 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Aug. 31, 1940, nonrecording gage near same site at different datums.

REMARKS.--No estimated daily discharges. Records good. No regulation. Several small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--45 years, 178 ft³/s, 25.42 in/yr, 129,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s Feb. 10, 1961, gage height, 14.43 ft, from rating curve extended above 4,700 ft³/s; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	1800	*2,080	*10.83	Nov. 30	2000	1,930	10.69

Minimum discharge, no flow Aug. 19, Aug. 21 to Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	.68	10	1360	359	52	77	267	33	30	4.1	.10	.00		
2	.74	234	826	281	62	75	212	32	28	3.9	.08	.00		
3	.70	531	579	231	72	70	175	29	27	3.5	.08	.00		
4	.72	344	382	193	61	84	146	30	20	3.1	.27	.00		
5	.75	164	288	172	56	83	125	28	18	2.7	.48	.00		
6	.67	128	231	154	59	75	110	27	37	2.5	.45	.00		
7	.72	164	199	141	347	69	99	26	121	2.3	.26	.00		
8	.92	141	179	123	1230	66	90	24	121	2.4	.15	.00		
9	.92	276	222	109	1210	64	82	23	59	2.5	.14	.00		
10	.93	1160	491	97	835	61	75	22	41	2.1	.14	.00		
11	1.5	1120	577	88	599	59	69	22	30	1.7	.08	.00		
12	3.5	1250	556	79	655	59	63	21	23	1.2	.04	.00		
13	4.4	1120	549	74	526	57	58	20	20	.88	.02	.00		
14	4.8	806	432	74	378	57	56	19	17	.97	.11	.57		
15	7.3	529	382	74	330	56	54	19	14	1.2	.14	.69		
16	6.5	330	301	70	254	55	52	18	13	1.2	.12	.59		
17	5.4	257	242	64	206	54	50	17	12	1.2	.08	.40		
18	3.0	427	214	62	178	53	48	15	11	1.0	.01	.23		
19	4.8	344	172	60	160	52	49	14	9.3	.98	.00	.16		
20	9.9	521	148	58	172	51	53	13	8.4	.51	.01	.14		
21	8.3	574	152	56	148	56	49	13	7.5	.14	.00	.11		
22	5.6	402	137	54	131	62	51	12	6.8	.08	.00	.10		
23	4.0	351	119	52	118	246	57	12	6.1	.05	.00	.07		
24	3.1	518	108	50	107	599	60	11	5.7	.04	.00	.06		
25	4.8	437	102	49	98	475	50	11	5.6	.12	.00	.04		
26	6.1	410	101	47	91	406	47	11	5.5	.14	.00	.03		
27	9.9	679	153	47	85	877	44	9.9	5.1	.11	.00	.03		
28	21	1750	237	52	80	1160	41	11	4.7	.10	.00	.02		
29	35	1530	217	51	---	800	39	14	4.7	.12	.00	.01		
30	19	1730	530	48	---	481	36	13	4.6	.10	.00	.01		
31	13	---	510	50	---	341	---	22	---	.15	.00	---		
TOTAL	188.65	18237	10696	3119	8300	6780	2407	591.9	716.0	41.09	2.76	3.26		
MEAN	6.09	608	345	101	296	219	80.2	19.1	23.9	1.33	.09	.11		
MAX	35	1750	1360	359	1230	1160	267	33	121	4.1	.48	.69		
MIN	.67	10	101	47	52	51	36	9.9	4.6	.04	.00	.00		
CFSM	.06	6.39	3.63	1.06	3.11	2.30	.84	.20	.25	.01	.00	.00		
IN.	.07	7.13	4.18	1.22	3.25	2.65	.94	.23	.28	.02	.00	.00		
AC-FT	374	36170	21220	6190	16460	13450	4770	1170	1420	82	5.5	6.5		
CAL YR 1984	TOTAL	72083.81	MEAN	197	MAX	4690	MIN	.47	CFSM	2.07	IN.	28.20	AC-FT	143000
WTR YR 1985	TOTAL	51082.66	MEAN	140	MAX	1750	MIN	.00	CFSM	1.47	IN.	19.98	AC-FT	101300

WILLAMETTE RIVER BASIN

14168000 FERN RIDGE LAKE NEAR ELMIRA, OR

LOCATION.--Lat 44°07'15", long 123°18'00", near center of sec.4, T.17 S., R.5 W., Lane County, Hydrologic Unit 17090003, in control house at spillway section of dam across Long Tom River and Coyote Creek, 4.5 mi northeast of Elmira, and at mile 25.7.

DRAINAGE AREA.--252 mi², not including Amazon Creek basin (see REMARKS).

PERIOD OF RECORD.--October 1941 to current year. Prior to October 1971, published as Fern Ridge Reservoir near Elmira.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by earth-fill dam with concrete outlet and spillway, completed in 1941 by Corps of Engineers; storage began Nov. 13, 1941. Total capacity, 116,800 acre-ft at elevation 375.1 ft, maximum pool elevation. Usable capacity, 101,100 acre-ft between elevations 340.0 ft, sill of outlet gate, and 373.5 ft, normal maximum operating pool level. Reservoir used for flood control and improvement of navigation. Since November 1951, most of flow of Amazon Creek has been diverted in SE¼ sec.29, T.17 S., R.4 W., and discharged into Fern Ridge Lake; drainage area at point of diversion, 21.3 mi².

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 124,500 acre-ft Dec. 27, 1955, elevation, 375.83 ft; minimum since first filling in 1942, 163 acre-ft Nov. 11, 1950, elevation, 344.00 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 100,600 acre-ft June 7, elevation, 373.45 ft; minimum, 6,060 acre-ft Jan. 2, elevation, 352.23 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

349	2,270	356	12,440	364	37,490	372	87,720
350	3,250	358	17,020	366	46,940	374	105,800
352	5,730	360	22,670	368	58,320	376	126,300
354	8,760	362	29,460	370	71,900		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	371.94	361.24	361.47	352.39	356.83	365.41	371.36	372.99	373.23	373.11	372.38	371.63
2	371.94	361.13	361.63	352.95	357.04	365.50	371.51	373.00	373.24	373.10	372.35	371.61
3	371.92	360.75	360.79	353.14	357.22	365.60	371.65	373.01	373.26	373.08	372.34	371.59
4	371.94	359.85	359.19	353.20	357.43	365.71	371.77	373.02	373.26	373.05	372.32	371.57
5	371.94	358.63	357.04	353.33	357.61	365.81	371.88	373.04	373.27	373.02	372.30	371.56
6	371.93	357.56	353.84	353.36	357.81	365.90	371.98	373.04	373.39	373.02	372.28	371.52
7	371.92	356.55	352.80	353.31	358.98	365.99	372.05	373.05	373.45	372.99	372.26	371.49
8	371.94	356.02	353.18	353.18	360.89	366.06	372.13	373.06	373.42	372.96	372.23	371.48
9	371.88	356.35	353.32	353.17	362.37	366.13	372.20	373.06	373.41	372.93	372.20	371.46
10	371.79	358.28	353.34	353.27	363.33	366.20	372.24	373.06	373.42	372.91	372.17	371.44
11	371.61	359.06	353.19	353.39	363.85	366.25	372.29	373.07	373.43	372.89	372.15	371.43
12	371.40	359.70	353.10	353.46	364.07	366.31	372.34	373.08	373.44	372.86	372.13	371.44
13	371.12	360.26	353.13	353.51	364.03	366.36	372.39	373.07	373.44	372.82	372.11	371.45
14	370.85	359.76	353.03	353.55	363.91	366.41	372.42	373.07	373.43	372.79	372.09	371.45
15	370.51	358.45	353.09	353.57	363.85	366.46	372.46	373.07	373.42	372.76	372.07	371.44
16	370.16	356.71	353.21	353.58	363.81	366.49	372.50	373.08	373.40	372.73	372.04	371.43
17	369.81	354.62	352.98	353.55	363.79	366.54	372.54	373.08	373.40	372.71	372.01	371.43
18	369.46	353.55	353.18	353.70	363.80	366.58	372.57	373.08	373.39	372.68	371.98	371.41
19	369.07	353.46	353.52	354.08	363.97	366.62	372.61	373.07	373.38	372.66	371.96	371.39
20	368.63	354.30	353.42	354.39	364.20	366.70	372.64	373.07	373.35	372.63	371.93	371.38
21	368.17	354.35	353.32	354.71	364.41	366.80	372.70	373.08	373.33	372.60	371.90	371.36
22	367.70	353.74	353.28	354.96	364.58	366.93	372.75	373.08	373.30	372.57	371.88	371.34
23	367.21	353.72	353.12	355.20	364.74	367.33	372.78	373.07	373.26	372.53	371.86	371.32
24	366.68	353.80	353.17	355.40	364.88	367.92	372.82	373.06	373.25	372.50	371.84	371.28
25	366.14	353.39	353.16	355.60	365.01	368.33	372.85	373.06	373.23	372.46	371.82	371.28
26	365.63	353.17	353.05	355.77	365.11	368.79	372.88	373.05	373.22	372.43	371.80	371.27
27	365.05	353.98	353.07	355.95	365.22	369.50	372.91	373.05	373.20	372.40	371.76	371.24
28	364.42	355.81	352.92	356.14	365.32	370.19	372.92	373.07	373.18	372.37	371.73	371.21
29	363.70	358.01	353.34	356.30	---	370.70	372.95	373.07	373.15	372.34	371.70	371.18
30	362.90	360.13	353.59	356.47	---	371.04	372.97	373.08	373.13	372.34	371.67	371.13
31	362.00	---	352.86	356.62	---	371.23	---	373.19	---	372.37	371.65	---
MAX	371.94	361.24	361.63	356.62	365.32	371.23	372.97	373.19	373.45	373.11	372.38	371.63
MIN	362.00	353.17	352.80	352.39	356.83	365.41	371.36	372.99	373.13	372.34	371.65	371.13
(+)	29460	23070	6970	13750	43530	81370	96210	98200	97660	90890	84790	80570
(+)	-57920	-6390	-16100	+6780	+29780	+37840	+14840	+1990	-540	-6770	-6100	-4220

CAL YR 1984 MAX 373.55 MIN 352.80 AC-FT# +1300
WTR YR 1985 MAX 373.45 MIN 352.39 AC-FT# -6810

† Contents in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

WILLAMETTE RIVER BASIN

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14169001 LONG TOM RIVER NEAR ALVADORE, OR

LOCATION.--Lat 44°07'25", long 123°17'55", in SW¼NE¼ sec.4, T.17 S., R.5 W., Lane County, Hydrologic Unit 17090003, on left bank 0.2 mi downstream from Fern Ridge Dam, 1.7 mi west of Alvadore, and at mile 25.5.

DRAINAGE AREA.--252 mi², not including Amazon Creek basin.

PERIOD OF RECORD.--August 1939 to current year. Prior to October 1943, published as "at Smithfield," and October 1943 to September 1959, as "below Fern Ridge Dam, near Smithfield."

REVISED RECORDS.--WSP 1248: 1940-41, 1948.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 332.00 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 21, 1939, nonrecording gage and Sept. 21, 1939, to Sept. 30, 1943, water-stage recorder at site 2.5 mi downstream at datum 11.09 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1941 by Fern Ridge Lake (see station 14168000). Several small diversions for irrigation upstream from station. Records include diversion to Coyote Creek Channel. Point of diversion is 500 ft upstream and point of return, 2.3 mi downstream. Discharge not adjusted for storage or release from Fern Ridge Lake as evaporation from reservoir at times exceeds natural flow and diversions, and beginning in November 1951, most of flow of Amazon Creek has been diverted into Fern Ridge Lake.

COOPERATION.--Gage-height record for Coyote Creek diversion furnished by Corps of Engineers.

AVERAGE DISCHARGE.--46 years, 536 ft³/s, 388,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s Jan. 1, 1943, gage height, 15.12 ft, site and datum then in use; minimum daily, 2 ft³/s Aug. 7, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,120 ft³/s Nov. 12; minimum daily, 26 ft³/s Feb. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	1610	1140	1480	52	53	379	50	48	55	37	57
2	29	2280	1840	653	52	54	134	50	50	41	37	57
3	29	3060	3050	641	52	53	53	48	50	44	36	57
4	29	2970	3730	593	39	53	62	48	48	53	36	57
5	30	2590	3880	508	26	53	54	48	48	52	36	57
6	31	1930	3740	508	27	54	54	48	147	46	38	57
7	39	1690	1520	508	30	54	57	48	555	43	44	57
8	40	1210	496	508	32	54	58	49	513	48	44	57
9	211	994	679	423	32	54	63	50	267	54	44	57
10	574	1040	1410	330	33	55	69	50	104	57	44	57
11	825	2350	1580	297	561	56	55	50	48	57	44	57
12	951	3110	1550	297	1360	56	50	50	48	57	44	56
13	1120	2550	1450	297	1500	57	52	49	48	57	44	56
14	1100	3050	1260	297	1310	56	53	48	48	57	44	56
15	1240	3460	1090	297	1040	56	53	48	48	57	44	56
16	1310	3200	844	297	766	55	30	48	49	57	44	56
17	1290	2850	844	297	663	56	36	48	48	57	48	56
18	1360	1940	569	191	509	56	40	48	48	56	53	56
19	1500	1120	406	50	205	56	40	48	48	56	56	56
20	1530	1140	547	49	48	56	40	48	54	56	57	56
21	1500	1420	576	49	48	51	40	48	61	56	57	56
22	1490	1460	529	49	48	46	46	48	66	56	57	56
23	1490	1100	531	49	48	48	50	48	67	56	57	56
24	1500	1240	397	49	48	54	50	48	60	64	57	56
25	1520	1390	382	49	45	52	50	48	57	75	57	56
26	1470	1270	465	51	49	53	50	48	56	75	57	56
27	1640	1790	649	51	52	56	50	48	56	73	57	56
28	1740	2760	840	51	53	53	50	49	64	69	57	56
29	1750	1900	680	51	---	53	50	49	68	63	57	56
30	1730	1140	1490	52	---	51	50	49	68	63	57	175
31	1720	---	2120	52	---	289	---	49	---	48	57	---
TOTAL	30817	59614	40284	9074	8728	1903	1918	1506	2940	1758	1501	1810
MEAN	994	1987	1299	293	312	61.4	63.9	48.6	98.0	56.7	48.4	60.3
MAX	1750	3460	3880	1480	1500	289	379	50	555	75	57	175
MIN	29	994	382	49	26	46	30	48	48	41	36	56
AC-FT	61130	118200	79900	18000	17310	3770	3800	2990	5830	3490	2980	3590
CAL YR 1984	TOTAL	221686	MEAN	606	MAX	3880	MIN	25	AC-FT	439700		
WTR YR 1985	TOTAL	161853	MEAN	443	MAX	3880	MIN	26	AC-FT	321000		

WILLAMETTE RIVER BASIN

14170000 LONG TOM RIVER AT MONROE, OR

LOCATION.--Lat 44°18'50", long 123°17'45", in NE¼ sec.33, T.14 S., R.5 W., Benton County, Hydrologic Unit 17090003, on left bank in canalized river channel at Monroe, 110 ft upstream from bridge on State Highway 99W, 0.1 mi downstream from Shafer Creek, and at mile 6.8.

DRAINAGE AREA.--391 mi².

PERIOD OF RECORD.--November 1920 to July 1921, October 1921 to April 1926, November 1926 to May 1927, October 1927 to current year. Prior to October 1930, published as "near Monroe."

REVISED RECORDS.--WSP 654: Drainage area. WSP 1248: 1923, 1927, 1928(M). WSP 1288: 1952.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 270.57 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 24, 1944, nonrecording gage at various sites ranging from present site to 1.5 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1941 by Fern Ridge Lake (see station 14168000). Several small diversions upstream from station.

AVERAGE DISCHARGE.--62 years (water years 1922-25, 1928-85), 775 ft³/s, 561,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft³/s Jan. 2, 1943, gage height, 17.14 ft, site and datum then in use, from graph based on gage readings, includes some overflow from Willamette River near Junction City; no flow Oct. 20-22, 1944 (water filling pool at gage); minimum observed prior to regulation, 7 ft³/s Sept. 29, Oct. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,610 ft³/s Nov. 12, gage height, 8.90 ft; minimum, 16 ft³/s July 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	1750	2160	2210	145	194	892	119	111	54	49	42
2	27	2600	2290	1250	164	188	533	117	105	34	45	42
3	26	3940	3410	983	159	183	333	114	99	20	41	39
4	30	3490	3910	1000	142	200	298	115	91	28	37	39
5	37	3090	4110	804	110	212	274	116	87	31	33	42
6	37	2330	3910	779	111	196	249	110	141	33	22	45
7	37	2290	2460	757	430	186	237	99	685	23	28	42
8	38	1720	860	734	1310	180	227	99	840	26	31	45
9	93	1710	914	664	1010	177	218	101	413	24	34	47
10	447	3250	1960	526	738	171	221	104	244	28	34	47
11	814	3080	2270	442	879	167	203	103	100	26	36	50
12	964	5820	2160	429	2260	163	178	103	83	26	37	59
13	1180	4060	2210	422	2160	161	174	95	70	25	34	71
14	1170	3620	1730	419	1970	157	167	93	65	27	32	78
15	1250	3950	1620	426	1580	156	172	93	63	29	27	78
16	1360	3640	1320	420	1250	152	155	92	60	26	25	71
17	1330	3290	1120	407	1020	147	143	87	54	23	24	71
18	1380	3080	1020	379	886	146	145	79	47	26	33	68
19	1540	1920	636	160	593	143	149	80	36	26	35	71
20	1620	2070	705	151	291	143	146	84	34	29	36	71
21	1590	2250	838	147	266	161	142	86	38	27	35	68
22	1550	2050	758	143	244	184	142	82	43	26	35	68
23	1560	1790	742	140	228	504	157	77	55	23	32	59
24	1560	1890	648	135	216	953	155	75	54	22	34	53
25	1600	2090	545	133	208	519	145	69	47	35	39	53
26	1560	1900	640	131	202	580	141	71	43	42	36	59
27	1650	2910	846	129	205	1250	138	74	39	38	34	59
28	1840	4920	1310	137	198	953	135	80	39	43	34	56
29	1850	3860	1180	139	---	611	130	83	49	36	34	59
30	1810	2660	2500	135	---	498	124	78	53	39	34	85
31	1810	---	2870	136	---	608	---	91	---	64	36	---
TOTAL	31786	87020	53652	14867	18975	10243	6523	2869	3888	959	1056	1737
MEAN	1025	2901	1731	480	678	330	217	92.5	130	30.9	34.1	57.9
MAX	1850	5820	4110	2210	2260	1250	892	119	840	64	49	85
MIN	26	1710	545	129	110	143	124	69	34	20	22	39
AC-FT	63050	172600	106400	29490	37640	20320	12940	5690	7710	1900	2090	3450
CAL YR 1984	TOTAL	326469	MEAN	892	MAX	5820	MIN	19	AC-FT	647600		
WTR YR 1985	TOTAL	233575	MEAN	640	MAX	5820	MIN	20	AC-FT	463300		

WILLAMETTE RIVER BASIN

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14171000 MARYS RIVER NEAR PHILOMATH, OR

LOCATION.--Lat 44°31'35", long 123°20'00", in NE¼SE¼ sec.18, T.12 S., R.5 W., Benton County, Hydrologic Unit 17090003, on left bank 50 ft downstream from bridge on Bellfountain Road, 0.6 mi downstream from Newton Creek, 2.0 mi southeast of Philomath, and at mile 9.4.

DRAINAGE AREA.--159 mi², including drainage area of Evergreen Creek above Bellfountain Road, 1.4 mi south of station.

PERIOD OF RECORD.--October 1940 to September 1985 (discontinued).

REVISED RECORDS.--WSP 1218: Drainage area. WSP 1935: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 224.01 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1961, nonrecording gage at bridge 50 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Records include flow of Evergreen Creek at Bellfountain Road crossing 1.4 mi south of station, with which overflow from Marys River may at times be mingled. Slight regulation by small storage reservoir on Rock Creek from which municipal supply is diverted for city of Corvallis. Other small diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--45 years, 462 ft³/s, 39.46 in/yr, 334,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s Dec. 22, 1964, gage height, 20.72 ft; maximum gage height, 20.91 ft Jan. 15, 1974; minimum discharge, 0.60 ft³/s Aug. 23, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 3,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1130	3,270	17.16	Nov. 28	0400	*4,830	*19.53

Minimum, 14 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	27	175	2320	1250	204	343	770	230	127	57	53	20		
2	27	2350	1650	981	236	323	714	223	124	54	50	21		
3	27	2460	1220	852	224	300	628	217	116	51	39	22		
4	27	1940	965	754	202	332	554	220	110	49	32	22		
5	29	1350	830	664	193	383	502	212	122	47	29	22		
6	28	1010	717	608	194	369	463	203	269	46	35	24		
7	30	881	626	559	357	339	425	195	1030	45	36	26		
8	29	801	572	507	651	316	401	188	934	44	37	28		
9	32	1110	576	469	770	297	379	182	593	41	38	28		
10	56	2470	947	433	892	283	360	177	411	39	40	31		
11	75	2360	898	403	1110	268	346	176	303	38	38	31		
12	83	2670	1060	375	1690	255	326	171	232	37	36	33		
13	84	2300	1110	344	1270	271	313	163	189	37	34	41		
14	80	1790	985	328	916	259	300	160	155	35	32	47		
15	84	1370	978	313	838	250	289	157	132	34	29	52		
16	72	1100	879	294	735	241	282	152	120	33	27	49		
17	58	862	812	276	639	233	275	147	109	33	26	42		
18	56	987	741	264	569	225	258	139	98	34	24	39		
19	126	890	634	252	552	217	264	137	91	33	23	39		
20	179	1130	576	243	625	216	271	135	86	33	22	37		
21	138	989	606	235	565	249	253	135	81	31	20	32		
22	97	762	578	226	524	305	264	130	76	32	20	29		
23	77	749	574	217	490	496	306	124	73	31	19	27		
24	67	934	584	208	462	924	341	120	69	28	18	24		
25	63	1140	571	199	440	872	333	118	69	29	20	22		
26	127	1140	560	194	407	812	318	115	67	27	20	20		
27	297	2310	669	191	382	987	293	111	64	28	20	18		
28	364	4290	910	201	363	1100	274	110	63	30	20	17		
29	274	3170	1140	204	---	964	255	111	61	27	21	15		
30	202	3040	2130	202	---	848	241	111	60	30	21	14		
31	175	---	1680	199	---	831	---	116	---	42	21	---		
TOTAL	3090	48530	29098	12445	16500	14108	10998	4885	6034	1155	900	872		
MEAN	99.7	1618	939	401	589	455	367	158	201	37.3	29.0	29.1		
MAX	364	4290	2320	1250	1690	1100	770	230	1030	57	53	52		
MIN	27	175	560	191	193	216	241	110	60	27	18	14		
CFSM	.63	10.2	5.91	2.52	3.70	2.86	2.31	.99	1.26	.23	.18	.18		
IN.	.72	11.35	6.81	2.91	3.86	3.30	2.57	1.14	1.41	.27	.21	.20		
AC-FT	6130	96260	57720	24680	32730	27980	21810	9690	11970	2290	1790	1730		
CAL YR 1984	TOTAL	211200	MEAN	577	MAX	4840	MIN	19	CFSM	3.63	IN.	49.41	AC-FT	418900
WTR YR 1985	TOTAL	148615	MEAN	407	MAX	4290	MIN	14	CFSM	2.56	IN.	34.77	AC-FT	294800

WILLAMETTE RIVER BASIN

14171750 WILLAMETTE RIVER ABOVE CALAPOOIA RIVER, AT ALBANY, OR

LOCATION.--Lat 44°38'30", long 123°07'00", in NW¼ sec.1, T.11 S., R.4 W., Benton County, Hydrologic Unit 17090003, temperature recorder on left bank, 0.6 mi upstream from gaging station at Albany, 0.4 mi upstream from Calapooia River, and at mile 119.9.

DRAINAGE AREA.--4,460 mi², approximately.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1963 to current year.

INSTRUMENTATION.--Temperature recorder since October 1963.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 23.5°C Aug. 3, 1977, and July 19, 1985; minimum, 0.5°C Jan. 26, 1969, Dec. 11, 1972.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 23.5°C July 19; minimum recorded, 2.5°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14171750 WILLAMETTE RIVER ABOVE CALAPOOIA RIVER, AT ALBANY, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14172000 CALAPOOIA RIVER AT HOLLEY, OR

LOCATION.--Lat 44°21'05", long 122°47'10", in SE¼ sec.15, T.14 S., R.1 W., Linn County, Hydrologic Unit 17090003, on right bank 200 ft downstream from bridge on State Highway 228, 0.3 mi southwest of Holley, 5.0 mi upstream from Brush Creek, and at mile 45.4.

DRAINAGE AREA.--105 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1935 to current year. Prior to October 1963, published as Calapooya River at Holley.

REVISED RECORDS.--WSP 1044: 1943. WSP 1218: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.58 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 7, 1963, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Slight regulation at times during low-water periods by small dam upstream. Diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--50 years, 441 ft³/s, 57.04 in/yr, 319,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s Dec. 22, 1964, gage height, 14.60 ft; maximum gage height, 15.30 ft Dec. 22, 1964 (backwater from debris); minimum discharge observed, 13 ft³/s Sept. 8, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 3,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1730	*2,940	*5.48				

Minimum, 21 ft³/s Aug. 27, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	32	249	1520	580	170	406	1210	359	138	73	55	22		
2	31	1980	1140	507	171	377	1180	347	138	70	42	29		
3	31	2370	905	489	165	339	1010	358	125	67	37	30		
4	34	1380	751	479	150	379	841	328	137	63	35	27		
5	36	898	632	466	153	348	734	285	137	61	34	27		
6	33	742	541	451	151	329	713	263	395	60	33	66		
7	32	781	483	456	494	305	729	243	705	58	33	64		
8	32	704	451	419	660	281	658	225	668	56	42	40		
9	39	866	478	375	497	270	617	213	417	54	41	35		
10	42	2040	1050	341	389	270	605	213	307	52	35	40		
11	61	1730	820	315	645	273	538	223	250	51	33	40		
12	72	1500	856	294	1380	272	478	195	215	50	31	42		
13	224	1420	799	280	856	258	447	186	190	47	29	57		
14	154	1290	720	285	795	252	435	192	171	46	28	65		
15	169	980	840	294	979	254	410	179	157	45	27	104		
16	110	785	697	282	814	269	370	181	145	44	27	82		
17	87	673	598	327	663	288	317	184	133	43	26	112		
18	86	698	526	353	558	281	307	178	122	42	25	128		
19	203	643	455	319	519	271	337	171	114	41	29	82		
20	283	756	420	288	500	277	296	164	107	38	30	64		
21	195	719	414	267	453	333	302	155	102	38	28	55		
22	142	610	405	247	496	307	370	147	98	37	27	49		
23	113	692	420	233	531	807	705	145	94	37	25	45		
24	107	784	450	222	537	1090	612	145	91	37	24	41		
25	100	687	409	210	558	789	515	137	89	36	24	38		
26	527	597	386	199	484	774	440	129	85	34	23	35		
27	508	1190	446	190	428	846	408	123	82	33	22	33		
28	704	2120	457	184	400	727	450	121	82	32	22	32		
29	520	1660	464	181	---	646	406	124	78	33	23	30		
30	336	2180	750	169	---	700	373	119	75	36	22	29		
31	300	---	690	165	---	1050	---	144	---	49	22	---		
TOTAL	5343	33724	19973	9867	14596	14068	16813	6176	5647	1463	934	1543		
MEAN	172	1124	644	318	521	454	560	199	188	47.2	30.1	51.4		
MAX	704	2370	1520	580	1380	1090	1210	359	705	73	55	128		
MIN	31	249	386	165	150	252	296	119	75	32	22	22		
CFSM	1.64	10.7	6.13	3.03	4.96	4.32	5.33	1.90	1.79	.45	.29	.49		
IN.	1.89	11.95	7.08	3.50	5.17	4.98	5.96	2.19	2.00	.52	.33	.55		
AC-FT	10600	66890	39620	19570	28950	27900	33350	12250	11200	2900	1850	3060		
CAL YR 1984	TOTAL	188515	MEAN	515	MAX	5770	MIN	31	CFSM	4.90	IN.	66.79	AC-FT	373900
WTR YR 1985	TOTAL	130147	MEAN	357	MAX	2370	MIN	22	CFSM	3.40	IN.	46.11	AC-FT	258100

WILLAMETTE RIVER BASIN

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14172000 CALAPOOIA RIVER AT HOLLEY, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1963 to current year.

INSTRUMENTATION.--Temperature recorder since October 1963.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 29.5°C July 17, Aug. 7, 1972, Aug. 12, 16, 1977; minimum, 0.0°C at times during winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 26.0°C Aug. 16, 25; minimum recorded, 2.0°C Dec. 19.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14172000 CALAPOOIA RIVER AT HOLLEY, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14173500 CALAPOOIA RIVER AT ALBANY, OR

LOCATION.--Lat 44°37'15", long 123°07'40", in NW¼ sec.13, T.11 S., R.4 W., Linn County, Hydrologic Unit 17090003, near right bank on downstream side of bridge on Riverside Drive at Albany, 0.6 mi downstream from Oak Creek, and at mile 3.0.

DRAINAGE AREA.--372 mi².

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: January 1964 to current year.

INSTRUMENTATION.--Temperature recorder since January 1964.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 29.0°C July 19, 20, 1985; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 29.0°C July 19, 20; minimum, 1.5°C Dec. 20, 21, Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	14.5	8.0	7.5	7.5	6.5	5.5	5.0	3.5	3.0	8.0	7.0
2	16.5	14.5	10.0	8.0	6.5	6.5	5.0	4.0	3.5	3.5	8.0	7.0
3	16.0	14.5	10.0	9.5	6.5	6.5	4.0	3.5	3.5	3.0	7.0	6.5
4	16.0	15.0	9.5	9.5	6.5	5.5	3.5	3.5	3.0	1.5	6.5	6.0
5	15.0	14.0	9.5	8.5	5.5	4.5	3.5	3.5	3.0	2.0	7.0	6.0
6	16.0	14.5	9.0	8.5	4.5	4.0	4.0	3.5	3.5	3.0	7.5	6.0
7	17.5	15.0	9.5	9.0	4.5	4.0	4.5	4.0	3.5	3.5	7.5	6.0
8	16.5	16.0	9.0	8.5	5.5	4.5	5.0	4.5	3.5	2.5	7.5	6.0
9	16.5	15.0	8.5	7.5	6.0	5.5	4.5	4.0	4.0	3.0	8.0	6.5
10	16.0	14.5	8.5	7.5	6.5	6.0	4.0	4.0	4.5	4.0	9.0	7.0
11	14.5	13.5	9.5	8.5	6.5	5.5	4.0	3.5	6.0	4.5	9.5	7.0
12	13.5	13.0	10.0	9.5	5.5	5.5	3.5	3.0	7.0	6.0	9.0	7.5
13	14.0	12.5	10.0	10.0	6.0	5.5	3.0	2.5	6.0	5.5	10.0	7.5
14	13.0	12.0	10.0	8.5	6.5	6.0	3.5	3.0	5.5	5.5	9.5	7.5
15	12.0	11.0	8.5	7.5	6.0	6.0	4.0	3.5	7.5	5.5	10.0	7.5
16	11.0	10.0	8.0	7.5	6.0	5.5	5.0	4.0	7.0	6.0	10.0	7.5
17	10.0	9.0	7.5	7.5	5.5	5.5	5.5	5.0	6.0	5.0	10.0	8.0
18	9.5	9.0	8.5	7.5	5.5	3.5	5.0	4.5	5.5	5.0	11.0	8.5
19	10.0	9.0	9.0	8.5	3.5	2.0	5.0	4.5	5.5	5.0	10.5	9.0
20	10.0	9.5	8.5	8.0	2.0	1.5	5.5	5.0	6.0	5.5	11.0	9.5
21	9.5	9.0	8.0	7.5	3.5	1.5	6.0	5.0	7.0	6.0	10.0	8.5
22	9.5	9.0	7.5	7.0	5.0	3.5	5.5	5.0	8.0	7.0	8.5	7.5
23	9.0	8.5	7.0	6.5	6.0	5.0	5.0	4.0	9.0	8.0	8.0	7.5
24	10.0	9.0	6.5	6.0	6.0	6.0	4.0	3.5	9.0	8.0	7.5	7.0
25	11.0	9.5	6.0	5.5	6.0	5.5	4.0	3.0	8.5	7.5	7.5	7.0
26	11.0	10.5	6.0	5.5	5.5	5.5	3.0	2.5	7.5	7.0	7.0	6.5
27	10.5	9.5	6.5	5.5	5.5	5.5	2.5	2.0	7.5	6.5	6.5	6.0
28	9.5	9.0	7.0	6.5	5.5	5.0	2.5	2.0	8.0	6.5	7.5	6.5
29	9.0	8.5	7.0	7.0	5.0	5.0	3.5	2.5	---	---	8.0	7.0
30	8.5	8.0	7.5	7.0	5.5	5.0	3.5	3.0	---	---	8.0	7.5
31	8.5	8.0	---	---	6.0	5.5	4.0	3.5	---	---	9.0	8.0
MONTH	17.5	8.0	10.0	5.5	7.5	1.5	6.0	2.0	9.0	1.5	11.0	6.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

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LOCATION.--Lat 44°38'20", long 123°06'20", in SW¹/₄ sec.6, T.11 S., R.3 W., Linn County, Hydrologic Unit 17090003, on right bank 5 ft upstream from bridge on U.S. Highway 20 (Ellsworth Street) in Albany, 0.2 mi downstream from Calapooia River, and at mile 119.31.

PERIOD OF RECORD.--November 1878 to April 1888 (fragmentary), January to June 1892, November 1892 to September 1894, December 1894 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 167.18 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1906, nonrecording gage at site 0.2 mi upstream at datum 5.00 ft higher. Sept. 27, 1906, to Nov. 12, 1934, nonrecording gage at site 300 ft upstream at datum 5.00 ft higher. Nov. 14, 1934, to Sept. 30, 1962, at datum 5.00 ft higher.

AVERAGE DISCHARGE.--91 years (water years 1894, 1896-85), 14,530 ft³/s, 40.77 in/yr, 10,530,000 acre-ft/yr.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 4, 1861, reached a stage of 41.0 ft, discharge, 340,000 ft³/s, from rating curve extended above 220,000 ft³/s. Flood of Feb. 4, 1890, reached a stage of 38.9 ft, discharge, 291,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 59,500 ft³/s Nov. 30, gage height, 19.46 ft; minimum, 4,110 ft³/s July 6.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8840	16200	58100	23000	6270	8300	16500	8310	8510	4800	5400	5880
2	8790	19600	52200	20100	6510	8030	18100	8090	8460	4620	5330	5960
3	8760	35900	47200	17500	6790	7760	19500	8140	8310	4520	5160	6000
4	8720	47100	44000	15900	6750	7640	18700	8430	8120	4420	5070	5960
5	8710	42400	36700	14800	6360	7990	15500	8210	7900	4310	5000	6390
6	8680	38700	32400	14100	6300	7790	12900	7760	8190	4150	4930	6810
7	8610	37300	29300	13700	7020	7590	12200	7580	13100	4220	4860	7240
8	8580	36100	23500	13600	18400	7310	11900	7510	19200	4250	4890	7570
9	8660	33800	20300	13500	23600	7090	11600	7160	19000	4200	5090	7690
10	8950	40200	23000	12200	20600	6900	11100	6860	18400	4200	5040	7760
11	9420	48600	32600	11100	16000	7260	10800	6650	15100	4250	4980	7950
12	9800	49000	31800	10300	20900	7690	10400	6500	12600	4420	4930	8430
13	10300	54200	31600	10100	27300	6710	9870	6320	10900	4410	4850	8220
14	11300	47100	29500	10200	22500	6470	9490	6330	9790	4430	4790	7870
15	11300	51200	27100	10100	19300	6350	9450	6540	9140	4390	4760	8170
16	11500	48300	25300	9590	19700	6320	9380	6510	8650	4320	4790	8220
17	11300	45800	21600	9360	17300	6300	9090	6500	8350	4300	4800	8240
18	11300	44300	19600	9560	14700	6300	8600	6860	7910	4240	4970	8540
19	11700	41800	17700	9790	12800	6230	8480	7190	6870	4200	5130	8500
20	12800	39600	16300	9540	12100	6220	8540	7630	6330	4200	5160	8350
21	13400	38700	15600	9460	11500	6390	8180	8110	5910	4410	5170	8380
22	12700	35900	15000	9250	10900	7010	8210	8950	5720	4480	5140	8300
23	12500	32300	13900	8840	10700	8010	8920	10000	5720	4480	5100	8250
24	12400	34500	14200	7920	10400	15200	11500	9910	5630	4440	5080	8180
25	12600	37100	14200	7620	10300	18500	13000	10000	5590	4430	5120	8120
26	13100	34600	13800	7480	9940	15500	13400	10000	5450	4400	5140	7820
27	16100	34600	13900	7390	9370	18500	11900	9840	5280	4360	5080	7540
28	17700	45700	15800	7290	8780	19800	10900	9720	5200	4540	5420	7530
29	20500	56700	16400	7210	---	17000	10200	9450	5080	4600	5770	7420
30	19000	58300	20500	6710	---	15100	8790	8780	4980	4710	5770	7400
31	17300	---	24700	6230	---	14800	---	8590	---	5140	5840	---
TOTAL	365320	1225600	797800	343440	373090	298060	347100	248430	269390	136840	158560	228690
MEAN	11780	40850	25740	11080	13320	9615</						

WILLAMETTE RIVER BASIN

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR

LOCATION.--Lat 44°42'25", long 122°06'00", in SE¼NW¼ sec.17, T.10 S., R.6 E., Marion County, Hydrologic Unit 17090005, on right bank 0.5 mi downstream from Boulder Creek, 3.0 mi southeast of Detroit, and at mile 70.7.

DRAINAGE AREA.--216 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1907 to October 1909, October 1928 to current year. Monthly discharge only January 1907, published in WSP 1318. Prior to October 1952, published as "at Detroit."

REVISED RECORDS.--WSP 814: Drainage area at former site. WSP 1248: 1931.

GAGE.--Water-stage recorder. Datum of gage is 1,590.07 ft above National Geodetic Vertical Datum of 1929. See WSP 1738 for history of changes prior to Oct. 1, 1952.

REMARKS.--No estimated daily discharges. Water-discharge records good except for flow above 3,000 ft³/s, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--59 years, 1,010 ft³/s, 63.50 in/yr, 731,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft³/s Dec. 22, 1964, slope-area measurement of peak flow, gage height, 13.76 ft, temporary backwater from debris; minimum, 250 ft³/s Sept. 13, 1909.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0430	*6,920	*7.63	No other peak greater than base discharge.			
Minimum, 423 ft ³ /s Sept. 29, 30.							

REVISIONS.--The maximum discharges for the water years 1981 and 1982 have been revised to 16,800 ft³/s Dec. 25, 1980, gage height, 10.54 ft and 10,700 ft³/s Feb. 20, 1982, gage height, 8.98 ft, superseding figures published in WDR OR-81-2 and WDR OR-82-2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	449	736	1460	763	640	843	1510	1620	1230	731	548	457		
2	446	4250	1290	742	629	821	1710	1840	1180	733	539	488		
3	448	5710	1170	726	612	828	1770	2050	1160	729	527	464		
4	451	3190	1080	711	576	797	1730	1800	1190	722	527	457		
5	452	2160	1000	704	612	777	1670	1620	1210	706	520	473		
6	448	1900	947	699	597	748	1760	1550	2060	689	513	567		
7	446	1820	912	694	645	726	1970	1490	2910	684	523	501		
8	457	1590	893	684	634	714	2070	1400	2580	681	534	475		
9	466	1520	1010	673	616	711	2130	1360	1990	673	518	484		
10	464	2540	1580	663	601	717	2370	1320	1690	660	508	535		
11	506	3240	1330	653	703	726	2360	1270	1540	643	502	501		
12	552	3190	1280	644	943	725	2240	1200	1490	628	500	493		
13	787	3050	1170	638	803	734	2200	1200	1440	617	497	511		
14	747	2580	1110	639	765	756	2330	1260	1350	606	492	521		
15	644	2040	1130	644	836	794	2390	1280	1310	602	491	562		
16	573	1710	1040	643	835	865	2290	1500	1250	595	488	509		
17	545	1500	992	677	806	920	1990	1620	1190	589	487	575		
18	540	1600	938	739	781	947	1790	1740	1220	583	492	567		
19	653	1500	885	751	772	967	1640	1760	1220	580	497	512		
20	748	1450	872	763	774	1050	1470	1710	1150	579	488	489		
21	690	1330	857	753	747	1030	1380	1630	1050	573	479	476		
22	630	1220	849	738	807	1040	1340	1630	991	563	474	468		
23	596	1240	885	724	831	1340	1580	1680	936	562	473	457		
24	606	1230	865	711	872	1240	1460	1710	871	557	473	450		
25	643	1140	836	699	898	1120	1330	1570	826	548	473	445		
26	1230	1070	818	685	878	1090	1230	1500	804	546	475	441		
27	1040	1360	829	674	856	1010	1250	1430	799	541	472	439		
28	1010	1730	813	666	844	953	1380	1320	789	536	463	433		
29	918	1670	810	654	---	908	1390	1350	769	537	460	428		
30	823	1670	828	639	---	1040	1460	1240	749	547	458	427		
31	772	---	797	634	---	1230	---	1240	---	549	454	---		
TOTAL	19780	60936	31276	21427	20913	28167	53190	46890	38944	19089	15345	14605		
MEAN	638	2031	1009	691	747	909	1773	1513	1298	616	495	487		
MAX	1230	5710	1580	763	943	1340	2390	2050	2910	733	548	575		
MIN	446	736	797	634	576	711	1230	1200	749	536	454	427		
CFSM	2.95	9.40	4.67	3.20	3.46	4.21	8.21	7.00	6.01	2.85	2.29	2.25		
IN.	3.41	10.49	5.39	3.69	3.60	4.85	9.16	8.08	6.71	3.29	2.64	2.52		
AC-FT	39230	120900	62040	42500	41480	55870	105500	93010	77250	37860	30440	28970		
CAL YR 1984	TOTAL	424162	MEAN	1159	MAX	5710	MIN	446	CFSM	5.37	IN.	73.05	AC-FT	841300
WTR YR 1985	TOTAL	370562	MEAN	1015	MAX	5710	MIN	427	CFSM	4.70	IN.	63.82	AC-FT	735000

WILLAMETTE RIVER BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: April 1951 to current year.

INSTRUMENTATION.--Temperature recorder since April 1951.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 19.0°C July 8, 18, 19, 1970; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 18.0°C July 19, 20; minimum, 0.0°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.0	8.5	5.5	4.0	4.5	4.0	3.5	3.0	2.5	1.0	4.5	4.0
2	9.5	7.0	6.0	5.5	4.0	3.5	3.0	2.5	3.0	2.0	4.0	3.5
3	9.5	7.5	6.0	5.5	4.0	3.5	3.0	2.5	3.0	.5	4.0	3.0
4	9.5	8.0	6.5	5.5	3.5	3.0	3.5	2.5	.5	.0	4.0	3.0
5	9.5	8.0	6.5	5.0	3.0	3.0	3.5	3.5	2.5	.5	5.0	3.0
6	9.5	8.5	6.0	6.0	3.5	2.5	4.0	3.5	3.5	2.5	4.5	3.5
7	10.0	8.5	6.0	5.5	4.0	3.0	4.0	4.0	3.0	.5	4.0	2.0
8	10.0	8.5	5.5	5.0	4.5	4.0	4.0	3.5	1.5	1.0	4.5	2.5
9	10.0	9.0	5.5	4.5	4.5	4.5	3.5	3.0	2.0	1.5	5.0	3.0
10	9.5	9.0	5.5	5.0	4.5	3.0	3.0	2.5	3.0	1.5	5.0	3.0
11	9.0	8.0	6.0	5.5	4.0	3.0	2.5	2.0	3.0	2.5	5.0	3.0
12	8.0	7.0	6.0	6.0	3.0	2.5	2.5	2.0	3.5	2.0	5.5	3.5
13	8.0	7.0	6.0	5.5	4.0	3.0	3.0	1.5	3.5	3.0	5.5	3.0
14	7.0	6.0	5.5	5.0	4.0	3.5	3.5	2.5	4.0	2.5	5.5	3.0
15	6.5	6.0	5.5	4.5	4.0	3.5	3.5	3.5	4.5	3.5	5.5	3.0
16	6.5	6.0	5.5	5.0	3.5	3.0	4.0	3.5	4.0	3.0	6.0	3.0
17	6.0	5.0	5.5	4.5	3.5	3.0	3.5	3.0	3.5	2.0	6.0	3.5
18	6.0	5.0	5.5	5.5	3.0	1.0	3.5	3.0	3.5	2.0	5.5	3.0
19	6.5	6.0	5.5	5.0	1.5	.5	4.0	3.0	3.5	3.0	5.5	3.0
20	7.0	6.0	5.5	5.0	1.5	1.0	4.5	4.0	4.0	2.5	5.0	3.5
21	7.5	6.5	5.0	5.0	3.5	1.5	4.0	3.5	4.5	3.5	3.5	2.5
22	6.5	5.0	5.0	4.0	4.0	3.5	3.5	3.0	5.0	4.0	3.5	2.5
23	6.0	4.5	4.5	4.0	4.0	4.0	3.0	2.5	5.0	3.5	4.0	3.5
24	7.5	6.0	4.5	4.0	4.5	4.0	3.0	2.0	4.5	4.0	4.5	3.0
25	7.5	6.5	4.5	4.0	4.0	3.5	2.5	2.0	4.5	3.5	4.5	3.5
26	7.5	5.5	4.5	4.0	4.0	3.5	2.0	1.5	4.5	3.0	3.5	2.5
27	5.5	5.0	4.5	4.0	4.0	2.0	2.5	1.5	4.0	2.5	4.0	2.5
28	5.5	4.5	5.0	4.5	3.0	2.0	3.5	2.5	4.5	3.0	5.5	3.0
29	5.5	5.0	4.5	4.0	3.0	2.0	3.5	3.0	---	---	4.5	3.5
30	5.5	5.0	4.5	4.0	3.5	2.5	3.0	2.0	---	---	4.5	3.5
31	5.5	4.5	---	---	4.0	3.5	3.5	2.5	---	---	6.0	4.0
MONTH	10.0	4.5	6.5	4.0	4.5	.5	4.5	1.5	5.0	.0	6.0	2.0

WILLAMETTE RIVER BASIN

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14178700 EAST HUMBURG CREEK NEAR DETROIT, OR

LOCATION.--Lat 44°47'57", long 122°03'28", in NW¼NE¼ sec.15, T.9 S., R.6 E., Marion County, Hydrologic Unit 17090005, in Willamette National Forest, on left bank 1.6 mi upstream from confluence with Humburg Creek, and 6.3 mi northeast of Detroit.

DRAINAGE AREA.--7.32 mi².

PERIOD OF RECORD.--August 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,050 ft, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 19-21, Feb. 9-12. Records good. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--7 years, 39.7 ft³/s, 73.65 in/yr, 28,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft³/s Dec. 25, 1980, gage height, 4.42 ft; minimum, 1.8 ft³/s Sept. 6-9, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 280 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0900	*511	*3.78	No other peak greater than base discharge.			
Minimum, 2.2 ft ³ /s Oct. 3, 4, 7, 8.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	2.5	22	50	21	15	47	146	83	25	11	5.2	2.9		
2	2.4	350	42	19	14	41	170	90	24	10	5.0	3.5		
3	2.4	329	35	18	14	34	146	90	23	9.9	4.5	3.0		
4	2.4	173	30	17	13	30	110	73	22	9.7	4.3	2.8		
5	2.5	93	27	17	14	27	99	61	22	9.4	4.1	3.5		
6	2.4	88	25	17	14	24	123	57	81	9.1	4.0	7.7		
7	2.3	86	24	17	13	22	145	53	119	8.8	4.2	4.0		
8	2.4	66	25	16	13	21	137	48	77	8.5	5.6	3.3		
9	2.6	57	63	16	12	21	145	47	51	8.2	4.4	3.9		
10	2.9	153	119	15	12	26	156	45	40	7.9	4.0	9.6		
11	4.6	217	63	15	26	35	135	42	34	7.6	3.9	5.5		
12	11	197	49	15	56	38	119	38	30	7.4	3.7	5.5		
13	21	144	40	14	35	34	120	39	27	7.1	3.5	6.8		
14	20	108	38	14	35	38	129	41	24	6.7	3.4	6.1		
15	15	72	44	15	55	43	126	42	22	6.5	3.3	7.1		
16	11	54	37	17	45	53	107	54	20	6.3	3.2	6.0		
17	9.3	46	32	32	36	64	81	59	19	6.2	3.1	11		
18	9.1	59	28	42	31	59	69	58	18	6.1	3.2	10		
19	19	58	24	33	28	55	59	54	17	6.2	3.2	6.8		
20	22	53	22	31	27	57	50	50	17	6.0	3.1	5.2		
21	17	48	22	29	25	58	46	47	16	5.9	3.1	4.5		
22	13	42	26	29	35	48	49	47	15	5.7	3.0	4.1		
23	11	43	40	27	44	59	90	48	14	5.6	2.9	3.7		
24	11	44	40	24	48	69	72	45	14	5.5	2.9	3.4		
25	13	38	33	21	49	50	60	40	13	5.3	2.8	3.3		
26	47	33	28	20	41	43	52	36	13	5.0	2.8	3.3		
27	41	83	26	19	36	37	72	33	12	4.8	2.8	3.2		
28	40	134	23	18	39	32	85	31	12	4.6	2.8	3.0		
29	34	96	22	17	---	30	74	31	11	4.5	2.7	2.9		
30	27	66	24	16	---	46	73	27	11	5.1	2.7	2.8		
31	26	---	24	15	---	86	---	27	---	5.3	2.6	---		
TOTAL	446.8	3052	1125	636	825	1327	3045	1536	843	215.9	110.0	148.4		
MEAN	14.4	102	36.3	20.5	29.5	42.8	102	49.5	28.1	6.96	3.55	4.95		
MAX	47	350	119	42	56	86	170	90	119	11	5.6	11		
MIN	2.3	22	22	14	12	21	46	27	11	4.5	2.6	2.8		
CFSM	1.97	13.9	4.96	2.80	4.03	5.85	13.9	6.76	3.84	.95	.48	.68		
IN.	2.27	15.51	5.72	3.23	4.19	6.74	15.47	7.81	4.28	1.10	.56	.75		
AC-FT	886	6050	2230	1260	1640	2630	6040	3050	1670	428	218	294		
CAL YR 1984	TOTAL	16426.0	MEAN	44.9	MAX	350	MIN	2.3	CFSM	6.13	IN.	83.48	AC-FT	32580
WTR YR 1985	TOTAL	13310.1	MEAN	36.5	MAX	350	MIN	2.3	CFSM	4.99	IN.	67.64	AC-FT	26400

WILLAMETTE RIVER BASIN

14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR

LOCATION.--Lat 44°45'10", long 122°07'40", in SE¼NE¼ sec.36, T.9 S., R.5 E., Marion County, Hydrologic Unit 17090005, in Willamette National Forest, on left bank 600 ft upstream from Canyon Creek, 1.5 mi northeast of Detroit, and at mile 2.0.

DRAINAGE AREA.--108 mi², revised, at measuring cable 0.2 mi downstream from gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1932 to current year. Monthly discharge only June 1932, published in WSP 1318. Published as "above Canyon Creek, near Detroit" from October 1952 to September 1984.

REVISED RECORDS.--WSP 1044: 1943(M). WSP 1248: 1947.

GAGE.--Water-stage recorder. Datum of gage is 1,573.95 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1952, at site 0.2 mi downstream at datum 13.46 ft lower.

REMARKS.--No estimated daily discharges. Water-discharge records good. No regulation or diversion upstream from station. All records given herein are for measuring site 0.2 mi downstream from gage.

AVERAGE DISCHARGE.--53 years, 579 ft³/s, 72.80 in/yr, 419,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,900 ft³/s Dec. 22, 1964, gage height, 14.55 ft; minimum, 87 ft³/s Sept. 2, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0430	*4,410	*7.65	No other peak greater than base discharge.			

Minimum discharge, 130 ft³/s Aug. 31, Sept. 1, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	139	343	896	397	273	554	1350	901	520	326	188	135		
2	137	2910	719	361	262	530	1570	1060	490	337	181	149		
3	135	3580	598	338	251	489	1520	1150	507	337	174	138		
4	136	1970	517	320	234	465	1350	949	584	333	171	135		
5	138	1310	458	309	245	435	1180	798	618	320	168	141		
6	137	1100	421	301	234	412	1240	731	1330	309	164	204		
7	135	1080	399	292	256	389	1450	692	2160	307	169	167		
8	138	910	394	285	248	370	1480	632	1550	303	192	152		
9	143	853	574	280	240	361	1500	600	1030	294	178	152		
10	144	1700	1120	273	234	370	1650	585	835	283	168	189		
11	178	2170	801	265	339	400	1560	550	746	270	164	167		
12	227	2090	730	258	672	421	1400	504	762	257	160	164		
13	397	1830	652	253	473	412	1350	499	747	248	156	179		
14	359	1490	588	253	436	423	1450	537	689	238	153	181		
15	297	1110	616	257	592	449	1450	544	698	234	152	208		
16	240	875	528	264	560	502	1330	725	624	227	149	186		
17	215	733	482	330	491	596	1070	848	582	222	148	242		
18	211	780	432	423	447	611	915	903	608	215	148	246		
19	298	741	395	415	436	604	809	901	614	211	149	204		
20	371	718	374	414	425	634	701	867	555	207	147	182		
21	317	656	363	406	418	687	652	826	486	202	145	169		
22	265	580	383	397	483	617	648	848	452	197	143	160		
23	241	581	560	378	552	788	924	906	423	195	141	153		
24	250	579	576	365	597	973	798	941	380	193	140	148		
25	298	529	490	347	647	755	701	816	351	188	138	143		
26	845	482	437	330	577	665	630	745	348	183	137	139		
27	682	872	419	319	521	602	684	682	361	180	137	136		
28	666	1440	390	311	510	544	810	617	366	177	136	134		
29	508	1260	383	299	---	515	793	607	348	175	135	132		
30	406	1140	449	283	---	695	792	533	335	182	134	130		
31	385	---	458	275	---	1120	---	526	---	186	133	---		
TOTAL	9038	36412	16602	9998	11653	17388	33757	23023	20099	7536	4798	4965		
MEAN	292	1214	536	323	416	561	1125	743	670	243	155	166		
MAX	845	3580	1120	423	672	1120	1650	1150	2160	337	192	246		
MIN	135	343	363	253	234	361	630	499	335	175	133	130		
CFSM	2.70	11.2	4.96	2.99	3.85	5.19	10.4	6.88	6.20	2.25	1.44	1.54		
IN.	3.11	12.54	5.72	3.44	4.01	5.99	11.63	7.93	6.92	2.60	1.65	1.71		
AC-FT	17930	72220	32930	19830	23110	34490	66960	45670	39870	14950	9520	9850		
CAL YR 1984	TOTAL	231073	MEAN	631	MAX	3580	MIN	135	CFSM	5.84	IN.	79.59	AC-FT	458300
WTR YR 1985	TOTAL	195269	MEAN	535	MAX	3580	MIN	130	CFSM	4.95	IN.	67.26	AC-FT	387300

WILLAMETTE RIVER BASIN

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14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1950 to July 1961, January 1962 to current year.

INSTRUMENTATION.--Temperature recorder December 1950 to July 1961 and since January 1962.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 18.0°C July 27, 1973; minimum, 0.0°C on several days in 1972, 1973, 1977-79, 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 14.0°C July 20, 21, 23, 24; minimum recorded, 0.0°C Feb. 3-5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	6.0	4.5	5.0	4.5	3.5	2.5	2.5	1.0	4.5	4.0
2	---	---	6.5	6.0	5.0	4.0	3.0	2.5	2.0	1.5	4.5	3.5
3	---	---	6.5	6.5	4.5	3.5	3.0	2.5	2.0	.0	4.0	3.0
4	---	---	6.5	6.5	3.5	3.0	3.0	2.0	.0	.0	4.0	3.0
5	---	---	6.5	6.0	3.5	---	3.5	3.0	2.0	.0	4.5	3.5
6	---	---	6.5	6.5	3.5	2.5	4.0	3.0	3.0	2.0	---	---
7	---	---	6.5	6.0	4.5	3.5	3.5	3.0	2.5	.5	---	---
8	---	---	6.0	6.0	4.5	4.0	4.0	3.0	1.5	1.0	---	---
9	---	---	6.0	5.5	4.5	4.5	3.0	2.5	1.5	1.0	---	---
10	---	---	6.5	5.5	4.5	4.0	2.5	2.0	2.5	1.0	---	---
11	---	---	6.5	6.0	4.0	3.0	2.5	2.0	2.5	2.0	---	---
12	---	---	6.5	6.5	4.0	3.0	2.0	1.5	3.5	1.5	---	---
13	---	---	6.5	6.0	4.5	4.0	2.5	1.5	3.5	2.0	---	---
14	---	---	6.0	5.5	4.5	4.5	3.5	2.0	4.0	2.5	---	---
15	---	---	6.0	5.0	4.5	4.0	3.5	3.5	4.5	3.5	---	---
16	---	---	6.0	5.5	4.0	3.5	3.5	3.0	3.5	2.5	---	---
17	---	---	6.0	5.0	4.0	3.5	3.5	2.5	3.5	2.0	---	---
18	---	---	6.5	6.0	3.5	1.5	3.5	3.0	3.5	2.0	---	---
19	6.5	6.5	6.5	5.5	2.0	.5	4.0	2.5	3.0	2.5	---	---
20	7.0	6.0	6.0	5.0	1.5	.5	4.5	3.5	4.0	2.5	---	---
21	7.5	6.5	6.0	5.0	3.5	1.5	4.0	3.5	4.5	3.5	---	---
22	7.0	5.5	5.0	4.5	4.0	3.5	3.5	3.0	5.0	4.0	---	---
23	6.5	5.0	5.0	4.5	4.5	4.0	3.5	2.5	5.0	4.0	---	---
24	8.0	6.5	5.0	4.5	4.5	4.0	3.0	2.5	5.0	4.0	---	---
25	8.0	7.0	5.0	4.5	4.0	3.5	2.5	2.0	4.5	3.5	---	---
26	7.5	5.5	5.0	4.5	4.5	4.0	2.5	1.5	5.0	3.5	---	---
27	6.0	5.5	5.0	4.0	4.0	2.5	3.0	1.5	4.5	3.0	---	---
28	6.5	5.5	5.5	5.0	3.5	2.5	3.5	3.0	4.5	3.0	---	---
29	6.5	5.5	5.5	4.5	3.5	3.0	3.5	3.0	---	---	---	---
30	6.0	5.5	5.0	4.0	4.0	3.0	3.0	2.0	---	---	---	---
31	6.0	5.0	---	---	4.0	3.5	3.0	2.5	---	---	---	---
MONTH	---	---	6.5	4.0	5.0	---	4.5	1.5	5.0	.0	---	---

WILLAMETTE RIVER BASIN

14179000 BREITENBUSH RIVER ABOVE FRENCH CREEK, NEAR DETROIT, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14180500 DETROIT LAKE NEAR DETROIT, OR

LOCATION.--Lat 44°43'20", long 122°14'55", in SW1/4 sec.7, T.10 S., R.5 E., Marion County, Hydrologic Unit 17090005, in control house near right abutment of Detroit Dam on North Santiam River, 4.9 mi west of Detroit, and at mile 60.9.

DRAINAGE AREA.--437 mi².

PERIOD OF RECORD.--January 1953 to current year. Prior to October 1971, published as Detroit Reservoir near Detroit.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by concrete, gravity-type dam with six 42-ft by 28-ft control gates. Length of dam is 1,580 ft, built by Corps of Engineers. Storage began in January 1953. Total capacity is 455,100 acre-ft and usable capacity is 340,100 acre-ft between elevations 1,425.0 ft, proposed lower limit of operation, and 1,569.0 ft, top of spillway gates. Reservoir used for flood control, power development, irrigation, improvement of navigation, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Midnight elevations furnished by Corps of Engineers and reviewed by Geological Survey. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 457,900 acre-ft July 13, 1972, elevation, 1,569.79 ft; minimum, 115,500 acre-ft Jan. 30, 1969, elevation, 1,425.37 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 445,500 acre-ft June 9, elevation, 1,566.24 ft; minimum, 152,300 acre-ft Dec. 8, elevation, 1,448.76 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,425	115,000	1,480	210,900	1,530	331,500
1,430	122,200	1,490	232,000	1,540	360,200
1,440	137,700	1,500	254,600	1,550	390,900
1,450	154,400	1,510	278,700	1,560	424,000
1,460	172,200	1,520	304,400	1,570	458,600
1,470	191,100				

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1523.08	1491.99	1466.46	1450.51	1454.94	1476.11	1508.60	1559.26	1562.68	1563.75	1561.02	1554.83
2	1521.76	1500.08	1464.31	1450.17	1454.93	1477.07	1512.09	1560.48	1562.42	1563.80	1560.82	1554.63
3	1520.39	1511.56	1461.57	1450.04	1454.96	1477.83	1515.27	1561.71	1562.17	1563.89	1560.67	1554.39
4	1519.02	1515.32	1458.46	1449.92	1454.91	1478.48	1518.12	1562.11	1562.24	1563.93	1560.52	1554.14
5	1517.65	1513.88	1454.89	1449.94	1454.97	1479.31	1520.52	1562.18	1562.42	1563.99	1560.35	1553.97
6	1516.25	1509.51	1450.87	1449.64	1455.01	1479.89	1522.94	1562.08	1563.62	1564.03	1560.17	1553.96
7	1514.81	1505.31	1449.14	1449.71	1455.31	1480.30	1525.93	1561.87	1565.39	1564.06	1560.03	1553.78
8	1513.39	1500.25	1449.10	1449.62	1455.49	1480.70	1528.94	1561.65	1566.19	1564.05	1559.87	1553.57
9	1511.95	1495.43	1449.85	1449.64	1455.50	1481.06	1531.97	1561.56	1566.15	1564.06	1559.66	1553.10
10	1510.50	1497.81	1452.17	1449.61	1455.59	1481.47	1535.36	1561.66	1565.48	1563.90	1559.44	1552.42
11	1509.27	1502.80	1452.43	1449.67	1456.35	1482.02	1538.43	1561.94	1564.53	1563.87	1559.22	1551.52
12	1508.21	1506.24	1452.42	1449.69	1458.15	1482.51	1540.78	1562.21	1563.58	1563.79	1559.00	1550.52
13	1507.69	1508.33	1452.11	1449.70	1459.10	1483.08	1542.49	1562.49	1563.23	1563.76	1558.81	1549.58
14	1507.08	1505.64	1451.52	1449.71	1459.96	1483.60	1544.31	1562.82	1562.98	1563.69	1558.60	1548.65
15	1506.18	1501.05	1451.27	1449.90	1461.61	1484.20	1545.82	1563.20	1563.02	1563.62	1558.42	1547.78
16	1505.07	1495.55	1450.54	1449.97	1462.92	1485.02	1546.97	1563.71	1563.00	1563.56	1558.20	1546.82
17	1503.89	1489.47	1449.60	1450.27	1463.87	1486.07	1547.86	1564.28	1562.89	1563.48	1557.97	1546.08
18	1502.69	1483.57	1449.57	1450.91	1464.67	1487.20	1548.75	1564.49	1562.98	1563.31	1557.79	1545.03
19	1501.90	1479.34	1449.62	1451.54	1465.48	1488.35	1549.55	1564.64	1563.10	1563.21	1557.58	1543.86
20	1501.41	1477.17	1449.75	1452.02	1466.22	1489.47	1550.05	1564.69	1563.24	1563.08	1557.43	1542.61
21	1500.62	1475.07	1449.86	1452.60	1466.91	1490.82	1550.51	1564.54	1563.35	1562.92	1557.23	1541.32
22	1499.61	1472.67	1450.03	1452.83	1467.83	1491.95	1551.03	1564.08	1563.40	1562.75	1557.02	1539.96
23	1498.47	1470.36	1450.74	1452.99	1469.11	1493.93	1552.44	1563.67	1563.39	1562.58	1556.80	1538.61
24	1497.27	1467.88	1451.54	1453.34	1470.40	1496.07	1553.50	1563.35	1563.44	1562.42	1556.58	1537.23
25	1496.27	1465.09	1451.64	1453.64	1471.94	1497.68	1554.12	1563.27	1563.39	1562.25	1556.35	1535.80
26	1496.88	1461.98	1450.97	1453.95	1473.17	1499.03	1554.65	1563.32	1563.31	1562.08	1556.21	1534.35
27	1496.63	1460.29	1450.87	1454.13	1474.28	1500.13	1555.40	1563.16	1563.30	1561.89	1555.95	1533.01
28	1496.24	1460.56	1450.69	1454.39	1475.14	1501.14	1556.39	1563.05	1563.43	1561.69	1555.72	1531.75
29	1495.41	1461.84	1450.63	1454.64	---	1501.89	1557.35	1563.21	1563.55	1561.49	1555.47	1530.39
30	1494.36	1464.71	1450.67	1454.68	---	1503.11	1558.24	1563.04	1563.70	1561.33	1555.23	1529.09
31	1493.20	---	1450.70	1454.85	---	1505.40	---	1562.88	---	1561.17	1554.99	---
MEAN	1506.04	1488.36	1452.39	1451.43	1462.10	1487.90	1540.61	1562.79	1563.52	1563.14	1558.17	1545.43
MAX	1523.08	1515.32	1466.46	1454.85	1475.14	1505.40	1558.24	1564.69	1566.19	1564.06	1561.02	1554.83
MIN	1493.20	1460.29	1449.10	1449.61	1454.91	1476.11	1508.60	1559.26	1562.17	1561.17	1554.99	1529.09
(†)	239100	181000	155600	162900	201200	267400	418000	433900	436700	428000	407100	329000
(‡)	-76800	-58100	-25400	+7300	+38300	+66200	+150600	+15900	+2800	-8700	-20900	-78100
CAL YR 1984	MEAN	1522.48	MAX	1566.37	MIN	1449.10	ACT-FT‡	-7200				
WTR YR 1985	MEAN	1515.38	MAX	1566.19	MIN	1449.10	AC-FT‡	+13100				

† Contents, in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

WILLAMETTE RIVER BASIN

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR

LOCATION.--Lat 44°45'10", long 122°17'50", in NE¼NE¼ sec.34, T.9 S., R.4 E., Linn County, Hydrologic Unit 17090005, on left bank 0.1 mi downstream from Little Sardine Creek, 0.8 mi downstream from Big Cliff Dam, 2.1 mi east of Niagara, and at mile 57.3.

DRAINAGE AREA.--453 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1908 to January 1920, October 1921 to March 1922, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "North Fork of Santiam River near Niagara" prior to October 1913, and as "above Mayflower Creek, near Detroit" October 1938 to September 1952.

REVISED RECORDS.--WSP 1288: 1914-18, 1920. WSP 1718: 1953-54.

GAGE.--Water-stage recorder. Datum of gage is 1,093.78 ft above National Geodetic Vertical Datum of 1929 (Federal Highway Administration bench mark). See WSP 1738 for history of changes prior to Oct. 1, 1952.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. Flow regulated since 1953 by Detroit Lake (see sta 14180500) and Big Cliff Reservoir, usable capacity for reregulating purposes, 2,930 acre-ft. No diversion upstream from station.

AVERAGE DISCHARGE.--57 years (water years 1910-19, 1939-85), 2,342 ft³/s, 70.21 in/yr, 1,697,000 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63,200 ft³/s Nov. 22, 1909, gage height, 16.4 ft, from floodmark, site and datum then in use, from rating curve extended above 35,000 ft³/s; minimum, 19 ft³/s Aug. 21, 1963; minimum daily, 395 ft³/s Mar. 25, 26, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,900 ft³/s Nov. 13, gage height, 7.89 ft; minimum, 915 ft³/s July 13, 14; minimum daily, 973 ft³/s Feb. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2410	2980	2170	1810	1010	1030	1020	1800	2540	1050	1110	1040
2	2520	3890	4800	1820	1020	1070	1010	2030	2470	1030	1100	1040
3	2420	1230	5040	1570	1010	1020	1010	2550	2500	1020	1030	1030
4	2560	2890	5050	1370	1000	1030	1030	3010	2020	1020	1030	1030
5	2510	6770	5130	1520	994	1020	1050	3110	2000	1030	1030	1040
6	2510	10200	5210	1320	989	1020	1050	3130	2840	1020	1050	1050
7	2550	9730	3090	1430	992	1030	1050	3220	4510	1020	1020	1060
8	2520	10100	1870	1420	995	1020	1050	2950	4390	1020	1050	1050
9	2600	9570	1830	1280	994	1000	1060	2650	4040	1050	1070	1550
10	2510	4490	2600	1190	1000	1020	1070	2350	4520	1350	1090	2130
11	2400	2740	3090	1090	1020	1010	1040	1910	4530	1020	1100	2250
12	2460	4140	3130	1160	1090	994	1540	1700	4440	1020	1110	2430
13	2500	4840	3020	1130	1040	1010	2300	1730	3170	1010	1040	2410
14	2510	9520	2950	1130	1010	1010	2560	1750	2920	1030	1030	2450
15	2560	10300	2860	1120	1010	1020	2930	1770	2260	1020	1030	2390
16	2390	10300	2870	1150	998	1010	3080	2090	2170	1030	1020	2440
17	2390	10200	2900	1100	1010	996	2580	2370	2260	1020	1020	2470
18	2440	10100	2070	1220	1020	1020	2150	3060	1880	1040	1020	2840
19	2550	7940	1570	1220	1030	1050	1980	3160	1760	1030	1020	2850
20	2570	5330	1570	1220	1010	1030	1900	3230	1700	1070	1020	2820
21	2600	4870	1610	1250	1010	1030	1950	3080	1500	1100	1040	2790
22	2500	4810	1610	1170	1010	1020	1930	3980	1500	1110	1030	2810
23	2470	4860	1630	1490	982	1040	1510	3950	1510	1110	1040	2820
24	2510	4930	1690	1110	973	1020	1570	3970	1370	1140	1010	2840
25	2540	4940	2000	1110	975	1030	1750	3220	1470	1100	1010	2770
26	2750	4990	2170	1060	1010	1020	1640	2680	1360	1100	1030	2730
27	3010	5270	1960	1070	998	1000	1490	2770	1330	1090	1020	2790
28	3310	5330	1750	1010	987	1010	1580	2550	1040	1090	1020	2560
29	3140	3820	1900	1030	---	1020	1530	2200	1030	1100	1020	2490
30	3080	2230	1810	1070	---	1010	1620	2540	1050	1110	1020	2510
31	3040	---	1840	1030	---	1000	---	2500	---	1100	1010	---
TOTAL	80830	183310	82790	38670	28187	31610	49030	83010	72080	33050	32240	64480
MEAN	2607	6110	2671	1247	1007	1020	1634	2678	2403	1066	1040	2149
MAX	3310	10300	5210	1820	1090	1070	3080	3980	4530	1350	1110	2850
MIN	2390	1230	1570	1010	973	994	1010	1700	1030	1010	1010	1030
AC-FT	160300	363600	164200	76700	55910	62700	97250	164700	143000	65550	63950	127900
MEAN†	1358	5134	2257	1366	1696	2096	4165	2937	2450	925	700	837
CFSM†	3.00	11.3	4.98	3.02	3.74	4.63	9.19	6.48	5.41	2.04	1.55	1.85
IN.†	3.46	12.64	5.74	3.48	3.90	5.34	10.26	7.48	6.03	2.35	1.78	2.06
AC-FT†	83500	305500	138800	84000	94210	128900	247850	180600	145800	56850	43050	49800

CAL YR 1984 TOTAL 974604 MEAN 2663 MAX 10300 MIN 940 AC-FT 1933000 MEAN† 2653 CFSM† 5.86 IN.† 79.72 AC-FT† 1926000
WTR YR 1985 TOTAL 779287 MEAN 2135 MAX 10300 MIN 973 AC-FT 1546000 MEAN† 2153 CFSM† 4.75 IN.† 64.53 AC-FT† 1559000

† Adjusted for change in contents of Detroit Lake.

WILLAMETTE RIVER BASIN

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14181500 NORTH SANTIAM RIVER AT NIAGARA, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: January 1953 to current year.

INSTRUMENTATION.--Temperature recorder since January 1953.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 16.5°C July 28, 29, 1958; minimum, 1.0°C Jan. 30 to Feb. 4, 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 14.0°C Oct. 7-13; minimum, 2.0°C Feb. 4-7.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

LOCATION.--Lat 44°47'30", long 122°34'40", in NW¼ sec.16, T.9 S., R.2 E., Marion County, Hydrologic Unit 17090005, on left bank 2.0 mi east of Mehama and at mile 2.0.

DRAINAGE AREA.--112 mi² at cableway 1.2 mi downstream where all discharge measurements are made.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1931 to current year. Records for July to September 1924 and July to September 1931 at site 4 mi upstream not equivalent owing to difference in drainage areas.

REVISED RECORDS.--WSP 754: 1932. WSP 1218: 1934, 1936, 1949-50. WSP 1935: Maximum only, 1932-34, 1936, 1938, 1943, 1945-49, 1950(M,P), 1951-53(M), 1954(M,P), 1955(M), 1956(M,P), 1957(M), 1958-59(M,P). WSP 2135: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 655.41 ft above National Geodetic Vertical Datum of 1929. Prior to June 12, 1948, nonrecording gage at about same site and datum.

REMARKS.--Estimated daily discharges: Feb. 28 to Apr. 16. Records excellent except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Records herein are for measuring site.

AVERAGE DISCHARGE.--54 years, 770 ft³/s, 93.36 in/yr, 557,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s Dec. 22, 1964, gage height, 16.73 ft, from rating curve extended above 17,000 ft³/s; minimum, 13 ft³/s Aug. 30, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 8,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0430	*6,430	*8.72				
Minimum, 23 ft ³ /s Sept. 1.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
	1	47	685	1880	859	237	650	2200	970	435	125	63	24
	2	46	3820	1360	725	225	650	2200	1070	375	117	56	33
	3	45	5330	1040	680	208	600	1900	1190	354	112	50	35
	4	49	2840	833	648	175	650	1500	957	414	106	61	28
	5	52	1900	697	622	198	600	1200	740	426	101	58	31
	6	47	1580	608	621	188	550	1200	645	1840	96	54	211
	7	44	1870	560	624	277	500	1300	582	3410	92	61	150
	8	44	1460	555	566	254	470	1300	517	2030	87	93	80
	9	53	1350	964	508	242	440	1200	477	1180	83	95	66
	10	63	2560	2310	463	233	440	1250	473	854	78	65	107
	11	121	3020	1340	433	590	440	1150	490	678	75	56	124
	12	331	2750	1250	402	1700	440	1000	427	601	72	52	118
	13	1290	2450	1110	383	952	440	900	401	538	70	49	322
	14	1000	2140	977	441	852	420	1000	445	474	67	46	281
	15	782	1460	1270	556	1500	420	900	442	423	65	45	383
	16	492	1090	959	535	1110	440	800	607	377	63	43	282
	17	366	880	788	766	855	510	741	723	332	61	43	401
	18	335	1040	668	877	708	510	642	686	311	59	49	529
	19	447	1140	584	725	682	510	620	618	298	56	53	307
	20	965	1180	530	640	743	520	517	572	271	54	54	217
	21	782	1110	546	568	697	610	510	508	242	52	52	168
	22	546	904	1010	496	989	610	628	543	221	51	49	139
	23	418	941	1780	441	1070	1000	1430	600	202	50	48	118
	24	369	1080	1590	400	1080	1500	1090	596	187	49	46	102
	25	408	940	1160	366	1100	1300	896	501	174	47	45	90
	26	2030	826	957	334	882	1100	741	445	163	45	41	81
	27	1770	1460	883	308	738	1000	812	393	155	44	41	74
	28	1880	2750	802	287	650	950	1090	366	150	43	42	68
	29	1330	2320	756	271	---	850	992	467	139	42	34	63
	30	929	2870	1140	249	---	1000	890	524	132	44	24	60
	31	875	---	1130	238	---	1600	---	465	---	55	24	---
TOTAL		17956	55746	32037	16032	19135	21720	32599	18440	17386	2161	1592	4692
MEAN		579	1858	1033	517	683	701	1087	595	580	69.7	51.4	156
MAX		2030	5330	2310	877	1700	1600	2200	1190	3410	125	95	529
MIN		44	685	530	238	175	420	510	366	132	42	24	24
CFSM		5.17	16.6	9.22	4.62	6.10	6.26	9.71	5.31	5.18	.62	.46	1.39
IN.		5.96	18.52	10.64	5.32	6.36	7.21	10.83	6.12	5.77	.72	.53	1.56
AC-FT		35620	110600	63550	31800	37950	43080	64660	36580	34490	4290	3160	9310
CAL YR 1984	TOTAL		315737	MEAN	863	MAX	6850	MIN	38	CFSM	7.71	IN.	104.87
WTR YR 1985	TOTAL		239496	MEAN	656	MAX	5330	MIN	24	CFSM	5.86	IN.	79.55
												AC-FT	626300
												AC-FT	475000

WILLAMETTE RIVER BASIN

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July to September 1985.

INSTRUMENTATION.--Temperature recorder since July 2, 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum during period July to September 1985, 26.0°C July. 20; minimum, 9.5°C Sept. 18, 19.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14183000 NORTH SANTIAM RIVER AT MEHAMA, OR

LOCATION.--Lat 44°47'20", long 122°37'00", in NW¼ sec.18, T.9 S., R.2 E., Marion County, Hydrologic Unit 17090005, on right bank 300 ft downstream from highway bridge at Mehama, 0.5 mi downstream from Little North Santiam River, and at mile 38.71.

DRAINAGE AREA.--655 mi², at cableway 0.8 mi downstream, where all discharge measurements are made.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1905 to March 1907, October 1910 to September 1914, September 1921 to current year. Monthly discharge only September 1921, published in WSP 1318. Prior to October 1913, published as North Fork of Santiam River at Mehama.

REVISED RECORDS.--WSP 739: 1922-23(M). WSP 1044: 1943. WSP 1248: 1906, 1911-14, 1924(M), 1926, 1934-36(M), 1937, 1938(M), 1942(M). WSP 2135: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 602.49 ft above National Geodetic Vertical Datum of 1929. Prior to June 15, 1933, nonrecording gage at site 100 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1953 by Detroit Lake (see sta 14180500) and Big Cliff Reservoir, usable capacity for reregulating purposes, 2,930 acre-ft. No diversion upstream from station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--69 years (water years 1906, 1911-14, 1922-85), 3,386 ft³/s, 2,453,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,600 ft³/s Dec. 28, 1945, gage height, 15.37 ft, from rating curve extended above 36,000 ft³/s, on basis of slope-area measurement of peak flow; maximum gage height, 17.5 ft Nov. 20, 1921, from graph based on gage readings, and Jan. 6, 1923, from floodmark, at site then in use; minimum discharge, 254 ft³/s Aug. 3, 1970; minimum daily, 420 ft³/s Sept. 18, 1924.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,700 ft³/s Nov. 13, gage height, 8.41 ft; minimum, 1,070 ft³/s Aug. 25; minimum daily, 1,110 ft³/s Aug. 27, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2450	3820	5010	2990	1360	2050	4330	3120	3230	1300	1270	1130
2	2560	10100	6300	2790	1330	2040	4300	3470	3110	1280	1250	1140
3	2460	9600	6350	2500	1320	1860	3810	4150	3090	1260	1180	1140
4	2630	7020	6000	2220	1280	1940	3210	4340	2710	1250	1160	1130
5	2570	9250	5850	2320	1300	1840	2790	4260	2650	1250	1150	1140
6	2560	12900	5750	2090	1290	1760	2770	4070	5500	1240	1160	1370
7	2600	12800	3920	2200	1520	1700	3010	4140	10400	1240	1140	1310
8	2600	12500	2520	2100	1510	1640	2880	3820	8020	1220	1220	1220
9	2640	12100	2800	1940	1500	1600	2830	3430	6200	1220	1230	1590
10	2610	9490	5390	1790	1480	1610	2950	3130	6030	1550	1220	2240
11	2570	6950	4810	1600	2130	1620	2710	2690	5850	1190	1210	2420
12	2850	9350	4770	1630	4090	1610	2920	2410	5570	1200	1230	2570
13	3970	7790	4540	1590	2700	1600	3660	2390	4290	1200	1180	2940
14	3760	13000	4260	1630	2450	1580	4080	2350	3770	1180	1150	2890
15	3570	12600	4500	1760	3470	1600	4360	2370	3130	1180	1140	2960
16	2990	11900	4090	1710	2840	1650	4400	2760	2810	1190	1130	2870
17	2820	11500	3870	1940	2430	1730	3730	3420	2890	1180	1130	3120
18	2860	11600	3050	2140	2180	1740	3060	3970	2450	1190	1130	3610
19	3140	9940	2320	2040	2140	1760	2880	4080	2290	1180	1130	3340
20	3850	6970	2220	1940	2230	1780	2630	4090	2170	1190	1130	3180
21	3620	6420	2210	1910	2160	1920	2710	3870	1940	1240	1140	3080
22	3210	6020	2700	1730	2400	1860	2920	4750	1900	1250	1150	3040
23	3000	6220	3590	1940	2460	2840	3540	4890	1850	1240	1140	3020
24	2970	6450	3630	1660	2440	3370	3110	4890	1730	1270	1130	3020
25	3080	6240	3280	1550	2450	2680	3030	4110	1750	1230	1120	2890
26	5340	6070	3350	1490	2300	2500	2790	3420	1700	1220	1120	2860
27	5280	7510	3180	1450	2140	2480	2630	3410	1650	1210	1110	2920
28	5730	9610	2850	1400	1990	2300	3070	3140	1380	1200	1120	2690
29	4840	7640	2810	1390	---	2220	2900	2950	1310	1210	1120	2570
30	4250	6700	3380	1410	---	2610	2830	3310	1320	1240	1120	2610
31	4160	---	3400	1350	---	3970	---	3230	---	1250	1110	---
TOTAL	103540	270060	122700	58200	58890	63460	96840	110430	102690	38250	35920	72010
MEAN	3340	9002	3958	1877	2103	2047	3228	3562	3423	1234	1159	2400
MAX	5730	13000	6350	2990	4090	3970	4400	4890	10400	1550	1270	3610
MIN	2450	3820	2210	1350	1280	1580	2630	2350	1310	1180	1110	1130
AC-FT	205400	535700	243400	115400	116800	125900	192100	219000	203700	75870	71250	142800
CAL YR 1984	TOTAL	1504880	MEAN	4112	MAX	13000	MIN	1060	AC-FT	2985000		
WTR YR 1985	TOTAL	1132990	MEAN	3104	MAX	13000	MIN	1110	AC-FT	2247000		

WILLAMETTE RIVER BASIN

14183000 NORTH SANTIAM RIVER AT MEHAMA, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 1985.

INSTRUMENTATION.--Temperature recorder since May 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum during period May to September 1985, 18.0°C July 18-20; minimum, 5.5°C May 12.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14184100 NORTH SANTIAM RIVER NEAR JEFFERSON, OR

LOCATION.--Lat 44°42'30", long 122°58'10", in SE¼SE¼ sec.7, T.10 S., R.2 W., Marion County, Hydrologic Unit 17090005, on right bank 300 ft upstream from Green's Bridge, on old bridge abutment at Jefferson Scio Road, and at mile 1.5.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 1985.

INSTRUMENTATION.--Temperature recorder since May 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum during period May to September 1985, 22.0°C July 19; minimum, 6.0°C May 11.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OR

LOCATION.--Lat 44°23'35", long 122°30'35", in SE¼ sec.36, T.13 S., R.2 E., Linn County, Hydrologic Unit 17090006, on left bank 100 ft downstream from bridge at Cascadia ranger station, 0.5 mi downstream from Mouse Creek, 0.5 mi upstream from Deer Creek, 1.5 mi southwest of Cascadia, and at mile 48.5.

DRAINAGE AREA.--174 mi², at cableway 0.7 mi upstream, where all discharge measurements are made.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1935 to current year. Monthly discharge only September 1935, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 759.88 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 1, 1935, nonrecording gage.

REMARKS.--Estimated daily discharges: Nov. 30, Dec. 15, 16, 24-27, Feb. 12, 13. Water-discharge records excellent. No regulation or diversion upstream from station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--50 years, 826 ft³/s, 64.47 in/yr, 598,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,600 ft³/s Dec. 22, 1964, gage height, 19.68 ft, from rating curve extended above 14,000 ft³/s; minimum, 23 ft³/s Dec. 1, 2, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1530	*9,080	*10.92	No other peak greater than base discharge.			
Minimum, 53 ft ³ /s Sept. 1.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	63	586	2160	845	301	715	2340	1140	468	161	93	54		
2	63	6030	1510	720	292	666	2340	1210	452	153	87	72		
3	63	6800	1140	711	276	595	1990	1310	419	147	82	73		
4	62	3240	930	723	239	612	1630	1090	449	141	77	64		
5	62	1860	780	738	260	575	1370	900	455	132	77	64		
6	62	1480	675	737	248	540	1390	824	1210	132	74	165		
7	62	1560	625	748	494	496	1590	752	2350	128	73	135		
8	62	1300	608	684	530	461	1510	671	2160	122	85	96		
9	70	1360	781	608	408	438	1500	639	1310	121	87	91		
10	71	3510	1980	546	351	438	1600	652	949	124	79	123		
11	94	3500	1380	505	656	450	1490	652	752	122	74	101		
12	147	3020	1710	469	1800	455	1350	577	639	118	71	92		
13	540	2990	1560	456	1010	437	1290	570	553	116	70	96		
14	438	2640	1250	489	1080	435	1320	631	488	112	66	117		
15	399	1760	1400	541	1760	448	1300	621	441	110	63	205		
16	265	1320	1130	518	1290	496	1180	765	398	107	62	157		
17	211	1070	915	643	958	560	934	819	358	105	61	294		
18	201	1140	758	730	780	560	854	811	331	101	61	353		
19	594	1080	648	674	725	551	823	770	310	98	62	207		
20	851	1100	589	618	795	572	722	714	287	94	63	157		
21	603	1070	565	562	766	643	712	650	263	91	63	132		
22	444	925	641	512	892	583	838	634	247	90	63	119		
23	346	966	833	476	950	1160	1790	636	232	88	61	108		
24	331	1070	950	450	965	1610	1390	628	221	86	59	101		
25	338	955	847	423	1020	1140	1150	565	211	85	58	93		
26	1620	851	792	394	866	988	962	522	200	83	56	87		
27	1390	1700	753	370	753	973	947	474	191	79	54	81		
28	1730	3040	704	353	699	852	1140	445	186	77	54	77		
29	1240	2550	682	337	---	788	1090	513	177	77	54	73		
30	823	3650	1100	312	---	1010	1080	455	167	79	54	71		
31	705	---	1070	302	---	1980	---	483	---	88	54	---		
TOTAL	13950	64123	31466	17194	21164	22227	39622	22123	16874	3367	2097	3658		
MEAN	450	2137	1015	555	756	717	1321	714	562	109	67.6	122		
MAX	1730	6800	2160	845	1800	1980	2340	1310	2350	161	93	353		
MIN	62	586	565	302	239	435	712	445	167	77	54	54		
CFSM	2.59	12.3	5.83	3.19	4.34	4.12	7.59	4.10	3.23	.63	.39	.70		
IN.	2.98	13.71	6.73	3.68	4.52	4.75	8.47	4.73	3.61	.72	.45	.78		
AC-FT	27670	127200	62410	34100	41980	44090	78590	43880	33470	6680	4160	7260		
CAL YR 1984	TOTAL	381165	MEAN	1041	MAX	11700	MIN	62	CFSM	5.98	IN.	81.49	AC-FT	756000
WTR YR 1985	TOTAL	257865	MEAN	706	MAX	6800	MIN	54	CFSM	4.06	IN.	55.13	AC-FT	511500

WILLAMETTE RIVER BASIN

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14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OR --Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: June 1962 to July 1967, February 1969 to current year.

INSTRUMENTATION.--Temperature recorder June 1962 to July 1967, February 1969 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 25.0°C July 30, Aug. 7, 1965; minimum, 0.0°C at times during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 23.0°C July 19, 20; minimum recorded, 0.0°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	11.5	7.5	6.0	6.5	5.5	5.0	4.0	3.5	1.5		
2	13.0	11.5	8.0	7.5	6.5	5.5	4.5	4.0	3.0	1.5		
3	13.0	11.0	8.0	7.5	6.0	5.5	4.5	4.0	3.0	2.5		
4	12.5	11.5	8.0	7.5	5.5	4.5	5.0	4.0	2.5	.0		
5	12.5	11.0	8.0	6.5	5.0	4.0	5.5	4.5	2.0	.5		
6	13.5	11.5	8.0	7.5	5.0	4.0	5.5	4.5	3.0	2.0		
7	14.0	12.0	7.5	7.0	5.5	4.5	5.5	5.0	3.0	3.0		
8	13.5	12.5	7.0	6.0	6.5	5.5	5.5	4.5	---	---		
9	13.0	12.0	7.0	6.5	6.5	6.0	5.0	4.0	---	---		
10	13.0	12.0	8.0	7.0	6.5	4.5	4.0	3.5	---	---		
11	12.0	11.0	8.0	8.0	5.0	4.0	4.0	3.5	---	---		
12	11.0	10.5	8.0	7.5	5.5	4.5	4.0	3.0	---	---		
13	10.5	9.5	8.0	7.0	6.0	5.5	3.5	3.0	---	---		
14	9.5	8.5	7.0	6.5	6.0	5.0	4.5	3.5	---	---		
15	8.5	7.5	7.5	6.0	6.0	5.0	5.0	4.5	---	---		
16	8.5	7.5	7.0	6.5	5.0	4.5	4.5	4.0	---	---		
17	7.5	7.5	7.5	6.0	5.0	4.5	5.0	4.5	---	---		
18	7.5	7.0	7.5	7.0	4.5	2.5	5.5	4.5	---	---		
19	8.5	7.5	7.0	6.5	2.5	1.5	5.5	4.0	---	---		
20	8.5	8.0	7.0	6.5	2.5	2.0	6.0	5.0	---	---		
21	8.5	8.0	6.5	5.5	4.0	2.5	6.0	4.0	---	---		
22	8.5	7.0	5.5	4.5	4.5	4.0	4.5	3.5	---	---		
23	8.0	6.5	6.0	5.0	5.0	4.5	4.0	3.5	---	---		
24	9.5	8.0	5.5	5.0	5.0	4.5	4.0	3.0	---	---		
25	9.5	8.5	6.0	5.0	5.0	4.0	3.5	2.5	---	---		
26	9.5	7.5	5.5	5.0	5.0	4.5	3.0	2.0	---	---		
27	7.5	7.5	6.5	5.5	5.0	4.5	3.0	2.0	---	---		
28	8.0	7.5	7.0	6.5	4.5	4.0	3.5	3.0	---	---		
29	7.5	7.0	6.5	6.5	5.0	4.5	3.5	3.0	---	---		
30	7.5	6.5	7.0	6.5	5.5	5.0	3.5	2.5	---	---		
31	7.0	6.5	---	---	5.5	5.0	3.5	2.5	---	---		
MONTH	14.0	6.5	8.0	4.5	6.5	1.5	6.0	2.0	---	---		

WILLAMETTE RIVER BASIN

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14185700 MIDDLE SANTIAM RIVER NEAR UPPER SODA, OR

LOCATION.--Lat 44°30'45", long 122°15'52", in SE¼NE¼ sec.24, T.12 S., R.4 E., Linn County, Hydrologic Unit 17090006, on right bank 0.8 mi upstream from Bear Creek, 7.5 mi north of Upper Soda, and at mile 23.9.

DRAINAGE AREA.--74.6 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,500 ft, from topographic map.

REMARKS.--No estimated daily discharges. Records excellent.

AVERAGE DISCHARGE.--5 years, 455 ft³/s, 82.83 in/yr, 329,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,000 ft³/s Dec. 25, 1980, gage height, 8.58 ft, from floodmark, from rating curve extended above 3,600 ft³/s on basis of slope-area measurement of peak flow; minimum, 22 ft³/s Sept. 16-20, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0400	*4,590	*6.70	No other peak greater than base discharge.			
Minimum, 29 ft ³ /s Oct. 3, 4, 7, 8.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	31	311	742	277	211	396	994	785	343	139	63	35		
2	30	2460	608	263	201	381	1150	885	324	134	63	45		
3	29	3660	515	254	188	356	1150	978	311	128	58	41		
4	29	1920	453	243	170	346	1050	820	327	123	57	37		
5	31	1170	405	242	178	318	936	698	330	119	56	39		
6	31	988	363	250	167	300	988	636	874	115	54	98		
7	29	963	338	264	193	278	1160	588	1210	111	55	64		
8	30	822	327	264	183	262	1160	535	1060	108	65	47		
9	35	785	472	259	171	251	1170	506	765	105	62	45		
10	35	1660	963	248	162	250	1270	499	617	100	55	56		
11	48	1840	722	241	252	265	1210	490	529	97	52	56		
12	102	1620	670	231	490	276	1110	447	477	94	50	51		
13	281	1550	575	225	374	276	1070	440	433	90	48	55		
14	246	1360	531	241	348	284	1110	473	393	87	47	66		
15	193	1020	550	276	455	301	1110	471	358	85	45	111		
16	140	793	483	285	447	351	1010	560	323	82	43	76		
17	116	662	441	368	405	415	826	616	298	81	42	122		
18	110	701	397	452	363	433	726	625	286	78	43	131		
19	203	656	355	452	344	438	651	602	268	74	49	91		
20	332	621	329	439	330	464	563	563	247	72	46	72		
21	262	557	317	412	311	491	520	521	224	70	43	61		
22	216	501	315	378	351	453	528	513	208	69	42	55		
23	171	515	380	350	388	582	915	522	196	68	41	50		
24	154	509	391	332	411	664	756	520	184	66	40	46		
25	161	470	353	311	444	555	647	467	178	64	39	43		
26	656	430	327	290	421	499	567	433	171	64	38	40		
27	589	635	318	273	393	454	576	397	163	61	38	39		
28	654	1030	297	259	382	413	659	366	155	60	37	37		
29	540	1010	285	244	---	386	675	401	148	59	36	35		
30	423	929	303	227	---	461	704	368	143	59	35	35		
31	379	---	301	217	---	788	---	356	---	63	35	---		
TOTAL	6286	32148	13826	9067	8733	12387	26961	17081	11543	2725	1477	1779		
MEAN	203	1072	446	292	312	400	899	551	385	87.9	47.6	59.3		
MAX	656	3660	963	452	490	788	1270	978	1210	139	65	131		
MIN	29	311	285	217	162	250	520	356	143	59	35	35		
CFSM	2.72	14.4	5.98	3.91	4.18	5.36	12.1	7.39	5.16	1.18	.64	.79		
IN.	3.13	16.03	6.89	4.52	4.35	6.18	13.44	8.52	5.76	1.36	.74	.89		
AC-FT	12470	63770	27420	17980	17320	24570	53480	33880	22900	5410	2930	3530		
CAL YR 1984	TOTAL	188186	MEAN	514	MAX	4370	MIN	29	CFSM	6.89	IN.	93.84	AC-FT	373300
WTR YR 1985	TOTAL	144013	MEAN	395	MAX	3660	MIN	29	CFSM	5.29	IN.	71.81	AC-FT	285600

WILLAMETTE RIVER BASIN

14185880 PACKERS GULCH NEAR CASCADIA, OR

LOCATION.--Lat 44°36'00", long 122°23'38", in NE¼NW¼ sec.24, T.11 S., R.3 E., Linn County, Hydrologic Unit 17090006, on right bank 2 ft downstream from bridge, 1.0 mi upstream from mouth, and 14 mi north of Cascadia.

DRAINAGE AREA.--7.45 mi².

PERIOD OF RECORD.--July 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,520 ft, from topographic map.

REMARKS.--No estimated daily discharges. Records excellent. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,470 ft³/s Feb. 13, 1984, gage height, 4.14 ft, from rating curve extended above 200 ft³/s; minimum, 2.3 ft³/s Aug. 26, 29-31, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 540 ft³/s and maximum (*) from rating curve extended above 200 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0730	*853	*3.56	No other peak greater than base discharge.			
Minimum, 2.3 ft ³ /s Aug. 26, 29-31.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	44	130	45	20	64	230	57	15	8.0	4.7	2.5
2	3.3	551	90	40	19	56	218	56	14	7.7	4.1	3.1
3	3.3	527	68	40	18	51	183	57	14	7.3	3.7	2.6
4	3.5	210	56	43	16	47	141	50	16	7.0	3.6	2.5
5	3.5	127	48	45	16	43	116	43	15	6.8	3.4	3.3
6	3.4	109	44	50	16	40	121	40	108	6.6	3.3	9.7
7	3.3	142	43	53	21	37	130	36	156	6.3	3.7	4.7
8	3.7	109	45	50	19	35	115	33	105	6.1	4.8	3.6
9	4.2	114	92	46	17	35	111	30	63	5.9	3.9	3.5
10	5.4	263	173	43	16	39	106	31	47	5.6	3.5	5.8
11	11	278	105	41	68	44	90	29	39	5.5	3.3	4.4
12	17	243	90	39	103	44	78	26	33	5.3	3.2	7.4
13	40	201	72	38	59	42	76	25	28	5.2	3.1	10
14	43	161	73	46	65	43	74	27	24	5.0	2.9	9.3
15	34	110	84	53	107	45	68	25	22	4.9	2.8	14
16	22	78	64	54	76	52	57	29	20	4.8	2.7	9.6
17	16	63	53	68	60	56	47	31	18	4.7	2.7	13
18	16	80	46	71	52	55	43	29	17	4.5	2.9	14
19	39	73	41	61	50	52	40	26	16	4.3	3.2	10
20	58	76	37	54	48	54	35	24	14	4.1	3.0	7.9
21	41	69	38	48	46	53	37	22	13	4.0	2.8	6.7
22	30	58	54	43	57	48	49	23	12	4.0	2.7	5.9
23	24	61	75	39	63	127	118	23	12	3.9	2.6	5.2
24	21	60	70	36	72	124	79	22	11	3.9	2.6	4.8
25	23	54	56	33	71	83	67	20	11	3.8	2.5	4.3
26	102	49	48	30	60	68	57	18	9.9	3.6	2.4	4.1
27	101	155	45	28	55	58	59	17	9.8	3.5	2.4	3.8
28	112	266	41	26	58	52	67	16	9.3	3.5	2.4	3.6
29	71	205	42	24	---	50	61	17	8.7	3.5	2.4	3.5
30	50	201	56	22	---	99	56	15	8.3	3.9	2.4	3.4
31	44	---	56	21	---	183	---	17	---	4.0	2.4	---
TOTAL	951.9	4737	2035	1330	1348	1879	2729	914	889.0	157.2	96.1	186.2
MEAN	30.7	158	65.6	42.9	48.1	60.6	91.0	29.5	29.6	5.07	3.10	6.21
MAX	112	551	173	71	107	183	230	57	156	8.0	4.8	14
MIN	3.3	44	37	21	16	35	35	15	8.3	3.5	2.4	2.5
CFSM	4.12	21.2	8.81	5.76	6.46	8.13	12.2	3.96	3.97	.68	.42	.83
IN.	4.75	23.65	10.16	6.64	6.73	9.38	13.63	4.56	4.44	.78	.48	.93
AC-FT	1890	9400	4040	2640	2670	3730	5410	1810	1760	312	191	369
CAL YR 1984	TOTAL	23721.8	MEAN	64.8	MAX	959	MIN	3.3	CFSM	8.70	IN.	118.45
WTR YR 1985	TOTAL	17252.4	MEAN	47.3	MAX	551	MIN	2.4	CFSM	6.35	IN.	86.15
											AC-FT	47050
											AC-FT	34220

WILLAMETTE RIVER BASIN

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14185900 QUARTZVILLE CREEK NEAR CASCADIA, OR

LOCATION.--Lat 44°32'25", long 122°26'05", in NW¼ sec.10, T.12 S., R.3 E., Linn County, Hydrologic Unit 17090006, on Bureau of Land Management land, on right bank 80 ft downstream from Panther Creek, 10 mi north of Cascadia, and at mile 6.6.

DRAINAGE AREA.--99.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1963 to November 1964 (destroyed by flood of December 1964); October 1965 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,050 ft, from topographic map. Aug. 13, 1963, to Dec. 22, 1964, water-stage recorder on left bank at present datum.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--21 years (water years 1964, 1966-85), 683 ft³/s, 93.50 in/yr, 494,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s Jan. 20, 1972, gage height, 16.38 ft; minimum, 14 ft³/s Aug. 19-23, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 36,500 ft³/s Dec. 22, 1964, from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0930	*8,270	*11.76	Nov. 10	1000	4,650	9.81

Minimum, 32 ft³/s Aug. 31, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	488	1470	558	221	762	2720	878	292	105	60	33
2	38	5880	1000	471	207	649	2560	938	269	101	58	44
3	37	6160	755	460	193	547	2160	1060	262	99	54	41
4	40	2730	610	484	169	512	1600	892	307	96	51	36
5	43	1580	516	527	182	453	1310	686	300	92	50	43
6	39	1450	459	596	173	414	1470	606	1900	90	48	175
7	38	2070	442	654	265	380	1670	546	2720	88	52	90
8	39	1440	488	574	232	351	1480	482	1730	85	68	58
9	56	1500	1100	500	206	344	1470	452	946	83	61	52
10	66	3970	2590	448	191	381	1510	451	654	80	52	70
11	152	3810	1260	417	741	458	1320	436	513	78	49	66
12	283	3260	1180	390	1620	482	1190	384	437	76	47	80
13	751	2790	924	376	804	438	1150	382	378	73	45	121
14	669	2220	834	475	790	446	1180	428	332	72	43	116
15	499	1370	1130	587	1510	488	1110	417	296	70	42	198
16	284	962	793	559	1000	600	949	530	264	69	41	137
17	212	770	637	847	738	704	707	594	240	68	40	264
18	201	1170	527	907	610	659	618	579	226	66	39	243
19	530	1090	456	721	578	608	560	534	212	64	45	151
20	977	1020	412	630	570	636	466	486	194	62	43	111
21	575	903	419	538	533	696	462	441	177	61	41	91
22	382	717	602	466	710	578	588	457	166	59	39	79
23	290	761	1010	420	843	1580	1640	466	155	58	38	71
24	266	820	939	391	935	1620	1030	441	146	57	37	64
25	293	697	686	358	961	978	823	376	139	57	36	59
26	1540	598	566	325	746	792	682	342	132	55	35	55
27	1420	1940	542	299	631	680	755	305	126	53	34	51
28	1650	3450	487	277	643	590	964	285	121	52	34	48
29	954	2360	520	259	---	569	852	332	115	52	34	45
30	639	2370	781	237	---	1020	797	315	110	54	33	44
31	607	---	767	225	---	2270	---	308	---	59	33	---
TOTAL	13608	60346	24902	14976	17002	21685	35793	15829	13859	2234	1382	2736
MEAN	439	2012	803	483	607	700	1193	511	462	72.1	44.6	91.2
MAX	1650	6160	2590	907	1620	2270	2720	1060	2720	105	68	264
MIN	37	488	412	225	169	344	462	285	110	52	33	33
CFSM	4.43	20.3	8.09	4.87	6.12	7.06	12.0	5.15	4.66	.73	.45	.92
IN.	5.10	22.63	9.34	5.62	6.38	8.13	13.42	5.94	5.20	.84	.52	1.03
AC-FT	26990	119700	49390	29700	33720	43010	71000	31400	27490	4430	2740	5430
CAL YR 1984	TOTAL	298072	MEAN	814	MAX	7920	MIN	37	CFSM	8.21	IN.	111.78
WTR YR 1985	TOTAL	224352	MEAN	615	MAX	6160	MIN	33	CFSM	6.20	IN.	84.13
											AC-FT	591200
											AC-FT	445000

WILLAMETTE RIVER BASIN

14185900 QUARTZVILLE CREEK NEAR CASCADIA, OR-- Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1963 to November 1964, October 1965 to current year.

INSTRUMENTATION.--Temperature recorder August 1963 to November 1964, October 1965 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 25.5°C Aug. 10, 11, 1971; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 23.5°C July 19, 20; minimum, 0.0°C Feb. 10.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.0	12.0	7.0	6.0	6.0	5.5	4.5	4.0	3.0	1.0	5.5	4.5
2	12.5	11.0	8.0	7.0	6.0	5.5	4.5	---	2.5	2.0	5.0	4.0
3	13.0	11.5	8.0	7.5	5.5	5.0	4.0	---	2.5	1.0	4.5	3.5
4	12.5	12.0	8.0	7.0	5.0	4.5	4.0	3.0	---	---	4.0	3.0
5	12.5	11.5	8.0	6.5	4.5	4.0	4.0	3.0	---	---	5.0	3.5
6	13.5	12.0	7.5	7.0	4.5	4.0	---	---	---	---	5.0	3.5
7	13.5	12.0	7.5	7.0	5.0	4.0	5.0	---	2.5	.5	5.0	3.0
8	13.0	12.5	7.0	6.5	5.5	5.0	5.0	4.0	1.0	.5	5.0	3.0
9	13.0	12.5	6.5	6.0	6.0	5.5	4.0	---	.5	.5	5.5	3.5
10	12.5	11.5	7.5	6.5	6.0	5.0	4.0	3.5	2.0	.0	6.0	4.0
11	11.5	10.0	7.5	---	5.0	4.0	4.0	3.5	2.0	1.5	6.0	3.5
12	10.0	---	---	---	5.0	4.0	4.0	3.5	4.0	2.0	6.0	4.5
13	9.0	---	7.0	7.0	5.5	5.0	4.0	3.0	4.5	3.5	6.0	3.5
14	8.0	7.5	7.0	6.5	5.5	5.0	5.0	3.5	4.5	3.5	6.5	4.0
15	8.0	7.0	7.0	6.0	5.0	4.5	5.0	4.0	5.5	4.5	6.5	4.0
16	8.0	7.0	7.0	6.5	4.5	4.0	5.0	4.0	4.5	3.5	7.0	4.0
17	7.0	6.5	7.0	6.0	4.5	4.0	5.0	4.5	4.5	3.0	7.0	5.0
18	7.0	6.5	7.5	7.0	4.0	2.0	5.0	4.0	4.5	3.0	7.0	4.0
19	8.0	7.0	7.0	6.5	2.5	1.5	5.0	3.5	4.0	3.5	6.5	4.5
20	8.5	8.0	6.5	6.0	2.5	2.0	5.5	4.5	5.0	3.5	6.0	4.5
21	8.5	8.0	6.5	5.5	3.5	2.0	4.5	3.5	5.0	4.5	4.5	2.5
22	8.0	7.0	5.5	5.0	4.5	3.5	4.5	---	5.5	4.5	3.5	2.5
23	7.5	6.5	5.5	5.0	5.0	4.5	3.5	---	6.0	4.5	4.5	3.5
24	9.0	7.5	5.5	5.0	4.5	4.5	3.5	3.0	5.5	5.0	5.0	4.0
25	9.5	8.5	5.0	4.5	4.5	3.5	3.0	2.0	5.5	4.5	5.5	4.0
26	9.5	7.5	5.5	5.0	5.0	3.5	3.0	---	5.5	4.0	4.5	3.0
27	7.5	7.0	6.0	---	5.0	3.5	3.0	2.0	5.5	3.5	4.0	3.0
28	7.5	7.0	6.5	6.0	4.0	3.5	3.5	2.5	6.0	4.0	6.0	3.5
29	7.5	7.0	6.5	5.5	4.0	4.0	3.5	---	---	---	5.0	4.0
30	7.0	6.5	6.5	6.0	5.0	4.0	3.0	2.5	---	---	5.5	4.5
31	7.0	6.5	---	---	5.0	4.5	3.0	2.0	---	---	6.0	5.0
MONTH	13.5	---	---	---	6.0	1.5	---	---	---	.0	7.0	2.5

WILLAMETTE RIVER BASIN

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14185900 QUARTZVILLE CREEK NEAR CASCADIA, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14186100 GREEN PETER LAKE NEAR FOSTER, OR

LOCATION.--Lat 44°27'10", long 122°32'40", in NE¼SE¼ sec.10, T.13 S., R.2 E., Linn County, Hydrologic Unit 17090006, in Green Peter Dam on Middle Santiam River, 7.0 mi northeast of Foster, and at mile 5.7.

DRAINAGE AREA.--273 mi².

PERIOD OF RECORD.--October 1966 to current year. Prior to October 1971, published as Green Peter Reservoir near Foster.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by concrete, gravity-type dam with ogee spillway completed in 1966 by Corps of Engineers; controlled storage began Oct. 6, 1966. Total capacity, 428,100 acre-ft, usable capacity 330,800 acre-ft between elevations 887.0 ft, proposed lower limit of operation, and 1,015.0 ft, top of spillway gates. Reservoir used for flood control, power development, improvement of navigation, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Midnight elevations furnished by Corps of Engineers and reviewed by Geological Survey. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 420,200 acre-ft June 9, 1981, elevation, 1,012.86 ft; minimum, 116,900 acre-ft Dec. 15, 1972, elevation, 899.20 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 415,600 acre-ft June 8, elevation, 1,011.58 ft; minimum, 157,300 acre-ft Jan. 14, elevation, 920.77 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)

899	116,600	960	251,100
900	118,300	980	309,700
920	155,700	1,000	374,800
940	199,900	1,013	420,700

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	982.27	962.66	944.72	922.75	925.18	949.47	980.03	1004.52	1009.41	1009.59	1003.63	994.75
2	981.42	968.91	943.50	921.85	925.28	950.23	983.12	1005.18	1009.31	1009.52	1003.47	994.49
3	980.55	977.94	941.79	921.72	925.35	950.88	985.48	1005.94	1009.30	1009.47	1003.30	994.20
4	979.73	978.58	939.78	921.68	925.35	951.56	987.21	1006.27	1009.31	1009.39	1003.12	993.90
5	978.87	975.71	937.75	921.68	925.42	952.10	988.51	1006.43	1009.33	1009.30	1002.91	993.61
6	978.00	972.36	934.86	921.73	925.46	952.56	989.96	1006.37	1010.46	1009.21	1002.65	993.48
7	977.11	969.43	933.25	921.77	925.98	952.96	991.59	1006.31	1011.40	1009.09	1002.37	993.21
8	976.25	965.64	932.58	921.79	926.35	953.32	992.61	1006.59	1011.50	1008.95	1002.10	992.91
9	975.43	962.08	932.70	921.60	926.54	953.63	993.14	1006.98	1010.78	1008.80	1001.80	992.69
10	974.61	963.26	934.18	921.32	926.77	953.98	993.82	1007.48	1009.76	1008.65	1001.51	992.44
11	973.94	964.17	932.90	921.12	927.89	954.38	994.28	1008.05	1009.51	1008.50	1001.20	992.07
12	973.45	964.40	932.93	921.08	930.49	954.82	994.56	1008.56	1009.35	1008.33	1000.90	991.73
13	973.52	964.13	932.00	921.00	931.72	955.24	994.77	1009.04	1009.35	1008.14	1000.59	991.39
14	973.48	962.50	930.91	921.06	933.01	955.63	995.05	1009.58	1009.30	1007.98	1000.28	990.88
15	973.21	959.06	931.00	921.34	935.26	956.08	995.53	1010.11	1009.31	1007.83	1000.05	990.41
16	972.65	955.42	930.57	921.61	936.82	956.76	995.84	1010.07	1009.31	1007.65	999.73	989.96
17	972.00	952.00	929.92	922.24	937.95	957.59	996.42	1010.14	1009.25	1007.48	999.40	989.58
18	971.27	950.29	929.03	923.04	938.83	958.39	996.99	1010.04	1009.40	1007.31	999.09	989.10
19	971.05	948.91	927.91	923.43	939.65	959.20	997.56	1009.42	1009.54	1007.09	998.78	988.43
20	971.22	947.60	927.16	923.88	940.50	960.14	997.95	1009.70	1009.70	1006.83	998.46	987.73
21	970.94	946.00	926.49	924.00	941.24	961.20	998.37	1009.41	1009.78	1006.54	998.13	986.98
22	970.37	944.14	926.12	924.19	942.24	962.16	998.95	1009.29	1009.78	1006.26	997.80	986.28
23	969.53	942.36	926.51	924.29	943.39	964.35	1000.64	1009.47	1009.80	1006.00	997.48	985.51
24	968.64	940.98	926.81	924.32	944.64	966.55	1001.08	1009.53	1009.80	1005.71	997.17	984.83
25	967.83	939.88	926.64	924.51	945.94	967.99	1001.36	1009.49	1009.80	1005.43	996.83	984.13
26	968.83	938.96	926.25	924.59	946.97	969.26	1001.76	1009.39	1009.83	1005.15	996.50	983.48
27	969.00	939.79	925.45	924.59	947.75	970.40	1002.23	1009.33	1009.86	1004.87	996.21	982.81
28	968.86	942.42	924.56	924.55	948.57	971.37	1002.92	1009.30	1009.84	1004.59	995.91	982.11
29	967.73	943.46	923.64	924.71	---	972.33	1003.49	1009.39	1009.72	1004.28	995.61	981.38
30	966.19	944.96	923.47	924.85	---	973.80	1003.96	1009.41	1009.64	1004.04	995.32	980.69
31	964.49	---	923.40	924.98	---	976.51	---	1009.47	---	1003.82	995.03	---
MAX	982.27	978.58	944.72	924.98	948.57	976.51	1003.96	1010.14	1011.50	1009.59	1003.63	994.75
MIN	964.49	938.96	923.40	921.00	925.18	949.47	980.03	1004.52	1009.25	1003.82	995.03	980.69
(+)	263700	211900	162800	166100	220900	299000	388400	407900	408500	387900	358000	311900
(#)	-55700	-51800	-49100	+3300	+54800	+78100	+89400	+19500	+600	-20600	-29900	-46100

CAL YR 1984 MAX 1011.82 MIN 922.27 AC-FT# -16000
WTR YR 1985 MAX 1011.50 MIN 921.00 AC-FT# -7500

† Contents, in acre-feet, at 2400, on last day of month.

Change in contents, in acre-feet.

WILLAMETTE RIVER BASIN

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14186600 FOSTER LAKE AT FOSTER, OR

LOCATION.--Lat 44°25'00", long 122°40'25", in NW¼NE¼ sec.27, T.13 S., R.1 E., Linn County, Hydrologic Unit 17090006, in Foster Dam on South Santiam River, 0.3 mi above Wiley Creek, 0.5 mi north of Foster, and at mile 37.7.

DRAINAGE AREA.--492 mi².

PERIOD OF RECORD.--December 1966 to current year. Prior to October 1971, published as Foster Reservoir at Foster.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by rockfill embankment with an impervious core and ogee spillway completed in 1966 by Corps of Engineers; controlled storage began in November 1966. Total capacity, 60,780 acre-ft and usable capacity 33,210 acre-ft between elevations 609.0 ft, proposed lower limit of operation, and 641.0 ft, top of spillway gates. Lake used for reregulation of water released from Green Peter Lake, flood control, power development, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Midnight elevations furnished by Corps of Engineers and reviewed by Geological Survey. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 60,090 acre-ft Sept. 17, 1968, elevation, 640.45 ft; minimum, 26,590 acre-ft Nov. 15, 16, 1971, elevation, 607.85 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 57,440 acre-ft June 7, elevation, 638.30 ft; minimum, 29,460 acre-ft Dec. 8, elevation, 611.18 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)

607	25,880	630	47,860
610	28,430	635	53,510
615	32,870	640	59,530
620	37,570	641	60,780
625	42,550		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	637.03	621.04	613.08	613.82	614.31	620.48	628.93	614.07	637.15	637.16	637.55	636.90
2	637.20	620.54	613.08	613.29	614.58	620.75	628.80	613.87	637.14	637.24	637.25	636.90
3	637.34	619.80	613.04	613.14	614.78	620.83	628.65	614.32	636.87	637.30	636.94	636.87
4	637.43	618.88	613.10	613.14	614.73	621.00	628.32	613.60	637.09	637.37	636.63	636.82
5	637.11	618.26	613.06	613.12	614.85	621.18	628.49	613.53	637.14	637.34	636.44	636.93
6	637.13	617.73	613.13	613.05	614.95	621.59	628.99	614.02	637.86	637.20	636.34	637.20
7	637.19	617.17	612.70	613.05	615.36	621.90	629.01	614.40	638.30	637.20	636.41	637.40
8	637.07	616.82	613.16	613.05	615.18	622.21	629.55	613.33	637.39	637.20	636.52	637.52
9	637.00	616.54	613.64	612.90	615.53	622.57	630.02	612.78	637.11	637.17	636.60	637.52
10	636.60	616.02	613.92	613.22	615.53	622.72	630.02	613.16	637.06	637.17	636.66	637.58
11	635.99	615.54	613.02	612.93	616.08	623.18	629.88	613.46	636.99	637.12	636.70	637.56
12	635.37	615.21	613.43	612.90	615.97	623.57	629.71	613.60	637.13	637.12	636.80	637.39
13	634.97	614.85	613.54	613.06	616.17	623.75	630.10	613.69	637.09	637.15	636.90	637.30
14	634.24	614.35	613.30	613.16	616.60	623.93	629.95	613.99	637.00	637.14	637.00	637.26
15	633.36	613.87	613.30	613.17	616.66	624.19	628.95	614.24	637.08	637.14	636.85	637.23
16	632.15	613.14	613.05	613.13	616.88	624.54	627.29	617.52	637.16	637.14	636.97	637.18
17	631.30	613.00	613.43	613.34	617.04	625.02	623.61	620.77	637.20	637.14	637.00	637.43
18	630.18	613.16	613.42	613.72	617.56	625.52	620.30	624.45	637.01	637.10	637.03	637.56
19	629.19	613.07	613.27	614.11	617.72	625.88	617.12	627.80	637.01	637.07	637.08	637.56
20	628.17	613.32	613.18	613.31	617.70	626.16	614.46	631.05	636.90	637.02	637.14	637.48
21	626.39	613.16	613.20	613.38	618.20	626.58	614.77	634.07	636.92	637.07	637.21	637.48
22	625.28	613.10	613.59	613.08	618.53	626.90	614.60	636.53	637.03	637.13	637.24	637.09
23	625.60	613.16	613.49	613.54	618.77	627.49	615.10	637.25	637.10	637.20	637.30	637.15
24	625.20	613.25	613.16	613.93	619.09	627.40	616.27	637.38	637.18	637.26	637.32	637.22
25	624.70	613.16	613.50	613.93	619.39	627.26	614.94	637.32	637.13	637.30	637.36	637.15
26	625.04	613.10	613.30	614.09	619.61	627.50	613.92	637.08	637.02	637.33	637.40	636.95
27	624.29	613.74	613.55	614.04	619.95	627.48	613.98	637.04	636.97	637.45	637.31	637.05
28	623.83	613.65	613.45	613.97	620.14	627.53	614.23	637.12	636.99	637.50	637.23	637.21
29	623.47	613.14	613.24	613.95	---	627.62	614.04	637.18	637.07	637.59	637.14	637.30
30	623.18	614.02	614.08	613.94	---	627.91	614.32	637.15	637.08	637.59	637.05	637.25
31	622.22	---	614.08	614.04	---	628.78	---	637.19	---	637.69	636.96	---
MAX	637.43	621.04	614.08	614.11	620.14	628.78	630.10	637.38	638.30	637.69	637.55	637.58
MIN	622.22	613.00	612.70	612.90	614.31	620.48	613.92	612.78	636.87	637.02	636.34	636.82
(+)	39740	31980	32040	32000	37700	46530	32250	56100	55970	56700	55820	56170
(+)	-15980	-7760	+60	-40	+5700	+8830	-14280	+23850	-130	+730	-880	+350

CAL YR 1984 MAX 637.60 MIN 612.70 AC-FT# +510
WTR YR 1985 MAX 638.30 MIN 612.70 AC-FT# +450

+ Contents, in acre-feet, at 2400, on last day of month.

Change in contents, in acre-feet.

WILLAMETTE RIVER BASIN

14186700 SOUTH SANTIAM RIVER AT FOSTER, OR

LOCATION.--Lat 44°24'50", long 122°40'25", in NE¼NW¼ sec.27, T.13 S., R.1 E., Linn County, Hydrologic Unit 17090006, on left bank 1000 ft downstream from Foster Dam, and at mile 37.5.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July to September 1985 (discontinued).

INSTRUMENTATION.--Temperature recorder since July 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum during period July to September 1985, 12.5°C on many days during July, August, September; minimum, 9.5°C September 24, 25, 29.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14187100 WILEY CREEK AT FOSTER, OR

LOCATION.--Lat 44°23'55", long 122°39'35", in SW¼NW¼ sec.35, T.13 S., R.1 E., Linn County, Hydrologic Unit 17090006, on left bank 1.5 mi downstream from Jackson Creek, 1.0 mi southeast of Foster, and at mile 1.4.

DRAINAGE AREA.--62.3 mi².

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 590 ft, from topographic map. Prior to May 2, 1974, at present site at datum 5.00 ft lower.

REMARKS.--Estimated daily discharges: Oct. 1-15, June 27 to July 2, July 21-30, Aug. 4 to Sept. 5, Sept. 8-11, 24-30. Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--12 years, 242 ft³/s, 52.75 in/yr, 175,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,320 ft³/s Jan. 15, 1974, gage height, 9.28 ft; minimum, 3.1 ft³/s Oct. 19, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1000	*2,170	*7.31	No other peak greater than base discharge.			
Minimum daily discharge, 9.0 ft ³ /s Aug. 28.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	16	171	902	321	86	194	634	193	62	40	32	16		
2	16	1500	654	264	93	185	601	184	61	38	21	19		
3	16	1430	504	243	96	168	539	192	57	36	18	18		
4	18	862	384	229	78	185	431	175	60	33	16	15		
5	21	565	306	219	85	177	348	151	61	30	16	16		
6	20	417	258	214	81	172	348	138	215	30	15	37		
7	18	467	231	214	328	159	368	130	467	29	16	27		
8	19	400	218	208	367	146	335	121	451	27	20	16		
9	21	544	219	189	256	140	310	114	256	26	19	15		
10	24	1250	608	173	199	137	293	114	185	24	16	19		
11	51	976	490	160	420	136	264	120	148	24	16	16		
12	112	842	531	148	841	135	238	104	127	23	15	19		
13	150	822	485	140	494	131	224	98	111	23	14	30		
14	130	768	420	138	440	129	212	107	96	23	13	37		
15	135	587	544	143	642	127	198	97	86	22	13	46		
16	51	436	410	139	501	130	181	97	77	21	13	32		
17	44	346	325	141	368	137	158	94	70	21	12	46		
18	56	347	275	151	289	136	163	88	64	20	12	44		
19	142	308	234	149	262	134	186	83	61	18	14	31		
20	168	406	211	141	260	144	170	79	58	17	15	25		
21	106	418	206	135	243	172	180	71	56	16	14	21		
22	76	338	214	128	256	168	226	64	55	16	13	19		
23	61	401	229	122	267	503	404	62	53	16	12	18		
24	57	517	237	117	268	653	350	63	52	15	11	16		
25	55	402	222	109	271	459	307	61	51	15	11	15		
26	348	329	210	104	240	417	260	59	49	15	10	14		
27	331	743	234	97	218	450	247	58	48	15	9.5	13		
28	460	1270	255	95	202	364	255	59	46	16	9.0	12		
29	355	1010	254	93	---	306	227	60	44	17	9.5	11		
30	232	1390	503	84	---	356	206	57	42	19	10	10		
31	203	---	421	82	---	571	---	69	---	27	11	---		
TOTAL	3512	20262	11194	4890	8151	7421	8863	3162	3269	712	446.0	673		
MEAN	113	675	361	158	291	239	295	102	109	23.0	14.4	22.4		
MAX	460	1500	902	321	841	653	634	193	467	40	32	46		
MIN	16	171	206	82	78	127	158	57	42	15	9.0	10		
CFSM	1.81	10.8	5.79	2.54	4.67	3.84	4.74	1.64	1.75	.37	.23	.36		
IN.	2.10	12.10	6.68	2.92	4.87	4.43	5.29	1.89	1.95	.43	.27	.40		
AC-FT	6970	40190	22200	9700	16170	14720	17580	6270	6480	1410	885	1330		
CAL YR 1984	TOTAL	107564	MEAN	294	MAX	2410	MIN	16	CFSM	4.72	IN.	64.23	AC-FT	213400
WTR YR 1985	TOTAL	72555.0	MEAN	199	MAX	1500	MIN	9.0	CFSM	3.19	IN.	43.32	AC-FT	143900

WILLAMETTE RIVER BASIN

14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OR

LOCATION.--Lat 44°24'45", long 122°41'15", in SE¼NE¼ sec.28, T.13 S., R.1 E., Linn County, Hydrologic Unit 17090006, on left bank 0.6 mi downstream from Wiley Creek and at mile 37.0.

DRAINAGE AREA.--557 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1973 to current year. Records for October 1966 to July 1973 (published as South Santiam River at Foster, station 14186700) at site 0.5 mi upstream not equivalent owing to inflow between sites.

GAGE.--Water-stage recorder. Elevation of gage is 560 ft, from topographic map.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. Flow regulated since October 1966 by Green Peter Lake (see station 14186100) and since December 1966 by Foster Lake (see station 14186600). No diversion upstream from station.

AVERAGE DISCHARGE.--12 years, 2,999 ft³/s, 2,173,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,800 ft³/s Feb. 26, 1982, gage height, 16.61 ft; minimum, 425 ft³/s July 26, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,900 ft³/s Nov. 2, gage height, 15.56 ft; minimum, 590 ft³/s July 3, 5; minimum daily, 603 ft³/s July 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1500	5670	9030	4080	882	1430	3360	2820	1600	614	740	734
2	1490	11300	7230	4000	873	1380	3490	2810	1560	608	731	736
3	1530	10400	6570	2860	884	1390	3460	2840	1510	603	732	732
4	1590	10900	6080	2570	925	1410	3310	3390	1230	605	725	734
5	1820	12100	5910	2570	880	1350	2740	2820	1390	658	731	734
6	1630	11900	5720	2570	861	1180	2530	2540	2890	695	734	751
7	1600	12000	4730	2570	1440	1150	3000	2430	6530	704	732	746
8	1690	11900	2940	2550	1900	1100	3400	2260	7180	693	734	735
9	1700	12100	3070	2530	1300	1020	4140	1650	5640	688	732	733
10	1920	12900	6110	2180	1270	1120	4520	985	5000	681	725	725
11	2010	12600	7330	2210	1590	976	4470	900	3060	675	736	974
12	2160	11600	5750	1800	3890	997	4300	884	2360	657	707	1060
13	2540	11700	6290	1730	2390	1080	3860	856	1850	643	692	1060
14	2590	12300	5930	1770	2210	1070	4240	841	1760	648	691	1450
15	2650	12100	5150	1780	3440	1040	4230	830	1360	648	692	1480
16	2630	10800	4580	1770	2680	867	4410	782	1300	648	692	1470
17	2370	8880	4030	1770	2150	866	4200	799	1290	638	734	1640
18	2650	7070	3990	1830	1650	855	3720	792	945	669	735	1820
19	3050	6220	3960	1920	1730	830	3520	775	797	716	730	1830
20	3330	6150	3250	2230	1920	845	3060	783	738	738	728	1740
21	3480	6320	3050	1920	1540	905	1610	765	707	736	728	1740
22	2970	5980	3070	1870	1800	890	2080	748	707	733	744	1700
23	2340	6150	3440	1450	1920	1770	2750	1190	707	735	733	1580
24	2750	5980	3750	1430	1890	2990	3580	1850	708	735	736	1470
25	2830	4930	3270	1380	1950	2180	3970	1880	690	737	734	1460
26	3900	4480	3360	1270	1750	1770	3100	1950	686	736	734	1460
27	5230	5290	3710	1360	1510	1960	2370	1600	636	734	735	1290
28	6690	8460	3990	1360	1490	1630	2570	1430	629	733	732	1270
29	6090	9240	3990	1140	---	1450	2600	1430	744	733	736	1350
30	5450	10600	4220	997	---	1590	2480	1420	740	730	733	1340
31	5640	---	4160	928	---	2570	---	1440	---	736	736	---
TOTAL	89820	278020	147660	62395	48715	41661	101070	48490	56944	21307	22534	36544
MEAN	2897	9267	4763	2013	1740	1344	3369	1564	1898	687	727	1218
MAX	6690	12900	9030	4080	3890	2990	4520	3390	7180	738	744	1830
MIN	1490	4480	2940	928	861	830	1610	748	629	603	691	725
AC-FT	178200	551500	292900	123800	96630	82630	200500	96180	112900	42260	44700	72490
CAL YR 1984	TOTAL	1342486	MEAN	3668	MAX	13300	MIN	633	AC-FT	2663000		
WTR YR 1985	TOTAL	955160	MEAN	2617	MAX	12900	MIN	603	AC-FT	1895000		

WILLAMETTE RIVER BASIN

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14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: July 1973 to current year.

INSTRUMENTATION.--Temperature recorder since July 1973.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 15.5°C at times in 1975, 1978, 1981; minimum recorded, 2.5°C Dec. 30, 31, 1978, Feb. 1, 1980, Feb. 7, 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 14.5°C May 16, July 18; minimum recorded, 2.5°C Feb. 7.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

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14187500 SOUTH SANTIAM RIVER AT WATERLOO, OR

LOCATION.--Lat 44°29'55", long 122°49'20", in SW¼NW¼ sec.28, T.12 S., R.1 W., Linn County, Hydrologic Unit 17090006, on left bank 0.1 mi downstream from highway bridge at Waterloo, 2.1 mi upstream from Hamilton Creek, and at mile 23.3.

DRAINAGE AREA.--640 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1905 to March 1907, October 1910 to December 1911 (gage heights only January to December 1911), July 1923 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as South Fork of Santiam River at Waterloo 1905-07, 1910-11.

REVISED RECORDS.--WSP 1248: 1907, 1924-30, 1932.

GAGE.--Water-stage recorder. Datum of gage is 370.39 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1911, nonrecording gage at site 0.5 mi downstream at datum about 5.0 ft lower. July 1, 1923, to Nov. 12, 1934, nonrecording gage, at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. Flow regulated since October 1966 by Green Peter Lake (see station 14186100) and since December 1966 by Foster Lake (see station 14186600). No diversion upstream from station.

AVERAGE DISCHARGE.--63 years (water years 1906, 1924-85), 2,953 ft³/s, 2,139,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 95,200 ft³/s Dec. 22, 1964, gage height, 24.50 ft; minimum, 61 ft³/s Oct. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,600 ft³/s Nov. 2, gage height, 8.92 ft; minimum, 552 ft³/s July 2-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1500	5700	9630	4320	995	1600	3620	2820	1620	585	729	662
2	1490	11500	7660	4220	995	1530	3730	2860	1590	566	691	672
3	1510	11200	7030	3230	995	1520	3700	2880	1560	556	687	666
4	1580	10900	6340	2760	1030	1620	3550	3410	1330	560	680	668
5	1760	11900	6120	2740	988	1510	3000	2940	1390	591	679	680
6	1670	11800	5860	2730	983	1390	2670	2620	2390	652	682	709
7	1590	11900	5190	2710	1590	1270	3060	2450	6550	663	686	715
8	1680	11700	3150	2680	2560	1230	3430	2370	7270	654	693	699
9	1700	12100	3220	2650	1960	1110	4160	1860	5900	645	685	701
10	1890	13400	6250	2330	1710	1260	4560	1130	5050	634	679	692
11	1990	13000	7650	2300	1800	1080	4560	980	3420	630	687	894
12	2150	12200	6100	1990	4790	1080	4360	943	2410	617	667	1040
13	2520	11800	6500	1850	2930	1170	3920	920	1980	593	630	1100
14	2640	12300	6180	1910	2590	1160	4290	890	1800	601	629	1400
15	2680	11900	5460	1890	3780	1150	4270	880	1500	592	629	1500
16	2690	10900	4840	1880	3190	979	4400	827	1340	592	626	1490
17	2400	8890	4250	1880	2500	951	4280	824	1330	582	665	1650
18	2610	7460	4180	1890	1990	944	3820	828	1070	594	680	1810
19	3080	6470	4100	2000	1950	905	3620	804	797	663	675	1840
20	3360	6600	3440	2300	2170	921	3310	799	750	682	675	1770
21	3520	6680	3240	2000	1800	1040	1770	792	695	687	672	1750
22	3130	6250	3270	1970	1990	1030	2170	759	691	683	687	1740
23	2360	6430	3560	1540	2120	1790	2750	1100	686	682	674	1610
24	2680	6620	4040	1480	2070	3540	3600	1780	685	684	676	1520
25	2900	5310	3470	1550	2120	2620	4040	1880	670	683	675	1480
26	3870	4920	3520	1380	1980	2220	3400	1970	660	679	668	1490
27	5270	5620	3820	1450	1690	2400	2490	1690	617	682	667	1310
28	6710	8770	4200	1450	1640	2060	2610	1460	598	679	663	1290
29	6210	9750	4220	1280	---	1820	2700	1470	678	674	661	1350
30	5490	11300	4590	1120	---	1800	2550	1460	753	684	660	1350
31	5630	---	4480	1020	---	2740	---	1500	---	708	661	---
TOTAL	90260	285270	155560	66500	56906	47440	104390	49896	57780	19777	20818	36248
MEAN	2912	9509	5018	2145	2032	1530	3480	1610	1926	638	672	1208
MAX	6710	13400	9630	4320	4790	3540	4560	3410	7270	708	729	1840
MIN	1490	4920	3150	1020	983	905	1770	759	598	556	626	662
AC-FT	179000	565800	308600	131900	112900	94100	207100	98970	114600	39230	41290	71900
CAL YR 1984	TOTAL	1405812	MEAN	3841	MAX	14000	MIN	564	AC-FT	2788000		
WTR YR 1985	TOTAL	990845	MEAN	2715	MAX	13400	MIN	556	AC-FT	1965000		

WILLAMETTE RIVER BASIN

14187500 SOUTH SANTIAM RIVER AT WATERLOO, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1963 to current year.

INSTRUMENTATION.--Temperature recorder since October 1963.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 26.0°C Aug. 4, 1966; minimum, 1.5°C Dec. 18-20, 1965, Feb. 1, 2, 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 18.5°C July 18, 19; minimum, 2.5°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

WILLAMETTE RIVER BASIN

14188750 CRABTREE CREEK NEAR SCIO, OR

LOCATION.--Lat 44°40'24", long 122°55'04", in SE¼NW¼ sec.27, T.10 S., R.2 W., Linn County, Hydrologic Unit 17090006, on right bank 5 miles from Crabtree on Gilkey Road, and at mile 2.5.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 1985 (discontinued).

INSTRUMENTATION.--Temperature recorder since May 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum during period May to September 1985, 28.0°C July 19, 20; minimum, 9.0°C May 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

197

14188800 THOMAS CREEK NEAR SCIO, OR

LOCATION.--Lat 44°42'42", long 122°45'55", in SE¼SE¼ sec.11, T.10 S., R.1 W., Linn County, Hydrologic Unit 17090006, on left bank 0.3 mi upstream from bridge on State Highway 226, 1.6 mi upstream from Mill Creek, 4.2 mi east of Scio, and at mile 14.6.

DRAINAGE AREA.--109 mi².

PERIOD OF RECORD.--October 1962 to current year.

REVISED RECORDS.--WDR OR-71-1: 1965(P), 1966(P), 1969(P).

GAGE.--Water-stage recorder. Datum of gage is 380.84 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 20 to Nov. 27. Records excellent except for estimated daily discharges, which are good. No regulation. Several small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--23 years, 502 ft³/s, 62.54 in/yr, 363,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,400 ft³/s Dec. 22, 1964, gage height, 18.44 ft, from rating curve extended above 7,200 ft³/s, on basis of slope-area measurement of peak flow; maximum gage height, 19.58 ft Jan. 21, 1972, backwater from debris; minimum discharge, 7.8 ft³/s Aug. 20, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 11	2330	*3,440	*7.76				
Minimum, 12 ft ³ /s Aug. 27.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	24	350	1620	747	158	393	1290	434	125	70	46	17		
2	24	1900	1170	631	165	363	1170	425	114	64	41	23		
3	24	2400	898	564	159	330	1010	451	106	58	34	25		
4	29	1500	730	519	137	417	835	409	118	57	29	18		
5	33	1050	606	479	149	371	707	340	114	54	27	20		
6	28	900	516	451	144	338	696	313	616	54	24	78		
7	26	820	461	444	364	309	747	291	1690	51	30	58		
8	27	720	429	413	487	288	664	263	1110	47	45	38		
9	40	800	598	373	508	274	641	244	647	45	40	33		
10	62	1300	1440	340	494	269	651	243	448	42	31	48		
11	102	1450	970	312	1190	268	601	258	351	42	28	46		
12	146	1500	984	293	1930	265	541	220	293	41	26	45		
13	347	1450	873	276	1000	250	503	206	251	41	22	174		
14	312	1300	802	280	839	244	483	228	217	40	20	136		
15	249	1000	958	304	1190	242	457	209	194	38	18	167		
16	164	800	764	283	893	250	411	216	173	34	17	107		
17	133	620	654	306	710	270	343	225	158	35	17	138		
18	147	680	561	328	588	273	328	209	140	33	17	144		
19	262	620	486	304	565	265	337	192	128	32	21	104		
20	275	700	441	290	564	287	295	179	119	30	23	82		
21	220	700	433	266	505	386	303	165	111	29	21	69		
22	185	620	552	245	532	389	422	156	103	28	20	61		
23	155	740	636	228	537	1360	842	153	98	28	19	54		
24	145	960	644	213	547	1520	698	152	95	27	18	48		
25	190	850	553	198	548	1020	647	147	93	27	18	42		
26	600	700	529	186	483	912	553	137	86	26	16	39		
27	640	1550	647	175	433	971	536	129	81	24	14	38		
28	580	2440	672	170	399	790	594	125	80	23	15	36		
29	500	2010	679	169	---	671	510	137	76	23	17	33		
30	400	2550	1070	158	---	755	455	131	74	24	18	33		
31	370	---	925	154	---	1190	---	130	---	38	17	---		
TOTAL	6439	34980	23301	10099	16218	15930	18270	7117	8009	1205	749	1954		
MEAN	208	1166	752	326	579	514	609	230	267	38.9	24.2	65.1		
MAX	640	2550	1620	747	1930	1520	1290	451	1690	70	46	174		
MIN	24	350	429	154	137	242	295	125	74	23	14	17		
CFSM	1.91	10.7	6.90	2.99	5.31	4.72	5.59	2.11	2.45	.36	.22	.60		
IN.	2.20	11.94	7.95	3.45	5.53	5.44	6.24	2.43	2.73	.41	.26	.67		
AC-FT	12770	69380	46220	20030	32170	31600	36240	14120	15890	2390	1490	3880		
CAL YR 1984	TOTAL	213445	MEAN	583	MAX	5760	MIN	23	CFSM	5.35	IN.	72.85	AC-FT	423400
WTR YR 1985	TOTAL	144271	MEAN	395	MAX	2550	MIN	14	CFSM	3.62	IN.	49.24	AC-FT	286200

WILLAMETTE RIVER BASIN

14188850 THOMAS CREEK NEAR CRABTREE, OR

LOCATION.--Lat 44°41'27", long 122°56'12", in NE¼NE¼ sec.21, T.10 S., R.2 W., Linn County, Hydrologic Unit 17090006, on right bank 7 miles from Crabtree on Kelly Road, and at mile 1.2.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 1985.

INSTRUMENTATION.--Temperature recorder since May 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum during period May to September 1985, 27.5°C July 19, 20; minimum, 9.0°C May 11.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

199

14188900 SOUTH SANTIAM RIVER BELOW THOMAS CREEK, NEAR JEFFERSON, OR

LOCATION.--Lat 44°40'21", long 122°59'28", in SE¼NE¼ sec.25, T.10 S., R.3 W., Linn County, Hydrologic Unit 17090006, on left bank 5 miles from Albany near Lickskilllet Road, and at mile 2.2.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 1985.

INSTRUMENTATION.--Temperature recorder since May 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum during period May to September 1985, 24.0°C July 18-20; minimum, 9.0°C May 4, 5, 8, 11.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14189000 SANTIAM RIVER AT JEFFERSON, OR

LOCATION.--Lat 44°42'55", long 122°00'40", in SE¼ sec.11, T.10 S., R.3 W., Marion County, Hydrologic Unit 17090005, on right bank 350 ft upstream from Southern Pacific railroad bridge at Jefferson, 2.1 mi downstream from confluence of North and South Santiam Rivers, and at mile 9.62.

DRAINAGE AREA.--1,790 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1905 to June 1906 (gage heights and discharge measurements only), October 1907 to September 1916, October 1939 to current year. Gage-height records collected at same site since 1907 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 904: Drainage area. WSP 1094: 1908, 1910, 1912, 1943. WSP 1248: 1911, 1915-16(M). WSP 1935: 1909.

GAGE.--Water-stage recorder. Datum of gage is 199.63 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 22, 1940, nonrecording gages at sites within 350 ft downstream at datum 3.00 ft higher.

REMARKS.--Estimated daily discharges: Oct. 22-25. Water-discharge records excellent. Flow regulated since 1953 by Detroit Lake (see station 14180500), since 1966 by Green Peter Lake (see station 14186100) and by Foster Lake (see station 14186600). Salem Canal diverts from North Santiam River at Stayton for irrigation and power; most of this water reaches Willamette River by way of Mill Creek at Salem. Stayton Canal diverts from North Santiam River at Stayton for irrigation of lands near West Stayton; some return flow reaches North Santiam River upstream from station. Albany power canal diverts from South Santiam River at Lebanon; return flow reaches Willamette River at Albany.

AVERAGE DISCHARGE.--55 years (water years 1908-16, 1940-85), 7,834 ft³/s, 5,676,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 197,000 ft³/s Dec. 22, 1964, gage height, 24.22 ft; minimum observed, 260 ft³/s Aug. 15-22, Aug. 24 to Sept. 2, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood stage of 25.0 ft was reached in December 1861, and 23.4 ft in February 1890 (information from Corps of Engineers). On Nov. 21, 1921, the stage reached 19.5 ft at gage on railroad bridge 350 ft downstream, corresponding gage height at present site and datum, 24.4 ft, from curve of relation, discharge, 202,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36,600 ft³/s Nov. 3, gage height, 13.00 ft; minimum, 1,290 ft³/s July 17, 18,

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3790	10800	23000	10500	3040	5010	11300	6870	4830	1790	1680	1460
2	3840	22300	19000	9830	3140	4900	11500	7340	4760	1630	1640	1500
3	3820	33600	17800	8670	3100	4610	10700	7850	4610	1520	1560	1530
4	4030	24400	16200	7290	2930	4970	9650	8620	4270	1480	1490	1510
5	4130	24600	15300	7110	2940	4780	8430	8360	4030	1510	1440	1530
6	4150	27100	14500	6800	2950	4480	7600	7550	5250	1560	1400	1670
7	4070	28100	13000	6730	3970	4150	8000	7410	18200	1570	1410	2000
8	4130	27100	8860	6580	7260	3980	8250	7050	18500	1540	1510	1850
9	4190	28500	8390	6280	7120	3780	8690	6200	14000	1480	1570	1820
10	4430	31800	14500	5720	6080	3790	9320	5150	11800	1650	1530	2300
11	4640	27000	17400	5270	6140	3680	9170	4450	10600	1580	1540	2760
12	4980	31400	15200	4950	14900	3580	8880	3970	8610	1450	1540	3040
13	6500	23800	14700	4600	10000	3590	8870	3780	7270	1410	1470	3520
14	7070	31300	14100	4570	8070	3580	9600	3770	6020	1400	1360	3850
15	6990	29000	14100	4790	10300	3550	9770	3760	5300	1400	1350	4120
16	6270	27000	12600	4690	9620	3490	9980	3800	4470	1360	1350	4030
17	5700	23700	11300	4830	7720	3480	9630	4510	4320	1340	1370	4200
18	5660	23000	10300	5100	6540	3530	8200	4770	3850	1320	1420	5010
19	6440	21000	9060	5180	5960	3480	7850	5090	3220	1390	1450	4850
20	8190	18500	8180	5230	6500	3490	7270	5080	2980	1390	1460	4630
21	8070	18100	7600	5020	5960	4020	5900	4890	2750	1410	1440	4490
22	7500	16100	8280	4650	6060	4130	6260	5330	2610	1440	1460	4470
23	6400	16200	9550	4530	6640	6230	7790	5880	2540	1400	1450	4360
24	6400	19300	10900	3950	6460	11800	8480	6490	2450	1410	1400	4250
25	7500	16500	9490	3970	6630	9180	8850	6310	2330	1430	1420	4070
26	10000	15500	9530	3660	6190	7900	8200	5660	2300	1420	1400	4030
27	12100	18000	9750	3540	5440	8720	6670	5340	2140	1420	1390	4020
28	14200	25900	10300	3560	5090	7480	6970	4670	1980	1440	1400	3790
29	13300	26200	9800	3400	---	6500	7130	4520	1770	1430	1410	3680
30	11400	26500	11800	3260	---	6280	6650	4780	1870	1430	1410	3710
31	11100	---	11700	3060	---	9590	---	4790	---	1560	1420	---
TOTAL	210990	712300	386190	167320	176750	161730	255560	174040	169630	45560	45140	98050
MEAN	6806	23740	12460	5397	6313	5217	8519	5614	5654	1470	1456	3268
MAX	14200	33600	23000	10500	14900	11800	11500	8620	18500	1790	1680	5010
MIN	3790	10800	7600	3060	2930	3480	5900	3760	1770	1320	1350	1460
AC-FT	418500	1413000	766000	331900	350600	320800	506900	345200	336500	90370	89540	194500
CAL YR 1984	TOTAL	3588840	MEAN	9806	MAX	36300	MIN	1230	AC-FT	7118000		
WTR YR 1985	TOTAL	2603260	MEAN	7132	MAX	33600	MIN	1320	AC-FT	5164000		

WILLAMETTE RIVER BASIN

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14189000 SANTIAM RIVER AT JEFFERSON, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1963 to current year.

INSTRUMENTATION.--Temperature recorder since October 1963.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 23.5°C Aug. 8, 1971, Aug. 1, 1973, Aug. 9, 1981; minimum, 0.0°C Jan. 1, 1979, Dec. 24, 1983.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 21.0°C Aug. 14-17; minimum recorded, 4.5°C Feb. 17, 18.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14189000 SANTIAM RIVER AT JEFFERSON, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

LOCATION.--Lat 44°47'00", long 123°14'00", in SW¼SW¼ sec.18, T.9 S., R.4 W., Polk County, Hydrologic Unit 17090003, on right bank 10 ft upstream from highway bridge at Helmick State Park, 3.0 mi northwest of Suver, 4.7 mi downstream from Little Luckiamute River, and at mile 13.5.

PERIOD OF RECORD.--August 1905 to October 1911, July 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 171.92 ft above National Geodetic Vertical Datum of 1929. Aug. 18, 1905, to Oct. 31, 1911, nonrecording gage at present site at different datum, Aug. 20 to Oct. 15, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--51 years, 911 ft³/s, 51.55 in/yr, 660,000 acre-ft/yr.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 29	0130	*7,080	*26.90	No other peak greater than base discharge.			
Minimum, 38 ft ³ /s Aug. 28.							

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	299	4940	2530	301	531	2200	394	201	146	87	41
2	40	1700	3320	1920	334	502	1810	371	175	131	78	43
3	40	3700	2370	1580	311	474	1520	372	157	120	67	45
4	39	3620	1850	1340	285	555	1300	402	168	115	62	42
5	43	2430	1530	1180	276	617	1180	370	175	112	59	42
6	47	1620	1300	1050	282	569	1040	342	229	106	52	41
7	45	1630	1150	954	431	528	930	326	2020	104	50	55
8	43	1540	1040	866	817	495	825	307	2190	103	55	53
9	45	2000	983	793	1020	473	762	296	1130	92	80	52
10	63	3240	1410	729	1280	453	706	285	786	86	68	52
11	153	3830	1410	674	1540	432	668	278	619	82	59	60
12	146	3590	1520	631	2680	413	660	267	518	81	57	59
13	204	3650	1680	594	2110	396	589	257	453	79	53	80
14	187	2890	1520	565	1540	383	546	252	400	76	49	99
15	179	2100	1600	574	1360	369	511	241	366	78	46	110
16	147	1660	1420	531	1190	357	484	228	331	70	43	103
17	116	1370	1320	501	1040	344	455	214	301	67	42	77
18	108	1530	1200	479	923	334	427	204	272	67	43	79
19	205	1480	1060	460	852	324	426	196	254	65	47	76
20	338	1590	971	447	964	318	423	192	232	61	47	67
21	260	1570	985	426	847	371	405	183	216	60	46	62
22	199	1340	1060	407	789	521	449	176	204	62	46	58
23	163	1230	1090	391	744	1160	653	169	194	56	43	55
24	142	1440	1090	374	707	2290	696	171	187	57	41	53
25	128	1670	1020	359	680	1770	607	164	180	57	42	51
26	156	1790	962	344	634	1510	548	160	173	56	44	49
27	327	2610	1080	333	593	2120	511	155	164	53	40	47
28	539	5660	1470	327	558	2200	480	150	157	51	39	46
29	463	6560	1620	322	---	1780	445	157	150	54	40	45
30	349	6220	3590	311	---	1690	417	154	148	48	39	44
31	337	---	3550	303	---	2440	---	167	---	67	39	---
TOTAL	5290	75559	51111	22295	25088	26719	22673	7600	12750	2462	1603	1786
MEAN	171	2519	1649	719	896	862	756	245	425	79.4	51.7	59.5
MAX	539	6560	4940	2530	2680	2440	2200	402	2190	146	87	110
MIN	39	299	962	303	276	318	405	150	148	48	39	41
CFSM	.71	10.5	6.87	3.00	3.73	3.59	3.15	1.02	1.77	.33	.22	.25
IN.	.82	11.71	7.92	3.46	3.89	4.14	3.51	1.18	1.98	.38	.25	.28
AC-FT	10490	149900	101400	44220								

WILLAMETTE RIVER BASIN

14191000 WILLAMETTE RIVER AT SALEM, OR

LOCATION.--Lat 44°56'40", long 123°02'30", in SE¼SW¼ sec. 22, T.7 S., R.3 W., Marion County, Hydrologic Unit 17090007, on right bank 300 ft upstream from Center Street Bridge in Salem and at mile 84.16.

DRAINAGE AREA.--7,280 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1909 to December 1916, January 1923 to current year. Monthly discharge only January 1923 to September 1927, published in WSP 1318. Gage-height records collected at about the same site since 1892 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1318: 1915(M).

GAGE.--Water-stage recorder. Datum of gage is 106.14 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1909, to Dec. 31, 1916, nonrecording gage at site 0.5 mi upstream at datum 8.00 ft higher. Jan. 1, 1923, to Nov. 26, 1934, nonrecording gage at Center Street Bridge at datum 8.00 ft higher. Nov. 27, 1934, to Sept. 30, 1962, water-stage recorder at present site at datum 8.00 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. Flow regulated by 12 reservoirs upstream from station (see elsewhere in this report). Many small diversions for irrigation upstream from station; part of flow of Salem Canal, which diverts water from North Santiam River, returns to Willamette River downstream from station, through Mill Creek at Salem.

AVERAGE DISCHARGE.--69 years, 23,690 ft³/s, 44.19 in/yr, 17,160,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 348,000 ft³/s Jan. 8, 1923, gage height, 38.3 ft, present datum; minimum discharge, 2,470 ft³/s Aug. 27, 1940, gage height, 3.55 ft, present datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 500,000 ft³/s Dec. 4, 1861, gage height, about 47 ft present datum, from rating curve extended above 250,000 ft³/s in 1916. Floods of Jan. 16, 1881, and Feb. 5, 1890, reached stages of 44.3 ft, discharge, 428,000 ft³/s, and 45.1 ft, discharge, 448,000 ft³/s, respectively, from floodmarks and information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 93,900 ft³/s Nov. 30, gage height, 21.63 ft; minimum discharge, 6,260 ft³/s July 19, gage height, 4.73 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	12000	27600	91100	39700	10400	14800	30100	15900	14000	7630	7550	7780		
2	12000	35200	81700	34900	10600	14300	31900	16000	14000	7260	7680	7900		
3	12100	64800	71300	30700	10900	13800	32300	16300	13800	7000	7440	7960		
4	12100	75600	65200	26600	10900	13600	31400	17200	13400	6850	7240	7980		
5	12300	72500	57500	24600	10400	14100	27400	17500	12700	6750	7130	8040		
6	12400	67900	51100	23400	10300	13800	22900	16200	13200	6620	6950	8660		
7	12200	67200	46800	22400	11000	13200	21500	15700	24600	6600	6860	9340		
8	12200	66100	38200	22000	21800	12700	21500	15300	40400	6650	6900	9710		
9	12400	65000	31600	21700	33000	12200	21200	14500	36400	6530	7150	9800		
10	12900	72400	37000	20200	31900	11900	21400	13300	32100	6440	7230	10200		
11	13400	80800	49600	18400	26600	11900	21000	12300	28800	6680	7120	10900		
12	14100	83400	51900	17300	35800	12300	20400	11600	23300	6570	7080	11800		
13	15300	86300	49400	16400	42600	11600	19800	11100	20400	6600	6960	12200		
14	17600	82900	48300	16300	36200	11200	19700	10900	17400	6580	6770	12300		
15	17900	82000	45200	16400	31800	10900	19800	11100	16000	6590	6650	12700		
16	17500	79500	42300	15900	32400	10800	19900	11100	14500	6470	6680	12900		
17	16900	73500	37500	15500	28600	10700	19800	11500	13800	6400	6680	12800		
18	16500	70000	33600	15700	24500	10800	18000	12000	13100	6350	6780	13700		
19	17400	67300	30100	16200	21300	10700	17100	12600	11600	6300	7050	14100		
20	19500	62300	27300	15900	20600	10600	16800	13200	10500	6310	7090	13700		
21	21400	60900	25400	15800	19900	10900	15700	13400	9860	6370	7130	13400		
22	20300	56700	25200	15200	18600	12000	14900	14100	9370	6560	7090	13300		
23	18700	51800	25200	14800	18800	14100	16600	15800	9210	6560	7080	13100		
24	18100	55700	26700	13700	18400	26100	19700	16500	9100	6530	6990	13000		
25	18500	58200	26100	12800	18300	31800	21700	16800	8820	6480	7020	12800		
26	20200	56000	25000	12400	17800	26900	22800	16400	8720	6470	7070	12500		
27	26300	56900	25300	12100	16600	30100	20100	15800	8420	6390	7000	12000		
28	30300	75900	28200	12000	15600	32600	18600	15200	8180	6490	7080	11900		
29	34000	87700	29200	11800	---	28100	18500	14800	7860	6640	7490	11600		
30	31800	92600	36600	11400	---	24800	16700	14300	7760	6650	7630	11500		
31	28800	---	42000	10700	---	26600	---	14100	---	7100	7690	---		
TOTAL	557100	2034700	1301600	572900	605600	509900	639200	442500	471300	205420	220260	339570		
MEAN	17970	67820	41990	18480	21630	16450	21310	14270	15710	6626	7105	11320		
MAX	34000	92600	91100	39700	42600	32600	32300	17500	40400	7630	7690	14100		
MIN	12000	27600	25000	10700	10300	10600	14900	10900	7760	6300	6650	7780		
CFSM	2.47	9.32	5.77	2.54	2.97	2.26	2.93	1.96	2.16	.91	.98	1.55		
IN.	2.85	10.40	6.65	2.93	3.09	2.61	3.27	2.26	2.41	1.05	1.13	1.74		
AC-FT	1105000	4036000	2582000	1136000	1201000	1011000	1268000	877700	934800	407500	436900	673500		
CAL YR 1984	TOTAL	11069540	MEAN	30240	MAX	104000	MIN	6560	CFSM	4.15	IN.	56.56	AC-FT	21956000
WTR YR 1985	TOTAL	7900050	MEAN	21640	MAX	92600	MIN	6300	CFSM	2.97	IN.	40.37	AC-FT	15670000

WILLAMETTE RIVER BASIN

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14191000 WILLAMETTE RIVER AT SALEM, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1910-12, 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1951 to September 1972, October 1976 to September 1983.

WATER TEMPERATURES: February 1951 to current year.

INSTRUMENTATION.--Temperature recorder since February 1951. Specific conductance recorder February 1951 to September 1972 and from October 1976 to September 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 141 micromhos Sept. 17, 1966; minimum daily, 30 micromhos Jan. 29, 1965.

WATER TEMPERATURES: Maximum, 25.5°C July 23, 1959; minimum, 0.0°C on several days in 1956, 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 24.0°C July 20; minimum, 3.0°C Feb. 4, 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

14191000 WILLAMETTE RIVER AT SALEM, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

WILLAMETTE RIVER BASIN

207

14192500 SOUTH YAMHILL RIVER NEAR WILLAMINA, OR

LOCATION.--Lat 45°02'50", long 123°30'10", in NE¼SE¼ sec.14, T.6 S., R.7 W., Polk County, Hydrologic Unit 17090008, on left bank 2.3 mi southwest of Willamina, 2.8 mi upstream from Willamina Creek, and at mile 45.5.

DRAINAGE AREA.--133 mi².

PERIOD OF RECORD.--May 1934 to current year.

REVISED RECORDS.--WSP 814: Drainage area. WSP 1318: 1934.

GAGE.--Water-stage recorder. Datum of gage is 235.55 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Apr. 24-29, June 19-25. Records good. Slight regulation occasionally at low flows by millpond upstream. No diversion upstream from station.

AVERAGE DISCHARGE.--51 years, 624 ft³/s, 63.71 in/yr, 452,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s Dec. 22, 1964, gage height, 17.07 ft; minimum, 2.6 ft³/s Oct. 11, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 27	1930	*5,850	*8.37	No other peak greater than base discharge.			
Minimum, 17 ft ³ /s Aug. 27, 28.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	22	550	2330	1400	186	374	1280	307	109	84	50	22		
2	22	3600	1680	1090	227	346	1060	289	99	80	41	22		
3	21	2840	1260	890	183	327	905	312	94	72	34	21		
4	23	1710	991	725	157	521	783	293	120	70	30	20		
5	32	1160	808	627	165	556	683	269	106	69	28	19		
6	30	1010	682	551	169	479	610	251	319	68	26	51		
7	27	1090	596	489	453	440	560	235	2680	64	26	68		
8	26	1020	537	440	457	412	517	222	1180	59	68	52		
9	54	1150	512	399	539	391	474	211	745	56	59	38		
10	196	2200	789	365	764	371	442	202	561	52	40	36		
11	280	1930	626	337	1630	349	496	213	452	50	35	35		
12	263	2040	1160	315	1880	330	470	190	385	47	31	57		
13	348	1820	1170	297	1250	313	423	180	337	44	28	113		
14	348	1480	1170	295	1020	298	382	185	305	44	25	91		
15	308	1180	1290	303	987	284	362	171	284	42	23	107		
16	215	966	1070	275	814	271	334	158	259	41	22	62		
17	166	858	931	263	702	261	323	147	239	42	21	72		
18	162	1110	806	255	614	250	315	142	219	41	21	86		
19	288	955	705	244	640	239	323	140	190	36	25	59		
20	317	1010	650	237	753	247	315	137	180	33	25	50		
21	246	858	724	227	661	328	319	130	160	33	25	43		
22	204	759	889	210	635	412	378	125	150	33	24	39		
23	174	1030	1040	195	584	1480	826	120	140	31	22	36		
24	160	1170	984	186	563	1490	680	122	130	31	21	33		
25	167	1410	877	178	522	1070	570	111	120	30	21	30		
26	414	1340	787	170	472	1020	490	105	107	28	20	27		
27	630	4240	1000	164	431	1360	440	99	101	26	18	26		
28	768	5150	1030	161	397	1240	390	99	99	25	18	23		
29	585	4100	1750	166	---	1080	348	100	94	24	19	22		
30	480	3460	2690	155	---	1340	331	102	94	28	19	21		
31	478	---	1850	157	---	1510	---	109	---	51	21	---		
TOTAL	7454	53196	33384	11766	17855	19389	15829	5476	10058	1434	886	1381		
MEAN	240	1773	1077	380	638	625	528	177	335	46.3	28.6	46.0		
MAX	768	5150	2690	1400	1880	1510	1280	312	2680	84	68	113		
MIN	21	550	512	155	157	239	315	99	94	24	18	19		
CFSM	1.80	13.3	8.10	2.86	4.80	4.70	3.97	1.33	2.52	.35	.22	.35		
IN.	2.08	14.88	9.34	3.29	4.99	5.42	4.43	1.53	2.81	.40	.25	.39		
AC-FT	14790	105500	66220	23340	35420	38460	31400	10860	19950	2840	1760	2740		
CAL YR 1984	TOTAL	238569	MEAN	652	MAX	5150	MIN	19	CFSM	4.90	IN.	66.73	AC-FT	473200
WTR YR 1985	TOTAL	178108	MEAN	488	MAX	5150	MIN	18	CFSM	3.67	IN.	49.82	AC-FT	353300

WILLAMETTE RIVER BASIN

14193000 WILLAMINA CREEK NEAR WILLAMINA, OR

LOCATION.--Lat 45°08'35", long 123°29'35", in NE¼NW¼ sec.13, T.5 S., R.7 W., Yamhill County, Hydrologic Unit 17090008, on right bank 4.5 mi north of Willamina and at mile 6.2.

DRAINAGE AREA.--64.7 mi².

PERIOD OF RECORD.--June 1934 to current year.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 315 ft above National Geodetic Vertical Datum of 1929 (plane-table survey). Prior to Oct. 1, 1939, water-stage recorder at site on left bank at datum 1.00 ft higher. Oct. 1, 1939, to Aug. 5, 1968, water-stage recorder at site on left bank at present datum.

REMARKS.--No estimated daily discharges. Records excellent. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--51 years, 262 ft³/s, 54.99 in/yr, 189,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,800 ft³/s Dec. 22, 1964, gage height, 13.54 ft, from rating curve extended above 3,400 ft³/s on basis of slope-area measurement at gage height 11.65 ft; minimum, 5.4 ft³/s July 15, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 31, 1931, reached a stage of about 12 ft, from information by local resident, discharge, 8,200 ft³/s, from rating curve extended above 3,400 ft³/s on basis of slope-area measurement at gage height 11.65 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 2,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	0530	*2,400	*7.07	No other peak greater than base discharge.			
Minimum discharge, 14 ft ³ /s Aug. 27.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	18	186	1130	677	113	225	764	144	58	45	27	16		
2	18	1330	831	554	110	206	643	136	56	42	27	17		
3	18	1220	653	468	97	201	538	138	56	40	25	16		
4	20	840	530	407	92	273	456	130	61	39	23	15		
5	21	559	445	354	92	273	392	121	53	38	22	17		
6	20	449	379	314	96	246	339	115	154	38	21	26		
7	20	404	328	282	172	225	298	109	585	37	23	24		
8	21	391	297	256	162	208	266	105	282	35	36	22		
9	27	475	273	233	179	197	244	101	196	34	26	21		
10	66	961	334	213	207	186	223	98	158	33	23	25		
11	85	823	282	198	408	176	220	96	135	33	22	25		
12	102	846	584	184	507	168	196	90	118	32	20	37		
13	95	766	605	174	392	158	179	87	106	31	20	43		
14	110	624	576	171	359	151	168	87	98	30	18	44		
15	91	507	588	162	393	144	156	81	92	29	17	45		
16	61	417	509	152	364	140	146	77	84	29	17	31		
17	50	372	451	145	330	135	138	73	76	29	16	32		
18	53	470	396	141	300	130	134	71	70	28	17	30		
19	111	429	347	138	333	124	135	70	66	26	18	25		
20	102	440	317	133	383	130	129	69	63	25	18	24		
21	76	388	307	128	361	162	133	66	61	24	18	22		
22	62	348	377	122	371	196	156	63	58	24	17	21		
23	55	405	416	117	362	539	269	64	57	24	16	20		
24	52	433	390	112	359	553	256	64	56	24	16	19		
25	59	506	363	108	329	445	255	61	56	24	16	17		
26	126	501	339	105	293	424	229	60	52	23	15	17		
27	206	1500	485	101	262	495	204	58	51	21	14	16		
28	327	2120	484	99	240	502	184	58	50	21	15	16		
29	226	1800	850	98	---	485	168	59	48	20	15	15		
30	179	1580	1180	93	---	817	155	60	48	25	16	15		
31	162	---	848	93	---	897	---	58	---	32	16	---		
TOTAL	2639	22090	15894	6532	7666	9211	7773	2669	3104	935	610	713		
MEAN	85.1	736	513	211	274	297	259	86.1	103	30.2	19.7	23.8		
MAX	327	2120	1180	677	507	897	764	144	585	45	36	45		
MIN	18	186	273	93	92	124	129	58	48	20	14	15		
CFSM	1.32	11.4	7.93	3.26	4.23	4.59	4.00	1.33	1.59	.47	.30	.37		
IN.	1.52	12.70	9.14	3.76	4.41	5.30	4.47	1.53	1.78	.54	.35	.41		
AC-FT	5230	43820	31530	12960	15210	18270	15420	5290	6160	1850	1210	1410		
CAL YR 1984	TOTAL	103739	MEAN	283	MAX	2120	MIN	17	CFSM	4.37	IN.	59.65	AC-FT	205800
WTR YR 1985	TOTAL	79836	MEAN	219	MAX	2120	MIN	14	CFSM	3.38	IN.	45.90	AC-FT	158400

WILLAMETTE RIVER BASIN

209

14194000 SOUTH YAMHILL RIVER NEAR WHITESON, OR

LOCATION.--Lat 45°10'08", long 123°12'25", in NE¼NW¼ sec.5, T.5 S., R.4 W., Yamhill County, Hydrologic Unit 17090008, near left bank on downstream side of Whiteson Bridge on State Highway 99W, 1.3 mi northwest of Whiteson, 1.4 mi downstream from Salt Creek, and at mile 16.71.

DRAINAGE AREA.--502 mi².

PERIOD OF RECORD.--July 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 82.30 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 20, 1940, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: June 30 to July 22. Records good except for estimated daily discharges, which are fair. Slight regulation during low-water periods by logpond upstream. Many small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--45 years, 1,771 ft³/s, 47.91 in/yr, 1,283,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,200 ft³/s Dec. 23, 1964, gage height, 47.20 ft; minimum, 3.2 ft³/s Aug. 24, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1937 reached a stage of 46.9 ft, from Oregon State Highway Department bridge plans.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 13,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 29	0030	*20,200	*41.01	No other peak greater than base discharge.			
Minimum discharge, 27 ft ³ /s Aug. 29.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	57	739	13300	5500	462	1020	4100	683	235	170	99	41		
2	57	3510	9180	3890	574	946	3340	619	230	160	90	47		
3	56	7430	5680	2990	530	871	2720	600	214	150	81	43		
4	56	6940	3690	2430	462	1050	2250	628	215	140	69	41		
5	60	4450	2800	2060	450	1370	1910	577	228	130	59	40		
6	69	2860	2280	1800	459	1270	1650	540	234	120	51	40		
7	73	2710	1950	1600	731	1130	1450	507	2640	110	44	66		
8	74	2550	1710	1430	1370	1030	1280	485	4320	105	53	91		
9	78	3080	1590	1280	1680	958	1160	470	2060	100	97	84		
10	117	4920	2070	1160	2480	902	1060	449	1280	95	82	76		
11	368	6190	2300	1050	3160	849	992	443	959	90	64	84		
12	423	5990	2770	971	5230	799	1030	421	787	83	56	93		
13	482	6170	4110	909	4620	756	903	394	669	78	51	136		
14	548	5810	3680	860	3320	718	824	383	595	74	52	194		
15	583	4470	3780	863	2800	682	766	377	528	70	40	195		
16	435	3300	3370	812	2430	652	716	349	469	66	37	183		
17	322	2530	2840	764	2070	622	671	324	425	63	37	132		
18	259	3010	2430	732	1790	599	627	305	380	60	39	143		
19	325	3460	2060	706	1610	575	615	293	345	57	37	145		
20	550	3410	1790	682	2000	559	622	287	318	55	43	122		
21	461	3290	1760	655	1870	639	618	277	297	53	48	109		
22	363	2740	1990	625	1740	820	674	261	278	51	49	99		
23	312	2380	2360	596	1640	1750	1120	246	266	50	43	93		
24	277	3340	2430	568	1540	4520	1500	248	254	49	37	87		
25	253	3690	2220	542	1480	3770	1330	240	250	48	39	82		
26	333	4050	2020	519	1330	2910	1140	237	237	47	38	77		
27	853	5240	2230	499	1200	3970	1020	231	216	43	34	72		
28	1430	14400	3200	489	1100	4570	911	223	204	39	31	68		
29	1350	18700	3380	482	---	3850	814	224	197	37	31	68		
30	935	16200	6540	477	---	3490	740	216	180	46	36	64		
31	858	---	7300	458	---	4560	---	218	---	63	37	---		
TOTAL	12417	157559	108810	38399	50128	52207	38553	11755	19510	2502	1604	2815		
MEAN	401	5252	3510	1239	1790	1684	1285	379	650	80.7	51.7	93.8		
MAX	1430	18700	13300	5500	5230	4570	4100	683	4320	170	99	195		
MIN	56	739	1590	458	450	559	615	216	180	37	31	40		
CFSM	.80	10.5	6.99	2.47	3.57	3.35	2.56	.75	1.29	.16	.10	.19		
IN.	.92	11.68	8.06	2.85	3.71	3.87	2.86	.87	1.45	.19	.12	.21		
AC-FT	24630	312500	215800	76160	99430	103600	76470	23320	38700	4960	3180	5580		
CAL YR 1984	TOTAL	681992	MEAN	1863	MAX	18700	MIN	33	CFSM	3.71	IN.	50.54	AC-FT	1353000
WTR YR 1985	TOTAL	496259	MEAN	1360	MAX	18700	MIN	31	CFSM	2.71	IN.	36.77	AC-FT	984300

WILLAMETTE RIVER BASIN

14194300 NORTH YAMHILL RIVER NEAR FAIRDALE, OR

LOCATION.--Lat 45°21'55", long 123°22'40", in SW¼ sec.25, T.2 S., R.6 W., Yamhill County, Hydrologic Unit 17090008, on right bank 0.4 mi downstream from small tributary, 1.3 mi upstream from Kutch Creek, 2.1 mi west of Fairdale, 9.5 mi west of Yamhill and at mile 28.4.

DRAINAGE AREA.--9.03 mi².

PERIOD OF RECORD.--October 1958 to March 1966, October 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 560 ft, from topographic map.

REMARKS.--No estimated daily discharges. Records excellent. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--25 years (water years 1959-65, 1968-85), 48.0 ft³/s, 72.19 in/yr, 34,780 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,330 ft³/s Dec. 22, 1964, gage height, 6.88 ft, from rating curve extended above 1,000 ft³/s; maximum gage height, 9.7 ft Dec. 23, 1964 (backwater from debris); minimum discharge, 2.3 ft³/s Sept. 23-26, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	1300	*316	*3.94				
Minimum discharge, 2.8 ft ³ /s Sept. 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	4.0	56	177	99	23	46	125	34	13	9.6	5.7	4.0		
2	3.9	204	135	81	22	42	118	32	13	9.1	5.4	3.5		
3	3.8	216	104	69	23	41	104	32	12	8.7	5.2	3.3		
4	4.5	150	84	60	21	44	87	29	13	8.4	4.9	3.3		
5	4.4	100	71	54	20	41	76	27	12	8.4	4.7	3.7		
6	4.3	79	61	49	23	38	67	25	31	8.2	4.6	6.7		
7	4.0	79	54	45	27	36	61	23	105	7.9	5.3	5.4		
8	4.6	81	50	41	23	34	56	23	63	7.6	8.6	4.3		
9	5.0	101	47	38	22	31	52	21	46	7.3	5.4	3.7		
10	13	162	52	36	23	30	49	22	37	7.1	5.0	5.1		
11	18	149	46	34	54	28	48	20	30	7.0	4.7	4.6		
12	19	141	79	32	65	27	44	19	26	6.8	4.6	7.2		
13	18	127	75	30	50	27	40	19	23	6.7	4.3	7.5		
14	23	106	83	31	48	26	37	18	21	6.4	4.1	5.9		
15	17	88	88	31	55	25	35	17	20	6.3	4.1	5.3		
16	12	72	78	29	52	24	32	17	18	6.3	4.0	4.8		
17	9.6	65	68	30	49	24	29	16	16	6.2	3.9	7.4		
18	10	85	59	32	45	24	28	15	15	5.9	4.1	5.8		
19	16	83	53	31	51	23	28	15	14	5.6	4.3	4.8		
20	16	82	49	31	55	24	27	15	14	5.5	4.3	4.3		
21	13	73	50	29	54	31	29	15	13	5.3	4.2	3.8		
22	11	65	62	28	61	33	41	14	13	5.3	4.0	3.7		
23	10	70	68	27	64	91	71	14	12	5.3	3.8	3.5		
24	9.6	69	68	25	69	86	62	14	12	5.3	3.7	3.3		
25	15	68	64	24	66	69	56	13	12	5.1	3.6	3.3		
26	39	64	58	23	59	62	51	13	11	4.9	3.5	3.3		
27	59	213	70	22	53	57	46	13	11	4.8	3.4	3.2		
28	85	296	65	23	49	55	43	13	11	4.6	3.6	3.1		
29	64	267	117	23	---	55	39	13	10	4.6	3.5	3.1		
30	53	244	160	22	---	102	37	13	9.8	6.0	3.6	3.0		
31	44	---	125	23	---	127	---	13	---	6.2	3.7	---		
TOTAL	612.7	3655	2420	1152	1226	1403	1618	587	656.8	202.4	137.8	133.9		
MEAN	19.8	122	78.1	37.2	43.8	45.3	53.9	18.9	21.9	6.53	4.45	4.46		
MAX	85	296	177	99	69	127	125	34	105	9.6	8.6	7.5		
MIN	3.8	56	46	22	20	23	27	13	9.8	4.6	3.4	3.0		
CFSM	2.19	13.5	8.65	4.12	4.85	5.02	5.97	2.09	2.43	.72	.49	.49		
IN.	2.52	15.06	9.97	4.75	5.05	5.78	6.67	2.42	2.71	.83	.57	.55		
AC-FT	1220	7250	4800	2280	2430	2780	3210	1160	1300	401	273	266		
CAL YR 1984	TOTAL	18287.1	MEAN	50.0	MAX	296	MIN	3.8	CFSM	5.54	IN.	75.34	AC-FT	36270
WTR YR 1985	TOTAL	13804.6	MEAN	37.8	MAX	296	MIN	3.0	CFSM	4.19	IN.	56.87	AC-FT	27380

WILLAMETTE RIVER BASIN

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14195500 HASKINS CREEK RESERVOIR NEAR MCMINNVILLE, OR

LOCATION.--Lat 45°18'43", long 123°21'23", in SW¼NW¼ sec.18, T.3 S., R.5 W., Yamhill County, Hydrologic Unit 17090008, on control tower 250 ft upstream from dam on Haskins Creek, 11 mi northwest of McMinnville, and at mile 5.1.

DRAINAGE AREA.--6.88 mi².

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1738: Drainage area. WDR OR-79-1: 1978 (maximum contents).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of McMinnville). Prior to February 1981, at datum 20.0 ft lower.

REMARKS.--Reservoir is formed by earthfill dam equipped with five siphon spillways which act as overflow weirs until priming occurs, approximately 815.5 ft elevation. Capacity of reservoir is 733 acre-ft between elevations 741.5 ft, invert of outlet tunnel, and 815.0 ft, crest of siphon spillways. Dead storage negligible. Rated capacity of three siphons is 700 ft³/s each and remaining two siphons 350 ft³/s each. Under normal operation, reservoir is filled in the spring (April or May) and drained when fall rains start. There is no planned storage during winter months; however, during periods of heavy runoff, inflow may be greater than capacity of outlet tunnel and there may be some temporary storage. Water is used for municipal supply of city of McMinnville.

COOPERATION.--Elevations and capacity table furnished by city of McMinnville, Water and Light Department.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 748 acre-ft Nov. 17, 1954, elevation, 815.65 ft, present datum; no contents most of time during winter months.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 733 acre-ft many days during the year, elevation, 815.0 ft, present datum; no contents Jan. 20-31.

MONTHEND ELEVATIONS AND CONTENTS AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	815.0	733	-
Oct. 31.....	815.0	733	0
Nov. 30.....	815.0	733	0
Dec. 31.....	815.0	733	0
CAL YR 1984.....	-	-	0
Jan. 31.....	755.0	0	-733
Feb. 28.....	815.0	733	+733
Mar. 31.....	815.0	733	0
Apr. 30.....	815.0	733	0
May 31.....	815.0	733	0
June 30.....	814.5	722	-11
July 31.....	815.0	733	+11
Aug. 31.....	815.0	733	0
Sept. 30.....	815.0	733	0
WTR YR 1985.....	-	-	0

WILLAMETTE RIVER BASIN

14196001 HASKINS CREEK BELOW RESERVOIR, NEAR MCMINNVILLE, OR

LOCATION.--Lat 45°18'39", long 123°21'06", in SE¼NW¼ sec.18, T.3 S., R.5 W., Yamhill County, Hydrologic Unit 17090008, on right bank 800 ft downstream from Haskins Creek Reservoir, 11 mi northwest of McMinnville, and at mile 5.0.

DRAINAGE AREA.--6.90 mi².

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1738: Drainage area. Maximum discharge for water year 1957, published in WSP 1518, has been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 707 ft above National Geodetic Vertical Datum of 1929 (topographic survey of 1955). Prior to Aug. 5, 1952, water-stage recorder at site 600 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. All records given herein include flow in pipeline which diverts 600 ft upstream from station for municipal supply of McMinnville. Flow regulated by Haskins Creek Reservoir (see station 14195500); during winter months reservoir is empty except when inflow exceeds capacity of outlet tunnel. Water from McGuire Lake (station 14302800) on the Nestucca River is diverted through a tunnel to Haskins Creek Reservoir to augment summer flows.

COOPERATION.--Meter readings for diversion and elevations of Haskins Creek Reservoir furnished by city of McMinnville.

AVERAGE DISCHARGE.--34 years, 32.3 ft³/s, 63.57 in/yr, 23,400 acre-ft/yr, adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft³/s Dec. 23, 1964, gage height, 5.98 ft, from floodmark, from rating curve extended above 400 ft³/s on basis of slope-area measurement of peak flow; maximum daily discharge, 515 ft³/s Jan. 21, 1972; minimum daily, 0.10 ft³/s Oct. 27, 28, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 212 ft³/s Nov. 28; minimum daily, 3.6 ft³/s Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	35	119	57	5.6	28	74	20	9.8	14	25	10
2	12	152	93	50	5.6	26	65	19	9.9	16	22	13
3	12	91	75	45	5.3	25	56	19	9.7	18	15	13
4	11	64	61	41	6.0	28	51	17	9.8	15	16	12
5	13	49	54	38	6.1	27	46	17	8.9	17	17	12
6	13	43	48	34	6.1	25	40	17	17	16	13	14
7	12	41	43	31	5.8	23	36	15	55	16	12	13
8	12	43	41	28	4.7	22	32	15	29	17	15	12
9	13	62	38	26	3.9	21	30	15	22	17	14	12
10	20	97	42	57	4.2	20	28	14	19	14	14	12
11	22	85	36	82	4.2	19	28	14	17	14	14	13
12	21	91	57	81	3.6	20	26	14	16	15	14	15
13	12	81	52	77	5.5	19	25	14	14	16	15	15
14	14	67	63	72	5.2	18	24	13	12	16	13	14
15	12	52	54	66	7.1	17	22	12	13	16	12	14
16	8.4	47	47	58	9.0	17	21	13	13	16	13	13
17	6.8	46	46	52	9.0	17	20	13	14	14	15	13
18	6.5	53	38	44	7.5	17	20	12	15	15	10	13
19	11	49	38	30	6.7	16	20	11	12	18	11	12
20	11	48	36	19	13	16	19	11	9.9	14	14	11
21	9.0	45	35	18	33	19	20	11	12	13	14	11
22	7.2	40	39	18	36	21	24	12	10	13	12	11
23	6.6	47	43	17	39	64	41	10	9.0	14	12	12
24	6.5	45	40	16	41	51	34	9.5	11	14	11	10
25	8.4	47	39	16	39	43	31	11	13	15	13	11
26	20	44	37	16	36	42	28	9.5	13	14	12	11
27	27	181	48	15	33	42	26	9.9	10	14	11	11
28	42	212	43	14	29	41	24	11	10	13	11	12
29	26	186	75	14	---	40	22	9.8	8.9	14	12	11
30	21	162	84	14	---	82	21	9.4	9.7	13	10	11
31	18	---	76	10	---	83	---	9.5	---	26	12	---
TOTAL	445.4	2305	1640	1156	410.1	949	954	407.6	432.6	477	424	367
MEAN	14.4	76.8	52.9	37.3	14.6	30.6	31.8	13.1	14.4	15.4	13.7	12.2
MAX	42	212	119	82	41	83	74	20	55	26	25	15
MIN	6.5	35	35	10	3.6	16	19	9.4	8.9	13	10	10
AC-FT	883	4570	3250	2290	813	1880	1890	808	858	946	841	728
MEAN†	10.8	76.8	52.9	25.3	27.8	30.6	31.8	13.1	13.5	6.23	5.15	4.89
CFSM†	1.57	11.1	7.67	3.67	4.03	4.43	4.61	1.90	1.96	0.903	0.746	0.709
IN.†	1.81	12.42	8.84	4.23	4.20	5.11	5.14	2.20	2.19	1.04	0.86	0.79
AC-FT†	666	4570	3250	1557	1546	1880	1890	808	804	383	317	291

CAL YR 1984 TOTAL 13176.7 MEAN 36.0 MAX 212 MIN 4.4 AC-FT 26140 MEAN† 33.6 CFSM† 4.87 IN.† 66.26 AC-FT† 24384
WTR YR 1985 TOTAL 9967.7 MEAN 27.3 MAX 212 MIN 3.6 AC-FT 19770 MEAN† 24.8 CFSM† 3.60 IN.† 48.84 AC-FT† 17975

† Adjusted for change in contents of Haskins Creek Reservoir and diversion from McGuire Lake.

14198500 MOLALLA RIVER ABOVE PINE CREEK, NEAR WILHOIT, OR

LOCATION.--Lat 45°00'35", long 122°28'45", in NE¼NE¼ sec.31, T.6 S., R.3 E., Clackamas County, Hydrologic Unit 17090009, on right bank 0.5 mi upstream from Pine Creek, 5 mi southeast of Wilhoit, and at mile 32.5.

DRAINAGE AREA.--97.0 mi², at cableway 0.2 mi downstream.

PERIOD OF RECORD.--October 1935 to current year.

REVISED RECORDS.--WSP 1738: Drainage area. WDR OR-75-1: 1967(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 791.35 ft above National Geodetic Vertical Datum of 1929 (Bureau of Public Roads bench mark). Oct. 1, 1935, to Sept. 30, 1945, and Oct. 1, 1945, to Feb. 9, 1961, water-stage recorder at site 0.3 mi downstream at datums 8.42 ft and 10.44 ft lower, respectively. Feb. 10, 1961, to July 21, 1966, water-stage recorder at site 0.2 mi downstream at datum 5.99 ft lower.

REMARKS.--Estimated daily discharges: Mar. 15-21, Mar. 24 to Apr. 25. Records excellent except for estimated daily discharges, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--50 years, 545 ft³/s, 76.30 in/yr, 394,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,300 ft³/s Dec. 22, 1964, gage height, 16.3 ft, from floodmark, site and datum then in use, from rating curve extended above 5,200 ft³/s; minimum, 18 ft³/s Oct. 3, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0900	*5,650	*8.73	Nov. 28	1600	3,620	7.40

Minimum, 21 ft³/s Aug. 27, 30, 31, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	36	383	1310	562	193	475	1800	658	275	97	66	21		
2	35	4040	960	484	185	436	1800	702	249	92	50	40		
3	34	3960	751	438	172	394	1500	766	232	87	42	32		
4	35	2200	613	411	153	400	1200	641	242	84	38	26		
5	41	1360	520	403	168	365	960	538	237	81	36	28		
6	37	1080	457	404	161	339	960	490	1110	79	35	98		
7	35	1050	417	400	226	314	1000	447	2640	75	37	68		
8	35	838	407	372	196	307	1000	401	1810	72	70	49		
9	44	804	702	342	184	304	940	374	998	69	58	47		
10	54	2020	1620	320	179	293	1000	376	682	65	44	87		
11	98	2070	989	299	736	293	900	375	522	64	41	88		
12	182	2010	900	280	1210	300	780	336	431	62	37	95		
13	390	1740	793	271	679	327	720	324	367	60	34	251		
14	342	1440	806	296	621	310	780	351	320	59	31	180		
15	299	1010	970	347	973	310	720	338	287	56	29	208		
16	207	765	749	347	756	330	640	397	257	54	28	161		
17	166	626	624	462	597	360	550	442	229	52	27	208		
18	149	769	522	523	500	360	490	420	208	52	26	205		
19	183	743	454	459	468	360	460	381	195	47	28	158		
20	351	776	414	423	445	370	400	350	178	45	30	130		
21	334	752	396	383	419	400	390	322	164	44	29	110		
22	253	642	497	347	580	422	600	320	155	43	27	98		
23	205	718	656	316	632	1180	1150	324	145	43	26	87		
24	193	781	665	293	659	1250	900	317	138	42	24	78		
25	228	667	570	274	669	1000	740	291	133	41	23	71		
26	893	568	522	255	572	900	527	269	126	39	23	64		
27	776	1780	511	240	498	800	604	254	118	37	21	61		
28	736	3340	478	228	462	740	771	237	116	36	22	56		
29	550	2180	500	217	---	680	696	282	107	35	22	52		
30	430	1840	742	202	---	820	634	294	104	37	21	52		
31	393	---	679	196	---	1200	---	288	---	52	21	---		
TOTAL	7744	42952	21194	10794	13293	16339	25612	12305	12775	1801	1046	2909		
MEAN	250	1432	684	348	475	527	854	397	426	58.1	33.7	97.0		
MAX	893	4040	1620	562	1210	1250	1800	766	2640	97	70	251		
MIN	34	383	396	196	153	293	390	237	104	35	21	21		
CFSM	2.58	14.8	7.05	3.59	4.90	5.43	8.80	4.09	4.39	.60	.35	.00		
IN.	2.97	16.47	8.13	4.14	5.10	6.27	9.82	4.72	4.90	.69	.40	1.12		
AC-FT	15360	85200	42040	21410	26370	32410	50800	24410	25340	3570	2070	5770		
CAL YR 1984	TOTAL	218569	MEAN	597	MAX	4040	MIN	34	CFSM	6.15	IN.	83.82	AC-FT	433500
WTR YR 1985	TOTAL	168764	MEAN	462	MAX	4040	MIN	21	CFSM	4.76	IN.	64.72	AC-FT	334700

WILLAMETTE RIVER BASIN

14201500 BUTTE CREEK AT MONITOR, OR

LOCATION.--Lat 45°06'06", long 122°44'42", in SE¼SE¼ sec.25, T.5 S., R.1 W., Marion County, Hydrologic Unit 17090009, on left bank at downstream side of highway bridge at Monitor and at mile 7.7.

DRAINAGE AREA.--58.7 mi².

PERIOD OF RECORD.--January to December 1936, October 1940 to September 1952, October 1966 to September 1985 (discontinued).
Monthly discharge only for January to December 1936, published as WSP 1318.

REVISED RECORDS.--WSP 2135: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 155 ft, from topographic map. Jan. 20 to Oct. 22, 1936, nonrecording gage at present site at different datum. Oct. 23 to Dec. 19, 1936, nonrecording gage at site 70 ft downstream at different datum. Oct. 1, 1940, to Sept. 30, 1952, nonrecording gage at present site at 151.35 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Aug. 14-21. Records good except for Nov. 28 and Aug. 14-21, which are fair. No regulation. Diversions for irrigation by pumping upstream from station.

AVERAGE DISCHARGE.--31 years (water years 1941-52, 1967-85), 221 ft³/s, 51.13 in/yr, 160,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,310 ft³/s Jan. 21, 1972, gage height, 15.26 ft, from floodmark; minimum, 0.04 ft³/s July 23, 24, Aug. 26, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	0500	*1,530	*8.60	No other peak greater than base discharge.			
Minimum, 0.37 ft ³ /s July 27, 28.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	9.5	114	700	351	69	163	390	175	77	29	28	5.1		
2	9.9	1060	548	302	71	154	426	179	69	26	21	6.3		
3	10	1300	437	265	66	143	409	204	62	23	16	7.4		
4	12	826	357	237	57	161	363	196	66	23	13	5.5		
5	17	554	298	218	65	150	313	163	65	20	12	6.0		
6	17	464	254	206	62	139	286	150	185	18	12	10		
7	14	449	223	196	118	130	296	137	811	18	23	21		
8	14	383	203	185	151	123	289	123	648	17	15	13		
9	18	405	246	171	166	116	264	114	399	12	10	12		
10	23	813	683	157	177	112	266	112	282	9.6	11	16		
11	40	789	493	144	416	108	267	113	217	9.3	5.4	24		
12	37	844	436	134	656	105	249	99	177	8.0	3.5	18		
13	85	809	381	126	413	101	224	102	148	6.6	3.3	51		
14	82	684	366	123	335	98	218	97	127	7.8	3.0	44		
15	79	515	452	124	403	96	207	92	113	7.5	2.7	36		
16	56	403	378	120	351	95	190	104	101	5.5	2.3	32		
17	47	333	325	119	298	98	161	117	85	7.0	2.0	34		
18	44	367	279	126	257	102	147	110	72	7.3	2.5	40		
19	46	324	241	127	237	101	145	101	64	4.6	3.6	29		
20	80	389	218	125	225	107	130	91	58	3.6	5.0	23		
21	81	376	215	115	202	151	131	83	53	5.6	4.3	20		
22	65	320	250	108	203	159	149	80	49	5.6	3.4	19		
23	55	443	270	100	203	429	231	78	48	4.0	3.5	18		
24	52	531	281	94	205	612	238	78	44	4.1	2.7	16		
25	51	440	267	88	213	439	223	74	43	4.0	4.8	14		
26	195	364	264	84	198	385	200	69	40	1.9	3.8	13		
27	225	802	315	80	183	399	190	65	37	.92	1.8	11		
28	219	1470	332	77	170	342	209	63	36	1.5	1.4	10		
29	176	1070	323	75	---	294	199	82	34	3.3	1.9	9.6		
30	138	930	436	71	---	282	183	82	33	3.8	2.7	9.5		
31	128	---	409	69	---	337	---	74	---	13	2.8	---		
TOTAL	2125.4	18571	10880	4517	6170	6231	7193	3407	4243	310.52	227.4	573.4		
MEAN	68.6	619	351	146	220	201	240	110	141	10.0	7.34	19.1		
MAX	225	1470	700	351	656	612	426	204	811	29	28	51		
MIN	9.5	114	203	69	57	95	130	63	33	.92	1.4	5.1		
CFSM	1.17	10.5	5.98	2.49	3.75	3.42	4.09	1.87	2.40	.17	.13	.33		
IN.	1.35	11.77	6.89	2.86	3.91	3.95	4.56	2.16	2.69	.20	.14	.36		
AC-FT	4220	36840	21580	8960	12240	12360	14270	6760	8420	616	451	1140		
CAL YR 1984	TOTAL	90399.5	MEAN	247	MAX	1470	MIN	4.3	CFSM	4.21	IN.	57.29	AC-FT	179300
WTR YR 1985	TOTAL	64448.72	MEAN	177	MAX	1470	MIN	.92	CFSM	3.02	IN.	40.84	AC-FT	127800

WILLAMETTE RIVER BASIN

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14202965 HENRY HAGG LAKE NEAR GASTON, OR

LOCATION.--Lat 45°28'25", long 123°11'51", in SE¼NE¼ sec.20, T.1 S., R.4 W., Washington County, Hydrologic Unit 17090010, at left end of Scoggins Dam on Scoggins Creek, 3.8 mi northwest of Gaston, and at mile 4.9.

DRAINAGE AREA.--38.7 mi².

PERIOD OF RECORD.--January 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill dam with gated concrete spillway and a gated outlet tunnel. Storage began in January 1975. Total capacity at elevation 305.7 ft, maximum water-surface elevation, is 63,360 acre-ft, of which 56,160 acre-ft is active storage above elevation 239.3 ft, proposed minimum pool. Reservoir is used for irrigation, flood control, and recreation. Figures given herein represent active storage.

COOPERATION.--Monthend elevations and contents furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 53,660 acre-ft Apr. 30, 1975, elevation, 303.52 ft; minimum contents observed since first filling, 808 acre-ft Oct. 31, 1975, elevation, 237.21 ft.

EXTREMES FOR CURRENT YEAR.--Maximum monthend contents, 53,590 acre-ft Apr. 30, elevation, 303.46 ft; minimum monthend contents, 22,630 acre-ft Sept. 30, elevation, 271.71 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30.....	280.00	29,810	-
Oct. 31.....	273.45	24,080	-5,730
Nov. 30.....	277.05	27,180	+3,100
Dec. 31.....	278.20	28,200	+1,020
CAL YR 1984.....	-	-	+3,950
Jan. 31.....	282.42	32,030	+3,830
Feb. 28.....	288.95	38,270	+6,240
Mar. 31.....	296.82	43,310	+5,040
Apr. 30.....	303.46	53,590	+10,280
May 31.....	301.36	51,240	-2,350
June 30.....	297.43	46,960	-4,280
July 31.....	286.22	35,620	-11,340
Aug. 31.....	276.74	26,910	-8,710
Sept.30.....	271.71	22,630	-4,280
WTR YR 1985.....	-	-	-7,180

WILLAMETTE RIVER BASIN

14202980 SCOGGINS CREEK BELOW HENRY HAGG LAKE, NEAR GASTON, OR

LOCATION.--Lat 45°28'10", long 123°11'56", in SE¼NE¼ sec.20, T.1 S., R.4 W., Washington County, Hydrologic Unit 17090010, on left bank 600 ft downstream from Scoggins Dam, 800 ft upstream from small left bank tributary, 3.7 mi northwest of Gaston, and at mile 4.8.

DRAINAGE AREA.--38.8 mi².

PERIOD OF RECORD.--January 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 187.48 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records excellent. Flow completely regulated by Henry Hagg Lake since January 1975. Discharge not adjusted for storage or release from Henry Hagg Lake as evaporation from reservoir at times exceeds natural flow.

AVERAGE DISCHARGE.--10 years, 110 ft³/s, 79,700 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,250 ft³/s Dec. 16, 1977, gage height, 13.50 ft; minimum, 1.4 ft³/s Nov. 16, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 370 ft³/s Dec. 2, gage height, 7.68 ft; minimum, 11 ft³/s Mar. 12-25, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	129	149	130	17	20	12	73	76	149	180	141
2	112	135	289	130	17	17	12	77	76	149	147	141
3	112	133	366	129	17	17	12	40	62	158	127	123
4	112	133	362	90	17	17	12	48	55	179	127	114
5	112	198	360	68	17	17	12	56	62	179	126	114
6	112	212	357	68	17	18	12	56	51	179	126	114
7	111	74	355	68	18	18	12	58	31	178	126	114
8	111	127	353	68	18	18	12	50	25	178	126	114
9	111	228	352	45	18	18	12	35	25	178	113	102
10	111	325	350	32	18	18	12	27	25	178	106	91
11	111	323	183	32	18	19	12	27	25	178	106	85
12	110	325	76	32	18	15	12	27	25	178	106	85
13	110	324	76	32	18	11	12	34	25	178	106	76
14	110	321	104	32	18	12	12	60	66	177	125	62
15	109	210	127	26	18	12	12	91	100	177	145	62
16	109	36	126	20	18	11	12	101	100	177	144	48
17	109	148	126	20	18	11	12	101	126	176	144	41
18	109	355	126	20	18	12	12	101	155	176	144	41
19	119	352	126	20	18	12	12	101	160	175	143	42
20	125	352	126	20	18	12	12	101	160	175	143	42
21	124	350	126	20	17	11	12	101	160	174	143	42
22	124	348	126	20	17	11	12	101	159	174	142	42
23	124	347	126	20	17	12	12	101	159	180	142	55
24	128	346	125	20	17	12	12	101	159	183	142	67
25	129	345	125	20	18	11	12	100	159	182	142	66
26	130	211	125	20	18	12	12	100	159	182	142	67
27	130	148	126	20	17	12	12	100	153	182	142	67
28	129	155	126	20	17	12	12	100	150	181	142	67
29	129	152	129	20	---	12	12	100	150	181	141	67
30	129	151	132	21	---	12	12	100	149	181	141	44
31	129	---	131	18	---	12	---	86	---	180	141	---
TOTAL	3642	6993	5886	1301	492	434	360	2354	2987	5452	4170	2336
MEAN	117	233	190	42.0	17.6	14.0	12.0	75.9	99.6	176	135	77.9
MAX	130	355	366	130	18	20	12	101	160	183	180	141
MIN	109	36	76	18	17	11	12	27	25	149	106	41
AC-FT	7220	13870	11670	2580	976	861	714	4670	5920	10810	8270	4630
CAL YR 1984	TOTAL	41415	MEAN	113	MAX	366	MIN	20	AC-FT	82150		
WTR YR 1985	TOTAL	36407	MEAN	99.7	MAX	366	MIN	11	AC-FT	72210		

WILLAMETTE RIVER BASIN

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14203500 TUALATIN RIVER NEAR DILLEY, OR

LOCATION.--Lat 45°28'30", long 123°07'23", in NE¼NW¼ sec.24, T.1 S., R.4 W., Washington County, Hydrologic Unit 17090010, on left bank 5 ft upstream from highway bridge, 1.0 mi south of Dilley, 1.2 mi downstream from Scoggins Creek, and at mile 58.81.

DRAINAGE AREA.--125 mi².

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1940 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1935: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 147.57 ft above National Geodetic Vertical Datum of 1929. Prior to June 16, 1950, nonrecording gage at several sites within 200 ft of present site at datum 4.00 ft higher. June 16, 1950, to Aug. 10, 1966, water-stage recorder at present site at datum 4.00 ft higher.

REMARKS.--Estimated daily discharges: Dec. 22-30. Records good except those for Dec. 22-30, which are poor. Diurnal fluctuation caused by operation of millpond on Scoggins Creek upstream from station and regulation by Henry Hagg Lake since January 1975. Diversions upstream from station of approximately 3,000 acre-ft from J.W. Barney Reservoir on the Middle Fork of North Fork Trask River for municipal water supply and irrigation in Wapato Lake area.

AVERAGE DISCHARGE.--46 years, 401 ft³/s, 290,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,100 ft³/s Dec. 22, 1964, gage height, 19.34 ft, from rating curve extended above 6,000 ft³/s; minimum, 0.08 ft³/s Sept. 3, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,010 ft³/s Nov. 28, gage height, 17.83 ft; minimum discharge, 29 ft³/s Sept. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	246	2000	945	131	230	786	168	129	181	211	152
2	124	602	1550	730	140	219	668	198	130	173	193	159
3	123	790	1410	591	128	209	558	164	114	171	151	143
4	125	788	1200	497	114	221	477	152	102	200	147	115
5	128	636	1030	407	123	218	410	162	101	205	142	115
6	128	565	897	367	122	208	362	156	126	202	138	120
7	127	368	807	340	168	196	332	148	340	200	140	127
8	125	400	746	318	192	184	307	138	291	200	154	126
9	131	493	706	291	240	175	284	123	189	197	148	120
10	151	796	711	257	342	170	265	108	144	199	128	105
11	179	892	623	239	443	163	252	107	121	193	124	111
12	191	898	495	224	656	158	243	102	106	195	118	107
13	201	897	564	217	521	147	221	99	95	202	115	111
14	192	866	533	213	428	142	206	116	106	203	125	72
15	193	791	641	210	385	137	193	144	156	200	155	65
16	162	500	588	194	349	135	179	161	153	197	153	55
17	154	390	520	188	316	131	168	157	167	197	155	36
18	152	670	469	186	287	130	161	152	200	196	158	36
19	166	757	427	184	278	128	161	152	204	193	161	33
20	199	800	398	182	313	128	158	154	203	191	160	32
21	186	805	382	178	294	150	155	153	203	191	160	31
22	174	765	370	173	295	181	163	151	202	191	162	30
23	166	729	360	166	303	350	239	148	199	193	161	33
24	165	741	360	160	307	589	246	153	201	199	159	47
25	171	741	360	155	302	512	223	150	200	199	157	53
26	212	685	390	149	277	461	200	151	202	196	154	61
27	288	854	440	144	251	570	182	150	194	195	149	65
28	321	2790	500	142	236	641	169	147	185	196	148	71
29	311	2700	600	138	---	545	151	146	182	196	147	78
30	266	2490	750	134	---	590	137	148	185	195	148	69
31	260	---	940	130	---	865	---	141	---	205	151	---
TOTAL	5595	26445	21767	8449	7941	8883	8256	4499	5130	6051	4672	2478
MEAN	180	882	702	273	284	287	275	145	171	195	151	82.6
MAX	321	2790	2000	945	656	865	786	198	340	205	211	159
MIN	123	246	360	130	114	128	137	99	95	171	115	30
AC-FT	11100	52450	43170	16760	15750	17620	16380	8920	10180	12000	9270	4920
CAL YR 1984	TOTAL	143572	MEAN	392	MAX	2790	MIN	102	AC-FT	284800		
WTR YR 1985	TOTAL	110166	MEAN	302	MAX	2790	MIN	30	AC-FT	218500		

WILLAMETTE RIVER BASIN

14207000 OSWEGO CANAL NEAR LAKE OSWEGO, OR

LOCATION.--Lat 45°23'18", long 122°43'11", in NW¼NW¼ sec.20, T.2 S., R.1 E., Clackamas County, Hydrologic Unit 17090010, on left bank 0.4 mi downstream from point of diversion on Tualatin River, 1.0 mi upstream from Lake Oswego, and 3.5 mi southwest of town of Lake Oswego.

PERIOD OF RECORD.--October 1928 to current year. October 1951 to September 1970, Oswego Canal records were not published separately, but were combined with records for Tualatin River at West Linn.

GAGE.--Water-stage recorder. Datum of gage is 96.50 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 15, 1928, nonrecording gage 800 ft upstream at different datum. Nov. 15, 1928, to June 29, 1939, nonrecording gage 900 ft downstream at datum about 1.0 ft higher.

REMARKS.--No estimated daily discharges. Records good. Oswego Canal diverts water from Tualatin River in NW¼ sec.20, but diversion dam is in NE¼ sec.33, about 3 mi downstream. Water used for recreational facilities and development of power below Lake Oswego and returned to Willamette River at that point.

AVERAGE DISCHARGE.--57 years, 69.3 ft³/s, 50,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,000 ft³/s Dec. 23, 1933; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 164 ft³/s Nov. 28; minimum daily, 4.7 ft³/s Dec. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	77	160	5.1	49	85	76	48	61	62	65	38
2	44	108	162	5.4	50	86	58	46	61	61	64	38
3	44	110	163	6.3	50	77	62	48	61	62	65	49
4	44	122	162	6.5	49	76	76	48	61	63	62	71
5	42	117	158	6.8	46	76	73	46	59	62	65	64
6	42	107	150	7.0	46	74	68	45	61	63	68	62
7	42	84	140	7.4	52	71	62	44	68	65	66	62
8	42	65	129	7.3	64	67	57	42	72	65	64	63
9	44	63	117	7.2	81	64	53	41	71	65	56	63
10	53	80	110	7.1	99	62	57	40	66	62	52	65
11	61	95	120	6.9	124	60	52	39	62	61	51	63
12	68	108	128	7.0	150	58	50	38	60	61	51	60
13	66	117	125	7.0	158	56	48	38	58	58	44	57
14	64	117	130	7.2	114	54	46	47	57	59	38	56
15	62	115	132	7.7	48	51	44	88	56	63	37	55
16	63	111	129	8.0	46	50	43	101	65	65	37	56
17	64	105	127	8.0	44	49	42	81	71	64	37	58
18	59	99	120	7.9	83	48	48	66	68	63	38	58
19	56	94	110	8.0	107	48	54	60	63	62	38	55
20	58	99	101	8.1	107	48	54	59	62	60	39	50
21	61	101	93	8.0	110	51	54	60	62	56	39	48
22	63	100	87	7.8	107	55	54	59	62	54	39	46
23	61	103	84	7.8	105	74	55	59	60	62	39	37
24	59	106	83	7.7	104	111	55	59	66	69	39	20
25	57	105	82	8.2	102	143	54	59	68	69	39	20
26	57	102	80	8.8	100	122	54	59	63	65	39	35
27	65	131	38	8.9	95	108	54	59	63	66	39	44
28	84	164	4.7	24	89	81	54	60	62	62	39	50
29	93	159	5.8	50	---	66	52	60	61	63	39	55
30	90	158	5.8	49	---	77	50	60	63	64	38	58
31	77	---	5.2	49	---	76	---	60	---	65	38	---
TOTAL	1829	3222	3241.5	371.1	2379	2224	1659	1719	1893	1941	1464	1556
MEAN	59.0	107	105	12.0	85.0	71.7	55.3	55.5	63.1	62.6	47.2	51.9
MAX	93	164	163	50	158	143	76	101	72	69	68	71
MIN	42	63	4.7	5.1	44	48	42	38	56	54	37	20
AC-FT	3630	6390	6430	736	4720	4410	3290	3410	3750	3850	2900	3090
CAL YR 1984	TOTAL	31695.4	MEAN	86.6	MAX	164	MIN	2.1	AC-FT	62870		
WTR YR 1985	TOTAL	23498.6	MEAN	64.4	MAX	164	MIN	4.7	AC-FT	46610		

WILLAMETTE RIVER BASIN

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14207500 TUALATIN RIVER AT WEST LINN, OR
(National stream quality accounting network station)

LOCATION.--Lat 45°21'03", long 122°40'30", in SW¼ sec.34, T.2 S., R.1 E., Clackamas County, Hydrologic Unit 17090010, on left bank 300 ft upstream from bridge on State Highway 212, 0.4 mi west of West Linn city limits, and at mile 1.8.

DRAINAGE AREA.--706 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1928 to current year. Prior to October 1960, published as "near Willamette."

REVISED RECORDS.--WSP 1014: 1943. WSP 1184: 1947. WSP 1248: 1941. WSP 1935: Drainage area. WDR OR-75-1: 1974(M). WDR OR-77-1: 1971-73, 1975, 1976(M).

GAGE.--Water-stage recorder. Datum of gage is 85.61 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 12, 1941, nonrecording gage at datum 1.02 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. October 1951 to September 1970, all records published for this station included the daily flow in Oswego Canal. Oswego Canal diverts at point 5.0 mi upstream from station for development of power between outlet of Lake Oswego and Willamette River. Some regulation in low-water season by flashboards on crest of diversion dam for Oswego Canal and regulation by Henry Hagg Lake since January 1975. Several diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--57 years, 1,540 ft³/s, 29.62 in/yr, 1,116,000 acre-ft/yr, adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,300 ft³/s Dec. 23, 1933, gage height, 17.72 ft; minimum daily, 0.20 ft³/s July 30 to Aug. 2, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,250 ft³/s Dec. 3, gage height, 9.52 ft; minimum, 24 ft³/s Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	488	5840	3580	558	1210	3280	605	314	232	191	140
2	178	1350	6060	3630	576	1140	3290	579	351	222	280	150
3	184	2150	6220	3580	583	1060	3230	610	362	203	298	162
4	192	2580	6170	3420	564	1050	3070	606	352	181	235	135
5	198	2500	5860	3120	519	1050	2820	567	318	166	178	113
6	197	2290	5370	2720	511	1020	2470	548	369	165	145	108
7	203	1950	4770	2270	600	964	2080	534	869	152	125	110
8	206	1620	4170	1910	811	901	1760	513	1390	154	144	120
9	214	1440	3530	1660	1110	845	1540	492	1350	168	174	132
10	296	1860	3150	1460	1490	797	1370	475	906	164	187	274
11	355	2430	2690	1300	2020	764	1240	452	639	152	168	339
12	436	2970	2430	1180	2730	734	1150	435	501	142	154	328
13	479	3360	2360	1080	3130	700	1070	412	428	131	141	297
14	457	3520	2480	1020	3180	670	982	299	365	128	122	272
15	441	3420	2520	990	3090	645	912	144	328	128	105	267
16	410	3240	2470	964	2830	624	858	277	335	130	99	245
17	373	2980	2420	916	2550	608	812	345	340	127	100	219
18	333	2730	2270	868	2210	590	771	369	300	122	105	191
19	310	2480	2060	835	1930	574	740	357	287	120	119	164
20	319	2610	1850	827	1780	575	718	340	277	117	138	145
21	340	2710	1690	806	1740	626	717	340	263	107	142	131
22	359	2710	1580	785	1680	705	720	331	253	88	137	120
23	347	2710	1500	760	1620	1040	751	311	244	50	135	209
24	330	2910	1480	738	1590	1730	813	301	241	53	133	171
25	313	2900	1440	708	1560	2590	878	295	244	58	135	111
26	313	2790	1420	672	1510	2870	828	291	243	68	146	32
27	358	3320	1540	641	1420	3180	772	291	232	75	153	55
28	473	5780	1800	613	1310	3340	737	295	227	84	143	63
29	553	5780	2230	579	---	3290	693	292	217	98	142	68
30	604	5730	2980	566	---	3290	650	300	217	113	137	74
31	546	---	3450	560	---	3290	---	304	---	144	133	---
TOTAL	10493	85308	95800	44758	45202	42472	41722	12310	12762	4042	4744	4945
MEAN	338	2844	3090	1444	1614	1370	1391	397	425	130	153	165
MAX	604	5780	6220	3630	3180	3340	3290	610	1390	232	298	339
MIN	176	488	1420	560	511	574	650	144	217	50	99	32
AC-FT	20810	169200	190000	88780	89660	84240	82760	24420	25310	8020	9410	9810
MEAN†	398	2951	3195	1455	1697	1442	1446	453	489	193	200	217
CFSM†	0.564	4.18	4.53	2.06	2.40	2.04	2.05	0.642	0.693	0.273	0.283	0.307
IN.†	0.65	4.66	5.22	2.38	2.50	2.35	2.29	0.74	0.77	0.32	0.33	0.34
AC-FT†	24450	175600	196440	89487	94270	88650	86050	27840	29100	11880	12310	12910

CAL YR 1984 TOTAL 557463 MEAN 1523 MAX 6220 MIN 47 AC-FT 1106000 MEAN† 1610 CFSM† 2.28 IN.† 31.04 AC-FT† 1168890
WTR YR 1985 TOTAL 404558 MEAN 1108 MAX 6220 MIN 32 AC-FT 802400 MEAN† 1173 CFSM† 1.66 IN.† 22.55 AC-FT† 848960

† Adjusted for diversion of Oswego Canal.

WILLAMETTE RIVER BASIN

14207500 TUALATIN RIVER AT WEST LINN, OR--Continued
(National stream quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to September 1981.

WATER TEMPERATURES: October 1975 to September 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	
OCT 23...	1200	344	154	7.20	10.0	9.2	K33	450	50	5	13	
JAN 22...	1030	784	136	7.10	4.0	11.5	K15	K100	47	4	12	
APR 19...	1030	731	132	7.00	12.0	9.4	28	100	46	5	12	
JUL 23...	1100	51	185	7.70	23.0	10.0	40	360	54	11	14	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 23...	4.2	10	2.4	45	11	10	.10	.240	1.2	.70	.020	
JAN 22...	4.0	8.3	1.7	43	7.4	6.9	<.10	.450	1.5	1.1	.290	
APR 19...	3.8	8.8	1.7	41	7.7	7.4	<.10	.240	1.2	.80	.230	
JUL 23...	4.6	15	3.4	43	18	11	.10	.220	1.4	2.0	.130	
DATE		PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	TUR- BID- ITY (NTU)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	
OCT 23...		.090	.160	23	110	100	102	6.3	12	11	94	
JAN 22...		.300	.370	23	84	91	178	4.2	7	15	96	
APR 19...		.250	.310	21	90	88	178	5.6	14	28	84	
JUL 23...		.170	.260	17	129	110	18	3.6	10	1.4	94	

WILLAMETTE RIVER BASIN

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14207500 TUALATIN RIVER AT WEST LINN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 23...	40	<1	18	<.5	<1	<1	<3	6	240	20
JAN 22...	40	<1	22	<.5	<1	1	<3	5	160	1
APR 19...	30	<1	26	<.5	<1	<1	<3	3	130	5
JUL 23...	30	1	28	<.5	<1	1	<3	4	15	<1
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 23...	<4	43	.1	<10	16	<1	<1	62	<6	16
JAN 22...	4	58	<.1	<10	6	<1	<1	58	<6	8
APR 19...	<4	80	<.1	<10	3	<1	1	62	<6	16
JUL 23...	<4	1	<.1	<10	1	<1	<1	66	<6	9

K - Results based on colony count outside acceptable range (non-ideal colony count).

WILLAMETTE RIVER BASIN

14207740 WILLAMETTE RIVER ABOVE FALLS, AT OREGON CITY, OR

LOCATION.--Lat 45°20'55", long 122°37'08", in SW¼SW¼ sec.31, T.2 S., R.2 E., Clackamas County, Hydrologic Unit 17090007, on right bank 0.2 mi above Willamette Falls, 0.6 mi downstream from Tualatin River, and at mile 26.8.

DRAINAGE AREA.--10,000 mi², approximately.

PERIOD OF RECORD.--October 1976 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 64.79 ft Dec. 17, 1977; minimum recorded, 52.65 ft Feb. 8, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 61.50 ft Nov. 30; minimum, 53.22 ft July 3.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.89	56.04	61.36	57.94	53.96	54.97	57.28	55.25	54.99	53.32	55.00	54.70
2	53.93	56.71	61.09	57.51	53.96	54.83	57.35	55.42	55.00	53.28	55.00	54.41
3	53.90	58.66	60.42	57.07	54.01	54.75	57.12	55.42	54.98	53.56	54.99	54.22
4	53.90	59.68	59.70	56.65	54.02	54.68	57.01	55.48	54.95	54.27	54.93	54.06
5	53.92	59.75	59.16	56.33	53.97	54.74	56.75	55.54	54.88	54.61	55.26	54.07
6	53.94	59.43	58.55	56.12	53.92	54.77	56.33	55.47	54.89	54.73	55.60	54.22
7	53.96	59.10	58.11	55.94	53.98	54.68	55.98	55.34	55.72	54.71	55.56	54.66
8	53.93	58.97	57.65	55.81	54.63	54.58	55.86	55.28	57.48	54.72	55.55	55.00
9	53.97	58.91	56.99	55.71	56.30	54.49	55.78	55.22	57.59	54.71	55.57	55.10
10	54.04	59.18	57.06	55.59	56.82	54.41	55.73	55.08	57.07	54.62	55.61	55.22
11	54.13	59.90	57.81	55.38	56.69	54.36	55.69	54.94	56.55	54.55	55.60	55.35
12	54.26	60.27	58.30	55.19	57.06	54.36	55.61	54.83	55.93	54.66	55.61	55.51
13	54.39	60.50	58.26	55.02	57.84	54.38	55.51	54.75	55.49	54.71	55.56	55.62
14	54.68	60.54	58.22	54.93	57.64	54.26	55.42	54.68	55.12	54.74	55.54	55.63
15	54.85	60.32	57.99	54.92	57.15	54.20	55.40	54.33	54.83	54.75	55.48	55.66
16	54.82	60.11	57.80	54.92	57.01	54.17	55.38	54.12	54.63	54.72	55.44	55.71
17	54.71	59.77	57.48	54.83	56.80	54.14	55.35	54.11	54.49	54.65	55.42	55.70
18	54.61	59.44	57.06	54.82	56.38	54.13	55.23	54.16	54.40	54.59	55.39	55.75
19	54.63	59.31	56.73	54.87	55.99	54.32	55.02	54.23	54.24	54.56	55.42	55.86
20	54.81	59.08	56.41	54.88	55.86	54.72	54.95	54.29	54.00	54.38	55.46	55.84
21	55.16	58.91	56.19	54.84	55.77	54.76	54.89	54.36	53.85	54.20	55.47	55.79
22	55.17	58.72	56.11	54.79	55.61	54.88	54.75	54.42	53.73	54.13	55.48	55.76
23	55.00	58.39	56.16	54.70	55.55	55.16	54.84	54.57	53.66	54.17	55.23	55.74
24	54.84	58.44	56.25	54.60	55.52	56.17	55.21	54.73	53.63	54.18	54.20	55.72
25	54.81	58.72	56.32	54.44	55.45	57.27	55.53	54.79	53.62	54.21	53.71	55.69
26	54.98	58.72	56.19	54.35	55.40	57.21	55.66	54.77	53.61	54.27	53.62	55.64
27	55.53	58.83	56.18	54.27	55.27	57.13	55.59	54.70	53.57	54.45	53.96	55.58
28	56.08	60.23	56.45	54.23	55.22	57.53	55.34	54.94	53.48	54.57	54.08	55.52
29	56.43	60.97	56.71	54.19	---	57.37	55.25	55.07	53.40	54.77	54.30	55.49
30	56.45	61.33	57.31	54.14	---	57.02	55.13	55.05	53.35	54.85	54.66	55.46
31	56.15	---	57.92	54.06	---	56.96	---	55.01	---	54.93	54.71	---
MEAN	54.71	59.30	57.68	55.26	55.64	55.21	55.70	54.85	54.77	54.44	55.08	55.29
MAX	56.45	61.33	61.36	57.94	57.84	57.53	57.35	55.54	57.59	54.93	55.61	55.86
MIN	53.89	56.04	56.11	54.06	53.92	54.13	54.75	54.11	53.35	53.28	53.62	54.06
CAL YR 1984	MEAN 56.12		MAX 61.36	MIN 52.79								
WTR YR 1985	MEAN 55.65		MAX 61.36	MIN 53.28								

WILLAMETTE RIVER BASIN

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14207770 WILLAMETTE RIVER BELOW FALLS, AT OREGON CITY, OR

LOCATION.--Lat 45°21'28", long 122°36'35", in NE¼NW¼ sec.31, T.2 S., R.2 E., Clackamas County, Hydrologic Unit 17090007, on right bank 0.5 mi below Willamette Falls, 1.4 mi upstream from Clackamas River, and at mile 26.2.

DRAINAGE AREA.--10,000 mi², approximately.

PERIOD OF RECORD.--November 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Oregon State Highway Division bench mark).

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 32.18 ft Feb. 21, 1982; minimum, 1.86 ft July 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 22.18 ft Dec. 1; minimum, 1.80 ft Aug. 11.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.44	4.20	5.10	9.44	8.28	8.76	22.18	21.72	21.98	13.39	12.66	13.15
2	6.82	3.84	5.11	14.50	9.34	11.53	21.74	20.39	21.18	12.74	12.12	12.49
3	6.74	4.89	5.74	18.06	14.59	16.83	20.43	18.59	19.58	12.12	11.32	11.87
4	6.98	4.84	5.91	18.55	18.01	18.27	18.55	17.06	17.84	11.27	10.34	10.97
5	7.14	5.09	6.03	18.15	17.36	17.83	16.99	15.36	16.39	11.00	10.03	10.38
6	6.83	4.24	5.43	17.29	16.42	16.87	15.30	14.26	14.88	10.65	9.47	10.01
7	6.81	4.15	5.44	16.49	16.03	16.28	14.28	13.59	14.01	10.95	9.12	9.81
8	7.38	4.37	5.72	16.21	15.71	15.96	13.54	12.19	13.05	10.96	9.52	10.07
9	7.59	4.65	5.94	16.10	15.46	15.77	12.15	11.05	11.62	10.80	9.54	10.02
10	8.16	5.00	6.43	17.91	15.81	16.71	13.48	11.29	12.34	10.26	9.25	9.72
11	8.43	5.32	6.59	19.29	17.97	18.69	14.59	13.22	13.83	9.64	8.79	9.23
12	8.98	5.79	7.03	19.74	18.96	19.31	15.20	14.37	14.78	9.40	8.43	8.85
13	8.71	6.20	7.19	20.26	19.46	19.81	14.95	14.31	14.60	9.01	7.75	8.33
14	8.57	6.09	6.99	20.25	19.55	19.85	14.47	13.97	14.26	9.10	7.62	8.26
15	8.00	6.52	7.06	19.56	18.88	19.13	14.37	13.45	13.98	9.35	7.74	8.39
16	7.87	6.22	6.87	19.06	18.46	18.78	13.80	12.81	13.39	9.19	7.74	8.37
17	7.20	5.84	6.37	18.55	17.36	17.80	13.03	12.30	12.71	9.53	7.76	8.43
18	6.49	4.93	5.56	17.56	16.76	17.07	12.45	11.39	12.04	9.87	7.90	8.73
19	6.86	5.09	6.00	16.87	16.27	16.63	11.81	10.61	11.25	9.94	8.04	8.79
20	7.67	5.87	6.74	16.50	15.87	16.22	11.38	9.90	10.57	10.02	8.46	9.10
21	8.24	6.24	7.13	16.28	15.62	15.92	11.43	9.97	10.55	9.82	8.01	8.77
22	8.92	6.76	7.74	15.80	14.80	15.44	11.31	9.88	10.38	9.93	8.09	8.85
23	8.80	6.79	7.61	15.25	14.05	14.58	11.16	9.83	10.32	9.88	8.73	9.22
24	9.11	6.56	7.48	15.72	14.61	15.02	10.89	9.73	10.16	9.38	8.42	8.91
25	8.95	6.22	7.31	15.94	15.09	15.44	10.49	9.43	9.87	9.19	8.04	8.61
26	10.44	6.66	8.36	15.66	15.08	15.35	10.29	8.95	9.54	8.93	7.45	8.13
27	10.72	8.62	9.38	17.34	14.91	15.63	10.38	9.15	9.78	7.83	6.54	7.12
28	10.83	9.33	9.84	20.66	17.45	19.18	10.74	9.73	10.27	8.00	6.62	7.17
29	10.61	9.57	9.99	21.44	20.65	20.92	11.37	10.31	10.76	7.99	6.69	7.20
30	10.19	9.37	9.72	22.13	21.30	21.84	13.04	11.36	12.21	7.30	6.07	6.62
31	9.75	8.79	9.10	---	---	---	13.70	13.11	13.40	7.34	6.00	6.52
MONTH	10.83	3.84	7.00	22.13	8.28	16.91	22.18	8.95	13.27	13.39	6.00	9.10

WILLAMETTE RIVER BASIN

14207770 WILLAMETTE RIVER BELOW FALLS, AT OREGON CITY, OR--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	8.69	6.03	7.39	8.46	7.63	8.03	11.57	---	---	---	---	---
2	8.26	6.47	7.59	8.63	7.39	7.94	12.62	11.33	---	---	---	---
3	8.16	6.25	7.00	8.26	7.01	7.66	---	---	---	---	---	---
4	9.02	6.43	7.57	8.88	6.88	7.76	---	---	---	---	---	---
5	9.65	7.52	8.43	9.50	7.34	8.24	---	---	---	8.79	---	---
6	9.57	7.76	8.58	9.42	7.37	8.12	11.70	10.44	---	---	---	---
7	9.58	7.38	8.24	9.35	7.18	8.02	---	9.75	---	---	---	---
8	10.25	7.54	8.80	---	6.93	7.90	---	---	---	---	---	---
9	11.71	9.79	10.81	9.51	7.44	8.21	---	---	---	---	---	---
10	12.13	11.06	11.52	8.91	6.52	---	---	---	9.05	---	---	---
11	11.88	10.85	11.31	9.32	---	---	---	---	8.95	---	---	---
12	12.92	11.53	12.22	8.90	---	---	---	---	8.89	7.92	8.58	---
13	13.85	13.01	13.45	7.82	5.44	---	---	---	8.55	7.68	8.12	---
14	13.50	12.60	13.21	7.12	5.09	---	---	---	8.55	7.93	8.23	---
15	12.92	12.32	12.63	7.00	---	---	---	---	8.67	7.49	8.20	---
16	12.70	11.92	12.34	7.21	---	---	---	---	8.49	6.88	7.50	---
17	11.92	10.94	11.59	7.31	5.33	---	---	---	8.56	6.97	7.89	---
18	10.84	10.00	10.49	7.53	5.21	---	---	---	8.77	7.13	7.92	---
19	10.75	9.45	9.99	7.52	5.03	---	11.09	---	9.03	7.61	8.25	---
20	10.58	9.57	10.06	8.44	---	---	10.85	---	9.27	7.98	8.67	---
21	10.26	9.43	9.88	8.48	6.59	---	10.91	---	9.38	8.09	---	---
22	10.04	9.21	9.60	8.59	6.93	---	10.91	---	9.19	8.15	---	---
23	9.93	9.03	9.42	9.59	---	---	10.48	---	9.61	8.54	---	---
24	9.57	8.49	8.96	11.47	---	---	---	---	---	---	---	---
25	8.93	7.97	8.48	12.32	11.39	---	---	---	9.64	---	---	---
26	9.37	8.35	8.79	---	---	---	---	---	---	---	---	---
27	8.78	7.97	8.37	---	---	---	---	---	---	8.05	---	---
28	8.65	7.66	8.10	---	---	---	---	---	8.70	---	---	---
29	---	---	---	---	---	---	---	---	9.16	---	---	---
30	---	---	---	---	---	---	---	---	9.76	8.88	---	---
31	---	---	---	---	---	---	---	---	10.24	8.67	---	---
MONTH	13.85	6.03	9.82	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	10.29	8.67	---	7.82	4.18	5.54	6.50	2.95	4.54	5.91	2.68	4.15
2	10.42	8.83	---	7.81	4.34	5.87	6.92	3.09	4.83	5.87	2.65	4.20
3	10.57	8.77	---	8.53	5.29	6.49	6.71	3.31	4.77	5.89	2.72	4.08
4	11.20	9.28	---	8.25	4.69	6.09	6.49	3.10	4.72	5.61	2.54	3.89
5	10.41	7.93	---	7.51	3.98	5.43	6.07	2.46	4.12	5.73	2.52	3.71
6	9.25	7.38	---	7.05	3.71	5.12	5.77	2.33	3.95	6.10	3.10	4.20
7	12.54	8.58	10.05	6.30	3.36	4.78	5.64	2.42	3.84	5.46	3.01	3.94
8	13.94	12.60	13.42	5.89	2.89	4.37	5.72	2.53	3.83	5.24	2.71	3.71
9	13.88	12.32	13.02	4.57	2.57	3.31	5.11	2.09	3.12	5.50	2.59	3.84
10	12.59	11.35	11.85	5.86	2.74	3.87	5.05	2.01	3.16	5.95	3.22	4.50
11	11.66	10.74	11.13	5.98	2.84	3.95	4.87	1.80	3.05	6.34	3.26	4.64
12	11.19	9.46	10.24	5.93	2.95	3.98	5.14	1.93	3.34	6.51	3.46	---
13	9.82	8.17	8.93	5.91	2.58	3.83	5.51	2.12	3.61	7.31	---	---
14	9.09	7.51	8.09	5.97	2.49	3.89	5.96	2.52	3.99	7.52	4.45	---
15	8.62	6.92	7.62	5.90	2.21	3.83	6.65	2.97	4.62	7.33	4.31	---
16	8.38	6.71	7.37	6.08	2.49	4.05	7.01	3.10	4.79	7.46	4.42	---
17	8.35	6.63	7.27	---	2.68	4.18	6.66	3.01	4.68	7.93	4.69	---
18	8.20	6.06	6.97	6.50	3.12	4.52	6.43	2.58	4.41	8.22	---	---
19	8.76	6.64	7.59	6.96	3.37	4.87	5.92	2.57	4.08	7.79	5.04	---
20	8.48	6.44	7.33	7.14	3.91	5.60	6.16	2.69	4.27	7.20	4.54	---
21	7.88	6.02	6.79	---	3.53	5.00	6.31	2.38	4.11	6.52	4.22	---
22	7.86	5.67	6.66	---	3.03	4.51	5.98	2.41	3.87	6.45	3.96	---
23	6.93	4.83	5.92	6.25	2.82	4.23	5.93	2.48	3.81	6.19	3.80	---
24	6.75	4.52	5.38	---	2.48	3.92	6.05	2.57	3.90	6.38	3.92	---
25	6.72	3.99	5.20	5.87	2.21	3.84	5.62	2.15	3.71	6.65	4.22	5.31
26	6.95	4.10	5.08	6.05	2.47	3.77	5.64	2.01	3.79	7.11	4.45	5.64
27	7.21	4.03	5.17	5.87	2.09	3.46	6.06	2.46	4.13	7.25	4.55	5.72
28	7.24	4.01	5.13	5.98	2.10	3.65	6.13	2.50	4.22	7.02	4.04	5.31
29	7.49	4.09	5.34	6.17	2.42	3.93	6.45	2.69	4.42	6.62	3.69	5.01
30	7.59	4.07	5.41	6.58	2.60	4.50	6.08	2.46	4.21	6.81	3.76	5.06
31	---	---	---	6.21	2.45	4.23	5.98	2.55	4.13	---	---	---
MONTH	13.94	3.99	---	---	2.09	4.47	7.01	1.80	4.07	8.22	---	---

WILLAMETTE RIVER BASIN

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14208600 TIMOTHY LAKE NEAR GOVERNMENT CAMP, OR

LOCATION.--Lat 45°06'50", long 121°48'35", in NE¼ sec.27, T.5 S., R.8 E., Clackamas County, Hydrologic Unit 17090011, Mount Hood National Forest, in intake structure 350 ft upstream from dam on Oak Grove Fork, 0.4 mi upstream from Anvil Creek, 14 mi south of Government Camp, and at mile 15.8.

DRAINAGE AREA.--53.8 mi².

PERIOD OF RECORD.--May 1956 to current year. Prior to October 1957, published as Timotny Meadows Reservoir.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Portland General Electric Co.).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway built by Portland General Electric Co. Usable storage began May 28, 1956. Capacity, 65,710 acre-ft at elevation 3,190 ft, normal maximum operating level. Usable capacity increased in 1966 water year to 64,450 acre-ft between elevations 3,125.0 ft, invert of outlet pipe, and 3,192.0 ft, top of radial gates. Storage of 4,060 acre-ft below elevation 3,125.0 ft not normally available for release. Water is used for power generation. Figures given herein represent total contents.

COOPERATION.--Elevations and capacity table furnished by Portland General Electric Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 68,800 acre-ft Oct. 3, 1967, elevation, 3,192.2 ft; minimum contents observed, 16,010 acre-ft Feb. 24, 1957, elevation, 3,144.5 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 65,380 acre-ft Aug. 3, elevation, 3,189.76 ft; minimum contents observed, 40,810 acre-ft Mar. 31, Apr. 11, elevation, 3,170.08 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30.....	3,183.57	57,180	-
Oct. 31.....	3,181.35	54,360	-2,820
Nov. 30.....	3,186.01	60,350	+5,990
Dec. 31.....	3,183.22	56,730	-3,620
CAL YR 1984.....	-	-	+1,920
Jan. 31.....	3,174.97	46,530	-10,200
Feb. 28.....	3,174.02	45,400	-1,130
Mar. 31.....	3,170.08	40,810	-4,590
Apr. 30.....	3,180.68	53,520	+12,710
May 31.....	3,187.18	61,900	+8,380
June 30.....	3,188.21	63,270	+1,370
July 31.....	3,189.56	65,110	+1,840
Aug. 31.....	3,188.31	63,410	-1,700
Sept.30.....	3,187.03	61,700	-1,710
WTR YR 1985.....	-	-	+4,520

WILLAMETTE RIVER BASIN

14208700 OAK GROVE FORK NEAR GOVERNMENT CAMP, OR

LOCATION.--Lat 45°06'50", long 121°48'50", in NE¼ sec.27, T.5 S., R.8 E., Clackamas County, Hydrologic Unit 17090011, Mount Hood National Forest, on right bank 0.1 mi upstream from Anvil Creek, 0.3 mi downstream from Timothy Lake, 14 mi south of Government Camp, and at mile 15.5.

DRAINAGE AREA.--54.4 mi².

PERIOD OF RECORD.--July 1956 to current year.

GAGE.--Water-stage recorder and artificial control. Datum of gage is 3,041.83 ft above National Geodetic Vertical Datum of 1929 (Portland General Electric Co. bench mark).

REMARKS.--No estimated daily discharges. Records excellent. Flow regulated since 1956 by Timothy Lake (see station 14208600). No diversion upstream from station.

AVERAGE DISCHARGE.--29 years, 132 ft³/s, 32.95 in/yr, 95,630 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,110 ft³/s Dec. 24, 1964, gage height, 3.93 ft, from rating curve extended above 290 ft³/s on basis of slope-area measurement of peak flow; minimum, 3.7 ft³/s Sept. 23, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 285 ft³/s Jan. 13, 19, 22, gage height, 2.35 ft; minimum, 28 ft³/s May 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262	120	122	233	99	198	84	40	217	58	36	134
2	262	52	138	245	123	213	45	39	217	58	60	134
3	263	44	152	238	117	209	46	39	215	64	102	130
4	273	42	170	254	107	217	46	40	127	68	102	131
5	270	42	178	251	104	219	46	39	140	66	99	105
6	271	42	194	255	107	219	47	39	75	67	101	80
7	271	55	194	257	129	230	47	39	36	66	105	79
8	178	97	195	260	206	235	47	39	36	66	107	78
9	39	119	165	259	110	233	47	38	79	67	107	100
10	39	50	124	241	106	232	47	51	106	68	107	62
11	102	45	176	258	102	232	45	71	123	57	107	88
12	159	45	163	272	137	225	45	93	134	49	106	112
13	121	45	183	279	100	235	44	98	143	47	107	112
14	107	43	191	274	88	231	44	85	127	45	107	112
15	133	43	169	273	88	219	44	104	103	39	107	112
16	132	77	201	281	94	216	43	66	90	35	107	110
17	139	106	204	279	98	199	42	40	89	35	107	107
18	131	66	218	270	98	197	42	36	89	35	107	106
19	141	111	216	277	98	191	41	36	70	35	106	108
20	124	103	222	274	161	184	40	36	57	35	107	110
21	138	126	227	276	250	168	40	55	62	35	107	110
22	148	140	213	258	201	183	40	54	62	35	107	110
23	140	115	170	239	204	137	41	40	59	35	107	110
24	117	138	180	262	193	145	41	35	58	35	107	110
25	85	151	193	261	195	168	40	42	59	35	107	110
26	46	171	209	258	195	165	40	58	59	35	106	111
27	40	130	205	263	206	177	40	73	60	35	107	111
28	40	50	217	260	207	187	40	89	59	35	133	112
29	40	69	215	260	---	201	40	68	59	35	134	112
30	71	80	219	229	---	173	40	121	58	36	134	112
31	107	---	226	100	---	152	---	219	---	36	134	---
TOTAL	4389	2517	5849	7896	3923	6190	1334	1922	2868	1447	3277	3218
MEAN	142	83.9	189	255	140	200	44.5	62.0	95.6	46.7	106	107
MAX	273	171	227	281	250	235	84	219	217	68	134	134
MIN	39	42	122	100	88	137	40	35	36	35	36	62
AC-FT	8710	4990	11600	15660	7780	12280	2650	3810	5690	2870	6500	6380
MEAN†	95.8	185	130	88.8	120	125	258	198	119	76.6	78.1	78.5
CFSM†	1.76	3.40	2.39	1.63	2.21	2.30	4.74	3.64	2.19	1.41	1.44	1.44
IN.†	2.03	3.79	2.75	1.88	2.29	2.65	5.30	4.20	2.43	1.62	1.65	1.61
AC-FT†	5890	10980	7980	5460	6650	7690	15360	12190	7060	4710	4800	4670

CAL YR 1984 TOTAL 52543 MEAN 144 MAX 409 MIN 39 AC-FT 104200 MEAN† 147 CFSM† 2.70 IN.† 36.59 AC-FT† 106120
WTR YR 1985 TOTAL 44830 MEAN 123 MAX 281 MIN 35 AC-FT 88920 MEAN† 129 CFSM† 2.37 IN.† 32.21 AC-FT† 93440

† Adjusted for change in contents in Timothy Lake.

WILLAMETTE RIVER BASIN

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14209000 OAK GROVE FORK ABOVE POWERPLANT INTAKE, OR

LOCATION.--Lat 45°04'20", long 121°57'00", on line between secs.3 and 4, T.6 S., R.7 E., Clackamas County, Hydrologic Unit 17090011, Mount Hood National Forest, on right bank 0.2 mi upstream from Spring Creek, 0.7 mi upstream from Kink Creek, 1.0 mi upstream from Portland General Electric Co. diversion dam, 24 mi southeast of Estacada, and at mile 6.1.

DRAINAGE AREA.--126 mi².

PERIOD OF RECORD.--May 1909 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as both Oak Grove Fork of Clackamas River at proposed intake, near Cazadero, and Oak Grove Fork of Clackamas River at intake, near Cazadero, May 1909 to September 1910, as Oak Grove Fork of Clackamas River at intake, near Cazadero, October 1910 to September 1921, and as Oak Grove Fork at Portland General Electric Power Co. intake, October 1921 to September 1929.

REVISED RECORDS.--WSP 1248: 1909, 1910(M), 1916, 1918, 1923, 1932. WSP 1935: 1914, 1921.

GAGE.--Water-stage recorder. Datum of gage is 2,052.31 ft above National Geodetic Vertical Datum of 1929. May 21, 1909, to Nov. 17, 1911, nonrecording gage and Mar. 26, 1912, to Sept. 30, 1923, water-stage recorder, at various sites 0.7 mi downstream, below Kink Creek, at different datum.

REMARKS.--No estimated daily discharges. Records excellent. Flow regulated since 1956 by Timothy Lake (see station 14208600). No diversion upstream from station.

AVERAGE DISCHARGE.--76 years, 501 ft³/s, 363,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s Jan. 7, 1923, gage height, 5.45 ft, site and datum then in use, from rating curve extended above 2,300 ft³/s on basis of peak discharge for other stations in Clackamas River basin; minimum discharge, 208 ft³/s Aug. 28-31, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,130 ft³/s Nov. 3, gage height, 3.29 ft; minimum discharge, 252 ft³/s Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	516	406	527	561	344	536	529	553	691	354	294	381
2	515	877	528	566	370	539	528	593	669	350	304	383
3	516	1030	527	557	362	536	577	638	656	352	361	372
4	526	766	535	568	347	541	588	598	549	356	359	380
5	525	615	535	567	349	539	585	565	551	352	355	380
6	528	557	544	568	353	534	605	556	580	350	354	342
7	526	540	539	568	374	538	637	544	636	347	366	323
8	452	553	536	572	467	540	661	521	562	345	376	319
9	257	534	539	568	370	538	693	509	552	343	367	339
10	259	551	537	547	351	538	742	515	558	342	364	353
11	309	654	556	556	373	541	756	526	563	332	364	325
12	414	664	546	574	436	534	736	535	563	319	363	366
13	404	645	549	578	369	544	734	541	562	317	362	372
14	399	595	565	573	351	540	753	537	540	313	362	368
15	389	558	539	572	358	532	768	552	491	306	363	368
16	378	569	558	574	358	544	759	551	464	298	361	365
17	384	597	553	574	360	534	705	548	455	296	360	387
18	370	572	558	567	358	538	669	562	450	291	359	370
19	394	601	556	572	363	538	626	558	426	289	353	358
20	376	596	568	570	415	545	580	548	396	288	352	357
21	383	610	565	573	546	531	556	554	394	288	352	358
22	390	611	576	555	548	543	538	554	392	288	350	355
23	388	595	572	518	538	533	584	559	379	288	350	352
24	364	545	555	549	542	529	540	554	375	288	350	352
25	354	517	560	543	538	541	515	556	372	288	349	352
26	384	526	567	539	536	535	496	548	370	288	347	352
27	340	518	565	541	537	535	516	557	369	287	348	352
28	342	512	565	537	541	539	540	559	367	287	374	352
29	322	501	564	536	---	539	526	559	363	286	379	352
30	336	523	567	516	---	543	530	581	358	290	378	352
31	382	---	561	356	---	543	---	709	---	300	377	---
TOTAL	12422	17938	17112	17115	11754	16680	18572	17340	14653	9718	11053	10737
MEAN	401	598	552	552	420	538	619	559	488	313	357	358
MAX	528	1030	576	578	548	545	768	709	691	356	379	387
MIN	257	406	527	356	344	529	496	509	358	286	294	319
AC-FT	24640	35580	33940	33950	23310	33080	36840	34390	29060	19280	21920	21300
CAL YR 1984	TOTAL	199411	MEAN	545	MAX	1120	MIN	257	AC-FT	395500		
WTR YR 1985	TOTAL	175094	MEAN	480	MAX	1030	MIN	257	AC-FT	347300		

WILLAMETTE RIVER BASIN

14209500 CLACKAMAS RIVER ABOVE THREE LYNX CREEK, OR

LOCATION.--Lat 45°07'30", long 122°04'20", in NE¼ sec.21, T.5 S., R.6 E., Clackamas County, Hydrologic Unit 17090011, Mount Hood National Forest, on right bank 0.1 mi upstream from Three Lynx Creek, 0.25 mi downstream from powerplant, 17 mi southeast of Estacada, and at mile 47.8.

DRAINAGE AREA.--479 mi².

PERIOD OF RECORD.--April 1909 to December 1913, October 1921 to current year. Prior to October 1911 (monthly discharge only), published in WSP 1318.

REVISED RECORDS.--WSP 1148: Drainage area. WSP 1248: 1910(M), 1912, 1948-50(M).

GAGE.--Water-stage recorder. Datum of gage is 1,091.69 ft above National Geodetic Vertical Datum of 1929 (levels by Portland General Electric Co.). Apr. 23, 1909, to Jan. 4, 1914, nonrecording gage at about same site and datum. Nov. 1, 1921, to Dec. 27, 1924, water-stage recorder at present site at datum 0.91 ft higher.

REMARKS.--No estimated daily discharges. Records excellent. Minor regulation since May 1956 by Timothy Lake (see station 14208600).

AVERAGE DISCHARGE.--68 years, 1,997 ft³/s, 56.62 in/yr, 1,447,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,200 ft³/s Dec. 22, 1964, gage height, 21.7 ft, from floodmark, from rating curve extended above 34,100 ft³/s on basis of slope-area measurement at gage height 15.06 ft; minimum recorded, 292 ft³/s Sept. 25, 1980; minimum daily, 427 ft³/s Oct. 5, 1958.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0530	*13,300	*8.85	No other peak greater than base discharge.			
Minimum, 605 ft ³ /s Oct. 9.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	886	1320	3460	1800	1040	1910	3050	2860	2230	1010	780	734		
2	883	9100	2880	1700	1070	1860	3590	3300	2080	994	750	780		
3	885	11800	2500	1600	1020	1790	3800	3770	2020	970	788	744		
4	883	6900	2240	1570	898	1780	3640	3320	2000	972	769	735		
5	892	4590	2050	1530	1080	1710	3320	2870	2000	948	768	743		
6	891	3660	1900	1490	1030	1650	3350	2680	3110	932	754	793		
7	884	3550	1830	1470	1100	1600	3690	2570	5560	920	773	748		
8	837	3010	1790	1410	1210	1520	3930	2380	4530	904	841	699		
9	626	2700	2040	1410	1050	1520	4080	2280	3280	887	804	716		
10	647	4420	3820	1350	995	1510	4560	2230	2750	872	778	920		
11	715	6290	3050	1320	1320	1520	4610	2220	2450	860	768	805		
12	822	6280	2910	1300	2590	1550	4310	2080	2320	830	757	824		
13	1420	5530	2630	1300	1930	1540	4100	2050	2200	822	749	936		
14	1490	4620	2460	1310	1700	1560	4340	2150	2060	813	742	894		
15	1280	3590	2700	1310	1840	1580	4400	2120	1890	794	737	903		
16	1040	2960	2400	1310	1790	1650	4280	2430	1780	779	739	868		
17	990	2610	2210	1380	1670	1790	3670	2840	1660	778	730	962		
18	977	2750	2030	1510	1570	1930	3250	2940	1630	772	731	987		
19	1060	2740	1880	1580	1550	1920	2960	2920	1530	758	732	888		
20	1240	2650	1840	1610	1560	1980	2620	2830	1460	715	731	834		
21	1250	2490	1800	1590	1680	2110	2450	2710	1390	736	726	809		
22	1150	2280	1830	1560	1820	2040	2360	2730	1330	750	722	789		
23	1070	2310	2000	1480	1930	2510	2930	2870	1260	756	721	768		
24	1060	2430	2000	1440	2060	3000	2750	2930	1220	731	713	751		
25	1110	2230	1900	1400	2180	2540	2490	2700	1180	718	712	740		
26	2450	2080	1830	1370	2070	2330	2300	2520	1140	719	706	733		
27	2170	2890	1820	1340	1960	2190	2340	2380	1120	705	709	695		
28	2040	5070	1750	1330	1870	2030	2720	2240	1090	705	730	702		
29	1750	4580	1730	1280	---	1930	2720	2230	1060	702	737	710		
30	1450	4260	1990	1240	---	2020	2700	2190	1040	721	733	709		
31	1420	---	1940	1050	---	2500	---	2280	---	761	731	---		
TOTAL	36268	121690	69210	44340	43583	59070	101310	80620	60370	25334	23161	23919		
MEAN	1170	4056	2233	1430	1557	1905	3377	2601	2012	817	747	797		
MAX	2450	11800	3820	1800	2590	3000	4610	3770	5560	1010	841	987		
MIN	626	1320	1730	1050	898	1510	2300	2050	1040	702	706	695		
CFSM	2.44	8.47	4.66	2.99	3.25	3.98	7.05	5.43	4.20	1.71	1.56	1.66		
IN.	2.82	9.45	5.37	3.44	3.38	4.59	7.87	6.26	4.69	1.97	1.80	1.86		
AC-FT	71940	241400	137300	87950	86450	117200	200900	159900	119700	50250	45940	47440		
CAL YR 1984	TOTAL	832761	MEAN	2275	MAX	11800	MIN	626	CFSM	4.75	IN.	64.67	AC-FT	1652000
WTR YR 1985	TOTAL	688875	MEAN	1887	MAX	11800	MIN	626	CFSM	3.94	IN.	53.50	AC-FT	1366000

14210000 CLACKAMAS RIVER AT ESTACADA, OR

LOCATION.--Lat 45°18'00", long 122°21'10", in NE¼ sec.19, T.3 S., R.4 E., Clackamas County, Hydrologic Unit 17090011, on left bank 0.2 mi downstream from River Mill Dam, 1.5 mi northwest of Estacada, and at mile 23.1.

DRAINAGE AREA.--671 mi².

PERIOD OF RECORD.--April 1908 to current year. Monthly discharge only April 1908, published in WSP 1318. Published as "near Cazadero" January 1909 to September 1957.

REVISED RECORDS.--WSP 1248: 1908-9, 1910(M), 1916, 1917(M), 1922(M), 1923. WSP 1288: Drainage area (former site). WSP 1638: 1919(M).

GAGE.--Water-stage recorder. Datum of gage is 296.93 ft above National Geodetic Vertical Datum of 1929 (levels by Portland General Electric Co.). See WSP 1738 for history of changes prior to Oct. 1, 1957. Oct. 1, 1957, to Feb. 16, 1965, water-stage recorder at same site at datum 2.00 ft higher.

REMARKS.--No estimated daily discharges. Records excellent. Large diurnal fluctuations and some regulation caused by powerplants at River Mill Dam and, since 1958, North Fork Dam. Minor regulation since 1956 by Timothy Lake (see station 14208600). Two small diversions upstream from station for Oregon City and Estacada municipal water supply.

AVERAGE DISCHARGE.--77 years, 2,760 ft³/s, 55.86 in/yr, 2,000,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 86,900 ft³/s Dec. 22, 1964, gage height, 18.36 ft; minimum, 50 ft³/s Mar. 10, 1961, from rating curve extended below 260 ft³/s; minimum daily, 285 ft³/s Oct. 4, 5, 1958, caused by filling of North Fork dam forebay.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 15,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	1100	*21,100	*8.81	No other peak greater than base discharge.			
Minimum, 625 ft ³ /s Sept. 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1100	2310	5790	2890	1500	2770	4670	3850	3080	1220	949	763		
2	1050	12800	4530	2620	1520	2690	5390	4270	2870	1200	886	858		
3	1070	18700	3680	2390	1440	2550	5610	5080	2730	1180	877	791		
4	1100	10700	3310	2320	1220	2670	5240	4700	2760	1170	868	795		
5	1100	7130	2950	2260	1460	2470	4620	3900	2730	1160	866	809		
6	1090	5380	2690	2190	1450	2340	4520	3530	3850	1110	838	1040		
7	1060	5210	2630	2150	1620	2280	4980	3310	9090	1100	879	967		
8	1080	4300	2520	2000	1660	2160	5300	3260	7870	1080	978	780		
9	886	3900	2880	2030	1610	2120	5430	3020	5370	1070	927	751		
10	846	5750	5970	1910	1410	2100	6060	2910	4150	1030	887	1190		
11	886	8610	4890	1890	2030	2140	6170	3020	3440	1040	858	975		
12	1070	8540	4600	1820	4230	2160	5770	2780	3290	1000	856	922		
13	1860	7940	4300	1820	2990	2160	5340	2710	3070	950	895	1100		
14	2330	7110	3850	1840	2640	2130	5590	2930	2880	977	870	1080		
15	2030	5630	4220	1900	3180	2180	5640	2860	2630	964	818	1020		
16	1590	4330	3660	1870	3040	2300	5580	3140	2500	920	801	1030		
17	1660	3700	3300	2130	2660	2470	4750	3690	2350	933	790	1220		
18	1160	3760	2980	2380	2430	2630	4210	3920	2190	935	795	1400		
19	1320	3750	2700	2360	2390	2630	3880	3700	2100	883	802	1120		
20	1840	3760	2600	2430	2480	2730	3430	3750	2000	826	774	1000		
21	1890	3600	2570	2370	2510	2960	3270	3300	1870	885	817	951		
22	1750	3330	2700	2280	3110	2860	3250	3410	1800	880	769	897		
23	1520	3420	3320	2220	3370	3660	4100	3580	1680	856	785	895		
24	1460	3870	3540	2050	3380	4520	3930	3720	1630	846	753	822		
25	1770	3430	3190	2010	3530	3730	3670	3600	1540	867	759	837		
26	4350	3160	2880	1990	3250	3410	3380	3270	1470	831	748	819		
27	3770	4270	2930	1880	2960	3240	3410	3120	1420	802	754	810		
28	3590	7800	2830	1860	2780	2950	3980	2970	1360	819	761	732		
29	3060	7180	2720	1820	---	2730	3860	2990	1330	796	795	831		
30	2260	6960	3110	1720	---	2950	3870	3070	1310	811	758	785		
31	2300	---	3230	1530	---	3790	---	3120	---	901	778	---		
TOTAL	53848	180330	107070	64930	67850	84480	138900	106480	86360	30042	25691	27990		
MEAN	1737	6011	3454	2095	2423	2725	4630	3435	2879	969	829	933		
MAX	4350	18700	5970	2890	4230	4520	6170	5080	9090	1220	978	1400		
MIN	846	2310	2520	1530	1220	2100	3250	2710	1310	796	748	732		
CFSM	2.59	8.96	5.15	3.12	3.61	4.06	6.90	5.12	4.29	1.44	1.24	1.39		
IN.	2.99	10.00	5.94	3.60	3.76	4.68	7.70	5.90	4.79	1.67	1.42	1.55		
AC-FT	106800	357700	212400	128800	134600	167600	275500	211200	171300	59590	50960	55520		
CAL YR 1984	TOTAL	1219688	MEAN	3332	MAX	18700	MIN	846	CFSM	4.97	IN.	67.62	AC-FT	2419000
WTR YR 1985	TOTAL	973971	MEAN	2668	MAX	18700	MIN	732	CFSM	3.98	IN.	54.00	AC-FT	1932000

WILLAMETTE RIVER BASIN

14211500 JOHNSON CREEK AT SYCAMORE, OR

LOCATION.--Lat 45°28'40", long 122°30'24", in lot 2, SW¼ sec.13, T.1 S., R.2 E., Multnomah County, Hydrologic Unit 17090012, on right bank 0.3 mi southwest of Sycamore station, 2.5 mi east of city limits of Portland, and at mile 10.2.

DRAINAGE AREA.--26.5 mi².

PERIOD OF RECORD.--July 1940 to current year.

REVISED RECORDS.--WSP 1318: 1941(M). WDR OR-75-1: 1974. WDR OR-77-1: Drainage area.

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 228.47 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Feb. 2-5. Records good. Slight diurnal fluctuation at low flow caused by recreational ponds upstream. Small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--45 years, 54.9 ft³/s, 28.13 in/yr, 39,780 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,620 ft³/s Dec. 22, 1964, gage height, 14.68 ft; minimum, 0.08 ft³/s Aug. 21, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1300	*711	*9.23	Nov. 28	0500	707	9.21
Nov. 23	1900	540	7.99				

Minimum, 0.41 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1.4	53	154	75	12	27	109	12	15	9.7	1.7	.71		
2	1.5	516	108	62	10	24	78	11	14	3.2	1.5	11		
3	1.6	309	77	50	9.0	23	63	17	9.1	2.4	1.4	.87		
4	3.4	148	61	41	7.0	64	51	17	8.7	2.3	1.3	.72		
5	3.8	85	50	36	8.5	51	43	12	12	2.1	1.2	.84		
6	2.2	68	42	32	12	43	36	10	49	2.0	2.2	2.3		
7	2.0	73	36	29	36	35	31	9.4	240	9.3	1.9	1.4		
8	2.2	76	35	26	85	29	27	8.7	128	5.8	11	1.1		
9	3.9	99	61	24	108	26	24	8.0	70	1.8	3.7	1.1		
10	21	277	278	21	160	25	22	7.9	40	1.7	2.2	23		
11	8.8	180	140	19	276	22	21	8.2	28	1.5	1.8	6.5		
12	14	206	161	17	263	21	17	13	22	1.5	1.5	2.9		
13	15	207	133	16	132	19	16	6.8	17	1.6	1.9	11		
14	15	153	123	16	94	18	21	7.9	14	1.9	.98	4.1		
15	11	95	152	15	88	16	12	7.1	12	1.8	1.1	7.8		
16	6.8	65	97	15	64	14	11	6.7	15	1.5	.68	3.2		
17	5.6	58	74	14	53	22	10	6.1	8.8	1.5	2.5	19		
18	7.1	79	60	13	45	13	12	6.1	8.0	1.4	1.2	22		
19	11	70	47	12	44	11	17	6.0	7.2	1.6	.88	5.0		
20	26	153	39	13	54	15	17	6.0	6.0	1.6	.99	2.5		
21	16	100	45	12	50	27	19	5.9	5.6	1.4	.78	1.7		
22	9.3	72	85	11	53	28	20	5.3	5.0	1.2	2.4	1.3		
23	7.5	242	90	11	50	148	27	5.1	8.0	.94	.98	.97		
24	11	244	77	10	46	196	20	5.6	5.4	1.5	1.1	1.3		
25	11	162	69	9.7	43	152	19	5.3	4.0	1.1	1.6	1.4		
26	35	104	67	9.3	38	200	20	4.7	3.7	1.2	.75	1.3		
27	42	407	105	9.6	33	235	19	4.6	3.2	1.1	.73	1.3		
28	59	536	102	8.3	30	124	22	4.6	3.0	7.4	.63	1.0		
29	32	264	134	7.8	---	88	15	30	3.0	4.0	.63	.87		
30	26	245	154	7.5	---	144	13	20	8.3	2.4	.76	.51		
31	28	---	102	7.7	---	133	---	11	---	2.3	.89	---		
TOTAL	440.1	5346	2958	649.9	1903.5	1993	832	289.0	773.0	80.74	52.88	138.69		
MEAN	14.2	178	95.4	21.0	68.0	64.3	27.7	9.32	25.8	2.60	1.71	4.62		
MAX	59	536	278	75	276	235	109	30	240	9.7	11	23		
MIN	1.4	53	35	7.5	7.0	11	10	4.6	3.0	.94	.63	.51		
CFSM	.54	6.72	3.60	.79	2.57	2.43	1.05	.35	.97	.10	.06	.17		
IN.	.62	7.50	4.15	.91	2.67	2.80	1.17	.41	1.09	.11	.07	.19		
AC-FT	873	10600	5870	1290	3780	3950	1650	573	1530	160	105	275		
CAL YR 1984	TOTAL	24034.36	MEAN	65.7	MAX	536	MIN	.96	CFSM	2.48	IN.	33.74	AC-FT	47670
WTR YR 1985	TOTAL	15456.81	MEAN	42.3	MAX	536	MIN	.51	CFSM	1.60	IN.	21.70	AC-FT	30660

WILLAMETTE RIVER BASIN

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14211720 WILLAMETTE RIVER AT PORTLAND, OR
(National stream quality accounting network station)

LOCATION.--Lat 45°31'07", long 122°40'00", in NW¼NE¼ sec.3, T.1 S., R.1 E., Multnomah County, Hydrologic Unit 17090012, in pier at east end of drawspan, on upstream side of Morrison Bridge, in Portland, and at mile 12.8.

DRAINAGE AREA.--11,100 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year. Gage-height records collected in this vicinity since 1879 are in reports of the National Weather Service.

GAGE.--Acoustic velocity meter (AVM) with water-stage and velocity-index recorder. Datum of gage is 1.55 ft above National Geodetic Vertical Datum of 1929 (levels by National Weather Service).

REMARKS.--Daily discharges estimated by flow routing for entire year. Water-discharge records fair above 50,000 ft³/s, poor below. Flow regulated by many reservoirs upstream (see elsewhere in this report). Many diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--13 years, 33,950 ft³/s, 24,600,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 283,000 ft³/s Jan. 18, 1974; maximum gage height, 23.84 ft Jan. 18, 1974; minimum daily discharge, 4,200 ft³/s July 10, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of June 7, 1894, and June 1, 1948, reached stages of 33.0 ft and 30.0 ft, respectively, from information by National Weather Service.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 148,000 ft³/s Nov. 29; maximum gage height, 9.8 ft Dec. 1; minimum daily discharge, 7,540 ft³/s July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13800	33200	138000	62000	14400	23100	52500	23900	19200	9940	9250	8980
2	13700	65600	119000	53600	14900	22200	53800	24400	18900	9500	9450	9280
3	13800	113000	100000	47200	15000	21200	52800	25800	18500	9150	9210	9260
4	13900	111000	89700	41500	14500	21500	49800	26200	18200	8930	8850	9220
5	14100	96800	79000	38100	14300	22300	43600	25200	17400	8750	8600	9260
6	14200	86000	70200	35500	14100	21600	37700	23300	20300	8540	8300	10200
7	14000	84100	63900	33200	15800	20400	35800	22300	45700	8460	8200	10900
8	14100	80700	53500	31400	28300	19500	35200	21800	63500	8470	8470	11000
9	14000	79700	46100	30400	40700	18700	34400	20500	51000	8360	8780	11100
10	14700	95300	56600	28100	41600	18100	34900	19100	42300	8190	8790	12400
11	16000	111000	66700	25700	40200	18000	34100	18200	36800	8410	8570	12900
12	17200	114000	68900	24000	58300	18300	32800	17100	30400	8220	8480	13800
13	19800	117000	68500	22800	62400	17500	31100	16400	26700	8140	8370	14500
14	22800	112000	66200	22600	53000	16900	31100	16300	23200	8140	8110	14600
15	22700	106000	64000	22700	48500	16600	31000	16000	21200	8120	7870	14900
16	21300	98800	59300	22100	47400	16500	30700	16700	19500	7940	7850	15100
17	20500	89700	52700	21900	41700	16600	29300	17800	18400	7870	7840	15100
18	19100	87000	47200	22300	36000	16700	26600	18600	17300	7820	7960	16200
19	20400	84500	42100	22600	31700	16600	25100	18900	15600	7680	8260	16200
20	23800	79800	38200	22300	31700	16600	24200	19400	14300	7600	8320	15400
21	25600	78200	35800	22000	30600	17500	22800	19100	13400	7720	8430	15100
22	24100	72400	36200	21200	29900	18900	22400	19900	12700	7860	8320	14800
23	22000	66900	37700	20500	30100	25400	26600	21700	12400	7750	8320	14800
24	21200	73800	39500	19100	29500	45500	30100	22500	12200	7700	8160	14500
25	21900	76300	37900	18000	29400	50100	31400	22700	11800	7690	8210	14100
26	27900	74100	36000	17500	28100	43600	31500	21700	11500	7650	8270	13700
27	34200	81100	36900	16900	26000	49200	28600	21000	11100	7540	8210	13200
28	39300	129000	42200	16700	24300	52800	27600	20200	10700	7660	8270	13000
29	42100	148000	44200	16300	---	46400	27000	19800	10300	7810	8720	12800
30	38100	147000	60200	15700	---	42800	24900	19400	10200	7890	8810	12700
31	34800	---	68200	14700	---	48200	---	19300	---	8560	8900	---
TOTAL	675100	2792000	1864600	828600	892400	819300	999400	635200	654700	254060	262150	389000
MEAN	21780	93070	60150	26730	31870	26430	33310	20490	21820	8195	8456	12970
MAX	42100	148000	138000	62000	62400	52800	53800	26200	63500	9940	9450	16200
MIN	13700	33200	35800	14700	14100	16500	22400	16000	10200	7540	7840	8980
AC-FT	1339000	5538000	3698000	1644000	1770000	1625000	1982000	1260000	1299000	503900	520000	771600
CAL YR 1984	TOTAL	15249700	MEAN	41670	MAX	148000	MIN	8000	AC-FT	30248000		
WTR YR 1985	TOTAL	11066510	MEAN	30320	MAX	148000	MIN	7540	AC-FT	21950000		

WILLAMETTE RIVER BASIN

14211720 WILLAMETTE RIVER AT PORTLAND, OR--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1975 to September 1981.

WATER TEMPERATURES: November 1975 to September 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT 17...	1130	20500	66	7.60	12.0	10.0	K190	35	23	0	6.0
DEC 19...	1115	42100	67	7.30	4.5	13.7	K150	--	30	7	9.0
FEB 21...	1200	30600	68	7.20	5.5	13.8	610	45	24	1	6.2
APR 16...	1230	30700	59	7.20	12.0	11.3	70	K9	21	0	5.6
JUN 13...	1115	26700	53	7.20	15.5	10.5	290	14	19	0	4.7
JUL 24...	1100	7700	91	7.20	22.5	7.2	33	5	29	0	7.6

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 17...	1.9	4.6	1.0	25	16	3.6	<.10	.050	.20	.30	.050
DEC 19...	1.9	7.1	.70	23	14	5.6	<.10	.060	.56	.20	.030
FEB 21...	2.1	4.6	.70	23	5.5	3.7	<.10	.090	.61	.60	.030
APR 16...	1.7	4.0	.60	21	3.0	2.9	<.10	.070	.26	.30	.030
JUN 13...	1.7	3.3	.60	20	3.3	2.7	<.10	.080	.20	.30	.030
JUL 24...	2.4	7.4	1.1	30	6.1	6.5	<.10	.140	.19	.60	.050

DATE	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	TUR- BID- ITY (NTU)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 17...	.040	.070	16	52	64	2880	4.1	11	609	95
DEC 19...	.040	.070	15	67	67	7620	30	12	1360	99
FEB 21...	.030	.050	17	59	54	4870	.70	11	909	84
APR 16...	.040	.050	15	38	46	3150	2.6	11	912	93
JUN 13...	.030	.050	15	43	43	3100	6.4	12	865	96
JUL 24...	.070	.110	17	73	67	1520	4.7	26	541	77

WILLAMETTE RIVER BASIN

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14211720 WILLAMETTE RIVER AT PORTLAND, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 17...	20	<1	13	1.0	<1	<1	<3	<1	65	1
DEC 19...	60	<1	6	<.5	<1	<1	<3	3	61	1
APR 16...	40	<1	13	2.4	<1	1	<3	3	62	5
JUL 24...	20	<1	18	<.5	8	<1	<3	--	36	1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 17...	<4	11	<.1	<10	<1	<1	<1	37	<6	17
DEC 19...	<4	18	<.1	<10	1	<1	1	39	<6	10
APR 16...	<4	24	<.1	<10	2	<1	<1	32	<6	13
JUL 24...	<4	4	<.1	<10	1	<1	<1	44	<6	17

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
DEC 19...		<0.9	<0.5	1.1	0.9	<0.6	<0.5	<0.01
APR 16...		<0.7	<0.4	0.5	<0.4	<0.4	<0.4	0.02

K - Results based on colony count outside acceptable range (non-ideal colony count).

COWLITZ RIVER BASIN

14245150 COWLITZ RIVER AT LONGVIEW, WA

LOCATION.--Lat 46°06'13", long 122°53'30", in NE¼ sec.11, T.7 N., R.2 W., Cowlitz County, Hydrologic Unit 17080005, near left bank on downstream side of railroad bridge, 0.3 mi downstream from Cowman River, 3.2 mi southeast of Longview City Hall, and at mile 1.0.

DRAINAGE AREA.--2,480 mi², at mouth, 1.0 mi downstream.

PERIOD OF RECORD.--May 1984 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is Columbia River Datum, 0.34 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 11.02 ft June 29, 1984; minimum, 2.12 ft Aug. 26, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 9.90 ft Nov. 10; minimum, 2.12 ft Aug. 26.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.60	4.66	4.92	6.53	5.38	5.75	9.13	7.91	8.40	6.72	5.50	5.99
2	5.65	4.68	4.87	8.46	5.95	7.15	8.87	7.75	8.17	6.86	5.38	5.90
3	5.87	4.68	5.03	8.95	7.20	7.91	8.80	7.59	8.04	7.44	5.70	6.29
4	5.86	4.77	5.14	8.40	6.78	7.53	8.70	7.31	7.89	7.40	5.29	6.18
5	6.02	4.82	5.19	7.73	6.20	6.87	8.51	6.93	7.62	7.75	5.26	6.16
6	5.99	4.80	5.13	8.53	6.25	7.04	8.27	6.61	7.27	7.91	5.14	6.19
7	5.98	4.80	5.18	8.40	6.48	7.19	8.59	6.67	7.34	8.34	5.09	6.39
8	6.38	4.81	5.34	8.64	6.54	7.27	8.72	6.69	7.40	8.50	5.33	6.61
9	6.61	4.91	5.50	8.45	6.60	7.27	8.53	6.63	7.23	8.31	5.40	6.54
10	7.20	4.95	5.77	9.90	6.66	7.95	9.03	6.61	7.50	7.89	5.35	6.38
11	7.28	5.36	6.01	9.54	7.49	8.35	8.76	6.75	7.50	7.16	5.36	6.13
12	7.76	5.35	6.12	9.57	7.50	8.32	8.84	6.84	7.78	7.08	5.37	6.00
13	7.54	5.37	6.14	9.39	7.64	8.38	8.20	7.08	7.54	7.02	5.20	5.79
14	6.92	5.53	5.90	8.45	7.57	7.93	8.34	6.93	7.60	7.21	5.12	5.87
15	6.36	5.36	5.65	8.24	7.17	7.60	8.38	7.14	7.57	7.50	5.46	6.07
16	6.30	5.31	5.55	8.36	7.16	7.77	8.27	6.74	7.24	7.35	5.37	6.00
17	5.84	5.32	5.46	8.31	7.21	7.66	8.08	6.55	7.01	7.76	5.44	6.18
18	5.56	5.22	5.31	9.06	7.29	7.94	8.34	6.49	7.10	8.08	5.46	6.38
19	5.87	5.13	5.29	8.87	7.28	7.85	8.41	6.38	7.01	8.14	5.30	6.41
20	6.06	5.17	5.43	9.36	7.19	7.89	8.49	6.25	6.97	8.34	5.31	6.49
21	6.18	5.10	5.43	9.19	7.17	7.84	8.95	6.29	7.21	7.89	5.34	6.30
22	6.71	5.06	5.59	9.30	7.10	7.81	8.99	6.39	7.30	7.99	5.57	6.39
23	7.00	5.02	5.67	9.45	7.06	7.86	8.77	6.41	7.30	7.93	5.40	6.46
24	7.33	5.09	5.80	9.83	7.33	8.14	8.07	6.21	6.88	7.41	5.43	6.29
25	7.47	5.14	5.90	9.24	7.21	7.90	7.67	5.91	6.49	6.98	5.46	6.12
26	8.35	5.37	6.48	8.41	7.11	7.58	7.59	5.71	6.39	6.88	5.35	5.90
27	8.37	5.90	6.68	9.13	6.89	7.89	7.53	5.81	6.67	6.61	5.15	5.59
28	7.83	5.90	6.54	9.30	7.60	8.56	7.37	6.11	6.61	6.64	5.14	5.61
29	7.01	5.81	6.15	8.93	7.87	8.40	7.53	6.11	6.85	6.75	5.46	5.82
30	6.53	5.58	5.89	9.24	7.93	8.51	8.03	6.60	7.16	6.31	5.00	5.55
31	6.06	5.53	5.71	---	---	---	7.33	6.10	6.58	6.27	4.81	5.29
MONTH	8.37	4.66	5.64	9.90	5.38	7.74	9.13	5.71	7.28	8.50	4.81	6.11

COWLITZ RIVER BASIN

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14245150 COWLITZ RIVER AT LONGVIEW, WA--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	7.11	4.71	5.51	5.99	4.62	5.11	6.44	5.06	5.57	6.81	4.63	5.60
2	6.83	4.45	5.48	5.93	4.55	5.04	6.98	5.16	5.85	7.50	4.70	5.96
3	6.75	4.37	5.28	6.23	4.45	5.07	7.51	5.15	6.14	8.43	5.05	6.45
4	7.29	4.45	5.47	7.18	4.66	5.52	7.55	5.02	6.05	8.77	5.22	6.70
5	8.01	4.64	5.99	7.70	4.59	5.79	7.84	4.97	6.21	8.71	4.73	6.33
6	8.37	4.90	6.25	7.71	4.49	5.73	8.01	4.89	6.19	8.44	4.61	---
7	8.33	4.96	6.38	7.70	4.48	5.70	8.47	4.90	6.24	8.59	5.16	6.57
8	8.12	5.13	6.46	7.28	4.42	5.57	8.32	4.90	6.05	8.09	4.69	6.17
9	8.19	5.28	6.52	7.70	4.35	5.78	7.97	4.82	5.89	7.34	4.27	5.67
10	8.30	5.36	6.46	7.41	4.31	5.38	7.78	4.91	5.89	6.63	3.80	5.17
11	8.43	5.55	6.77	7.44	4.29	5.46	7.57	5.06	5.94	5.88	3.87	4.90
12	8.28	5.66	6.54	7.30	4.51	5.37	6.91	5.08	5.87	5.74	3.86	4.79
13	7.32	5.34	6.03	6.32	4.13	4.80	6.51	4.77	5.65	5.75	3.70	4.60
14	7.60	5.46	6.22	5.73	4.00	4.49	6.20	4.60	5.33	5.92	3.81	4.64
15	7.75	5.74	6.49	5.52	3.96	4.44	6.58	4.68	5.50	5.87	3.61	4.58
16	7.71	5.57	6.49	5.96	3.92	4.63	6.88	4.83	5.74	6.08	3.58	4.53
17	7.52	5.38	6.25	6.03	3.99	4.69	7.19	4.92	5.94	6.46	3.70	4.89
18	7.36	5.15	5.98	6.07	4.01	4.71	7.57	5.16	6.32	6.69	3.82	4.97
19	7.96	5.16	6.18	6.18	3.99	4.77	8.09	5.60	6.75	6.90	3.89	5.15
20	7.64	5.35	6.32	6.90	4.09	5.17	8.10	5.30	6.55	7.08	3.96	5.25
21	7.36	5.37	6.19	7.21	4.22	5.52	8.17	5.38	6.65	7.05	3.94	5.27
22	7.16	5.34	6.11	6.97	4.29	5.48	8.45	5.39	6.70	6.90	3.81	5.20
23	7.01	5.43	6.00	7.46	4.48	5.95	8.65	5.34	6.61	7.06	4.03	5.32
24	7.01	5.37	5.86	8.02	5.52	6.45	7.15	4.68	5.62	6.70	3.99	5.22
25	6.46	5.17	5.56	7.51	5.36	6.17	6.73	4.71	5.50	6.55	4.08	5.21
26	6.45	5.03	5.47	7.54	5.33	6.32	7.04	4.87	5.83	6.15	3.92	5.00
27	5.97	4.80	5.20	8.05	5.44	6.46	6.83	4.72	5.71	5.95	3.83	4.91
28	5.85	4.77	5.11	7.09	5.11	5.85	6.03	4.74	5.30	6.46	3.66	4.75
29	---	---	---	6.26	4.78	5.36	6.24	4.56	5.17	6.71	4.04	5.10
30	---	---	---	6.08	4.94	5.36	6.25	4.37	5.29	7.06	4.32	5.39
31	---	---	---	6.27	5.11	5.63	---	---	---	7.81	4.49	5.95
MONTH	8.43	4.37	6.02	8.05	3.92	5.41	8.65	4.37	5.94	8.77	3.58	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	8.69	4.75	6.26	---	4.66	---	6.80	3.97	5.09	5.44	2.23	3.67
2	8.86	4.82	6.45	7.40	5.04	5.78	6.42	3.33	4.49	5.39	2.26	3.63
3	9.05	4.81	6.59	7.72	5.13	6.03	6.04	2.89	4.15	5.19	2.23	3.48
4	9.54	5.28	6.99	7.75	5.17	6.01	5.78	2.73	3.95	5.04	2.20	3.33
5	8.98	4.73	6.48	7.22	5.04	5.74	5.10	2.64	3.66	5.19	2.26	3.34
6	8.01	4.18	5.88	6.68	4.90	5.52	5.03	2.63	3.57	5.32	2.47	3.56
7	8.09	5.09	6.53	6.38	4.99	5.50	5.16	2.65	3.56	4.73	2.56	3.39
8	8.21	6.33	7.22	5.95	4.88	5.30	4.72	2.75	3.44	4.62	2.36	3.16
9	7.55	6.05	6.89	5.78	4.63	5.11	4.52	2.58	3.13	5.17	2.27	3.26
10	7.43	5.85	6.67	5.74	4.52	4.87	4.33	2.47	2.97	5.43	2.48	3.64
11	7.50	5.96	6.48	5.80	4.52	4.89	4.57	2.41	2.98	5.68	2.60	3.78
12	7.52	6.04	6.49	5.79	4.45	4.80	4.63	2.37	3.14	5.96	2.47	4.02
13	7.39	6.02	6.43	5.82	4.64	4.95	5.03	2.30	3.25	6.46	2.71	4.38
14	7.34	5.83	6.36	5.90	4.43	4.82	5.46	2.27	3.61	6.69	2.80	4.50
15	7.33	5.54	6.11	5.74	4.31	4.85	6.24	2.36	4.00	6.54	2.77	4.44
16	7.10	5.41	5.98	6.22	4.72	5.14	6.51	2.42	4.10	6.78	2.78	4.57
17	7.10	5.37	---	6.27	4.55	5.06	6.34	2.42	4.12	7.01	2.97	4.74
18	---	---	---	6.35	4.45	5.04	6.15	2.30	3.94	6.94	3.04	4.61
19	---	---	---	6.67	4.70	5.31	5.56	2.23	3.71	6.60	2.99	4.39
20	---	---	---	6.87	4.83	5.46	5.67	2.27	3.74	5.99	2.80	3.95
21	---	---	---	6.65	4.62	5.24	5.47	2.22	3.56	5.42	2.67	3.72
22	---	---	---	6.21	4.45	5.12	5.31	2.21	3.34	5.03	2.48	3.39
23	---	---	---	5.96	4.73	5.15	5.34	2.24	3.25	5.12	2.40	3.30
24	---	---	---	5.87	4.61	5.01	5.23	2.23	3.30	5.14	2.40	3.43
25	---	---	---	5.94	4.34	4.84	5.23	2.16	3.20	5.40	2.45	3.70
26	---	---	---	5.98	4.45	4.81	5.23	2.12	3.27	5.91	2.65	4.14
27	---	---	---	6.02	4.47	4.87	5.56	2.19	3.50	6.16	2.68	4.24
28	---	---	---	6.09	4.32	4.88	5.71	2.18	3.61	5.98	2.57	4.01
29	---	---	---	6.51	4.25	4.98	5.93	2.26	3.85	5.70	2.46	3.85
30	---	---	---	6.86	4.56	5.25	5.93	2.22	3.77	5.83	2.49	3.87
31	---	---	---	6.69	4.47	5.19	5.59	2.23	3.63	---	---	---
MONTH	---	---	---	---	4.25	---	6.80	2.12	3.64	7.01	2.20	3.85

COLUMBIA RIVER MAIN STEM

14245300 COLUMBIA RIVER AT LONGVIEW, WA

LOCATION.--Lat 46°06'22", long 122°57'14", in SE¼NE¼ sec.8, T.7 N., R.2 W., Cowlitz County, Hydrologic Unit 17080003, on right bank, at the Port of Longview, 2,000 ft upstream from Longview Bridge, 2.1 mi downstream from Cowlitz River and at mile 66.2.

DRAINAGE AREA.--256,700 mi², approximately.

PERIOD OF RECORD.--November 1983 to current year (gage heights only). Gage-height records collected at site on opposite bank, at same datum, published as "at Rainier" (station 14245295) November 1971 to May 1981.

GAGE.--Water-stage recorder. Datum of gage is Columbia River Datum, 0.34 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 16.52 ft Jan. 19, 1974; minimum gage height, 0.46 ft July 6, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 9.35 ft Nov. 10; minimum gage height not recorded because of equipment failure.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.23	1.34	3.19	5.87	1.68	3.82	7.83	5.53	6.53	---	---	---
2	5.26	---	2.98	7.62	2.96	5.55	7.53	5.27	6.18	---	2.84	---
3	5.58	1.56	3.57	8.26	4.95	6.40	7.45	4.91	5.95	6.56	3.05	4.55
4	5.60	1.66	3.71	7.55	4.41	5.87	7.41	4.36	5.71	6.79	2.74	4.59
5	5.72	1.85	3.71	7.07	3.68	5.18	7.35	3.36	5.34	7.32	2.87	4.82
6	5.70	1.29	3.40	8.14	3.94	5.68	7.39	3.33	5.11	7.51	2.53	4.92
7	5.71	1.27	3.53	7.78	3.71	5.58	7.81	3.57	5.44	7.98	2.57	5.17
8	6.24	1.60	3.93	8.08	3.70	5.71	8.08	3.26	5.62	8.12	3.19	5.49
9	6.47	1.93	4.13	7.83	3.72	5.64	7.90	3.26	5.30	7.94	3.24	5.45
10	7.07	2.29	4.59	9.35	3.71	6.48	8.41	3.23	5.78	7.43	3.25	5.20
11	7.12	2.51	4.64	8.67	4.87	6.68	8.09	3.75	5.82	6.47	3.05	4.74
12	7.66	2.47	4.90	8.69	4.61	6.56	8.02	3.83	6.14	6.41	2.76	4.55
13	7.35	3.01	4.98	8.36	4.63	6.57	7.05	3.94	5.52	6.50	2.59	4.32
14	6.58	2.24	4.18	7.21	4.60	5.89	7.25	3.46	5.61	6.77	2.60	4.35
15	5.92	2.04	3.79	6.92	3.95	5.55	7.30	3.79	5.41	6.99	2.89	4.37
16	5.83	1.62	3.62	7.05	4.11	5.80	7.25	3.37	5.01	6.84	2.67	4.37
17	5.00	1.63	3.29	7.06	4.21	5.62	7.24	3.17	4.76	7.35	2.87	4.67
18	4.40	---	---	8.25	4.38	6.03	---	3.36	---	7.74	3.06	5.07
19	5.13	---	---	7.99	4.04	5.74	---	3.17	---	7.81	3.09	5.16
20	5.46	1.36	3.37	8.73	4.08	5.91	---	3.26	---	8.05	3.03	5.41
21	5.68	1.22	3.33	8.48	3.95	5.85	---	---	---	7.50	3.03	---
22	6.45	1.72	3.93	8.68	3.46	5.83	---	---	---	7.62	---	---
23	6.84	2.01	4.21	8.86	3.56	5.82	---	---	---	7.59	3.81	---
24	7.20	2.13	4.36	9.24	3.85	6.30	---	---	---	6.92	3.43	5.14
25	7.38	2.11	4.50	8.50	3.95	6.03	---	---	---	6.33	3.16	4.81
26	8.20	2.11	5.14	7.50	3.79	5.52	---	---	---	6.18	3.21	4.48
27	8.17	3.17	5.35	8.22	3.31	5.99	---	---	---	5.95	2.54	3.90
28	7.51	3.10	5.04	8.07	4.52	6.69	---	---	---	5.98	2.41	3.87
29	6.47	2.42	4.29	7.62	5.16	6.47	---	---	---	5.88	2.71	3.86
30	5.84	1.81	3.92	7.92	5.13	6.59	---	---	---	5.39	2.07	3.45
31	4.96	1.80	3.53	---	---	---	---	---	---	5.54	1.95	---
MONTH	8.20	---	---	9.35	1.68	5.91	---	---	---	---	---	---

GAGE HEIGHT (FEET ABOVE DATUM). WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	5.36	2.24	3.67	---	2.18	---	6.45	3.49	---
2	6.45	2.24	4.37	5.26	2.22	3.62	---	3.06	---	---	3.65	5.28
3	6.45	2.03	4.11	---	2.02	---	6.95	3.09	---	---	4.10	---
4	7.06	2.58	4.40	6.82	2.68	---	---	3.26	---	---	4.32	---
5	7.79	2.86	5.11	---	2.81	---	6.98	3.57	5.31	---	3.71	---
6	8.17	3.30	5.44	---	2.52	---	7.76	3.31	---	---	4.07	---
7	8.15	3.33	5.53	---	2.64	---	---	3.27	---	---	4.75	---
8	7.84	3.28	5.57	---	2.60	---	---	3.04	---	---	4.23	---
9	7.91	3.55	5.62	6.88	2.73	---	---	2.92	---	---	3.71	---
10	7.99	3.61	5.44	---	2.32	---	---	3.04	---	6.66	3.29	4.97
11	8.05	3.50	5.58	---	2.46	---	---	3.40	---	5.90	3.20	---
12	7.76	3.73	5.24	---	2.61	---	---	3.59	---	---	3.20	---
13	6.69	3.26	4.70	---	---	---	---	3.15	---	---	3.00	---
14	7.07	3.51	5.02	---	1.15	---	---	2.60	---	---	3.08	---
15	7.13	3.78	5.28	---	1.30	---	---	3.12	---	---	3.04	---
16	7.15	3.41	5.27	---	1.42	---	---	3.55	---	---	2.79	---
17	7.00	2.94	4.96	---	1.40	---	---	3.84	---	---	2.99	---
18	6.88	2.69	4.61	---	1.45	---	---	4.19	---	6.70	2.84	---
19	7.65	2.81	5.04	---	1.73	---	---	4.76	---	6.72	3.09	4.88
20	7.19	3.30	5.21	---	2.59	---	---	4.43	---	6.72	3.28	5.02
21	6.90	3.32	---	---	2.84	---	---	4.50	---	6.71	3.31	5.04
22	6.61	3.23	---	---	2.89	---	---	4.53	---	6.71	3.17	5.01
23	6.36	---	---	---	3.09	---	---	4.26	---	---	3.42	---
24	6.39	2.83	---	---	3.83	---	---	2.79	---	6.66	3.32	5.02
25	5.63	2.31	3.65	---	3.53	---	---	2.99	---	6.63	3.43	5.01
26	5.66	2.57	3.78	---	3.98	---	---	3.75	---	6.23	3.30	4.82
27	5.14	2.34	3.50	---	---	---	---	3.42	---	6.07	3.22	4.70
28	5.10	2.38	3.55	6.65	3.39	4.82	---	2.40	---	6.62	2.96	4.45
29	---	---	---	5.69	2.57	4.13	4.94	2.69	3.97	6.72	3.57	4.96
30	---	---	---	---	2.44	---	5.64	2.86	---	---	3.88	5.21
31	---	---	---	---	2.09	3.73	---	---	---	---	4.11	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	---	3.96	---	6.72	1.38	3.79	6.30	1.04	3.49	5.33	---	3.03
2	---	3.95	---	6.76	1.51	4.06	6.16	1.04	3.46	5.25	---	2.98
3	---	3.98	---	---	2.30	4.58	5.87	1.04	3.35	4.85	---	2.82
4	---	4.51	---	6.76	2.18	4.49	5.62	1.04	3.18	4.84	---	2.66
5	8.73	3.78	5.96	6.66	1.57	3.97	4.85	---	2.83	4.85	1.04	2.69
6	---	3.13	---	6.02	1.27	3.59	4.81	---	2.74	---	1.33	2.97
7	---	3.94	---	5.43	1.17	3.35	4.97	1.04	2.76	4.52	1.23	2.70
8	---	4.44	---	4.96	1.04	3.02	4.48	1.18	2.56	4.43	---	---
9	6.55	3.90	5.40	4.80	---	2.71	4.22	---	---	5.00	---	---
10	6.55	3.87	5.14	4.82	---	2.56	4.06	---	---	4.85	---	2.89
11	6.70	3.75	4.96	4.87	1.23	2.55	4.41	---	---	---	---	2.99
12	6.70	3.70	4.88	4.91	1.04	2.52	4.56	---	---	5.83	1.04	3.35
13	6.49	3.18	4.38	4.87	---	2.43	4.82	---	---	---	1.41	---
14	---	2.78	---	4.97	---	---	5.32	---	---	---	1.55	---
15	6.54	2.43	---	5.14	---	2.77	6.12	1.04	3.37	6.18	1.34	---
16	---	2.03	---	5.48	---	2.97	6.37	1.06	3.52	6.66	1.47	---
17	---	2.13	---	5.57	---	2.97	6.25	1.07	3.56	6.77	1.86	---
18	---	1.91	---	5.85	---	---	6.04	1.04	3.31	5.86	1.82	---
19	6.73	2.62	4.66	6.17	1.08	3.53	---	---	---	---	1.89	---
20	---	2.68	---	6.30	1.19	---	5.55	---	3.09	---	1.37	---
21	---	2.10	---	6.09	1.08	3.49	---	---	---	4.85	1.18	2.99
22	6.42	2.08	4.14	5.52	1.04	3.26	5.19	---	2.63	4.83	---	2.59
23	---	1.58	---	5.14	---	2.90	---	---	---	4.83	---	---
24	5.32	1.13	3.27	5.04	---	2.70	5.12	---	---	4.84	---	---
25	5.33	1.04	3.12	5.35	---	2.58	5.13	---	---	4.85	---	2.94
26	5.67	1.14	2.93	5.25	---	2.50	5.11	---	---	---	1.32	---
27	---	1.33	---	5.50	---	---	---	---	---	---	1.42	---
28	6.08	1.51	3.26	5.53	---	---	5.60	---	2.95	---	1.18	---
29	6.39	1.54	3.56	5.94	---	3.18	5.82	---	3.23	5.58	1.04	3.14
30	6.63	1.39	3.67	6.46	---	3.39	5.83	---	3.15	5.70	1.06	3.17
31	---	---	---	6.20	1.04	3.33	---	---	---	---	---	---
MONTH	---	1.04	---	---	---	---	---	---	---	---	---	---

PACIFIC SLOPE BASINS IN OREGON

NEHALEM RIVER BASIN

14301000 NEHALEM RIVER NEAR FOSS, OR
(National stream quality accounting network station)

LOCATION.--Lat 45°42'15", long 123°45'15", in NW¼ sec.35, T.3 N., R.9 W., Tillamook County, Hydrologic Unit 17100202, on right bank 0.2 mi upstream from Cook Creek, 2.2 mi northeast of Foss, and at mile 13.5.

DRAINAGE AREA.--667 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 32.60 ft above National Geodetic Vertical Datum of 1929 (State Highway Department bench mark). Prior to Nov. 11, 1939, nonrecording gage.

REMARKS.--Estimated daily discharges: Oct. 1-10, Nov. 16 to Jan. 1. Water-discharge records good. No regulation. Several small diversions for irrigation and domestic use upstream from station.

AVERAGE DISCHARGE.--46 years, 2,721 ft³/s, 55.40 in/yr, 1,971,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,900 ft³/s Jan. 20, 1972, gage height, 23.11 ft; minimum, 34 ft³/s Aug. 29-31, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 19,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 29	2200	*17,700	*13.06				
Minimum, 91 ft ³ /s Aug. 29, 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	111	2140	12600	7760	798	1880	6630	1950	607	423	198	102		
2	108	10800	9410	5590	765	1760	5530	1750	720	404	220	106		
3	108	11800	6920	4650	683	1650	4550	1690	761	379	250	102		
4	111	9740	5260	3690	643	1800	3750	1640	722	358	210	101		
5	122	6890	3970	3030	702	1900	3080	1530	652	339	188	119		
6	125	4940	3240	2570	925	1860	2610	1410	750	326	171	197		
7	118	4520	2500	2240	1090	1740	2260	1310	5620	321	176	223		
8	125	4300	2170	1980	1220	1620	2000	1240	4960	310	218	210		
9	139	4790	1920	1760	1260	1540	1780	1190	3440	297	211	207		
10	462	7480	1920	1600	1560	1470	1630	1150	2400	282	189	223		
11	732	10200	1790	1470	4080	1400	1630	1120	1850	269	179	327		
12	797	9200	2350	1370	7440	1340	1590	1050	1520	258	172	431		
13	1120	7950	3690	1290	6420	1270	1440	998	1320	249	157	500		
14	1240	7040	4650	1280	4670	1220	1320	1010	1190	241	145	453		
15	1300	5820	5870	1260	4240	1170	1250	976	1110	231	134	609		
16	1030	4510	4520	1190	3720	1120	1190	922	995	226	127	519		
17	780	3650	4320	1140	3250	1080	1130	858	893	222	121	501		
18	623	4170	3510	1090	2820	1040	1080	814	816	217	116	533		
19	552	4680	2930	1050	2600	1000	1110	772	747	209	115	475		
20	617	4940	2430	1030	2920	985	1160	745	696	201	115	402		
21	650	4810	2280	1000	3020	1120	1220	722	647	190	112	336		
22	637	4230	2820	958	3060	1380	1330	692	617	182	110	293		
23	568	4520	3540	914	3040	4010	2920	667	584	177	108	262		
24	524	5400	3640	871	2970	5950	3310	664	565	174	109	237		
25	568	5470	3320	833	2830	5440	3330	647	552	172	109	217		
26	1020	5110	3040	795	2560	4350	3010	633	525	168	103	200		
27	1560	9870	3480	771	2290	4410	2870	599	503	161	99	186		
28	2210	16400	4360	758	2050	4960	2840	579	479	155	96	176		
29	2190	17200	6350	734	---	4690	2510	601	458	147	93	165		
30	1890	15700	11300	711	---	5820	2200	595	447	147	94	154		
31	1870	---	10900	719	---	7240	---	590	---	172	108	---		
TOTAL	24007	218270	141000	56104	73626	78215	72260	31114	37146	7607	4553	8566		
MEAN	774	7276	4548	1810	2630	2523	2409	1004	1238	245	147	286		
MAX	2210	17200	12600	7760	7440	7240	6630	1950	5620	423	250	609		
MIN	108	2140	1790	711	643	985	1080	579	447	147	93	101		
CFSM	1.16	10.9	6.82	2.71	3.94	3.78	3.61	1.51	1.86	.37	.22	.43		
IN.	1.34	12.17	7.86	3.13	4.11	4.36	4.03	1.74	2.07	.42	.25	.48		
AC-FT	47620	432900	279700	111300	146000	155100	143300	61710	73680	15090	9030	16990		
CAL YR 1984	TOTAL	994166	MEAN	2716	MAX	17200	MIN	108	CFSM	4.07	IN.	55.45	AC-FT	1972000
WTR YR 1985	TOTAL	752468	MEAN	2062	MAX	17200	MIN	93	CFSM	3.09	IN.	41.97	AC-FT	1493000

PACIFIC SLOPE BASINS IN OREGON

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NEHALEM RIVER BASIN

14301000 NEHALEM RIVER NEAR FOSS, OR--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1980 to September 1981.

WATER TEMPERATURES: December 1974 to September 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT 24...	1315	520	69	7.50	8.0	12.2	34	100	20	0	5.7
JAN 10...	1215	1590	55	7.20	3.0	14.0	K12	K6	16	1	4.6
APR 08...	1230	1950	53	7.20	11.0	11.6	K11	K5	16	0	4.4
JUL 29...	1200	122	77	7.70	21.5	9.7	K8	200	23	0	6.5
DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 24...	1.4	5.6	.90	21	6.2	5.6	<.10	.020	.45	.30	<.010
JAN 10...	1.2	4.6	.60	15	4.5	4.3	<.10	.020	.56	<.20	<.010
APR 08...	1.1	4.5	.70	15	3.8	4.1	<.10	.040	.42	.30	.010
JUL 29...	1.7	6.8	1.2	25	4.5	6.2	<.10	.060	.16	.50	<.010
DATE	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	TUR- BID- ITY (NTU)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	
OCT 24...	.010	.020	15	63	53	88	2.2	4	5.6	82	
JAN 10...	.010	.020	4.5	34	34	146	2.5	3	13	--	
APR 08...	.010	.010	12	37	40	195	3.2	4	21	79	
JUL 29...	<.010	.030	13	44	55	14	2.5	6	2.0	89	

NEHALEM RIVER BASIN

14301000 NEHALEM RIVER NEAR FOSS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 24...	40	<1	9	<.5	<1	<1	<3	2	270	17
JAN 10...	50	<1	11	3.8	<1	1	<3	4	190	7
APR 08...	50	<1	12	<.5	<1	<1	<3	3	110	3
JUL 29...	20	<1	16	<.5	<1	<1	<3	2	76	1
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 24...	<4	5	<.1	<10	10	<1	<1	40	<6	<3
JAN 10...	<4	4	<.1	<10	2	<1	<1	29	<6	14
APR 08...	<4	4	<.1	<10	2	<1	<1	28	<6	12
JUL 29...	<4	<1	<.1	<10	1	<1	<1	44	<6	10

K - Results based on colony count outside acceptable range (non-ideal colony count).

14301500 WILSON RIVER NEAR TILLAMOOK, OR

LOCATION.--Lat 45°29'05", long 123°41'20", in SW¼SE¼ sec.8, T.1 S., R.8 W., Tillamook County, Hydrologic Unit 17100203, on right bank 0.2 mi upstream from Negro Jack Creek, 8.0 mi east of Tillamook, and at mile 11.4.

DRAINAGE AREA.--161 mi², at cableway, 2.0 mi downstream, where all discharge measurements are made.

PERIOD OF RECORD.--October 1914 to September 1915, August to November 1916, July 1931 to current year. Prior to January 1915 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1398: 1953. WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 71.89 ft above National Geodetic Vertical Datum of 1929. Dec. 18, 1914, to Nov. 4, 1916, nonrecording gage at site 2.8 mi downstream at different datum. July 30, 1931, to Sept. 30, 1938, nonrecording gage at site 2.82 mi downstream at datum 28.83 ft lower. Oct. 1, 1938, to Oct. 17, 1968, water-stage recorder at site 2.1 mi downstream at datum 29.76 ft lower.

REMARKS.--No estimated daily discharges. Records good. No regulation. Small diversions for domestic use upstream from station.

AVERAGE DISCHARGE.--55 years (water years 1915, 1932-85), 1,196 ft³/s, 100.88 in/yr, 866,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s Jan. 20, 1972, gage height, 16.91 ft; maximum gage height, 20.26 ft Dec. 22, 1964 (site and datum then in use); minimum discharge, 32 ft³/s Sept. 5, 1973, but may have been less for short period following a landslide Jan. 31, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1916 reached a stage of 20.8 ft, from floodmark, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 12,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1200	*7,800	*10.48				

Minimum discharge, 71 ft³/s Sept. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	96	1110	3390	2060	345	796	2990	742	258	223	119	80		
2	96	6010	2450	1640	347	737	2460	676	262	213	113	80		
3	96	5120	1870	1360	308	697	2020	683	249	203	108	79		
4	99	4160	1520	1170	280	872	1660	699	285	194	104	74		
5	106	2600	1260	1030	294	874	1390	652	269	189	100	86		
6	103	1970	1080	921	308	817	1220	600	480	183	98	148		
7	102	2010	955	835	540	757	1110	551	4430	178	115	163		
8	104	1980	874	758	491	712	1010	518	2310	170	198	126		
9	127	2360	809	693	474	678	933	487	1420	165	142	110		
10	504	3500	885	636	584	651	877	467	1060	159	119	134		
11	626	3900	779	593	1720	621	950	454	850	157	111	162		
12	783	3090	1150	552	2560	588	964	420	715	152	106	226		
13	1090	2570	1370	522	1560	557	818	399	622	147	102	254		
14	949	2070	1820	530	1360	526	727	396	564	144	96	222		
15	790	1690	2460	555	1730	502	656	377	522	138	94	232		
16	582	1400	1790	533	1430	482	599	357	464	136	92	200		
17	455	1240	1450	525	1200	473	543	342	423	133	89	222		
18	391	1640	1200	534	1030	462	509	332	392	130	88	223		
19	382	1810	1040	521	1040	448	523	320	366	125	87	187		
20	418	1860	952	502	1190	455	513	309	343	121	87	160		
21	403	1690	975	477	1140	560	500	297	326	119	87	143		
22	365	1450	1530	450	1200	686	573	281	309	116	87	133		
23	336	1600	1840	424	1230	2410	1610	272	297	115	85	123		
24	319	1810	1700	401	1250	2610	1420	273	289	114	83	115		
25	376	1750	1470	382	1190	1790	1240	263	281	112	81	108		
26	717	1590	1300	364	1060	1510	1100	252	266	110	78	101		
27	1190	4070	1450	349	926	1560	1060	244	255	107	76	98		
28	1510	6830	1400	339	832	1470	1070	243	246	103	76	93		
29	1230	5600	2550	330	---	1380	949	260	236	100	76	91		
30	1020	5080	4360	316	---	2840	834	257	235	107	76	89		
31	959	---	2860	309	---	3650	---	254	---	126	80	---		
TOTAL	16324	83560	50539	20611	27619	33171	32828	12677	19024	4489	3053	4262		
MEAN	527	2785	1630	665	986	1070	1094	409	634	145	98.5	142		
MAX	1510	6830	4360	2060	2560	3650	2990	742	4430	223	198	254		
MIN	96	1110	779	309	280	448	500	243	235	100	76	74		
CFSM	3.27	17.3	10.1	4.13	6.12	6.65	6.80	2.54	3.94	.90	.61	.88		
IN.	3.77	19.31	11.68	4.76	6.38	7.66	7.59	2.93	4.40	1.04	.71	.98		
AC-FT	32380	165700	100200	40880	54780	65790	65110	25140	37730	8900	6060	8450		
CAL YR 1984	TOTAL	402605	MEAN	1100	MAX	6830	MIN	93	CFSM	6.83	IN.	93.02	AC-FT	798600
WTR YR 1985	TOTAL	308157	MEAN	844	MAX	6830	MIN	74	CFSM	5.24	IN.	71.20	AC-FT	611200

NESTUCCA RIVER BASIN

14302800 MCGUIRE LAKE NEAR FAIRDALE, OR

LOCATION.--Lat 45°18'30", long 123°24'30", in NW¼SE¼ sec.15, T.3 S., R.6 W., Yamhill County, Hydrologic Unit 17100203, on control tower in reservoir on Nestucca River, 0.3 mi upstream from Walker Creek, and 5.0 mi southwest of Fairdale.

DRAINAGE AREA.--2.85 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill dam with ungated spillway. Capacity of reservoir is 3,840 acre-ft between elevations 1,810.0 ft and 1,865.5 ft. Dead storage negligible. Under normal operation, reservoir is filled in the spring (April or May) and drained when fall rains start. There is no planned storage during winter months; however, during periods of heavy runoff, inflow may be greater than capacity of outlet tunnel and there may be temporary storage. Water is used during summer months for municipal supply of city of McMinnville.

COOPERATION.--Elevation and capacity table furnished by city of McMinnville, Water and Light Department.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 3,890 acre-ft Mar. 12 1972, Feb. 19, Mar. 28, 1974, elevation, 1,865.8 ft; no contents most of time during winter months.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 3,770 acre-ft Apr. 17 to June 27, elevation, 1,865.0 ft; reservoir empty Dec. 9-11.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,853.3	2,340	-
Oct. 31.....	1,851.7	2,180	-160
Nov. 30.....	1,838.9	1,120	-1,060
Dec. 31.....	1,835.0	880	-240
CAL YR 1984.....	-	-	+150
Jan. 31.....	1,843.9	1,490	+610
Feb. 28.....	1,851.5	2,160	+670
Mar. 31.....	1,860.5	3,160	+1,000
Apr. 30.....	1,865.0	3,770	+610
May 31.....	1,865.0	3,770	0
June 30.....	1,864.0	3,630	-140
July 31.....	1,859.9	3,080	-550
Aug. 31.....	1,854.7	2,480	-600
Sept. 30.....	1,850.1	2,020	-460
WTR YR 1985.....	-	-	-320

NESTUCCA RIVER BASIN

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14302900 NESTUCCA RIVER NEAR FAIRDALE, OR

LOCATION.--Lat 45°18'40", long 123°25'05", in SW¼NW¼ sec.15, T.3 S., R.6 W., Yamhill County, Hydrologic Unit 17100203, on right bank 100 ft upstream from former Meadow Lake, 0.4 mi downstream from Walker Creek, 5.3 mi southwest of Fairdale, and at mile 49.3.

DRAINAGE AREA.--6.18 mi².

PERIOD OF RECORD.--June 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,778.99 ft above National Geodetic Vertical Datum of 1929 (levels by city of McMinnville).

REMARKS.--No estimated daily discharges. Records good. Flow regulated since March 1969 by McGuire Lake about 1 mi upstream from station (see sta 14302800); during winter months lake is empty except when inflow exceeds capacity of outlet tunnel.

AVERAGE DISCHARGE.--25 years (water years 1961-85), 32.6 ft³/s, 71.64 in/yr, 23,620 acre-ft/yr, adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 876 ft³/s Dec. 22, 1964, gage height, 10.43 ft; minimum, 0.76 ft³/s Aug. 9, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 305 ft³/s Nov. 28, gage height, 5.10 ft; minimum, 2.1 ft³/s Oct. 2-4; minimum daily, 2.3 ft³/s Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	44	173	37	7.1	17	54	19	7.9	6.0	3.5	2.8
2	2.3	185	151	27	6.3	15	46	18	7.8	4.4	3.5	2.8
3	2.3	103	135	22	5.6	15	38	19	7.9	4.3	3.4	2.8
4	2.4	63	123	19	5.2	18	30	18	8.4	4.3	3.3	2.7
5	2.4	44	114	16	5.4	15	25	16	7.3	4.3	3.2	3.0
6	2.4	39	104	14	7.1	14	22	15	23	4.2	3.1	4.7
7	2.4	51	91	12	10	13	19	14	87	4.1	3.3	3.7
8	2.9	69	74	11	7.6	12	17	13	48	4.0	4.7	3.4
9	3.2	85	32	11	7.4	12	15	13	31	3.9	3.5	3.1
10	8.8	130	33	10	7.9	12	14	13	24	3.8	3.3	3.6
11	10	115	21	9.7	21	11	15	12	19	3.8	3.2	3.5
12	14	112	28	9.3	23	11	13	12	16	3.7	3.1	6.3
13	20	98	58	8.9	18	11	12	12	14	3.7	2.9	6.1
14	22	82	70	9.1	17	10	11	12	13	3.6	2.8	5.5
15	18	72	32	8.9	20	10	9.8	11	12	3.6	2.8	5.0
16	15	65	27	8.4	19	9.9	9.0	10	11	3.6	2.8	4.0
17	14	64	22	8.2	17	10	9.3	8.7	9.5	4.2	2.8	4.6
18	15	77	21	8.2	16	9.9	12	8.4	8.6	3.5	2.8	4.0
19	19	71	21	8.3	19	9.4	14	8.3	8.1	3.4	2.9	3.6
20	18	117	18	8.4	20	9.4	16	8.3	7.8	3.4	2.9	3.5
21	16	158	17	8.2	20	12	18	8.1	7.4	3.4	2.8	3.3
22	15	152	23	7.8	23	14	25	7.8	7.2	3.3	2.8	3.2
23	15	154	24	7.5	23	64	45	8.3	7.0	3.4	2.7	3.1
24	14	150	22	7.2	26	45	42	8.3	7.1	3.4	2.7	3.1
25	16	144	20	6.9	24	30	35	7.7	6.8	3.3	2.6	3.0
26	28	139	19	6.8	21	25	31	7.5	6.7	3.2	2.6	3.0
27	33	243	25	6.5	19	22	27	7.2	6.7	3.2	2.6	3.0
28	48	273	20	6.3	18	20	24	7.2	6.9	3.1	2.6	3.0
29	33	234	54	6.1	---	19	21	7.2	6.8	3.0	2.6	3.0
30	30	212	72	5.8	---	57	20	7.2	6.8	3.6	2.7	3.0
31	26	---	49	5.7	---	62	---	7.9	---	3.8	2.8	---
TOTAL	470.5	3545	1693	341.2	433.6	614.6	689.1	345.1	440.7	116.5	93.3	109.4
MEAN	15.2	118	54.6	11.0	15.5	19.8	23.0	11.1	14.7	3.76	3.01	3.65
MAX	48	273	173	37	26	64	54	19	87	6.0	4.7	6.3
MIN	2.3	39	17	5.7	5.2	9.4	9.0	7.2	6.7	3.0	2.6	2.7
AC-FT	933	7030	3360	677	860	1220	1370	685	874	231	185	217
MEAN†	16.1	100	50.7	20.9	27.6	36.1	33.3	11.1	13.1	4.15	1.77	3.26
CFSM†	2.61	16.2	8.20	3.38	4.47	5.84	5.39	1.80	2.12	0.672	0.286	0.528
IN.†	3.00	18.11	9.47	3.90	4.64	6.74	6.01	2.08	2.36	0.77	0.33	0.59
AC-FT†	990	5970	3120	1287	1530	2220	1980	685	777	255	109	194

CAL YR 1984 TOTAL 11991.5 MEAN 32.8 MAX 273 MIN 1.4 AC-FT 23790 MEAN† 35.4 CFSM† 5.73 IN.† 77.96 AC-FT† 25696
WTR YR 1985 TOTAL 8892.0 MEAN 24.4 MAX 273 MIN 2.3 AC-FT 17640 MEAN† 26.4 CFSM† 4.27 IN.† 57.99 AC-FT† 19115

† Adjusted for storage and diversion by McGuire Lake.

NESTUCCA RIVER BASIN

14303200 TUCCA CREEK NEAR BLAINE, OR

LOCATION.--Lat 45°19'28", long 123°32'43", in SE¼NW¼ sec.9, T.3 S., R.7 W., Tillamook County, Hydrologic Unit 17100203, on right bank at road bridge, 80 ft upstream from mouth, and 8 mi northeast of Blaine.

DRAINAGE AREA.--3.09 mi².

PERIOD OF RECORD.--July 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,400 ft, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 157 ft³/s Nov. 28, 1984, gage height, 2.98 ft; minimum, 1.3 ft³/s Oct. 20-21, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 180 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	0915	*157	*2.98				
Minimum, 1.5 ft ³ /s Aug. 28-30, Sept. 2-5.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1.6	27	77	43	6.5	17	75	12	4.2	4.0	2.4	1.6		
2	1.6	100	51	33	5.5	15	57	12	4.0	3.9	2.3	1.6		
3	1.6	91	36	25	5.1	15	43	12	4.0	3.7	2.2	1.5		
4	1.8	64	28	22	5.0	16	33	11	4.2	3.6	2.1	1.5		
5	1.7	43	23	19	5.0	15	27	10	3.9	3.5	2.0	1.9		
6	1.6	33	20	17	5.8	14	23	9.5	10	3.4	2.0	3.9		
7	1.6	35	17	15	7.2	13	20	9.0	37	3.4	2.3	3.1		
8	1.9	38	16	14	6.1	12	17	8.7	27	3.3	3.5	2.3		
9	2.0	42	14	13	6.0	12	16	8.2	21	3.2	2.3	2.0		
10	4.7	61	15	12	6.4	11	14	8.1	17	3.1	2.1	2.5		
11	6.8	66	13	11	14	11	14	7.6	15	3.1	2.0	2.3		
12	6.7	55	22	10	20	10	12	7.3	13	3.0	2.0	3.8		
13	7.5	44	24	9.8	18	10	11	7.0	11	2.9	1.9	4.0		
14	9.4	36	30	10	18	9.7	10	6.8	10	2.9	1.8	3.3		
15	9.0	31	34	9.8	24	9.2	9.5	6.5	9.4	2.8	1.8	3.6		
16	7.5	26	32	9.2	25	8.9	9.0	6.1	8.5	2.7	1.8	3.1		
17	6.4	23	27	8.9	24	8.6	8.5	5.9	7.8	2.7	1.7	3.5		
18	6.1	25	23	8.5	21	8.4	8.2	5.7	7.2	2.6	1.7	3.1		
19	7.0	24	20	8.3	19	8.1	8.3	5.5	6.7	2.5	1.7	2.8		
20	6.5	26	18	8.1	19	8.3	8.2	5.3	6.4	2.5	1.7	2.6		
21	6.0	25	19	7.7	19	9.1	8.6	5.1	6.0	2.5	1.7	2.5		
22	5.7	24	27	7.4	22	10	10	4.9	5.7	2.4	1.6	2.3		
23	5.6	24	34	7.1	24	29	17	4.8	5.4	2.4	1.6	2.2		
24	5.5	23	34	6.8	26	33	18	4.7	5.3	2.4	1.6	2.1		
25	8.1	24	31	6.6	25	28	18	4.6	5.0	2.3	1.6	2.0		
26	15	23	27	6.3	23	25	18	4.5	4.8	2.2	1.6	1.9		
27	23	78	26	6.2	21	23	17	4.4	4.6	2.2	1.6	1.9		
28	35	146	24	6.0	19	21	16	4.4	4.4	2.1	1.6	1.8		
29	32	129	46	5.8	---	21	14	4.5	4.4	2.1	1.5	1.8		
30	27	116	86	5.6	---	59	13	4.3	4.2	2.6	1.7	1.8		
31	22	---	62	5.5	---	95	---	4.4	---	2.5	1.6	---		
TOTAL	277.9	1502	956	377.6	439.6	585.3	573.3	214.8	277.1	88.5	59.0	74.3		
MEAN	8.96	50.1	30.8	12.2	15.7	18.9	19.1	6.93	9.24	2.85	1.90	2.48		
MAX	35	146	86	43	26	95	75	12	37	4.0	3.5	4.0		
MIN	1.6	23	13	5.5	5.0	8.1	8.2	4.3	3.9	2.1	1.5	1.5		
CFSM	2.90	16.2	9.97	3.95	5.08	6.12	6.18	2.24	2.99	.92	.61	.80		
IN.	3.35	18.08	11.51	4.55	5.29	7.05	6.90	2.59	3.34	1.07	.71	.89		
AC-FT	551	2980	1900	749	872	1160	1140	426	550	176	117	147		
CAL YR 1984	TOTAL	6993.5	MEAN	19.1	MAX	146	MIN	1.6	CFSM	6.18	IN.	84.19	AC-FT	13870
WTR YR 1985	TOTAL	5425.4	MEAN	14.9	MAX	146	MIN	1.5	CFSM	4.82	IN.	65.32	AC-FT	10760

NESTUCCA RIVER BASIN

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14303600 NESTUCCA RIVER NEAR BEAVER, OR

LOCATION.--Lat 45°16'00", long 123°50'45", in SE¼NE¼ sec.36, T.3 S., R.10 W., Tillamook County, Hydrologic Unit 17100203, on right bank 150 ft upstream from Saling Creek, 1.2 mi southwest of Beaver, and at mile 13.5.

DRAINAGE AREA.--180 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 43 ft, from river profile map.

REMARKS.--No estimated daily discharges. Water-discharge records good. No regulation. Small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--21 years, 1,089 ft³/s, 82.16 in/yr, 789,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 ft³/s Jan. 11, 1972, gage height, 22.0 ft, from floodmark; minimum, 32 ft³/s Sept. 14, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 20, 1962, reached a stage of 23.4 ft, discharge, 32,500 ft³/s caused by failure of Meadow Lake Dam.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	1500	*6,620	*9.50				

Minimum, 74 ft³/s Aug. 26-30, Sept. 3-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	1340	4310	2460	418	877	2920	827	282	252	136	79
2	102	4220	3330	2000	442	820	2350	770	272	237	125	79
3	102	3850	2590	1690	375	813	1950	801	268	218	117	77
4	110	2810	2090	1460	331	1060	1650	764	313	209	111	74
5	112	2120	1760	1290	343	1060	1420	687	276	201	107	104
6	106	1840	1520	1160	354	986	1250	636	582	196	103	291
7	102	1920	1350	1050	627	930	1120	596	3350	192	118	278
8	110	1940	1220	970	606	886	1010	573	2020	185	196	182
9	140	2080	1110	902	675	845	934	547	1360	177	150	141
10	470	3130	1230	843	906	805	870	532	1090	170	126	135
11	709	3220	1060	785	1550	757	888	530	922	169	114	149
12	681	3050	1510	723	2090	711	809	490	811	164	106	271
13	738	2850	1760	673	1580	666	722	471	706	160	100	319
14	834	2510	1900	669	1460	630	664	480	635	154	95	259
15	761	2150	2140	642	1530	600	621	448	595	152	90	273
16	574	1830	1920	592	1360	578	591	416	541	149	90	230
17	477	1610	1760	566	1220	554	559	393	494	145	87	288
18	432	1820	1550	542	1100	530	542	373	458	142	87	280
19	537	1730	1390	524	1140	510	552	363	421	138	90	228
20	619	1840	1290	510	1210	525	557	356	398	134	90	192
21	534	1800	1320	490	1150	593	587	338	373	131	89	174
22	476	1660	1900	470	1220	770	690	323	354	130	86	162
23	435	1970	2310	449	1190	1690	1340	312	333	127	84	147
24	408	2180	2170	430	1210	1930	1290	315	323	124	81	136
25	487	2260	1910	411	1160	1590	1260	309	315	121	77	128
26	820	2200	1710	396	1070	1510	1170	297	301	119	76	123
27	1160	4330	1920	386	990	1720	1090	288	287	113	74	120
28	1860	6420	1890	377	924	1740	1020	285	280	110	77	115
29	1650	5890	2500	375	---	1650	941	291	272	108	74	109
30	1420	5520	3790	353	---	2770	881	304	267	124	77	105
31	1290	---	3100	357	---	3570	---	289	---	164	79	---
TOTAL	18360	82090	61310	24545	28231	34676	32248	14404	18899	4915	3112	5248
MEAN	592	2736	1978	792	1008	1119	1075	465	630	159	100	175
MAX	1860	6420	4310	2460	2090	3570	2920	827	3350	252	196	319
MIN	102	1340	1060	353	331	510	542	285	267	108	74	74
CFSM	3.29	15.2	11.0	4.40	5.60	6.22	5.97	2.58	3.50	.88	.56	.97
IN.	3.79	16.97	12.67	5.07	5.83	7.17	6.66	2.98	3.91	1.02	.64	1.08
AC-FT	36420	162800	121600	48690	56000	68780	63960	28570	37490	9750	6170	10410
CAL YR 1984	TOTAL	414910	MEAN	1134	MAX	6420	MIN	99	CFSM	6.30	IN.	85.75
WTR YR 1985	TOTAL	328038	MEAN	899	MAX	6420	MIN	74	CFSM	4.99	IN.	67.79
											AC-FT	823000
											AC-FT	650700

NESTUCCA RIVER BASIN

14303600 NESTUCCA RIVER NEAR BEAVER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1964 to September 1985 (discontinued).

INSTRUMENTATION.--Graphic temperature recorder October 1964 to Sept. 7, 1977. Digital temperature recorder since Sept. 7, 1977.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 24.0°C July 1-3, 1967, Aug. 9, 10, 1981; minimum, 0.5°C Jan. 28-30, 1980, Dec. 22-25, 1983, Feb. 4, 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 22.5°C July 11, 18, 24; minimum, 0.5°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

NESTUCCA RIVER BASIN

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14303600 NESTUCCA RIVER NEAR BEAVER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

SILETZ RIVER BASIN

14304850 BIG ROCK CREEK NEAR VALSETZ, OR

LOCATION.--Lat 44°46'41", long 123°41'34", in NE¼NW¼ sec.20, T.9 S., R.8 W., Polk County, Hydrologic Unit 17100204, on left bank about 0.2 mi downstream from bridge and 4.7 mi southwest of Valsetz.

DRAINAGE AREA.--6.90 mi².

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: February 1979 to September 1985 (discontinued).

INSTRUMENTATION.--Temperature recorder since Feb. 27, 1979.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 20.0°C Aug. 9, 10, 1981; minimum, 0.0°C Jan. 28-30, 1980, Dec. 24, 25, 1983, Feb. 4, 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 18.0°C July 17-20, 23; minimum, 0.0°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.0	9.5	---	---	7.5	6.5	6.0	5.5	3.5	3.0	7.0	5.5
2	11.5	9.5	---	---	7.0	6.5	6.0	5.0	4.0	3.0	6.0	4.0
3	11.5	9.5	---	---	7.0	6.0	5.5	5.0	3.5	1.5	6.5	5.0
4	13.0	10.5	---	---	6.0	5.5	5.0	4.5	1.5	.0	6.0	5.0
5	11.5	10.0	---	---	5.5	5.0	5.5	4.5	3.0	1.5	6.5	5.0
6	12.5	11.5	---	---	5.5	5.0	5.5	5.0	4.5	3.0	7.0	5.0
7	13.5	12.0	---	---	6.5	5.5	5.5	5.0	4.5	3.0	6.5	4.5
8	12.5	10.5	---	---	7.0	6.5	6.0	5.0	3.5	2.5	7.0	4.5
9	13.0	11.5	---	---	7.0	6.5	5.0	4.0	4.5	3.5	7.5	4.5
10	12.5	11.5	---	---	7.0	6.0	4.0	3.5	5.0	4.0	8.0	5.0
11	11.5	11.0	---	---	6.0	6.0	4.0	3.5	6.0	4.5	7.0	4.5
12	11.0	10.5	---	---	6.5	6.0	4.0	3.0	6.5	5.5	7.5	5.0
13	10.5	9.5	---	---	7.5	6.5	4.0	3.0	6.5	5.0	7.5	4.0
14	9.5	8.5	---	---	7.5	7.0	5.5	3.5	6.5	5.0	8.0	5.5
15	8.5	7.0	---	---	7.0	6.0	6.0	5.0	6.5	5.5	8.0	4.5
16	9.0	7.0	---	---	6.0	5.0	5.5	4.5	6.0	4.5	6.5	5.5
17	7.5	6.5	---	---	6.5	5.5	5.0	3.5	6.0	4.0	8.0	5.0
18	7.5	7.0	---	---	5.5	4.0	5.5	4.0	6.0	3.5	8.0	5.0
19	9.5	7.5	---	---	4.0	3.0	6.5	5.5	6.0	5.5	8.0	5.0
20	10.0	9.0	---	---	4.5	3.0	6.5	5.5	6.5	5.5	8.0	5.5
21	9.5	8.5	---	---	6.0	4.5	6.0	5.0	7.0	6.0	6.0	4.5
22	8.5	7.5	7.0	5.5	7.0	6.0	5.0	4.0	8.0	6.5	6.5	5.0
23	8.0	7.0	7.5	6.5	7.0	6.5	4.5	3.0	8.5	6.5	6.5	6.0
24	10.0	7.0	7.0	6.0	6.5	5.5	4.0	3.0	8.0	6.0	7.0	5.5
25	10.0	9.0	6.5	6.0	6.0	5.5	3.0	2.0	7.0	4.5	7.0	5.5
26	9.5	8.0	7.0	6.0	6.5	6.0	3.0	2.0	7.0	5.0	6.0	5.0
27	9.0	8.5	8.0	6.5	6.0	5.5	3.0	1.5	7.0	4.5	6.5	4.5
28	9.5	8.5	8.0	7.5	6.0	5.5	3.5	2.5	7.5	4.5	8.0	5.5
29	8.5	7.5	8.0	7.5	7.0	6.0	4.0	3.0	---	---	7.0	5.5
30	8.0	7.5	8.0	7.0	7.5	7.0	3.0	2.0	---	---	7.5	6.5
31	8.0	7.0	---	---	7.0	6.0	4.0	3.0	---	---	8.5	7.0
MONTH	13.5	6.5	---	---	7.5	3.0	6.5	1.5	8.5	.0	8.5	4.0

SILETZ RIVER BASIN

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14304850 BIG ROCK CREEK NEAR VALSETZ, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

SILETZ RIVER BASIN

14305500 SILETZ RIVER AT SILETZ, OR

LOCATION.--Lat 44°42'55", long 123°53'10", in NW¼SW¼ sec.11, T.10 S., R.10 W., Lincoln County, Hydrologic Unit 17100204, on right bank, 1.8 mi downstream from Baker Creek, 1.5 mi east of Siletz, and at mile 42.6.

DRAINAGE AREA.--202 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1905 to November 1911, January to May 1912, January to June 1924, November 1924 to current year. Prior to December 1905 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1935: 1943, 1947-49(M), 1953-58(M).

GAGE.--Water-stage recorder. Datum of gage is 102.32 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1905, to Sept 30, 1938, nonrecording gage at various sites within 2.5 mi downstream at different datums.

REMARKS.--Estimated daily discharges: Apr. 2-8. Records excellent. Slight regulation from logponds. Small diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--66 years (water years 1906-11, 1926-85), 1,560 ft³/s, 104.88 in/yr, 1,130,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (1905-12, 1924-38).--Maximum discharge, 34,600 ft³/s Nov. 22, 1909, gage height, 24.6 ft, site and datum then in use; minimum observed discharge, 51 ft³/s Dec. 6, 7, 1929.

EXTREMES FOR PERIOD OF RECORD (1938-84).--Maximum discharge, 32,200 ft³/s Jan. 28, 1965, gage height, 27.32 ft, present site and datum; minimum discharge, 48 ft³/s Sept 25, 26, Oct. 4, 1965, Sept. 28, 29, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 20, 1921, reached a stage of 31.6 ft, at site 2.5 mi downstream at different datum, from floodmark, discharge, 40,800 ft³/s, from rating curve extended above 17,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	1130	*13,600	*14.40				

Minimum discharge, 78 ft³/s Sept. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	91	1220	5140	3010	484	850	4130	836	356	317	185	85		
2	91	7000	3630	2360	548	798	3250	788	321	298	154	84		
3	91	6590	2750	1910	478	781	2500	887	308	283	140	83		
4	110	4660	2150	1610	432	1200	2100	838	394	275	131	80		
5	133	3270	1760	1390	423	1270	1700	772	346	265	124	89		
6	110	2730	1490	1230	442	1190	1420	729	1510	255	121	213		
7	103	2740	1300	1110	932	1090	1240	686	10100	246	129	164		
8	113	2700	1170	1010	1020	1000	1080	647	5010	234	215	121		
9	202	3010	1130	924	1130	932	1040	617	2850	224	180	109		
10	551	4740	1570	852	1300	880	1170	590	1980	216	140	119		
11	678	4380	1380	793	2480	830	1120	578	1520	212	127	121		
12	651	4320	2070	740	3760	787	980	545	1250	205	120	192		
13	777	3900	2240	695	2580	743	885	516	1060	199	116	336		
14	741	3250	2240	686	2050	703	818	511	931	193	111	339		
15	727	2630	2620	715	2120	671	763	477	839	188	106	462		
16	577	2160	2260	657	1760	641	701	452	747	182	105	294		
17	480	1830	1950	627	1510	617	671	428	673	179	101	359		
18	502	2100	1700	601	1310	593	695	410	618	174	99	367		
19	854	1960	1490	579	1330	573	667	397	573	167	104	283		
20	1070	2150	1360	561	1470	598	686	392	535	163	104	237		
21	859	1980	1500	536	1340	743	845	374	494	158	98	210		
22	700	1750	1910	510	1290	1020	1900	356	469	153	94	191		
23	598	2120	2290	487	1210	3230	1670	341	442	149	92	176		
24	538	2580	2250	467	1190	3920	1450	340	420	145	90	162		
25	565	2740	1980	449	1140	2750	1310	338	407	142	89	150		
26	968	2630	1740	431	1050	2400	1260	322	389	138	88	139		
27	1500	6490	1930	417	968	2710	1180	309	369	131	82	132		
28	1840	11000	1940	415	898	2820	1080	325	353	127	82	125		
29	1480	8580	2810	428	---	2470	987	350	339	124	82	117		
30	1250	7740	5430	398	---	3740	903	349	336	147	82	114		
31	1240	---	4000	402	---	5090	---	393	---	209	88	---		
TOTAL	20190	114950	69180	27000	36645	47640	40201	15893	35939	6098	3579	5653		
MEAN	651	3832	2232	871	1309	1537	1340	513	1198	197	115	188		
MAX	1840	11000	5430	3010	3760	5090	4130	887	10100	317	215	462		
MIN	91	1220	1130	398	423	573	667	309	308	124	82	80		
CFSM	3.22	19.0	11.0	4.31	6.48	7.61	6.63	2.54	5.93	.98	.57	.93		
IN.	3.72	21.17	12.74	4.97	6.75	8.77	7.40	2.93	6.62	1.12	.66	1.04		
AC-FT	40050	228000	137200	53550	72690	94490	79740	31520	71290	12100	7100	11210		
CAL YR 1984	TOTAL	572804	MEAN	1565	MAX	11000	MIN	91	CFSM	7.75	IN.	105.49	AC-FT	1136000
WTR YR 1985	TOTAL	422968	MEAN	1159	MAX	11000	MIN	80	CFSM	5.74	IN.	77.89	AC-FT	839000

SILETZ RIVER BASIN

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14305500 SILETZ RIVER AT SILETZ, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: February 1979 to September 1985 (discontinued).

INSTRUMENTATION.--Temperature recorder since Feb. 28, 1979.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 25.5°C Aug. 10, 1981; minimum, 0.0°C Jan. 28-30, 1980.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 22.0°C July 18, 20, 23, 24, Aug. 16; minimum recorded, 5.0°C Mar. 8.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

SILETZ RIVER BASIN

14305500 SILETZ RIVER AT SILETZ, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

YAQUINA RIVER BASIN

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14306030 YAQUINA RIVER NEAR CHITWOOD, OR

LOCATION.--Lat 44°39'29", long 123°50'15", in NE¼SW¼ sec.31, T.10 S., R.9 W., Lincoln County, Hydrologic Unit 17100204, on left bank 200 ft below Thornton Creek and 1.1 mi west of Chitwood, and at mile 29.3.

DRAINAGE AREA.--71.0 mi².

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 28.43 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--13 years, 261 ft³/s, 49.92 in/yr, 189,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,150 ft³/s Nov. 16, 1973, gage height, 14.43 ft; minimum, 2.8 ft³/s Sept. 27, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	0300	*2,240	*8.42				

Minimum discharge, 10 ft³/s Aug. 28 to Sept. 1, Sept. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	12	187	1160	733	85	157	668	118	52	45	30	11		
2	12	1280	862	571	103	144	568	113	44	43	23	12		
3	11	1400	665	456	89	141	468	120	42	41	20	11		
4	14	1150	516	375	80	217	387	113	50	40	18	11		
5	17	847	416	322	80	248	331	103	43	38	17	13		
6	15	632	346	285	81	252	291	98	239	37	16	24		
7	13	638	302	256	191	236	258	92	1350	35	17	22		
8	15	643	272	228	373	210	230	87	889	34	21	16		
9	19	811	262	204	521	193	205	85	506	32	21	15		
10	39	1170	436	183	610	177	186	83	346	30	17	18		
11	73	1100	466	167	620	162	171	81	268	30	16	22		
12	68	1040	550	154	772	150	154	76	218	29	15	25		
13	61	1040	632	144	640	141	142	73	182	27	14	40		
14	62	905	577	137	492	132	132	73	156	26	14	42		
15	69	730	558	131	413	125	125	68	138	26	13	36		
16	53	572	523	121	349	119	118	65	122	25	13	28		
17	43	456	487	114	309	113	110	62	110	24	13	27		
18	48	443	445	109	277	107	107	61	99	23	14	31		
19	111	427	395	104	268	102	111	60	92	22	15	25		
20	157	492	355	100	279	106	108	59	85	21	14	20		
21	109	523	351	95	262	129	103	57	78	20	14	18		
22	82	468	343	91	254	150	120	54	73	20	13	17		
23	67	515	381	87	236	476	185	52	68	19	12	16		
24	61	740	408	84	226	923	183	50	63	19	12	15		
25	62	729	396	80	206	706	179	49	61	18	13	14		
26	140	701	360	78	190	577	170	48	58	19	13	14		
27	235	1220	405	75	178	734	160	46	55	18	12	13		
28	284	2080	591	76	167	943	148	50	52	18	11	14		
29	235	1610	719	79	---	787	134	50	49	17	11	13		
30	189	1630	1210	73	---	666	125	46	48	23	11	12		
31	180	---	960	74	---	713	---	63	---	35	11	---		
TOTAL	2556	26179	16349	5786	8351	10036	6377	2255	5636	854	474	595		
MEAN	82.5	873	527	187	298	324	213	72.7	188	27.5	15.3	19.8		
MAX	284	2080	1210	733	772	943	668	120	1350	45	30	42		
MIN	11	187	262	73	80	102	103	46	42	17	11	11		
CFSM	1.16	12.3	7.42	2.63	4.20	4.56	3.00	1.02	2.65	.39	.22	.28		
IN.	1.34	13.72	8.57	3.03	4.38	5.26	3.34	1.18	2.95	.45	.25	.31		
AC-FT	5070	51930	32430	11480	16560	19910	12650	4470	11180	1690	940	1180		
CAL YR 1984	TOTAL	121666	MEAN	332	MAX	2380	MIN	11	CFSM	4.68	IN.	63.75	AC-FT	241300
WTR YR 1985	TOTAL	85448	MEAN	234	MAX	2080	MIN	11	CFSM	3.30	IN.	44.77	AC-FT	169500

ALSEA RIVER BASIN

14306100 NORTH FORK ALSEA RIVER AT ALSEA, OR

LOCATION.--Lat 44°22'45", long 123°35'40", in SE¼ sec.1, T.14 S., R.8 W., Benton County, Hydrologic Unit 17100205, on left bank at Alsea, 0.2 mi upstream from bridge on Lobster Valley Road, 0.7 mi upstream from confluence with South Fork, and at mile 49.4.

DRAINAGE AREA.--63.0 mi².

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 272.31 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 24 to Jan. 9, July 11 to Aug. 26. Records good except for estimated daily discharges, which are poor. No regulation. Some diversions by pumping upstream from station.

AVERAGE DISCHARGE.--28 years, 282 ft³/s, 60.79 in/yr, 204,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s Dec. 22, 1964, gage height, 14.57 ft, from rating curve extended above 2,900 ft³/s on basis of slope-area measurement at gage height 11.80 ft; minimum discharge, 8.3 ft³/s June 8, Sept. 19, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0700	*3,130	*6.53	Nov. 28	0130	2,830	6.13

Minimum recorded discharge, 20 ft³/s Aug. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	24	123	1040	600	110	154	620	109	64	55	42	22		
2	24	1940	796	450	126	143	508	107	59	54	38	23		
3	24	1340	621	400	114	138	417	114	57	51	34	23		
4	27	868	505	350	101	188	351	105	61	49	30	22		
5	27	579	424	320	99	197	305	98	55	48	28	22		
6	27	462	371	290	99	187	271	96	352	48	27	27		
7	25	445	332	270	224	174	245	90	1080	46	29	27		
8	26	442	306	250	295	160	222	88	598	45	30	25		
9	33	669	309	240	329	150	205	84	359	43	30	26		
10	77	1610	478	203	352	142	190	82	266	42	28	28		
11	91	1250	432	185	702	133	184	84	212	40	26	28		
12	74	1550	624	174	987	124	167	80	179	40	24	35		
13	87	1120	636	164	608	117	152	77	155	38	23	46		
14	66	808	565	157	499	112	144	77	142	38	22	41		
15	64	615	544	148	537	106	136	73	129	37	21	37		
16	48	482	475	141	445	102	131	69	116	36	21	31		
17	41	407	417	135	368	96	124	68	107	35	22	32		
18	45	441	374	130	313	94	121	66	98	35	23	33		
19	87	407	338	125	305	90	126	66	92	34	24	32		
20	87	498	320	119	308	92	116	64	86	33	25	32		
21	68	480	332	114	282	126	114	62	82	32	24	32		
22	55	410	331	110	269	150	126	62	78	32	23	32		
23	47	419	350	106	254	504	216	61	75	31	22	31		
24	44	458	320	103	240	620	176	61	73	30	22	30		
25	46	571	300	98	221	444	155	59	71	30	22	30		
26	115	608	280	95	197	412	147	59	68	29	21	30		
27	195	1610	300	93	179	538	136	57	66	28	20	29		
28	242	2350	350	92	165	571	129	64	64	27	21	29		
29	157	1670	500	94	---	495	121	59	62	26	21	29		
30	120	1500	1100	88	---	561	114	57	61	30	22	29		
31	112	---	800	96	---	723	---	80	---	45	22	---		
TOTAL	2205	26132	14870	5940	8728	7843	6169	2378	4967	1187	787	893		
MEAN	71.1	871	480	192	312	253	206	76.7	166	38.3	25.4	29.8		
MAX	242	2350	1100	600	987	723	620	114	1080	55	42	46		
MIN	24	123	280	88	99	90	114	57	55	26	20	22		
CFSM	1.13	13.8	7.62	3.05	4.95	4.02	3.27	1.22	2.63	.61	.40	.47		
IN.	1.30	15.43	8.78	3.51	5.15	4.63	3.64	1.40	2.93	.70	.46	.53		
AC-FT	4370	51830	29490	11780	17310	15560	12240	4720	9850	2350	1560	1770		
CAL YR 1984	TOTAL	114861	MEAN	314	MAX	2940	MIN	23	CFSM	4.98	IN.	67.82	AC-FT	227800
WTR YR 1985	TOTAL	82099	MEAN	225	MAX	2350	MIN	20	CFSM	3.57	IN.	48.48	AC-FT	162800

ALSEA RIVER BASIN

255

14306340 EAST FORK LOBSTER CREEK NEAR ALSEA, OR

LOCATION.--Lat 44°14'53", long 123°38'07", in NE¼SE¼ sec.22, T.15 S., R.8 W., Benton County, Hydrologic Unit 17100205, on left bank 500 ft upstream from mouth, and 9 mi south of Alsea.

DRAINAGE AREA.--5.70 mi².

PERIOD OF RECORD.--July 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 680 ft, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 563 ft³/s Feb. 13, 1984, gage height, 3.46 ft; minimum, 0.70 ft³/s Oct. 1-4, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0500	*1,080	*3.81	Nov. 10	0300	366	3.21

Minimum, 0.70 ft³/s Oct. 1-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	.70	26	95	53	9.3	16	66	13	6.4	4.8	3.0	.84		
2	.70	546	64	40	11	15	53	12	5.8	4.5	2.7	.98		
3	.70	399	47	32	11	15	44	12	5.3	4.2	2.3	.92		
4	.93	128	35	27	9.7	18	32	12	5.6	3.9	2.1	.92		
5	1.1	61	28	24	9.5	19	27	11	5.6	3.7	2.0	.93		
6	1.1	45	25	22	9.3	20	23	11	89	3.7	1.9	1.7		
7	1.1	57	22	20	37	19	21	10	189	3.5	1.7	1.5		
8	1.5	46	20	18	40	17	19	9.8	78	3.5	1.8	1.2		
9	2.8	92	20	17	33	17	18	9.4	41	3.4	1.9	1.1		
10	8.3	251	42	17	31	16	17	9.1	28	3.0	1.7	1.2		
11	7.1	149	35	15	120	15	16	9.0	21	3.0	1.7	1.2		
12	8.5	245	55	15	121	14	15	8.7	18	3.0	1.6	1.8		
13	16	126	60	14	56	13	14	8.1	15	2.8	1.6	2.7		
14	11	85	48	14	46	13	14	8.1	13	2.8	1.5	1.9		
15	11	58	52	13	47	13	14	8.0	12	2.7	1.4	2.0		
16	5.6	41	43	12	37	12	13	7.5	11	2.7	1.4	2.0		
17	4.1	33	33	12	30	12	13	7.1	9.7	2.7	1.3	2.7		
18	5.5	36	29	11	25	11	12	7.1	8.7	2.5	1.3	2.7		
19	17	33	25	11	24	11	12	6.8	8.2	2.4	1.3	1.8		
20	16	48	22	11	25	10	12	6.8	7.6	2.2	1.3	1.6		
21	9.5	45	23	10	23	12	12	6.7	7.3	2.2	1.2	1.4		
22	6.5	33	24	9.6	23	13	13	6.4	7.0	2.2	1.2	1.3		
23	5.0	36	26	9.5	21	71	20	5.9	6.7	2.2	1.2	1.3		
24	4.3	43	27	9.2	20	69	19	5.9	6.5	2.1	1.2	1.2		
25	4.1	42	26	8.8	19	46	18	5.9	6.4	2.0	1.2	1.1		
26	20	40	24	8.8	19	39	17	5.8	5.7	2.0	1.2	1.1		
27	31	146	28	8.4	17	55	16	5.6	5.6	1.7	1.0	1.0		
28	39	240	37	8.4	16	56	15	6.4	5.3	1.7	.92	1.0		
29	21	168	90	8.4	---	47	14	6.2	5.1	1.7	.89	1.0		
30	15	150	152	8.2	---	55	14	5.8	5.0	2.6	.84	1.0		
31	15	---	74	8.3	---	76	---	7.3	---	3.6	.84	---		
TOTAL	291.13	3448	1331	495.6	889.8	835	613	254.4	638.5	89.0	47.19	43.09		
MEAN	9.39	115	42.9	16.0	31.8	26.9	20.4	8.21	21.3	2.87	1.52	1.44		
MAX	39	546	152	53	121	76	66	13	189	4.8	3.0	2.7		
MIN	.70	26	20	8.2	9.3	10	12	5.6	5.0	1.7	.84	.84		
CFSM	1.65	20.2	7.53	2.81	5.58	4.72	3.58	1.44	3.74	.50	.27	.25		
IN.	1.90	22.50	8.69	3.23	5.81	5.45	4.00	1.66	4.17	.58	.31	.28		
AC-FT	577	6840	2640	983	1760	1660	1220	505	1270	177	94	85		
CAL YR 1984	TOTAL	11681.86	MEAN	31.9	MAX	546	MIN	.70	CFSM	5.60	IN.	76.24	AC-FT	23170
WTR YR 1985	TOTAL	8975.71	MEAN	24.6	MAX	546	MIN	.70	CFSM	4.32	IN.	58.58	AC-FT	17800

ALSEA RIVER BASIN

14306400 FIVE RIVERS NEAR FISHER, OR

LOCATION.--Lat 44°20'15", long 123°49'35", W-1/2 sec.19, T.14 S., R.9 W., Lincoln County, Hydrologic Unit 17100205, in Siuslaw National Forest, on left bank at downstream side of abandoned highway bridge, 500 ft downstream from Lobster Creek, 3.2 mi north of Fisher, and at mile 3.3.

DRAINAGE AREA.--114 mi².

PERIOD OF RECORD.--August 1958 to September 1963, October 1967 to current year.

REVISED RECORDS.--WSP 1718: 1959.

GAGE.--Water-stage recorder. Elevation of gage is 130 ft from topographic map.

REMARKS.--No estimated daily discharges. Records excellent. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--23 years, 558 ft³/s, 66.47 in/yr, 404,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,200 ft³/s Jan. 21, 1972, gage height, 21.08 ft; minimum discharge, 16 ft³/s Oct. 1, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 22.3 ft, from floodmarks, discharge, 19,000 ft³/s from rating curve extended above 10,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0800	*6,700	*13.20	Nov. 27	2030	4,770	11.17
Nov. 10	0800	4,870	11.28				

Minimum discharge, 29 ft³/s Aug. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	34	291	2090	1050	192	283	816	191	100	107	67	31		
2	34	4760	1570	871	212	268	710	188	92	101	56	35		
3	34	3320	1240	739	200	258	624	209	90	96	52	33		
4	36	1790	1010	647	181	375	554	191	96	93	48	31		
5	41	1150	843	579	175	480	500	176	89	90	45	31		
6	38	969	717	526	177	457	456	169	708	88	44	49		
7	36	1110	633	482	469	410	418	161	2450	86	46	43		
8	40	1040	577	443	781	367	387	154	1250	82	50	36		
9	61	1450	559	409	814	338	358	150	710	79	47	41		
10	172	4170	868	380	975	314	334	148	513	75	43	56		
11	230	2700	803	351	1370	292	344	146	410	74	42	45		
12	183	3120	973	329	1860	275	304	137	345	72	41	78		
13	244	2350	1050	309	1140	261	282	134	299	69	40	124		
14	198	1700	943	294	863	250	266	135	269	68	39	92		
15	190	1300	982	280	725	238	253	127	246	66	38	82		
16	130	1040	896	265	614	229	242	122	224	64	37	62		
17	101	879	794	253	539	219	229	117	208	63	37	63		
18	105	917	707	242	484	211	225	113	193	61	37	66		
19	184	812	631	233	480	203	249	112	179	59	41	53		
20	236	920	589	223	488	209	221	110	168	57	38	47		
21	175	898	585	214	444	254	215	107	159	56	36	43		
22	135	770	544	206	418	285	226	102	150	55	34	41		
23	113	851	535	199	392	923	338	99	143	55	33	40		
24	101	1010	515	192	375	1250	303	100	138	53	33	38		
25	102	1140	496	184	347	839	277	98	135	51	34	37		
26	242	1100	472	179	327	833	254	95	128	50	32	35		
27	411	2830	550	175	308	1330	239	94	124	48	31	34		
28	535	4170	692	179	293	1410	224	111	119	46	31	34		
29	360	3070	1090	181	---	1110	210	106	116	45	31	33		
30	264	2910	2210	167	---	958	200	97	115	57	31	33		
31	239	---	1380	174	---	928	---	116	---	74	31	---		
TOTAL	5004	54537	27544	10955	15643	16057	10258	4115	9966	2140	1245	1466		
MEAN	161	1818	889	353	559	518	342	133	332	69.0	40.2	48.9		
MAX	535	4760	2210	1050	1860	1410	816	209	2450	107	67	124		
MIN	34	291	472	167	175	203	200	94	89	45	31	31		
CFSM	1.41	15.9	7.80	3.10	4.90	4.54	3.00	1.17	2.91	.61	.35	.43		
IN.	1.63	17.80	8.99	3.57	5.10	5.24	3.35	1.34	3.25	.70	.41	.48		
AC-FT	9930	108200	54630	21730	31030	31850	20350	8160	19770	4240	2470	2910		
CAL YR 1984	TOTAL	216897	MEAN	593	MAX	5980	MIN	33	CFSM	5.20	IN.	70.78	AC-FT	430200
WTR YR 1985	TOTAL	158930	MEAN	435	MAX	4760	MIN	31	CFSM	3.82	IN.	51.86	AC-FT	315200

ALSEA RIVER BASIN

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14306500 ALSEA RIVER NEAR TIDEWATER, OR
(National stream quality accounting network station)

LOCATION.--Lat 44°23'10", long 123°49'50", in NW¼NW¼ sec.6, T.14 S., R.9 W., Lincoln County, Hydrologic Unit 17100205, on right bank 0.9 mi downstream from Grass Creek, 2.5 mi upstream from Scott Creek, 3.8 mi southeast of Tidewater, and at mile 21.0.

DRAINAGE AREA.--334 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 48.16 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 16, 1939, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records excellent. No regulation. Diversion for irrigation upstream from station.

AVERAGE DISCHARGE.--46 years, 1,526 ft³/s, 62.05 in/yr, 1,106,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,800 ft³/s Dec. 22, 1964, gage height, 27.44 ft; minimum discharge, 45 ft³/s Sept. 26, 27, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood on or about Feb. 3, 1890, reached a stage of 29.5 ft, from floodmark (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 13,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1200	*14,400	*15.41	No other peak greater than base discharge.			
Minimum discharge, 90 ft ³ /s Aug. 28-30, Sept. 29, 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	98	648	5900	3100	620	916	2770	612	360	328	220	95		
2	100	9750	4430	2550	718	871	2370	593	313	310	192	102		
3	99	8530	3470	2180	679	834	2040	638	297	295	175	103		
4	104	5120	2800	1920	607	1090	1780	612	312	284	156	98		
5	112	3180	2350	1720	583	1360	1590	565	294	275	145	96		
6	110	2520	2020	1570	590	1300	1440	544	1350	267	140	129		
7	105	2720	1800	1440	1290	1180	1310	520	6110	261	143	136		
8	108	2590	1640	1320	2040	1070	1210	500	3430	252	156	116		
9	152	3410	1570	1230	2120	1010	1130	486	1950	241	156	122		
10	316	9480	2310	1140	2400	956	1060	477	1410	232	141	152		
11	622	7340	2250	1070	3630	901	1040	475	1140	227	133	136		
12	475	8280	2750	1020	5080	851	962	450	984	221	127	186		
13	566	6630	3050	958	3140	807	901	439	869	214	122	304		
14	498	4720	2700	922	2480	774	854	440	779	210	118	260		
15	488	3560	2750	881	2310	738	814	422	719	205	113	240		
16	347	2820	2480	836	1980	712	779	400	661	201	109	189		
17	265	2350	2210	800	1720	685	741	379	614	194	110	187		
18	252	2440	2000	768	1520	658	719	368	569	190	109	195		
19	450	2240	1790	738	1460	636	766	362	532	187	115	167		
20	637	2510	1670	712	1530	641	706	361	504	178	119	143		
21	477	2530	1710	685	1400	781	680	352	478	173	112	131		
22	360	2200	1640	659	1320	928	723	336	457	170	106	122		
23	291	2220	1650	638	1250	2290	997	324	438	166	103	116		
24	254	2650	1630	616	1200	3710	965	326	421	164	101	112		
25	251	3050	1570	595	1130	2530	882	320	412	158	102	106		
26	575	3240	1480	576	1060	2290	813	311	393	155	101	101		
27	1030	6740	1620	564	1010	3290	762	302	378	148	95	98		
28	1440	11700	2030	568	951	3670	720	336	362	143	91	96		
29	1020	8550	2710	575	---	2970	672	354	349	138	91	93		
30	735	8090	6270	544	---	2710	639	313	348	162	94	91		
31	666	---	4150	559	---	3150	---	370	---	218	96	---		
TOTAL	13003	141808	78400	33454	45818	46309	32835	13287	27233	6567	3891	4222		
MEAN	419	4727	2529	1079	1636	1494	1095	429	908	212	126	141		
MAX	1440	11700	6270	3100	5080	3710	2770	638	6110	328	220	304		
MIN	98	648	1480	544	583	636	639	302	294	138	91	91		
CFSM	1.25	14.2	7.57	3.23	4.90	4.47	3.28	1.28	2.72	.63	.38	.42		
IN.	1.45	15.79	8.73	3.73	5.10	5.16	3.66	1.48	3.03	.73	.43	.47		
AC-FT	25790	281300	155500	66360	90880	91850	65130	26350	54020	13030	7720	8370		
CAL YR 1984	TOTAL	610483	MEAN	1668	MAX	14800	MIN	98	CFSM	4.99	IN.	67.99	AC-FT	1211000
WTR YR 1985	TOTAL	446827	MEAN	1224	MAX	11700	MIN	91	CFSM	3.66	IN.	49.77	AC-FT	886300

ALSEA RIVER BASIN

14306500 ALSEA RIVER NEAR TIDEWATER, OR--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1979 to September 1981.

WATER TEMPERATURES: October 1979 to September 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT 25...	1115	258	65	7.40	10.0	10.9	41	360	21	0	5.7
JAN 09...	1000	1230	54	7.20	5.5	13.0	K16	K10	16	0	4.7
APR 09...	1200	1120	54	7.20	12.0	11.6	K18	K13	16	0	4.2
JUL 30...	0930	144	65	7.20	19.0	8.4	44	1600	20	0	5.0
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 25...	1.7	5.0	.80	22	3.1	4.4	<.10	.020	.38	.30	
JAN 09...	1.1	4.6	.80	18	1.8	3.8	<.10	<.010	.53	<.20	
APR 09...	1.4	4.5	.70	18	1.6	3.9	<.10	.040	.36	.50	
JUL 30...	1.9	5.8	.90	25	2.7	4.5	<.10	.060	.14	.30	
DATE		PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	TUR- BID- ITY (NTU)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 25...	.010	.010	13	51	47	36	1.5	4	2.8	83	
JAN 09...	.010	.020	16	34	44	113	.90	2	6.6	--	
APR 09...	.010	.010	14	41	41	124	2.1	4	12	81	
JUL 30...	<.010	.020	14	49	50	19	1.0	3	1.2	97	

ALSEA RIVER BASIN

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14306500 ALSEA RIVER NEAR TIDEWATER, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 25...	20	<1	9	<.5	<1	<1	<3	2	110	21
JAN 09...	20	<1	9	<.5	<1	1	<3	<1	110	5
APR 09...	20	<1	18	<.5	<1	<1	<3	2	42	2
JUL 30...	20	<1	20	<.5	<1	4	<3	2	62	1
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 25...	<4	7	<.1	<10	7	<1	<1	46	<6	<3
JAN 09...	<4	4	<.1	<10	3	<1	<1	29	<6	12
APR 09...	<4	5	<.1	<10	3	<1	<1	35	<6	9
JUL 30...	<4	2	<.1	<10	1	<1	<1	46	<6	11

K - Results based on colony count outside acceptable range (non-ideal colony count).

BIG CREEK BASIN

14306900 BIG CREEK NEAR ROOSEVELT BEACH, OR

LOCATION.--Lat 44°10'05", long 124°03'55", in SE¼SE¼ sec.13, T.16 S., R.12 W., Lane County, Hydrologic Unit 17100205, on right bank 1.0 mi downstream from Frying Pan Creek, 2.5 mi east of Roosevelt Beach.

DRAINAGE AREA.--11.9 mi².

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 141 ft, by barometer.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--13 years, 94.5 ft³/s, 107.84 in/yr, 68,470 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,150 ft³/s Nov. 30, 1975, gage height, 6.90 ft; minimum, 3.8 ft³/s Oct. 15, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	0800	*655	*5.49				

Minimum discharge, 6.4 ft³/s Aug. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	8.7	119	332	170	44	46	229	42	20	25	13	7.0		
2	8.7	332	262	146	38	44	190	45	19	24	11	7.0		
3	8.7	237	206	124	35	50	160	46	21	22	10	6.6		
4	10	179	166	109	32	76	134	40	23	21	10	6.7		
5	8.0	143	138	86	30	89	118	39	20	21	9.8	10		
6	7.4	157	118	89	39	84	101	38	262	20	9.7	22		
7	7.4	152	106	77	86	79	91	36	511	20	11	9.6		
8	15	173	90	73	89	72	80	35	281	18	11	8.3		
9	12	244	99	66	86	70	72	34	180	19	9.8	8.0		
10	84	520	127	62	101	66	67	34	136	18	9.4	9.3		
11	75	408	110	58	138	59	67	32	110	17	9.5	8.7		
12	75	424	137	55	180	58	59	30	96	17	9.0	26		
13	80	354	137	51	149	54	54	30	81	16	9.0	29		
14	63	269	151	50	133	50	51	30	71	16	8.7	23		
15	52	214	160	47	117	49	48	28	65	15	8.6	18		
16	42	175	153	44	104	47	45	27	59	14	8.2	15		
17	38	160	143	42	89	44	43	26	54	14	8.0	20		
18	48	148	128	40	83	42	41	25	48	14	8.1	13		
19	77	132	115	39	84	40	44	24	45	13	8.3	12		
20	85	149	111	37	83	44	39	24	42	13	8.1	11		
21	70	131	110	36	77	42	39	24	40	13	8.0	11		
22	60	122	101	35	72	58	49	23	38	13	7.7	9.8		
23	51	170	102	33	68	158	80	22	36	12	7.4	9.4		
24	48	176	90	32	68	154	60	22	35	12	7.4	9.0		
25	63	189	93	30	60	123	55	21	32	11	7.4	8.3		
26	111	175	89	30	56	160	52	21	30	11	7.0	8.4		
27	107	406	101	29	51	184	51	20	30	10	7.0	8.5		
28	115	414	99	29	47	192	48	26	28	10	6.7	8.3		
29	104	416	164	31	---	172	45	22	27	10	6.7	7.4		
30	95	429	240	30	---	209	43	21	26	11	7.5	7.4		
31	87	---	202	30	---	252	---	23	---	16	7.4	---		
TOTAL	1715.9	7317	4380	1810	2239	2867	2255	910	2466	486	270.4	357.7		
MEAN	55.4	244	141	58.4	80.0	92.5	75.2	29.4	82.2	15.7	8.72	11.9		
MAX	115	520	332	170	180	252	229	46	511	25	13	29		
MIN	7.4	119	89	29	30	40	39	20	19	10	6.7	6.6		
CFSM	4.66	20.5	11.8	4.91	6.72	7.77	6.32	2.47	6.91	1.32	.73	.00		
IN.	5.36	22.87	13.69	5.66	7.00	8.96	7.05	2.84	7.71	1.52	.85	1.12		
AC-FT	3400	14510	8690	3590	4440	5690	4470	1800	4890	964	536	709		
CAL YR 1984	TOTAL	39303.0	MEAN	107	MAX	853	MIN	7.4	CFSM	8.99	IN.	122.86	AC-FT	77960
WTR YR 1985	TOTAL	27074.0	MEAN	74.2	MAX	520	MIN	6.6	CFSM	6.24	IN.	84.63	AC-FT	53700

SIUSLAW RIVER BASIN

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14307580 LAKE CREEK NEAR DEADWOOD, OR

LOCATION.--Lat 44°04'58", long 123°47'05", in NW¼NW¼ sec.21, T.17 S., R.9 W., Lane County, Hydrologic Unit 17100206, on right bank 0.2 mi upstream from Indian Creek, 1.5 mi southwest of Deadwood, and at mile 2.6.

DRAINAGE AREA.--174 mi².

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 178.86 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Mar. 1-13. Records good. Flow slightly regulated by natural storage in Triangle Lake. Several diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--18 years, 731 ft³/s, 57.05 in/yr, 529,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,400 ft³/s Dec. 25, 1980, gage height, 15.86 ft; minimum, 12 ft³/s Aug. 14, 15, 17, 18, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0900	*6,450	*7.87	Nov. 30	0130	4,850	6.69
Nov. 10	0600	5,630	7.26				

Minimum, 32 ft³/s Aug. 29 to Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	43	299	3150	1780	278	365	1480	254	132	118	65	34		
2	43	4100	2380	1390	307	360	1250	246	123	111	59	38		
3	42	3760	1840	1150	306	360	1050	252	119	103	55	39		
4	47	2500	1470	975	288	560	897	248	122	98	51	36		
5	57	1620	1200	857	276	640	778	235	115	94	49	36		
6	51	1220	1010	768	274	620	687	223	927	91	48	50		
7	49	1440	882	698	739	520	612	211	2770	88	48	52		
8	54	1310	792	636	1380	480	555	201	1740	85	53	45		
9	73	1820	766	583	1370	440	506	194	1010	81	50	54		
10	144	4740	1090	536	1470	390	469	189	671	77	46	61		
11	206	3580	1140	497	1790	360	459	186	499	75	43	58		
12	192	4870	1400	467	2480	340	422	177	409	72	41	68		
13	250	3540	1570	442	1760	310	392	172	351	69	39	96		
14	216	2700	1390	427	1260	305	368	170	313	67	38	81		
15	216	1960	1350	407	1030	297	350	162	283	65	37	81		
16	160	1490	1220	388	867	286	340	155	258	63	37	73		
17	126	1200	1070	371	749	275	324	147	239	62	37	69		
18	128	1260	953	356	658	265	314	143	217	60	38	70		
19	220	1170	843	343	622	256	336	140	201	58	41	65		
20	280	1280	770	332	624	260	320	138	186	56	40	61		
21	231	1270	747	319	572	306	308	133	175	54	38	57		
22	180	1100	714	309	530	357	312	126	164	52	37	54		
23	147	1100	697	299	493	1190	395	122	154	51	36	51		
24	125	1290	679	289	467	1820	378	121	147	50	36	49		
25	116	1430	659	279	444	1330	355	119	143	48	38	46		
26	253	1430	633	271	419	1240	335	116	137	47	35	43		
27	456	2770	728	265	397	2090	315	113	130	45	33	41		
28	788	4490	957	269	382	2120	298	138	125	42	33	40		
29	562	4120	1500	270	---	1640	280	134	122	42	33	38		
30	396	4300	3320	260	---	1490	266	121	123	45	32	37		
31	323	---	2390	267	---	1630	---	142	---	64	32	---		
TOTAL	6174	69159	39310	16500	22232	22902	15151	5228	12105	2133	1298	1623		
MEAN	199	2305	1268	532	794	739	505	169	404	68.8	41.9	54.1		
MAX	788	4870	3320	1780	2480	2120	1480	254	2770	118	65	96		
MIN	42	299	633	260	274	256	266	113	115	42	32	34		
CFSM	1.14	13.2	7.29	3.06	4.56	4.25	2.90	.97	2.32	.40	.24	.31		
IN.	1.32	14.79	8.40	3.53	4.75	4.90	3.24	1.12	2.59	.46	.28	.35		
AC-FT	12250	137200	77970	32730	44100	45430	30050	10370	24010	4230	2570	3220		
CAL YR 1984	TOTAL	296058	MEAN	809	MAX	8130	MIN	42	CFSM	4.65	IN.	63.30	AC-FT	587200
WTR YR 1985	TOTAL	213815	MEAN	586	MAX	4870	MIN	32	CFSM	3.37	IN.	45.71	AC-FT	424100

SIUSLAW RIVER BASIN

14307620 SIUSLAW RIVER NEAR MAPLETON, OR
(National stream quality accounting network station)

LOCATION.--Lat 44°03'45", long 123°52'55", in SW¼ sec. 27, T. 17 S., R. 10 W., Lane County, Hydrologic Unit 17100206, on right bank 250 ft above Shoemaker Creek, 2.5 mi northwest of Mapleton, and at mile 23.7.

DRAINAGE AREA.--588 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 41 ft, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversions upstream from station.

AVERAGE DISCHARGE.--18 years, 2,181 ft³/s, 50.37 in/yr, 1,580,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,400 ft³/s Jan. 21, 1972, gage height, 28.45 ft; minimum, 45 ft³/s Aug. 18, 19, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1964 reached a stage of about 28 ft, from information by local residents (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1130	16,300	15.18	Nov. 12	1100	15,700	14.87
Nov. 10	0930	*17,500	*15.82	Nov. 28	0830	15,000	14.48

Minimum discharge, 95 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	158	838	10900	4770	967	1200	4470	783	457	354	246	112		
2	158	10600	7800	3770	1080	1160	3710	756	427	335	227	118		
3	158	9870	5630	3280	1060	1120	3100	774	411	319	203	127		
4	166	6240	4410	2790	1010	1350	2600	762	417	308	189	125		
5	191	3810	3650	2480	968	1640	2250	714	399	296	178	138		
6	190	2910	3130	2260	956	1600	2010	691	2150	285	169	154		
7	179	3660	2730	2100	1840	1480	1830	658	7300	278	164	163		
8	188	3410	2460	1980	5320	1360	1670	633	4640	268	176	149		
9	245	4190	2380	1850	5380	1270	1560	614	2520	260	182	170		
10	411	14600	3090	1730	5080	1200	1450	599	1720	251	170	203		
11	664	10600	3940	1630	5010	1140	1420	594	1340	240	157	192		
12	623	13800	4510	1540	6690	1080	1310	567	1110	233	152	199		
13	757	10200	5220	1460	5430	1030	1220	550	964	224	145	298		
14	680	7230	4530	1420	3990	988	1160	545	856	217	142	281		
15	652	5350	4130	1380	3280	950	1110	526	779	210	139	276		
16	526	4020	3670	1320	2690	919	1070	503	716	204	136	247		
17	437	3250	3260	1270	2300	889	1020	484	661	198	133	230		
18	430	3420	2920	1220	2060	862	985	470	613	195	133	215		
19	698	3500	2580	1190	1920	834	1030	460	570	193	136	193		
20	924	3770	2370	1160	1910	840	989	455	532	187	143	176		
21	745	3970	2310	1120	1790	938	950	441	503	181	142	164		
22	593	3530	2210	1090	1680	1080	965	426	477	179	138	145		
23	493	3290	2150	1060	1580	2900	1220	399	452	174	133	138		
24	428	3810	2080	1030	1500	6090	1190	403	432	172	128	133		
25	399	4190	2010	997	1420	4750	1100	404	420	168	127	126		
26	740	4570	1950	967	1350	3970	1020	389	407	163	129	118		
27	1230	8050	2100	946	1290	6640	965	377	388	160	125	111		
28	1920	14700	2900	942	1240	7600	913	436	378	154	118	108		
29	1730	13100	3880	942	---	6110	863	469	368	148	117	100		
30	1250	14200	8410	934	---	5080	819	422	366	148	112	96		
31	987	---	6390	936	---	5180	---	456	---	204	112	---		
TOTAL	18950	198678	119700	51564	70791	73250	45969	16760	32773	6906	4701	5005		
MEAN	611	6623	3861	1663	2528	2363	1532	541	1092	223	152	167		
MAX	1920	14700	10900	4770	6690	7600	4470	783	7300	354	246	298		
MIN	158	838	1950	934	956	834	819	377	366	148	112	96		
CFSM	1.04	11.3	6.57	2.83	4.30	4.02	2.61	.92	1.86	.38	.26	.28		
IN.	1.20	12.57	7.57	3.26	4.48	4.63	2.91	1.06	2.07	.44	.30	.32		
AC-FT	37590	394100	237400	102300	140400	145300	91180	33240	65010	13700	9320	9930		
CAL YR 1984	TOTAL	888648	MEAN	2428	MAX	27900	MIN	155	CFSM	4.13	IN.	56.22	AC-FT	1763000
WTR YR 1985	TOTAL	645047	MEAN	1767	MAX	14700	MIN	96	CFSM	3.01	IN.	40.81	AC-FT	1279000

SIUSLAW RIVER BASIN

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14307620 SIUSLAW RIVER NEAR MAPLETON, OR--continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1967 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1978 to September 1981.

WATER TEMPERATURES: November 1967 to September 1975. October 1977 to September 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	
NOV 15...	1430	5260	42	--	9.0	11.9	32	37	10	0	2.7	
JAN 08...	1415	1950	39	7.20	5.0	13.4	K8	25	11	0	2.6	
APR 10...	1030	1550	41	7.20	12.0	11.3	25	K12	11	0	2.8	
JUL 31...	0930	225	47	7.20	18.0	9.4	330	1100	13	0	3.1	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV 15...	.90	3.4	.70	11	3.0	3.6	<.10	.010	.43	.30	<.010	
JAN 08...	1.0	3.1	.70	12	2.3	3.7	<.10	.010	.30	<.20	<.010	
APR 10...	1.0	3.7	.70	12	1.5	3.7	<.10	.040	.22	.30	<.010	
JUL 31...	1.3	4.7	.90	18	2.4	4.6	<.10	.040	<.10	.40	.010	
DATE		PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	TUR- BID- ITY (NTU)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	
NOV 15...	<.010	.020	11	32	32	454	6.8	15	213	62		
JAN 08...	.010	.010	13	19	34	100	2.0	2	11	--		
APR 10...	.010	<.010	12	34	33	142	2.6	5	21	72		
JUL 31...	<.010	.020	11	34	39	21	1.3	3	1.8	74		

SIUSLAW RIVER BASIN

14307620 SIUSLAW RIVER NEAR MAPLETON, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 15...	130	<1	18	<.5	<1	<1	<3	1	130	<1
JAN 08...	<10	<1	8	.6	<1	1	<3	5	94	7
APR 10...	50	<1	19	<.5	<1	<1	<3	1	87	1
JUL 31...	20	<1	22	<.5	<1	<1	<3	3	89	1
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 15...	<4	8	<.1	<10	<1	<1	<1	32	<6	4
JAN 08...	<4	2	<.1	<10	1	1	<1	29	<6	8
APR 10...	<4	5	<.1	<10	3	<1	<1	33	<6	9
JUL 31...	<4	2	<.1	<10	1	<1	<1	41	<6	9

K - Results based on colony count outside acceptable range (non-ideal colony count).

SIUSLAW RIVER BASIN

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14307645 NORTH FORK SIUSLAW RIVER NEAR MINERVA, OR

LOCATION.--Lat 44°02'50", long 124°00'10", in NW¼SW¼ sec.34, T.17 S., R.11 W., Lane County, Hydrologic Unit 17100206, on left bank 10 ft downstream from county road bridge, 0.3 mi upstream from Condon Creek, 2.7 mi southwest of Minerva, and at mile 13.09.

DRAINAGE AREA.--41.2 mi².

PERIOD OF RECORD.--October 1967 to September 1985 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 40 ft, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No regulation. Small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--18 years, 297 ft³/s, 97.89 in/yr, 215,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft³/s Dec. 25, 1980, gage height, 24.36 ft; minimum, 11 ft³/s Sept. 9-11, 17, 18, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1100	1,840	15.36	Nov. 27	1830	2,030	16.31
Nov. 10	1100	*2,400	*17.99	June 7	1300	2,270	17.47

Minimum, 14 ft³/s Aug. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	19	219	1200	580	128	147	862	115	52	66	42	16		
2	19	1450	895	469	139	139	646	113	47	63	32	18		
3	19	909	714	394	125	139	507	119	51	60	30	16		
4	26	594	568	339	114	219	408	111	64	59	27	16		
5	28	431	465	302	110	264	344	104	53	57	25	16		
6	21	447	390	274	111	259	299	100	796	55	25	42		
7	19	616	340	251	401	231	265	93	2030	53	26	26		
8	30	577	306	230	548	204	237	90	1050	51	31	21		
9	46	824	306	213	435	187	216	87	527	49	27	21		
10	179	2150	474	198	514	172	199	85	353	48	25	37		
11	187	1420	415	184	553	160	197	85	273	46	24	23		
12	166	1400	613	172	677	150	173	81	225	44	23	36		
13	211	1140	601	164	497	142	159	78	192	42	22	72		
14	151	819	529	167	404	135	149	76	168	41	21	62		
15	133	620	555	158	360	129	143	72	151	40	21	55		
16	109	474	509	146	305	124	138	70	136	39	21	41		
17	94	396	454	141	271	119	129	68	122	38	21	46		
18	109	413	405	136	244	112	128	66	116	36	22	37		
19	236	350	357	130	251	107	133	64	110	35	23	31		
20	281	471	330	125	254	118	122	64	105	35	22	30		
21	179	432	348	120	228	130	118	61	98	34	19	27		
22	131	354	330	116	213	153	123	58	93	33	18	25		
23	108	464	326	112	198	585	282	56	88	33	18	28		
24	95	593	309	109	191	671	204	55	84	32	18	29		
25	106	672	295	106	178	449	175	56	81	31	19	27		
26	340	622	279	103	168	485	158	54	79	31	17	27		
27	368	1370	319	101	159	754	148	53	75	29	17	22		
28	566	1880	346	104	151	752	138	67	73	29	16	22		
29	381	1540	533	108	---	593	128	62	71	28	16	23		
30	270	1680	1030	99	---	662	120	58	70	32	16	25		
31	225	---	757	98	---	1050	---	63	---	46	16	---		
TOTAL	4852	25327	15298	5949	7927	9541	7048	2384	7433	1315	700	917		
MEAN	157	844	493	192	283	308	235	76.9	248	42.4	22.6	30.6		
MAX	566	2150	1200	580	677	1050	862	119	2030	66	42	72		
MIN	19	219	279	98	110	107	118	53	47	28	16	16		
CFSM	3.81	20.5	12.0	4.66	6.87	7.48	5.70	1.87	6.02	1.03	.55	.74		
IN.	4.38	22.87	13.81	5.37	7.16	8.61	6.36	2.15	6.71	1.19	.63	.83		
AC-FT	9620	50240	30340	11800	15720	18920	13980	4730	14740	2610	1390	1820		
CAL YR 1984	TOTAL	133598	MEAN	365	MAX	3900	MIN	13	CFSM	8.86	IN.	120.63	AC-FT	265000
WTR YR 1985	TOTAL	88691	MEAN	243	MAX	2150	MIN	16	CFSM	5.90	IN.	80.08	AC-FT	175900

UMPQUA RIVER BASIN

14307700 JACKSON CREEK NEAR TILLER, OR

LOCATION.--Lat 42°57'15", long 122°49'40", in SW¼NE¼ sec.21 T.30 S., R.1 W., Douglas County, Hydrologic Unit 17100302, on right bank 0.5 mi upstream from Chapman Creek, 0.8 mi downstream from Beaver Creek, 6.5 mi northeast of Tiller, and at mile 3.0. Records include flow of Chapman Creek.

DRAINAGE AREA.--152 mi², at cableway 0.6 mi downstream where all discharge measurements are made.

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 1935: 1956-57(M).

GAGE.--Water-stage recorder. Datum of gage is 1,240.25 ft above National Geodetic Vertical Datum of 1929 (levels by Douglas County Water Resources Department).

REMARKS.--Estimated daily discharges: Jan. 6 to Feb. 19. Records excellent except those for period of estimated daily record, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--30 years, 320 ft³/s, 28.59 in/yr, 231,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,100 ft³/s Dec. 22, 1964, gage height, 18.0 ft, from floodmark, from rating curve extended above 5,100 ft³/s and basin runoff comparison; minimum, 11 ft³/s Jan. 6, 1977, Nov. 13, 1978, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1430	*5,160	*8.61	No other peak greater than base discharge.			
Minimum, 17 ft ³ /s Aug. 28-31, Sept. 1.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	25	126	1020	294	130	268	797	374	182	51	30	18		
2	25	1060	706	266	130	258	920	386	172	49	28	23		
3	24	1260	611	269	130	236	843	382	159	47	26	25		
4	25	894	517	306	125	234	694	327	169	46	25	21		
5	26	530	433	344	120	220	620	294	160	44	24	20		
6	26	460	373	385	120	216	631	276	203	43	23	21		
7	25	493	351	425	170	211	679	259	256	42	22	30		
8	24	465	345	390	270	200	638	240	295	41	22	27		
9	36	502	357	350	220	193	607	227	244	38	22	26		
10	36	640	711	310	190	192	600	214	209	36	22	35		
11	84	905	713	270	230	194	552	205	184	36	21	28		
12	65	3620	952	240	650	193	487	190	167	35	21	25		
13	97	2360	766	225	580	187	461	187	152	34	20	24		
14	91	1380	584	220	500	182	482	193	140	33	20	39		
15	91	875	575	215	540	185	496	195	131	32	19	42		
16	68	621	495	210	500	195	456	207	121	31	19	34		
17	64	492	417	260	400	213	377	208	112	30	19	38		
18	75	549	369	330	370	215	338	225	103	30	19	55		
19	186	524	321	310	360	216	318	231	97	30	21	37		
20	296	922	292	280	354	213	285	222	90	29	21	29		
21	217	754	273	250	328	209	371	213	83	27	21	26		
22	149	554	252	225	330	207	505	215	79	27	20	25		
23	110	539	245	205	338	274	495	223	73	27	19	23		
24	99	618	239	190	331	437	442	230	70	26	19	22		
25	89	533	231	180	321	401	372	208	67	26	18	22		
26	141	473	222	165	299	374	326	192	65	25	18	21		
27	185	1330	223	155	274	343	327	177	62	25	17	20		
28	242	2060	236	150	253	337	363	187	59	24	17	20		
29	280	1230	234	140	---	347	363	183	56	25	17	19		
30	187	1400	341	130	---	347	361	156	54	27	17	19		
31	149	---	339	130	---	513	---	200	---	29	17	---		
TOTAL	3237	28169	13743	7819	8563	8010	15206	7226	4014	1045	644	814		
MEAN	104	939	443	252	306	258	507	233	134	33.7	20.8	27.1		
MAX	296	3620	1020	425	650	513	920	386	295	51	30	55		
MIN	24	126	222	130	120	182	285	156	54	24	17	18		
CFSM	.68	6.18	2.91	1.66	2.01	1.70	3.34	1.53	.88	.22	.14	.18		
IN.	.79	6.89	3.36	1.91	2.10	1.96	3.72	1.77	.98	.26	.16	.20		
AC-FT	6420	55870	27260	15510	16980	15890	30160	14330	7960	2070	1280	1610		
CAL YR 1984	TOTAL	150127	MEAN	410	MAX	3620	MIN	24	CFSM	2.70	IN.	36.74	AC-FT	297800
WTR YR 1985	TOTAL	98490	MEAN	270	MAX	3620	MIN	17	CFSM	1.78	IN.	24.10	AC-FT	195400

UMPQUA RIVER BASIN

267

14308000 SOUTH UMPQUA RIVER AT TILLER, OR

LOCATION.--Lat 42°55'50", long 122°56'50", in NE¼ sec.33, T.30 S., R.2 W., Douglas County, Hydrologic Unit 17100302, Umpqua National Forest, on left bank 0.3 mi upstream from bridge on State Highway 227 at Tiller, 0.3 mi upstream from Elk Creek, and at mile 187.31.

DRAINAGE AREA.--449 mi².

PERIOD OF RECORD.--October 1910 to December 1911, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to December 1911, published as South Fork of Umpqua River at Tiller.

REVISED RECORDS.--WSP 1448: 1911(M), 1912, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 991.8 ft above National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Oct. 1, 1939, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. No regulation. Small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--47 years, 1,048 ft³/s, 31.70 in/yr, 759,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,200 ft³/s Dec. 22, 1964, gage height, 25.72 ft; minimum observed, 20 ft³/s Sept. 3, 4, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1830	*14,800	*12.66	Nov. 28	1530	8,240	9.45
Minimum, 48 ft ³ /s Aug. 28-31, Sept. 1.							

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	62	407	4370	1110	439	840	3770	1020	488	171	104	48		
2	63	3030	2750	991	438	840	4080	1060	458	165	101	49		
3	64	5220	2430	1050	448	750	3380	1080	424	157	94	67		
4	61	3560	2040	1230	419	731	2610	928	463	153	84	66		
5	63	1880	1670	1340	413	698	2230	806	457	145	78	59		
6	66	1710	1470	1400	407	674	2190	745	793	143	77	56		
7	65	2220	1400	1520	522	668	2290	698	1060	140	74	69		
8	61	1860	1350	1440	1020	629	2130	647	1400	135	71	85		
9	72	2140	1350	1250	790	611	1950	609	970	131	72	83		
10	91	2430	3100	1060	649	619	1920	576	768	126	72	92		
11	183	4050	3010	919	788	649	1740	555	643	123	68	98		
12	201	10500	3520	823	3200	648	1510	514	569	121	67	81		
13	295	8130	2910	766	2550	618	1380	494	515	117	66	76		
14	250	5480	2140	750	2190	596	1440	501	465	114	66	106		
15	257	3250	2100	734	2430	599	1470	502	428	111	60	148		
16	187	2190	1790	704	2260	626	1350	521	391	109	59	134		
17	159	1640	1480	884	1800	675	1140	528	362	106	59	114		
18	172	1820	1280	1120	1450	677	985	552	337	106	56	153		
19	585	1850	1090	1080	1290	671	957	580	315	102	56	125		
20	994	2800	963	970	1320	660	834	565	295	99	59	104		
21	648	2550	893	873	1190	649	935	543	270	97	56	92		
22	452	1860	826	778	1150	624	1480	537	253	95	56	81		
23	321	1710	800	710	1200	851	1610	563	240	93	55	77		
24	268	2240	790	660	1150	2020	1500	592	226	88	55	72		
25	240	1870	749	615	1100	1740	1220	563	216	88	53	69		
26	339	1610	740	569	984	1510	1030	519	210	84	50	69		
27	622	3320	728	532	881	1380	973	480	199	81	50	62		
28	1170	7530	806	519	813	1300	1050	476	191	81	48	61		
29	1170	4950	812	493	---	1390	1020	509	183	81	48	59		
30	691	6110	1190	460	---	1380	997	430	177	81	48	55		
31	506	---	1330	441	---	2090	---	504	---	97	48	---		
TOTAL	10378	99917	51882	27791	33291	28413	51171	19197	13766	3540	2010	2510		
MEAN	335	3331	1674	896	1189	917	1706	619	459	114	64.8	83.7		
MAX	1170	10500	4370	1520	3200	2090	4080	1080	1400	171	104	153		
MIN	61	407	728	441	407	596	834	430	177	81	48	48		
CFSM	.75	7.42	3.73	2.00	2.65	2.04	3.80	1.38	1.02	.25	.14	.19		
IN.	.86	8.28	4.30	2.30	2.76	2.35	4.24	1.59	1.14	.29	.17	.21		
AC-FT	20580	198200	102900	55120	66030	56360	101500	38080	27300	7020	3990	4980		
CAL YR 1984	TOTAL	506133	MEAN	1383	MAX	16100	MIN	61	CFSM	3.08	IN.	41.93	AC-FT	1004000
WTR YR 1985	TOTAL	343866	MEAN	942	MAX	10500	MIN	48	CFSM	2.10	IN.	28.49	AC-FT	682100

UMPQUA RIVER BASIN

14308600 SOUTH UMPQUA RIVER AT DAYS CREEK, OR

LOCATION.--Lat 42°58'05", long 123°09'60", in NW¼ sec.15, T.30 S., R.4 W., Douglas County, Hydrologic Unit 17100302, on left bank 0.3 mi upstream from Days Creek, 0.4 mi southeast of community of Days Creek, and at mile 170.2.

DRAINAGE AREA.--641 mi².

PERIOD OF RECORD.--March 1975 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 738.55 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 12 to Jan. 2; Jan. 6-13. Records good except those for periods of estimated daily record, which are fair. No regulation. Many small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--10 years, 1,211 ft³/s, 25.66 in/yr, 877,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,300 ft³/s Dec. 6, 1981, gage height, 22.39 ft; minimum, 31 ft³/s Sept. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	unknown	*20,600	*15.62	Nov. 28	unknown	unknown	unknown
Minimum, 44 ft ³ /s Aug. 29-31.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	479	6600	1450	588	1090	4300	1200	620	202	121	47
2	69	3170	5000	1250	614	1120	4600	1240	561	192	118	53
3	69	5910	3500	1320	670	999	3840	1250	514	184	108	69
4	69	4170	2500	1430	634	986	2990	1130	547	177	96	79
5	71	2260	2000	1560	581	952	2540	990	548	168	86	67
6	77	1890	1900	1600	580	915	2440	909	784	164	83	66
7	75	2480	1800	1700	700	909	2510	848	1160	161	80	74
8	69	2100	1700	1600	1510	863	2370	791	1640	154	76	101
9	70	2430	2900	1400	1210	823	2160	743	1170	148	77	103
10	103	2810	3700	1250	1010	828	2130	702	927	141	77	109
11	158	4350	3600	1150	1110	855	1960	688	773	138	74	120
12	252	14500	4400	1000	3820	849	1740	638	676	135	70	99
13	292	11000	3700	960	3230	808	1580	611	608	132	68	88
14	306	7800	3000	940	2670	777	1620	611	549	127	66	99
15	289	5300	2500	920	2870	778	1650	613	499	121	63	171
16	242	3000	2200	875	2720	802	1560	626	462	118	60	178
17	201	2200	1800	1010	2200	850	1360	637	429	116	58	144
18	200	2350	1600	1280	1810	858	1200	656	399	113	59	175
19	437	2400	1400	1270	1600	846	1200	684	372	111	61	167
20	1210	3100	1200	1160	1660	827	1080	671	347	106	68	127
21	774	2800	1150	1070	1520	821	1120	650	319	102	69	108
22	564	2400	1100	962	1460	791	1810	637	298	97	66	97
23	388	2150	1050	878	1490	1030	1830	654	282	96	63	89
24	310	2500	1000	816	1430	2220	1790	686	268	93	60	85
25	280	2300	980	767	1370	2130	1510	676	256	89	58	81
26	294	2100	970	713	1260	1970	1310	619	248	87	53	78
27	711	4000	980	668	1140	1930	1210	576	238	86	49	73
28	1140	9600	1100	660	1060	1830	1260	546	225	85	47	69
29	1410	7600	1130	633	---	2070	1240	626	216	87	46	67
30	843	8200	1500	594	---	1980	1200	531	209	89	45	65
31	607	---	1700	577	---	2600	---	580	---	101	46	---
TOTAL	11649	127349	69660	33463	42517	37107	59110	23019	16144	3920	2171	2948
MEAN	376	4245	2247	1079	1518	1197	1970	743	538	126	70.0	98.3
MAX	1410	14500	6600	1700	3820	2600	4600	1250	1640	202	121	178
MIN	69	479	970	577	580	777	1080	531	209	85	45	47
CFSM	.59	6.62	3.51	1.68	2.37	1.87	3.07	1.16	.84	.20	.11	.15
IN.	.68	7.39	4.04	1.94	2.47	2.15	3.43	1.34	.94	.23	.13	.17
AC-FT	23110	252600	138200	66370	84330	73600	117200	45660	32020	7780	4310	5850

CAL YR 1984	TOTAL	633155	MEAN	1730	MAX	20300	MIN	68	CFSM	2.70	IN.	36.74	AC-FT	1256000
WTR YR 1985	TOTAL	429057	MEAN	1175	MAX	14500	MIN	45	CFSM	1.83	IN.	24.90	AC-FT	851000

UMPQUA RIVER BASIN

269

14309000 COW CREEK NEAR AZALEA, OR

LOCATION.--Lat 42°49'30", long 123°10'40", in N-1/2 sec.4, T.32 S., R.4 W., Douglas County, Hydrologic Unit 17100302, on right bank 0.8 mi upstream from Whitehorse Creek, 4.5 mi northeast of Azalea, and at mile 58.2.

DRAINAGE AREA.--78.0 mi².

PERIOD OF RECORD.--April 1926 to September 1928 (no winter records), April 1929 to December 1931, April 1932 to current year.

REVISED RECORDS.--WSP 984: 1933-36. WSP 1154: 1946(M), 1948(M). WSP 1448: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,694.32 ft above National Geodetic Vertical Datum of 1929 (Douglas County Road Department bench mark). Prior to July 19, 1949, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records excellent. Slight regulation resulting from construction of Galesville Dam 2 mi upstream. Diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--55 years (water years 1930-31, 1933-85), 113 ft³/s, 19.67 in/yr, 81,870 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s Jan. 15, 1974, gage height, 16.40 ft, from high-water mark in well; minimum, 1.1 ft³/s Aug. 12, 1981, but may have been less during period of no gage-height record Sept. 4-30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1000	*4,430	*11.93	Nov. 27	1630	2,280	8.87

Minimum, 5.4 ft³/s Oct. 3, result of construction at Galesville Dam 2.0 mi upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	14	30	410	137	72	125	405	71	40	19	25	9.9		
2	14	391	309	127	73	126	415	68	38	18	16	13		
3	14	262	308	123	76	114	348	67	35	17	14	13		
4	15	141	248	124	69	122	278	65	38	17	13	12		
5	17	82	209	129	68	119	241	61	36	17	12	11		
6	17	87	182	136	68	113	223	59	52	16	12	13		
7	16	92	170	142	106	108	212	57	60	16	12	17		
8	14	86	163	137	185	104	189	54	62	16	12	16		
9	17	98	163	128	125	100	173	51	45	15	12	16		
10	21	276	257	116	105	99	160	51	40	15	12	15		
11	33	397	260	107	241	95	145	53	36	15	12	14		
12	28	1960	364	101	481	91	130	49	33	15	11	13		
13	30	851	327	94	325	88	122	46	31	14	11	13		
14	26	394	269	89	277	86	117	46	30	14	11	16		
15	27	246	274	86	280	84	113	44	29	14	9.8	20		
16	26	178	231	84	257	84	106	44	29	13	9.8	16		
17	28	147	197	92	214	85	96	44	27	13	9.8	15		
18	30	212	181	105	183	84	95	42	26	13	10	17		
19	34	177	159	103	168	81	110	41	24	13	12	15		
20	47	312	145	99	167	80	98	39	24	12	12	14		
21	39	269	135	92	150	79	106	38	23	12	12	13		
22	30	190	126	86	146	79	141	37	22	12	11	12		
23	25	186	120	81	143	93	114	35	22	11	10	12		
24	24	224	116	77	138	171	104	36	22	11	10	12		
25	23	184	114	74	134	144	99	37	21	11	9.7	12		
26	28	162	111	72	126	153	90	36	21	11	8.6	12		
27	33	1040	112	70	119	161	84	34	21	11	8.0	11		
28	36	1430	116	70	113	173	80	37	20	11	8.2	11		
29	57	578	111	69	---	234	77	39	20	14	8.9	11		
30	36	550	168	66	---	244	73	35	20	14	8.3	10		
31	33	---	156	72	---	313	---	48	---	17	8.8	---		
TOTAL	832	11232	6211	3088	4609	3832	4744	1464	947	437	351.9	404.9		
MEAN	26.8	374	200	99.6	165	124	158	47.2	31.6	14.1	11.4	13.5		
MAX	57	1960	410	142	481	313	415	71	62	19	25	20		
MIN	14	30	111	66	68	79	73	34	20	11	8.0	9.9		
CFSM	.34	4.79	2.56	1.28	2.12	1.59	2.03	.61	.41	.18	.15	.17		
IN.	.40	5.36	2.96	1.47	2.20	1.83	2.26	.70	.45	.21	.17	.19		
AC-FT	1650	22280	12320	6130	9140	7600	9410	2900	1880	867	698	803		
CAL YR 1984	TOTAL	54594	MEAN	149	MAX	2080	MIN	11	CFSM	1.91	IN.	26.04	AC-FT	108300
WTR YR 1985	TOTAL	38152.8	MEAN	105	MAX	1960	MIN	8.0	CFSM	1.35	IN.	18.20	AC-FT	75680

UMPQUA RIVER BASIN

14309500 WEST FORK COW CREEK NEAR GLENDALE, OR

LOCATION.--Lat 42°48'15", long 123°36'35", in SW¼NE¼ sec.11, T.32 S., R.8 W., Douglas County, Hydrologic Unit 17100302, on left bank 1.6 mi downstream from Bear Creek, 11 mi northwest of Glendale, and at mile 0.8.

DRAINAGE AREA.--86.9 mi².

PERIOD OF RECORD.--August 1955 to current year.

REVISED RECORDS.--WSP 1738: 1956, drainage area (former site). WSP 1935: 1956.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,018.48 ft above National Geodetic Vertical Datum of 1929. Prior to June 8, 1964, at site 0.6 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records excellent. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--30 years, 277 ft³/s, 43.29 in/yr, 200,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft³/s Dec. 22, 1964, gage height, 18.59 ft, from floodmark, from rating curve extended above 2,600 ft³/s on basis of slope-area measurement of peak flow; minimum, 3.7 ft³/s Aug. 17, 19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1000	2,510	7.06	Nov. 27	1530	*6,320	*11.01
Nov. 12	0600	4,600	9.19				

Minimum, 5.7 ft³/s Oct. 3, 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	6.0	42	1090	346	75	130	1130	87	38	19	14	6.6		
2	6.4	1470	729	273	108	124	944	82	40	18	13	8.2		
3	6.3	1210	551	227	126	114	694	82	36	17	11	8.6		
4	6.0	694	437	197	110	131	496	77	36	16	9.8	8.0		
5	6.7	329	352	177	98	138	384	72	35	15	9.3	7.5		
6	6.9	270	286	167	93	140	312	70	44	15	8.8	7.5		
7	6.3	283	247	159	673	132	257	67	91	15	8.7	8.1		
8	6.1	411	219	147	977	124	215	64	116	15	8.7	8.1		
9	9.4	690	197	136	536	120	188	61	76	14	8.7	9.2		
10	18	1600	245	123	370	122	168	62	60	13	8.3	11		
11	74	2390	288	113	803	125	150	60	52	13	8.0	9.6		
12	45	3570	542	105	1570	122	134	57	46	12	7.7	10		
13	39	1710	710	100	893	115	122	55	41	12	7.5	18		
14	32	887	524	96	683	108	115	53	38	12	7.4	26		
15	41	570	465	91	627	103	109	51	36	12	7.1	23		
16	31	395	381	86	506	98	103	50	35	12	6.8	17		
17	27	369	311	83	394	94	98	50	33	11	6.7	14		
18	28	679	268	82	313	89	94	49	30	11	7.0	14		
19	36	576	230	79	271	85	113	47	29	11	8.1	14		
20	50	507	205	77	263	82	112	45	27	9.7	8.8	12		
21	46	478	184	75	237	82	114	43	25	9.3	8.6	12		
22	35	387	165	72	221	86	168	41	24	9.1	7.9	11		
23	28	360	154	69	209	294	169	39	23	9.1	7.5	10		
24	24	407	149	67	191	897	164	40	22	9.3	7.3	9.8		
25	21	410	147	65	175	531	150	39	22	9.4	6.9	9.4		
26	27	382	144	63	161	482	134	39	22	8.9	6.5	9.0		
27	55	2960	141	61	148	569	120	38	21	8.4	6.3	8.7		
28	87	3930	156	62	136	582	110	40	21	8.4	6.1	8.3		
29	103	1850	153	61	---	656	100	43	20	9.0	6.3	8.2		
30	64	1610	459	60	---	641	91	39	19	9.4	6.2	8.1		
31	49	---	454	62	---	940	---	40	---	12	6.2	---		
TOTAL	1020.1	31426	10583	3581	10967	8056	7258	1682	1158	375.0	251.2	334.9		
MEAN	32.9	1048	341	116	392	260	242	54.3	38.6	12.1	8.10	11.2		
MAX	103	3930	1090	346	1570	940	1130	87	116	19	14	26		
MIN	6.0	42	141	60	75	82	91	38	19	8.4	6.1	6.6		
CFSM	.38	12.1	3.92	1.33	4.51	2.99	2.78	.62	.44	.14	.09	.13		
IN.	.44	13.45	4.53	1.53	4.69	3.45	3.11	.72	.50	.16	.11	.14		
AC-FT	2020	62330	20990	7100	21750	15980	14400	3340	2300	744	498	664		
CAL YR 1984	TOTAL	104199.7	MEAN	285	MAX	5560	MIN	5.9	CFSM	3.28	IN.	44.61	AC-FT	206700
WTR YR 1985	TOTAL	76692.2	MEAN	210	MAX	3930	MIN	6.0	CFSM	2.42	IN.	32.83	AC-FT	152100

UMPQUA RIVER BASIN

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14310000 COW CREEK NEAR RIDDLE, OR

LOCATION.--Lat 42°55'25", long 123°25'40", in NE¼ sec.32, T.30 S., R.6 W., Douglas County, Hydrologic Unit 17100302, on left bank 0.4 mi upstream from Council Creek, 3.8 mi southwest of Riddle, and at mile 6.7.

DRAINAGE AREA.--456 mi².

PERIOD OF RECORD.--September 1954 to current year.

REVISED RECORDS.--WSP 1935: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 682.60 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records excellent. No regulation. Many small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--31 years, 903 ft³/s, 654,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,400 ft³/s Jan. 15, 1974, gage height, 28.17 ft; minimum, 7.4 ft³/s Aug. 17-19, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 29, 1950, reached a stage of about 28.5 ft, present site and datum, from slope-area measurement, discharge, 41,100 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 10,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	2200	11,000	12.37	Nov. 27	2130	*15,000	*15.15
Minimum, 19 ft ³ /s Aug. 28-31, Sept. 1.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	128	3540	1130	287	498	3520	323	161	69	43	19
2	39	1640	2520	935	362	521	3050	308	178	66	57	21
3	39	2590	2140	803	393	476	2290	305	160	62	48	26
4	41	1640	1760	714	379	490	1680	294	152	59	41	27
5	41	831	1440	664	342	519	1320	276	149	55	37	27
6	43	629	1180	643	330	506	1110	266	155	54	34	28
7	43	649	1000	637	710	485	953	258	192	53	31	29
8	45	707	894	609	2170	454	825	246	317	51	29	32
9	47	1300	815	566	1520	434	732	238	246	50	29	36
10	56	2710	933	517	1200	425	671	235	199	47	28	44
11	115	4480	1420	471	1620	419	616	236	171	44	27	45
12	144	9550	1730	438	4580	407	562	228	151	43	26	43
13	108	6570	2660	416	3150	390	510	215	140	41	26	49
14	105	3090	2120	401	2340	378	483	207	130	40	25	63
15	104	1930	1880	381	1980	364	468	201	123	40	24	69
16	102	1330	1650	364	1680	355	452	196	119	39	23	63
17	93	1020	1360	352	1350	344	430	212	115	37	22	58
18	95	1680	1180	358	1100	336	405	197	110	36	23	55
19	116	1670	1000	364	942	327	458	188	102	36	24	53
20	123	1580	877	353	910	314	452	178	94	33	28	50
21	140	1900	784	340	823	315	434	171	88	31	29	48
22	125	1480	695	329	756	316	533	163	84	30	28	45
23	107	1240	639	315	717	448	540	156	81	29	27	43
24	93	1580	611	302	674	1780	504	153	80	28	26	41
25	84	1550	597	290	629	1310	471	153	80	28	24	39
26	87	1380	588	280	590	1160	439	149	78	27	22	36
27	119	6570	568	271	556	1750	409	145	76	25	21	35
28	147	13700	602	276	517	2020	388	147	74	24	20	34
29	254	6670	581	272	---	2440	363	156	72	25	19	31
30	197	4400	1120	269	---	2280	340	155	70	26	19	31
31	151	---	1350	261	---	2940	---	159	---	30	19	---
TOTAL	3042	86194	40234	14321	32607	25201	25408	6514	3947	1258	879	1220
MEAN	98.1	2873	1298	462	1165	813	847	210	132	40.6	28.4	40.7
MAX	254	13700	3540	1130	4580	2940	3520	323	317	69	57	69
MIN	39	128	568	261	287	314	340	145	70	24	19	19
AC-FT	6030	171000	79800	28410	64680	49990	50400	12920	7830	2500	1740	2420
CAL YR 1984	TOTAL	346898	MEAN	948	MAX	18000	MIN	33	AC-FT	688100		
WTR YR 1985	TOTAL	240825	MEAN	660	MAX	13700	MIN	19	AC-FT	477700		

UMPQUA RIVER BASIN

14311000 NORTH MYRTLE CREEK NEAR MYRTLE CREEK, OR

LOCATION.--Lat 43°02'30", long 123°15'30", in SW¼ sec.14, T.29 S., R.5 W., Douglas County, Hydrologic Unit 17100302, on left bank 300 ft downstream from Bilger Creek, 1.5 mi northeast of town of Myrtle Creek, and at mile 2.2.

DRAINAGE AREA.--54.2 mi².

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 1738: 1957. WDR OR-79-1: 1978.

GAGE.--Water-stage recorder. Datum of gage is 642.81 ft above National Geodetic Vertical Datum of 1929 (levels by City Engineer of Myrtle Creek). Oct. 1, 1955, to Aug. 31, 1977, at site 340 ft downstream on right bank. Oct. 1, 1955, to Sept. 30, 1975, at datum 1.63 ft lower and Oct. 1, 1975, to Aug. 31, 1977, at datum 1.33 ft lower.

REMARKS.--Estimated daily discharges: Dec. 23-29, Apr. 6-14. Records fair. No regulation. Several diversions for irrigation upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--30 years, 73.6 ft³/s, 53,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft³/s Dec. 6, 1981, gage height, 10.08 ft, from floodmark, from rating curve extended above 1,300 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 11.58 ft Dec. 26, 1955 (backwater from debris), site and datum then in use; no flow at times in July 1973 and August 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s and maximum (*) from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	1330	*1,050	*5.56				
Minimum, 0.28 ft ³ /s Aug. 16.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	17	383	157	48	65	210	32	17	5.0	4.4	2.2
2	5.8	135	297	130	59	65	175	30	16	4.2	3.5	3.3
3	5.9	203	269	107	74	57	141	29	15	4.0	2.4	3.3
4	6.8	124	229	91	72	64	112	26	17	4.3	1.9	3.0
5	8.2	64	194	85	67	62	93	25	16	4.1	1.8	3.3
6	7.2	67	153	86	65	59	80	25	21	4.6	1.6	3.9
7	6.2	70	120	84	111	55	82	23	27	4.4	1.9	4.3
8	6.5	68	99	85	183	50	80	23	31	3.2	2.7	4.2
9	8.2	152	90	81	203	47	74	22	22	2.8	2.4	4.1
10	9.9	143	182	69	195	44	74	21	18	2.7	1.8	4.7
11	17	213	237	61	212	41	70	21	15	3.1	1.8	4.5
12	13	403	285	55	325	38	66	20	13	3.0	1.7	4.3
13	13	370	360	52	268	36	60	19	12	3.1	1.3	5.5
14	14	250	291	49	220	35	62	19	12	2.9	1.3	6.4
15	15	190	269	44	199	33	61	18	12	2.9	1.4	6.8
16	12	136	227	42	168	32	56	18	11	2.4	1.0	5.7
17	11	111	196	40	134	31	51	18	11	2.3	1.3	7.6
18	13	158	173	39	107	29	49	17	9.4	2.2	1.7	8.7
19	19	154	140	37	97	28	55	17	8.5	1.9	2.2	6.6
20	24	252	116	36	99	28	51	16	7.8	1.9	3.0	5.8
21	17	285	103	35	88	30	51	15	7.5	1.6	2.4	5.0
22	13	214	88	33	84	33	61	15	6.9	2.0	2.2	4.6
23	12	223	80	32	84	59	60	14	6.9	1.6	1.9	4.6
24	11	278	74	31	78	120	57	14	6.5	1.7	1.9	4.2
25	10	242	70	31	72	115	54	14	6.2	2.1	1.7	4.3
26	15	229	68	30	65	125	49	13	6.0	2.1	1.3	4.1
27	24	333	66	30	58	196	44	12	5.7	1.8	1.4	3.7
28	50	852	66	34	53	244	40	14	5.6	1.4	1.7	3.4
29	40	540	80	34	---	308	37	17	5.4	1.8	1.9	3.5
30	23	502	174	33	---	273	34	15	5.6	3.0	2.1	3.6
31	19	---	185	39	---	243	---	21	---	4.5	1.9	---
TOTAL	455.0	6978	5364	1792	3488	2645	2189	603	374.0	88.6	61.5	139.2
MEAN	14.7	233	173	57.8	125	85.3	73.0	19.5	12.5	2.86	1.98	4.64
MAX	50	852	383	157	325	308	210	32	31	5.0	4.4	8.7
MIN	5.3	17	66	30	48	28	34	12	5.4	1.4	1.0	2.2
AC-FT	902	13840	10640	3550	6920	5250	4340	1200	742	176	122	276
CAL YR 1984	TOTAL	30790.1	MEAN	84.1	MAX	1630	MIN	3.5	AC-FT	61070		
WTR YR 1985	TOTAL	24177.3	MEAN	66.2	MAX	852	MIN	1.0	AC-FT	47960		

UMPQUA RIVER BASIN

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14311500 LOOKINGGLASS CREEK AT BROCKWAY, OR

LOCATION.--Lat 43°07'50", long 123°27'50", in SE¼SE¼ sec.13, T.28 S., R.7 W., Douglas County, Hydrologic Unit 17100302, on left bank 1.7 mi northwest of Brockway and at mile 2.85.

DRAINAGE AREA.--158 mi².

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2135: Drainage area (former site).

GAGE.--Water-stage recorder. Elevation of gage is 540 ft, from topographic map. Prior to Oct. 5, 1967, water-stage recorder at site 2.3 mi downstream at different datum. Oct. 5, 1967, to Oct. 5, 1976, water-stage recorder, at datum 1.00 ft lower.

REMARKS.--Estimated daily discharges: Nov. 2 to Jan. 10. Records good except for estimated daily discharges, which are poor. Some regulation by Ben Irving Reservoir 17 mi upstream on Berry Creek, capacity, 11,200 acre-ft since January 1980. Many diversions by pumping for irrigation upstream from station. Discharge not adjusted for storage or release from Ben Irving Reservoir as losses from reservoir at times exceed natural flow.

AVERAGE DISCHARGE.--24 years (water years 1956-79), 282 ft³/s, 204,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,000 ft³/s Dec. 26, 1955, gage height, 24.93 ft, site and datum then in use, from rating curve extended above 7,200 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 25.28 ft Dec. 23, 1964 (backwater from South Umpqua River, site and datum then in use); no flow at times each year prior to January 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,290 ft³/s Nov. 27, gage height, 10.87 ft; minimum, 0.02 ft³/s July 16, 17.

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	33	1100	550	62	118	644	61	25	4.3	7.3	8.6
2	4.9	159	800	450	116	113	473	57	22	4.7	4.8	9.4
3	5.7	334	700	350	122	102	356	53	21	2.7	2.6	8.6
4	7.0	220	600	280	117	118	282	52	21	2.2	1.3	8.3
5	8.2	116	480	230	108	114	234	47	21	2.7	.50	9.3
6	8.5	84	380	210	105	104	204	45	26	2.0	.09	10
7	8.0	84	300	190	331	103	179	43	36	1.9	.03	9.3
8	9.7	118	240	170	793	113	160	40	50	2.1	.03	7.5
9	21	310	210	150	1220	106	147	38	35	1.1	.03	8.1
10	27	471	360	135	921	101	115	38	28	.70	1.2	9.4
11	31	808	600	122	904	95	104	38	24	.41	4.6	11
12	29	1720	800	113	1390	91	93	35	21	.12	7.4	11
13	27	1020	1100	106	937	87	85	33	18	.20	8.0	13
14	25	672	800	99	665	84	80	33	14	.17	7.8	14
15	26	473	700	94	530	81	75	32	14	.07	7.8	15
16	26	343	550	87	404	80	71	32	13	.03	7.1	13
17	26	288	460	82	334	78	70	32	11	.18	6.9	13
18	28	575	400	78	281	75	66	28	9.6	.68	6.9	12
19	29	576	320	75	252	73	76	25	9.5	.08	9.0	12
20	33	600	280	72	261	72	75	25	8.6	2.5	8.9	12
21	36	571	250	68	238	74	81	25	6.9	7.0	8.5	12
22	31	440	210	65	216	90	111	22	6.0	6.6	8.6	11
23	28	462	190	62	197	358	122	21	6.1	7.9	8.9	11
24	26	703	180	60	179	794	129	21	5.6	7.2	7.2	11
25	24	860	170	56	157	531	122	21	6.6	6.5	7.4	11
26	26	805	160	55	143	592	108	21	5.9	5.6	7.0	10
27	31	2620	180	53	136	1370	96	20	5.5	4.9	7.6	9.7
28	48	4600	210	62	124	1690	84	21	6.2	3.9	8.3	9.1
29	57	2600	250	60	---	1420	76	22	5.9	5.7	7.7	8.6
30	44	1600	700	56	---	924	68	21	5.3	4.6	7.4	8.3
31	37	---	800	56	---	787	---	25	---	6.0	8.3	---
TOTAL	771.4	24265	14480	4296	11243	10538	4586	1027	487.7	94.74	179.18	316.2
MEAN	24.9	809	467	139	402	340	153	33.1	16.3	3.06	5.78	10.5
MAX	57	4600	1100	550	1390	1690	644	61	50	7.9	9.0	15
MIN	3.4	33	160	53	62	72	66	20	5.3	.03	.03	7.5
AC-FT	1530	48130	28720	8520	22300	20900	9100	2040	967	188	355	627
CAL YR 1984	TOTAL	105578.07	MEAN	288	MAX	6940	MIN	.97	AC-FT	209400		
WTR YR 1985	TOTAL	72284.22	MEAN	198	MAX	4600	MIN	.03	AC-FT	143400		

UMPQUA RIVER BASIN

14312000 SOUTH UMPQUA RIVER NEAR BROCKWAY, OR

LOCATION.--Lat 43°08'00", long 123°23'50", in SW¼ sec.15, T.28 S., R.6 W., Douglas County, Hydrologic Unit 17100302, on right bank 10 ft upstream from Winston Bridge on State Highway 99, 2.5 mi northeast of Brockway, 4.2 mi downstream from Lookingglass Creek, and at mile 132.8.

DRAINAGE AREA.--1,670 mi².

PERIOD OF RECORD.--December 1905 to June 1912, October 1923 to September 1926, January 1942 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1248: 1946(M), 1948(M), 1951. WSP 1448: Drainage area. WDR OR 72-1: 1965(M).

GAGE.--Water-stage recorder. Datum of gage is 462.52 ft above National Geodetic Vertical Datum of 1929 (State Highway Department bench mark). Prior to June 24, 1949, nonrecording gage at several sites within 400 ft of present site at various datums. June 24, 1949, to Oct. 1, 1970, at datum 461.84 ft National Geodetic Vertical Datum of 1929 (State Highway Department bench mark).

REMARKS.--No estimated daily discharges. Records excellent. Regulation from Ben Irving Reservoir, since January 1980, on Berry Creek during summer months. Many small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--51 years (water years 1907-11, 1924-26, 1943-85), 2,907 ft³/s, 23.64 in/yr, 2,106,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 125,000 ft³/s Dec. 23, 1964, gage height, 34.28 ft; minimum, 16 ft³/s Aug. 23, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 21, 1927, reached a stage of about 31.2 ft, present site and datum, discharge (revised), 89,500 ft³/s. Discharge for flood of February 1890, which reached a stage 1.9 ft higher, according to local resident who lived nearby at time of both floods, has been found to be in error and should not be used.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 13	0030	32,700	17.05	Nov. 28	1230	*37,000	*18.29

Minimum, 57 ft³/s Aug. 31, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	125	771	14400	4070	1130	2030	9760	1750	878	272	149	62		
2	125	2040	9400	3420	1340	2180	9770	1750	826	258	165	70		
3	128	9940	8090	3040	1480	1990	7930	1750	775	243	174	79		
4	136	7560	6590	2960	1530	1920	6130	1710	731	230	153	85		
5	146	4100	5360	3000	1360	1970	4980	1490	771	224	135	103		
6	151	2750	4410	2960	1320	1890	4440	1370	768	212	111	106		
7	154	3330	3830	3040	1610	1850	4250	1290	1350	205	97	98		
8	153	3170	3480	2980	4730	1780	4000	1230	2000	201	92	108		
9	151	4180	3290	2730	5130	1680	3580	1150	1760	191	91	134		
10	159	5690	4440	2440	4230	1610	3360	1100	1340	181	84	150		
11	212	8650	7450	2150	3800	1620	3140	1080	1100	171	87	168		
12	358	23700	7560	1950	10900	1600	2830	1030	943	160	86	182		
13	420	23400	10600	1810	9970	1550	2530	959	826	155	85	177		
14	466	13100	7850	1710	7210	1470	2440	919	741	151	78	178		
15	447	7810	6930	1660	6510	1430	2450	910	673	147	77	194		
16	454	5270	6140	1580	6030	1420	2380	908	627	139	72	257		
17	378	3950	5030	1570	4980	1450	2180	949	582	131	69	266		
18	345	4610	4340	1840	4100	1460	1940	946	532	131	67	238		
19	367	5260	3690	1980	3490	1440	1980	946	486	125	72	256		
20	1110	5970	3210	1870	3470	1410	1920	943	449	120	82	253		
21	1120	7540	2910	1740	3240	1390	1780	907	418	118	84	211		
22	917	5550	2640	1600	2980	1390	2500	867	386	117	94	188		
23	659	4650	2430	1480	2910	1860	2730	846	363	109	89	176		
24	517	6570	2340	1390	2780	4560	2950	868	349	101	86	165		
25	441	6120	2250	1310	2640	5040	2550	903	338	95	83	158		
26	410	5430	2200	1240	2450	4390	2230	856	325	92	79	149		
27	594	12300	2150	1180	2270	6330	2000	789	311	89	71	142		
28	979	35900	2380	1180	2080	6840	1920	754	300	87	65	135		
29	1940	23200	2400	1160	---	8080	1920	804	288	92	64	129		
30	1410	17300	3700	1110	---	6760	1820	814	278	102	62	124		
31	991	---	4730	1080	---	7240	---	752	---	115	59	---		
TOTAL	15963	269811	156220	63230	105670	87630	104390	33340	21514	4764	2862	4741		
MEAN	515	8994	5039	2040	3774	2827	3480	1075	717	154	92.3	158		
MAX	1940	35900	14400	4070	10900	8080	9770	1750	2000	272	174	266		
MIN	125	771	2150	1080	1130	1390	1780	752	278	87	59	62		
CFSM	.31	5.39	3.02	1.22	2.26	1.69	2.08	.64	.43	.09	.06	.09		
IN.	.36	6.01	3.48	1.41	2.35	1.95	2.33	.74	.48	.11	.06	.11		
AC-FT	31660	535200	309900	125400	209600	173800	207100	66130	42670	9450	5680	9400		
CAL YR 1984	TOTAL	1281648	MEAN	3502	MAX	45800	MIN	108	CFSM	2.10	IN.	28.55	AC-FT	2542000
WTR YR 1985	TOTAL	870135	MEAN	2384	MAX	35900	MIN	59	CFSM	1.43	IN.	19.38	AC-FT	1726000

UMPQUA RIVER BASIN

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14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR

LOCATION.--Lat 43°13'20", long 123°24'45", in NW¼SE¼ sec.16, T.27 S., R.6 W., Douglas County, Hydrologic Unit 17100302, on left bank, 3.7 mi west of Roseburg, and at mile 117.7.

DRAINAGE AREA.--1,798 mi².

PERIOD OF RECORD.--Water years 1970 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1970 to current year.

pH: August 1971 to current year.

DISSOLVED OXYGEN: October 1970 to current year.

WATER TEMPERATURES: October 1970 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1970.

REMARKS.--Records of discharge are given for gaging station 14312000, South Umpqua River near Brockway. Daily records for specific conductance are rated fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 423 microsiemens Sept. 18, 1971; minimum, 37 microsiemens Feb. 18, 1983.

pH: Maximum, 10.0 units Sept. 8, 9, 1971; minimum, 5.0 units Sept. 29, 1971.

DISSOLVED OXYGEN: Maximum, 16.0 mg/l July 30, 1977; minimum, 0.4 mg/l Aug. 10, 1978.

WATER TEMPERATURES: Maximum, 35.0°C July 16, 1976; minimum, 0.0°C Dec. 14, 16, 1972, Jan. 9, 1974.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 194 microsiemens Oct. 10; minimum recorded, 46 microsiemens Nov. 13.

pH: Maximum, 9.2 units Aug. 25, 29; minimum, 7.1 units Mar. 26-28, Aug. 17-21, 24, 25, 27, Aug. 30 to Sept. 6.

DISSOLVED OXYGEN: Maximum, 15.2 mg/l Aug. 25; minimum, 2.9 mg/l July 16.

WATER TEMPERATURES: Maximum, 29.5°C July 19; minimum, 3.5°C Feb. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT										
16...	1330	174	8.10	13.0	10.9	K4400	780	67	7	16
NOV										
13...	1130	63	7.20	9.5	11.3	2000	2600	--	--	--
DEC										
05...	1030	85	7.30	7.0	12.0	K1200	960	36	0	8.0
JAN										
17...	0830	104	7.60	4.5	12.6	K55	44	48	5	11
FEB										
21...	1040	92	7.60	6.5	12.4	470	150	36	0	8.0
MAR										
21...	1200	103	8.10	10.0	12.0	190	32	--	--	5.0
APR										
17...	1145	87	7.50	13.0	10.7	80	K15	210	170	--
MAY										
15...	1430	113	8.30	16.5	11.2	K4	K15	50	7	13
JUN										
13...	1130	98	7.90	21.5	8.9	K19	580	41	3	9.7
JUL										
10...	1145	148	8.20	26.0	9.5	120	540	51	2	12
AUG										
09...	1130	188	8.00	23.0	8.5	K580	600	62	1	15
SEP										
10...	1600	188	8.80	20.0	12.1	140	130	66	7	15

UMPQUA RIVER BASIN

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. DIS- SOLVED (MG/L)	
OCT 16...	6.6	12	<.10	<.10	.210	.30	--	.110	.100	105	
NOV 13...	2.7	2.3	.12	.10	.060	.70	.80	.260	.020	30	
DEC 05...	4.0	3.0	.16	.10	.030	<.20	--	.040	.020	66	
JAN 17...	5.0	4.1	<.10	<.10	.050	.30	--	.030	.030	65	
FEB 21...	4.0	3.0	<.10	<.10	.050	<.20	--	.030	.020	57	
MAR 21...	4.5	4.0	<.10	<.10	.040	.40	--	.040	.020	63	
APR 17...	--	2.9	<.10	<.10	.040	.30	--	.030	.020	58	
MAY 15...	4.3	4.6	<.10	<.10	.070	<.20	--	.050	.030	66	
JUN 13...	4.0	3.6	<.10	<.10	.050	.30	--	.050	.040	57	
JUL 10...	5.2	8.7	<.10	<.10	.150	.70	--	.180	.090	88	
AUG 09...	6.0	12	.23	--	--	--	--	--	.270	104	
SEP 10...	7.0	16	.28	.30	.350	1.0	1.3	.290	.250	112	
	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)		
JAN 17...	30	<1	<100	<10	<1	10	<1	2	60		
AUG 09...	20	2	100	<10	1	<10	<1	3	50		
	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)		
JAN 17...	13	<10	10	<.1	<1	3	<1	<1	30		
AUG 09...	<1	<10	20	.4	<1	1	<1	<1	30		
DATE	PER- THANE TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)
OCT 16...	<.1	<.010	<.010	<.1	<.010	<.010	<.010	<.010	<.010	<.010	<1
JAN 17...	<.1	<.010	<.010	<.1	<.010	<.010	<.010	<.010	<.010	<.010	<1
APR 17...	<.1	<.010	<.010	<.1	<.010	<.010	<.010	<.010	<.010	<.010	<1
AUG 09...	<.1	<.010	<.010	<.1	<.010	<.010	<.010	<.010	<.010	<.010	<1
	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	MIREX, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	
OCT 16...	<.010	<.010	<.01	<.1	<.10	--	--	--	<.01	--	
JAN 17...	<.010	<.010	<.01	<.1	<.10	<.01	<.01	<.01	<.01	<.01	
APR 17...	<.010	<.010	<.01	<.1	<.10	.07	<.01	<.01	<.01	<.01	
AUG 09...	<.010	<.010	<.01	<.1	<.10	--	--	--	<.01	--	

K - Results based on colony count outside acceptable range (non-ideal colony count).

UMPQUA RIVER BASIN

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14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

 SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEC. C) WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	84	70	90	113	96	77	---	112	134		---
2	167	98	75	92	114	98	70	---	114	137		---
3	171	73	80	95	114	97	69	---	114	139		---
4	173	58	82	96	112	97	71	---	114	140		---
5	177	62	84	94	110	99	76	---	115	140		---
6	184	67	87	93	112	99	79	---	117	142		---
7	189	71	89	94	118	98	81	---	116	143		---
8	188	68	90	94	108	98	80	---	107	145		---
9	190	69	89	94	90	99	80	---	87	148		---
10	190	68	94	94	90	99	82	---	83	149		---
11	185	66	80	95	97	101	83	---	86	151		---
12	185	59	80	98	87	102	83	---	92	152		---
13	---	55	76	99	73	102	85	---	97	151		---
14	---	62	77	100	78	102	88	---	102	151		---
15	---	64	83	101	83	103	90	---	105	151		---
16	---	71	84	103	83	103	89	116	106	152		---
17	161	78	86	104	83	102	87	116	109	153		---
18	152	96	89	104	86	104	88	115	114	155		---
19	148	89	90	99	89	103	93	115	117	158		---
20	144	89	91	95	91	102	95	115	120	159		---
21	137	83	92	95	90	103	98	113	121	---		---
22	112	86	94	99	90	101	99	112	123	---		---
23	99	91	97	100	92	105	94	113	123	---		---
24	102	89	99	100	93	104	93	112	123	---		---
25	106	88	102	101	92	82	88	109	123	---		---
26	110	87	101	102	92	83	90	106	125	---		---
27	113	83	103	104	92	87	96	105	128	---		171
28	116	57	106	107	92	84	100	104	130	---		174
29	113	74	103	109	---	82	101	106	131	---		172
30	88	75	102	109	---	84	102	107	132	---		173
31	82	---	93	110	---	85	---	110	---	---		---
MEAN	---	75	89	99	95	97	87	---	113	---		---

UMPQUA RIVER BASIN

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.7	7.3	7.8	7.6	7.3	7.3	7.5	7.4	8.0	7.8	7.9	7.7
2	8.8	7.3	7.6	7.4	7.4	7.3	7.5	7.4	8.0	7.8	7.9	7.7
3	8.8	7.3	7.6	7.3	7.4	7.4	7.5	7.5	8.0	7.8	8.0	7.7
4	8.5	7.3	7.4	7.3	7.5	7.4	7.5	7.5	8.0	7.8	8.0	7.7
5	8.5	7.3	7.4	7.3	7.5	7.5	7.5	7.5	8.0	7.8	8.1	7.7
6	8.5	7.2	7.5	7.4	7.5	7.5	7.5	7.5	8.1	7.8	8.1	7.8
7	8.6	7.2	7.6	7.5	7.6	7.5	7.5	7.4	8.0	7.8	8.0	7.7
8	8.0	7.3	7.6	7.4	7.6	7.6	7.5	7.4	7.8	7.4	8.0	7.7
9	8.5	7.2	7.6	7.5	7.6	7.6	7.5	7.4	7.4	7.4	8.1	7.7
10	7.6	7.2	7.6	7.5	7.6	7.5	7.5	7.4	7.5	7.4	8.3	7.7
11	8.1	7.2	7.5	7.4	7.6	7.5	7.5	7.5	7.5	7.5	8.3	7.7
12	7.8	7.3	7.4	7.3	7.5	7.4	7.6	7.5	7.5	7.4	8.3	7.8
13	---	---	7.4	7.2	7.4	7.4	7.6	7.5	7.4	7.3	8.4	7.8
14	---	---	7.4	7.3	7.5	7.4	7.7	7.6	7.4	7.4	8.3	7.8
15	---	---	7.4	7.4	7.5	7.4	7.7	7.6	7.4	7.4	8.4	7.8
16	---	---	7.5	7.4	7.4	7.4	7.7	7.6	7.4	7.4	8.2	7.8
17	8.1	7.6	7.5	7.4	7.5	7.4	7.6	7.4	7.5	7.4	8.3	7.8
18	8.0	7.5	7.6	7.5	7.5	7.5	7.7	7.6	7.5	7.5	8.4	7.8
19	8.0	7.4	7.6	7.5	7.5	7.5	7.6	7.6	7.6	7.5	8.3	7.7
20	8.2	7.5	7.6	7.4	7.6	7.5	7.6	7.5	7.6	7.6	8.4	7.7
21	7.8	7.6	7.6	7.5	7.6	7.6	7.7	7.5	7.6	7.4	8.1	7.7
22	7.8	7.6	7.5	7.5	7.6	7.6	7.7	7.5	7.7	7.5	7.9	7.5
23	7.8	7.5	7.5	7.4	7.6	7.6	7.7	7.6	7.7	7.6	7.6	7.4
24	7.9	7.5	7.6	7.5	7.6	7.6	7.7	7.6	7.7	7.6	7.4	7.2
25	8.0	7.5	7.5	7.4	7.6	7.6	7.8	7.6	7.8	7.6	7.3	7.2
26	8.1	7.5	7.5	7.5	7.7	7.6	7.8	7.7	7.8	7.6	7.3	7.1
27	8.1	7.5	7.6	7.3	7.7	7.6	7.8	7.7	7.8	7.6	7.2	7.1
28	7.8	7.6	7.5	7.4	7.7	7.6	7.9	7.7	7.9	7.6	7.3	7.1
29	7.8	7.7	7.4	7.2	7.6	7.6	7.9	7.7	---	---	7.4	7.3
30	7.7	7.6	7.3	7.2	7.6	7.5	8.0	7.8	---	---	7.4	7.3
31	7.8	7.6	---	---	7.5	7.5	8.0	7.8	---	---	7.5	7.3
MONTH	---	---	7.8	7.2	7.7	7.3	8.0	7.4	8.1	7.3	8.4	7.1
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.3	7.2	---	---	8.1	7.5	8.8	7.4	8.9	7.5	8.6	7.1
2	7.3	7.2	---	---	8.0	7.4	8.8	7.3	9.1	7.7	8.8	7.1
3	7.3	7.2	---	---	8.0	7.4	8.8	7.3	9.1	8.0	9.1	7.1
4	7.3	7.2	---	---	8.0	7.4	8.8	7.2	9.0	7.8	8.5	7.1
5	7.4	7.2	---	---	8.2	7.5	8.8	7.3	9.1	7.8	8.4	7.1
6	7.4	7.2	---	---	8.0	7.5	8.9	7.2	9.0	7.6	8.4	7.1
7	7.4	7.2	---	---	7.6	7.4	8.9	7.2	8.8	7.4	8.7	7.3
8	7.4	7.2	---	---	7.8	7.4	8.9	7.2	8.9	7.4	---	---
9	7.4	7.2	---	---	7.5	7.3	8.8	7.2	8.9	7.3	---	---
10	7.4	7.3	---	---	7.6	7.3	8.9	7.2	9.0	7.3	---	---
11	7.4	7.3	---	---	7.7	7.3	8.9	7.2	9.0	7.4	8.5	7.4
12	7.5	7.3	---	---	7.8	7.3	8.9	7.2	9.0	7.4	8.5	7.4
13	7.5	7.3	---	---	7.9	7.3	9.0	7.2	9.0	7.3	8.3	7.4
14	7.5	7.3	---	---	8.0	7.3	9.0	7.3	9.0	7.3	8.4	7.4
15	7.5	7.3	---	---	7.9	7.3	9.1	7.3	9.0	7.2	8.5	7.4
16	7.5	7.3	8.0	7.5	8.1	7.3	9.0	7.3	9.0	7.2	8.5	7.4
17	7.4	7.4	8.1	7.5	8.2	7.3	9.0	7.4	8.9	7.1	8.4	7.5
18	7.4	7.3	8.1	7.5	8.2	7.3	9.0	7.4	8.4	7.1	8.5	7.4
19	7.6	7.4	8.1	7.5	8.3	7.2	8.9	7.3	8.4	7.1	8.3	7.4
20	7.6	7.4	8.0	7.5	8.4	7.2	9.0	7.3	8.8	7.1	8.6	7.5
21	7.5	7.4	8.0	7.4	8.5	7.2	9.0	7.4	9.0	7.1	8.6	7.5
22	7.6	7.4	8.0	7.4	8.5	7.2	9.0	7.4	9.1	7.2	8.5	7.5
23	7.4	7.3	7.9	7.3	8.6	7.2	9.0	7.5	8.9	7.2	8.7	7.5
24	7.3	7.3	7.9	7.3	8.7	7.3	9.1	7.5	8.9	7.1	8.7	7.4
25	7.4	7.3	8.0	7.4	8.7	7.3	9.1	7.6	9.2	7.1	8.8	7.4
26	7.4	7.3	7.9	7.4	8.7	7.5	9.1	7.6	9.1	7.2	8.8	---
27	7.4	7.3	7.9	7.5	8.8	7.4	9.1	7.6	9.1	7.1	8.9	7.3
28	7.4	7.2	7.9	7.4	8.8	7.4	9.1	7.7	9.1	7.2	8.8	7.3
29	7.5	7.3	8.0	7.4	8.8	7.4	9.0	7.6	9.2	7.2	8.9	7.3
30	7.5	7.3	8.0	7.5	8.8	7.4	8.7	7.6	9.1	7.1	8.9	7.3
31	---	---	7.9	7.4	---	---	8.8	7.5	9.1	7.1	---	---
MONTH	7.6	7.2	---	---	8.8	7.2	9.1	7.2	9.2	7.1	---	---

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.3	8.4	10.4	12.5	11.9	12.2	11.8	11.6	11.7	12.3	12.2	12.3
2	13.6	8.4	10.7	11.9	11.3	11.5	11.9	11.7	11.8	12.4	12.3	12.4
3	13.6	8.3	10.6	11.7	11.3	11.6	11.9	11.7	11.8	12.5	12.4	12.5
4	12.6	7.8	10.0	12.2	11.7	12.0	11.8	11.7	11.7	12.6	12.5	12.5
5	12.7	8.4	10.3	12.1	11.9	12.0	12.2	11.8	12.0	12.6	12.5	12.6
6	12.7	8.3	10.2	12.1	11.9	12.0	12.3	12.2	12.2	12.5	12.2	12.4
7	12.5	8.1	10.1	12.1	11.8	12.0	12.3	12.2	12.3	12.2	12.1	12.2
8	10.5	7.8	9.3	12.0	11.8	11.9	12.4	12.3	12.3	12.1	11.9	12.1
9	11.7	7.5	9.4	12.5	11.8	12.3	12.4	12.1	12.3	12.1	11.9	12.0
10	9.6	7.6	8.5	12.4	12.0	12.3	12.2	11.7	11.9	12.4	12.0	12.2
11	10.4	7.6	8.8	12.0	11.5	11.7	12.1	11.9	12.0	12.6	12.4	12.5
12	9.8	7.5	8.7	11.8	11.3	11.6	12.1	12.0	12.0	12.7	12.5	12.6
13	---	---	---	11.9	11.3	11.6	12.2	12.1	12.1	12.8	12.5	12.6
14	---	---	---	11.6	11.4	11.5	12.2	12.0	12.1	13.0	12.6	12.8
15	---	---	---	11.5	11.3	11.4	12.0	11.9	11.9	12.9	12.8	12.8
16	---	---	---	11.6	11.4	11.5	12.1	11.9	12.0	12.8	12.6	12.7
17	11.2	9.8	10.4	11.6	11.4	11.5	12.3	12.1	12.2	12.8	12.3	12.5
18	11.0	9.6	10.1	11.7	11.4	11.6	12.3	12.1	12.2	12.4	12.1	12.3
19	11.4	9.8	10.4	11.6	11.4	11.6	12.4	12.3	12.4	12.4	12.1	12.2
20	11.3	10.0	10.6	11.7	11.4	11.5	12.6	12.4	12.5	12.3	12.0	12.2
21	11.2	10.4	10.8	11.9	11.7	11.9	12.7	12.6	12.6	12.3	11.9	12.1
22	11.4	10.8	11.1	12.0	11.8	11.9	12.7	12.5	12.6	12.4	11.9	12.1
23	11.5	10.5	11.0	11.9	11.6	11.8	12.6	12.4	12.5	12.5	12.1	12.3
24	11.4	10.4	11.0	12.1	11.9	12.0	12.5	12.2	12.4	12.7	12.3	12.5
25	11.6	10.6	11.0	12.1	11.9	12.0	12.2	12.1	12.1	13.0	12.5	12.7
26	11.5	10.3	10.8	12.1	12.0	12.1	12.3	12.1	12.2	13.0	12.6	12.7
27	11.7	10.3	10.9	12.0	11.5	11.8	12.4	---	---	12.9	12.5	12.7
28	11.5	10.8	11.2	11.9	11.7	11.8	12.3	12.2	12.2	12.9	12.3	12.6
29	11.8	11.3	11.5	11.9	11.4	11.5	12.3	12.2	12.2	13.0	12.3	12.7
30	12.4	11.6	12.0	11.6	11.4	11.4	12.3	12.1	12.2	13.3	12.6	12.9
31	12.4	11.9	12.2	---	---	---	12.4	12.2	12.3	13.1	12.6	12.8
MONTH	---	---	---	12.5	11.3	11.8	12.7	---	---	13.3	11.9	12.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	12.7	12.3	12.5	12.2	11.5	11.8	10.9	10.7	10.8	---	---	---
2	12.9	12.2	12.5	12.4	11.5	11.9	10.8	10.7	10.8	---	---	---
3	12.8	12.3	12.6	12.7	11.7	12.1	10.9	10.8	10.8	---	---	---
4	13.1	12.4	12.8	12.6	11.6	12.1	11.0	10.7	10.9	---	---	---
5	13.0	12.5	12.8	12.4	11.6	12.0	10.9	10.6	10.7	---	---	---
6	12.9	12.3	12.7	12.4	11.4	11.9	10.8	10.5	10.6	---	---	---
7	12.5	11.8	12.0	12.6	11.7	12.1	10.6	10.4	10.5	---	---	---
8	11.8	11.6	11.7	12.7	11.8	12.3	10.5	10.3	10.4	---	---	---
9	12.0	11.7	11.8	12.9	11.8	12.3	10.6	10.2	10.4	---	---	---
10	12.4	12.0	12.2	12.8	11.7	12.2	10.6	10.2	10.3	---	---	---
11	12.2	11.7	12.0	12.7	11.6	12.1	10.7	10.2	10.5	---	---	---
12	11.9	11.7	11.8	12.6	11.5	12.0	11.0	10.4	10.6	---	---	---
13	11.9	11.7	11.8	12.6	11.4	12.0	10.9	10.1	10.5	---	---	---
14	11.9	11.7	11.7	12.6	11.3	11.9	10.8	10.0	10.4	---	---	---
15	11.8	11.6	11.7	12.6	11.4	11.9	10.6	9.8	10.2	---	---	---
16	11.8	11.5	11.6	12.1	11.1	11.6	10.7	9.9	10.3	11.0	9.2	10.1
17	12.0	11.6	11.9	12.4	11.2	11.7	11.0	10.3	10.6	11.1	9.1	10.0
18	12.1	11.9	12.0	12.3	11.0	11.5	11.0	10.5	10.8	11.2	9.2	10.0
19	12.2	11.9	12.1	12.3	11.0	11.5	11.5	10.7	11.1	11.0	9.1	9.9
20	12.4	12.0	12.2	12.1	10.9	11.4	11.5	10.9	11.3	10.9	8.9	9.7
21	12.3	11.8	12.0	12.0	10.4	11.0	11.4	10.8	11.1	10.9	8.8	9.8
22	12.0	11.6	11.8	11.8	10.3	10.9	11.6	11.0	11.3	10.7	8.4	9.5
23	12.1	11.5	11.8	11.4	10.9	11.1	11.5	11.1	11.3	10.1	8.0	8.9
24	12.0	11.3	11.6	11.1	10.6	10.8	11.4	11.0	11.2	10.1	8.1	9.0
25	12.2	11.5	11.8	11.3	11.0	11.2	11.7	11.0	11.3	10.4	8.5	9.3
26	12.3	11.6	11.9	11.2	10.9	11.1	11.6	10.8	11.2	10.4	8.7	9.4
27	12.6	11.7	12.1	11.2	10.9	11.1	11.2	10.2	10.8	10.4	8.7	9.4
28	12.6	11.8	12.1	11.2	11.1	11.1	10.7	10.0	10.4	10.4	8.7	9.5
29	---	---	---	11.4	11.2	11.3	11.1	10.2	10.6	10.8	9.0	9.9
30	---	---	---	11.3	11.1	11.2	11.0	10.0	10.5	10.8	9.1	9.9
31	---	---	---	11.1	10.9	11.0	---	---	---	10.7	8.8	9.7
MONTH	13.1	11.3	12.1	12.9	10.3	11.6	11.7	9.8	10.7	---	---	---

UMPQUA RIVER BASIN

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.0	8.9	9.8	---	---	---	10.6	4.8	7.7	10.9	3.5	7.1
2	10.9	8.7	9.7	---	---	---	12.4	5.7	8.8	12.4	3.7	7.6
3	10.4	8.5	9.4	---	---	---	11.8	5.9	8.7	14.0	3.9	8.6
4	10.5	8.5	9.4	---	---	---	11.8	5.5	8.4	10.9	3.6	6.9
5	10.9	8.7	9.6	---	---	---	12.2	5.6	8.6	10.3	3.7	6.7
6	10.4	8.4	9.3	---	---	---	12.4	5.1	8.5	10.2	3.8	6.7
7	9.3	8.4	8.8	---	---	---	11.1	4.8	7.8	11.5	4.2	---
8	9.9	8.7	9.3	---	---	---	12.3	5.1	8.6	---	---	---
9	10.2	9.0	9.6	---	---	---	12.8	5.1	8.8	---	---	---
10	10.0	8.8	9.4	12.4	---	---	13.1	5.0	8.8	---	---	---
11	10.1	8.5	9.3	11.4	3.8	7.4	13.5	5.2	9.1	10.6	6.3	8.3
12	10.1	8.2	9.0	11.6	3.4	7.2	13.6	5.1	9.1	10.2	6.6	8.1
13	10.5	7.7	8.9	---	---	---	13.3	4.7	8.8	10.1	6.8	8.2
14	9.6	7.6	8.5	---	---	---	13.4	4.5	8.7	10.5	6.7	8.4
15	9.1	7.0	8.0	12.4	3.1	7.4	13.3	4.1	8.5	11.2	6.9	8.4
16	9.4	7.2	8.2	11.3	2.9	6.6	13.4	3.8	8.4	11.1	7.1	8.7
17	9.3	7.0	8.0	11.8	4.1	7.7	12.4	3.5	7.5	10.2	7.2	8.5
18	9.1	6.5	7.6	11.8	3.8	7.7	9.9	3.5	6.5	11.0	7.3	8.9
19	9.0	6.1	7.3	11.6	3.6	7.4	10.5	3.5	6.9	10.6	7.4	8.8
20	9.1	5.8	7.3	11.5	3.5	7.4	12.8	4.0	8.1	11.5	8.0	9.4
21	9.3	5.7	7.3	11.1	3.7	7.4	13.8	4.4	8.9	11.8	7.9	9.5
22	9.5	5.6	7.4	11.4	3.7	7.3	14.3	4.8	9.3	11.2	7.6	9.0
23	9.7	5.5	7.5	11.4	3.7	7.4	13.6	4.7	9.0	11.8	7.5	9.2
24	10.3	5.7	7.8	11.6	3.6	7.5	13.6	4.4	8.8	12.0	7.2	9.4
25	---	---	---	11.9	3.8	7.7	15.2	4.3	9.3	12.0	7.1	9.4
26	---	---	---	12.0	3.6	7.7	14.8	4.0	9.1	12.2	---	---
27	---	---	---	11.8	3.6	7.6	13.9	3.6	8.2	12.3	6.6	9.0
28	---	---	---	11.1	3.8	7.2	14.8	3.6	8.8	12.1	6.5	8.8
29	---	---	---	10.4	3.4	6.6	14.7	3.6	8.9	12.8	6.6	9.4
30	---	---	---	8.9	3.8	6.3	14.2	3.6	8.6	12.9	6.7	9.1
31	---	---	---	9.7	4.2	7.0	14.9	3.4	8.8	---	---	---
MONTH	---	---	---	---	---	---	15.2	3.4	8.5	---	---	---

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

UMPQUA RIVER BASIN

14313000 LEMOLO LAKE NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°19'10", long 122°11'20", in SE¼NW¼ sec.11, T.26 S., R.5 E., Douglas County, Hydrologic Unit 17100301, at Lemolo No. 1 diversion dam on North Umpqua River, 0.8 mi downstream from Lake Creek, 13.0 mi east of town of Toketee Falls, and at mile 93.01.

DRAINAGE AREA.--170 mi².

PERIOD OF RECORD.--July 1954 to current year. Prior to October 1960, published as Lemolo Reservoir near Toketee Falls.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Pacific Power & Light Co.).

REMARKS.--Lake is formed by Lemolo No 1 diversion dam. Storage began July 15, 1954. Usable capacity for normal operation, 12,520 acre-ft between elevations 4,097.0 ft and 4,148.5 ft. Dead storage below 4,097.0 ft, 1,040 acre-ft. Water is used for power generation. Figures given herein represent total contents.

COOPERATION.--Gage readings furnished by Pacific Power & Light Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 14,000 acre-ft Dec. 24, 1964, elevation, 4,149.5 ft; minimum observed, 11 acre-ft Mar. 5, 1955, elevation, 4,055.4 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 13,410 acre-ft Sept. 19, 20, elevation, 4,148.14 ft; minimum observed, 1,560 acre-ft Mar. 21, elevation, 4,103.00 ft.

MONTHEND ELEVATION AND CONTENTS AT 0900, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30.....	4,142.8	11,270	-
Oct. 31.....	4,137.4	9,350	-1,920
Nov. 30.....	4,139.8	10,170	+820
Dec. 31.....	4,130.0	6,990	-3,180
CAL YR 1984.....	-	-	-1,820
Jan. 31.....	4,107.6	2,070	-4,920
Feb. 28.....	4,108.6	2,200	+130
Mar. 31.....	4,105.4	1,810	-390
Apr. 30.....	4,141.1	10,640	+8,830
May 31.....	4,147.0	12,930	+2,290
June 30.....	4,146.6	12,770	-160
July 31.....	4,147.7	13,220	+450
Aug. 31.....	4,147.4	13,100	-120
Sept.30.....	4,146.1	12,560	-540
WTR YR 1985.....	-	-	+1,290

14313500 NORTH UMPQUA RIVER BELOW LEMOLO LAKE, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°19'20", long 122°11'40", in NW¼NW¼ sec.11, T.26 S., R.5 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on right bank 0.4 mi downstream from Lemolo Lake, 13 mi east of town of Toketee Falls, and at mile 92.6.

DRAINAGE AREA.--170 mi² (see REMARKS).

PERIOD OF RECORD.--October 1927 to December 1945, March 1946 to current year. Records since October 1983 are equivalent to earlier records if diversion to Lemolo No. 1 power canal is added to flow past station. Published as "below Lake Creek" prior to October 1952, as "below Lake Creek, near Toketee Falls" October 1952 to September 1953, and as "below Lemolo Reservoir near Toketee Falls" October 1953 to September 1960.

REVISED RECORDS.--WSP 1448: Drainage area. WRD OR-75-1: 1964(M).

GAGE.--Water-stage recorder. Elevation of gage is 4,025 ft, from river-profile map. Prior to July 15, 1954, at site 1 mi upstream at datum about 65 ft higher. July 15, 1954, to Sept. 25, 1955, at site 400 ft upstream at datum 14.11 ft higher.

REMARKS.--No estimated daily discharges. Records excellent. Flow regulated since 1954 by Lemolo Lake (see station 14313000); also slightly regulated by Diamond Lake. Records given herein do not include flow in Lemolo No. 1 power canal which, beginning July 1955, diverts 0.4 mi upstream from station for power generation with return flow 4.3 mi downstream.

AVERAGE DISCHARGE.--55 years (1928-83), 423 ft³/s, 33.79 in/yr, 306,500 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 4,600 ft³/s Dec. 25, 1964, from rating curve extended above 450 ft³/s on basis of slope-area measurement of peak flow, gage height, 9.20 ft, from floodmark; minimum, 6.4 ft³/s July 17, 1954.

Combined flow, maximum discharge, 4,680 ft³/s Dec. 25, 1964, from river rating curve extended above 450 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 9.7 ft³/s May 13, 1955.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 480 ft³/s Sept. 20, gage height, 6.40 ft; minimum, 17 ft³/s Jan. 25-31.

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	24	25	22	27	28	27	40	133	32	28	25
2	24	26	25	22	27	28	27	40	132	32	27	25
3	24	26	25	22	27	28	28	40	131	30	27	25
4	25	25	25	22	27	28	29	40	69	28	27	25
5	26	25	25	22	27	28	30	40	26	26	27	25
6	26	25	25	21	27	28	32	40	47	26	26	24
7	26	25	25	21	27	28	32	40	70	26	26	24
8	26	25	25	21	27	27	33	34	126	26	25	24
9	25	25	25	21	27	26	34	30	166	25	25	161
10	25	25	25	20	27	26	35	30	165	25	25	221
11	25	25	25	20	28	26	36	30	164	25	25	236
12	25	26	25	20	28	26	37	30	164	25	26	264
13	25	26	25	20	28	26	38	30	130	26	25	315
14	25	26	25	20	28	26	38	31	56	107	26	333
15	25	26	24	20	28	26	39	31	27	313	26	335
16	25	26	24	20	28	26	40	32	27	31	27	337
17	25	26	24	19	28	26	40	31	27	27	27	374
18	25	26	24	19	28	26	40	32	27	25	27	400
19	25	26	24	19	28	26	41	34	27	25	28	399
20	25	26	24	19	28	26	40	35	27	25	28	426
21	25	26	24	18	28	26	40	98	28	25	27	458
22	25	26	24	18	28	26	40	138	29	26	27	452
23	25	26	23	18	28	26	40	138	29	122	27	401
24	25	26	23	18	28	27	40	139	29	27	27	367
25	25	26	23	17	28	27	39	139	29	25	26	370
26	25	25	23	17	28	27	39	138	29	25	26	368
27	25	26	23	17	28	27	39	138	29	26	26	279
28	25	26	23	17	28	27	39	137	29	26	26	22
29	25	25	23	17	---	27	39	137	29	27	26	22
30	25	25	22	17	---	27	39	135	30	28	26	21
31	24	---	22	23	---	27	---	135	---	29	26	---
TOTAL	775	767	747	607	774	829	1090	2162	2031	1291	818	6758
MEAN	25.0	25.6	24.1	19.6	27.6	26.7	36.3	69.7	67.7	41.6	26.4	225
MAX	26	26	25	23	28	28	41	139	166	313	28	458
MIN	24	24	22	17	27	26	27	30	26	25	25	21
AC-FT	1540	1520	1480	1200	1540	1640	2160	4290	4030	2560	1620	13400
CAL YR 1984	TOTAL	24830	MEAN	67.8	MAX	426	MIN	22	AC-FT	49250		
WTR YR 1985	TOTAL	18649	MEAN	51.1	MAX	458	MIN	17	AC-FT	36990		

UMPQUA RIVER BASIN

14314500 CLEARWATER RIVER ABOVE TRAP CREEK, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°14'40", long 122°17'10", in SW¼ sec.1, T.27 S., R.4 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on right bank 900 ft downstream from Clearwater No. 1 diversion dam, 0.4 mi upstream from Trap Creek, 8.7 mi east of town of Toketee Falls, and at mile 7.8.

DRAINAGE AREA.--41.6 mi². (See REMARKS.)

PERIOD OF RECORD.--October 1927 to December 1945, March 1946 to current year. Records since October 1983 are equivalent to earlier records if diversion to Clearwater No. 1 power canal is added to flow past station. Monthly discharge only December 1927 to March 1928, published in WSP 1318. Prior to October 1952, published as "above Trap Creek."

REVISED RECORDS.--WSP 1124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,862.84 ft above National Geodetic Vertical Datum of 1929 (levels by Pacific Power & Light Co.). Prior to Dec. 1, 1953, at two sites about 0.4 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records good. Records after September 1983 do not include flow in Clearwater No. 1 power canal, completed in June 1953, which diverts 900 ft upstream from station for generation of power and returns water to Clearwater River 2.5 mi downstream from station.

AVERAGE DISCHARGE.--55 years (1928-83), 173 ft³/s, 125,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 848 ft³/s Dec. 23, 1964, gage height, 7.19 ft; maximum gage height, 7.87 ft Dec. 23, 1964, log jam; minimum discharge, 0.08 ft³/s Sept. 21, 1977, result of beavers plugging release gate at diversion dam 900 ft upstream.

Combined flow, maximum discharge, 1,020 ft³/s Dec. 23, 1964; minimum daily, 91 ft³/s Nov. 4-6, 1931.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 269 ft³/s May 2, gage height, 4.84 ft; minimum, 5.1 ft³/s Aug. 5-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	5.9	6.1	5.7	5.8	5.9	6.0	247	11	6.3	5.4	5.5
2	5.7	21	6.1	5.7	5.7	5.9	6.1	259	9.3	6.3	5.3	5.6
3	5.7	11	6.1	5.7	5.7	5.9	6.1	267	8.9	6.2	5.3	5.5
4	5.7	7.0	6.1	5.7	5.7	5.9	6.3	254	11	6.1	5.3	5.5
5	5.7	6.8	6.1	5.7	5.8	5.9	6.5	249	11	6.1	5.3	5.5
6	5.7	7.0	6.1	5.6	5.7	5.9	7.4	248	36	6.1	5.3	5.6
7	5.7	6.8	6.1	5.7	5.9	5.9	13	247	49	6.1	5.2	5.5
8	5.7	6.7	6.1	5.9	5.9	5.9	21	244	36	6.1	5.1	5.5
9	5.8	6.7	6.1	5.9	5.9	5.9	29	155	25	6.1	5.1	5.6
10	5.9	7.0	6.4	5.9	5.7	5.9	40	20	20	6.1	5.1	5.5
11	6.2	11	6.1	5.9	5.9	5.9	47	17	17	6.1	5.5	5.5
12	6.0	38	6.1	5.9	6.1	5.9	45	14	18	6.1	5.7	5.5
13	6.4	23	6.1	5.8	5.9	5.9	46	14	18	6.1	5.7	5.5
14	5.9	11	6.1	5.8	5.9	5.8	56	17	16	6.1	5.7	31
15	5.9	7.5	6.1	5.7	5.9	5.7	67	16	15	6.1	5.7	6.3
16	5.7	6.7	5.9	5.7	5.9	5.7	73	18	13	6.1	5.6	6.1
17	5.7	6.6	5.9	5.7	5.9	5.7	63	20	13	6.1	5.6	6.2
18	5.8	6.8	5.9	5.7	5.9	5.7	56	24	16	6.1	5.7	6.1
19	6.4	6.5	6.0	5.7	5.9	5.7	47	28	16	6.1	5.7	6.0
20	54	6.5	6.1	5.8	5.9	5.9	37	27	12	6.1	5.6	5.9
21	23	6.3	6.1	5.9	5.7	5.9	35	25	8.8	6.1	5.5	5.9
22	6.0	6.3	5.9	5.9	5.9	5.9	28	27	7.6	6.0	5.5	5.9
23	5.9	6.5	5.9	5.8	5.8	6.0	28	32	7.2	66	5.5	5.9
24	5.9	6.3	5.9	5.9	5.8	6.0	21	36	6.8	5.7	5.5	5.9
25	5.9	6.3	5.9	5.7	5.9	5.9	18	30	6.6	5.5	5.5	5.9
26	6.2	6.1	5.9	5.7	5.9	5.9	16	26	6.5	5.5	5.5	5.9
27	6.1	6.6	5.9	5.7	5.9	5.9	16	21	6.5	5.3	5.5	5.9
28	6.1	6.5	5.8	5.9	5.9	5.9	18	21	6.4	5.3	5.5	5.9
29	6.1	6.3	5.8	5.7	---	5.9	20	16	6.4	5.3	5.5	5.9
30	5.9	6.4	5.9	5.7	---	5.9	158	11	6.3	5.4	5.5	5.9
31	5.9	---	5.8	5.7	---	5.9	---	13	---	5.4	5.5	---
TOTAL	248.3	273.1	186.4	178.8	163.8	182.0	1036.4	2643	440.3	244.0	169.4	198.4
MEAN	8.01	9.10	6.01	5.77	5.85	5.87	34.5	85.3	14.7	7.87	5.46	6.61
MAX	54	38	6.4	5.9	6.1	6.0	158	267	49	66	5.7	31
MIN	5.7	5.9	5.8	5.6	5.7	5.7	6.0	11	6.3	5.3	5.1	5.5
AC-FT	493	542	370	355	325	361	2060	5240	873	484	336	394
CAL YR 1984	TOTAL	9323.9	MEAN	25.5	MAX	303	MIN	5.7	AC-FT	18490		
WTR YR 1985	TOTAL	5963.9	MEAN	16.3	MAX	267	MIN	5.1	AC-FT	11830		

14316000 FISH CREEK AT BIG CAMAS RANGER STATION, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°13'50", long 122°26'45", in SE¼ sec.10, T.27 S., R.3 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, 0.2 mi upstream from Camas Creek, 0.7 mi east of Big Camas ranger station, 3.2 mi south of town of Toketee Falls, and at mile 4.7.

DRAINAGE AREA.--68.8 mi² (see REMARKS).

PERIOD OF RECORD.--October 1947 to current year. Records since October 1983 are equivalent to earlier records if diversion to Fish Creek power canal is added to flow past station. Prior to October 1952, published as "at Big Camas ranger station."

REVISED RECORDS.--WSP 1448: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,858.52 ft above National Geodetic Vertical Datum of 1929 (levels by Pacific Power & Light Co.). Prior to July 10, 1951, water-stage recorder and July 10 to Aug. 10, 1951, nonrecording gage at site 1,000 ft upstream at datum 13.72 ft higher. Aug. 11 to Nov. 3, 1951, nonrecording gage at site 200 ft downstream at different datum. Nov. 4, 1951, to Sept. 30, 1956, water-stage recorder at present site at datum 1.92 ft higher.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Records given herein do not include flow in Fish Creek power canal (diversion began June 18, 1952), which diverts water 2 mi upstream from station for power generation at Fish Creek powerplant; diversion discharged to North Umpqua River 600 ft downstream from Toketee powerplant.

AVERAGE DISCHARGE.--36 years (1947-83), 237 ft³/s, 46.78 in/yr, 171,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 12,100 ft³/s Dec. 22, 1964, gage height, 13.9 ft, from floodmark; minimum, 2.3 ft³/s Sept. 25, 1957.

Combined flow, maximum discharge, 12,100 ft³/s Dec. 22, 1964; minimum daily, 19 ft³/s July 30, 1979, result of diversion dam manipulation.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 1,420 ft³/s Nov. 12, gage height, 6.13 ft; minimum, 8.2 ft³/s Oct. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	19	18	145	21	24	55	99	286	176	35	108	63		
2	17	387	111	20	23	52	208	342	159	32	96	76		
3	16	422	90	20	22	48	273	339	149	30	90	66		
4	16	217	73	21	36	48	274	263	178	29	88	62		
5	17	133	62	24	30	42	290	234	177	27	85	61		
6	16	177	57	28	18	39	351	217	442	26	83	71		
7	15	162	51	34	32	35	468	204	540	24	82	68		
8	16	120	49	36	31	32	491	188	463	23	82	66		
9	23	94	57	35	25	31	498	168	360	22	79	69		
10	28	208	185	32	22	30	528	147	302	21	78	75		
11	59	484	150	30	46	29	507	128	265	20	77	65		
12	50	1190	120	27	122	30	437	118	252	19	76	66		
13	64	833	92	27	90	30	429	125	220	18	74	73		
14	19	502	77	27	98	31	492	146	198	18	73	96		
15	13	337	73	27	86	34	533	147	177	17	72	94		
16	13	246	61	28	90	40	491	167	154	16	71	75		
17	11	197	56	41	81	48	399	188	142	16	70	87		
18	13	209	50	61	70	52	328	244	135	15	74	78		
19	63	173	55	66	65	57	272	265	124	14	78	68		
20	66	165	43	63	58	60	221	254	107	15	72	51		
21	33	129	38	57	53	60	196	246	91	17	70	60		
22	14	105	35	51	54	56	178	267	80	17	68	58		
23	10	119	33	47	56	88	226	310	70	35	67	51		
24	20	122	30	42	58	166	189	341	61	17	66	56		
25	13	98	28	39	58	100	157	293	54	21	64	54		
26	59	82	27	36	55	85	141	265	50	20	64	53		
27	31	114	27	33	51	73	150	235	47	19	62	42		
28	40	179	26	32	49	63	179	234	43	18	61	11		
29	25	146	24	28	---	53	205	201	40	60	61	10		
30	15	200	25	26	---	50	235	165	38	102	60	9.9		
31	14	---	22	25	---	61	---	190	---	112	60	---		
TOTAL	828	7568	1972	1084	1503	1678	9445	6917	5294	875	2311	1834.9		
MEAN	26.7	252	63.6	35.0	53.7	54.1	315	223	176	28.2	74.5	61.2		
MAX	66	1190	185	66	122	166	533	342	540	112	108	96		
MIN	10	18	22	20	18	29	99	118	38	14	60	9.9		
CFSM	.39	3.66	.92	.51	.78	.79	4.58	3.24	2.56	.41	1.08	.89		
IN.	.45	4.09	1.07	.59	.81	.91	5.11	3.74	2.86	.47	1.25	.99		
AC-FT	1640	15010	3910	2150	2980	3330	18730	13720	10500	1740	4580	3640		
CAL YR 1984	TOTAL	61899	MEAN	169	MAX	1400	MIN	10	CFSM	2.46	IN.	33.47	AC-FT	122800
WTR YR 1985	TOTAL	41309.9	MEAN	113	MAX	1190	MIN	9.9	CFSM	1.64	IN.	22.34	AC-FT	81940

UMPQUA RIVER BASIN

14316500 NORTH UMPQUA RIVER ABOVE COPELAND CREEK, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°17'45", long 122°32'10", in NW¼ sec.24, T.26 S., R.2 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on left bank 0.6 mi upstream from Copeland Creek, 4.7 mi west of town of Toketee Falls, and at mile 67.2.

DRAINAGE AREA.--475 mi².

PERIOD OF RECORD.--September 1949 to current year. Monthly discharge only September 1949, published in WSP 1318. Prior to October 1952, published as "above Copeland Creek."

REVISED RECORDS.--WSP 1448: 1953(M), 1954, drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,580 ft, from river-profile map. Prior to Aug. 1, 1976, on right bank at same datum.

REMARKS.--No estimated daily discharges. Records excellent. Considerable fluctuation caused by powerplants upstream; flow slightly regulated by Diamond Lake and by Lemolo Lake (see station 14313000). No diversion upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--36 years, 1,519 ft³/s, 1,101,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,700 ft³/s Dec. 22, 1964, gage height, 19.1 ft, from floodmark, from rating curve extended above 7,200 ft³/s on basis of slope-area measurement of peak flow; minimum, 370 ft³/s Sept. 30, 1981; minimum daily, 565 ft³/s Sept. 13, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,430 ft³/s Nov. 12, gage height, 9.40 ft; minimum, 698 ft³/s July 23; minimum daily, 729 ft³/s Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	979	1110	2100	1350	1120	1410	2000	2140	1770	1050	1110	861
2	881	2290	1870	1260	1090	1430	2510	2290	1770	1140	1100	864
3	1080	3000	1790	1270	1060	1290	2360	2310	1670	1170	925	875
4	1030	2180	1680	1310	1050	1320	2190	2090	1750	1160	839	963
5	971	1710	1510	1420	1090	1220	1950	1920	1620	1160	999	999
6	1010	1820	1430	1460	1140	1290	2150	1870	2130	1150	945	995
7	969	1950	1420	1540	1200	1290	2650	1880	2360	1030	926	1030
8	956	1800	1560	1580	1170	1240	2520	1810	2490	1110	921	1090
9	969	1680	1560	1470	1150	1250	2620	1740	2280	1130	915	812
10	1020	2050	2410	1410	1060	1160	2730	1780	2110	972	816	739
11	1020	2880	2190	1430	1160	1180	2670	1770	2020	907	868	729
12	1090	4590	1980	1370	1880	1160	2530	1610	1920	908	907	743
13	1210	4000	1820	1310	1760	1170	2480	1690	1880	912	913	757
14	1150	3180	1690	1370	1660	1160	2630	1720	1720	914	846	770
15	1040	2560	1640	1350	1750	1270	2810	1700	1570	914	845	847
16	854	2280	1610	1310	1740	1290	2670	1790	1550	1060	831	871
17	1010	1930	1470	1390	1540	1220	2400	1780	1560	1130	825	872
18	1020	2000	1460	1630	1500	1330	2250	1840	1500	1110	815	904
19	1260	1820	1490	1680	1500	1360	2120	1970	1530	1020	854	885
20	1420	2030	1410	1600	1450	1380	1940	2010	1490	917	897	849
21	1200	1870	1370	1460	1410	1380	1910	1820	1450	864	913	872
22	1150	1700	1380	1410	1460	1370	1980	2170	1390	856	913	884
23	926	1710	1320	1410	1380	1410	2080	2190	1330	838	877	860
24	1070	1850	1320	1370	1340	1750	1910	2240	1360	1120	859	819
25	1100	1690	1320	1370	1460	1610	1810	2140	1310	1030	854	820
26	1280	1570	1300	1180	1490	1600	1720	2100	1240	876	858	814
27	1350	1770	1330	1090	1400	1490	1730	1990	1260	881	858	816
28	1340	2360	1300	1240	1360	1440	1860	1940	1180	857	860	931
29	1320	2050	1240	1200	---	1430	1950	1870	1070	845	858	935
30	1250	2580	1320	1190	---	1330	1980	1770	1050	855	857	941
31	1080	---	1300	1180	---	1400	---	1770	---	960	858	---
TOTAL	34005	66010	48590	42610	38370	41630	67110	59710	49330	30846	27662	26147
MEAN	1097	2200	1567	1375	1370	1343	2237	1926	1644	995	892	872
MAX	1420	4590	2410	1680	1880	1750	2810	2310	2490	1170	1110	1090
MIN	854	1110	1240	1090	1050	1160	1720	1610	1050	838	815	729
AC-FT	67450	130900	96380	84520	76110	82570	133100	118400	97850	61180	54870	51860
CAL YR 1984	TOTAL	677547	MEAN	1851	MAX	6330	MIN	854	AC-FT	1344000		
WTR YR 1985	TOTAL	532020	MEAN	1458	MAX	4590	MIN	729	AC-FT	1055000		

UMPQUA RIVER BASIN

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14316700 STEAMBOAT CREEK NEAR GLIDE, OR

LOCATION.--Lat 43°21'00", long 122°43'40", in N-1/2 sec.32, T.25-1/2 S., R.1 E., Douglas County, Hydrologic Unit 17100301, in Umpqua National Forest, on right bank in Canton Creek Forest Service Park, 200 ft downstream from Canton Creek, 19 mi northeast of Glide, and at mile 0.5.

DRAINAGE AREA.--227 mi².

PERIOD OF RECORD.--Annual maximum, water year 1956, June 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,128.55 ft above National Geodetic Vertical Datum of 1929 (levels by Federal Highway Administration). October 1955 to June 1956, nonrecording gage at site 100 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records excellent. No regulation or diversion upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--29 years, 749 ft³/s, 44.81 in/yr, 542,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,000 ft³/s Dec. 22, 1964, gage height, 25.6 ft, from floodmark, from rating curve extended above 13,000 ft³/s on basis of slope-area measurement at 17.96 ft; minimum, 30 ft³/s Sept. 15-17, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 30	0800	*9,730	*10.17	No other peak greater than base discharge.			
Minimum, 39 ft ³ /s Aug. 31, Sept. 1.							

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	52	317	3050	809	279	782	3270	696	343	106	85	40		
2	52	4220	1810	694	274	711	3450	696	371	103	74	53		
3	52	6360	1430	716	264	599	2620	665	305	99	66	55		
4	53	3070	1200	916	236	572	1860	544	314	95	62	48		
5	57	1470	997	1030	237	516	1530	465	290	92	59	45		
6	55	1330	883	1100	234	487	1500	431	1110	91	57	50		
7	53	1760	896	1290	800	463	1570	400	1610	88	56	59		
8	52	1370	948	1150	1410	428	1360	364	1560	84	58	62		
9	66	1510	1040	986	804	411	1220	342	882	81	57	61		
10	68	3600	3530	811	578	434	1210	330	622	79	55	69		
11	138	4670	2330	696	1190	493	1040	325	482	78	53	60		
12	168	6290	2090	626	4100	514	871	292	403	76	53	56		
13	309	4860	1710	596	2320	478	835	282	347	74	52	62		
14	236	3200	1310	626	1880	474	875	296	303	72	50	107		
15	270	1900	1350	617	2290	506	847	289	271	71	47	131		
16	162	1290	1120	600	1950	553	738	312	245	69	46	103		
17	127	961	909	887	1390	617	600	325	223	68	46	94		
18	137	1060	777	1030	1070	597	540	342	208	67	46	124		
19	656	1090	662	893	980	566	523	343	193	66	50	90		
20	806	1180	593	763	998	536	455	325	177	65	50	71		
21	502	1220	549	666	944	558	511	297	162	64	49	64		
22	304	966	500	577	1060	508	813	300	152	64	47	59		
23	205	924	496	524	1220	1040	1530	313	145	62	45	56		
24	181	1130	525	486	1120	2380	1230	317	137	61	45	53		
25	164	997	533	444	1050	1430	911	285	133	60	44	52		
26	673	859	516	400	870	1130	754	261	127	59	42	49		
27	852	1620	536	366	733	1020	741	241	122	57	41	48		
28	1790	4810	609	345	689	907	847	253	117	57	40	47		
29	1030	3240	592	322	---	921	753	269	112	58	40	46		
30	564	6520	966	294	---	899	701	217	110	67	40	45		
31	403	---	1000	285	---	1850	---	286	---	74	39	---		
TOTAL	10237	73794	35457	21545	30970	23380	35705	11103	11576	2307	1594	1959		
MEAN	330	2460	1144	695	1106	754	1190	358	386	74.4	51.4	65.3		
MAX	1790	6520	3530	1290	4100	2380	3450	696	1610	106	85	131		
MIN	52	317	496	285	234	411	455	217	110	57	39	40		
CFSM	1.45	10.8	5.04	3.06	4.87	3.32	5.24	1.58	1.70	.33	.23	.29		
IN.	1.68	12.09	5.81	3.53	5.08	3.83	5.85	1.82	1.90	.38	.26	.32		
AC-FT	20310	146400	70330	42730	61430	46370	70820	22020	22960	4580	3160	3890		
CAL YR 1984	TOTAL	359490	MEAN	982	MAX	13200	MIN	52	CFSM	4.33	IN.	58.91	AC-FT	713000
WTR YR 1985	TOTAL	259627	MEAN	711	MAX	6520	MIN	39	CFSM	3.13	IN.	42.55	AC-FT	515000

UMPUA RIVER BASIN

14318000 LITTLE RIVER AT PEEL, OR

LOCATION.--Lat 43°15'10", long 123°01'30", in NW¼ sec.2, T.27 S., R.3 W., Douglas County, Hydrologic Unit 17100301, on left bank 0.6 mi southeast of Peel, 0.9 mi downstream from Cavitt Creek, and at mile 6.3.

DRAINAGE AREA.--177 mi².

PERIOD OF RECORD.--August 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 828.33 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records excellent. No regulation. Small diversions for rural domestic use and irrigation upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--31 years, 477 ft³/s, 36.60 in/yr, 345,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,100 ft³/s Dec. 11, 1956, gage height, 19.63 ft, from rating curve extended above 5,900 ft³/s on basis of slope-area measurement at gage height 16.55 ft; minimum, 14 ft³/s Sept. 2, 9, 10, 28, 29, 1967, Sept. 25-27, 1974, Aug. 18, 19, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 22, 23, 1953, reached a stage of 20.6 ft, from floodmark, discharge, 22,700 ft³/s, from rating curve extended above 5,900 ft³/s on basis of slope-area measurement at gage height 16.55 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1730	*5,800	*9.95				
Minimum, 17 ft ³ /s Aug. 27, 28.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	25	237	2010	541	190	376	1760	467	225	64	45	19		
2	24	2270	1280	475	213	367	1750	451	229	61	38	25		
3	24	2720	1160	496	241	326	1380	431	193	59	34	29		
4	26	1530	928	533	202	341	1050	360	215	57	31	24		
5	30	832	740	543	199	324	887	321	197	54	30	22		
6	28	898	620	549	196	314	860	302	561	53	29	25		
7	25	1070	562	576	474	301	896	278	981	51	28	33		
8	25	925	534	521	721	285	800	255	1020	49	30	29		
9	30	1180	536	448	539	273	728	241	602	47	29	31		
10	40	1590	1340	381	420	278	715	235	416	46	27	42		
11	107	2400	1200	334	678	285	644	240	316	45	26	35		
12	84	4390	1800	302	1920	283	558	216	255	44	25	30		
13	109	3430	1440	283	1270	269	527	208	215	42	24	32		
14	101	2230	1040	279	1100	263	533	216	186	40	23	43		
15	131	1340	1070	277	1260	263	514	208	166	40	22	58		
16	85	904	851	268	1070	274	447	208	152	39	22	48		
17	75	689	678	324	801	295	380	204	138	38	22	70		
18	99	833	574	390	623	294	362	203	125	37	23	94		
19	397	834	478	372	550	292	394	199	115	36	25	56		
20	525	1090	421	335	566	292	351	188	105	34	27	43		
21	403	1010	407	304	534	306	473	176	98	34	26	36		
22	241	760	386	275	554	301	851	169	92	34	24	33		
23	163	776	380	252	569	576	1070	165	87	33	22	31		
24	129	923	373	234	526	1180	963	170	85	32	22	29		
25	107	818	361	220	489	834	741	159	82	31	21	27		
26	279	722	351	206	433	774	595	148	79	30	20	27		
27	439	1780	360	194	381	802	560	139	74	30	19	25		
28	817	3990	389	199	349	785	571	156	73	29	19	25		
29	659	2440	382	186	---	777	519	205	69	31	19	24		
30	387	3170	707	175	---	739	482	159	67	34	19	23		
31	293	---	675	181	---	1150	---	242	---	40	19	---		
TOTAL	5907	47781	24033	10653	17068	14219	22361	7319	7218	1294	790	1068		
MEAN	191	1593	775	344	610	459	745	236	241	41.7	25.5	35.6		
MAX	817	4390	2010	576	1920	1180	1760	467	1020	64	45	94		
MIN	24	237	351	175	190	263	351	139	67	29	19	19		
CFSM	1.08	9.00	4.38	1.94	3.45	2.59	4.21	1.33	1.36	.24	.14	.20		
IN.	1.24	10.04	5.05	2.24	3.59	2.99	4.70	1.54	1.52	.27	.17	.22		
AC-FT	11720	94770	47670	21130	33850	28200	44350	14520	14320	2570	1570	2120		
CAL YR 1984	TOTAL	234684	MEAN	641	MAX	7230	MIN	24	CFSM	3.62	IN.	49.32	AC-FT	465500
WTR YR 1985	TOTAL	159711	MEAN	438	MAX	4390	MIN	19	CFSM	2.47	IN.	33.57	AC-FT	316800

14319500 NORTH UMPQUA RIVER AT WINCHESTER, OR

LOCATION.--Lat 43°16'20", long 123°24'40", in NW¼NE¼ sec.33, T.26 S., R.6 W., Douglas County, Hydrologic Unit 17100301, on left bank 400 ft downstream from county bridge, 3.0 mi west of Winchester, and at mile 1.8.

DRAINAGE AREA.--1,344 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1908 to December 1913, October 1923 to September 1929, August 1954 to current year. Prior to December 1908, monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1448: 1909-12, drainage area. WDR OR-72-1: 1965(M).

GAGE.--Water-stage recorder. *Datum of gage is 372.97 ft above National Geodetic Vertical Datum of 1929 (Douglas County Road Department bench mark). Oct. 1, 1908, to Dec. 31, 1913, and Oct. 1, 1923, to Sept. 30, 1929, nonrecording gage at site 4.8 mi upstream at different datums. Aug. 27, 1954, to Aug. 12, 1965, water-stage recorder on right bank at same datum.

REMARKS.--Estimated daily discharges: Dec. 1-3. Water-discharge records excellent. Diurnal fluctuation caused by upstream powerplants; slight regulation by Lemolo Lake and Diamond Lake. Several small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--42 years, 3,793 ft³/s, 38.33 in/yr, 2,748,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150,000 ft³/s Dec. 22, 1964, gage height, 34.2 ft, from floodmark; minimum, 374 ft³/s Sept. 18, 1983; minimum daily, 578 ft³/s Sept. 14, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 29, 1950, reached a stage of 23.2 ft, from floodmark, at site 4.8 mi upstream at different datum, discharge, 88,000 ft³/s. Flood of Nov. 23, 1953, reached a stage of 28.4 ft, from floodmarks, present site and datum, discharge, 93,300 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	1000	21,000	10.29	Nov. 30	1430	*30,100	*12.88
Nov. 12	2300	27,500	12.15				

Minimum, 722 ft³/s Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1230	2230	15000	4670	2170	3430	10100	4050	2850	1420	1220	945		
2	1190	8250	10000	3990	2250	3600	11900	4280	2890	1400	1340	959		
3	1260	19800	8000	3750	2450	3220	10300	4240	2750	1480	1300	996		
4	1310	13600	6350	3930	2250	3100	7920	4010	2690	1480	1080	1000		
5	1280	7100	5440	4240	2110	3100	6550	3540	2710	1460	977	1100		
6	1210	5440	4620	4350	2150	2820	6170	3300	3370	1470	1160	1140		
7	1110	7150	4300	4660	3410	2930	6620	3200	5900	1440	1090	1170		
8	1140	6460	4210	4590	6510	2750	6590	3080	7910	1300	1080	1220		
9	1190	7120	4380	4220	5580	2650	5980	2940	5380	1380	1070	1270		
10	1240	10100	9150	3760	4330	2610	6090	2830	4310	1370	1050	978		
11	1420	13900	10700	3390	4030	2570	5810	2910	3710	1200	939	922		
12	1610	23400	10300	3210	13600	2660	5300	2760	3350	1130	986	878		
13	1800	21900	10100	3000	10400	2590	4910	2560	3090	1120	1030	898		
14	1980	15400	7250	2930	7620	2530	4990	2700	2840	1120	1030	983		
15	1850	9990	7070	3020	8150	2570	5150	2670	2570	1120	949	1100		
16	1660	7190	6270	2900	7820	2710	5000	2720	2380	1110	948	1210		
17	1340	5750	5230	3060	6210	2800	4440	2770	2320	1270	929	1150		
18	1450	5840	4610	3760	5050	2820	4010	2780	2240	1350	932	1260		
19	1940	6150	4130	3940	4540	2880	4080	2930	2140	1310	929	1250		
20	4320	6710	3750	3660	4740	2880	3730	2970	2140	1210	982	1120		
21	3070	7330	3560	3370	4410	2970	3560	2910	2030	1080	1040	1040		
22	2450	5880	3410	3020	4340	2960	4790	2830	1940	1020	1010	1040		
23	1930	5460	3250	2870	4650	4180	5690	3020	1860	1010	1020	1040		
24	1590	7100	3200	2740	4360	9040	6500	3120	1780	986	982	1010		
25	1640	6650	3220	2620	4220	7170	5200	3100	1800	1300	963	953		
26	1860	6020	3140	2540	4040	6410	4490	2930	1720	1180	948	946		
27	3880	7570	3150	2220	3710	7140	4100	2860	1650	1010	947	939		
28	5070	21500	3620	2220	3370	6320	4240	2710	1630	1000	944	932		
29	5250	16900	3450	2260	---	6090	4250	2920	1540	1000	945	1060		
30	3470	22500	4980	2210	---	5380	4140	2610	1440	994	941	1070		
31	2720	---	5390	2170	---	6010	---	2710	---	1070	937	---		
TOTAL	64460	310390	181230	103270	138470	120890	172600	94960	84930	37790	31698	31579		
MEAN	2079	10350	5846	3331	4945	3900	5753	3063	2831	1219	1023	1053		
MAX	5250	23400	15000	4670	13600	9040	11900	4280	7910	1480	1340	1270		
MIN	1110	2230	3140	2170	2110	2530	3560	2560	1440	986	929	878		
CFSM	1.55	7.70	4.35	2.48	3.68	2.90	4.28	2.28	2.11	.91	.76	.78		
IN.	1.78	8.59	5.02	2.86	3.83	3.35	4.78	2.63	2.35	1.05	.88	.87		
AC-FT	127900	615700	359500	204800	274700	239800	342400	188400	168500	74960	62870	62640		
CAL YR 1984	TOTAL	1887890	MEAN	5158	MAX	45800	MIN	1110	CFSM	3.84	IN.	52.25	AC-FT	3745000
WTR YR 1985	TOTAL	1372267	MEAN	3760	MAX	23400	MIN	878	CFSM	2.80	IN.	37.98	AC-FT	2722000

UMPQUA RIVER BASIN

14319500 NORTH UMPQUA RIVER AT WINCHESTER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-69, 1971 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: January 1971 to current year.

INSTRUMENTATION.--Temperature recorder since 1971.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 26.5°C Aug. 10, 1972, Aug. 8, 9, 1978, Aug. 9, 10, 1981; minimum, 0.0°C at times in 1971-72, 1974, 1977, 1980, 1984.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 24.0°C July 11, 19, 20, 23, 24; minimum, 3.0°C Dec. 20, Feb. 4-6.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

UMPQUA RIVER BASIN

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14319500 NORTH UMPQUA RIVER AT WINCHESTER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

UMPQUA RIVER BASIN

14319900 CALAPOOYA CREEK AT NONPAREIL, OR

LOCATION.--Lat 43°25'04", long 123°09'13", in SW¼SE¼ sec.3, T.25 S., R.4 W., Douglas County, Hydrologic Unit 17100303, on left bank 0.3 mi upstream from county road bridge, 0.9 mi northeast of Nonpareil, and at mile 26.7.

DRAINAGE AREA.--88.6 mi².

PERIOD OF RECORD.--July 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 699.22 ft above National Geodetic Vertical Datum of 1929 (Douglas County Survey bench mark).

REMARKS.--No estimated daily discharges. Records good except those for periods of backwater Oct. 1-20 and July 1 to Sept. 30, which are fair. Only minor diversions by pumping for irrigation upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--9 years, 210 ft³/s, 32.19 in/yr, 152,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,640 ft³/s Dec. 6, 1981, gage height, 11.16 ft; minimum, 5.3 ft³/s Aug. 17-19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 30	0700	*3,400	*7.88	No other peak greater than base discharge.			
Minimum, 6.7 ft ³ /s Aug. 26, 27.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	11	187	1330	329	101	173	542	159	100	34	30	10		
2	12	901	828	277	125	165	512	145	101	32	23	14		
3	12	1210	623	247	149	151	421	139	90	31	19	17		
4	16	729	469	228	134	167	339	130	91	29	17	17		
5	20	416	367	214	123	164	286	119	85	27	16	16		
6	17	338	299	205	117	160	258	114	134	27	14	21		
7	16	338	260	199	434	151	242	108	360	27	12	25		
8	17	369	232	188	547	142	221	103	377	26	18	22		
9	31	580	219	174	456	136	201	99	235	25	16	20		
10	43	801	492	160	346	132	187	98	171	24	12	22		
11	54	917	506	148	455	127	170	104	134	23	11	22		
12	49	1230	707	139	1130	122	155	93	111	22	9.9	21		
13	67	1130	722	132	671	118	144	88	94	22	9.7	25		
14	85	926	531	126	501	114	137	91	83	21	9.9	33		
15	98	600	531	121	592	112	130	86	76	21	9.5	39		
16	81	413	425	117	497	110	123	83	69	19	9.2	33		
17	75	340	346	116	381	110	115	81	64	19	9.2	35		
18	84	373	298	118	308	108	120	78	58	18	9.7	39		
19	176	351	254	116	278	107	155	77	54	17	14	30		
20	228	471	228	112	288	109	145	76	49	15	17	25		
21	211	499	220	108	278	122	167	73	46	15	17	22		
22	180	387	203	104	269	131	242	70	43	15	13	20		
23	162	426	194	99	260	331	386	70	42	14	9.6	19		
24	155	542	190	95	243	682	373	73	40	13	8.3	17		
25	149	519	185	92	225	477	327	74	40	13	7.5	16		
26	229	482	179	89	208	548	274	69	39	12	6.9	15		
27	279	832	198	86	192	666	241	67	37	10	6.7	14		
28	350	1990	256	89	178	532	221	75	36	9.7	7.6	13		
29	295	1360	248	87	---	509	198	84	35	12	8.8	13		
30	231	2470	482	87	---	432	175	73	34	17	9.2	12		
31	204	---	418	88	---	478	---	125	---	24	9.7	---		
TOTAL	3637	22127	12440	4490	9486	7586	7207	2924	2928	633.7	390.4	647		
MEAN	117	738	401	145	339	245	240	94.3	97.6	20.4	12.6	21.6		
MAX	350	2470	1330	329	1130	682	542	159	377	34	30	39		
MIN	11	187	179	86	101	107	115	67	34	9.7	6.7	10		
CFSM	1.32	8.33	4.53	1.64	3.83	2.77	2.71	1.06	1.10	.23	.14	.24		
IN.	1.53	9.29	5.22	1.89	3.98	3.19	3.03	1.23	1.23	.27	.16	.27		
AC-FT	7210	43890	24670	8910	18820	15050	14300	5800	5810	1260	774	1280		
CAL YR 1984	TOTAL	104049.8	MEAN	284	MAX	3070	MIN	9.6	CFSM	3.21	IN.	43.69	AC-FT	206400
WTR YR 1985	TOTAL	74496.1	MEAN	204	MAX	2470	MIN	6.7	CFSM	2.30	IN.	31.28	AC-FT	147800

UMPQUA RIVER BASIN

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 14321000 UMPQUA RIVER NEAR ELKTON, OR
 (National stream quality accounting network station)

LOCATION.--Lat 43°35'10", long 123°33'15", in NW¼ sec.8, T.23 S., R.7 W., Douglas County, Hydrologic Unit 17100303, on left bank 3.5 mi south of Elkton, 8.3 mi upstream from Elk Creek, and at mile 56.9.

 DRAINAGE AREA.--3,683 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1905 to current year.

REVISED RECORDS.--WSP 1184: 1927(M), 1938(M), 1943(M), 1946(M). WSP 1448: 1911-13, drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 90.42 ft above National Geodetic Vertical Datum of 1929. Prior to June 29, 1972, at site 2,400 ft downstream at same datum. See WSP 1931 or 2135 for history of changes prior to June 29, 1972.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. Regulation by powerplants on North Umpqua River ordinarily does not affect discharge at this station. Diversions for irrigation upstream from station.

 AVERAGE DISCHARGE.--80 years, 7,541 ft³/s, 27.81 in/yr, 5,463,000 acre-ft/yr.

 EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 265,000 ft³/s Dec. 23, 1964, gage height, 51.95 ft, from floodmarks; minimum observed, 640 ft³/s July 18, 1926.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least December 1861, that of Dec. 23, 1964.

 EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 52,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 13	0900	65,000	21.88	Nov. 28	2130	*79,400	*24.71

Minimum, 1,020 ft³/s Aug. 18-21.

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1380	3720	44800	11500	3620	5940	18700	6110	3680	1650	1170	1030		
2	1360	4320	25800	9870	3780	6170	22400	6050	3820	1620	1300	1040		
3	1330	26100	20400	8580	4250	6120	20500	6220	3790	1590	1460	1040		
4	1360	27200	16700	8010	4580	5670	16500	6120	3570	1620	1430	1050		
5	1430	15400	13800	8100	4290	5690	13300	5630	3520	1630	1280	1070		
6	1430	10000	11500	8260	4040	5510	11600	5090	3690	1600	1160	1140		
7	1390	9740	10000	8290	4600	5280	11300	4770	5600	1590	1220	1200		
8	1350	11000	9250	8600	11400	5240	11500	4620	9170	1580	1220	1230		
9	1310	11300	9010	8080	16100	4960	10600	4370	9010	1450	1170	1280		
10	1360	16500	9950	7250	13800	4780	10000	4190	6770	1470	1150	1320		
11	1440	21400	22000	6470	10700	4650	9780	4080	5530	1490	1140	1210		
12	1610	41400	18600	5930	21800	4640	9080	4070	4790	1350	1090	1110		
13	1900	57600	24600	5540	26800	4610	8190	3820	4250	1250	1050	1140		
14	2300	37100	19900	5210	18900	4470	7690	3630	3920	1240	1080	1170		
15	2400	23500	16900	5110	16400	4340	7810	3720	3560	1230	1120	1230		
16	2360	16000	15800	5060	16300	4370	7870	3650	3210	1220	1050	1270		
17	2090	12100	13200	4840	13800	4460	7360	3730	3010	1220	1030	1390		
18	1830	11300	11300	5230	11400	4560	6530	3770	2890	1300	1030	1420		
19	1880	13000	9950	6090	9800	4590	6290	3780	2740	1370	1030	1440		
20	2730	13100	8850	6080	9390	4600	6330	3960	2590	1370	1030	1490		
21	5110	18300	8010	5680	9260	4620	5820	3950	2520	1300	1040	1400		
22	4090	15000	7360	5270	8550	4750	6260	3670	2360	1210	1090	1310		
23	3330	11800	6820	4850	8450	5770	8290	3900	2240	1140	1090	1280		
24	2640	15600	6480	4610	8330	12700	10300	3910	2140	1130	1100	1260		
25	2160	16300	6300	4380	7790	16400	9210	4020	2060	1110	1100	1240		
26	2180	15800	6190	4180	7440	13300	7820	3980	2060	1280	1070	1200		
27	2780	15800	6110	3980	6900	19700	6820	3800	1980	1280	1040	1150		
28	4700	64200	6850	3670	6320	19100	6390	3690	1900	1130	1030	1130		
29	7210	61500	7370	3780	---	18700	6530	3570	1860	1090	1030	1120		
30	6470	52400	9000	3710	---	16300	6320	3750	1770	1090	1030	1150		
31	4680	---	12700	3630	---	14500	---	3540	---	1100	1030	---		
TOTAL	79590	668480	415500	189840	288790	246490	297090	133160	110000	41700	34860	36510		
MEAN	2567	22280	13400	6124	10310	7951	9903	4295	3667	1345	1125	1217		
MAX	7210	64200	44800	11500	26800	19700	22400	6220	9170	1650	1460	1490		
MIN	1310	3720	6110	3630	3620	4340	5820	3540	1770	1090	1030	1030		
CFSM	.70	6.05	3.64	1.66	2.80	2.16	2.69	1.17	.00	.37	.31	.33		
IN.	.80	6.75	4.20	1.92	2.92	2.49	3.00	1.34	1.11	.42	.35	.37		
AC-FT	157900	1326000	824100	376500	572800	488900	589300	264100	218200	82710	69140	72420		
CAL YR 1984	TOTAL	3589790	MEAN	9808	MAX	99800	MIN	1280	CFSM	2.66	IN.	36.26	AC-FT	7120000
WTR YR 1985	TOTAL	2542010	MEAN	6964	MAX	64200	MIN	1030	CFSM	1.89	IN.	25.68	AC-FT	5042000

UMPQUA RIVER BASIN

14321000 UMPQUA RIVER NEAR ELKTON, OR--Continued
(National stream quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: April 1971 to current year.

INSTRUMENTATION.--Temperature recorder since April 1971.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 30.0°C July 14, 1971; minimum, 0.0°C Jan. 7, 8, 11, 12, and probably Jan. 9, 10, 1974.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.5°C July 19; minimum recorded, 3.5°C Feb. 4-6.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	
NOV 15...	0940	24100	57	7.20	8.5	11.5	540	600	22	0	5.4	
JAN 15...	1030	5100	77	7.30	4.5	13.2	K3	K10	29	0	7.2	
MAR 19...	1050	4610	79	7.70	8.5	11.3	K2	K8	31	0	7.7	
MAY 15...	0930	3720	72	7.70	13.5	10.1	K2	K2	27	0	6.7	
JUL 11...	0930	1500	71	7.90	23.0	7.7	K4	140	24	0	5.8	
SEP 11...	0930	1240	74	7.80	16.0	9.1	K5	31	26	0	6.0	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV 15...	2.0	3.0	.70	23	3.9	2.0	<.10	.010	<.10	<.20	.020	
JAN 15...	2.7	4.1	.50	31	4.8	3.1	<.10	<.010	.11	.30	.010	
MAR 19...	2.9	4.3	.70	40	4.2	2.9	<.10	.010	<.10	.20	.020	
MAY 15...	2.4	3.8	.80	30	2.2	2.5	<.10	.030	<.10	<.20	.020	
JUL 11...	2.4	4.9	.90	30	2.4	2.5	<.10	.030	<.10	<.20	<.010	
SEP 11...	2.6	5.6	1.2	33	6.4	3.4	.10	<.050	<.10	.20	.030	

UMPQUA RIVER BASIN

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14321000 UMPQUA RIVER NEAR ELKTON, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	TUR- BID- ITY (NTU)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 15...	.010	.070	16	45	47	2930	35	60	3900	76
JAN 15...	.020	.020	18	42	59	578	3.7	--	--	--
MAR 19...	.010	.010	18	60	65	747	2.3	--	--	--
MAY 15...	.020	.020	17	47	54	472	1.4	4	40	59
JUL 11...	.040	.030	18	55	55	223	2.1	2	8.1	--
SEP 11...	.030	.090	21	53	66	177	.80	13	44	75
DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 15...	190	<1	18	<.5	<1	<1	<3	3	220	<1
MAR 19...	30	<1	19	1.1	<1	<1	<3	2	27	2
MAY 15...	30	<1	18	<.5	<1	<1	<3	4	26	3
SEP 11...	20	1	16	<.5	<1	<1	<3	3	20	2
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 15...	<4	5	<.1	<10	2	<1	<1	37	<6	10
MAR 19...	<4	5	.1	<10	1	<1	<1	54	<6	79
MAY 15...	<4	4	.3	<10	1	<1	<1	48	<6	17
SEP 11...	<4	1	.2	<10	2	<1	<1	51	<6	8

K - Results based on colony count outside acceptable range (non-ideal colony count).

UMPQUA RIVER BASIN

14321000 UMPQUA RIVER NEAR ELKTON, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

COOS RIVER BASIN

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14324580 PONY CREEK AT COOS BAY, OR

LOCATION.--Lat 43°22'50", long 124°14'25", in NE¼NE¼ sec.28, T.25 S., R.13 W., Coos County, Hydrologic Unit 17100304, on right bank, 10 ft upstream from outlet to Lower Pony Creek Dam, and at mile 2.2. Prior to Oct. 1, 1982, at site 260 ft downstream.

DRAINAGE AREA.--3.90 mi².

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (Coos Bay-North Bend Water Board bench mark). Prior to Oct. 1, 1982, at site 260 ft downstream at datum 12.23 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Upper and Lower Pony Creek Reservoirs (see stations 14324550 and 14324560) and diversion upstream from station from Lower Pony Creek Reservoir to municipal water supply of Coos Bay-North Bend (station 14323570). Approximately 4.6 ft³/s is diverted to the Coos Bay-North Bend water treatment plant, maximum capacity, 10.8 ft³/s.

AVERAGE DISCHARGE.--10 years, 10.8 ft³/s, 37.61 in/yr, 7,820 acre-ft/yr, adjusted for Coos Bay-North Bend diversion and change in contents of Upper and Lower Pony Creek Reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181 ft³/s Dec. 6, 1981, gage height, 6.19 ft, former site and datum; minimum, 0.01 ft³/s Feb. 11-20, Apr. 27, 29, May 12, 13, June 5, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 85 ft³/s Nov. 30, gage height, 30.91 ft; minimum, 0.02 ft³/s on many days during year.

MONTHLY DISCHARGE OF PONY CREEK, PONY CREEK DIVERSION AND MONTHLY CHANGE IN CONTENTS
OF RESERVOIRS NEAR COOS BAY, OR, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

	14324580 Pony Creek at Coos Bay (acre-feet)	14324570 Diversion from Lower Pony Cr. Reservoir to City of Coos Bay (acre-feet)	14324560 Lower Pony Creek Reservoir Change in Contents (acre-feet)	14324550 Upper Pony Creek Reservoir Change in Contents (acre-feet)	Pony Creek adjusted for diversion and change in contents (acre-feet) (inches)
October.....	24	352	+9	+109	494 2.38
November.....	817	314	+22	+619	1,772 8.52
December.....	866	341	-14	-49	1,144 5.50
CAL YR 1984.....	4,436	4,711	-8	-15	9,124 43.87
January.....	165	375	-4	-13	523 2.51
February.....	356	329	0	0	685 3.29
March.....	38	381	+2	+293	714 3.43
April.....	75	375	-3	+28	475 2.28
May.....	1.5	436	-3	-126	308 1.48
June.....	8.7	471	-18	-87	375 1.80
July.....	1.2	527	+4	-377	155 0.75
August.....	1.2	519	+3	-396	127 0.61
September.....	3.5	392	-22	-270	104 0.50
WTR YR 1985.....	2,357	4,812	-24	-269	6,876 33.06

COQUILLE RIVER BASIN

14325000 SOUTH FORK COQUILLE RIVER AT POWERS, OR

LOCATION.--Lat 42°53'30", long 124°04'10", in SE¼ sec.12, T.31 S., R.12 W., Coos County, Hydrologic Unit 17100305, on left bank 0.6 mi downstream from highway bridge at Powers, 0.9 mi upstream from Woodward Creek, and at mile 64.5.

DRAINAGE AREA.--169 mi².

PERIOD OF RECORD.--September 1916 to September 1926, October 1928 to current year.

REVISED RECORDS.--WSP 1184: 1946(M). WSP 1448: 1917-18(M), 1919, 1920(M), 1925.

GAGE.--Water-stage recorder. Datum of gage is 197.42 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 17, 1938, nonrecording gage at various sites within 1 mi of present site at different datums.

REMARKS.--Estimated daily discharges: Nov. 11-14. Records good. No regulation. Small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--66 years (water years 1917-26, 1930-85), 795 ft³/s, 63.88 in/yr, 576,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,900 ft³/s Dec. 22, 1964, gage height, 26.51 ft, from floodmarks, from rating curve extended above 19,000 ft³/s on basis of contracted-opening measurement at gage height 18.14 ft and slope-area measurement of peak flow; minimum, 12 ft³/s Sept. 22-25, 27-30, 1939, Oct. 5, 1961, Oct. 16-20, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1230	9,600	9.83	Nov. 27	1800	*10,500	*10.35
Minimum, 23 ft ³ /s Oct. 7.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	27	195	3490	1060	191	405	1970	299	118	84	42	27		
2	28	6510	2250	852	261	389	2240	274	134	79	43	30		
3	26	5190	1630	715	293	346	2020	298	121	76	40	32		
4	25	2810	1240	619	249	522	1560	272	115	73	37	31		
5	25	1530	988	554	220	643	1280	242	112	69	35	30		
6	25	1370	813	515	214	590	1100	225	934	67	33	32		
7	24	1560	699	488	2590	499	930	209	2530	65	32	34		
8	27	1980	611	450	3130	441	772	194	1780	63	33	34		
9	58	2830	554	413	1860	414	661	186	1000	59	32	32		
10	82	6210	776	375	1320	412	574	180	682	57	32	34		
11	280	5400	818	341	2360	426	516	187	506	55	31	33		
12	186	8000	1070	313	4120	424	460	170	402	54	30	39		
13	289	5000	1430	292	2390	402	406	157	332	53	30	138		
14	140	3100	1220	276	1690	381	366	155	280	51	29	245		
15	114	1940	1410	261	1550	364	333	145	246	49	28	154		
16	92	1320	1200	249	1340	352	313	137	220	47	28	87		
17	87	1120	1010	239	1090	335	289	140	195	46	29	78		
18	88	2000	886	231	888	316	299	133	176	45	30	84		
19	116	1740	751	222	776	295	424	125	160	44	32	68		
20	288	1860	659	212	815	281	392	119	148	42	33	57		
21	210	1680	597	203	760	289	418	114	136	42	32	50		
22	145	1290	541	194	717	290	662	108	129	41	31	45		
23	111	1360	495	185	682	1820	766	104	123	41	30	41		
24	92	1600	466	181	631	3180	765	107	115	40	29	39		
25	80	1430	442	176	573	1810	655	109	109	39	29	36		
26	132	1200	428	165	516	1860	550	104	104	38	28	34		
27	215	5960	493	163	463	2210	473	100	100	35	27	33		
28	481	8950	678	165	419	2370	418	123	96	34	27	32		
29	482	4810	640	161	---	1880	374	148	90	36	26	31		
30	282	5900	1730	160	---	1400	331	122	87	38	26	30		
31	210	---	1390	169	---	1480	---	123	---	40	26	---		
TOTAL	4467	95845	31405	10599	32108	26826	22317	5109	11280	1602	970	1670		
MEAN	144	3195	1013	342	1147	865	744	165	376	51.7	31.3	55.7		
MAX	482	8950	3490	1060	4120	3180	2240	299	2530	84	43	245		
MIN	24	195	428	160	191	281	289	100	87	34	26	27		
CFSM	.85	18.9	5.99	2.02	6.79	5.12	4.40	.98	2.22	.31	.19	.33		
IN.	.98	21.10	6.91	2.33	7.07	5.90	4.91	1.12	2.48	.35	.21	.37		
AC-FT	8860	190100	62290	21020	63690	53210	44270	10130	22370	3180	1920	3310		
CAL YR 1984	TOTAL	317405	MEAN	867	MAX	12200	MIN	24	CFSM	5.13	IN.	69.87	AC-FT	629600
WTR YR 1985	TOTAL	244198	MEAN	669	MAX	8950	MIN	24	CFSM	3.96	IN.	53.75	AC-FT	484400

14328000 ROGUE RIVER ABOVE PROSPECT, OR

LOCATION.--Lat 42°46'30", long 122°29'55", in SE¼NE¼ sec.19, T.32 S., R.3 E., Jackson County, Hydrologic Unit 17100307, Rogue River National Forest, on left bank 1.4 mi upstream from Pacific Power and Light Co. diversion dam, 1.8 mi northwest of Prospect, and at mile 173.4.

DRAINAGE AREA.--312 mi².

PERIOD OF RECORD.--January 1908 to February 1912, October 1923 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to October 1925, published as "near Prospect."

REVISED RECORDS.--WSP 1248: 1925, 1927(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 2,620 ft, from river-profile map. Prior to Feb. 17, 1912, nonrecording gage at several sites within a few hundred feet upstream at various datums.

REMARKS.--No estimated daily discharges. Records excellent. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--65 years (water years 1909-11, 1924-85), 830 ft³/s, 36.13 in/yr, 601,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s Dec. 22, 1964, gage height, 11.55 ft, from floodmark, from rating curve extended above 9,000 ft³/s on basis of slope-area measurement at 16,600 ft³/s; minimum observed, 200 ft³/s Nov. 20, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1430	*3,560	*4.47	No other peak greater than base discharge.			
Minimum, 421 ft ³ /s Aug. 28.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	557	658	991	626	652	829	1030	1510	1050	642	506	434		
2	557	1330	925	632	652	824	1390	1630	1010	629	482	465		
3	552	1810	900	631	648	788	1600	1700	985	621	467	450		
4	551	1370	863	631	570	783	1590	1470	1040	614	464	438		
5	557	1090	829	635	611	751	1670	1370	1030	602	462	433		
6	556	1140	806	656	627	730	1840	1350	1310	593	457	455		
7	551	1200	794	682	645	708	2100	1320	1440	580	454	465		
8	546	1090	784	700	642	683	2160	1240	1450	573	455	451		
9	571	1020	787	703	624	671	2160	1190	1240	559	452	459		
10	564	1190	1020	694	596	674	2260	1130	1150	550	450	499		
11	741	1720	1030	680	630	680	2210	1080	1100	545	446	464		
12	706	3140	998	667	873	700	2020	1060	1090	540	445	454		
13	838	2760	913	660	858	703	1980	1070	1070	531	441	465		
14	666	2110	858	662	803	712	2160	1120	1030	522	440	555		
15	635	1630	871	663	824	741	2290	1120	1010	517	437	545		
16	610	1380	819	660	880	794	2190	1200	977	514	437	484		
17	601	1200	799	710	853	840	1900	1170	941	510	440	514		
18	602	1420	778	813	818	862	1690	1300	929	501	459	500		
19	752	1310	682	836	813	902	1530	1370	918	495	473	462		
20	946	1230	711	836	806	919	1340	1330	879	492	454	450		
21	814	1100	745	823	772	903	1270	1280	831	491	447	444		
22	718	1040	719	800	779	856	1220	1300	801	489	441	443		
23	666	1020	707	778	815	870	1290	1390	776	479	437	443		
24	678	1050	692	763	828	1070	1180	1460	746	475	435	438		
25	661	988	680	747	833	974	1090	1370	724	473	431	437		
26	789	936	681	726	820	926	1040	1280	707	468	430	432		
27	767	950	680	708	794	880	1060	1190	692	461	428	432		
28	794	1060	678	716	788	845	1160	1200	680	460	425	434		
29	763	1020	664	693	---	791	1260	1170	669	478	430	432		
30	713	1050	677	648	---	766	1370	1050	656	538	429	432		
31	681	---	648	668	---	837	---	1080	---	506	429	---		
TOTAL	20703	40012	24729	21847	20854	25012	49050	39500	28931	16448	13883	13809		
MEAN	668	1334	798	705	745	807	1635	1274	964	531	448	460		
MAX	946	3140	1030	836	880	1070	2290	1700	1450	642	506	555		
MIN	546	658	648	626	570	671	1030	1050	656	460	425	432		
CFSM	2.14	4.28	2.56	2.26	2.39	2.59	5.24	4.08	3.09	1.70	1.44	1.47		
IN.	2.47	4.77	2.95	2.60	2.49	2.98	5.85	4.71	3.45	1.96	1.66	1.65		
AC-FT	41060	79360	49050	43330	41360	49610	97290	78350	57380	32620	27540	27390		
CAL YR 1984	TOTAL	415919	MEAN	1136	MAX	4050	MIN	546	CFSM	3.64	IN.	49.59	AC-FT	825000
WTR YR 1985	TOTAL	314778	MEAN	862	MAX	3140	MIN	425	CFSM	2.76	IN.	37.53	AC-FT	624400

14330000 ROGUE RIVER BELOW PROSPECT, OR

LOCATION.--Lat 42°43'50", long 122°30'55", in SE¼NW¼ sec.6, T.33 S., R.3 E., Jackson County, Hydrologic Unit 17100307, on right bank 600 ft downstream from Prospect No. 1 powerplant, 1.4 mi downstream from Mill Creek, 2.0 mi southwest of Prospect, 2.1 mi upstream from South Fork Rogue River, and at mile 169.4.

DRAINAGE AREA.--379 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1913 to September 1930, October 1968 to current year.

REVISED RECORDS.--WSP 1518: 1914-23, 1924(M), 1925, 1928.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,964.56 ft above National Geodetic Vertical Datum of 1929 (Pacific Power and Light Co. bench mark). Prior to September 1927 nonrecording gage at site 1,000 ft upstream, above powerplants, at different datum, also concurrent nonrecording gage on headrace to obtain equivalent combined flow.

REMARKS.--No estimated daily discharges. Water-discharge records good. Fluctuations caused by powerplant 600 ft upstream from station. Small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--34 years, 1,292 ft³/s, 936,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,900 ft³/s Jan. 18, 1971, gage height, 7.62 ft, from high-water mark; minimum, 205 ft³/s Sept. 17, 22, 24, 1980, caused by regulation of diversion gates upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1890, 12.4 ft Dec. 22, 1964, from floodmarks, discharge, 25,000 ft³/s, from records for station upstream from Prospect (see station 14328000) and for station downstream from South Fork Rogue River near Prospect (see station 14335000) after adjusting for estimated intervening tributary inflow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,260 ft³/s Nov. 2, gage height, 5.14 ft, caused by regulation of diversion gates upstream; minimum, 291 ft³/s Sept. 19, caused by regulation of diversion gates upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1240	1320	1710	1280	1320	1520	1710	2140	1740	1210	1180	1010
2	1240	2390	1640	1300	1310	1500	2050	2290	1710	1220	1140	1060
3	1240	2710	1630	1310	1310	1460	2300	2380	1670	1280	1120	1040
4	1240	2060	1580	1300	1190	1460	2240	2120	1740	1270	1100	1020
5	1240	1820	1540	1320	1280	1410	2340	2030	1700	1270	1100	1010
6	1230	1880	1470	1330	1290	1380	2550	2010	1850	1270	1090	1040
7	1200	1940	1450	1370	1320	1350	2820	2010	1930	1260	1080	1070
8	1190	1820	1440	1380	1320	1320	2860	1950	1950	1250	1050	1030
9	1220	1760	1460	1400	1280	1300	2870	1900	1770	1240	1080	1070
10	1220	1940	1700	1380	1250	1310	2930	1830	1720	1230	1070	1100
11	1430	2440	1720	1360	1300	1330	2890	1770	1710	1220	1060	1050
12	1370	3900	1680	1330	1600	1370	2720	1750	1660	1190	1060	1030
13	1520	3410	1580	1330	1560	1400	2670	1790	1650	1200	1050	1040
14	1320	2780	1520	1330	1500	1410	2840	1840	1710	1190	1050	1170
15	1280	2250	1540	1330	1550	1450	2950	1840	1700	1190	1050	1150
16	1260	1960	1480	1320	1590	1500	2810	1900	1660	1170	1040	1010
17	1260	1880	1470	1370	1560	1550	2540	1900	1560	1180	1040	1010
18	1270	2050	1440	1510	1520	1560	2330	1980	1540	1170	1050	982
19	1450	1950	1360	1540	1510	1530	2180	2040	1560	1150	1080	932
20	1660	1930	1390	1540	1490	1580	1990	2000	1560	1130	1060	929
21	1530	1800	1430	1520	1450	1570	1930	1970	1530	1160	1040	913
22	1410	1730	1390	1490	1460	1530	1860	1990	1490	1150	1040	902
23	1330	1720	1360	1470	1500	1540	1890	2060	1470	1120	1030	890
24	1340	1730	1350	1450	1520	1770	1790	2130	1430	1000	1020	879
25	1310	1670	1330	1430	1520	1640	1700	2060	1390	1130	1010	868
26	1480	1620	1330	1410	1500	1600	1660	1990	1370	1110	1000	884
27	1450	1650	1350	1380	1450	1530	1770	1930	1350	1110	1010	883
28	1510	1800	1360	1400	1460	1480	1870	1790	1340	1100	1010	872
29	1450	1740	1340	1360	---	1440	1900	1660	1340	1140	1000	866
30	1370	1820	1360	1310	---	1410	2000	1540	1330	1200	1000	909
31	1340	---	1320	1340	---	1500	---	1660	---	1160	1000	---
TOTAL	41600	61470	45720	42890	39910	45700	68960	60250	48130	36670	32710	29619
MEAN	1342	2049	1475	1384	1425	1474	2299	1944	1604	1183	1055	987
MAX	1660	3900	1720	1540	1600	1770	2950	2380	1950	1280	1180	1170
MIN	1190	1320	1320	1280	1190	1300	1660	1540	1330	1000	1000	866
AC-FT	82510	121900	90690	85070	79160	90650	136800	119500	95470	72730	64880	58750
CAL YR 1984	TOTAL	699850	MEAN	1912	MAX	5050	MIN	1190	AC-FT	1388000		
WTR YR 1985	TOTAL	553629	MEAN	1517	MAX	3900	MIN	866	AC-FT	1098000		

ROGUE RIVER BASIN

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14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1976 to September 1981.

pH: November 1976 to September 1981.

WATER TEMPERATURES: October 1968 to current year.

DISSOLVED OXYGEN: October 1979 to September 1981.

SUSPENDED SEDIMENT DISCHARGE: November 1976 to September 1981 (October to April only, 1980 water year, November to April only, 1981 water year).

INSTRUMENTATION.--Water-quality monitor since November 1976. Automatic pumping sediment sampler November 1976 to April 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 73 microsiemens Sept. 22, 1980; minimum recorded, 28 microsiemens Jan. 13, 1980, may have been lower during period of missing record Jan. 14-17, 1980.

pH: Maximum recorded, 8.3 units Aug. 10, 1981, may have been higher during period of no record in July and August 1981; minimum, 7.0 units Nov. 30, 1976.

WATER TEMPERATURES: Maximum, 20.5°C July 20, 1979 (result of regulation); minimum, 0.0°C Jan. 1, 2, 4, 5, 1970, Mar. 1, 1971, Jan. 26, 29-31, Feb. 2, 1979, and Jan. 29, 30, 1980.

DISSOLVED OXYGEN: Maximum, 13.6 mg/l Dec. 8, 1980, Feb. 21, 1981; minimum, 7.2 mg/l June 21, 1980, result of regulation.

SEDIMENT CONCENTRATIONS: Maximum daily mean (water years 1977-79), 1,270 mg/l (estimated) Jan. 11, 1979; minimum, 0 mg/l on many days each year. Maximum daily mean (period October 1979 to April 1981), 716 mg/l Oct. 25, 1979; minimum daily mean, 0 mg/l on several days in October and December 1979, Nov. 15-21, 28, Dec. 1, 1980, Jan. 19, 1981.

SEDIMENT DISCHARGE: Maximum daily (water years 1977-79), 17,790 tons Dec. 15, 1977; minimum daily, 0 tons on many days each year. Maximum daily (period October 1979 to April 1981), 5,570 tons Jan. 13, 1980; minimum daily, 0 tons on several days in October and December 1979, Nov. 15-21, 28, Dec. 1, 1980, Jan. 19, 1981.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 14.5°C July 12, 15, 19, 20, 24, 26; minimum, 1.5°C Feb. 1, 4, 5, 10, Mar. 26-28.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

14332000 SOUTH FORK ROGUE RIVER NEAR PROSPECT, OR

LOCATION.--Lat 42°42'30", long 122°23'30", in SE¼SW¼ sec.7, T.33 S., R.4 E., Jackson County, Hydrologic Unit 17100307, in Rogue River National Forest on left bank 0.3 mi downstream from South Fork dam and intake of South Fork power canal, 0.31 mi downstream from Imnaha Creek, 5.6 mi southeast of Prospect, and at mile 10.2.

DRAINAGE AREA.--83.8 mi². Area at site above Imnaha Creek used October 1931 to September 1949, 61.3 mi², and Imnaha Creek near Prospect, 22.2 mi².

PERIOD OF RECORD.--April 1924 to September 1931, October 1949 to current year. Equivalent records for period October 1931 to September 1949 may be obtained from combined flow of South Fork Rogue River above Imnaha Creek, near Prospect and Imnaha Creek near Prospect. Records since October 1983 equivalent to earlier records if South Fork Rogue River power canal diversion is added to flow past station.

REVISED RECORDS.--WSP 1318: 1925(M), 1927(M), 1930(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,300 ft, from topographic map. Prior to Sept. 10, 1965, at site 1,000 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Sept. 9-30. Records good except those for September, which are fair. All records given herein do not include flow in South Fork power canal (completed in March 1932) which diverts 1,500 ft upstream from station and returns water to Rogue River upstream from South Fork Rogue River; practically no storage upstream from diversion dam.

AVERAGE DISCHARGE.--59 years (water years 1925-83), 178 ft³/s, 129,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 7,010 ft³/s Dec. 22, 1964, gage height, 11.1 ft, from floodmark, from rating curve extended above 410 ft³/s on basis of measurement of flow over dam of 3,180 ft³/s; no flow Jan. 31, 1950, Sept. 29, 30, 1967 (entire flow diverted to canal).

Combined flow, maximum discharge, 7,010 ft³/s Dec. 22, 1964 (no flow in canal); minimum daily, about 38 ft³/s Aug. 1-31, 1931.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 392 ft³/s Apr. 15, gage height, 3.37 ft; minimum, 0.22 ft³/s Oct. 7, 8, 15-19.

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	2.2	51	3.3	2.3	1.3	32	195	123	11	9.5	3.9
2	.23	82	47	3.2	2.2	1.2	44	224	112	11	9.5	4.0
3	.23	220	42	3.1	2.2	1.1	63	235	103	11	9.5	3.8
4	.23	105	36	2.9	2.2	1.3	79	184	122	11	9.4	3.6
5	.23	70	31	2.9	2.2	.95	103	167	128	11	9.1	3.5
6	.23	72	27	3.0	1.8	.88	140	166	148	10	8.8	3.5
7	.22	72	23	2.9	2.3	.69	195	162	164	10	7.8	3.7
8	.23	57	20	5.5	2.2	.60	237	150	255	9.9	7.7	3.6
9	.34	44	15	3.1	1.9	.57	221	137	190	9.6	7.7	4.0
10	.25	63	27	3.1	1.5	.55	197	121	159	9.5	7.7	3.9
11	1.6	108	22	3.1	5.9	.52	301	106	146	9.4	7.7	3.7
12	1.0	163	22	3.1	29	.40	234	101	146	9.0	7.7	3.9
13	15	152	17	3.1	17	.38	295	106	139	9.0	6.4	4.1
14	.32	114	17	3.1	4.5	.39	334	118	125	9.0	4.2	4.5
15	.24	87	19	3.0	1.4	.49	371	124	117	9.0	4.1	4.4
16	.22	71	14	3.0	1.5	.70	360	141	108	9.0	4.0	105
17	.22	63	12	2.8	1.4	1.1	311	138	99	9.0	4.0	102
18	.22	79	12	2.8	1.4	1.4	234	170	92	9.0	4.0	98
19	20	71	8.1	2.7	1.5	8.7	238	188	83	8.9	4.0	96
20	43	73	8.0	2.7	1.4	6.8	197	180	69	8.3	4.0	94
21	18	60	6.7	2.6	1.3	7.9	184	173	60	9.0	4.0	92
22	3.1	53	4.8	2.6	1.4	9.3	175	184	52	8.8	3.8	92
23	2.4	54	4.3	2.6	1.4	17	190	206	45	8.0	3.8	95
24	2.3	53	3.8	2.5	1.3	49	166	235	39	7.7	3.8	96
25	2.2	45	3.8	2.5	1.2	34	143	213	34	8.8	3.8	96
26	19	38	3.6	2.4	1.2	35	162	200	28	9.7	3.7	92
27	8.9	43	3.6	2.4	1.1	32	132	178	22	9.5	3.8	88
28	9.3	56	3.5	2.4	1.1	28	139	184	18	9.5	4.1	90
29	15	49	3.5	2.2	---	22	151	154	16	9.5	4.0	90
30	4.4	58	3.4	2.2	---	18	167	117	14	9.5	3.8	10
31	2.4	---	3.3	2.2	---	25	---	119	---	9.5	3.8	---
TOTAL	171.25	2277.2	514.4	89.0	95.8	307.22	5795	5076	2956	293.1	179.2	1394.1
MEAN	5.52	75.9	16.6	2.87	3.42	9.91	193	164	98.5	9.45	5.78	46.5
MAX	43	220	51	5.5	29	49	371	235	255	11	9.5	105
MIN	.22	2.2	3.3	2.2	1.1	.38	32	101	14	7.7	3.7	3.5
AC-FT	340	4520	1020	177	190	609	11490	10070	5860	581	355	2770
CAL YR 1984	TOTAL	43694.71	MEAN	119	MAX	691	MIN	.22	AC-FT	86670		
WTR YR 1985	TOTAL	19148.27	MEAN	52.5	MAX	371	MIN	.22	AC-FT	37980		

ROGUE RIVER BASIN

14334700 SOUTH FORK ROGUE RIVER, SOUTH OF PROSPECT, OR

LOCATION.--Lat 42°42'45", long 122°30'20", in NW¼SE¼ sec.7, T.33 S., R.3 E., Jackson County, Hydrologic Unit 17100307, on right bank 200 ft upstream from unnamed tributary, 0.6 mi upstream from Smith Creek, 1.2 mi downstream from Beaver Creek, 2.8 mi southwest of Prospect, and at mile 2.4.

DRAINAGE AREA.--246 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,030 ft, from topographic map.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. Some regulation by South Fork canal dam upstream. Power diversions upstream from station from South Fork Rogue River, Middle Fork Rogue River, and Red Blanket Creek divert water to Rogue River via Main Canal. During summer base flow all of streamflow is diverted for power except that for fish life. Base flow at station is principally from springs downstream from power diversions.

AVERAGE DISCHARGE.--17 years, 404 ft³/s, 292,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,880 ft³/s Mar. 3, 1972, gage height, 12.71 ft, from floodmark; minimum, 54 ft³/s Aug. 16-19, 1977; minimum daily, 54 ft³/s Sept. 24-30, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1890, 20.1 ft, Dec. 22, 1964, from floodmarks at gage, discharge, 28,500 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,420 ft³/s June 7, gage height, 6.65 ft; minimum, 103 ft³/s Aug. 31, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	230	604	238	207	350	511	671	604	352	140	110
2	189	652	531	230	203	336	565	727	532	319	132	124
3	182	937	478	224	202	325	595	784	509	228	128	121
4	191	591	432	226	195	333	653	666	558	225	125	115
5	201	458	404	228	197	322	689	616	633	205	124	111
6	197	437	409	236	197	317	751	602	834	188	125	117
7	203	455	393	244	221	308	844	575	1010	184	123	123
8	202	436	382	268	246	300	884	543	1110	179	149	117
9	219	422	375	246	226	297	911	543	938	175	119	134
10	224	494	449	240	213	296	989	539	851	169	120	131
11	325	650	432	237	246	282	975	503	774	163	120	120
12	293	994	458	235	443	256	922	459	828	183	119	118
13	324	873	436	231	450	228	912	448	771	159	119	125
14	254	706	425	224	411	228	982	478	622	156	113	146
15	258	607	445	221	414	230	1050	492	587	152	111	140
16	236	535	410	220	427	235	1090	543	573	146	111	163
17	225	494	382	226	413	241	987	533	610	145	113	248
18	220	531	380	235	396	253	880	608	578	138	121	236
19	339	470	347	240	391	320	781	673	538	135	121	220
20	395	534	324	243	382	295	696	668	464	133	113	214
21	289	484	316	242	364	297	700	647	403	139	115	209
22	237	448	302	240	366	305	737	662	370	134	111	208
23	226	454	297	234	367	332	764	721	347	132	113	208
24	238	487	292	228	364	460	727	808	329	253	118	218
25	232	430	289	224	356	404	684	766	327	130	118	221
26	283	386	284	219	350	398	637	733	300	128	117	201
27	276	438	262	215	345	403	520	706	307	130	108	198
28	287	638	246	216	351	396	534	880	293	134	108	201
29	313	589	244	210	---	378	627	925	280	138	107	200
30	279	671	255	204	---	376	624	816	263	138	107	178
31	256	---	245	207	---	439	---	734	---	142	107	---
TOTAL	7787	16531	11528	7131	8943	9940	23221	20069	17143	5332	3675	4975
MEAN	251	551	372	230	319	321	774	647	571	172	119	166
MAX	395	994	604	268	450	460	1090	925	1110	352	149	248
MIN	182	230	244	204	195	228	511	448	263	128	107	110
AC-FT	15450	32790	22870	14140	17740	19720	46060	39810	34000	10580	7290	9870
CAL YR 1984	TOTAL	216925	MEAN	593	MAX	2120	MIN	182	AC-FT	430300		
WTR YR 1985	TOTAL	136275	MEAN	373	MAX	1110	MIN	107	AC-FT	270300		

ROGUE RIVER BASIN

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14334700 SOUTH FORK ROGUE RIVER SOUTH OF PROSPECT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1968 to current year.

SEDIMENT RECORDS: October 1976 to April 1981 (October to April only 1980 water year, November to April only 1981 water year).

INSTRUMENTATION.--Water temperature recorder since October 1968.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 20.0°C July 18, 19, 1979; minimum, 0.0°C on several days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily, 654 mg/l Nov. 26, 1977; minimum daily, 0 mg/l on several days each year.

SEDIMENT DISCHARGE: Maximum daily, 6,180 tons Nov. 26, 1977; minimum daily, 0 tons on several days each year.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 15.5°C July 21; minimum, 1.5°C Dec. 20, Feb. 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

14334700 SOUTH FORK ROGUE RIVER SOUTH OF PROSPECT, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

14335040 LOST CREEK LAKE NEAR MCLEOD, OR

LOCATION.--Lat 42°40'16", long 122°40'25", in SW¼ sec.26, T.33 S., R. 1 E., Jackson County, Hydrologic Unit 17100307, in outlet structure of Lost Creek Dam on Rogue River, 1.0 mi northeast of McLeod and at mile 157.2.

DRAINAGE AREA.--686 mi² (revised).

WATER-ELEVATION RECORDS

PERIOD OF RECORD.--February 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Nov. 28, 1977, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earthfill dam completed in October 1976. Storage began in February 1977. Total capacity, 465,000 acre-ft between elevations 1,551.0 ft and 1,872.0 ft, maximum pool elevation. Elevation of gated spillway crest, 1,823.0 ft. Usable storage, 315,000 acre-ft between elevation 1,751.0 ft and 1,872.0 ft. Water is used for flood control, recreation, power generation, pollution abatement, domestic use and other purposes.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 465,100 acre-ft May 21, 1979, May 25, 1981, elevation, 1,872.02 ft; minimum since first filling, 100,800 acre-ft Oct. 29, 1977, elevation, 1,720.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 462,000 acre-ft May 24, elevation, 1,871.12 ft; minimum, 282,700 acre-ft Dec. 29, elevation, 1,811.13 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,720.0	100,100	1,850.0	393,100
1,750.0	148,200	1,872.0	465,000
1,800.0	254,600		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1812.78	1818.24	1812.41	1811.36	1822.21	1841.81	1860.97	1864.66	1869.75	1869.60	1854.39	1832.86
2	1812.83	1819.29	1812.25	1811.52	1822.74	1842.48	1861.77	1865.18	1869.47	1869.35	1853.78	1832.13
3	1812.86	1820.75	1811.93	1811.84	1823.25	1843.12	1862.29	1865.68	1869.30	1869.05	1853.17	1831.40
4	1812.92	1821.29	1811.77	1812.16	1823.68	1843.79	1862.61	1865.89	1869.30	1868.74	1852.55	1830.65
5	1812.96	1821.48	1811.68	1812.49	1824.15	1844.40	1862.82	1865.97	1869.37	1868.42	1851.90	1829.89
6	1813.00	1821.63	1811.61	1812.83	1824.64	1844.97	1862.94	1866.04	1869.73	1868.14	1851.26	1829.16
7	1813.02	1821.53	1811.60	1813.20	1825.27	1845.52	1863.09	1866.19	1870.36	1867.82	1850.62	1828.43
8	1813.06	1821.05	1811.59	1813.61	1825.90	1846.05	1863.12	1866.45	1870.74	1867.44	1849.98	1827.69
9	1813.12	1821.53	1811.55	1814.02	1826.41	1846.54	1863.13	1866.75	1870.77	1866.95	1848.32	1826.95
10	1813.23	1821.22	1811.89	1814.38	1826.90	1847.04	1863.20	1867.11	1870.71	1866.45	1848.66	1826.22
11	1813.52	1821.24	1812.20	1814.73	1827.64	1847.56	1863.25	1867.46	1870.63	1865.93	1848.00	1825.47
12	1813.77	1820.70	1812.56	1815.06	1828.71	1848.06	1863.14	1867.78	1870.63	1865.41	1847.33	1824.79
13	1814.13	1821.00	1812.64	1815.38	1829.65	1848.57	1863.05	1868.14	1870.63	1864.91	1846.65	1824.33
14	1814.30	1819.45	1812.59	1815.70	1830.54	1849.09	1863.24	1868.60	1870.59	1864.38	1845.96	1824.19
15	1814.42	1817.41	1812.59	1816.02	1831.42	1849.59	1863.55	1869.04	1870.53	1863.85	1845.26	1824.15
16	1814.54	1815.09	1812.49	1816.31	1832.33	1850.16	1863.65	1869.58	1870.40	1863.30	1844.55	1824.07
17	1814.65	1813.23	1812.35	1816.66	1833.20	1850.76	1863.86	1869.94	1870.33	1862.76	1843.83	1824.05
18	1814.78	1812.49	1812.18	1817.10	1834.00	1851.40	1864.50	1870.36	1870.36	1862.25	1843.15	1824.01
19	1815.06	1812.21	1811.92	1817.55	1834.80	1852.05	1864.30	1870.68	1870.52	1861.69	1842.47	1823.89
20	1815.71	1812.34	1811.75	1817.99	1835.55	1852.71	1864.01	1870.88	1870.63	1861.15	1841.75	1823.77
21	1816.05	1812.18	1811.72	1818.44	1836.26	1853.35	1864.09	1870.96	1870.64	1860.61	1841.01	1823.67
22	1816.26	1812.03	1811.69	1818.85	1836.95	1854.04	1864.09	1870.95	1870.68	1860.07	1840.28	1823.50
23	1816.40	1812.08	1811.63	1819.23	1837.70	1854.69	1864.06	1871.00	1870.68	1859.52	1839.55	1823.37
24	1816.59	1812.00	1811.55	1819.58	1838.41	1855.58	1863.99	1871.09	1870.64	1858.96	1838.82	1823.25
25	1816.76	1812.00	1811.46	1819.92	1839.12	1856.32	1863.95	1870.94	1870.56	1858.40	1838.10	1823.11
26	1817.10	1811.97	1811.36	1820.41	1839.82	1857.17	1863.93	1870.79	1870.44	1857.81	1837.37	1822.98
27	1817.39	1812.10	1811.27	1820.59	1840.47	1857.92	1863.95	1870.62	1870.31	1857.22	1836.62	1822.84
28	1817.80	1812.12	1811.18	1820.92	1841.12	1858.66	1864.03	1870.54	1870.16	1856.64	1835.87	1822.67
29	1818.10	1812.11	1811.16	1821.22	---	1859.18	1864.15	1870.36	1870.04	1856.08	1835.11	1822.51
30	1818.32	1812.46	1811.29	1821.47	---	1859.61	1864.24	1870.08	1869.83	1855.53	1834.35	1822.37
31	1818.43	---	1811.34	1821.76	---	1860.22	---	1869.87	---	1854.96	1833.59	---
MEAN	1814.96	1816.47	1811.85	1816.53	1831.17	1850.72	1863.43	1868.70	1870.29	1863.01	1844.33	1825.61
MAX	1818.43	1821.63	1812.64	1821.76	1841.12	1860.22	1864.50	1871.09	1870.77	1869.60	1854.39	1832.86
MIN	1812.78	1811.97	1811.16	1811.36	1822.21	1841.81	1860.97	1864.66	1869.30	1854.96	1833.59	1822.37
(+)	302000	286200	283300	311000	366100	425600	438800	457700	457600	408700	344100	312600
(+)	+15100	-15800	-2900	+27700	+55100	+59500	+13200	+18900	-100	-48900	-64600	-31500
CAL YR 1984	MEAN	3188.44	MAX	3671.93	MIN	1811.16	AC-FT#	-17000				
WTR YR 1985	MEAN	1839.78	MAX	1871.09	MIN	1811.16	AC-FT#	+25700				

† Contents, in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

ROGUE RIVER BASIN

14335040 LOST CREEK LAKE NEAR MCLEOD, OR--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 42°41'38", long 122°35'52", in SE¼SE¼ sec.17, T.33 S., R.2 E., Jackson County, Hydrologic Unit 17100307, at Highway 62 crossing (Peyton Bridge), and 0.4 mi southeast of Needle Rock.

PERIOD OF RECORD.--January 1984 to January 1985 (discontinued).

REMARKS.--Local identifier 4241381223552 Lost Creek Lake #3.

WATER QUALITY DATA, OCTOBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
OCT							
11...	1230	0.0	62	8.70	14.0	11.8	4.8
11...	1235	10.0	66	7.50	11.0	11.6	4.4
11...	1240	20.0	64	7.60	9.5	10.6	1.3
11...	1245	25.0	65	7.50	9.0	10.7	1.8
11...	1250	30.0	66	7.50	8.5	10.6	1.4
30...	1310	0.0	60	8.40	10.5	11.3	3.0
30...	1315	5.0	60	--	10.0	--	--
30...	1320	10.0	60	7.20	9.5	9.5	1.0
30...	1325	15.0	61	--	9.0	--	--
30...	1329	19.0	60	--	9.0	--	--
30...	1350	20.0	58	7.60	8.5	10.5	1.0
30...	1351	25.0	57	--	7.0	--	--
30...	1352	30.0	59	7.40	6.5	10.9	1.0
30...	1353	35.0	58	--	6.0	--	--
30...	1354	38.0	59	7.40	6.0	11.4	1.0
NOV							
08...	1130	0.0	60	7.30	9.5	10.9	1.7
08...	1134	5.0	60	--	9.5	--	--
08...	1139	10.0	61	7.20	9.5	10.9	1.2
08...	1144	15.0	60	--	8.5	--	--
08...	1147	18.0	59	7.10	8.5	10.3	1.0
08...	1148	25.0	56	--	7.0	--	--
08...	1149	30.0	56	7.10	6.5	11.2	1.5
08...	1150	35.0	55	7.00	6.0	11.2	1.1
15...	1240	0.0	58	7.60	8.5	10.8	1.5
15...	1249	10.0	58	7.50	8.5	10.5	1.2
15...	1306	15.0	56	--	8.0	--	--
15...	1309	18.0	56	--	7.5	--	--
15...	1311	20.0	52	7.30	7.0	11.0	2.5
15...	1312	25.0	--	--	6.0	--	--
15...	1319	30.0	51	7.20	5.5	11.3	2.3
19...	1230	0.5	58	7.60	9.0	10.5	1.3
19...	1235	5.0	57	7.60	8.5	10.4	--
19...	1240	10.0	59	7.40	8.5	10.1	1.2
19...	1250	20.0	56	7.30	8.0	10.5	1.2
19...	1251	25.0	54	7.30	7.0	10.3	--
19...	1252	30.0	52	7.20	6.0	11.3	1.0
29...	1320	0.0	67	7.10	7.5	10.3	--
29...	1325	5.0	68	7.00	7.5	10.2	--
29...	1330	10.0	68	7.00	7.5	10.2	--
29...	1335	15.0	67	7.10	7.5	10.1	--
29...	1338	18.0	67	7.10	7.0	9.8	--
29...	1339	19.0	65	7.10	6.5	9.8	--
29...	1340	20.0	65	7.10	6.0	10.2	--
29...	1341	25.0	63	7.20	5.0	10.2	--
29...	1342	30.0	63	7.10	4.5	11.1	--
29...	1346	35.5	62	7.10	4.5	11.5	--

ROGUE RIVER BASIN

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14335040 LOST CREEK LAKE NEAR MCLEOD, OR--Continued

4241381223552 LOST CREEK LAKE SITE 3--Continued

WATER QUALITY DATA, OCTOBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
DEC							
04...	1340	0.5	66	7.20	7.0	9.9	2.0
04...	1345	5.0	66	7.00	7.0	10.0	--
04...	1350	10.0	66	7.10	7.0	9.8	2.3
04...	1355	15.0	66	7.10	7.0	9.8	--
04...	1401	25.0	66	7.10	5.0	10.0	--
04...	1402	30.0	63	7.20	4.5	11.0	2.3
12...	1300	0.0	61	7.10	6.5	10.1	1.2
12...	1310	10.0	61	6.90	6.5	9.9	1.1
12...	1316	15.0	59	6.90	6.5	10.1	--
12...	1320	20.0	61	6.90	5.5	10.6	1.3
12...	1321	25.0	60	7.00	4.0	10.8	--
12...	1322	30.0	59	7.10	4.5	11.2	1.4
20...	1320	0.0	--	--	5.5	--	1.3
20...	1330	10.0	--	--	4.0	--	1.3
20...	1340	20.0	--	--	3.5	--	1.2
20...	1350	30.0	--	--	3.5	--	1.1
JAN							
02...	1315	0.5	60	7.20	5.0	11.0	1.0
02...	1320	5.0	59	7.20	4.5	11.2	--
02...	1321	6.0	61	7.30	4.0	11.0	--
02...	1322	7.0	59	7.30	3.5	11.5	--
02...	1325	10.0	60	7.30	3.5	12.2	1.0
02...	1327	13.0	60	7.30	3.0	12.2	--
02...	1330	15.0	60	7.30	3.5	12.2	--
02...	1334	20.0	61	7.30	3.5	12.1	1.0
02...	1336	30.0	61	7.30	3.5	12.1	1.0
08...	1220	0.5	65	7.20	5.0	11.1	1.2
08...	1225	5.0	66	7.20	5.0	11.0	--
08...	1230	10.0	66	7.20	5.0	11.2	1.3
08...	1235	15.0	67	7.30	4.5	11.7	--
08...	1240	20.0	67	7.40	4.0	12.1	1.1
08...	1242	30.0	67	7.40	4.0	12.2	1.0
16...	1345	0.0	62	7.50	3.0	11.9	1.0
16...	1349	5.0	61	7.40	3.0	12.2	--
16...	1353	10.0	60	7.40	3.0	12.0	1.1
16...	1357	15.0	61	7.30	3.5	12.0	--
16...	1401	20.0	61	7.30	3.5	11.7	1.0
16...	1403	30.0	61	7.20	3.5	11.5	<1.0
22...	1300	0.5	65	7.50	3.5	11.9	<1.0
22...	1305	5.0	65	7.30	3.5	12.1	--
22...	1310	10.0	65	7.30	3.5	12.0	<1.0
22...	1315	15.0	64	7.30	3.5	12.0	--
22...	1320	20.0	65	7.30	3.5	12.0	<1.0
22...	1322	30.0	65	7.20	3.5	11.9	<1.0
29...	1330	0.5	63	7.60	2.5	12.4	1.5
29...	1340	10.0	63	7.40	3.0	12.1	1.3
29...	1350	20.0	63	7.30	3.5	12.5	1.1

ROGUE RIVER BASIN

14335040 LOST CREEK LAKE NEAR MCLEOD, OR--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 42°41'05", long 122°39'20", in SW¼ sec.24, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, 1.2 mi northeast of outlet structure, and 1.9 mi south of Fawn Butte.

PERIOD OF RECORD.--January 1984 to January 1985 (discontinued).

REMARKS.--Local identifier 4241051223920 Lost Creek Lake #9.

WATER QUALITY DATA, OCTOBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
OCT							
11...	1115	0.0	63	8.70	14.5	12.1	4.8
11...	1120	20.0	61	7.00	9.5	9.8	2.1
11...	1125	30.0	64	7.00	8.0	9.5	2.6
11...	1130	40.0	57	6.90	7.0	11.9	3.4
11...	1135	60.0	56	6.80	5.5	8.8	4.2
25...	1110	0.5	58	8.50	11.5	11.7	3.0
25...	1119	10.0	60	--	10.5	--	--
25...	1122	12.0	60	--	10.0	--	--
25...	1124	15.0	60	--	9.5	--	--
25...	1126	16.0	58	--	9.0	--	--
25...	1128	18.0	57	--	9.0	--	--
25...	1130	20.0	60	7.20	9.0	9.6	1.0
25...	1131	25.0	60	--	8.5	--	--
25...	1133	35.0	59	--	7.5	--	--
25...	1134	40.0	58	7.00	7.0	10.0	1.2
25...	1136	50.0	52	6.80	6.0	8.7	1.1
25...	1138	60.0	53	6.60	5.5	8.3	1.3
30...	1230	0.0	58	8.50	11.0	11.4	2.0
30...	1234	5.0	59	--	10.5	--	--
30...	1239	10.0	59	--	10.0	--	--
30...	1244	13.0	60	--	9.5	--	--
30...	1246	15.0	60	--	9.0	--	--
30...	1249	20.0	60	7.20	8.5	10.1	1.0
30...	1251	30.0	58	--	8.0	--	--
30...	1252	35.0	57	--	7.5	--	--
30...	1253	40.0	59	7.00	7.0	10.2	1.4
30...	1255	50.0	62	6.80	--	8.7	1.0
30...	1257	60.0	52	6.70	5.5	8.5	1.0
NOV							
08...	1130	0.0	59	7.40	9.5	11.0	2.0
08...	1135	5.0	59	--	9.5	--	--
08...	1140	10.0	60	--	9.5	--	--
08...	1143	13.0	60	--	9.0	--	--
08...	1145	15.0	60	--	8.5	--	--
08...	1150	20.0	59	6.90	8.5	9.5	1.0
08...	1152	30.0	59	--	7.5	--	--
08...	1153	35.0	57	6.70	7.0	10.6	1.5
08...	1155	45.0	57	6.60	6.5	10.5	1.5
08...	1158	60.5	54	6.60	6.5	8.5	1.2
15...	1140	0.0	59	7.50	9.0	10.7	1.5
15...	1145	5.0	58	--	9.0	--	--
15...	1150	10.0	58	--	9.0	--	--
15...	1155	15.0	59	--	8.5	--	--
15...	1200	20.0	58	7.50	8.0	10.0	<1.0
15...	1201	25.0	58	--	7.5	--	--
15...	1202	30.0	55	--	7.0	--	--
15...	1203	35.0	56	7.20	6.5	10.4	<1.0
15...	1206	50.0	53	7.20	6.5	11.0	1.5
15...	1208	65.5	53	7.20	5.5	9.2	1.3
19...	1135	0.5	58	7.80	9.0	10.6	1.0
19...	1139	5.0	57	7.60	9.0	10.4	--
19...	1144	10.0	58	7.50	9.0	10.3	--
19...	1149	15.0	58	7.40	8.5	9.1	--
19...	1154	20.0	57	7.10	7.5	10.0	<1.0
19...	1156	30.0	51	7.10	7.0	10.7	--
19...	1157	35.0	50	7.10	6.5	10.6	1.1
19...	1200	50.0	50	7.00	6.0	10.9	1.4
19...	1203	65.0	53	6.60	5.5	8.1	1.3
29...	1240	0.0	66	7.20	7.5	10.4	1.8
29...	1245	5.0	66	7.00	7.5	10.4	--
29...	1250	10.0	67	7.00	7.5	10.4	--
29...	1255	15.0	67	7.10	7.5	10.3	--
29...	1300	20.0	62	6.90	7.0	10.1	1.6
29...	1303	35.0	61	6.80	6.0	10.2	2.0
29...	1307	55.0	65	6.80	5.5	10.4	2.3
29...	1309	65.0	64	6.80	5.5	10.5	2.3

ROGUE RIVER BASIN

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14335040 LOST CREEK LAKE NEAR MCLEOD, OR--Continued

4241051223920 LOST CREEK LAKE SITE 9--Continued

WATER QUALITY DATA, OCTOBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
DEC							
04...	1230	0.5	65	7.20	7.5	10.0	1.7
04...	1235	5.0	65	7.10	7.5	10.2	--
04...	1240	10.0	61	7.10	7.0	10.2	--
04...	1245	15.0	65	7.10	7.5	10.2	--
04...	1250	20.0	65	7.10	7.0	10.0	1.6
04...	1253	35.0	61	6.90	6.0	10.1	2.2
04...	1256	50.0	63	6.90	5.5	10.4	2.5
04...	1300	65.0	63	7.00	5.0	10.6	3.0
12...	1215	0.0	61	7.10	6.5	10.1	1.3
12...	1220	5.0	61	7.00	6.5	10.0	--
12...	1225	10.0	61	7.00	7.0	9.9	--
12...	1230	15.0	61	7.00	6.5	9.9	--
12...	1235	20.0	60	6.90	6.5	9.9	1.4
12...	1238	35.0	60	6.90	5.5	10.5	1.5
12...	1241	50.0	62	6.90	5.0	10.7	2.5
12...	1244	65.0	61	6.90	4.5	10.8	1.5
20...	1230	0.5	--	--	6.0	--	1.5
20...	1240	20.0	--	--	6.0	--	1.3
20...	1245	35.0	--	--	5.0	--	1.5
20...	1250	50.0	--	--	5.0	--	1.0
20...	1255	65.0	--	--	4.5	--	1.3
26...	1200	0.0	60	7.40	6.0	10.2	1.3
26...	1210	20.0	60	7.10	5.5	10.1	1.1
26...	1215	35.0	61	7.10	5.0	10.5	1.7
26...	1220	50.0	61	7.10	4.5	10.6	1.6
26...	1225	65.0	61	7.00	4.5	10.5	1.4
JAN							
02...	1230	0.0	58	7.20	5.5	10.7	1.0
02...	1235	5.0	59	7.20	5.5	10.8	--
02...	1240	10.0	59	7.20	5.5	10.7	--
02...	1245	15.0	59	7.20	5.5	10.7	--
02...	1250	20.0	57	7.10	5.0	10.6	1.0
02...	1253	35.0	60	7.10	4.5	10.9	1.1
02...	1256	50.0	59	7.10	4.0	11.0	1.1
02...	1259	65.0	60	7.10	4.5	11.0	1.0
08...	1145	0.5	64	7.20	5.5	11.2	1.3
08...	1150	5.0	64	7.20	5.5	11.0	--
08...	1200	15.0	64	7.20	5.0	10.8	--
08...	1205	20.5	65	7.10	5.0	10.8	1.3
08...	1208	35.0	66	7.10	4.5	10.9	1.1
08...	1211	50.0	66	7.10	4.0	11.2	1.6
08...	1214	65.0	66	7.10	4.0	11.2	1.7
16...	1215	0.0	59	7.70	5.0	11.0	1.3
16...	1220	5.0	58	7.60	5.0	10.9	--
16...	1229	15.0	57	7.40	5.0	10.9	--
16...	1234	20.0	59	7.30	4.5	10.7	1.2
16...	1237	35.0	59	7.20	4.5	10.7	1.2
16...	1240	50.0	60	7.20	4.0	10.9	1.2
16...	1243	65.0	61	7.20	4.0	10.9	1.1
22...	1230	0.5	63	7.30	5.0	11.1	1.3
22...	1235	5.0	64	7.20	5.0	11.1	--
22...	1240	10.0	64	7.20	5.0	11.1	--
22...	1245	15.0	64	7.20	5.0	11.0	--
22...	1250	20.0	64	7.10	5.0	11.0	1.1
22...	1253	35.5	65	7.10	4.0	10.9	1.2
22...	1256	50.0	65	7.10	4.0	11.2	1.3
22...	1259	65.0	65	7.10	4.0	11.0	1.4
29...	1230	0.5	62	7.40	4.5	11.3	1.2
29...	1250	20.0	62	7.20	4.5	11.1	1.2
29...	1300	35.0	63	7.20	4.0	10.8	1.2
29...	1310	50.0	63	7.10	4.0	10.8	1.1
29...	1315	65.0	63	7.10	4.0	11.0	1.1

ROGUE RIVER BASIN

14335040 LOST CREEK LAKE NEAR MCLEOD, OR--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 42°40'25", long 122°40'04", near center of sec.26, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, 0.2 mi northeast of outlet structure, and 2.4 mi southeast of Yellow Rock.

PERIOD OF RECORD.--January 1984 to January 1985 (discontinued).

REMARKS.--Local identifier 4240251224004 Lost Creek Lake #11.

WATER QUALITY DATA, OCTOBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
OCT							
11...	1030	0.0	61	8.50	14.5	12.0	4.0
11...	1035	20.0	64	7.00	9.5	9.5	2.0
11...	1040	30.0	58	7.00	8.5	12.0	3.3
11...	1045	40.0	60	7.00	6.5	9.0	3.7
11...	1050	60.0	57	7.00	5.5	9.0	4.1
25...	1024	0.0	59	8.40	12.0	11.8	3.5
25...	1032	10.0	59	--	11.0	--	--
25...	1040	13.0	59	--	10.0	--	--
25...	1042	15.0	59	--	9.5	--	--
25...	1048	20.0	66	7.10	9.0	10.0	1.0
25...	1049	25.0	58	--	8.5	--	--
25...	1050	30.0	59	--	8.0	--	--
25...	1052	40.0	58	6.60	7.5	10.3	1.0
25...	1054	50.0	52	6.50	6.0	8.6	1.1
25...	1056	60.0	55	6.40	5.5	8.3	2.1
30...	1100	0.0	58	8.40	11.0	11.5	2.2
30...	1105	5.0	59	--	10.5	--	--
30...	1110	10.0	59	--	10.0	--	--
30...	1115	15.0	60	--	9.0	--	--
30...	1120	20.0	59	7.00	8.5	9.7	1.0
30...	1122	30.5	59	--	8.0	--	--
30...	1125	45.0	58	--	7.0	--	--
30...	1126	50.0	53	6.60	5.5	10.1	1.0
30...	1128	60.0	53	6.80	5.5	8.7	1.8
NOV							
08...	1100	0.0	58	7.40	9.5	10.8	1.4
08...	1105	5.0	59	--	9.5	--	--
08...	1110	10.0	60	--	9.5	--	--
08...	1113	13.0	60	--	9.0	--	--
08...	1115	15.0	60	--	8.5	--	--
08...	1120	20.0	58	6.90	8.5	9.5	1.3
08...	1121	25.0	60	--	8.0	--	--
08...	1122	30.0	59	--	7.5	--	--
08...	1123	35.0	58	6.70	7.0	10.6	1.3
08...	1125	45.0	57	6.60	6.5	10.5	1.5
08...	1128	60.5	54	6.60	6.5	8.5	1.2
15...	1100	0.0	59	7.40	9.0	10.4	1.5
15...	1105	5.0	58	--	9.0	--	--
15...	1110	10.0	58	--	9.0	--	--
15...	1115	15.0	59	--	8.5	--	--
15...	1120	20.0	65	7.20	7.5	9.7	<1.0
15...	1121	25.0	55	--	7.0	--	--
15...	1123	35.0	56	7.20	6.5	10.4	1.2
15...	1125	45.0	56	7.20	6.5	10.6	<1.0
15...	1128	60.0	55	7.20	5.5	9.2	1.0
19...	1100	1.0	59	7.20	9.0	10.4	1.5
19...	1104	5.0	58	7.60	9.0	11.0	--
19...	1109	10.0	57	7.60	9.0	11.2	--
19...	1114	15.0	57	7.60	9.0	11.0	--
19...	1119	20.0	57	7.20	8.0	10.5	<1.0
19...	1121	30.0	61	7.20	7.0	11.1	--
19...	1122	35.0	54	7.10	6.5	11.2	1.1
19...	1125	50.0	51	7.10	6.0	11.7	1.2
19...	1128	65.0	54	6.80	5.5	9.0	1.4
29...	1140	1.0	66	6.70	7.5	11.5	1.7
29...	1144	5.0	66	6.70	7.5	10.9	--
29...	1149	10.0	66	6.90	7.5	10.9	--
29...	1154	15.0	67	7.00	7.5	10.8	--
29...	1159	20.0	64	6.80	7.0	10.4	1.6
29...	1201	30.0	60	6.80	6.5	10.8	--
29...	1202	35.0	62	6.80	6.0	10.8	1.5
29...	1205	50.0	64	6.80	5.5	10.6	1.6
29...	1208	65.5	64	6.60	5.5	10.1	1.3
29...	1210	73.0	65	6.60	5.5	10.0	--

ROGUE RIVER BASIN

313

14335040 LOST CREEK LAKE NEAR MCLEOD, OR--Continued

4240251224004 LOST CREEK LAKE SITE 11--Continued

WATER QUALITY DATA, OCTOBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
DEC							
04...	1100	0.5	66	7.30	7.5	10.1	1.8
04...	1105	5.0	65	7.20	7.5	10.0	--
04...	1110	10.0	66	7.20	7.0	9.9	--
04...	1120	20.0	61	7.00	7.0	9.7	2.0
04...	1121	25.0	60	7.00	6.5	9.9	--
04...	1122	30.0	60	7.00	6.0	10.0	--
04...	1123	35.0	63	7.00	5.5	10.1	3.1
04...	1126	50.0	63	7.00	5.5	10.4	1.8
04...	1129	65.0	62	7.00	5.0	10.2	2.2
12...	1100	0.0	62	7.20	6.5	10.1	1.4
12...	1105	5.0	61	7.00	6.5	9.9	--
12...	1110	10.0	62	7.00	6.5	9.9	--
12...	1115	15.0	61	6.90	6.5	9.9	--
12...	1120	20.0	58	6.90	6.0	10.2	1.4
12...	1122	30.0	59	6.90	5.5	10.3	--
12...	1123	35.0	60	6.90	5.0	10.5	1.9
12...	1126	50.0	61	7.00	5.0	10.7	1.3
12...	1129	64.0	59	7.00	5.0	10.6	1.7
20...	1100	0.0	63	7.00	6.0	10.5	1.4
20...	1110	20.0	61	6.90	6.0	10.5	1.5
20...	1120	35.0	60	6.90	5.0	11.0	1.3
20...	1130	65.0	61	6.90	5.0	11.0	1.2
26...	1100	0.0	61	7.00	5.5	10.5	1.4
26...	1105	20.0	59	7.00	5.5	10.2	1.0
26...	1110	35.0	60	7.00	4.5	10.9	1.9
26...	1115	50.0	60	7.00	4.5	10.9	1.8
26...	1120	65.0	60	7.00	4.5	10.9	1.7
JAN							
02...	1100	0.0	58	6.80	5.5	10.6	<1.0
02...	1105	5.0	58	7.00	5.5	10.7	--
02...	1110	10.0	59	7.00	5.5	10.8	--
02...	1115	15.0	59	7.10	5.5	10.8	--
02...	1120	20.0	58	7.00	5.0	10.7	1.0
02...	1123	35.0	60	7.00	4.5	10.9	1.1
02...	1125	45.0	72	7.00	4.5	10.8	--
02...	1128	60.0	59	7.00	4.5	11.0	--
02...	1129	63.5	61	7.00	4.5	11.0	1.1
08...	1025	0.0	61	6.70	5.5	11.3	1.4
08...	1030	5.0	63	6.80	5.5	11.1	--
08...	1040	15.0	64	7.00	5.5	10.9	--
08...	1046	20.0	63	7.00	4.5	10.8	1.4
08...	1047	25.0	64	7.00	4.5	10.8	--
08...	1049	35.0	65	7.00	4.5	11.1	1.0
08...	1052	50.0	65	7.00	4.5	11.0	1.6
08...	1054	60.0	66	7.00	4.5	11.2	--
08...	1055	65.0	65	7.00	4.5	11.2	1.9
16...	1043	3.0	60	7.20	5.0	11.6	--
16...	1055	15.0	59	7.20	5.0	11.2	--
16...	1100	20.0	58	7.20	5.0	11.0	1.4
16...	1101	25.0	60	7.20	4.5	10.6	--
16...	1103	35.0	60	7.10	4.5	10.8	1.2
16...	1105	45.0	62	7.10	4.0	11.0	--
16...	1109	65.0	59	7.10	4.0	11.0	1.0
22...	1100	0.5	64	7.20	5.0	11.7	1.3
22...	1106	5.0	64	7.20	5.0	11.7	--
22...	1110	10.0	64	7.20	5.0	11.8	--
22...	1115	15.0	63	7.20	5.0	11.7	--
22...	1120	20.0	64	7.10	4.0	11.0	1.3
22...	1121	25.0	--	7.10	4.5	11.0	--
22...	1123	35.0	61	7.10	4.0	11.0	1.2
22...	1126	50.0	65	7.10	4.0	11.0	1.0
22...	1129	65.0	65	7.10	4.0	11.0	1.3
29...	1100	0.0	62	7.50	5.0	11.7	2.0
29...	1120	20.0	62	7.20	4.5	10.9	2.1
29...	1125	35.0	64	7.10	4.0	11.1	1.0
29...	1130	50.0	63	7.20	4.0	11.6	1.1
29...	1145	69.5	63	7.10	4.0	11.2	1.0

LOCATION.--Lat 42°39'35", long 122°41'30", in SW1/4 sec.34, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 0.3 mi upstream from Big Butte Creek, 0.1 southwest of McLeod, and at mile 155.6.

PERIOD OF RECORD.--May 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1976 to September 1981.

pH: November 1976 to September 1981.

WATER TEMPERATURES: November 1976 to current year.

DISSOLVED OXYGEN: November 1976 to September 1981.

SUSPENDED SEDIMENT DISCHARGE: October 1976 to September 1981 (October to April only, 1980 water year, November to April only, 1981 water year).

INSTRUMENTATION.--Water-quality monitor since November 1976. Automatic pumping sediment sampler November 1976 to April 1981.

REMARKS.--Water-discharge records, obtained by subtracting Big Butte Creek near McLeod (station 14337500) from Rogue River near McLeod (station 14337600), are used for computation of daily sediment loads.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 76 microsiemens Nov. 11, 1977; minimum, 45 microsiemens Dec. 24, 25, 1977.

pH: Maximum, 9.2 units May 8, 9, 11, 12, 1981; minimum, 6.7 units Nov. 8-13, 1978.

WATER TEMPERATURES: Maximum, 15.5°C June 23, 1985; minimum, 0.5°C Jan. 9, 1977; minimum since full operation of Lost Creek Lake, 3.5°C Feb. 1-9, 15, 1979.

DISSOLVED OXYGEN: Maximum, 15.7 mg/l Jan. 8, 1977; minimum, 6.8 mg/l Aug. 20, 1977.

SEDIMENT CONCENTRATIONS: Maximum recorded daily mean, 75 mg/l Dec. 14, 1977; minimum daily, 0 mg/l many days.

SEDIMENT DISCHARGE: Maximum recorded daily, 1,570 tons (1,420 tonnes) Dec. 14, 1977; minimum daily, 0 tons (0 tonnes) many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 15.5°C June 23; minimum recorded, 3.5°C Feb. 26, 27, but may have been less during period of no temperature record Feb. 1-20.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

ROGUE RIVER BASIN

315

14335075 ROGUE RIVER AT MCLEOD, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

14335500 SOUTH FORK BIG BUTTE CREEK NEAR BUTTE FALLS, OR

LOCATION.--Lat 42°32'25", long 122°33'15", in NE¼SW¼ sec.11, T.35 S., R.2 E., Jackson County, Hydrologic Unit 17100307, on right bank 10 ft downstream from Ginger Creek, 0.6 mi east of town of Butte Falls, and at mile 14.0.

DRAINAGE AREA.--138 mi².

PERIOD OF RECORD.--September 1910 to October 1911 (published as "at Butte Falls"), August to October 1915, October 1917 to September 1922, March 1925 to current year. Monthly discharge only August, September 1915, published in WSP 1318.

REVISED RECORDS.--WSP 1288: 1911, 1918-19, 1921-22, 1929. WSP 1318: 1918-19. WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Oct. 1, 1968. Elevation of gage is 2,360 ft, from river-profile map. Sept. 21, 1910, to Sept. 30, 1922, nonrecording gage at site 300 ft upstream at different datum.

REMARKS.--Estimated daily discharges: May 20 to June 9. Records good. Flow slightly regulated since 1952 by Willow Creek Reservoir, capacity, 7,320 acre-ft. Diversions for irrigation upstream from station and for municipal water supply for Medford (since 1927) and Butte Falls.

AVERAGE DISCHARGE.--66 years (water years 1911, 1918-22, 1926-85), 155 ft³/s, 112,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s Dec. 22, 1964, gage height, 7.65 ft, from rating curve extended above 1,600 ft³/s on basis of slope-area measurement of peak flow; minimum, 29 ft³/s Sept. 26, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 30	1900	*375	*1.97				
Minimum, 62 ft ³ /s Sept. 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	104	330	139	126	193	208	198	115	86	93	84
2	94	167	279	136	127	187	229	195	115	85	91	90
3	93	198	255	133	125	180	247	181	115	84	89	88
4	93	165	227	132	118	190	249	175	115	94	89	83
5	94	139	206	133	120	182	249	171	115	93	87	83
6	93	141	188	136	119	180	255	162	115	95	85	84
7	91	139	177	147	157	175	266	154	120	95	84	87
8	92	143	170	158	180	168	272	146	115	93	89	85
9	96	145	163	164	156	163	274	141	115	89	94	96
10	101	157	166	161	145	163	275	138	115	88	94	77
11	115	157	212	156	187	164	270	136	111	88	94	73
12	107	174	223	151	263	161	257	138	109	88	93	72
13	112	176	252	148	261	158	250	133	108	91	94	72
14	102	169	236	145	249	158	252	133	106	90	93	78
15	101	154	223	144	257	156	256	133	104	89	91	77
16	99	145	222	142	263	156	249	128	104	90	91	73
17	104	138	205	140	255	159	235	125	101	90	90	74
18	105	152	197	140	241	160	231	127	95	89	91	73
19	129	145	190	141	238	161	236	125	96	90	94	72
20	127	201	174	141	228	163	214	122	96	87	94	71
21	114	218	170	140	213	167	251	120	95	88	93	70
22	106	200	164	139	209	167	255	120	94	88	91	69
23	102	187	155	138	206	170	267	120	93	88	82	68
24	99	222	151	136	203	201	247	120	92	88	81	68
25	98	195	150	134	199	192	231	120	90	88	81	67
26	108	181	147	131	199	188	217	115	89	87	79	67
27	105	196	145	128	193	185	211	115	88	86	80	66
28	131	295	145	132	187	188	206	120	89	86	80	66
29	127	309	142	129	---	187	201	115	89	89	80	66
30	110	309	148	126	---	182	198	115	88	93	80	66
31	106	---	144	126	---	192	---	115	---	95	80	---
TOTAL	3258	5421	5956	4346	5424	5396	7258	4256	3092	2770	2727	2265
MEAN	105	181	192	140	194	174	242	137	103	89.4	88.0	75.5
MAX	131	309	330	164	263	201	275	198	120	95	94	96
MIN	91	104	142	126	118	156	198	115	88	84	79	66
AC-FT	6460	10750	11810	8620	10760	10700	14400	8440	6130	5490	5410	4490
CAL YR 1984	TOTAL	71773	MEAN	196	MAX	703	MIN	91	AC-FT	142400		
WTR YR 1985	TOTAL	52169	MEAN	143	MAX	330	MIN	66	AC-FT	103500		

14337500 BIG BUTTE CREEK NEAR MCLEOD, OR

LOCATION.--Lat 42°39'05", long 122°41'25", in NE¼NW¼ sec.3, T.34 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 225 ft upstream from county road bridge, 0.9 mi south of McLeod, and at mile 0.64.

DRAINAGE AREA.--245 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1957. October 1967 to current year.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,525.95 ft above National Geodetic Vertical Datum of 1929. Oct. 9, 1945, to Sept. 30, 1957, nonrecording gage at site 260 ft downstream at datum 0.53 ft higher.

REMARKS.--Estimated daily discharges: June 17 to July 22. Water-discharge records good except those for estimated daily discharges, which are poor. Slight regulation by fish hatchery 600 ft upstream from station. Several diversions in the vicinity of Butte Falls, the two largest being the city of Medford diversion and Eagle Point Irrigation District Canal.

AVERAGE DISCHARGE.--30 years, 285 ft³/s, 206,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,950 ft³/s Dec. 22, 1955, gage height, 12.75 ft, site and datum then in use, from rating curve extended above 3,300 ft³/s on basis of slope-area measurement of peak flow; minimum, 6.4 ft³/s June 23, 24, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 18.6 ft, present site, from floodmark by local resident, discharge, 16,800 ft³/s, from rating curve, at former site, extended above 9,000 ft³/s and field estimate of overflow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 27	2130	*1,460	*6.09				
Minimum, 56 ft ³ /s Aug. 26.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	107	709	224	203	301	517	254	148	67	74	64
2	180	369	578	224	161	300	530	250	141	67	70	75
3	177	484	546	193	171	277	547	244	126	67	67	73
4	181	374	430	191	153	289	536	236	120	67	66	65
5	187	246	368	192	153	279	517	221	120	67	64	65
6	186	249	323	198	161	273	503	211	117	67	61	69
7	180	252	293	217	255	260	502	203	115	67	60	72
8	186	285	275	232	545	242	447	201	136	66	63	71
9	195	318	261	241	324	228	403	190	124	66	72	85
10	205	380	452	235	256	222	405	183	116	66	73	111
11	239	405	442	227	479	224	397	181	99	66	107	71
12	220	696	684	217	793	219	403	170	89	66	70	62
13	233	501	545	208	611	213	374	161	83	66	72	62
14	213	410	445	203	515	209	346	151	79	66	72	71
15	211	325	477	197	499	227	358	146	76	66	70	70
16	207	280	417	192	508	285	347	145	73	65	70	63
17	214	265	368	186	487	287	327	148	72	65	71	63
18	220	375	371	186	457	287	309	141	72	65	70	64
19	239	301	322	188	421	286	338	135	70	65	74	64
20	189	692	289	190	422	287	308	133	70	65	73	74
21	155	493	287	190	387	295	335	130	70	65	74	147
22	132	389	285	185	369	298	382	125	70	65	72	144
23	102	421	285	181	361	310	364	121	70	65	65	141
24	96	560	240	178	353	361	350	128	68	66	60	139
25	92	443	231	171	343	354	324	130	68	65	59	136
26	101	374	225	165	331	384	302	123	68	65	58	135
27	108	653	224	163	319	425	294	119	68	63	59	136
28	171	1030	224	171	304	465	285	123	68	62	60	135
29	200	761	223	182	---	486	270	156	68	65	59	135
30	135	884	280	166	---	491	259	133	68	71	59	135
31	117	---	247	228	---	500	---	144	---	75	59	---
TOTAL	5468	13322	11346	6121	10341	9564	11579	5136	2732	2049	2103	2797
MEAN	176	444	366	197	369	309	386	166	91.1	66.1	67.8	93.2
MAX	239	1030	709	241	793	500	547	254	148	75	107	147
MIN	92	107	223	163	153	209	259	119	68	62	58	62
AC-FT	10850	26420	22500	12140	20510	18970	22970	10190	5420	4060	4170	5550
CAL YR 1984	TOTAL	128547	MEAN	351	MAX	1410	MIN	73	AC-FT	255000		
WTR YR 1985	TOTAL	82558	MEAN	226	MAX	1030	MIN	58	AC-FT	163800		

ROGUE RIVER BASIN

14337500 BIG BUTTE CREEK NEAR MCLEOD, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1970 to current year.

INSTRUMENTATION.--Temperature recorder since August 1970.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 24.0°C at times in 1973, 1977, 1979-81; minimum, 0.0°C at times in 1971, 1972, 1977-80.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 22.0°C June 18; minimum, 1.0°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

ROGUE RIVER BASIN

14337600 ROGUE RIVER NEAR MCLEOD, OR

LOCATION.--Lat 42°39'20", long 122°42'50", in SW¼ sec.33, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on left bank at Obstinate J Ranch, 1.3 mi downstream from Big Butte Creek, 1.6 mi southwest of McLeod, and at mile 154.0.

DRAINAGE AREA.--938 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,489.08 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. Flow regulated since February 1977 by Lost Creek Lake (see station 14335040). Diversions for irrigation upstream from station; most of low flow of Big Butte Creek is diverted near Butte Falls.

AVERAGE DISCHARGE.--20 years, 2,185 ft³/s, 1,583,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s Mar. 3, 1972, gage height, 12.24 ft; minimum, 468 ft³/s Feb. 18, 1977, result of closure of Lost Creek Dam, minimum prior to that time, 604 ft³/s Sept. 5, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1928, 20.35 ft Dec. 22, 1964, from floodmarks, discharge, 74,300 ft³/s, from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,400 ft³/s Nov. 13, gage height, 5.23 ft; minimum, 927 ft³/s Feb. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1440	1780	3360	1800	1180	1100	1730	2450	2850	1960	2240	2230
2	1420	2310	3230	1620	956	1100	2050	2430	2850	2010	2250	2230
3	1420	2450	3230	1370	972	1080	2800	2590	2620	2010	2260	2230
4	1420	2350	2800	1360	951	1080	3140	2710	2420	2010	2260	2230
5	1430	2190	2520	1360	957	1100	3380	2770	2320	2020	2260	2230
6	1430	2350	2400	1370	962	1090	3760	2770	2240	2010	2260	2240
7	1430	2780	2230	1400	1100	1080	4130	2570	2240	1970	2240	2240
8	1430	3250	2200	1410	1400	1050	4420	2290	2560	2040	2240	2250
9	1430	3290	2190	1400	1150	1040	4420	2160	2770	2230	2250	2280
10	1430	3340	2450	1430	1070	1030	4430	1950	2770	2230	2260	2330
11	1460	3730	2400	1390	1360	1030	4420	1840	2710	2230	2270	2310
12	1460	5580	2640	1390	1660	1030	4440	1840	2570	2230	2260	2140
13	1460	4890	2640	1380	1430	1020	4240	1740	2530	2230	2260	1890
14	1460	6350	2630	1370	1340	1020	4060	1700	2530	2240	2260	1600
15	1450	6200	2640	1370	1310	1040	4060	1700	2500	2240	2260	1400
16	1420	6160	2600	1360	1330	1100	4360	1700	2490	2240	2270	1350
17	1440	5310	2530	1350	1300	1110	3670	1920	2360	2210	2270	1290
18	1450	4190	2500	1350	1260	1110	2600	2050	2150	2230	2270	1330
19	1470	3290	2460	1370	1240	1100	3760	2290	1870	2200	2270	1360
20	1430	3340	2330	1370	1230	1110	3540	2470	1880	2190	2270	1350
21	1410	3170	2140	1370	1200	1120	2990	2630	1870	2190	2280	1450
22	1400	2870	2080	1370	1170	1120	3140	2840	1880	2190	2260	1450
23	1380	2760	2080	1360	1180	1130	3130	2840	1880	2190	2250	1440
24	1330	3130	2020	1360	1170	1200	3040	3000	1850	2190	2250	1400
25	1320	2660	2020	1350	1150	1210	2850	3260	1860	2190	2250	1410
26	1340	2500	2020	1340	1150	1220	2690	3150	1890	2220	2240	1410
27	1350	3010	2000	1330	1150	1270	2570	3040	1890	2240	2220	1410
28	1420	4100	2000	1350	1130	1330	2570	3040	1890	2240	2260	1410
29	1460	3560	1870	1370	---	1560	2630	3040	1890	2230	2250	1410
30	1410	3430	1860	1340	---	1720	2770	2930	1890	2230	2230	1410
31	1490	---	1820	1410	---	1730	---	2830	---	2230	2230	---
TOTAL	44090	106320	73890	43170	33458	36030	101790	76540	68020	67070	69900	52710
MEAN	1422	3544	2384	1393	1195	1162	3393	2469	2267	2164	2255	1757
MAX	1490	6350	3360	1800	1660	1730	4440	3260	2850	2240	2280	2330
MIN	1320	1780	1820	1330	951	1020	1730	1700	1850	1960	2220	1290
AC-FT	87450	210900	146600	85630	66360	71470	201900	151800	134900	133000	138600	104600
CAL YR 1984	TOTAL	1070740	MEAN	2926	MAX	6590	MIN	1260	AC-FT	2124000		
WTR YR 1985	TOTAL	772988	MEAN	2118	MAX	6350	MIN	951	AC-FT	1533000		

ROGUE RIVER BASIN

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14337600 ROGUE RIVER NEAR MCLEOD, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1970 to current year.

INSTRUMENTATION.--Temperature recorder since August 1970.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 18.0°C July 17, 18, Aug. 7, 1973; minimum, 0.5°C Jan. 3-5, 14, 15, 1971. Maximum since full operation of Lost Creek Lake, 15.0°C July 1, 1980; minimum, 3.0°C Feb. 2, 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 14.5°C June 20-24; minimum, 4.0°C Jan. 25-27, Feb. 1, 2, 4-6, 8-12.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.5	7.0	7.0	7.0	6.0	5.5	5.0	5.0	4.5	4.0	5.0	5.0
2	7.5	7.0	7.5	7.0	5.5	5.5	5.0	5.0	4.5	4.0	5.0	4.5
3	7.5	7.0	7.5	7.0	6.0	5.5	5.0	5.0	4.5	4.5	5.0	4.5
4	7.5	7.0	7.0	7.0	6.0	5.5	5.0	5.0	4.5	4.0	5.0	4.5
5	7.5	7.0	7.0	7.0	5.5	5.5	5.0	5.0	4.5	4.0	5.0	4.5
6	7.5	7.0	7.0	6.5	5.5	5.5	5.5	5.0	4.5	4.0	5.0	4.5
7	7.5	7.0	6.5	6.5	5.5	5.0	5.5	5.0	4.5	4.5	5.0	4.5
8	7.5	7.0	6.5	6.5	5.5	5.5	5.5	5.5	4.5	4.0	5.0	4.5
9	7.5	7.0	6.5	6.5	5.5	5.5	5.5	5.0	4.0	4.0	5.0	4.5
10	7.5	7.0	6.5	6.5	5.5	5.5	5.0	4.5	4.5	4.0	5.5	5.0
11	7.5	7.0	6.5	6.5	5.5	5.5	4.5	4.5	4.5	4.0	5.5	5.0
12	7.0	7.0	7.0	6.5	5.5	5.0	4.5	4.5	5.0	4.0	5.5	5.0
13	7.5	7.0	7.0	7.0	5.5	5.0	4.5	4.5	5.0	4.5	5.5	5.0
14	7.0	7.0	7.0	7.0	5.5	5.0	4.5	4.5	5.0	4.5	5.5	5.0
15	7.0	7.0	7.0	7.0	5.0	5.0	4.5	4.5	5.5	5.0	5.5	5.0
16	7.0	7.0	7.0	7.0	5.5	5.0	4.5	4.5	5.5	5.0	6.0	5.5
17	7.0	6.5	7.0	7.0	5.5	5.0	4.5	4.5	5.0	5.0	6.0	5.5
18	7.0	6.5	7.0	7.0	5.5	5.0	4.5	4.5	5.0	4.5	6.5	5.5
19	7.0	6.5	7.0	6.5	5.0	5.0	4.5	4.5	5.0	4.5	6.5	5.5
20	7.0	7.0	6.5	6.5	5.0	5.0	4.5	4.5	5.0	4.5	6.0	6.0
21	7.0	7.0	6.5	6.0	5.0	5.0	4.5	4.5	5.0	4.5	6.0	5.5
22	7.0	7.0	6.5	6.0	5.0	5.0	4.5	4.5	5.5	5.0	5.5	5.5
23	7.0	7.0	6.0	6.0	5.0	5.0	4.5	4.5	5.5	5.0	6.0	5.5
24	7.5	7.0	6.0	5.5	5.0	5.0	4.5	4.5	5.0	5.0	6.0	6.0
25	7.0	7.0	6.0	6.0	5.0	5.0	4.5	4.0	5.0	5.0	6.0	5.5
26	7.0	7.0	6.0	6.0	5.5	5.0	4.5	4.0	5.0	4.5	6.0	5.0
27	7.0	7.0	6.0	6.0	5.5	5.0	4.5	4.0	5.0	4.5	5.0	5.0
28	7.0	7.0	6.0	6.0	5.5	5.0	4.5	4.5	5.0	4.5	5.5	5.0
29	7.0	7.0	6.0	6.0	5.5	5.0	4.5	4.5	---	---	6.0	5.0
30	7.0	7.0	6.0	6.0	5.5	5.0	4.5	4.5	---	---	6.0	5.5
31	7.0	7.0	---	---	5.5	5.0	4.5	4.5	---	---	6.5	6.0
MONTH	7.5	6.5	7.5	5.5	6.0	5.0	5.5	4.0	5.5	4.0	6.5	4.5

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

ROGUE RIVER BASIN

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14337800 ELK CREEK NEAR CASCADE GORGE, OR

LOCATION.--Lat 42°46'25", long 122°40'15", in NW¼ sec.23, T.32 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 0.1 mi downstream from Sugarpine Creek, 6.5 mi northwest of town of Cascade Gorge, and at mile 10.7.

DRAINAGE AREA.--78.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,813.83 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Estimated daily discharges: Feb. 4, 5. Water-discharge records good. No regulation. Many diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--12 years, 157 ft³/s, 27.06 in/yr, 113,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,780 ft³/s Jan. 15, 1974, gage height, 8.9 ft, from floodmark; minimum daily, 0.72 ft³/s Aug. 24, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0730	*1,830	*5.90	No other peak greater than base discharge.			
Minimum, 1.0 ft ³ /s Aug. 15.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	4.3	33	503	117	66	147	882	118	48	14	6.5	4.1		
2	4.5	616	343	110	67	145	946	119	43	13	7.2	6.0		
3	4.5	460	304	114	63	130	740	115	39	13	5.5	6.0		
4	4.8	348	276	145	57	125	533	105	41	12	4.8	5.2		
5	5.9	202	225	174	55	116	440	97	37	12	4.4	5.0		
6	5.9	191	196	202	57	109	413	94	48	11	4.4	5.7		
7	5.2	233	187	233	112	105	393	89	58	11	4.6	6.9		
8	4.9	229	187	227	199	98	347	85	62	11	4.9	6.6		
9	7.2	274	190	195	134	94	317	80	52	10	4.5	6.7		
10	8.9	494	332	163	107	93	298	78	45	9.3	4.3	7.9		
11	20	627	356	139	227	94	269	75	40	8.0	4.2	7.0		
12	18	1420	343	125	659	95	232	70	36	7.7	3.9	6.6		
13	20	827	308	114	490	95	218	68	33	7.4	3.3	6.9		
14	17	544	261	111	410	97	217	65	31	8.2	3.2	12		
15	21	354	261	108	477	99	210	63	29	7.5	3.3	12		
16	16	246	225	106	449	103	190	65	28	7.1	2.9	11		
17	15	196	190	130	342	109	165	62	26	6.5	3.0	12		
18	24	264	163	172	269	111	147	61	24	6.0	3.6	13		
19	66	246	139	171	240	111	138	59	23	6.5	6.4	10		
20	79	370	127	156	231	110	124	58	22	5.1	5.3	8.7		
21	56	316	120	140	203	107	135	56	21	5.0	5.2	7.9		
22	36	232	109	124	197	101	167	54	19	5.3	4.9	7.4		
23	28	215	103	112	202	119	156	52	19	4.9	4.6	7.4		
24	25	253	97	104	202	208	142	52	18	4.9	3.9	6.7		
25	21	218	93	96	196	191	129	50	18	4.8	3.7	6.7		
26	28	187	89	87	175	179	118	48	17	4.9	3.2	6.3		
27	32	444	90	81	156	164	114	44	16	4.1	2.9	6.1		
28	73	1100	93	80	144	154	117	52	16	5.3	3.3	6.1		
29	89	625	92	77	---	160	116	54	15	6.1	3.5	5.8		
30	56	749	111	71	---	193	116	44	15	5.9	3.4	6.0		
31	42	---	129	68	---	506	---	56	---	6.3	3.5	---		
TOTAL	838.1	12513	6242	4052	6186	4268	8529	2188	939	243.8	132.3	225.7		
MEAN	27.0	417	201	131	221	138	284	70.6	31.3	7.86	4.27	7.52		
MAX	89	1420	503	233	659	506	946	119	62	14	7.2	13		
MIN	4.3	33	89	68	55	93	114	44	15	4.1	2.9	4.1		
CFSM	.34	5.29	2.55	1.66	2.80	1.75	3.60	.90	.40	.10	.05	.10		
IN.	.40	5.91	2.95	1.91	2.92	2.01	4.03	1.03	.44	.12	.06	.11		
AC-FT	1660	24820	12380	8040	12270	8470	16920	4340	1860	484	262	448		
CAL YR 1984	TOTAL	70395.1	MEAN	192	MAX	2450	MIN	3.3	CFSM	2.44	IN.	33.23	AC-FT	139600
WTR YR 1985	TOTAL	46356.9	MEAN	127	MAX	1420	MIN	2.9	CFSM	1.61	IN.	21.88	AC-FT	91950

ROGUE RIVER BASIN

14337800 ELK CREEK NEAR CASCADE GORGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1973 to October 1976, August 1977 to current year.

INSTRUMENTATION.--Temperature recorder August 1973 to October 1976 and since August 1977.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 28.5°C July 29, 30, 1973, Aug. 9-11, 1981; minimum, 0.0°C at times during most winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.5°C July 19, 20, 26; minimum, 0.0°C Feb. 1.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	8.5	6.5	4.5	6.0	5.0	3.5	2.0	1.0	.0	6.0	4.0
2	14.0	8.5	8.5	6.5	6.0	5.0	4.0	2.5	2.0	.5	5.0	3.0
3	14.0	8.5	8.0	7.5	6.5	5.0	4.0	2.5	3.5	.5	4.5	2.5
4	12.0	9.5	8.0	6.5	5.5	4.5	4.5	3.0	.5	.5	5.0	3.0
5	14.5	10.5	8.0	6.5	5.5	4.5	5.0	4.0	2.0	.5	5.5	3.0
6	15.0	11.0	8.0	7.5	5.0	4.0	5.5	4.5	3.5	1.5	6.0	3.0
7	15.0	10.5	8.0	6.5	5.0	4.0	5.5	4.5	3.0	2.0	5.0	3.0
8	12.5	10.0	6.5	6.5	5.0	4.0	5.5	4.0	4.0	2.0	6.5	2.0
9	14.0	10.5	6.5	6.0	6.5	5.0	4.5	3.5	4.0	2.5	7.5	2.5
10	11.5	10.5	8.0	6.5	6.0	5.0	4.0	3.0	4.0	2.0	8.5	3.5
11	10.5	9.0	8.0	7.5	5.0	3.5	4.0	2.5	4.0	3.0	8.5	3.5
12	10.0	8.5	8.5	8.0	4.5	3.5	4.0	2.0	5.5	3.5	8.0	3.5
13	11.0	8.5	8.5	7.5	5.5	4.5	3.5	1.5	5.5	4.0	8.0	3.0
14	9.5	7.5	7.5	6.5	4.5	4.0	4.5	2.5	6.0	4.0	8.5	3.0
15	9.0	6.5	7.0	6.0	5.0	4.5	4.5	2.5	6.5	5.0	9.0	3.5
16	8.5	6.5	7.0	5.5	5.0	4.0	4.5	2.5	6.5	5.0	9.5	4.0
17	8.0	5.5	7.5	5.5	5.0	4.0	5.0	3.0	6.0	4.0	9.0	4.0
18	6.5	6.0	8.0	7.0	4.0	2.5	5.0	3.5	6.0	3.5	9.5	4.0
19	7.0	6.0	7.0	6.0	3.0	1.5	5.5	3.5	5.0	4.0	9.0	4.0
20	8.5	7.0	7.0	5.5	3.0	1.0	5.5	4.0	6.0	4.0	8.5	5.0
21	9.0	7.0	6.0	5.5	4.5	2.5	4.5	3.0	6.5	4.0	6.5	3.5
22	9.0	5.5	6.0	4.5	3.5	2.5	4.5	2.5	7.5	5.0	3.5	2.5
23	---	---	5.5	4.5	4.0	3.0	4.5	2.5	7.0	4.0	5.5	3.5
24	---	---	5.0	4.5	3.5	2.5	4.5	3.0	6.5	4.0	6.0	4.0
25	---	---	5.5	4.5	3.0	2.0	4.0	1.5	6.5	4.0	6.5	3.5
26	---	---	5.0	4.5	4.5	3.0	3.5	1.5	6.0	3.5	3.5	1.0
27	---	---	5.0	4.5	4.0	3.5	3.0	1.0	7.0	3.0	3.0	2.0
28	---	---	6.5	5.0	4.5	3.0	4.0	2.5	7.5	3.5	4.0	1.5
29	---	---	6.5	5.5	4.0	3.0	3.5	2.0	---	---	6.5	3.0
30	7.0	---	6.5	5.5	4.0	2.5	3.0	1.0	---	---	5.5	4.0
31	7.5	5.5	---	---	4.0	3.0	3.0	1.0	---	---	8.0	4.5
MONTH	---	---	8.5	4.5	6.5	1.0	5.5	1.0	7.5	.0	9.5	1.0

ROGUE RIVER BASIN

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14337800 ELK CREEK NEAR CASCADE GORGE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

14337870 WEST BRANCH ELK CREEK NEAR TRAIL, OR

LOCATION.--Lat 42°42'40", long 122°44'55", in SW¼ sec.7, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on Bureau of Land Management land, on left bank 300 ft upstream from Spot Creek and 5.3 mi northeast of Trail.

DRAINAGE AREA.--14.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to September 1976, October 1977 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,773.24 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--No estimated daily discharges. Records good except those for August and September, which are fair. No regulation or diversions upstream from station.

AVERAGE DISCHARGE.--11 years, 24.6 ft³/s, 23.53 in/yr, 17,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s Jan. 15, 1974, gage height, 5.30 ft, from rating curve extended above 600 ft³/s on basis of slope-area measurement of peak flow; minimum, 0.26 ft³/s Sept. 16, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1100	*461	*2.99	Apr. 1	2100	304	2.56
Minimum, 1.0 ft ³ /s Sept. 24, 25.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	2.7	5.7	99	22	10	18	209	7.5	5.2	2.5	2.2	1.8		
2	2.6	101	73	21	10	19	190	7.3	4.9	2.4	2.1	2.0		
3	2.5	79	67	23	10	16	120	7.0	4.4	2.4	1.9	1.9		
4	2.7	59	61	31	11	15	81	6.7	4.5	2.4	1.8	1.6		
5	3.0	27	49	34	10	13	58	6.2	4.3	2.3	1.9	1.5		
6	2.9	29	40	38	10	13	42	6.1	6.1	2.3	1.8	1.6		
7	2.7	38	38	46	29	13	32	5.9	7.1	2.3	1.8	1.7		
8	3.4	31	39	40	46	12	26	5.8	7.0	2.2	1.9	1.6		
9	4.1	35	40	33	28	12	22	5.6	5.8	2.1	1.8	1.8		
10	5.6	82	75	27	21	13	19	5.7	4.9	2.1	1.8	1.8		
11	5.9	93	77	23	59	14	16	5.6	4.3	2.1	1.8	1.6		
12	5.9	300	73	21	176	14	14	5.3	4.0	2.1	1.9	1.6		
13	5.5	143	68	19	118	13	13	5.0	3.7	2.1	2.0	1.6		
14	4.7	98	53	18	100	13	12	4.9	3.5	2.1	1.9	2.1		
15	6.3	61	48	17	104	13	12	4.8	3.3	2.1	1.9	1.7		
16	4.8	34	40	17	95	12	11	4.8	3.3	2.0	1.9	1.4		
17	5.2	25	32	21	66	12	9.8	4.9	3.2	2.0	2.0	1.4		
18	6.5	34	28	27	47	12	10	4.6	2.9	2.0	2.1	1.4		
19	10	37	24	24	39	11	9.8	4.6	2.9	1.9	2.5	1.4		
20	13	64	21	22	33	10	9.4	4.5	2.8	1.8	2.3	1.4		
21	13	59	19	19	29	10	11	4.2	2.7	1.8	2.1	1.3		
22	7.2	38	17	17	30	9.9	15	4.1	2.7	1.8	2.0	1.3		
23	4.8	33	16	15	34	12	13	4.1	2.5	1.9	1.8	1.2		
24	4.1	39	15	14	32	26	13	4.3	2.7	1.9	1.7	1.1		
25	3.8	34	15	13	30	24	12	4.1	2.7	1.9	1.6	1.1		
26	4.9	28	15	12	25	22	11	4.0	2.6	1.7	1.6	1.2		
27	5.4	72	15	11	21	20	9.9	4.1	2.6	1.7	1.6	1.2		
28	16	210	16	11	18	20	9.5	5.7	2.6	1.7	1.6	1.2		
29	16	107	14	10	---	22	9.0	5.0	2.5	1.9	1.7	1.2		
30	8.1	132	19	10	---	34	8.2	4.4	2.5	2.0	1.7	1.2		
31	6.3	---	22	10	---	104	---	6.2	---	2.2	1.8	---		
TOTAL	189.6	2127.7	1228	666	1241	571.9	1027.6	163.0	114.2	63.7	58.5	44.9		
MEAN	6.12	70.9	39.6	21.5	44.3	18.4	34.3	5.26	3.81	2.05	1.89	1.50		
MAX	16	300	99	46	176	104	209	7.5	7.1	2.5	2.5	2.1		
MIN	2.5	5.7	14	10	10	9.9	8.2	4.0	2.5	1.7	1.6	1.1		
CFSM	.43	4.99	2.79	1.51	3.12	1.30	2.42	.37	.27	.14	.13	.11		
IN.	.50	5.57	3.22	1.74	3.25	1.50	2.69	.43	.30	.17	.15	.12		
AC-FT	376	4220	2440	1320	2460	1130	2040	323	227	126	116	89		
CAL YR 1984	TOTAL	10234.3	MEAN	28.0	MAX	421	MIN	2.0	CFSM	1.97	IN.	26.81	AC-FT	20300
WTR YR 1985	TOTAL	7496.1	MEAN	20.5	MAX	300	MIN	1.1	CFSM	1.44	IN.	19.64	AC-FT	14870

ROGUE RIVER BASIN

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14337870 WEST BRANCH ELK CREEK NEAR TRAIL, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1977 to current year.

INSTRUMENTATION.--Temperature recorder since August 1970.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 25.5°C Aug. 8, 1978; minimum, 0.0°C at times during most winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 22.0°C July 19, 20, 22; minimum, 0.0°C Feb. 1, 3-5, Mar. 26.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.0	9.0	6.5	4.5	6.0	5.5	3.0	2.5	1.0	.0	6.0	4.0
2	12.0	8.5	8.5	6.5	6.5	5.5	4.0	2.5	1.5	.5	5.0	2.5
3	12.0	8.5	8.5	8.0	6.5	5.5	4.0	3.0	3.0	.0	4.5	2.0
4	11.0	9.5	8.5	7.0	5.5	5.0	4.5	3.0	.0	.0	5.0	3.0
5	12.5	10.0	8.5	6.5	5.5	5.0	5.5	4.0	2.0	.0	5.0	3.0
6	13.5	10.5	8.5	8.0	5.0	4.5	6.0	4.5	---	---	5.0	3.0
7	13.0	10.0	8.5	7.0	5.0	4.0	6.0	5.0	---	---	4.5	3.0
8	12.0	10.0	7.0	6.5	5.5	4.5	6.0	4.0	---	---	6.0	2.0
9	12.5	11.0	7.0	6.0	6.5	5.5	4.5	3.5	---	---	6.5	2.5
10	11.0	10.0	8.5	6.5	6.5	5.5	3.5	3.0	---	---	8.5	4.0
11	10.0	8.5	8.5	8.0	5.5	4.0	3.5	2.5	---	---	8.0	3.5
12	9.5	8.5	9.0	8.5	5.0	4.5	3.0	2.0	---	---	7.5	3.5
13	10.0	8.0	9.0	8.0	5.5	5.0	3.0	1.5	---	---	7.5	3.0
14	8.5	7.0	8.0	7.0	5.0	4.0	4.0	2.0	---	---	8.0	3.5
15	8.5	6.5	7.5	6.5	5.5	4.5	3.5	2.5	---	---	9.0	4.0
16	7.5	6.0	7.0	6.0	4.5	4.5	3.5	2.5	---	---	9.0	4.0
17	7.0	5.5	7.5	5.5	5.0	4.0	4.5	3.0	---	---	9.0	4.5
18	6.0	5.5	8.0	7.0	4.0	3.0	5.0	3.5	---	---	9.0	4.5
19	7.0	5.5	7.5	6.5	3.0	2.0	5.0	3.5	5.0	---	9.0	4.0
20	8.0	7.0	7.0	6.5	3.0	1.5	5.0	4.0	5.0	3.5	8.0	5.0
21	8.5	6.5	6.5	5.5	4.0	3.0	4.0	3.0	6.0	3.0	5.5	3.5
22	8.0	6.0	5.5	5.0	3.5	2.5	3.5	2.5	7.0	5.0	4.0	2.5
23	8.0	5.5	6.0	4.5	3.5	3.0	3.5	2.0	6.5	3.5	6.0	4.0
24	10.0	8.0	5.5	5.0	3.5	2.0	3.5	2.5	6.5	4.0	6.5	4.0
25	8.5	7.5	6.0	5.0	3.0	2.0	3.0	1.5	6.0	4.0	5.0	3.5
26	8.5	7.0	5.0	4.5	4.0	3.0	2.5	1.0	5.5	3.0	3.5	.0
27	7.5	6.5	6.5	5.0	4.0	3.5	3.0	.5	6.0	2.5	2.0	1.5
28	7.0	6.5	7.5	6.5	4.0	3.0	3.0	1.5	7.0	3.0	2.5	1.0
29	7.0	5.5	6.5	6.0	4.0	3.0	3.0	1.5	---	---	5.0	2.5
30	6.5	5.0	7.0	6.0	4.5	3.0	2.0	.5	---	---	5.5	4.0
31	7.0	5.0	---	---	4.0	3.0	2.5	.5	---	---	6.5	4.5
MONTH	13.5	5.0	9.0	4.5	6.5	1.5	6.0	.5	---	.0	9.0	.0

ROGUE RIVER BASIN

14337870 WEST BRANCH ELK CREEK NEAR TRAIL, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

14338000 ELK CREEK NEAR TRAIL, OR

LOCATION.--Lat 42°39'50", long 122°44'50", in SW¼ sec.30, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 3.3 mi northeast of Trail and at mile 0.4.

DRAINAGE AREA.--133 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to current year. Prior to March 1946 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 1,456.56 ft above National Geodetic Vertical Datum of 1929. Prior to July 5, 1946, nonrecording gage at various sites within 1.0 mi of present site at different datums. July 5, 1946, to June 22, 1950, nonrecording gage, and June 23, 1950, to May 23, 1954, water-stage recorder, at site 0.3 mi upstream at datum 12.14 ft higher.

REMARKS.--Estimated daily discharges: Oct. 23 to Nov. 1, Nov. 10-15, Dec. 18-20. Water-discharge records good except those for Oct. 23 through Dec. 20, which are fair. No regulation. Diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--40 years, 233 ft³/s, 168,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,200 ft³/s Dec. 22, 1964, gage height, 18.84 ft, from rating curve extended above 4,700 ft³/s on basis of slope-area measurement of peak flow; minimum, 0.40 ft³/s Aug. 16, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	unknown	*2,990	a*7.40	No other peak greater than base discharge.			
Minimum, 2.6 ft ³ /s Aug. 31, Sept. 1.							
a From floodmark.							

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	70	967	211	95	209	1570	138	68	14	8.8	4.7
2	9.4	805	591	196	95	208	1590	137	61	14	9.2	7.4
3	9.3	714	536	203	94	186	1170	135	54	13	8.3	8.0
4	9.3	493	467	248	86	178	799	125	53	12	7.4	7.6
5	11	276	381	282	89	165	614	114	52	11	6.1	7.1
6	11	233	326	298	88	158	537	108	63	10	5.3	7.1
7	10	295	308	334	174	151	490	103	77	10	5.4	8.7
8	9.6	288	305	332	424	141	424	99	92	10	5.9	9.5
9	12	342	305	290	278	134	378	94	74	9.5	5.9	9.6
10	15	850	528	243	213	133	354	91	62	9.7	5.5	10
11	30	1100	581	207	413	138	316	87	54	8.3	5.2	9.8
12	30	2300	628	183	1410	141	275	81	49	7.7	5.1	9.1
13	35	1500	595	167	980	136	252	78	44	7.8	4.6	9.2
14	27	1000	460	158	759	133	248	76	40	7.6	4.1	14
15	36	600	447	154	821	135	242	73	39	7.5	3.8	16
16	28	392	379	150	742	141	224	71	36	7.5	4.0	15
17	26	309	316	180	537	149	199	71	33	7.5	3.7	12
18	33	422	280	235	411	149	180	64	31	7.2	3.5	17
19	70	443	250	233	357	148	173	67	28	7.0	4.8	14
20	130	691	220	210	341	144	156	65	27	6.9	4.5	11
21	96	639	187	191	301	140	164	62	24	6.0	5.6	9.7
22	65	434	171	169	290	136	219	60	23	6.3	5.4	9.0
23	55	391	159	153	309	155	203	58	21	6.2	4.6	8.4
24	50	488	152	142	300	281	189	59	21	6.0	6.1	8.1
25	45	451	147	132	286	272	171	57	20	6.2	4.6	7.6
26	55	415	144	122	256	267	154	54	19	5.6	3.2	7.4
27	65	736	143	114	224	255	146	53	19	5.6	3.2	7.4
28	100	2040	151	112	203	258	147	59	18	5.2	3.0	7.1
29	170	1200	150	107	---	283	144	72	12	5.5	3.5	7.1
30	100	1330	190	99	---	379	139	58	14	7.5	3.4	6.8
31	80	---	231	97	---	914	---	72	---	8.1	2.8	---
TOTAL	1432.1	21247	10695	5952	10576	6417	11867	2541	1228	256.4	156.5	285.4
MEAN	46.2	708	345	192	378	207	396	82.0	40.9	8.27	5.05	9.51
MAX	170	2300	967	334	1410	914	1590	138	92	14	9.2	17
MIN	9.3	70	143	97	86	133	139	53	12	5.2	2.8	4.7
AC-FT	2840	42140	21210	11810	20980	12730	23540	5040	2440	509	310	566
CAL YR 1984	TOTAL	107220.7	MEAN	293	MAX	3710	MIN	5.3	AC-FT	212700		
WTR YR 1985	TOTAL	72653.4	MEAN	199	MAX	2300	MIN	2.8	AC-FT	144100		

ROGUE RIVER BASIN

14338000 ELK CREEK NEAR TRAIL, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: June 1973 to current year.

INSTRUMENTATION.--Temperature recorder since June 1973.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 31.5°C July 17, 1979; minimum, 0.0°C at times most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 29.0°C July 18-20; minimum, 0.0°C Feb. 4, 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	11.5	7.5	5.5	6.0	5.0	3.5	1.5	1.5	.5	6.5	4.5
2	16.5	11.5	9.0	7.5	6.0	5.0	4.0	2.0	2.0	.5	6.0	3.0
3	16.5	12.0	8.5	8.0	7.0	5.5	4.0	2.0	3.5	1.5	4.5	2.0
4	14.5	12.5	9.0	7.5	5.5	4.5	4.0	2.0	1.5	.0	5.5	3.5
5	16.5	13.0	8.5	6.5	5.5	4.0	5.0	3.5	2.0	.0	5.0	3.0
6	17.5	13.5	9.0	8.0	5.0	3.5	6.0	4.5	4.0	1.5	6.0	3.0
7	18.0	13.5	9.0	7.5	5.0	3.5	6.0	5.0	3.5	3.0	5.0	3.0
8	15.5	13.0	7.5	6.5	5.0	3.5	6.0	4.5	4.0	2.5	6.0	2.0
9	16.5	13.0	7.0	6.5	6.5	5.0	4.5	3.0	4.5	3.0	7.0	2.5
10	14.0	12.5	8.5	7.0	6.5	5.0	4.0	2.0	4.5	2.0	9.5	4.0
11	13.5	11.5	8.5	8.0	5.5	4.5	3.5	2.0	4.0	3.5	8.5	4.0
12	11.5	10.5	9.0	8.5	5.0	4.0	3.5	1.5	6.0	4.0	8.0	4.0
13	12.5	10.5	8.5	8.0	6.0	4.5	3.0	1.0	6.0	4.0	8.0	3.5
14	11.0	9.0	8.0	7.0	5.0	4.5	3.5	1.5	6.5	3.5	8.5	4.0
15	10.5	8.5	7.5	6.5	5.5	4.5	4.0	2.0	7.0	5.0	9.0	4.5
16	9.5	8.0	7.5	5.5	5.0	4.0	4.0	2.0	7.0	5.0	9.5	4.5
17	9.5	7.0	7.5	5.5	5.0	4.0	4.5	2.0	6.5	4.0	9.0	5.0
18	8.5	7.0	8.5	7.5	4.5	3.0	5.0	3.0	6.0	3.0	9.5	5.0
19	8.5	7.0	7.5	6.5	3.0	1.5	5.0	3.0	5.0	3.5	9.5	4.5
20	9.5	8.0	7.5	6.5	2.5	1.0	5.0	3.5	6.0	4.0	9.0	5.5
21	10.0	8.5	7.0	5.5	4.0	2.5	4.5	3.0	6.5	3.5	7.0	5.0
22	10.0	7.0	6.0	4.5	4.0	3.0	4.0	2.0	8.0	5.5	5.0	3.0
23	9.5	6.5	5.5	4.5	4.0	3.0	4.0	1.5	7.0	4.0	6.0	3.5
24	12.0	9.5	5.5	4.5	4.0	3.0	4.0	2.0	6.5	4.0	7.0	4.5
25	11.0	9.5	6.0	4.5	3.0	2.0	3.5	1.0	6.5	3.5	6.0	3.5
26	11.0	9.5	5.0	4.5	4.5	2.5	3.0	.5	5.5	3.0	4.5	1.0
27	9.5	8.0	5.5	5.0	4.0	3.5	2.0	.5	6.5	2.5	3.0	1.5
28	8.5	7.5	7.0	5.5	4.5	3.0	4.0	1.5	7.0	3.0	5.0	1.5
29	9.0	7.0	6.5	6.0	4.0	3.5	3.5	2.0	---	---	6.5	2.5
30	7.5	6.0	7.0	6.0	4.0	3.0	3.0	1.5	---	---	7.0	4.0
31	8.5	6.5	---	---	4.5	3.0	3.0	1.0	---	---	8.5	4.5
MONTH	18.0	6.0	9.0	4.5	7.0	1.0	6.0	.5	8.0	.0	9.5	1.0

ROGUE RIVER BASIN

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14338000 ELK CREEK NEAR TRAIL, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

14339000 ROGUE RIVER AT DODGE BRIDGE, NEAR EAGLE POINT, OR

LOCATION.--Lat 42°31'30", long 122°50'30", in SE¼ sec.17, T.35 S., R.1 W., Jackson County, Hydrologic Unit 17100307, on right bank 50 ft upstream from Dodge Bridge, 0.7 mi downstream from Reese Creek, 4.3 mi northwest of Eagle Point, and at mile 138.61.

DRAINAGE AREA.--1,215 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1094: 1942(M), 1943, 1945(M), 1946. WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,271.39 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 21, 1938, nonrecording gage, Dec. 21, 1938, to Aug. 15, 1968, water-stage recorder, at datum 2.27 ft higher, Aug. 16, 1968, to Sept. 30, 1976, water-stage recorder, at datum 1.00 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records excellent. Flow regulated since February 1977 by Lost Creek Lake (see sta 14335040). Diversions for irrigation upstream from station; most of low flow of Big Butte Creek (see sta 14337500) is diverted near Butte Falls.

AVERAGE DISCHARGE.--47 years, 2,631 ft³/s, 1,906,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 87,600 ft³/s Dec. 22, 1964, gage height, 12.78 ft, datum then in use, from rating curve extended above 23,000 ft³/s; minimum, 567 ft³/s Feb. 18, 1977, result of closure of Lost Creek dam, minimum prior to that time, 611 ft³/s Aug. 6, 14, 29, Sept. 9, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,200 ft³/s Nov. 12, gage height, 7.27 ft; minimum, 1,180 ft³/s Feb. 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1490	1780	5170	2180	1560	1390	4040	2700	2920	1990	2330	2340
2	1480	3440	4370	2050	1240	1390	4320	2530	2910	2060	2330	2350
3	1470	3890	4440	1690	1220	1350	4440	2760	2750	2060	2310	2360
4	1480	3350	3790	1710	1220	1340	4240	2820	2530	2060	2300	2350
5	1480	2760	3300	1770	1180	1340	4150	2890	2440	2080	2320	2340
6	1480	2840	3060	1820	1180	1330	4430	2870	2310	2050	2300	2350
7	1480	3350	2810	1890	1360	1310	4710	2730	2330	2040	2270	2380
8	1480	3820	2750	1890	2510	1290	4960	2430	2620	2060	2270	2400
9	1490	3970	2720	1820	1780	1260	4900	2280	2870	2310	2300	2430
10	1490	4820	3490	1770	1550	1240	4850	2070	2860	2320	2320	2460
11	1530	5200	3610	1700	2420	1240	4800	1920	2800	2310	2360	2420
12	1530	10700	4070	1650	4660	1240	4770	1900	2660	2320	2320	2270
13	1540	7510	3900	1620	3180	1220	4540	1840	2590	2320	2320	2060
14	1530	8040	3590	1600	2620	1210	4270	1750	2580	2320	2330	1750
15	1530	7230	3620	1600	2550	1210	4270	1740	2560	2310	2340	1520
16	1510	6870	3410	1590	2530	1280	4490	1750	2570	2310	2340	1450
17	1510	6020	3180	1610	2220	1300	4200	1910	2490	2280	2330	1380
18	1530	5220	3110	1690	1960	1300	2760	2080	2220	2280	2350	1390
19	1580	4170	2950	1720	1810	1300	3910	2270	1940	2260	2340	1420
20	1650	4940	2780	1700	1770	1300	3890	2530	1920	2240	2340	1420
21	1580	4270	2560	1680	1670	1300	3270	2630	1920	2250	2390	1460
22	1530	3680	2440	1650	1600	1300	3500	2870	1920	2230	2350	1500
23	1500	3480	2410	1620	1600	1340	3430	2870	1920	2230	2340	1490
24	1440	4420	2340	1610	1580	1490	3350	3000	1900	2230	2330	1450
25	1420	3630	2310	1590	1550	1570	3090	3320	1900	2230	2320	1440
26	1410	3240	2280	1570	1510	1570	2930	3240	1940	2250	2310	1440
27	1440	4650	2280	1560	1460	1760	2790	3110	1950	2270	2310	1440
28	1510	8520	2300	1580	1410	1930	2770	3140	1940	2270	2330	1440
29	1730	5920	2190	1590	---	2220	2790	3170	1940	2270	2330	1440
30	1570	6010	2280	1550	---	2660	2960	3030	1940	2290	2330	1440
31	1540	---	2280	1580	---	3240	---	2940	---	2310	2330	---
TOTAL	46930	147740	95790	52650	52900	46220	117820	79090	70140	68810	72090	55380
MEAN	1514	4925	3090	1698	1889	1491	3927	2551	2338	2220	2325	1846
MAX	1730	10700	5170	2180	4660	3240	4960	3320	2920	2320	2390	2460
MIN	1410	1780	2190	1550	1180	1210	2760	1740	1900	1990	2270	1380
AC-FT	93090	293000	190000	104400	104900	91680	233700	156900	139100	136500	143000	109800
CAL YR 1984	TOTAL	1262610	MEAN	3450	MAX	10700	MIN	1380	AC-FT	2504000		
WTR YR 1985	TOTAL	905560	MEAN	2481	MAX	10700	MIN	1180	AC-FT	1796000		

ROGUE RIVER BASIN

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14339000 ROGUE RIVER AT DODGE BRIDGE, NEAR EAGLE POINT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1973 to current year.

INSTRUMENTATION.--Temperature recorder since August 1973.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 20.0°C July 27, 28, 1975; minimum, 0.0°C Jan. 6-8, 10, 11, 1974, Jan. 6-9, 1977. Maximum since full operation of Lost Creek Lake, 19.5°C July 3, 1981; minimum, 1.0°C Feb. 4, 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 19.0°C June 22; minimum, 1.0°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

14342500 NORTH FORK LITTLE BUTTE CREEK AT FISH LAKE, NEAR LAKECREEK, OR

LOCATION.--Lat 42°22'35", long 122°21'20", in SE¼SW¼ sec.4, T.37 S., R.4 E., Jackson County, Hydrologic Unit 17100307, on right bank 0.5 mi downstream from Fish Lake dam, 14 mi east of Lakecreek, and at mile 15.2.

DRAINAGE AREA.--20.8 mi².

PERIOD OF RECORD.--October 1914 to July 1915, June 1916 to current year. Monthly discharge only November 1916 to May 1917, published in WSP 1318.

REVISED RECORDS.--WSP 654: Drainage area (former site). WSP 1218: 1917(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,571.41 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1914, to July 31, 1915, nonrecording gage at site 0.5 mi upstream at different datum. June 1, 1916, to July 9, 1918, nonrecording gage and July 10, 1918, to Oct. 28, 1932, water-stage recorder at site 0.25 mi upstream at different datums.

REMARKS.--Estimated daily discharges: May 17 to June 24. Records good. Since 1915, Fish Lake (see below) has stored water for irrigation by Medford Irrigation District. Cascade Canal diverts from Fourmile Lake in Klamath River basin and discharges into lava bed 1.0 mi upstream from Fish Lake; diversion began August 1923. No diversion from creek upstream from station.

AVERAGE DISCHARGE.--69 years (water years 1917-85), 36.1 ft³/s, 26,150 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 940 ft³/s June 5, 1917, computed from rate of change in contents of reservoir after break in dam occurred; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 121 ft³/s Sept. 17, gage height, 1.98 ft; minimum recorded, 10 ft³/s Mar. 14, 15.

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	64	61	54	46	42	12	33	34	67	81	63
2	70	66	60	54	46	42	12	33	34	67	80	63
3	69	65	60	53	46	42	13	34	34	67	79	61
4	69	65	60	53	46	42	13	34	34	72	79	53
5	69	65	60	52	46	42	13	34	34	78	79	46
6	69	65	60	51	46	42	14	34	34	78	79	47
7	69	65	60	51	46	42	14	34	34	76	79	46
8	69	65	58	51	46	42	15	34	34	76	78	46
9	69	63	58	51	46	42	16	34	34	76	78	46
10	69	63	58	51	46	42	16	35	34	76	78	46
11	69	64	58	51	46	40	17	35	34	76	78	46
12	68	63	58	50	46	40	18	35	34	76	78	45
13	68	64	58	50	46	40	19	35	34	76	78	45
14	67	63	58	50	45	29	21	35	34	76	78	52
15	67	63	58	50	45	10	23	35	38	76	78	65
16	67	63	56	50	45	11	24	35	56	74	76	63
17	67	63	56	50	45	11	24	35	58	78	76	92
18	67	63	56	50	45	11	25	35	64	83	76	119
19	68	63	56	50	43	11	25	35	69	83	76	117
20	67	63	56	48	43	11	26	35	69	83	74	114
21	67	63	56	48	43	11	27	34	68	83	74	111
22	66	63	56	48	43	11	28	34	67	83	73	108
23	65	62	56	48	43	11	29	34	67	83	72	105
24	65	61	56	48	43	11	29	34	67	82	72	103
25	65	61	56	48	42	11	29	34	67	81	70	100
26	66	61	55	48	42	11	29	34	67	81	67	99
27	65	61	54	46	42	12	29	34	67	81	65	97
28	65	61	54	46	42	12	31	34	67	81	65	104
29	65	61	54	46	---	11	32	34	67	81	64	109
30	65	61	54	46	---	11	32	34	67	81	63	84
31	65	---	54	46	---	12	---	34	---	81	63	---
TOTAL	2086	1893	1770	1538	1249	758	655	1063	1501	2412	2306	2295
MEAN	67.3	63.1	57.1	49.6	44.6	24.5	21.8	34.3	50.0	77.8	74.4	76.5
MAX	70	66	61	54	46	42	32	35	69	83	81	119
MIN	65	61	54	46	42	10	12	33	34	67	63	45
AC-FT	4140	3750	3510	3050	2480	1500	1300	2110	2980	4780	4570	4550
(†)	a6820	6340	5480	4520	a3980	a4520	5960	6730	a6710	6300	a4750	a2470
CAL YR 1984	TOTAL	21725	MEAN	59.4	MAX	98	MIN	21	AC-FT	43090		
WTR YR 1985	TOTAL	19526	MEAN	53.5	MAX	119	MIN	10	AC-FT	38730		

† Monthend contents, in acre-feet, of Fish Lake.

a Interpolated.

ROGUE RIVER BASIN

14343000 NORTH FORK LITTLE BUTTE CREEK NEAR LAKECREEK, OR

LOCATION.--Lat 42°24'10", long 122°32'10", in NW¼ sec.36, T.36 S., R.2 E., Jackson County, Hydrologic Unit 17100307, on right bank 1.2 mi upstream from Wasson Canyon, 4.9 mi east of Lakecreek, and at mile 4.8.

DRAINAGE AREA.--43.8 mi².

PERIOD OF RECORD.--September 1911 to March 1913, July to September 1917, May 1922 to December 1964, September 1965 to September 1985 (discontinued). Monthly discharge only for some periods, published in WSP 1318. Published as "above Medford intake, near Lakecreek" 1922-28, 1931-40. Records for April to September 1916, May 1917 to September 1919, April to September 1921, and October 1923 to September 1924 at site 3 mi upstream not equivalent owing to diversion and difference in drainage areas.

REVISED RECORDS.--WSP 1518: 1912-13. WSP 1738: Drainage area (former site).

GAGE.--Water-stage recorder. Concrete control since Oct. 9, 1968. Elevation of gage is 2,160 ft, from topographic map. Sept. 10, 1911, to Mar. 31, 1913, and July 1 to Sept. 30, 1917, nonrecording gage at site 1,000 ft downstream at different datums. May 26, 1922, to Dec. 31, 1964, water-stage recorder at site 1,000 ft downstream at datum 2,125.01 ft above mean sea level.

REMARKS.--Estimated daily discharges: June 21-30. Records excellent. Flow partly regulated since 1915 by Fish Lake (published with station 14342500). Diversions for irrigation upstream from station; some water diverted into Fish Lake from Fourmile Lake, in Klamath River basin, since 1923.

AVERAGE DISCHARGE.--63 years (water years 1912, 1923-64, 1966-85), 71.9 ft³/s, 52,090 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,750 ft³/s Dec. 22, 1964, gage height, 6.06 ft, present site and datum; minimum, 11 ft³/s Oct. 29 to Nov. 8, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 185 ft³/s Nov. 20, gage height, 3.54 ft; minimum, 44 ft³/s Mar. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	91	116	77	72	83	64	76	65	89	108	80
2	100	130	109	77	72	80	66	76	63	90	106	82
3	100	129	104	78	72	79	66	75	62	90	106	80
4	100	120	100	79	71	81	66	74	63	95	104	76
5	100	106	96	83	71	79	66	73	62	104	104	68
6	98	108	93	86	71	79	68	72	62	103	103	70
7	98	104	92	85	84	78	68	72	67	103	103	69
8	98	108	91	82	95	78	68	72	62	103	102	69
9	99	107	97	80	82	78	68	71	62	102	102	72
10	99	105	105	78	79	80	68	71	61	102	101	68
11	105	104	130	76	100	80	68	71	60	102	101	67
12	101	104	111	75	122	77	68	69	60	101	101	67
13	106	109	104	73	104	75	70	68	59	101	100	68
14	100	105	105	73	100	70	72	68	59	101	99	72
15	100	101	101	72	105	45	73	68	64	101	99	84
16	99	98	98	72	104	46	73	67	80	101	98	83
17	99	97	96	72	98	47	72	67	79	104	97	109
18	96	100	92	74	92	47	75	67	84	112	98	156
19	108	98	90	74	91	47	75	66	93	111	97	152
20	101	152	91	73	92	47	75	66	93	110	96	149
21	96	116	88	72	91	48	86	66	92	110	95	146
22	96	106	85	72	90	47	86	65	91	110	93	144
23	98	108	83	71	88	47	95	65	90	110	93	140
24	97	111	82	71	86	52	85	65	90	108	92	137
25	95	106	82	72	85	50	81	63	90	109	90	134
26	105	102	81	72	83	49	78	63	89	108	85	132
27	99	120	82	72	82	51	77	63	89	108	81	130
28	113	136	80	72	80	53	77	65	89	108	81	135
29	105	118	85	72	---	53	76	63	89	108	80	146
30	99	138	79	72	---	54	76	65	89	108	80	123
31	96	---	77	72	---	61	---	65	---	109	79	---
TOTAL	3107	3337	2925	2329	2462	1941	2206	2117	2258	3221	2974	3108
MEAN	100	111	94.4	75.1	87.9	62.6	73.5	68.3	75.3	104	95.9	104
MAX	113	152	130	86	122	83	95	76	93	112	108	156
MIN	95	91	77	71	71	45	64	63	59	89	79	67
AC-FT	6160	6620	5800	4620	4880	3850	4380	4200	4480	6390	5900	6160
CAL YR 1984	TOTAL	38978	MEAN	106	MAX	291	MIN	75	AC-FT	77310		
WTR YR 1985	TOTAL	31985	MEAN	87.6	MAX	156	MIN	45	AC-FT	63440		

14350000 EMIGRANT CREEK NEAR ASHLAND, OR

LOCATION.--43°09'50", long 122°36'15", in SE¼NE¼ sec.20, T.39 S., R.2 E., Jackson County, Hydrologic Unit 17100309, on left bank 0.1 mi downstream from Emigrant Dam, 6 mi southeast of Ashland, and at mile 29.2.

DRAINAGE AREA.--64.3 mi².

PERIOD OF RECORD.--January to June 1920, October 1921 to July 1922, February 1923 to May 1924 (incomplete), October 1924 to November 1925, February to August 1926, October 1926 to September 1928, April 1929 to September 1930, April 1931 to October 1932 (incomplete), April 1933 to September 1935, April 1936 to September 1939 (incomplete), April 1940 to September 1947, January 1948 to October 1952 (incomplete), December 1952 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1448: 1921, 1927-28, 1937, 1953(M).

GAGE.--Water-stage recorder and artificial control. Datum of gage is 2,042.80 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark). Prior to Oct. 1, 1926, water-stage recorder or nonrecording gage at several nearby sites at various datums. Oct. 1, 1926, to Feb. 24, 1959, water-stage recorder near present site at datum 10.93 ft higher. Feb. 25, 1959, to May 7, 1961, water-stage recorder at site 1.0 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1924 by Emigrant Lake (see below). Several diversions upstream from station for irrigation; the principal diversion canals are Ashland lateral and East lateral (see below). From June 1923 to August 1960, water diverted by Keene Creek Canal from Klamath River basin into Emigrant Creek upstream from station. Beginning May 1960, water from Klamath River basin diverted to Emigrant Creek above station via Green Springs powerplant diversion.

AVERAGE DISCHARGE.--45 years (water years 1925, 1927-30, 1934-35, 1941-47, 1954-85), 34.1 ft³/s, 24,710 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft³/s Feb. 20, 1927, by computation of peak flow over dam; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 233 ft³/s Nov. 30, gage height, 2.23 ft; minimum, no flow Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	1.2	229	89	2.0	2.0	.90	.90	.90	66	69	55
2	.50	1.5	227	89	2.0	2.0	1.2	.90	.90	65	69	45
3	.50	1.2	227	89	2.0	2.0	1.2	.83	.90	64	75	40
4	.50	1.2	227	89	2.0	2.0	1.2	.90	.90	63	78	35
5	.50	1.2	190	89	2.0	2.0	13	.90	.90	63	78	31
6	.50	17	158	89	2.0	2.0	20	.90	.90	63	80	29
7	.50	32	119	66	2.2	2.0	20	.70	.90	63	85	29
8	.50	45	86	45	2.1	2.0	73	.73	.90	63	85	29
9	.50	57	86	45	2.0	2.0	173	.70	.90	65	82	22
10	.51	57	86	22	2.0	2.0	201	.70	18	78	82	18
11	.50	57	86	1.6	2.0	2.0	144	.70	23	85	81	18
12	.50	90	88	1.6	2.0	2.0	169	.70	18	84	76	18
13	.50	132	88	1.6	2.0	2.0	148	.70	15	83	72	16
14	.50	144	88	1.6	2.0	2.0	99	.70	14	83	72	13
15	.50	152	88	1.6	2.0	2.0	101	.70	14	82	68	13
16	.50	159	88	1.6	2.0	2.0	136	.70	14	82	64	3.8
17	.50	159	88	1.6	2.0	2.0	119	.79	15	81	64	.20
18	.50	159	88	1.6	2.0	2.0	99	.90	25	81	63	.20
19	.50	116	88	1.6	2.0	2.0	99	.90	39	81	60	.20
20	.50	75	88	1.6	2.0	1.7	100	.90	45	81	53	.20
21	.50	75	88	1.6	2.0	1.2	101	9.8	45	71	49	.20
22	.50	75	89	1.6	2.0	1.1	65	25	46	67	49	.20
23	.50	75	89	1.6	2.0	.93	53	23	46	69	49	.20
24	.50	75	89	1.6	2.0	1.2	54	14	47	69	48	.20
25	.50	75	89	1.6	2.0	1.2	78	7.4	47	68	48	.10
26	.50	75	89	1.6	2.0	1.0	85	9.5	50	68	51	.10
27	.50	76	89	1.6	2.0	.90	85	13	60	71	54	.07
28	.50	136	89	1.6	2.0	1.1	61	13	68	71	53	.10
29	.50	177	89	1.9	---	1.0	36	20	67	71	56	.10
30	.94	207	89	2.0	---	.90	6.7	11	66	70	58	.10
31	1.2	---	89	2.0	---	.90	---	7.1	---	69	56	---
TOTAL	16.65	2503.3	3491	746.7	56.3	51.13	2343.20	168.65	790.10	2240	2027	416.97
MEAN	.54	83.4	113	24.1	2.01	1.65	78.1	5.44	26.3	72.3	65.4	13.9
MAX	1.2	207	229	89	2.2	2.0	201	25	68	85	85	55
MIN	.50	1.2	86	1.6	2.0	.90	.90	.70	.90	63	48	.07
AC-FT	33	4970	6920	1480	112	101	4650	335	1570	4440	4020	827
(†)	14150	18410	17790	21030	28140	a35210	a38840	35430	30770	20150	a9500	7640
(‡)	79	24	0	0	0	32	3920	7930	7080	8500	8510	4040
CAL YR 1984	TOTAL	22646.05	MEAN	61.9	MAX	415	MIN	.50	AC-FT	44920		
WTR YR 1985	TOTAL	14851.00	MEAN	40.7	MAX	229	MIN	.07	AC-FT	29460		

† Monthend contents, in acre-feet, of Emigrant Lake.

‡ Diversion, in acre-feet, by East Lateral.

a Interpolated.

ROGUE RIVER BASIN

14357500 BEAR CREEK AT MEDFORD, OR

LOCATION.--Lat 42°19'40", long 122°52'10", in NW¼ sec.30, T.37 S., R.1 W., Jackson County, Hydrologic Unit 17100308, on left bank 40 ft upstream from Main street Bridge, in Medford, and at mile 9.91.

DRAINAGE AREA.--289 mi².

PERIOD OF RECORD.--March 1915 to June 1920 (no low-flow records), October 1920 to September 1981, December 1983 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1044: 1944. WSP 1448: 1916, 1917(M), 1918-20, 1922, 1924, 1927(M), 1928, 1930. WSP 1568: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,341.98 ft above National Geodetic Vertical Datum of 1929. Dec. 31, 1947, to Sept. 23, 1985, at datum 2.00 ft higher. See WSP 1738 for history of changes prior to Dec. 31, 1947.

REMARKS.--No estimated daily discharges. Records excellent. Flow partly regulated since 1924 by Emigrant Lake (published with sta 14350000). Numerous diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--62 years (water years 1921-81, 1985), 115 ft³/s, 83,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,500 ft³/s Dec. 2, 1962, gage height, 10.04 ft, present datum; maximum gage height, about 13.0 ft Feb. 20, 1927, from floodmarks, present datum, site then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,570 ft³/s Nov. 27, gage height, 3.33 ft; minimum, 21 ft³/s Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	42	453	185	72	130	174	102	178	62	111	86
2	33	276	401	180	81	125	172	96	190	45	96	124
3	34	191	418	182	82	109	161	89	150	48	82	118
4	31	135	378	186	67	120	150	95	136	53	85	105
5	32	103	338	190	65	110	156	92	132	55	82	91
6	31	106	290	204	67	105	186	86	121	55	64	82
7	32	125	269	215	93	104	209	74	127	59	64	90
8	32	139	222	173	383	102	212	78	125	58	73	95
9	38	160	217	165	167	98	334	79	115	48	75	140
10	69	159	364	152	122	107	403	69	98	53	78	127
11	104	174	315	113	226	107	349	83	83	65	88	135
12	61	491	377	103	388	104	282	70	67	72	85	120
13	56	345	315	97	258	94	292	75	63	72	75	118
14	51	292	268	94	216	99	227	62	66	78	79	135
15	51	263	324	87	216	105	207	49	65	67	72	116
16	65	256	282	83	199	111	187	51	56	59	70	107
17	72	256	254	92	166	115	225	52	54	61	74	100
18	71	266	287	106	147	114	211	50	42	59	77	81
19	67	241	234	106	140	126	235	50	47	57	96	70
20	71	412	209	103	134	126	223	58	52	51	81	65
21	57	275	219	99	125	130	213	52	51	50	83	52
22	48	211	222	94	121	105	215	44	49	52	76	34
23	44	369	208	88	125	88	180	59	49	56	71	28
24	41	533	201	85	123	95	180	80	55	50	73	25
25	40	286	200	82	118	94	186	77	52	42	79	25
26	59	239	197	78	114	94	196	75	46	39	84	22
27	59	557	199	75	107	106	184	76	44	45	69	21
28	90	817	198	79	103	102	170	115	47	47	75	21
29	72	451	192	73	---	98	155	142	54	53	68	21
30	52	532	236	71	---	114	122	129	62	57	70	21
31	45	---	208	70	---	168	---	212	---	76	75	---
TOTAL	1647	8702	8495	3710	4225	3405	6396	2521	2476	1744	2430	2375
MEAN	53.1	290	274	120	151	110	213	81.3	82.5	56.3	78.4	79.2
MAX	104	817	453	215	388	168	403	212	190	78	111	140
MIN	31	42	192	70	65	88	122	44	42	39	64	21
AC-FT	3270	17260	16850	7360	8380	6750	12690	5000	4910	3460	4820	4710
CAL YR 1984	TOTAL	71772	MEAN	196	MAX	817	MIN	17	AC-FT	142400		
WTR YR 1985	TOTAL	48126	MEAN	132	MAX	817	MIN	21	AC-FT	95460		

ROGUE RIVER BASIN

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14359000 ROGUE RIVER AT RAYGOLD, NEAR CENTRAL POINT, OR

LOCATION.--Lat 42°26'15", long 122°59'10", in SW¼ sec.18, T.36 S., R.2 W., Jackson County, Hydrologic Unit 17100308, on right bank at Raygold, 0.1 mi downstream from Gold Ray Dam, 1.0 mi downstream from Bear Creek, 5.6 mi northwest of Central Point, and at mile 125.8.

DRAINAGE AREA.--2,053 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1905 to current year. Prior to October 1921, published as "near Tolo."

REVISED RECORDS.--WSP 1248: 1906, 1914(M), 1915. WSP 1398: 1910(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,121.78 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 19, 1914, nonrecording gage and Sept. 19, 1914, to Sept. 30, 1956, water-stage recorder, at site 300 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Mar. 31, Apr. 1. Water-discharge records excellent. Flow regulated since February 1977 by Lost Creek Lake (see station 14335040). Slight regulation by Fish Lake (published with station 14342500) and Emigrant Lake (published with station 14350000). Many diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--80 years, 2,997 ft³/s, 2,171,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131,000 ft³/s Dec. 23, 1964, gage height, 23.43 ft, from rating curve extended above 63,000 ft³/s on basis of slope-area measurement of 113,000 ft³/s; minimum not determined; minimum daily, 616 ft³/s Sept. 6, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,800 ft³/s Nov. 12, 28; maximum gage height, 7.80 ft Nov. 28; minimum, 1,420 ft³/s Feb. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1650	2070	7170	2810	1770	1950	4800	3210	3330	1980	2460	2410
2	1620	3970	5900	2660	1520	1990	5060	2900	3340	2040	2430	2530
3	1600	5260	6190	2290	1590	1870	5240	3180	3130	2030	2380	2530
4	1600	4310	5180	2300	1510	1900	5060	3220	2820	2040	2370	2470
5	1610	3350	4350	2360	1470	1880	4890	3290	2740	2070	2370	2460
6	1610	3210	3960	2440	1490	1860	5210	3260	2590	2060	2320	2480
7	1600	3770	3610	2580	1650	1830	5510	3110	2620	2040	2290	2540
8	1610	4330	3430	2530	4670	1790	5790	2780	2890	2040	2310	2560
9	1620	4690	3350	2440	2820	1740	5930	2630	3150	2250	2330	2680
10	1660	5460	4600	2340	2260	1740	5970	2440	3070	2270	2360	2720
11	1850	5630	5360	2210	3200	1750	5850	2290	2950	2270	2400	2660
12	1790	12900	5860	2120	7510	1720	5750	2230	2750	2270	2360	2510
13	1790	9090	5540	2060	4820	1670	5570	2190	2640	2290	2340	2330
14	1750	9090	4700	2030	3730	1640	5270	2040	2620	2290	2350	2110
15	1740	7900	4820	2010	3540	1630	5250	1980	2600	2280	2360	1840
16	1710	7410	4590	1980	3440	1650	5310	1960	2600	2260	2350	1740
17	1750	6710	4160	1990	2990	1670	5270	2090	2530	2240	2350	1690
18	1790	6070	4270	2080	2640	1670	3400	2290	2240	2240	2380	1750
19	1890	5050	3900	2110	2470	1680	4650	2410	1990	2230	2440	1760
20	2030	6970	3570	2100	2440	1680	4790	2710	1960	2210	2400	1750
21	1910	5930	3350	2060	2270	1690	4020	2700	1950	2240	2440	1740
22	1830	4670	3290	2010	2170	1660	4310	2950	1930	2230	2400	1730
23	1790	4310	3120	1970	2190	1710	4150	2960	1930	2250	2380	1680
24	1720	7370	3020	1940	2160	1900	4090	3140	1950	2310	2370	1610
25	1690	5270	2940	1900	2110	1970	3780	3460	1920	2260	2350	1600
26	1710	4350	2890	1870	2050	2010	3620	3420	1960	2240	2350	1590
27	1770	5810	2870	1840	1990	2350	3390	3280	1960	2250	2330	1580
28	1950	14000	2890	1890	1910	2610	3330	3350	1940	2260	2340	1580
29	2260	8250	2790	1880	---	2910	3300	3490	1950	2300	2340	1600
30	1930	8310	3130	1820	---	3260	3420	3330	1960	2320	2340	1580
31	1820	---	3080	1820	---	4000	---	3380	---	2360	2360	---
TOTAL	54650	185510	127880	66440	74380	61380	141980	87670	74010	68420	73350	61810
MEAN	1763	6184	4125	2143	2656	1980	4733	2828	2467	2207	2366	2060
MAX	2260	14000	7170	2810	7510	4000	5970	3490	3340	2360	2460	2720
MIN	1600	2070	2790	1820	1470	1630	3300	1960	1920	1980	2290	1580
AC-FT	108400	368000	253600	131800	147500	121700	281600	173900	146800	135700	145500	122600
CAL YR 1984	TOTAL	1511500	MEAN	4130	MAX	14000	MIN	1600	AC-FT	2998000		
WTR YR 1985	TOTAL	1077480	MEAN	2952	MAX	14000	MIN	1470	AC-FT	2137000		

ROGUE RIVER BASIN

14359000 ROGUE RIVER AT RAYGOLD, NEAR CENTRAL POINT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1973 to current year.

INSTRUMENTATION.--Temperature recorder since August 1973.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 22.0°C July 25, 26, 1976; minimum, 0.0°C Jan. 7, 1974. Maximum since full operation of Lost Creek Lake, 20.5°C July 3, 4, 1981; minimum, 1.0°C Dec. 30, 1978, Jan. 30, 1980.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 19.5°C June 18, 20-23, July 12, 14-20, 23-26; minimum recorded, 2.5°C Feb. 4.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

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14359000 ROGUE RIVER AT RAYGOLD, NEAR CENTRAL POINT, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

14361500 ROGUE RIVER AT GRANTS PASS, OR

LOCATION.--Lat 42°25'50", long 123°19'00", in NW¼ sec.20, T.36 S., R.5 W., Josephine County, Hydrologic Unit 17100308, on right bank at city of Grants Pass filter plant, 0.6 mi upstream from bridge on State Highway 99 at Grants Pass, and at mile 101.8. Prior to Sept. 3, 1983, at site 300 ft upstream.

DRAINAGE AREA.--2,459 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 884.28 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 8, 1957, at site 300 ft upstream at datum 4.00 ft higher and Aug. 8, 1957, to Sept. 2, 1983, at site 300 ft upstream at datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: Jan. 9-11, 13-16, 22-27, 31, Feb. 14. Water-discharge records good. Flow regulated since February 1977 by Lost Creek Lake (station 14355040), slight regulation by Fish Lake and Emigrant Lake. Large fluctuations at times caused by Savage Rapids Dam 5.5 mi upstream from station. Many diversions from Rogue River and tributaries upstream from station, the largest of which is at Savage Rapids Dam of Grants Pass Irrigation District, 5.5 mi upstream from station.

AVERAGE DISCHARGE.--47 years, 3,543 ft³/s, 2,567,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 152,000 ft³/s Dec. 23, 1964, gage height, 35.15 ft, present datum, from rating curve extended above 93,000 ft³/s; minimum, 195 ft³/s Jan. 30, 1961; minimum daily, 606 ft³/s Sept. 10, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in December 1861 reached a stage of about 43 ft, present datum (information furnished by Corps of Engineers). Flood in February 1890 reached a stage of about 36 ft, present datum, and that of Feb. 21, 1927, about 32 ft, present datum, according to local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,300 ft³/s Nov. 12, gage height, 11.02 ft; minimum, 1,220 ft³/s June 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1620	2170	9900	3460	2040	2250	6700	3450	3430	1820	2420	2360
2	1600	3890	7520	3300	1750	2330	7010	2910	3400	1910	2400	2520
3	1560	7050	7890	3220	1790	2190	6820	3240	3270	1890	2330	2560
4	1560	5360	6660	2790	1750	2210	6250	3270	2820	1890	2300	2490
5	1570	4490	5490	2800	1670	2190	5870	3350	2800	1930	2300	2470
6	1580	3660	4900	2900	1680	2150	6110	3330	2590	1930	2250	2490
7	1590	4360	4420	3050	1810	2120	6350	3240	2640	1890	2210	2560
8	1690	4770	4170	3000	5290	2060	6640	2790	2800	1900	2230	2590
9	1730	5510	4030	2910	3690	2010	6720	2610	3200	2050	2250	2710
10	1760	6570	4930	2740	2790	1970	6780	2450	3100	2130	2290	2850
11	1990	6980	7280	2600	3200	1980	6600	2250	2970	2150	2330	2770
12	1950	16900	7010	2500	11000	1960	6460	2200	2770	2160	2300	2630
13	1930	12800	7270	2460	7030	1880	6250	2090	2540	2200	2250	2370
14	1910	10900	6030	2390	5260	1850	5890	2000	2550	2180	2270	2220
15	1860	9150	6050	2310	4800	1840	5870	1900	2520	2190	2280	1980
16	1840	8430	5900	2260	4590	1820	5790	1860	2510	2160	2260	1700
17	1870	7790	5190	2260	3990	1830	6100	1920	2500	2140	2270	1690
18	1920	7140	5200	2430	3480	1840	3910	2240	2130	2160	2300	1730
19	2020	6080	4840	2470	3160	1850	4880	2220	1960	2130	2390	1770
20	2230	7720	4390	2470	3080	1840	5420	2620	1770	2110	2370	1760
21	2110	7640	4040	2400	2850	1850	4340	2590	1820	2130	2400	1740
22	2010	5720	3980	2380	2670	1820	4490	2900	1790	2120	2350	1730
23	1940	4890	3740	2340	2640	1910	4520	2880	1780	2120	2330	1690
24	1860	9000	3590	2310	2600	2160	4500	3050	1820	2180	2320	1600
25	1810	6800	3500	2300	2530	2280	4110	3400	1760	2170	2290	1590
26	1820	5390	3430	2280	2440	2360	3850	3450	1810	2150	2300	1570
27	1910	7100	3390	2240	2360	2840	3610	3270	1810	2170	2250	1550
28	2040	19000	3390	2220	2260	3320	3510	3300	1800	2160	2290	1560
29	2590	12100	3320	2190	---	3880	3450	3530	1810	2230	2300	1560
30	2190	10700	3650	2100	---	4190	3520	3420	1820	2250	2280	1560
31	2000	---	3800	2100	---	5080	---	3370	---	2290	2320	---
TOTAL	58060	230060	158900	79180	94200	71860	162320	87100	72290	64890	71430	62370
MEAN	1873	7669	5126	2554	3364	2318	5411	2810	2410	2093	2304	2079
MAX	2590	19000	9900	3460	11000	5080	7010	3530	3430	2290	2420	2850
MIN	1560	2170	3320	2100	1670	1820	3450	1860	1760	1820	2210	1550
AC-FT	115200	456300	315200	157100	186800	142500	322000	172800	143400	128700	141700	123700
CAL YR 1984	TOTAL	1772080	MEAN	4842	MAX	19000	MIN	1560	AC-FT	3515000		
WTR YR 1985	TOTAL	1212660	MEAN	3322	MAX	19000	MIN	1550	AC-FT	2405000		

ROGUE RIVER BASIN

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14361500 ROGUE RIVER AT GRANTS PASS, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1973 to current year.

INSTRUMENTATION.--Temperature recorder since August 1973.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 23.5°C June 7, 1977; minimum, 0.5°C on several days in 1974, 1977, 1978, 1980. Maximum since full operation of Lost Creek Lake, 21.5°C July 4, 5, 1981.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 20.5°C June 18-20, July 18-20, 24, 25; minimum, 2.0°C Jan. 14, Feb. 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

14361590 MIDDLE FORK APPLEGATE RIVER NEAR COPPER, OR

LOCATION.--Lat 42°00'23", long 123°09'23", in W-1/2 sec.17, T.48 N., R.11 W., Mt. Diablo Meridian, Siskiyou County, CA, Rogue River National Forest, Hydrologic Unit 17100309, on left bank 0.2 mi upstream from Elliot Creek, 1.6 mi southwest of former town of Copper, and at mile 51.6.

DRAINAGE AREA.--50.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,001.74 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--No estimated daily discharges. Water-discharge records good. No regulation or diversion.

AVERAGE DISCHARGE.--6 years, 194 ft³/s, 51.96 in/yr, 140,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,880 ft³/s Dec. 19, 1981, gage height, 9.74 ft; minimum, 8.3 ft³/s Sept. 14-26, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0530	*2,530	*7.18	No other peak greater than base discharge.			
Minimum, 9.1 ft ³ /s Aug. 29, 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	13	27	217	75	73	132	179	276	104	35	20	11		
2	13	535	190	74	71	127	306	282	103	34	20	14		
3	13	339	170	73	69	120	390	250	95	33	18	12		
4	13	188	153	74	64	118	373	197	105	32	17	12		
5	13	120	141	75	64	111	396	178	105	31	17	11		
6	13	252	133	78	63	107	525	171	188	31	16	11		
7	13	191	129	83	88	101	551	164	197	31	15	12		
8	13	148	131	83	98	97	503	154	162	31	14	12		
9	15	128	134	82	81	93	523	144	130	30	13	13		
10	25	367	171	80	72	91	526	134	112	28	13	13		
11	37	752	182	78	176	89	484	127	101	27	13	12		
12	29	1690	168	76	408	88	413	123	97	27	13	12		
13	43	711	150	75	273	86	442	129	92	26	12	15		
14	24	430	139	74	223	86	506	143	84	26	12	20		
15	21	292	139	74	223	89	488	141	81	26	12	16		
16	22	223	126	76	221	94	402	152	77	25	11	14		
17	21	210	120	90	197	100	330	154	72	25	11	13		
18	21	299	116	111	177	100	290	169	69	24	12	13		
19	27	240	108	115	166	105	248	177	65	23	12	13		
20	39	230	104	114	154	110	212	168	61	22	12	12		
21	30	196	100	109	144	111	203	162	56	22	12	12		
22	25	172	95	104	140	107	191	171	52	22	11	12		
23	23	180	92	99	143	124	189	184	49	21	11	12		
24	21	198	90	96	145	154	177	177	46	21	11	12		
25	20	173	88	92	147	122	162	166	43	20	10	11		
26	28	156	86	88	142	119	154	154	42	19	10	11		
27	27	236	85	85	134	114	167	139	40	19	9.7	11		
28	42	408	83	84	129	105	196	138	39	20	9.7	11		
29	52	275	80	80	---	98	221	117	37	22	9.5	11		
30	37	244	83	77	---	98	239	103	36	20	9.5	11		
31	31	---	78	75	---	118	---	104	---	19	9.7	---		
TOTAL	764	9610	3881	2649	4085	3314	9986	5048	2540	792	396.1	375		
MEAN	24.6	320	125	85.5	146	107	333	163	84.7	25.5	12.8	12.5		
MAX	52	1690	217	115	408	154	551	282	197	35	20	20		
MIN	13	27	78	73	63	86	154	103	36	19	9.5	11		
CFSM	.49	6.31	2.47	1.69	2.88	2.11	6.57	3.21	1.67	.50	.25	.25		
IN.	.56	7.05	2.85	1.94	3.00	2.43	7.33	3.70	1.86	.58	.29	.28		
AC-FT	1520	19060	7700	5250	8100	6570	19810	10010	5040	1570	786	744		
CAL YR 1984	TOTAL	62996	MEAN	172	MAX	1690	MIN	13	CFSM	3.39	IN.	46.22	AC-FT	125000
WTR YR 1985	TOTAL	43440.1	MEAN	119	MAX	1690	MIN	9.5	CFSM	2.35	IN.	31.87	AC-FT	86160

ROGUE RIVER BASIN

14361590 MIDDLE FORK APPLEGATE RIVER NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1979 to current year.

INSTRUMENTATION.--Temperature recorder since August 1979.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 23.5°C Aug. 8, 10-12, 1981; minimum, 0.0°C Dec. 24, 1983, Mar. 27, 1985.

EXTREMES CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 22.0°C July 19, 20, 26; minimum, 0.0°C Mar. 27.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	10.5	6.0	4.0	5.0	4.5	2.0	1.5	3.0	2.0	5.0	4.0
2	12.5	9.5	7.0	6.0	5.0	4.5	2.5	2.0	3.0	2.5	4.0	2.5
3	13.0	9.5	6.5	6.0	5.0	4.5	2.5	2.0	3.5	2.0	4.0	2.0
4	12.0	10.5	6.0	5.5	4.5	4.0	3.0	2.0	2.0	.5	4.5	3.5
5	13.0	11.0	6.5	5.0	4.0	4.0	4.0	3.0	2.5	1.0	4.0	3.0
6	13.0	11.5	6.5	6.0	4.0	3.5	5.0	3.5	3.0	1.5	3.5	3.0
7	14.0	11.0	6.0	5.5	4.0	3.5	4.5	4.0	3.5	2.5	4.0	3.0
8	12.5	11.0	6.0	4.5	4.5	4.0	4.5	3.5	3.0	2.0	5.0	2.5
9	12.0	10.5	5.0	4.5	5.0	4.5	4.0	3.5	3.0	2.0	5.5	2.5
10	11.5	10.0	6.0	5.0	5.0	5.0	3.5	2.5	3.0	1.0	5.5	3.5
11	10.5	9.0	6.0	6.0	5.0	4.5	3.0	2.5	4.0	2.0	6.5	3.5
12	11.0	8.5	6.0	6.0	4.5	4.5	2.5	2.0	5.0	3.5	6.0	4.0
13	10.0	9.0	6.0	5.0	4.5	3.5	2.5	1.5	5.0	4.0	5.5	3.0
14	9.5	7.5	5.5	5.0	3.5	3.0	3.0	2.5	6.0	4.5	6.0	3.0
15	8.5	7.5	6.0	5.0	4.0	3.0	3.0	2.5	6.0	5.0	6.5	3.5
16	8.0	6.0	5.5	5.5	3.0	2.5	3.5	2.5	5.5	5.0	7.0	4.0
17	7.0	5.5	6.0	5.0	3.5	2.5	4.0	3.0	5.5	4.5	5.5	4.0
18	6.5	5.0	6.0	5.5	3.0	3.0	4.0	3.5	5.0	4.0	7.0	4.0
19	8.0	6.5	5.5	5.0	3.0	1.5	4.0	3.5	5.5	4.0	7.0	4.0
20	8.0	6.5	5.5	5.0	2.0	1.0	4.5	3.5	5.0	4.0	7.0	4.5
21	8.0	7.0	5.0	4.5	2.5	2.0	4.5	3.0	5.5	3.5	5.0	3.5
22	7.0	6.0	4.5	3.5	2.5	2.0	3.5	2.5	6.5	4.5	5.5	3.0
23	7.5	5.5	5.5	3.5	2.5	2.0	3.5	2.5	6.0	4.0	6.0	4.5
24	9.0	7.5	4.0	3.5	2.5	2.0	4.0	3.0	6.0	4.0	5.0	3.5
25	8.0	6.0	4.0	3.5	3.0	2.0	3.5	2.5	6.0	4.5	4.5	3.0
26	8.0	6.5	3.5	3.0	3.5	3.0	3.0	2.0	5.0	3.5	3.0	.5
27	6.5	5.0	3.5	3.0	3.5	3.0	3.0	1.5	5.5	3.5	.5	.0
28	6.5	6.0	5.0	3.5	4.0	3.0	4.0	3.0	5.5	3.5	3.0	.5
29	7.0	6.0	5.0	5.0	3.5	3.0	4.0	3.0	---	---	5.0	2.5
30	6.5	5.5	5.5	5.0	3.5	3.0	3.0	2.0	---	---	6.0	2.5
31	5.5	4.5	---	---	3.5	2.0	3.5	2.0	---	---	7.0	3.5
MONTH	14.0	4.5	7.0	3.0	5.0	1.0	5.0	1.5	6.5	.5	7.0	.0

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

ROGUE RIVER BASIN

14361600 ELLIOTT CREEK NEAR COPPER, OR

LOCATION.--Lat 42°00'16", long 123°09'00", in W-1/2 sec.17, T.48 N., R.11 W., Mt. Diablo Meridian, Siskiyou County, CA, Hydrologic Unit 17100309, Rogue River National Forest, on left bank 0.3 mi upstream from Middle Fork Applegate River and 1.5 mi south of former town of Copper.

DRAINAGE AREA.--51.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,023.56 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 24 to Nov. 13. Water-discharge records good except those for Oct. 24 to Nov. 13, and Sept. 5-30, which are fair. No diversion or regulation.

AVERAGE DISCHARGE.--8 years, 117 ft³/s, 30.67 in/yr, 84,770 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,980 ft³/s Dec. 19, 1981, gage height, 7.13 ft; minimum, 3.9 ft³/s Sept. 10, 1980; minimum daily, 7.1 ft³/s Sept. 14-16, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	a			Feb. 11	2100	775	3.69
Nov. 12	unknown	*1,300	*4.55				

Minimum, 15 ft³/s Aug. 31.

a Secondary peak of unknown magnitude and time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	18	28	126	55	44	66	132	212	141	46	25	17		
2	18	450	112	55	43	66	167	223	130	44	25	23		
3	18	340	105	48	43	63	174	212	124	42	23	20		
4	16	185	94	48	39	64	162	182	133	41	23	18		
5	16	120	86	50	42	62	170	179	130	39	22	18		
6	16	235	79	52	41	61	216	177	195	38	22	18		
7	16	190	77	53	58	60	250	172	178	37	21	18		
8	16	140	77	53	74	57	245	168	159	36	21	18		
9	18	125	78	52	55	57	263	159	145	34	21	20		
10	19	255	97	51	49	57	279	150	136	33	21	20		
11	20	505	95	49	150	56	261	144	128	32	20	20		
12	21	900	86	49	221	56	242	141	126	32	19	18		
13	26	240	79	47	133	55	270	147	121	31	19	18		
14	23	145	74	47	112	54	313	153	114	30	19	20		
15	22	108	78	46	108	55	327	153	111	30	18	20		
16	21	88	73	46	104	56	285	158	104	29	18	18		
17	21	88	69	51	91	59	247	157	97	28	18	18		
18	21	121	68	55	84	58	226	168	92	27	18	20		
19	24	91	64	54	80	58	203	174	87	27	20	20		
20	31	107	61	54	77	60	185	170	82	26	19	20		
21	27	95	59	54	74	61	175	174	75	26	19	18		
22	25	83	57	53	73	59	162	184	69	26	18	18		
23	24	91	56	52	73	61	158	190	65	25	18	18		
24	21	114	55	50	72	74	150	196	63	24	17	17		
25	20	91	55	49	72	62	141	194	60	24	17	17		
26	26	80	55	48	70	60	135	188	56	23	17	17		
27	27	231	53	48	68	62	147	181	54	23	17	17		
28	40	359	53	47	66	62	162	176	52	23	16	17		
29	49	190	52	47	---	60	176	155	50	26	16	17		
30	36	150	54	46	---	64	189	142	48	27	16	16		
31	30	---	55	44	---	89	---	155	---	25	16	---		
TOTAL	726	5945	2282	1553	2216	1894	6212	5334	3125	954	599	554		
MEAN	23.4	198	73.6	50.1	79.1	61.1	207	172	104	30.8	19.3	18.5		
MAX	49	900	126	55	221	89	327	223	195	46	25	23		
MIN	16	28	52	44	39	54	132	141	48	23	16	16		
CFSM	.45	3.82	1.42	.97	1.53	1.18	4.00	3.32	2.01	.59	.37	.36		
IN.	.52	4.27	1.64	1.12	1.59	1.36	4.46	3.83	2.24	.69	.43	.40		
AC-FT	1440	11790	4530	3080	4400	3760	12320	10580	6200	1890	1190	1100		
CAL YR 1984	TOTAL	45913	MEAN	125	MAX	900	MIN	16	CFSM	2.41	IN.	32.97	AC-FT	91070
WTR YR 1985	TOTAL	31394	MEAN	86.0	MAX	900	MIN	16	CFSM	1.66	IN.	22.55	AC-FT	62270

ROGUE RIVER BASIN

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14361600 ELLIOTT CREEK NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1977 to current year.

INSTRUMENTATION.--Temperature recorder since October 1977.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 23.0°C Aug. 7, 8, 1978, Aug. 8, 10-12, 1981; minimum, 0.0°C at times during most winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 19.5°C July 18-20; minimum, 0.0°C Feb. 4, 5, Mar. 27.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.0	10.0	6.5	3.5	5.0	4.0	1.5	1.0	2.0	1.0	4.5	2.5
2	10.5	8.5	7.0	6.0	5.5	4.0	2.0	1.5	3.0	1.5	2.5	1.5
3	11.0	8.5	6.5	5.5	5.0	4.0	2.0	1.5	2.5	1.0	3.5	1.0
4	11.0	10.0	6.0	5.0	4.0	3.5	3.0	2.0	1.0	.0	3.5	2.5
5	11.0	10.0	6.5	4.5	3.5	3.5	4.0	3.0	1.5	.0	3.5	1.5
6	12.0	10.5	6.5	6.0	3.5	3.0	4.5	3.5	2.5	1.0	3.5	1.5
7	11.5	10.0	6.0	5.0	3.5	3.0	4.5	4.0	3.0	2.5	4.0	2.0
8	11.5	10.0	6.0	5.0	4.5	3.5	4.5	3.0	2.5	2.0	4.5	2.0
9	10.5	9.0	5.0	4.5	5.0	4.5	3.5	3.0	2.5	1.5	4.5	1.5
10	10.5	9.5	6.5	5.0	5.0	4.5	3.0	2.0	2.5	.5	5.0	3.0
11	9.5	8.5	6.5	6.0	4.5	4.0	2.0	1.5	3.5	2.0	5.5	2.5
12	11.0	8.0	6.5	6.0	4.5	4.0	1.5	1.0	4.5	3.0	5.0	3.0
13	11.0	8.5	6.5	5.0	4.0	3.0	2.0	1.0	3.5	2.5	5.0	2.0
14	8.5	7.0	5.0	4.5	3.0	2.5	2.5	1.5	5.0	3.0	5.5	2.5
15	8.0	7.0	6.0	4.5	3.5	3.0	2.0	1.5	5.5	4.5	6.0	2.5
16	7.5	5.5	5.5	5.0	3.0	2.0	2.5	2.0	5.0	4.0	6.5	3.0
17	6.5	5.0	6.5	4.0	3.5	2.5	3.0	2.5	4.0	3.0	5.5	3.5
18	6.0	5.0	6.0	5.5	2.5	2.0	3.5	2.5	4.0	2.5	6.5	3.5
19	8.0	6.0	6.0	5.0	2.0	1.0	3.5	2.5	5.0	3.0	6.5	3.0
20	8.0	6.5	5.5	4.5	2.0	.5	3.5	2.5	4.5	3.0	6.5	4.0
21	8.0	7.0	5.0	4.5	2.0	2.0	3.5	2.0	4.5	2.5	5.0	2.5
22	7.0	5.5	4.5	3.5	2.0	1.5	2.0	1.5	5.5	4.0	5.0	2.0
23	7.5	5.0	5.5	3.5	2.5	1.5	2.0	1.5	5.0	3.0	6.0	4.5
24	8.5	7.5	4.0	3.5	2.5	1.5	3.0	2.0	5.0	3.0	5.0	3.0
25	8.0	6.0	4.0	3.5	3.0	1.5	2.0	1.5	4.5	3.5	4.5	2.0
26	8.0	7.0	3.5	2.5	3.5	2.5	1.5	1.0	4.0	2.5	2.5	.0
27	7.0	5.0	5.0	3.0	3.5	2.0	2.5	.5	4.5	2.0	1.0	.0
28	7.0	6.0	6.0	5.0	3.5	2.5	3.5	2.5	5.0	2.5	3.5	.5
29	7.0	6.5	5.5	5.0	3.5	2.0	3.0	2.0	---	---	5.0	2.0
30	6.5	5.5	5.5	5.0	3.0	3.0	2.5	1.0	---	---	6.0	3.0
31	5.5	4.5	---	---	3.0	1.5	3.0	1.5	---	---	6.5	3.0
MONTH	12.0	4.5	7.0	2.5	5.5	.5	4.5	.5	5.5	.0	6.5	.0

14361600 ELLIOTT CREEK NEAR COPPER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

ROGUE RIVER BASIN

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14361700 CARBERRY CREEK NEAR COPPER, OR

LOCATION.--Lat 42°01'34", long 123°10'10", in SW¼SW¼ sec.3, T.41 S., R.4 W., Jackson County, Hydrologic Unit 17100309, Rogue River National Forest, on right bank, 1.2 mi west of former town of Copper and at mile 0.9.

DRAINAGE AREA.--68.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,990.01 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records good. No regulation. Diversion for irrigation of up to 8 ft³/s from Sturgis Fork into Thompson Creek upstream from station.

AVERAGE DISCHARGE.--7 years, 168 ft³/s, 33.11 in/yr, 121,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,680 ft³/s Feb. 18, 1983, gage height, 8.02 ft; maximum gage height, 8.10 ft Dec. 19, 1981; minimum discharge, 5.9 ft³/s Sept. 14-16, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 4.2 ft³/s was measured Sept. 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0530	*713	*2.94				
Minimum discharge, 10 ft ³ /s Aug. 29-31.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	17	25	239	80	76	123	176	199	91	27	22	12		
2	17	296	201	78	74	122	271	204	95	26	20	15		
3	17	186	178	78	73	116	339	188	88	25	21	14		
4	16	111	160	78	67	115	325	162	86	25	16	13		
5	18	72	146	78	69	110	325	152	84	24	15	12		
6	19	114	136	83	67	106	380	148	111	23	14	12		
7	18	93	131	86	84	105	418	144	125	22	14	14		
8	16	78	130	87	101	101	403	139	115	22	14	14		
9	20	74	130	87	86	98	410	134	98	22	14	17		
10	23	239	147	85	77	97	413	128	89	21	14	18		
11	39	373	155	82	135	95	385	121	82	20	13	15		
12	25	637	159	82	264	95	344	115	77	20	13	14		
13	28	532	146	80	265	93	350	115	73	20	12	16		
14	23	366	138	78	222	91	388	120	70	19	12	18		
15	22	251	135	78	218	91	381	117	67	18	12	18		
16	22	192	127	79	219	93	332	120	63	18	11	14		
17	23	168	120	89	193	98	289	120	58	18	11	14		
18	22	215	116	101	172	96	263	123	54	17	11	15		
19	23	181	109	103	159	97	233	125	51	17	13	14		
20	32	178	105	103	150	99	204	120	48	16	14	13		
21	27	162	102	103	140	99	190	115	45	17	14	12		
22	24	146	99	98	135	96	181	119	43	18	14	12		
23	22	149	95	95	135	102	181	124	41	18	13	12		
24	21	163	93	93	135	127	170	121	39	18	12	11		
25	20	144	91	90	135	106	159	115	32	18	12	11		
26	24	131	89	86	131	106	153	112	31	16	11	11		
27	25	247	86	83	127	103	159	106	29	16	11	11		
28	30	334	85	82	123	102	170	110	28	16	11	11		
29	38	301	84	80	---	96	174	104	28	18	12	11		
30	28	280	87	76	---	99	178	96	27	18	11	11		
31	26	---	83	76	---	123	---	94	---	19	11	---		
TOTAL	725	6438	3902	2657	3832	3200	8344	4010	1968	612	418	405		
MEAN	23.4	215	126	85.7	137	103	278	129	65.6	19.7	13.5	13.5		
MAX	39	637	239	103	265	127	418	204	125	27	22	18		
MIN	16	25	83	76	67	91	153	94	27	16	11	11		
CFSM	.34	3.12	1.83	1.24	1.99	1.49	4.03	1.87	.95	.29	.20	.20		
IN.	.39	3.48	2.11	1.43	2.07	1.73	4.51	2.17	1.06	.33	.23	.22		
AC-FT	1440	12770	7740	5270	7600	6350	16550	7950	3900	1210	829	803		
CAL YR 1984	TOTAL	60239	MEAN	165	MAX	821	MIN	14	CFSM	2.39	IN.	32.52	AC-FT	119500
WTR YR 1985	TOTAL	36511	MEAN	100	MAX	637	MIN	11	CFSM	1.45	IN.	19.71	AC-FT	72420

ROGUE RIVER BASIN

14361700 CARBERRY CREEK NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1977 to current year.

INSTRUMENTATION.--Temperature recorder since October 1977.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 24.5°C Aug. 8-12, 1981; minimum, 0.0°C at times during most winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 22.0°C July 19, 20, 28; minimum, 0.0°C Feb. 4, 5, 10, Mar. 27.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	10.5	6.5	4.5	5.0	4.5	2.0	1.0	2.0	1.0	5.0	3.5
2	12.0	9.5	8.0	6.5	5.5	4.5	2.5	1.5	3.0	1.5	4.0	2.5
3	12.5	9.5	7.0	6.0	5.5	4.5	2.5	1.5	3.0	1.5	4.0	1.5
4	12.0	10.5	6.5	5.5	4.5	3.5	3.0	1.5	1.5	.0	4.5	3.5
5	13.0	11.5	6.5	5.0	4.0	3.5	4.0	3.0	2.5	.0	4.0	2.5
6	13.5	11.5	7.0	6.5	4.0	3.5	4.5	3.5	3.0	1.0	4.5	2.5
7	13.5	11.0	6.5	5.5	4.0	3.0	4.5	4.0	3.0	2.5	4.0	2.5
8	12.5	11.0	6.0	4.0	4.5	3.5	5.0	3.5	2.5	1.0	5.0	2.5
9	11.5	10.0	5.0	4.0	5.0	4.5	4.0	3.0	2.0	1.0	5.5	2.0
10	11.0	10.0	6.5	5.0	5.0	5.0	3.0	2.0	2.0	.0	6.0	3.5
11	11.0	9.0	6.5	6.0	5.0	4.5	3.0	1.5	3.0	1.5	6.5	3.5
12	12.0	9.0	6.5	6.0	4.5	4.5	2.5	1.0	4.5	2.5	6.5	4.0
13	11.5	9.5	6.5	5.5	4.5	3.5	2.0	1.0	4.5	3.0	6.5	3.0
14	9.5	8.0	6.0	5.0	---	---	3.0	1.5	5.0	3.0	6.5	3.0
15	9.0	8.0	6.5	5.0	---	---	3.0	1.5	5.5	4.5	7.0	3.5
16	8.0	6.5	6.5	5.5	---	---	3.0	2.0	5.5	4.0	7.5	4.0
17	7.5	6.0	6.5	4.5	---	---	3.5	2.5	5.0	3.5	6.0	4.0
18	7.0	5.5	6.5	5.5	---	---	3.5	2.5	4.5	2.5	8.0	4.0
19	8.5	7.0	6.0	5.0	---	---	4.0	2.5	5.0	3.0	8.0	4.0
20	8.5	7.0	6.0	5.0	---	---	4.0	3.0	5.0	3.5	7.5	4.5
21	9.0	7.5	5.5	4.5	---	---	4.0	2.0	5.5	3.0	6.0	3.5
22	8.5	6.5	4.5	3.0	---	---	3.0	1.5	6.5	4.5	5.5	3.0
23	8.5	5.5	5.5	3.5	---	---	3.0	1.5	5.5	3.0	7.0	4.5
24	10.0	8.5	4.5	3.5	---	---	3.5	2.0	6.0	3.5	6.0	4.0
25	8.5	7.0	4.0	3.5	---	---	3.0	1.5	6.0	4.0	5.0	3.0
26	9.5	7.5	4.0	3.0	---	---	2.5	1.0	4.5	3.0	3.5	.5
27	7.5	6.0	4.0	3.0	---	---	2.0	.5	5.0	2.5	1.0	.0
28	7.5	6.5	5.5	4.0	4.0	---	3.5	2.0	5.5	2.5	3.5	.5
29	8.0	6.5	6.0	5.0	3.5	2.5	3.5	2.0	---	---	5.0	2.0
30	7.5	6.0	6.0	5.0	3.5	3.0	2.5	1.0	---	---	7.0	3.0
31	7.0	5.5	---	---	3.5	2.0	3.0	1.5	---	---	7.5	3.5
MONTH	13.5	5.5	8.0	3.0	---	---	5.0	.5	6.5	.0	8.0	.0

ROGUE RIVER BASIN

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14361700 CARBERRY CREEK NEAR COPPER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

14361900 APPLEGATE LAKE NEAR COPPER, OR

LOCATION.--Lat 42°03'25", long 123°06'30", in SE¼ sec.25, T.40 S., R.4 W., Jackson County, Hydrologic Unit 17100309, in outlet structure of Applegate Dam on Applegate River, 2.5 mi northeast of former town of Copper, 13 mi south of Ruch and at mile 46.3.

DRAINAGE AREA.--223 mi².

WATER-ELEVATION RECORDS

PERIOD OF RECORD.--December 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam completed in October 1980. Storage began Dec. 2, 1980. Total capacity, 82,200 acre-ft between elevations 1,763.0 ft and 1,987.0 ft, maximum pool elevation. Elevation of gated spillway crest, 1,943.7 ft. Usable contents, 75,200 acre-ft between elevations 1,854.0 ft and 1,987.0 ft. Water is used for flood control, recreation, pollution abatement, irrigation, and other purposes.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 82,210 acre-ft May 6, 1982, elevation, 1,987.01 ft; minimum since first filling, 11,770 acre-ft Nov. 11, 1981, elevation, 1,873.12 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 81,880 acre-ft May 24, elevation, 1,986.67 ft; minimum, 16,880 acre-ft Dec. 29, elevation, 1,888.66 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,860.0	8,330	1,920.0	30,960	1,987.0	82,200
1,880.0	13,890	1,940.0	43,090		
1,900.0	21,380	1,960.0	58,020		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1944.74	1920.05	1888.83	1888.80	1892.99	1925.68	1940.20	1983.14	1985.61	1978.54	1964.15	1949.12
2	1943.98	1923.20	1888.83	1888.85	1893.34	1926.37	1942.11	1984.16	1985.60	1978.03	1963.70	1949.12
3	1943.20	1924.29	1888.80	1888.88	1893.65	1927.01	1944.36	1984.75	1985.56	1977.60	1963.24	1947.83
4	1942.42	1924.38	1888.83	1888.93	1893.89	1927.65	1946.42	1985.05	1985.60	1977.15	1962.77	1947.23
5	1941.61	1924.02	1888.76	1888.99	1894.01	1928.22	1948.54	1985.27	1985.63	1976.69	1962.30	1946.47
6	1940.81	1924.27	1888.97	1889.10	1893.96	1928.76	1951.27	1985.47	1986.06	1976.24	1961.81	1945.74
7	1939.99	1923.68	1889.08	1889.15	1894.27	1929.26	1954.13	1985.51	1986.22	1975.78	1961.31	1945.02
8	1939.17	1922.09	1889.19	1889.22	1893.66	1929.69	1956.71	1985.43	1986.12	1975.32	1960.81	1944.30
9	1938.36	1919.16	1889.30	1889.27	1893.57	1930.12	1959.36	1985.29	1985.99	1974.90	1960.33	1943.64
10	1937.66	1922.29	1889.41	1889.27	1893.93	1930.52	1962.00	1985.12	1985.94	1974.47	1959.85	1942.92
11	1937.06	1925.42	1889.15	1889.23	1896.18	1930.90	1964.37	1985.07	1985.93	1974.05	1959.37	1942.21
12	1936.29	1928.54	1889.10	1889.15	1900.77	1931.26	1965.96	1985.12	1985.93	1973.62	1958.87	1941.47
13	1935.57	1923.80	1888.97	1889.08	1903.66	1931.56	1967.23	1985.18	1985.87	1973.18	1958.39	1940.75
14	1934.74	1919.06	1888.97	1889.10	1905.89	1931.84	1968.82	1985.31	1985.82	1972.72	1957.90	1940.06
15	1933.88	1913.16	1889.00	1889.09	1908.01	1932.10	1970.33	1985.42	1985.77	1972.27	1957.41	1939.33
16	1933.09	1907.63	1888.94	1889.11	1910.03	1932.41	1971.44	1985.61	1985.75	1971.83	1956.90	1938.59
17	1932.28	1902.10	1888.98	1889.31	1911.77	1932.76	1972.33	1985.87	1985.65	1971.39	1956.40	1937.84
18	1931.46	1896.58	1888.99	1889.75	1913.24	1933.11	1973.25	1986.20	1985.43	1970.95	1955.89	1937.08
19	1930.67	1892.62	1888.85	1889.78	1914.65	1933.47	1973.96	1986.39	1985.15	1970.49	1955.41	1936.32
20	1929.96	1890.00	1888.71	1889.78	1916.00	1933.86	1974.50	1986.43	1984.88	1970.02	1954.92	1935.54
21	1929.19	1889.45	1888.75	1889.72	1917.30	1934.24	1974.96	1986.44	1984.51	1969.57	1954.42	1934.76
22	1928.38	1889.10	1888.92	1889.60	1918.53	1934.58	1975.59	1986.50	1984.02	1969.09	1953.92	1933.97
23	1927.51	1889.13	1888.89	1889.71	1919.75	1935.11	1976.36	1986.61	1983.51	1968.62	1953.42	1933.18
24	1926.70	1889.16	1888.82	1890.15	1920.92	1935.79	1977.06	1986.61	1982.98	1968.11	1952.91	1932.38
25	1925.82	1889.19	1888.84	1890.63	1922.07	1936.26	1977.66	1986.48	1982.41	1967.61	1952.40	1931.59
26	1925.03	1889.11	1888.82	1891.06	1923.10	1936.81	1978.31	1986.30	1981.77	1967.09	1951.87	1930.77
27	1924.24	1889.73	1888.77	1891.44	1924.06	1937.33	1979.10	1986.05	1981.13	1966.58	1951.35	1929.98
28	1923.45	1889.25	1888.69	1891.80	1924.90	1937.72	1979.97	1985.82	1980.47	1966.10	1950.82	1929.18
29	1922.73	1888.83	1888.69	1892.14	---	1938.08	1980.94	1985.63	1979.78	1965.62	1950.28	1928.37
30	1921.89	1888.83	1888.80	1892.41	---	1938.45	1981.96	1985.55	1979.10	1965.11	1949.75	1927.55
31	1921.00	---	1888.79	1892.67	---	1939.08	---	1985.60	---	1964.62	1949.23	---
MEAN	1933.00	1907.27	1888.92	1889.84	1906.72	1932.58	1966.31	1985.59	1984.47	1971.72	1956.84	1938.74
MAX	1944.74	1928.54	1889.41	1892.67	1924.90	1939.08	1981.96	1986.61	1986.22	1978.54	1964.15	1949.12
MIN	1921.00	1888.83	1888.69	1888.80	1892.99	1925.68	1940.20	1983.14	1979.10	1964.62	1949.23	1927.55
(†)	31490	16940	16920	18390	33660	42460	77320	80830	74630	61830	49660	35190
(‡)	-15450	-14550	-20	+1470	+15270	+8800	+34860	+3510	-6200	-12800	-12170	-14470
CAL YR 1984	MEAN	1945.01	MAX	1986.84	MIN	1888.69	AC-FT†	-1530				
WTR YR 1985	MEAN	1938.64	MAX	1986.61	MIN	1888.69	AC-FT‡	-11750				

† Contents, in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

ROGUE RIVER BASIN

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14361900 APPLGATE LAKE NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 42°03'15", long 123°06'55", on line between secs. 25 and 36, T.40 S., R.4 W.. Jackson County, Hydrologic Unit 17100309, 0.1 mi southwest of outlet structure, and 0.5 mi northwest of Hart-tish Park boat ramp.

PERIOD OF RECORD.--January 1984 to January 1985 (discontinued).

REMARKS.--Local identifier 4203151230655 Applegate Lake #1.

WATER QUALITY DATA, OCTOBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
OCT 1984							
09...	1220	0.0	122	7.70	17.5	8.3	1.0
09...	1125	10.0	124	7.60	17.5	8.2	1.0
09...	1130	20.0	89	7.20	11.0	7.0	1.0
09...	1135	30.0	91	7.30	9.5	7.0	1.0
09...	1140	35.0	97	7.20	8.5	5.5	1.0
17...	1000	0.0	121	7.40	--	8.6	1.0
17...	1003	10.0	120	7.40	15.5	8.2	1.0
17...	1007	14.0	118	7.30	15.0	7.4	--
17...	1011	19.0	93	6.90	12.5	6.0	--
17...	1013	20.0	87	6.90	12.0	6.2	1.0
17...	1014	25.0	87	7.00	10.5	6.2	1.0
17...	1015	30.0	87	7.00	9.5	5.4	1.0
17...	1016	35.0	94	7.00	8.5	4.6	1.0
23...	1030	0.5	124	7.30	14.5	8.6	1.1
23...	1035	5.0	125	7.20	14.0	8.4	--
23...	1040	10.0	125	7.20	14.0	8.4	1.0
23...	1045	15.0	120	6.80	13.5	7.0	1.0
23...	1051	25.0	93	6.50	11.0	5.0	--
23...	1055	33.0	102	6.60	8.5	4.2	1.0
NOV							
01...	1016	1.0	128	7.50	13.0	7.7	--
01...	1019	5.0	125	7.50	13.0	8.6	--
01...	1024	10.1	128	7.40	13.0	8.5	<1.0
01...	1028	15.0	128	7.40	12.5	8.5	--
01...	1033	21.0	128	7.20	12.5	7.6	<1.0
01...	1034	25.0	125	7.10	12.0	7.5	--
01...	1035	29.5	122	7.00	11.5	7.1	<1.0
01...	1037	35.0	110	6.90	11.0	5.8	1.2
01...	1038	35.5	102	6.60	11.0	7.4	--
06...	1100	0.5	121	7.40	12.5	8.9	<1.0
06...	1105	5.0	121	7.40	12.5	9.0	--
06...	1110	10.0	121	7.40	12.0	8.9	<1.0
06...	1114	15.0	119	7.30	11.5	8.4	--
06...	1120	20.5	111	7.20	11.0	7.8	1.4
06...	1121	25.0	104	7.30	10.0	9.1	1.9
06...	1122	31.0	118	7.20	10.0	9.3	1.5
13...	1100	0.0	109	7.60	11.0	9.1	<1.0
13...	1110	10.0	103	7.40	10.0	9.2	<1.0
13...	1115	20.0	93	7.40	9.0	9.7	2.4
13...	1120	30.0	79	7.40	8.5	10.1	4.6
13...	1125	33.0	77	7.40	8.0	10.2	--
21...	1030	0.0	118	6.80	9.5	9.4	1.0
21...	1035	5.0	118	6.90	9.5	9.1	<1.0
21...	1040	10.0	112	6.90	9.0	9.3	1.0
21...	1044	15.0	112	6.90	8.5	9.5	1.2
21...	1049	20.0	110	6.90	8.0	9.8	--
28...	1100	0.0	111	6.90	--	10.0	1.2
28...	1103	3.0	115	7.00	7.5	9.8	--
28...	1105	5.0	115	7.00	7.5	9.8	1.3
28...	1120	20.0	116	7.00	7.0	10.1	3.9

ROGUE RIVER BASIN

14361900 APPLEGATE LAKE NEAR COPPER, OR--Continued

4203151230655 APPLEGATE LAKE SITE 1

WATER QUALITY DATA, OCTOBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
DEC							
06...	1020	0.5	125	7.20	6.5	10.5	2.0
06...	1025	5.0	125	7.30	6.5	10.4	2.2
06...	1030	10.0	124	7.20	6.5	10.5	2.3
06...	1035	15.0	124	7.30	6.0	10.8	2.0
06...	1037	17.0	124	7.30	6.0	11.0	1.7
06...	1040	20.0	127	7.30	5.5	11.1	--
06...	1041	25.0	130	7.40	5.5	11.2	--
06...	1042	30.0	132	7.40	5.5	11.1	--
06...	1043	33.5	132	7.40	5.5	11.1	--
10...	1100	0.0	118	7.40	6.0	10.1	--
10...	1105	5.0	117	7.40	6.0	10.4	2.7
10...	1110	10.0	119	7.40	6.0	10.2	2.5
10...	1115	14.5	123	7.30	5.5	10.6	3.0
10...	1120	20.0	122	7.40	5.0	11.0	3.5
10...	1121	25.0	125	7.40	5.0	11.0	--
18...	1100	0.0	117	--	--	10.6	1.3
18...	1105	5.0	113	7.50	5.5	10.6	1.7
18...	1110	10.0	118	7.50	5.5	10.6	1.5
18...	1115	15.0	118	7.40	5.5	10.5	1.6
18...	1120	20.0	121	7.30	5.0	10.7	1.6
27...	1120	0.0	117	7.20	4.5	10.9	<1.0
27...	1125	5.0	117	7.30	4.5	11.2	1.0
27...	1129	10.0	116	7.30	4.5	11.1	<1.0
27...	1134	15.0	118	7.30	4.5	11.1	<1.0
27...	1139	25.0	121	7.30	4.5	11.0	--
27...	1140	30.0	134	7.40	4.0	11.1	--
JAN 1985							
04...	1130	0.0	120	7.20	4.5	10.9	<1.0
04...	1135	5.0	121	7.20	4.0	11.6	<1.0
04...	1140	10.0	120	7.20	4.0	11.6	<1.0
04...	1145	15.0	122	7.30	4.0	11.6	<1.0
04...	1150	20.0	121	7.30	4.0	11.6	1.0
10...	1215	0.0	121	6.90	4.0	11.5	1.1
10...	1220	5.0	123	7.10	4.0	11.8	1.3
10...	1225	10.0	124	7.20	3.5	11.8	1.2
10...	1230	15.0	124	7.30	3.5	11.8	1.1
10...	1235	20.5	125	7.40	4.0	11.8	1.0
17...	1230	0.0	125	8.00	3.5	11.5	<1.0
17...	1235	5.0	124	7.80	3.5	11.5	<1.0
17...	1240	10.0	124	7.70	3.5	11.8	<1.0
17...	1245	15.0	124	7.60	3.5	11.8	<1.0
17...	1250	20.0	124	7.50	3.5	11.8	<1.0
24...	1050	0.5	124	7.60	3.5	12.1	1.0
24...	1055	5.0	126	7.70	3.5	12.0	1.0
24...	1100	10.0	126	7.60	3.5	12.0	<1.0
24...	1110	20.0	127	7.60	3.5	11.9	1.1
31...	1200	0.0	120	7.70	3.5	12.3	<1.0
31...	1205	5.0	122	7.80	3.0	12.5	<1.0
31...	1210	10.0	119	7.80	3.0	12.4	1.0
31...	1215	15.0	131	7.70	3.5	12.1	<1.0
31...	1220	20.0	126	7.60	3.5	12.0	1.0

ROGUE RIVER BASIN

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14361900 APPLEGATE LAKE NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 42°02'54", long 123°07'39", in SW¼NW¼ sec.36, T.40 S., R.4 W., Jackson County, Hydrologic Unit 17100309, near mouth of Grouse Creek, 0.2 mi south of Hart-tish Park swimming area, 1.2 mi east of Collings Mountain, and 0.8 mi southwest of outlet structure.

PERIOD OF RECORD.--January 1984 to January 1985 (discontinued).

REMARKS.--Local identifier 4202541230739 Applegate Lake #2.

WATER QUALITY DATA, DECEMBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
DEC 1984							
06...	1120	0.5	124	7.50	6.5	10.7	1.5
06...	1121	1.0	124	7.40	6.5	10.8	--
06...	1125	5.0	126	7.40	6.5	10.7	2.2
06...	1130	10.0	124	7.40	6.0	10.8	2.2
06...	1135	15.0	126	7.40	5.5	11.1	1.8
06...	1140	20.0	134	7.40	5.5	10.9	1.4
10...	1140	0.0	119	7.50	6.0	10.5	2.4
10...	1150	10.0	121	7.30	5.5	10.7	2.3
10...	1155	15.0	120	7.40	5.0	10.7	2.0
27...	1200	0.5	116	7.50	4.0	11.6	<1.0
27...	1205	5.0	117	7.50	4.0	11.8	<1.0
27...	1210	10.0	117	7.50	4.0	11.7	<1.0
27...	1215	15.0	117	7.50	4.0	11.6	1.0
27...	1220	19.5	122	7.40	4.0	11.3	--
JAN 1985							
04...	1200	0.5	121	7.50	3.0	12.6	<1.0
04...	1205	5.0	122	7.50	3.0	12.6	<1.0
04...	1210	10.0	122	7.50	3.0	12.4	<1.0
04...	1215	15.0	126	7.50	3.5	12.2	<1.0
10...	1250	0.5	124	--	3.5	11.9	1.0
10...	1255	5.0	125	--	3.5	12.0	<1.0
10...	1300	10.0	124	--	3.5	12.1	<1.0
10...	1304	14.0	125	--	3.5	11.9	--
10...	1310	20.0	127	--	4.0	11.6	<1.0
17...	1315	1.0	125	7.70	3.0	12.0	<1.0
17...	1320	5.0	125	7.60	3.0	12.2	<1.0
17...	1325	10.0	124	7.60	3.0	12.3	<1.0
17...	1330	15.0	125	7.50	3.5	12.2	<1.0
24...	1135	1.0	121	7.70	3.5	12.2	<1.0
24...	1139	5.0	121	7.70	3.0	12.2	<1.0
24...	1144	10.0	122	7.60	3.5	12.2	<1.0
24...	1149	15.0	123	7.60	3.5	12.2	1.0
24...	1151	17.0	125	7.60	3.5	12.2	<1.0
31...	1230	0.0	115	7.80	3.0	12.6	<1.0
31...	1235	5.0	116	7.80	3.5	12.7	1.3
31...	1240	10.0	117	7.80	3.5	12.6	<1.0
31...	1245	15.0	119	7.70	3.5	12.4	<1.0

ROGUE RIVER BASIN

14361900 APPLEGATE LAKE NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 42°02'28", long 123°07'39", in SW¼SW¼ sec.36, T.40 S., R.4 W., Jackson County, Hydrologic Unit 17100309, near confluence with Squaw Creek arm, 0.7 mi south of Hart-tish Park swimming area, 1.3 mi southeast of Collings Mountain, and 1.2 mi southwest of outlet structure.

PERIOD OF RECORD.--January 1984 to January 1985 (discontinued).

REMARKS.--Local identifier 4202281230739 Applegate Lake #3.

WATER QUALITY DATA, OCTOBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
OCT 1984							
09...	1230	0.0	123	7.60	17.5	8.3	1.1
09...	1235	10.0	124	7.60	17.5	8.0	1.0
09...	1240	20.0	89	7.00	11.5	5.9	1.0
09...	1245	30.0	92	7.00	9.5	4.3	1.0
17...	1100	0.5	122	7.60	15.5	8.4	1.0
17...	1105	5.0	121	7.60	15.0	7.5	--
17...	1110	10.0	121	7.60	15.5	8.4	1.0
17...	1113	13.0	123	7.50	15.0	8.4	--
17...	1115	15.0	122	7.50	14.5	8.4	1.0
17...	1116	16.0	123	7.50	14.0	8.4	--
17...	1118	19.0	100	6.80	12.5	5.3	--
17...	1119	20.0	91	6.80	12.0	4.3	1.0
17...	1120	25.0	87	6.80	10.5	3.8	1.1
23...	1220	1.0	128	7.20	14.5	8.8	1.0
23...	1225	5.0	129	7.20	14.0	9.3	--
23...	1230	10.0	129	7.20	14.0	9.0	1.0
23...	1235	15.0	129	7.00	13.5	8.2	1.0
23...	1238	18.0	129	7.00	13.0	8.7	--
23...	1240	20.0	128	7.00	12.5	8.6	1.0
23...	1241	25.0	96	6.40	11.0	2.8	--
23...	1242	30.0	99	6.40	9.5	2.3	--
NOV 1984							
01...	1105	0.0	131	7.50	13.0	8.7	<1.0
01...	1110	5.0	131	7.40	13.0	8.7	--
01...	1115	10.5	131	7.40	13.0	8.7	--
01...	1120	15.0	132	7.40	13.0	8.6	--
01...	1125	20.0	135	7.30	12.5	8.7	--
01...	1127	27.5	132	7.30	11.5	8.8	--
06...	1130	0.5	123	7.40	12.0	9.1	<1.0
06...	1134	5.0	122	7.40	12.0	9.6	--
06...	1139	10.0	122	7.30	12.0	9.5	<1.0
06...	1144	15.0	125	7.40	11.5	9.8	--
06...	1149	20.0	115	7.40	11.0	9.8	1.5
06...	1150	25.0	112	7.40	10.0	9.7	1.2
06...	1151	28.5	111	7.40	9.5	9.8	--
13...	1130	0.0	110	7.40	11.0	9.4	<1.0
13...	1135	10.0	99	7.40	9.5	9.4	1.0
13...	1140	20.0	77	7.40	8.0	10.2	3.6
13...	1145	30.0	67	7.40	7.5	10.4	4.7
21...	1040	0.0	120	7.20	9.5	9.6	1.0
21...	1045	5.0	119	7.00	9.5	9.4	<1.0
21...	1049	9.0	118	7.00	9.0	9.2	--
21...	1050	10.0	117	7.10	8.5	9.6	<1.0
21...	1052	12.0	112	7.10	8.0	10.0	--
21...	1053	13.0	111	7.10	7.5	10.0	--
21...	1058	18.0	108	7.10	7.0	10.4	--
28...	1140	0.0	118	7.10	7.5	10.1	2.6
28...	1145	5.0	118	7.10	7.0	10.0	3.7
28...	1147	7.0	112	7.10	6.0	10.0	--
28...	1148	8.0	108	7.10	5.5	10.3	--
28...	1149	10.0	104	7.20	5.0	11.3	9.8
28...	1154	15.0	99	7.20	4.5	11.5	14
28...	1156	17.0	100	7.20	4.5	11.6	--

ROGUE RIVER BASIN

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14361900 APPLEGATE LAKE NEAR COPPER, OR--Continued

4202281230739 APPLEGATE LAKE SITE 3--Continued

WATER QUALITY DATA, OCTOBER 1984 TO JANUARY 1985

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
DEC 1984							
06...	1205	5.0	126	7.40	6.5	11.9	1.4
06...	1211	10.0	122	7.40	5.5	11.8	1.3
06...	1216	15.0	122	7.50	4.5	11.7	1.1
10...	1200	0.5	117	7.40	6.0	10.7	2.2
10...	1205	5.0	118	7.40	6.0	10.5	3.6
10...	1210	10.0	119	7.40	5.5	10.9	2.1
10...	1215	14.5	118	7.50	4.5	11.3	1.4
10...	1217	17.0	134	7.40	5.0	11.5	1.4
19...	1150	0.0	115	7.50	5.0	11.0	1.6
19...	1155	5.0	115	7.50	5.0	10.9	1.4
19...	1200	10.0	113	7.50	4.0	11.3	1.2
19...	1205	15.0	114	7.50	4.0	11.3	1.0
19...	1207	17.0	140	7.40	4.5	11.3	1.3
27...	1250	0.5	116	7.60	3.0	12.2	<1.0
27...	1255	5.0	117	7.60	3.0	12.5	<1.0
27...	1300	10.0	116	7.60	3.5	12.2	<1.0
27...	1304	14.5	118	7.50	4.0	12.0	<1.0
27...	1307	17.5	148	7.60	3.8	11.9	--
JAN 1985							
10...	1330	1.0	123	--	4.0	12.0	1.1
10...	1335	5.0	125	--	4.0	12.5	1.2
10...	1340	10.0	125	--	4.0	12.5	<1.0
10...	1345	15.0	127	--	3.5	11.8	<1.0
17...	1345	1.0	124	7.60	3.0	12.2	<1.0
17...	1350	5.0	124	7.50	3.5	13.0	<1.0
17...	1355	10.0	125	7.40	3.5	13.1	<1.0
17...	1400	15.0	127	7.30	3.5	13.0	<1.0
24...	1210	1.0	117	--	3.0	12.4	<1.0
24...	1215	5.0	117	--	3.0	12.3	<1.0
24...	1220	10.0	122	--	3.5	12.2	1.0
24...	1225	15.0	127	--	3.5	12.0	1.0
31...	1350	0.0	113	7.80	3.0	12.3	<1.0
31...	1355	5.0	112	7.80	3.0	12.6	1.0
31...	1400	10.0	115	7.80	3.0	12.6	1.2
31...	1405	15.0	121	7.70	3.5	12.3	<1.0

ROGUE RIVER BASIN

14361900 APPLEGATE LAKE NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 42°02'16", long 123°08'30", near line between NE¼ and NW¼ sec.2, T.41 S., R.4 W., Jackson County, Hydrologic Unit 17100309, 0.4 mi north of mouth of Panther Gulch, and 0.9 mi southeast of Collings Mountain.

PERIOD OF RECORD.--May 1984 to December 1984 (discontinued).

REMARKS.--Local identifier 4202161230830 Applegate Lake #4.

WATER QUALITY DATA, OCTOBER 1984 TO DECEMBER 1984

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	TUR- BID- ITY (NTU)
OCT 1984							
09...	1310	0.0	124	7.60	17.5	8.3	1.2
09...	1315	10.0	125	7.60	17.0	8.2	1.0
09...	1320	15.0	94	7.40	15.5	7.9	1.0
09...	1325	20.0	94	6.90	11.5	4.1	1.0
17...	1200	0.0	120	7.70	15.5	8.6	1.0
17...	1205	5.0	121	7.60	15.5	8.6	1.0
17...	1210	10.0	121	7.60	15.5	8.4	1.0
17...	1212	12.0	122	7.60	15.5	8.5	--
17...	1215	15.0	122	7.60	14.5	8.5	1.0
17...	1217	17.0	123	7.60	13.5	8.3	--
17...	1220	20.0	112	7.00	12.5	4.2	1.0
23...	1310	0.5	129	7.30	14.5	8.8	1.0
23...	1315	6.0	128	7.20	14.0	8.7	1.0
23...	1319	10.0	129	7.20	14.0	8.6	1.0
23...	1325	15.0	129	7.20	13.5	8.6	1.0
23...	1329	18.0	130	7.00	13.0	8.1	1.0
NOV							
01...	1200	0.0	132	7.70	13.0	9.0	<1.0
01...	1205	5.0	131	7.60	13.0	8.9	--
01...	1211	11.5	132	7.50	13.0	8.9	<1.0
01...	1215	15.5	132	7.50	12.5	8.9	<1.0
06...	1220	0.0	121	7.50	12.0	9.0	<1.0
06...	1225	5.0	123	7.50	12.0	8.9	<1.0
06...	1230	10.0	121	7.40	12.0	8.9	<1.0
06...	1235	15.0	118	7.50	11.0	9.2	<1.0
13...	1200	0.0	110	7.40	11.0	9.1	1.0
13...	1205	5.0	110	7.30	11.0	9.0	<1.0
13...	1210	10.0	96	7.40	9.5	9.5	4.0
13...	1215	15.0	77	7.40	8.0	10.2	4.8
21...	1120	0.0	121	7.10	9.5	9.5	1.1
21...	1123	3.0	120	7.10	9.0	9.1	--
21...	1124	4.0	115	7.20	8.0	9.1	--
21...	1125	5.0	108	7.20	7.0	9.8	<1.0
21...	1126	6.0	107	7.30	6.5	10.3	--
28...	1200	0.0	94	7.40	5.0	11.6	--
28...	1205	5.0	96	7.30	5.0	11.7	--
DEC							
18...	1130	0.0	118	7.60	5.5	10.9	1.3
18...	1135	5.0	117	7.50	5.0	10.7	1.5
18...	1140	10.0	117	7.40	5.5	10.7	1.7
18...	1145	15.0	123	7.30	5.0	10.8	1.3

14362000 APPLEGATE RIVER NEAR COPPER, OR

LOCATION.--Lat 42°03'50", long 123°06'37", in SW¼NW¼ sec.30, T.40 S., R.3 W., Jackson County, Hydrologic Unit 17100309, U.S. Corps of Engineers land, on left bank 0.1 mi downstream from Brushy Gulch, 0.6 mi downstream from Applegate Dam, 3.1 mi northeast of former town of Copper, and at mile 45.7.

DRAINAGE AREA.--225 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WDR OR-78-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,747.51 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1977, at site 0.6 mi upstream at datum 12.15 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since December 1980 by Applegate Lake (see station 14361900). Some storage during winter in Squaw Lakes Reservoir, capacity, 1,100 acre-ft on Squaw Creek upstream from station. Diversions upstream from station from Carberry Creek for irrigation in Thompson Creek basin.

AVERAGE DISCHARGE.--47 years, 456 ft³/s, 330,370 acre-ft/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,800 ft³/s Jan. 15, 1974, gage height, 25.38 ft, site and datum then in use, from high-water mark in well, from rating curve extended above 12,000 ft³/s on basis of four slope-area measurements of peak flows made in 1950, 1955, 1964, and 1974; minimum, 1.5 ft³/s Dec. 20, 1980, result of regulation at Applegate dam, 0.6 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,980 ft³/s Nov. 13, gage height, 6.83 ft; minimum, 81 ft³/s Feb. 20; minimum daily, 85 ft³/s Feb. 21-24.

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	327	343	675	228	162	165	193	178	348	382	268	239
2	325	354	589	216	150	165	188	265	349	347	259	239
3	325	357	542	216	150	165	177	404	335	312	259	240
4	331	357	478	216	151	164	178	439	325	312	259	282
5	333	357	457	216	178	162	178	440	324	312	259	318
6	331	405	372	220	209	162	179	440	324	309	259	317
7	328	567	371	243	249	162	182	499	448	309	259	317
8	327	759	371	242	462	163	183	538	507	302	259	316
9	326	932	407	242	304	165	184	539	458	282	254	316
10	325	946	458	242	176	165	185	538	368	284	250	315
11	324	956	544	244	178	166	189	447	327	285	250	314
12	332	1450	500	244	149	172	376	384	316	282	250	313
13	344	2460	461	238	134	182	573	385	322	283	250	318
14	343	2850	405	223	135	193	574	385	303	282	249	318
15	342	2220	410	223	137	199	579	385	287	282	248	318
16	334	2330	387	223	138	195	584	365	258	282	248	317
17	323	1880	354	223	139	191	525	337	282	281	250	316
18	323	1410	354	223	140	191	439	336	335	279	249	315
19	322	1380	354	304	124	192	438	420	346	279	247	315
20	322	1120	339	309	98	193	439	483	329	280	247	315
21	321	701	295	309	85	195	439	482	362	279	247	315
22	320	458	262	309	85	196	325	482	408	279	247	315
23	320	510	290	257	85	192	244	511	407	280	245	315
24	325	554	291	187	85	189	244	558	407	282	245	315
25	327	445	270	170	92	189	244	582	422	282	244	315
26	325	445	270	171	107	190	206	582	438	281	244	316
27	324	930	270	171	108	191	175	581	441	281	244	315
28	324	1690	268	170	127	191	176	579	444	280	244	308
29	332	1050	242	169	---	191	176	487	443	279	244	306
30	335	786	243	171	---	192	177	397	443	279	244	306
31	334	---	243	172	---	193	---	348	---	279	242	---
TOTAL	10174	31002	11772	6991	4337	5621	8949	13796	11106	9047	7763	9184
MEAN	328	1033	380	226	155	181	298	445	370	292	250	306
MAX	344	2850	675	309	462	199	584	582	507	382	268	318
MIN	320	343	242	169	85	162	175	178	258	279	242	239
AC-FT	20180	61490	23350	13870	8600	11150	17750	27360	22030	17940	15400	18220
MEAN†	76.9	789	379	249	430	324	884	502	266	83.6	52.5	63.0
AC-FT†	4730	46940	23330	15340	23870	19950	52610	30870	15830	5140	3230	3750

CAL YR 1984 TOTAL 179243 MEAN 490 MAX 2850 MIN 140 AC-FT 355500 MEAN† 488 AC-FT† 353970
WTR YR 1985 TOTAL 129742 MEAN 355 MAX 2850 MIN 85 AC-FT 257300 MEAN† 339 AC-FT† 245550

† Adjusted for change in contents of Applegate Lake.

14362000 APPLEGATE RIVER NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1980 to current year.

pH: September 1980 to current year.

WATER TEMPERATURES: January 1977 to current year.

DISSOLVED OXYGEN: September 1980 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1980.

REMARKS.--Storage began in Applegate Lake Dec. 2, 1980. Dam site is approximately 0.5 mi upstream.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 188 microsiemens Sept. 13, 1980; minimum, 61 microsiemens Dec. 3, 1980, Dec. 20, 1981, June 19, 20, 1983.

pH: Maximum, 9.0 units Sept. 4, 1980; minimum, 7.2 units Oct. 26 to Nov. 3, 1983.

WATER TEMPERATURES: Maximum, 26.5°C Aug. 7, 1978; minimum, 0.0°C on many days during winter periods prior to filling of Applegate Lake.

DISSOLVED OXYGEN: Maximum, 15.1 mg/l Dec. 15, 1981; minimum, 4.9 mg/l Sept. 28-30, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 141 microsiemens Feb. 2; minimum, 81 microsiemens Apr. 30, May 1.

pH: Maximum, 8.2 units Mar. 5, 6, 23, Aug. 26, 29, 30; minimum, 7.3 units Oct. 29 to Nov. 1.

WATER TEMPERATURES: Maximum, 20.0°C July 4, Aug. 29; minimum, 3.0°C Jan. 24 to Feb. 14.

DISSOLVED OXYGEN: Maximum, 14.0 mg/l Jan. 28, Feb. 8; minimum, 8.0 mg/l Aug. 29.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
JAN 29...	1000	173	121	8.10	3.0	14.8	<1	<1	300	2	20
AUG 12...	1200	258	100	7.90	15.5	9.8	1	1	--	<1	<10

DATE	TIME	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
JAN 29...		<1	19	230	4	10	<.1	.40	<1	<1	60
AUG 12...		<1	3	250	1	30	--	--	<1	<1	90

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 1984					APR 1985				
12...	1205	323	3	2.6	01...	1220	193	2	1.0
29...	1120	335	2	1.8	16...	1000	576	4	6.2
NOV					MAY				
13...	1115	2310	14	87	13...	1230	386	3	3.1
27...	1150	870	6	14	31...	1205	349	3	2.8
DEC					JUN				
11...	1510	574	1	1.5	14...	1140	303	8	6.5
28...	1110	277	1	0.75	28...	1210	446	3	3.6
JAN 1985					JUL				
11...	1300	244	1	0.66	12...	1130	285	12	9.2
29...	1000	173	3	1.4	26...	1335	282	4	3.0
29...	1025	169	3	1.4	AUG				
FEB					12...	1200	258	21	15
13...	1105	135	3	1.1	12...	1300	250	21	14
MAR					26...	1230	244	4	2.6
01...	1130	165	3	1.3	SEP				
15...	1105	198	3	1.6	25...	1200	315	11	9.4

ROGUE RIVER BASIN

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14362000 APPLEGATE RIVER NEAR COPPER, OR--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	99	113	127	131	126	115	82	87	92	96	105
2	104	112	116	130	139	126	115	85	87	92	93	106
3	105	104	121	130	138	125	116	86	86	93	93	106
4	105	98	119	130	137	122	116	85	85	94	93	103
5	107	101	121	131	133	117	116	85	85	92	94	102
6	108	103	123	130	126	118	117	85	86	92	94	103
7	108	107	124	130	123	118	117	86	86	93	95	102
8	109	106	125	130	120	118	117	86	85	93	96	104
9	109	107	125	129	125	119	116	87	86	94	98	104
10	110	110	125	130	128	119	116	87	86	94	97	105
11	111	111	125	131	128	119	116	87	86	95	98	104
12	106	101	126	130	126	119	116	86	85	95	99	105
13	96	87	128	130	123	119	116	86	86	95	99	103
14	96	87	129	130	122	118	116	86	85	95	100	99
15	96	90	128	130	124	119	115	87	85	95	100	99
16	96	97	123	130	125	118	110	86	85	96	100	100
17	97	102	125	130	125	117	103	86	85	95	101	100
18	97	106	126	131	123	118	102	86	85	95	101	100
19	97	107	124	128	124	117	100	88	86	96	103	102
20	97	106	127	128	126	118	98	88	85	96	103	102
21	97	107	128	127	126	117	98	88	86	96	105	103
22	97	110	127	127	127	118	94	88	88	96	105	103
23	98	112	127	128	127	116	91	88	88	96	106	105
24	96	113	128	124	127	116	89	88	89	96	106	105
25	96	111	129	121	127	116	87	89	89	96	107	105
26	99	110	129	121	127	116	85	88	89	96	107	105
27	101	112	129	122	126	116	86	89	89	96	107	106
28	103	114	129	122	126	116	85	89	89	97	107	107
29	104	108	125	123	---	116	85	88	90	97	109	108
30	98	111	119	123	---	116	83	88	91	97	108	109
31	94	---	121	122	---	115	---	87	---	99	106	---
MEAN	101	105	125	128	127	118	105	87	87	95	101	104
WTR YR 1985	MEAN	107		MAX	139	MIN	82					

14362000 APPLGATE RIVER NEAR COPPER. OR--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.8	7.6	7.5	7.3	7.8	7.8	8.0	7.9	8.1	7.9	8.0	7.9
2	7.8	7.7	7.6	7.4	7.8	7.8	8.0	7.9	8.1	7.9	8.1	7.9
3	7.9	7.6	7.9	7.6	7.9	7.8	8.0	7.9	8.1	8.0	8.1	7.9
4	7.8	7.7	7.9	7.8	7.9	7.9	8.0	7.9	8.1	7.9	8.1	7.9
5	7.9	7.7	7.9	7.8	7.9	7.9	8.0	7.9	8.0	7.9	8.2	8.0
6	7.9	7.7	7.9	7.8	7.9	7.9	8.0	7.9	8.0	7.9	8.2	8.0
7	7.9	7.7	7.8	7.8	8.0	7.9	8.0	7.9	8.1	8.0	8.1	8.0
8	7.9	7.7	7.8	7.8	8.0	7.9	8.0	7.9	8.0	8.0	8.1	8.0
9	7.9	7.7	7.8	7.8	7.9	7.9	8.0	7.9	8.1	7.9	8.1	8.0
10	7.9	7.7	7.8	7.8	7.9	7.9	8.0	7.9	8.1	8.0	8.1	7.9
11	7.9	7.7	7.8	7.8	7.9	7.9	8.0	7.9	8.0	7.9	8.1	7.9
12	8.0	7.5	7.8	7.7	7.9	7.9	8.0	7.9	8.1	7.9	8.1	7.9
13	7.6	7.5	7.8	7.7	7.9	7.9	8.0	7.9	8.1	8.0	8.1	7.9
14	7.6	7.5	7.7	7.7	7.9	7.9	8.0	7.9	8.1	8.0	8.1	7.9
15	7.6	7.5	7.8	7.7	7.9	7.9	8.0	7.9	8.1	7.9	8.1	7.9
16	7.6	7.5	7.8	7.7	8.0	7.9	8.0	7.9	8.1	7.9	8.1	7.9
17	7.6	7.5	7.7	7.7	8.0	7.9	8.0	7.9	8.1	8.0	8.1	7.9
18	7.6	7.5	7.7	7.7	8.0	7.9	8.0	7.9	8.1	8.0	8.1	7.9
19	7.6	7.5	7.7	7.7	8.0	7.9	8.0	7.9	8.1	7.9	8.1	7.9
20	7.6	7.5	7.7	7.7	8.0	7.9	8.0	7.9	8.1	7.9	8.1	8.0
21	7.6	7.5	7.7	7.7	8.0	7.9	8.0	7.9	8.1	7.9	8.1	8.0
22	7.6	7.5	7.7	7.7	8.0	7.9	8.0	7.9	8.1	7.9	8.1	7.9
23	7.6	7.4	7.7	7.7	8.0	7.9	8.0	7.9	8.1	7.9	8.2	8.0
24	7.5	7.4	7.7	7.7	8.0	7.9	8.1	7.9	8.1	7.9	8.1	8.0
25	7.5	7.4	7.7	7.7	8.0	7.9	8.1	8.0	8.1	7.9	8.1	8.0
26	7.6	7.4	7.8	7.7	8.0	7.9	8.1	8.0	8.1	7.9	8.1	8.0
27	7.6	7.4	7.8	7.7	8.0	7.9	8.1	7.9	8.1	7.9	8.1	7.9
28	7.6	7.5	7.8	7.7	7.9	7.9	8.1	7.9	8.1	7.9	8.1	8.0
29	7.5	7.3	7.8	7.8	8.0	7.9	8.1	7.9	---	---	8.1	7.9
30	7.3	7.3	7.8	7.8	7.9	7.9	8.1	7.9	---	---	8.1	7.9
31	7.3	7.3	---	---	8.0	7.9	8.1	7.9	---	---	8.1	7.9
MONTH	8.0	7.3	7.9	7.3	8.0	7.8	8.1	7.9	8.1	7.9	8.2	7.9
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	7.9	8.0	7.8	8.0	7.8	8.1	8.0	8.0	7.9	8.0	7.8
2	8.1	8.0	8.0	7.8	7.9	7.8	8.1	8.0	7.9	7.8	8.0	7.8
3	8.1	8.0	7.9	7.8	7.9	7.8	8.1	8.0	7.9	7.8	8.0	7.8
4	8.1	8.0	7.9	7.8	7.9	7.8	8.1	8.0	7.9	7.8	7.9	7.7
5	8.1	7.9	7.9	7.8	7.9	7.8	8.0	7.9	7.9	7.8	7.8	7.7
6	8.1	8.0	7.9	7.8	7.9	7.8	8.0	7.9	7.9	7.8	7.9	7.7
7	8.1	7.9	7.9	7.8	7.9	7.8	8.0	7.9	7.9	7.8	7.8	7.7
8	8.1	7.9	7.9	7.8	7.9	7.8	8.0	7.9	7.9	7.8	7.8	7.7
9	8.1	7.9	7.9	7.8	7.9	7.8	8.0	7.9	7.9	7.8	7.8	7.6
10	8.1	7.9	7.9	7.8	7.9	7.8	8.0	7.9	7.9	7.8	7.9	7.8
11	8.1	7.9	7.9	7.8	7.9	7.8	8.0	7.9	8.0	7.8	8.0	7.8
12	8.1	7.9	8.0	7.8	7.9	7.8	8.0	7.9	7.9	7.8	8.0	7.8
13	7.9	7.9	8.0	7.8	8.0	7.8	8.0	7.9	8.0	7.8	7.9	7.6
14	7.9	7.9	8.0	7.8	7.9	7.8	8.0	7.9	8.0	7.8	7.7	7.6
15	7.9	7.9	8.0	7.8	7.9	7.8	8.0	7.9	8.0	7.8	7.7	7.6
16	8.0	7.9	8.0	7.8	7.9	7.9	8.0	7.9	8.0	7.8	7.7	7.6
17	8.0	7.9	8.0	7.8	7.9	7.8	8.0	7.9	8.0	7.8	7.7	7.6
18	8.0	7.9	8.0	7.8	8.0	7.9	8.0	7.9	8.0	7.8	7.8	7.6
19	8.0	7.9	8.0	7.8	8.0	7.9	8.0	7.9	8.0	7.9	7.8	7.6
20	8.0	7.9	8.0	7.8	8.0	7.9	8.0	7.9	8.0	7.8	7.8	7.6
21	8.0	7.9	8.0	7.8	8.1	7.9	8.0	7.9	8.1	7.9	7.8	7.6
22	8.0	7.9	8.0	7.8	8.1	8.0	8.0	7.9	8.0	7.9	7.8	7.6
23	8.0	7.9	7.9	7.8	8.1	8.0	8.0	7.9	8.0	7.9	7.8	7.6
24	8.0	7.8	7.9	7.8	8.1	8.0	8.0	7.9	8.0	7.9	7.8	7.6
25	7.9	7.8	8.0	7.8	8.1	8.0	8.0	7.9	8.0	7.9	7.8	7.6
26	8.0	7.8	8.0	7.8	8.1	8.0	8.0	7.9	8.2	7.9	7.9	7.6
27	8.0	7.8	7.9	7.9	8.0	8.0	8.0	7.9	8.1	7.9	7.9	7.6
28	8.0	7.8	8.0	7.9	8.1	8.0	8.0	7.9	8.1	7.9	7.9	7.6
29	8.0	7.8	8.0	7.8	8.1	8.0	8.0	7.9	8.2	7.9	7.9	7.6
30	8.0	7.8	8.0	7.8	8.1	8.0	8.0	7.9	8.2	7.9	7.9	7.7
31	---	---	8.0	7.9	---	---	8.1	7.9	8.0	7.8	---	---
MONTH	8.1	7.8	8.0	7.8	8.1	7.8	8.1	7.9	8.2	7.8	8.0	7.6
YEAR	8.2	7.3										

14362000 APPLGATE RIVER NEAR COPPER. OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

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

14362000 APPLEGATE RIVER NEAR COPPER, OR--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.1	9.6	9.8	11.2	10.3	10.7	12.0	11.7	11.9	12.8	12.4	12.5
2	10.1	9.5	9.7	10.4	10.1	10.2	11.7	11.6	11.7	12.8	12.4	12.5
3	9.9	9.5	9.6	10.8	10.3	10.6	11.7	11.7	11.7	12.8	12.4	12.5
4	10.0	9.5	9.7	11.1	10.7	10.8	11.8	11.6	11.7	12.8	12.5	12.6
5	10.0	9.5	9.7	10.9	10.6	10.7	12.0	11.8	11.9	12.8	12.4	12.5
6	10.0	9.5	9.7	11.2	10.6	10.9	12.0	11.8	11.9	12.7	12.4	12.5
7	10.0	9.5	9.6	11.5	11.1	11.2	12.0	11.9	11.9	12.7	12.4	12.5
8	9.9	9.4	9.6	11.9	11.1	11.5	12.0	11.9	12.0	12.8	12.5	12.6
9	10.0	9.4	9.6	12.2	11.8	12.0	12.3	12.0	12.2	12.9	12.5	12.6
10	9.6	9.4	9.5	12.1	11.8	11.9	12.4	12.2	12.3	12.9	12.6	12.7
11	10.0	9.5	9.7	12.0	11.9	11.9	12.7	12.4	12.6	13.0	12.6	12.7
12	10.8	9.6	10.1	12.9	12.0	12.2	12.7	12.5	12.6	12.9	12.6	12.7
13	11.1	10.6	10.8	13.1	12.2	12.7	12.7	12.4	12.6	13.0	12.6	12.7
14	11.1	10.6	10.8	13.0	12.1	12.4	12.5	12.0	12.3	13.0	12.6	12.8
15	11.1	10.6	10.8	12.3	11.6	12.0	12.4	12.0	12.2	13.1	12.8	12.9
16	10.7	10.4	10.6	11.7	11.6	11.7	12.4	12.2	12.3	13.3	12.8	12.9
17	11.0	10.5	10.7	11.7	11.3	11.5	12.5	12.2	12.3	13.2	12.8	13.0
18	11.0	10.5	10.7	11.7	11.5	11.6	12.5	12.2	12.3	13.3	12.8	13.0
19	10.8	10.4	10.6	11.8	11.7	11.8	12.5	12.3	12.4	13.5	12.9	13.1
20	10.8	10.4	10.6	11.8	11.7	11.8	12.6	12.3	12.4	13.5	13.0	13.2
21	10.9	10.5	10.6	11.9	11.6	11.8	12.7	12.4	12.5	13.8	13.2	13.3
22	11.0	10.5	10.6	11.8	11.6	11.7	12.8	12.5	12.6	13.5	13.3	13.5
23	11.0	10.4	10.6	12.2	11.6	11.8	12.7	12.5	12.6	13.5	13.2	13.3
24	11.1	10.4	10.6	12.2	11.4	11.7	12.8	12.4	12.6	13.7	13.2	13.4
25	11.0	10.4	10.6	11.7	11.5	11.7	12.6	12.3	12.4	13.7	13.3	13.4
26	11.0	10.4	10.6	11.9	11.6	11.8	12.7	12.4	12.5	13.8	13.3	13.5
27	11.2	10.5	10.7	11.7	11.2	11.4	12.6	12.3	12.4	13.8	13.3	13.5
28	11.0	10.5	10.6	12.0	11.3	11.7	12.7	12.2	12.4	14.0	13.3	13.5
29	11.6	10.5	11.0	12.2	11.9	12.1	12.6	12.1	12.3	13.8	12.7	13.2
30	11.5	11.0	11.2	12.0	11.8	11.9	12.6	12.2	12.4	13.2	12.8	12.9
31	11.6	10.7	11.0	---	---	---	12.8	12.4	12.5	13.2	12.7	12.9
MONTH	11.6	9.4	10.3	13.1	10.1	11.6	12.8	11.6	12.3	14.0	12.4	12.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.0	12.5	12.7	12.6	12.2	12.4	12.5	11.8	12.2	11.7	11.1	11.4
2	13.0	12.5	12.7	12.6	12.2	12.3	12.4	11.8	12.0	11.8	10.7	11.2
3	13.0	12.5	12.7	12.7	12.1	12.4	12.5	11.8	12.0	12.2	10.8	11.6
4	13.2	12.6	12.8	12.6	11.9	12.2	12.5	11.8	12.1	12.1	11.6	11.9
5	13.1	12.7	12.8	12.4	11.9	12.1	12.4	11.7	12.0	12.0	11.6	11.7
6	13.0	12.5	12.7	12.4	12.0	12.1	12.3	11.7	11.9	12.0	11.4	11.7
7	13.4	12.4	12.6	12.5	12.0	12.2	12.4	11.7	12.0	12.3	11.5	11.9
8	14.0	13.4	13.7	12.6	12.1	12.3	12.3	11.6	12.0	12.5	11.6	11.9
9	13.8	12.4	13.0	12.7	12.1	12.3	12.2	11.6	11.8	12.4	11.6	12.0
10	12.8	12.4	12.6	12.5	12.0	12.2	12.1	11.5	11.8	12.1	11.6	11.8
11	12.7	12.4	12.5	12.6	12.0	12.2	12.1	11.5	11.8	11.9	11.1	11.6
12	12.8	12.4	12.5	12.6	12.1	12.3	12.5	11.6	12.1	11.5	10.9	11.2
13	12.7	12.4	12.5	12.6	12.0	12.3	12.7	12.4	12.6	11.4	10.9	11.1
14	12.8	12.3	12.5	12.5	12.0	12.2	12.9	12.5	12.6	11.6	10.9	11.2
15	12.8	12.3	12.5	12.4	11.8	12.1	12.7	12.3	12.5	11.9	10.8	11.1
16	12.7	12.3	12.4	12.5	11.8	12.0	12.8	12.1	12.4	11.5	10.8	11.0
17	12.7	12.3	12.4	12.5	11.9	12.1	12.8	11.6	12.1	11.5	10.7	11.0
18	12.7	12.3	12.4	12.5	11.9	12.1	12.0	11.6	11.8	11.6	10.6	11.0
19	12.6	12.3	12.4	12.6	12.0	12.2	12.1	11.8	11.9	11.8	10.6	11.2
20	12.9	12.3	12.5	12.9	11.9	12.2	12.0	11.7	11.9	11.8	11.1	11.3
21	13.1	12.4	12.6	12.6	11.9	12.1	12.0	11.7	11.9	11.7	11.0	11.4
22	13.3	12.4	12.7	12.5	11.7	12.1	12.1	11.1	11.6	11.7	11.0	11.3
23	13.1	12.4	12.6	12.2	11.5	11.8	11.7	11.1	11.4	11.8	11.1	11.4
24	13.1	12.5	12.7	12.3	11.6	11.9	11.7	11.3	11.5	11.8	11.2	11.5
25	13.1	12.4	12.7	12.4	11.7	12.0	11.7	11.3	11.5	11.8	11.2	11.5
26	12.9	12.4	12.6	11.8	11.6	11.7	11.8	11.3	11.4	11.7	11.2	11.4
27	13.1	12.4	12.6	11.9	11.5	11.7	11.9	11.3	11.5	11.7	11.1	11.4
28	13.0	12.3	12.6	12.2	11.7	11.9	11.7	11.3	11.5	12.1	11.1	11.4
29	---	---	---	12.4	11.9	12.1	12.0	11.2	11.5	11.6	10.7	11.1
30	---	---	---	12.5	12.0	12.2	11.8	11.1	11.4	11.0	10.3	10.7
31	---	---	---	12.5	12.0	12.3	---	---	---	10.7	10.0	10.4
MONTH	14.0	12.3	12.6	12.9	11.5	12.1	12.9	11.1	11.9	12.5	10.0	11.4

14362250 STAR GULCH NEAR RUCH, OR

LOCATION.--Lat 42°09'15", long 123°04'27", in NE¼NE¼ sec.29, T.39 S., R.3 W., Jackson County, Hydrologic Unit 17100309, Bureau of Land Management land, on left bank 1.0 mi downstream from Benson Gulch, 6.0 mi southwest of Ruch, and at mile 1.1.

DRAINAGE AREA.--16.0 mi².

PERIOD OF RECORD.--July 1983 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,667.04 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 153 ft³/s Dec. 14, 1983, Nov. 28, 1985, gage height, 3.11 ft; minimum, 0.24 ft³/s Aug. 26, 27, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	0600	68	2.55	Nov. 28	0130	*153	*3.11

Minimum, 0.24 ft³/s Aug. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.8	26	5.2	3.2	5.9	26	3.6	2.8	1.1	.71	.44
2	1.1	5.6	21	5.2	3.2	5.5	34	3.6	2.8	1.0	.56	.59
3	1.1	5.2	19	5.1	3.2	5.3	27	3.6	2.4	.95	.47	.54
4	1.1	3.5	17	4.9	3.1	5.5	19	3.5	2.4	.89	.42	.46
5	1.2	2.4	15	4.9	3.0	5.3	15	3.5	2.3	.85	.40	.41
6	1.2	3.3	13	5.1	3.0	5.2	13	3.4	2.3	.86	.38	.44
7	1.1	2.9	12	5.3	5.1	5.0	11	3.4	2.4	.80	.38	.51
8	1.1	3.8	12	5.3	12	4.7	9.7	3.3	2.4	.77	.41	.57
9	1.2	5.3	12	5.3	9.2	4.6	8.8	3.2	2.2	.73	.42	.71
10	1.4	8.9	13	5.1	7.5	4.4	8.1	3.3	2.0	.71	.40	.75
11	1.9	8.1	13	4.8	11	4.3	7.4	3.2	1.9	.71	.40	.66
12	1.5	46	13	4.6	31	4.2	6.7	3.1	1.8	.70	.38	.57
13	1.6	28	13	4.5	26	4.1	6.2	3.0	1.8	.68	.36	.55
14	1.6	20	12	4.4	19	4.1	6.0	2.9	1.7	.66	.35	.68
15	1.4	11	12	4.2	16	4.0	5.8	2.9	1.7	.63	.33	.75
16	1.7	7.4	11	4.1	14	3.9	5.7	2.9	1.6	.62	.33	.63
17	1.9	6.1	9.6	4.1	12	3.9	5.4	2.9	1.5	.61	.32	.59
18	1.6	6.6	9.1	4.2	10	3.9	5.4	2.8	1.4	.58	.37	.59
19	1.7	5.8	8.3	4.3	9.5	3.8	5.3	2.6	1.4	.55	.49	.57
20	1.8	10	7.7	4.2	8.5	3.7	5.1	2.6	1.3	.52	.48	.55
21	1.7	14	7.2	4.2	7.6	3.7	5.0	2.5	1.2	.50	.46	.53
22	1.6	10	6.7	4.1	7.0	3.7	4.7	2.4	1.2	.49	.41	.53
23	1.5	9.1	6.3	4.0	6.6	3.8	4.6	2.5	1.2	.48	.37	.54
24	1.5	11	6.1	3.8	6.3	4.1	4.3	2.5	1.3	.49	.33	.53
25	1.6	10	6.1	3.7	6.1	3.7	4.2	2.5	1.3	.48	.32	.54
26	1.7	8.5	6.0	3.6	5.9	4.7	4.2	2.5	1.2	.45	.31	.54
27	1.7	69	5.7	3.5	5.7	5.2	4.1	2.4	1.2	.44	.30	.55
28	2.1	124	5.6	3.4	5.4	5.2	4.0	2.6	1.1	.44	.31	.58
29	2.2	60	5.3	3.4	---	6.1	3.8	2.6	1.1	.55	.32	.60
30	1.9	33	5.7	3.2	---	8.6	3.7	2.4	1.1	.60	.33	.61
31	1.8	---	5.3	3.2	---	15	---	2.9	---	.65	.35	---
TOTAL	47.6	540.3	334.7	134.9	260.1	155.1	273.2	91.1	52.0	20.49	12.17	17.11
MEAN	1.54	18.0	10.8	4.35	9.29	5.00	9.11	2.94	1.73	.66	.39	.57
MAX	2.2	124	26	5.3	31	15	34	3.6	2.8	1.1	.71	.75
MIN	1.1	1.8	5.3	3.2	3.0	3.7	3.7	2.4	1.1	.44	.30	.41
AC-FT	94	1070	664	268	516	308	542	181	103	41	24	34
CAL YR 1984	TOTAL	3082.26	MEAN	8.42	MAX	124	MIN	.92	AC-FT	6110		
WTR YR 1985	TOTAL	1938.77	MEAN	5.31	MAX	124	MIN	.30	AC-FT	3850		

ROGUE RIVER BASIN

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14366000 APPLGATE RIVER NEAR APPLGATE, OR

LOCATION.--Lat 42°14'30", long 123°08'20", in NE¼ sec.26, T.38 S., R.4 W., Jackson County, Hydrologic Unit 17100309, on left bank 0.9 mi downstream from Keeler Creek, 1.8 mi southeast of Applegate, and at mile 26.7.

DRAINAGE AREA.--483 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1738: Drainage area. WSP 1935: 1953(M). WDR OR-76-1: 1956(M), 1965(M).

GAGE.--Water-stage recorder. Datum of gage is 1,285.33 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 23, 1938, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since December 1980 by Applegate Lake (see sta 14361900). Many diversions for irrigation upstream from station. McDonald Creek Canal diverts from McDonald Creek upstream from station for irrigation in Bear Creek basin. Thompson Creek Irrigation Association ditch diverts upstream from station for irrigation in Thompson Creek basin. Fowler-Keeler and Berryman ditches divert upstream from station for irrigation downstream.

AVERAGE DISCHARGE.--47 years, 564 ft³/s, 408,600 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,200 ft³/s Jan. 15, 1974, gage height, 20.41 ft, from rating curve extended above 18,000 ft³/s on basis of slope-area measurements of flow at gage heights 18.00 ft and 19.57 ft; minimum, 4.6 ft³/s Sept. 22-25, 1979. Minimum since first filling of Applegate Lake, 161 ft³/s Nov. 11, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 20, 1927, reached a stage of 18.7 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,410 ft³/s Nov. 28, gage height, 5.78 ft; minimum, 185 ft³/s Aug. 29, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	376	1040	332	231	270	414	279	407	370	242	202
2	328	504	866	314	214	273	455	292	412	336	222	209
3	329	487	828	312	211	266	430	460	394	287	221	206
4	332	438	723	309	203	270	391	510	376	286	219	220
5	336	421	663	309	216	270	376	505	374	288	218	276
6	334	435	578	312	263	263	384	501	378	281	217	277
7	329	634	540	339	291	259	403	520	459	280	214	278
8	330	770	529	343	650	256	403	580	558	275	214	278
9	333	996	544	343	500	252	395	581	528	249	212	288
10	338	1020	593	340	296	249	395	588	423	240	206	294
11	352	1040	717	335	351	249	391	539	370	237	204	290
12	351	1820	668	331	581	249	426	438	344	234	204	283
13	371	2600	647	327	448	256	752	436	348	236	206	295
14	367	3140	584	309	393	263	764	433	328	233	204	313
15	360	2450	564	309	367	273	776	423	320	227	206	316
16	358	2480	555	302	353	276	776	425	288	229	207	314
17	349	2150	504	302	333	273	734	391	282	229	205	316
18	345	1500	496	308	316	273	600	393	341	227	209	321
19	348	1460	481	357	305	273	595	444	345	228	211	318
20	353	1330	468	380	273	273	584	535	327	222	207	313
21	352	940	438	380	243	273	574	535	336	222	204	308
22	355	608	378	380	228	273	501	529	389	228	202	305
23	357	568	388	354	222	273	376	547	392	227	203	305
24	361	796	403	280	218	273	372	611	388	228	202	304
25	369	612	376	249	214	270	368	643	396	230	199	302
26	370	587	374	245	220	266	347	641	411	228	202	298
27	369	1430	370	243	220	295	282	640	409	224	202	288
28	369	3130	367	243	220	292	270	646	408	232	199	279
29	373	1900	344	243	---	299	270	578	408	242	193	277
30	374	1220	346	238	---	312	270	468	408	239	192	278
31	372	---	342	233	---	361	---	417	---	240	194	---
TOTAL	10894	37842	16714	9601	8580	8473	14074	15528	11547	7734	6440	8551
MEAN	351	1261	539	310	306	273	469	501	385	249	208	285
MAX	374	3140	1040	380	650	361	776	646	558	370	242	321
MIN	328	376	342	233	203	249	270	279	282	222	192	202
AC-FT	21610	75060	33150	19040	17020	16810	27920	30800	22900	15340	12770	16960
CAL YR 1984	TOTAL	229141	MEAN	626	MAX	3140	MIN	203	AC-FT	454500		
WTR YR 1985	TOTAL	155978	MEAN	427	MAX	3140	MIN	192	AC-FT	309400		

ROGUE RIVER BASIN

14366000 APPLEGATE RIVER NEAR APPLEGATE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1973 to current year.

INSTRUMENTATION.--Temperature recorder since August 1973.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 28.0°C July 29, 30, Aug. 3, 4, 1974; minimum, 0.0°C on several days 1975-80. Maximum since full operation of Applegate Lake, 25.5°C July 5, 1984; minimum, 0.5°C Jan. 27, 30, 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 23.0°C July 2, probably higher during period of no record in July; minimum recorded, 0.5°C Jan. 27, 30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

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14366000 APPLEGATE RIVER NEAR APPLEGATE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

14369500 APPLGATE RIVER NEAR WILDERVILLE, OR

LOCATION.--Lat 45°21'15", long 123°24'20", in SE¼NE¼ sec.16, T.37 S., R.6 W., Josephine County, Hydrologic Unit 17100309, on left bank 0.3 mi downstream from Jackson Creek, 3.6 mi southeast of Wilderville, and at mile 7.6.

DRAINAGE AREA.--698 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to September 1955, September 1978 to current year.

REVISED RECORDS.--WSP 1318: 1943. WSP 1738: 1951, 1953, drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 947.18 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Sept. 1, 1978, nonrecording gage at site 1,100 ft upstream at datum 2.36 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since December 1980 by Applegate Lake (see station 14361900). Many diversions for irrigation upstream from station. Wilderville ditch diverts up to 16 ft³/s 0.3 mi upstream and at the mouth of Jackson Creek.

AVERAGE DISCHARGE.--24 years, 777 ft³/s, 562,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft³/s Jan. 18, 1953, gage height, 18.3 ft, from floodmark, site and datum then in use, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 0.78 ft³/s Aug. 22-24, 1979. Minimum since first filling of Applegate Lake, 183 ft³/s Aug. 9, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached a stage of 20.3 ft, from floodmark, former site and datum, discharge, 66,500 ft³/s, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow.

Flood of February 1927 reached a stage of 22 ft at former site, from local resident. Floods of Dec. 22, 1964, and Jan. 15, 1974, are known to have exceeded the December 1955 flood.

No flow was observed at present site during the late summer of 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,650 ft³/s Nov. 28, gage height, 8.02 ft; minimum, 163 ft³/s July 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	378	453	2170	585	346	459	1290	332	459	371	224	183
2	379	724	1790	548	340	481	1370	326	469	314	215	200
3	379	999	1660	532	330	463	1220	475	449	280	210	206
4	387	858	1440	520	318	477	1000	554	427	262	204	201
5	389	654	1250	517	313	467	875	554	413	265	202	240
6	389	664	1090	519	356	457	817	542	436	260	201	258
7	389	831	968	539	439	445	793	542	476	252	198	262
8	389	1000	915	548	1100	434	745	615	634	244	203	265
9	389	1450	891	540	926	426	712	615	613	228	197	273
10	404	1580	1090	526	592	424	690	624	527	212	192	293
11	458	1740	1330	510	1020	420	660	612	448	204	190	299
12	438	4240	1230	496	2350	415	624	481	389	206	189	304
13	453	4050	1150	484	1520	417	953	467	357	208	187	307
14	452	4070	1030	466	1130	420	987	465	345	203	182	333
15	439	3190	1100	454	957	425	1000	452	324	197	181	344
16	440	2920	1060	447	864	425	991	455	304	198	181	341
17	439	2720	941	442	774	423	955	422	276	202	180	344
18	428	2140	913	445	700	421	799	412	311	204	182	344
19	433	2010	854	475	653	416	788	432	326	208	194	348
20	449	2040	814	517	596	415	754	546	321	202	188	342
21	444	1670	770	517	540	415	745	557	305	192	184	340
22	432	1150	686	516	506	415	731	550	358	198	183	327
23	425	1120	666	505	483	431	544	550	370	201	179	328
24	420	1620	680	429	468	523	515	613	365	201	185	317
25	436	1240	647	382	451	486	496	662	354	198	188	308
26	436	1090	629	373	445	547	477	657	373	198	186	303
27	447	3380	615	367	444	757	403	658	378	192	180	297
28	459	6920	603	368	432	749	379	667	379	199	181	287
29	481	3840	574	363	---	816	366	658	382	215	181	280
30	473	2620	630	353	---	843	348	539	383	212	174	280
31	458	---	613	346	---	1040	---	472	---	219	174	---
TOTAL	13212	62983	30799	14629	19393	15752	23027	16506	11951	6945	5895	8754
MEAN	426	2099	994	472	693	508	768	532	398	224	190	292
MAX	481	6920	2170	585	2350	1040	1370	667	634	371	224	348
MIN	378	453	574	346	313	415	348	326	276	192	174	183
AC-FT	26210	124900	61090	29020	38470	31240	45670	32740	23700	13780	11690	17360
CAL YR 1984	TOTAL	337347	MEAN	922	MAX	6920	MIN	215	AC-FT	669100		
WTR YR 1985	TOTAL	229846	MEAN	630	MAX	6920	MIN	174	AC-FT	455900		

ROGUE RIVER BASIN

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14369500 APPLEGATE RIVER NEAR WILDERVILLE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: September 1978 to current year.

INSTRUMENTATION.--Temperature recorder since September 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 28.0°C July 20, 1979; minimum recorded, 0.5°C Dec. 30, 31, 1978, Jan. 29, 30, 1980.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.0°C July 19; minimum, 2.5°C Jan. 13, 27, Feb. 4, 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

14369500 APPLEGATE RIVER NEAR WILDERVILLE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

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14370400 ROGUE RIVER NEAR MERLIN, OR

LOCATION.--Lat 42°29'50", long 123°29'15", in SE¼ sec.26, T.35 S., R.7 W., Josephine County, Hydrologic Unit 17100310, on left bank at Robertson Bridge, 3.4 mi upstream from Jumpoff Joe Creek, 3.7 mi southwest of Merlin, and at mile 86.8.

DRAINAGE AREA.--3,271 mi².

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: February 1974 to current year.

INSTRUMENTATION.--Temperature recorder February 1974 to January 1983; water-quality monitor since February 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 25.5°C Aug. 3-5, 1977; minimum, 0.0°C Jan. 9, 1977, Dec. 30, 1978, to Jan. 1, 1979, Jan. 30, 1980.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 23.0°C July 9, 18, 19; minimum, 3.0°C Jan. 27, Feb. 4-6.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

14370400 ROGUE RIVER NEAR MERLIN, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

14371500 GRAVE CREEK AT PEASE BRIDGE, NEAR PLACER, OR

LOCATION.--Lat 42°38'30", long 123°12'40", in SE¼ sec.6, T.34 S., R.4 W., Jackson County, Hydrologic Unit 17100310, on right bank 0.5 mi downstream from Pease Bridge, 0.5 mi upstream from Boulder Creek, 5.4 mi east of Placer, and at mile 27.1.

DRAINAGE AREA.--22.1 mi² at measuring site 0.5 mi upstream.

PERIOD OF RECORD.--October 1940 to current year. Prior to October 1945 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,354.2 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark). Prior to Aug. 4, 1955, at sites 0.5 mi upstream at datum 29.9 ft higher.

REMARKS.--Estimated daily discharges: Jan. 20 to Feb. 20. Records good except for estimated daily discharges, which are poor. No regulation. One small diversion upstream from station. Prior to 1945, Columbia upper ditch diverted water about 2 mi upstream from station, bypassing station. Records herein are for measuring site.

AVERAGE DISCHARGE.--40 years (water years 1946-85), 59.9 ft³/s, 36.81 in/yr, 43,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,240 ft³/s Dec. 22, 1964, gage height, 11.20 ft, from rating curve extended above 1,200 ft³/s on basis of slope-area measurement at gage height 9.66 ft; minimum, 0.12 ft³/s July 15, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 850 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1600	*1,810	*6.28	No other peak greater than base discharge.			
Minimum, 0.34 ft ³ /s Aug. 29.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1.5	8.7	205	47	31	65	360	31	12	3.0	1.4	.50		
2	1.5	235	147	43	32	60	374	29	12	2.7	1.1	.50		
3	1.5	171	126	41	33	52	308	29	10	2.5	.85	.87		
4	1.6	100	106	43	31	50	222	27	10	2.4	.77	1.1		
5	1.8	55	90	46	30	46	181	25	9.8	2.0	.72	1.1		
6	2.0	68	80	54	38	43	162	23	13	1.9	.66	.95		
7	1.8	85	77	67	50	40	145	21	21	1.7	.76	.93		
8	1.7	77	76	72	36	37	123	21	30	1.6	.80	1.2		
9	1.9	85	83	65	30	36	111	20	23	1.5	.83	1.7		
10	2.8	266	176	56	60	39	101	19	18	1.3	.71	1.7		
11	6.6	453	185	49	125	43	89	19	14	1.2	.70	1.6		
12	6.3	1130	156	44	250	45	76	17	11	1.1	.61	1.7		
13	7.1	529	121	40	210	44	70	16	9.3	1.1	.52	1.5		
14	4.6	243	98	38	190	45	67	15	8.2	1.0	.48	2.0		
15	5.0	148	93	38	190	47	63	15	7.7	.97	.43	4.7		
16	4.5	101	77	48	120	52	55	14	7.3	.96	.40	5.4		
17	5.0	82	66	70	115	57	48	14	6.3	.87	.39	3.3		
18	6.6	115	59	68	110	56	45	14	5.2	.83	.39	2.7		
19	9.9	107	51	64	96	55	43	13	4.7	.75	.69	3.5		
20	16	148	45	60	86	53	39	12	4.3	.66	.70	3.0		
21	12	131	42	54	75	49	43	11	4.4	.63	.77	2.8		
22	7.6	99	38	49	81	46	51	11	4.1	.60	.81	2.5		
23	5.8	98	36	45	89	61	49	11	3.8	.62	.70	2.5		
24	4.9	114	35	41	87	120	46	9.5	4.1	.58	.56	2.3		
25	4.3	93	34	38	83	89	42	10	4.3	.54	.57	2.1		
26	6.5	75	33	35	73	80	38	9.5	3.9	.53	.50	2.1		
27	8.5	139	33	33	63	67	36	9.3	3.4	.47	.42	2.0		
28	23	360	33	31	58	61	35	10	3.6	.46	.37	2.1		
29	24	210	32	29	---	60	34	12	3.0	.61	.38	2.0		
30	14	281	52	28	---	70	32	10	2.8	.78	.41	1.9		
31	10	---	53	29	---	166	---	12	---	1.3	.41	---		
TOTAL	210.3	5806.7	2538	1465	2472	1834	3088	509.3	274.2	37.16	19.81	62.25		
MEAN	6.78	194	81.9	47.3	88.3	59.2	103	16.4	9.14	1.20	.64	2.07		
MAX	24	1130	205	72	250	166	374	31	30	3.0	1.4	5.4		
MIN	1.5	8.7	32	28	30	36	32	9.3	2.8	.46	.37	.50		
CFSM	.31	8.78	3.71	2.14	4.00	2.68	4.66	.74	.41	.05	.03	.09		
IN.	.35	9.77	4.27	2.47	4.16	3.09	5.20	.86	.46	.06	.03	.10		
AC-FT	417	11520	5030	2910	4900	3640	6130	1010	544	74	39	123		
CAL YR 1984	TOTAL	22560.66	MEAN	61.6	MAX	1130	MIN	.89	CFSM	2.79	IN.	37.98	AC-FT	44750
WTR YR 1985	TOTAL	18316.72	MEAN	50.2	MAX	1130	MIN	.37	CFSM	2.27	IN.	30.83	AC-FT	36330

ROGUE RIVER BASIN

14372250 ROGUE RIVER AT MARIAL, OR

LOCATION.--Lat 42°42'50", long 123°53'10", in NW¼ sec.9, T.33 S., R.10 W., Curry County, Hydrologic Unit 17100310, on right bank 0.2 mi downstream from Mule Creek and at mile 48.2.

DRAINAGE AREA.--3,812 mi².

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: June 1974 to current year.

INSTRUMENTATION.--Temperature recorder since June 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 27.5°C Aug. 5, 1977; minimum, 1.0°C Jan. 1, 2, 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 24.5°C July 18, 26; minimum, 3.5°C Jan. 13-16, 27, 28, Feb. 4-6.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

ROGUE RIVER BASIN

14372300 ROGUE RIVER NEAR AGNESS, OR
(National stream quality accounting network station)

LOCATION.--Lat 42°34'50", long 124°03'30", in NE¼NW¼ sec.6, T.35 S., R.11 W., Curry County, Hydrologic Unit 17100310, on left bank 0.8 mi upstream from Shasta Costa Creek, 1.5 mi north of Agness, 2.6 mi upstream from Illinois River, and at mile 29.7.

DRAINAGE AREA.--3,939 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 113.81 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Public Roads).

REMARKS.--Estimated daily discharges: Nov. 15-27, May 4-14, June 7-12, Sept. 6-13. Water-discharge records good. Flow regulated since February 1977 by Lost Creek Lake (see sta 14335040), since December 1980 by Applegate Lake (see sta 14361900), slight regulation by Fish Lake and Emigrant Lake. Many diversions for irrigation and mining.

AVERAGE DISCHARGE.--25 years, 6,347 ft³/s, 4,598,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 290,000 ft³/s Dec. 23, 1964, from slope-area measurement; maximum gage height, 68.03 ft Dec. 23, 1964, from floodmark (backwater from Illinois River); minimum discharge, 608 ft³/s July 9, 10, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 51,400 ft³/s Nov. 28, gage height, 16.31 ft; minimum, 1,820 ft³/s Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2160	2680	22000	6010	3010	3740	12700	4480	4220	2470	2510	2410
2	2120	6580	15800	5560	3050	3780	13800	4170	4240	2430	2600	2510
3	2080	11700	14000	5120	2760	3710	12500	4020	4160	2410	2530	2640
4	2050	9510	12300	4670	2770	3710	10800	4300	3900	2320	2480	2640
5	2100	7010	10300	4590	2640	3770	9440	4400	3590	2310	2460	2590
6	2120	6390	8830	4620	2600	3680	8830	4500	3840	2310	2430	2600
7	2130	6790	7850	4700	4100	3580	8710	4400	3770	2270	2360	2700
8	2140	7800	7210	4820	7250	3470	8730	4200	3600	2220	2320	2800
9	2270	9720	6800	4670	8530	3360	8640	3900	3800	2210	2340	2900
10	2340	13100	7090	4450	6320	3320	8570	3600	4300	2390	2360	3000
11	2810	18300	11000	4230	7090	3290	8350	3500	4100	2390	2390	3100
12	2800	34400	10300	4000	19200	3270	8050	3300	3600	2420	2430	3000
13	2710	38800	12300	3850	16800	3200	7920	3200	3290	2440	2380	2910
14	2590	22700	10500	3720	11600	3110	7750	3120	3090	2520	2340	2710
15	2510	19300	9850	3630	9580	3060	7520	2950	3030	2540	2340	2550
16	2450	18000	10100	3550	8720	3030	7400	2900	3010	2580	2360	2290
17	2430	16000	8910	3490	7680	3000	7550	2880	3000	2500	2350	2070
18	2460	15000	8230	3520	6620	3000	6710	2950	2930	2480	2370	2070
19	2630	13000	7930	3640	5900	2960	5640	3170	2630	2480	2460	2100
20	2800	16000	7170	3690	5560	2950	6670	3280	2450	2450	2510	2120
21	2880	15500	6620	3670	5220	2940	6350	3660	2360	2400	2480	2100
22	2690	13000	6250	3590	4820	3010	5760	3670	2330	2380	2490	2080
23	2550	11000	5920	3500	4610	4000	6080	3900	2350	2370	2430	2050
24	2480	19000	5670	3390	4500	5650	5790	3900	2360	2360	2430	2010
25	2380	15000	5500	3250	4330	5140	5560	4180	2400	2410	2420	1940
26	2430	12000	5350	3150	4170	5030	5250	4420	2330	2360	2390	1900
27	2460	17000	5270	3080	4040	6790	4920	4380	2410	2330	2370	1880
28	2870	45800	5250	3080	3870	8000	4660	4250	2430	2340	2340	1850
29	3310	34400	5190	3110	---	8710	4550	4440	2430	2360	2370	1850
30	3290	24100	6040	3070	---	8140	4480	4460	2450	2420	2370	1850
31	2830	---	6650	2990	---	9400	---	4200	---	2440	2370	---
TOTAL	77870	499580	272180	122410	177340	133800	229680	118680	94400	74310	74780	71220
MEAN	2512	16650	8780	3949	6334	4316	7656	3828	3147	2397	2412	2374
MAX	3310	45800	22000	6010	19200	9400	13800	4500	4300	2580	2600	3100
MIN	2050	2680	5190	2990	2600	2940	4480	2880	2330	2210	2320	1850
AC-FT	154500	990900	539900	242800	351800	265400	455600	235400	187200	147400	148300	141300
CAL YR 1984	TOTAL	2792610	MEAN	7630	MAX	45800	MIN	2050	AC-FT	5539000		
WTR YR 1985	TOTAL	1946250	MEAN	5332	MAX	45800	MIN	1850	AC-FT	3860000		

ROGUE RIVER BASIN

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14372300 ROGUE RIVER NEAR AGNESS, OR--Continued
(National stream quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1960 to current year.

INSTRUMENTATION.--Temperature recorder since October 1960.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 26.5°C on several days in 1962, Aug. 3, 6, 9-11, 1977; minimum, 1.0°C Jan. 22-25, 1962, Dec. 9-16, 1972, Jan. 9, 10, 1977, Jan. 1-3, 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 25°C July 19; minimum, 4.0°C Jan. 14-16, 25, 28, 29, Feb. 4-6.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	
NOV 14...	1245	23300	87	7.70	9.5	12.0	200	920	36	0	8.3	
JAN 16...	1030	3550	117	7.80	4.0	12.8	K8	K10	49	0	12	
MAR 20...	1000	2950	120	7.90	9.5	11.2	K3	K5	54	0	13	
MAY 14...	1330	3200	104	7.50	15.0	10.4	K13	K16	41	0	9.9	
JUL 09...	1200	2210	90	8.20	22.0	8.7	K5	100	--	--	--	
SEP 12...	1030	2970	97	7.96	15.0	10.0	K76	88	39	0	9.4	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV 14...	3.7	3.4	1.0	36	4.9	2.0	<.10	.030	.14	.20	.030	
JAN 16...	4.7	4.9	.90	52	7.1	2.7	<.10	.030	.19	.40	.050	
MAR 20...	5.2	5.3	1.0	55	3.5	2.8	<.10	<.010	<.10	.20	.020	
MAY 14...	4.0	4.3	1.1	51	3.6	2.3	<.10	.040	<.10	.20	.030	
JUL 09...	--	--	--	56	--	--	--	.050	<.10	.30	.030	
SEP 12...	3.7	5.3	1.5	44	4.1	2.2	.10	.060	.17	.40	.070	

ROGUE RIVER BASIN

14372300 ROGUE RIVER NEAR AGNESS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	TUR- BID- ITY (NTU)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 14...	.030	.100	18	59	64	3710	34	126	7930	53
JAN 16...	.040	.050	22	77	86	738	2.2	2	19	89
MAR 20...	.040	.050	17	85	81	677	.80	--	--	--
MAY 14...	.030	.040	19	90	75	778	2.2	4	35	62
JUL 09...	.070	.080	--	--	--	--	--	7	42	--
SEP 12...	.070	.090	26	71	79	569	2.0	7	56	51
DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 14...	160	<1	22	<.5	<1	3	<3	4	230	1
MAR 20...	30	<1	23	<.5	<1	<1	<3	3	31	<1
MAY 14...	20	<1	19	<.5	<1	<1	<3	5	25	8
SEP 12...	20	<1	17	<.5	1	1	<3	2	31	<1
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 14...	<4	8	.1	<10	3	<1	<1	51	<6	32
MAR 20...	<4	4	.1	<10	2	<1	<1	79	<6	5
MAY 14...	<4	5	.2	<10	3	<1	4	69	<6	16
SEP 12...	<4	4	.2	<10	1	<1	<1	67	<6	58

K - Results based on colony count outside acceptable range (non-ideal colony count).

14372300 ROGUE RIVER NEAR AGNESS, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

ROGUE RIVER BASIN

14372500 EAST FORK ILLINOIS RIVER NEAR TAKILMA, OR

LOCATION.--Lat 42°00'10", long 123°37'30", in SE¼NE¼ sec.15, T.41 S., R.8 W., Josephine County, Hydrologic Unit 17100311, Siskiyou National Forest, on right bank 0.3 mi downstream from Dunn Creek (California-Oregon State line), 3.4 mi south of Takilma, and at mile 71.2.

DRAINAGE AREA.--42.3 mi².

PERIOD OF RECORD.--April to September 1926, April 1927 to April 1932, October 1940 to current year. Monthly discharge only for some periods, published in WSP 1318. Records prior to 1942 water year not equivalent owing to large diversions.

REVISED RECORDS.--WSP 1184: 1948. WSP 1288: 1951(P). WSP 1398: 1946, 1947(M), 1949. WSP 1738: Drainage area (former site).

GAGE.--Water-stage recorder. Elevation of gage is 1,780 ft, from topographic map. Prior to Oct. 31, 1946, nonrecording gage at sites 0.6 mi downstream at different datums. Oct. 31, 1946, to May 13, 1949, nonrecording gage and May 14, 1949, to Aug. 23, 1965, water-stage recorder at site 0.6 mi downstream at datum 1,746.6 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records excellent except those for period of backwater from rock dam, June 26 to Sept. 30, which are fair. No regulation. Two small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--44 years (water years 1942-85), 180 ft³/s, 57.79 in/yr, 130,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft³/s Dec. 22, 1964, gage height, 14.90 ft, present site and datum, from floodmark, from rating curve extended above 4,400 ft³/s on basis of slope-area measurement of peak flow; minimum, 4.6 ft³/s Nov. 3, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1500	*2,920	*7.42	No other peak greater than base discharge.			
Minimum, 7.1 ft ³ /s Aug. 25, 26.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	12	37	594	86	50	113	397	147	54	24	17	9.5		
2	12	1090	405	81	48	106	497	146	52	24	15	14		
3	11	996	317	77	47	99	494	142	49	23	14	11		
4	12	715	256	75	44	102	416	113	54	23	13	9.8		
5	13	307	216	76	43	93	396	100	54	23	12	9.2		
6	12	586	189	81	43	87	417	94	113	23	11	10		
7	12	441	172	89	148	82	386	88	157	22	11	12		
8	12	375	161	89	275	78	332	84	139	21	11	11		
9	13	333	156	86	167	76	329	80	95	21	11	11		
10	23	695	211	79	120	80	316	75	76	20	11	12		
11	39	1270	228	75	466	84	279	70	66	20	10	12		
12	25	2490	250	71	995	86	239	68	60	20	9.6	12		
13	43	1360	222	67	555	84	241	69	55	19	9.3	15		
14	23	737	196	65	393	84	258	74	50	19	9.2	19		
15	18	433	189	63	359	85	239	75	47	19	8.8	16		
16	19	306	166	66	328	90	204	82	44	19	8.8	13		
17	19	275	149	87	260	95	173	82	42	19	8.7	13		
18	19	539	136	105	212	93	159	85	39	19	9.0	14		
19	39	417	122	101	187	93	140	86	37	18	9.7	12		
20	53	390	112	94	166	95	122	82	35	17	9.7	11		
21	33	325	106	87	147	94	126	79	33	17	9.5	11		
22	26	253	98	80	139	94	131	82	31	17	8.7	10		
23	22	264	92	74	141	171	144	85	30	17	8.2	9.9		
24	20	341	88	69	145	309	136	80	29	17	7.9	9.7		
25	18	287	85	66	143	210	123	74	28	16	7.5	9.5		
26	35	240	82	62	134	198	113	71	27	16	7.5	9.4		
27	36	1350	79	59	122	194	116	66	27	15	7.7	9.4		
28	149	1570	76	58	113	166	127	72	25	15	7.8	9.4		
29	125	731	72	54	---	152	133	61	25	18	7.8	9.3		
30	62	878	99	52	---	162	135	54	25	15	8.1	9.1		
31	45	---	93	51	---	256	---	52	---	16	8.4	---		
TOTAL	1000	20031	5417	2325	5990	3811	7318	2618	1598	592	307.9	343.2		
MEAN	32.3	668	175	75.0	214	123	244	84.5	53.3	19.1	9.93	11.4		
MAX	149	2490	594	105	995	309	497	147	157	24	17	19		
MIN	11	37	72	51	43	76	113	52	25	15	7.5	9.1		
CFSM	.76	15.8	4.14	1.77	5.06	2.91	5.77	2.00	1.26	.45	.23	.27		
IN.	.88	17.62	4.76	2.04	5.27	3.35	6.44	2.30	1.41	.52	.27	.30		
AC-FT	1980	39730	10740	4610	11880	7560	14520	5190	3170	1170	611	681		
CAL YR 1984	TOTAL	67522	MEAN	184	MAX	2490	MIN	10	CFSM	4.35	IN.	59.38	AC-FT	133900
WTR YR 1985	TOTAL	51351.1	MEAN	141	MAX	2490	MIN	7.5	CFSM	3.33	IN.	45.16	AC-FT	101900

14375100 SUCKER CREEK BELOW LITTLE GRAYBACK CREEK, NEAR HOLLAND, OR

LOCATION.--Lat 42°09'35", long 123°28'40", in NE¼SW¼ sec.24, T.39 S., R.7 W., Josephine County, Hydrologic Unit 17100311, on right bank 500 ft downstream from Little Grayback Creek, 2.0 mi downstream from Grayback Creek, 3.7 mi northeast of Holland, and at mile 9.3.

DRAINAGE AREA.--83.9 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,713.92 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark).

REMARKS.--Estimated daily discharges: Nov. 8 to Dec. 25. Records good except for estimated daily discharges, which are fair. Grayback Canal and 3 small diversions from Grayback and Cave Creeks divert water for domestic use and irrigation upstream from station. Return flow from these diversions enters creek upstream from station.

AVERAGE DISCHARGE.--20 years, 247 ft³/s, 39.98 in/yr, 179,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,550 ft³/s Jan. 15, 1974, gage height, 8.20 ft; minimum, 12 ft³/s Oct. 20, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1940, 10.8 ft on Dec. 22, 1964, from floodmark, discharge, 19,300 ft³/s, from estimate based on slope-area measurement of peak flow at site 0.7 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	unknown	*3,300	a*5.68	Nov. 27	unknown	unknown	unknown
Minimum, 22 ft ³ /s Aug. 26-30.							
a From peak-stage indicator.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	30	48	550	143	106	188	451	241	139	68	44	30		
2	28	337	450	140	108	178	571	240	142	66	42	47		
3	25	334	370	138	107	169	585	228	130	64	37	35		
4	28	264	320	138	100	172	522	202	133	61	36	32		
5	32	159	270	135	100	164	504	194	129	60	35	30		
6	30	249	250	140	99	158	524	188	184	59	34	32		
7	27	206	230	143	138	153	512	181	218	56	33	38		
8	29	180	210	141	199	147	471	175	189	55	34	38		
9	39	300	200	139	170	144	471	168	161	54	33	44		
10	56	500	250	134	154	144	460	161	146	53	31	48		
11	92	800	270	128	335	143	422	156	137	53	31	43		
12	56	1500	300	126	872	140	388	156	131	52	30	44		
13	73	900	280	123	568	138	397	160	124	50	29	53		
14	49	600	250	119	455	135	421	164	117	49	28	72		
15	44	330	240	115	434	135	403	163	112	47	27	64		
16	46	250	230	117	412	137	357	168	107	46	27	51		
17	47	230	225	128	359	139	318	168	104	45	26	55		
18	46	420	220	138	315	135	304	173	100	44	28	52		
19	59	350	210	138	287	136	281	177	95	43	30	44		
20	74	330	200	138	262	137	254	172	91	42	30	42		
21	60	280	195	136	242	137	254	169	87	41	30	40		
22	49	240	190	131	234	136	247	176	83	41	27	39		
23	43	250	180	127	230	158	251	183	83	40	26	38		
24	42	300	170	125	226	211	232	176	80	39	26	37		
25	39	280	170	119	222	180	218	171	78	38	25	37		
26	58	240	165	114	214	186	209	164	76	36	24	36		
27	52	950	155	111	200	194	212	154	73	35	23	35		
28	80	1000	148	111	189	191	219	166	72	35	24	34		
29	81	600	143	106	---	188	218	150	71	41	23	34		
30	58	700	158	100	---	200	221	139	71	41	24	34		
31	51	---	146	102	---	287	---	139	---	43	25	---		
TOTAL	1523	13127	7345	3943	7337	5060	10897	5422	3463	1497	922	1258		
MEAN	49.1	438	237	127	262	163	363	175	115	48.3	29.7	41.9		
MAX	92	1500	550	143	872	287	585	241	218	68	44	72		
MIN	25	48	143	100	99	135	209	139	71	35	23	30		
CFSM	.59	5.22	2.82	1.51	3.12	1.94	4.33	2.09	1.37	.58	.35	.50		
IN.	.68	5.82	3.26	1.75	3.25	2.24	4.83	2.40	1.54	.66	.41	.56		
AC-FT	3020	26040	14570	7820	14550	10040	21610	10750	6870	2970	1830	2500		
CAL YR 1984	TOTAL	93208	MEAN	255	MAX	1500	MIN	25	CFSM	3.04	IN.	41.33	AC-FT	184900
WTR YR 1985	TOTAL	61794	MEAN	169	MAX	1500	MIN	23	CFSM	2.01	IN.	27.40	AC-FT	122600

ROGUE RIVER BASIN

14375500 WEST FORK ILLINOIS RIVER BELOW ROCK CREEK, NEAR O'BRIEN, OR

LOCATION.--Lat 42°02'20", long 123°44'50", in SW¼SE¼ sec.34, T.40 S., R.9 W., Josephine County, Hydrologic Unit 17100311, Siskiyou National Forest, on left bank 0.2 mi downstream from Rock Creek, 3.0 mi southwest of O'Brien, and at mile 12.8.

DRAINAGE AREA.--42.4 mi².

PERIOD OF RECORD.--September 1954 to September 1985 (discontinued).

REVISED RECORDS.--WDR OR-80-2: 1979.

GAGE.--Water-stage recorder. Datum of gage is 1,516.14 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Three small diversions from Elk Creek for irrigation upstream from station. Several observations of water temperature were taken during the year.

AVERAGE DISCHARGE.--31 years, 219 ft³/s, 70.14 in/yr, 158,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft³/s Dec. 22, 1964, gage height, 16.05 ft, from rating curve extended above 6,200 ft³/s, on basis of slope-area measurement at gage height 14.79 ft; minimum, 1.5 ft³/s Sept. 2-4, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1530	*4,040	*9.77	Feb. 12	0100	2,880	8.71
Nov. 27	1830	3,280	9.10				

Minimum, 4.5 ft³/s Aug. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	7.5	55	815	174	46	88	674	58	35	18	11	5.5		
2	6.7	1160	529	144	48	84	645	56	40	17	10	7.0		
3	6.7	1410	420	127	48	80	522	65	34	16	7.6	6.6		
4	7.2	856	331	114	46	99	392	59	33	15	7.3	6.3		
5	8.1	331	266	106	46	97	307	54	32	15	7.4	6.1		
6	8.1	550	219	101	47	96	246	52	87	14	7.2	6.2		
7	7.8	523	188	99	711	94	202	50	229	13	7.0	7.0		
8	8.2	654	166	95	951	93	170	47	191	13	6.6	6.5		
9	9.4	743	148	92	480	95	148	46	116	13	6.4	6.9		
10	28	1240	181	86	323	109	133	45	86	13	6.9	7.6		
11	57	1960	197	82	1080	129	124	43	68	12	6.5	7.5		
12	45	3230	208	77	1830	129	112	41	57	12	5.6	9.1		
13	55	1880	200	72	854	117	102	37	49	11	5.5	13		
14	24	1000	177	65	546	109	96	37	44	11	5.6	21		
15	18	526	189	62	411	104	90	34	40	9.0	5.5	17		
16	21	337	174	58	325	98	85	34	35	8.9	5.4	11		
17	23	293	160	56	259	92	78	35	33	9.4	5.4	10		
18	23	606	148	54	214	87	78	34	30	9.5	5.6	9.6		
19	84	457	135	52	186	80	80	32	28	9.6	6.1	13		
20	83	433	125	50	167	76	73	32	26	8.8	6.1	8.9		
21	50	355	124	49	148	74	84	31	24	9.2	6.1	7.5		
22	37	267	124	48	135	97	99	29	23	8.9	5.9	7.3		
23	30	281	120	48	127	525	104	29	21	9.1	5.7	7.2		
24	26	397	114	47	119	896	99	29	20	8.5	5.6	7.6		
25	24	367	109	46	110	451	90	28	20	8.2	5.5	7.6		
26	39	333	103	46	104	609	82	27	20	8.0	5.2	7.5		
27	41	1860	101	45	98	614	76	26	19	7.8	5.1	6.4		
28	252	2630	108	50	92	503	70	42	19	7.9	5.1	6.4		
29	176	1200	105	46	---	442	65	37	18	8.8	4.8	6.6		
30	95	1480	292	45	---	374	61	31	19	9.6	4.8	6.8		
31	69	---	224	45	---	532	---	32	---	11	5.0	---		
TOTAL	1369.7	27414	6500	2281	9551	7073	5187	1232	1496	345.2	193.5	256.7		
MEAN	44.2	914	210	73.6	341	228	173	39.7	49.9	11.1	6.24	8.56		
MAX	252	3230	815	174	1830	896	674	65	229	18	11	21		
MIN	6.7	55	101	45	46	74	61	26	18	7.8	4.8	5.5		
CFSM	1.04	21.6	4.95	1.74	8.04	5.38	4.08	.94	1.18	.26	.15	.20		
IN.	1.20	24.05	5.70	2.00	8.38	6.21	4.55	1.08	1.31	.30	.17	.23		
AC-FT	2720	54380	12890	4520	18940	14030	10290	2440	2970	685	384	509		
CAL YR 1984	TOTAL	83040.8	MEAN	227	MAX	3230	MIN	5.6	CFSM	5.35	IN.	72.86	AC-FT	164700
WTR YR 1985	TOTAL	62899.1	MEAN	172	MAX	3230	MIN	4.8	CFSM	4.06	IN.	55.19	AC-FT	124800

ROGUE RIVER BASIN

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14377100 ILLINOIS RIVER NEAR KERBY, OR

LOCATION.--Lat 42°13'55", long 123°39'45", in SE¼SE¼ sec.29, T.38 S., R.8 W., Josephine County, Hydrologic Unit 17100311, Siskiyou National Forest, on right bank 1.6 mi upstream from Josephine Creek, 2.5 mi northwest of Kerby, and at mile 50.3.

DRAINAGE AREA.--380 mi².

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,198.8 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 28, 1965, water-stage recorder, and Jan. 28 to Sept. 30, 1965, nonrecording gage 700 ft downstream at datum 2.99 ft lower.

REMARKS.--Estimated daily discharges: Oct. 1-14 and Jan. 12-30. Records good. No regulation. Diversions for irrigation upstream from station. Several observations of water temperature were obtained during the year.

AVERAGE DISCHARGE.--24 years, 1,347 ft³/s, 48.14 in/yr, 975,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,200 ft³/s Dec. 22, 1964, gage height, 45.28 ft, from floodmark, site and datum then in use, from rating curve extended above 30,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 14 ft³/s Aug. 11, 13, 14, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	1800	*20,500	*22.65	Feb. 12	0430	11,500	16.93
Nov. 27	2200	16,400	20.26				

Minimum, 23 ft³/s Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	55	311	4870	1020	395	742	3250	650	295	96	36	29		
2	55	3770	3460	905	402	714	3500	653	325	80	36	34		
3	58	5740	2880	829	392	675	3260	653	307	75	36	31		
4	60	4260	2340	770	377	734	2710	602	302	75	35	33		
5	70	1970	2010	735	369	728	2380	556	293	74	33	31		
6	65	2520	1730	718	368	700	2240	530	486	73	32	33		
7	60	2810	1540	726	1440	662	2080	505	1000	71	32	32		
8	60	2870	1400	716	3600	635	1830	481	1210	68	32	34		
9	70	3300	1280	693	2350	617	1700	449	739	68	32	39		
10	130	5940	1560	656	1790	629	1640	424	565	65	34	43		
11	220	8820	1800	623	3780	674	1490	399	474	61	34	43		
12	170	17200	1750	590	8820	698	1340	385	375	60	34	46		
13	280	10400	1670	550	4630	670	1240	366	342	59	33	53		
14	150	5940	1500	530	3180	645	1270	366	287	55	32	71		
15	144	3630	1550	520	2610	629	1230	354	271	52	31	86		
16	144	2650	1460	560	2290	620	1110	356	238	48	30	77		
17	155	2250	1340	650	1920	616	981	355	223	46	30	68		
18	153	3790	1270	750	1620	595	906	363	207	46	29	71		
19	179	3200	1150	770	1410	578	899	354	201	45	29	70		
20	374	3130	1060	740	1280	563	809	348	176	42	29	67		
21	285	2760	1010	680	1140	566	797	340	155	39	28	66		
22	227	2250	957	640	1050	555	899	331	136	39	25	61		
23	187	2260	911	580	1010	1240	879	339	116	37	26	59		
24	166	3220	866	550	956	3310	853	337	112	36	27	49		
25	154	2790	829	520	919	1960	781	311	109	35	28	50		
26	153	2440	791	490	870	2160	724	310	104	34	27	47		
27	202	9120	755	470	817	2820	693	292	98	34	26	46		
28	551	13300	758	450	765	2660	685	312	91	35	25	48		
29	1060	6870	726	440	---	2380	672	348	91	36	25	48		
30	528	7260	1220	420	---	2070	646	306	93	36	28	47		
31	384	---	1210	402	---	2460	---	292	---	36	28	---		
TOTAL	6549	146771	47653	19693	50550	35305	43494	12667	9421	1656	942	1512		
MEAN	211	4892	1537	635	1805	1139	1450	409	314	53.4	30.4	50.4		
MAX	1060	17200	4870	1020	8820	3310	3500	653	1210	96	36	86		
MIN	55	311	726	402	368	555	646	292	91	34	25	29		
CFSM	.56	12.9	4.04	1.67	4.75	3.00	3.82	1.08	.83	.14	.08	.13		
IN.	.64	14.37	4.66	1.93	4.95	3.46	4.26	1.24	.92	.16	.09	.15		
AC-FT	12990	291100	94520	39060	100300	70030	86270	25120	18690	3280	1870	3000		
CAL YR 1984	TOTAL	535401	MEAN	1463	MAX	17200	MIN	48	CFSM	3.85	IN.	52.41	AC-FT	1062000
WTR YR 1985	TOTAL	376213	MEAN	1031	MAX	17200	MIN	25	CFSM	2.71	IN.	36.83	AC-FT	746200

CHETCO RIVER BASIN

14400000 CHETCO RIVER NEAR BROOKINGS, OR

LOCATION.--Lat 42°07'25", long 124°11'10", in SE¼ sec.12, T.40 S., R.13 W., Curry County, Hydrologic Unit 17100312, on right bank 16 ft upstream from bridge, 0.5 mi upstream from Elk Creek, 6.8 mi northeast of Brookings, and at mile 10.7.

DRAINAGE AREA.--271 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 50 ft, from topographic map.

REMARKS.--Estimated daily discharges: May 17-22. Records good. No regulation or diversion upstream from station. Several measurements of water temperature made during the year.

AVERAGE DISCHARGE.--16 years, 2,383 ft³/s, 119.41 in/yr, 1,726,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65,800 ft³/s Jan. 16, 1971, gage height, 27.45 ft; minimum, 45 ft³/s Oct. 21-23, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 32.25 ft, from high-water mark on bridge pier, discharge, 85,400 ft³/s, from rating curve extended above 45,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1230	24,300	14.92	Nov. 27	1830	21,400	13.86
Nov. 11	2100	*26,200	*15.60				

Minimum, 69 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	826	10000	2370	395	802	4100	639	661	354	153	85
2	74	13600	6890	1990	430	765	4470	631	691	336	150	93
3	70	11500	5300	1730	414	723	4040	706	563	318	142	94
4	76	7580	4210	1530	387	873	3250	683	500	307	134	90
5	79	4390	3430	1390	371	1010	2780	623	453	294	127	86
6	77	5120	2860	1290	390	986	2380	594	3500	285	123	82
7	75	7570	2460	1230	4630	941	2040	553	7880	274	121	90
8	94	6500	2130	1150	6830	903	1740	520	6540	262	119	91
9	169	7110	1900	1100	3730	890	1520	501	3740	252	117	93
10	310	18600	2120	1000	2740	954	1380	477	2640	243	113	102
11	1020	19500	2200	913	5640	1080	1460	453	2030	235	109	105
12	1000	23900	2310	847	12200	1150	1310	430	1650	230	105	142
13	1330	18700	2310	789	7010	1100	1140	418	1380	224	102	303
14	605	12000	2130	741	4690	1040	1040	400	1200	209	103	486
15	387	8160	2350	698	3580	1020	959	388	1070	206	102	484
16	300	5920	2280	659	2930	1000	901	375	956	198	101	272
17	270	4900	2180	629	2420	965	838	365	866	188	100	203
18	273	6720	2030	610	2030	913	805	355	789	183	100	169
19	753	5720	1840	594	1780	864	856	350	723	177	101	146
20	1290	5050	1670	564	1600	831	784	340	659	175	100	132
21	812	4400	1610	533	1420	835	866	330	602	173	98	124
22	580	3690	1480	507	1300	930	1270	320	560	173	94	117
23	451	3650	1370	486	1210	4630	1250	314	528	173	92	111
24	368	4440	1300	466	1130	8730	1120	313	493	162	91	106
25	309	4150	1250	448	1040	4840	1000	303	470	150	91	104
26	393	3770	1210	434	973	4520	906	291	444	145	89	100
27	452	12200	1250	418	912	4730	835	283	422	142	87	98
28	2230	17200	1320	488	850	4460	774	373	402	137	86	97
29	2620	11500	1300	423	---	3990	727	412	379	140	87	96
30	1340	14900	3550	398	---	3340	675	349	368	147	87	95
31	940	---	3020	385	---	3230	---	369	---	151	85	---
TOTAL	18820	273266	81260	26810	73032	63045	47216	13458	43159	6643	3309	4396
MEAN	607	9109	2621	865	2608	2034	1574	434	1439	214	107	147
MAX	2620	23900	10000	2370	12200	8730	4470	706	7880	354	153	486
MIN	70	826	1210	385	371	723	675	283	368	137	85	82
CFSM	2.24	33.6	9.67	3.19	9.62	7.51	5.81	1.60	5.31	.79	.39	.54
IN.	2.58	37.51	11.15	3.68	10.03	8.65	6.48	1.85	5.92	.91	.45	.60
AC-FT	37330	542000	161200	53180	144900	125000	93650	26690	85610	13180	6560	8720
CAL YR 1984	TOTAL	957235	MEAN	2615	MAX	34000	MIN	65	CFSM	9.65	IN.	131.40
WTR YR 1985	TOTAL	654414	MEAN	1793	MAX	23900	MIN	70	CFSM	6.62	IN.	89.83
											AC-FT	1899000
											AC-FT	1298000

SANDY RIVER BASIN

452650122091801 BULL RUN RESERVOIR NUMBER TWO, OR

LOCATION.--Lat 45°26'55", long 122°08'45", in SE-1/4SE-1/2 sec.26, T.1 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on headworks dam on Bull Run River, 4.4 mi northeast of town of Bull Run, and approximately 20 mi east of Portland.

PERIOD OF RECORD.--June 1980 to September 1981 (event sampling), September 1981 to November 1981 (weekly composite), July 1982 to current year (weekly composite).

INSTRUMENTATION.--A bulk-type plastic double cylinder with receiving funnel directing deposition to inner cylinder was used for the period of record June 1980 to September 1981. The wet-deposition sample collector is an Aerochem Model 301* wet/dry deposition collector. The sensing circuit is activated by wet deposition, causing the motor to move the cover from the wet bucket and cover the dry bucket. When the heater in the sensor evaporates the precipitation, the cycle is reversed. The sample buckets are polyethylene and have a capacity of 13 liters (28.6 cm inside diameter, 23.2 cm deep). The opening of the collector is approximately 5 ft above ground level and has been used for the weekly composite sampling period of record September 1981 to current year.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing-bucket gage. The sample collector is located in the restricted access area of the city of Portland's Bull Run River Watershed.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ATM DEP WET TOTAL FOR PERIOD (IN)	SAMPLE SIZE (ML)	COL- LECTOR EFFI- CIENCY WET DEPOS. PERCENT	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT								
02-09	0.61	1100	1.0	8.7	7.0	5.03	5.31	0.14
OCT								
09-16	3.14	5300	0.97	14.5	12.0	5.14	5.39	0.07
OCT								
16-23	0.77	1300	0.97	7.6	5.1	4.87	5.16	0.03
OCT								
23-30	2.99	4800	0.94	6.5	5.6	5.12	5.32	0.03
OCT 30-								
NOV 06	4.29	6800	0.92	7.6	6.6	5.18	5.35	0.04
NOV								
06-13	3.07	5200	0.98	4.2	3.5	5.22	5.33	0.01
NOV								
13-20	1.54	2700	1.0	7.1	5.7	5.03	5.28	0.04
NOV								
20-27	2.75	4700	0.99	5.8	5.0	5.04	5.24	0.02
NOV 27-								
DEC 04	2.20	3600	0.94	--	--	--	--	--
DEC								
04-11	2.40	4000	0.97	6.4	5.4	4.79	5.09	0.01
DEC								
11-18	2.39	3800	0.92	13.4	12.5	4.95	5.26	0.06
DEC								
18-26	2.02	2600	0.75	5.0	3.9	5.05	5.38	0.06
DEC 26-								
JAN 02	36.83	2300	0.92	6.4	5.1	4.98	5.58	0.05
JAN								
02-08	0.0	0	--	--	--	--	--	--
JAN								
08-15	0.09	160	1.0	6.0	4.9	4.95	5.99	0.19
JAN								
15-22	0.11	21	0.11	--	58.7	--	4.29	0.77
JAN								
22-29	0.01	11	0.63	--	37.7	--	6.52	--
JAN 29-								
FEB 05	0.69	60	0.05	--	23.1	--	6.04	0.29
FEB								
05-12	3.77	6200	0.95	6.5	5.5	4.99	5.30	0.03
FEB								
12-19	0.81	1400	0.99	7.8	6.0	4.82	5.19	0.03
FEB								
19-26	2.00	3300	0.94	8.1	7.1	4.89	5.22	0.04
FEB 26-								
MAR 05	1.00	1700	0.97	6.7	6.0	4.98	5.24	0.05
MAR								
05-12	0.15	230	0.89	15.6	13.8	4.53	4.78	0.19
MAR								
12-19	0.0	0	--	--	--	--	--	--
MAR								
19-26	3.11	5300	0.98	6.3	5.4	5.01	5.54	0.07
MAR 26-								
APR 02	1.91	3300	0.99	4.5	3.7	4.98	5.27	0.03
APR								
02-09	0.13	120	0.55	9.9	11.1	5.17	5.29	0.24
APR								
09-16	0.13	250	1.1	7.7	6.0	4.89	5.49	0.21
APR								
16-23	2.65	4500	0.98	10.9	8.8	4.73	5.10	0.06
APR								
23-30	0.75	1300	0.99	14.9	12.9	4.56	4.82	0.08
APR 30-								
MAY 07	0.42	790	1.1	7.7	6.6	5.10	5.48	0.11
MAY								
07-14	0.8	1400	0.99	15.2	13.0	4.52	4.78	0.15
MAY								
14-21	0.07	100	0.87	37.8	28.2	4.16	4.56	0.32
MAY								
21-28	0.09	150	0.97	17.7	15.7	4.48	4.69	0.16
MAY 28-								
JUN 04	2.50	4400	1.0	5.7	5.5	4.87	5.07	0.02
JUN								
04-11	3.48	6000	1.0	3.7	3.4	5.13	5.28	0.02
JUN								
11-18	0.0	7	--	--	--	--	5.98	--
JUN								
18-25	0.0	0	--	--	--	--	--	--
JUN 25-								
JUL 02	0.0	2	--	--	--	--	--	--

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

CHEMICAL QUALITY OF PRECIPITATION

SANDY RIVER BASIN

452650122091801 BULL RUN RESERVOIR NUMBER TWO, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4)
OCT 02-09	0.065	0.369	0.055	0.61	0.66	0.17	0.57	0.003
OCT 09-16	0.173	1.42	0.063	0.53	2.6	<0.02	0.18	0.003
OCT 16-23	0.019	0.123	0.022	0.44	0.21	0.09	0.45	0.003
OCT 23-30	0.053	0.414	0.021	0.37	0.76	<0.02	0.16	0.003
OCT 30-NOV 06	0.083	0.662	0.03	0.41	1.2	0.05	0.04	0.003
NOV 06-13	0.02	0.155	0.009	0.21	0.27	0.04	0.09	0.003
NOV 13-20	0.064	0.477	0.023	0.4	0.89	<0.02	0.2	0.003
NOV 20-27	0.025	0.2	0.01	0.33	0.33	0.05	0.24	0.003
NOV 27-DEC 04	--	--	--	--	--	--	--	--
DEC 04-11	0.009	0.062	0.01	0.45	0.09	0.06	0.37	0.003
DEC 11-18	0.151	1.24	0.053	0.65	2.3	0.04	0.37	0.003
DEC 18-26	0.023	0.143	0.014	0.34	0.2	0.05	0.35	0.003
DEC 26-JAN 02	0.052	0.384	0.02	0.1	0.66	<0.02	0.16	<0.003
JAN 02-08	--	--	--	--	--	--	--	--
JAN 08-15	0.116	0.337	0.056	0.57	0.29	<0.02	0.75	0.003
JAN 15-22	0.302	1.023	0.123	3.1	1.4	0.55	6.7	0.013
JAN 22-29	--	--	--	--	--	--	--	--
JAN 29-FEB 05	0.309	2.44	0.35	0.76	4.4	0.08	0.85	0.003
FEB 05-12	0.057	0.469	0.017	0.38	0.82	<0.02	0.17	0.003
FEB 12-19	0.038	0.284	0.022	0.37	0.5	0.04	0.41	0.005
FEB 19-26	0.047	0.375	0.033	0.46	0.65	0.08	0.46	0.003
FEB 26-MAR 05	0.05	0.406	0.024	0.33	0.69	<0.02	0.17	0.003
MAR 05-12	0.082	0.372	0.126	1.0	0.67	<0.02	1.1	0.011
MAR 12-19	--	--	--	--	--	--	--	--
MAR 19-26	0.052	0.397	0.029	0.27	0.69	<0.02	0.23	0.003
MAR 26-APR 02	0.013	0.082	0.016	0.32	0.16	<0.02	0.25	0.003
APR 02-09	0.08	0.336	0.147	1.42	0.54	0.39	1.4	0.009
APR 09-16	0.046	0.132	0.065	0.59	0.25	0.19	0.85	0.003
APR 16-23	0.062	0.463	0.049	0.79	0.93	0.19	0.53	0.003
APR 23-30	0.076	0.559	0.049	1.14	1.0	0.18	0.64	0.003
APR 30-MAY 07	0.065	0.468	0.035	0.51	0.85	0.06	0.14	0.003
MAY 07-14	0.053	0.295	0.031	1.05	0.54	0.22	1.2	0.01
MAY 14-21	0.162	0.861	0.101	2.59	1.1	0.68	3.9	0.01
MAY 21-28	0.068	0.177	0.046	1.66	0.27	0.43	1.4	0.01
MAY 28-JUN 04	0.014	0.096	0.014	0.33	0.18	<0.02	0.31	0.01
JUN 04-11	0.009	0.037	0.007	0.21	0.07	<0.02	0.09	0.01
JUN 11-18	--	--	--	--	--	--	--	--
JUN 18-25	--	--	--	--	--	--	--	--
JUN 25-JUL 02	--	--	--	--	--	--	--	--

CHEMICAL QUALITY OF PRECIPITATION

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SANDY RIVER BASIN

452650122091801 BULL RUN RESERVOIR NUMBER TWO, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ATM DEP WET TOTAL FOR PERIOD (IN)	SAMPLE SIZE (ML)	COL- LECTOR EFFI- CIENCY WET DEPOS. PERCENT	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	CALCIUM DIS- SOLVED (MG/L AS CA)
JUL 02-09	0.0	7	--	--	46.1	--	5.16	0.94
JUL 09-16	0.0	0	--	--	--	--	--	--
JUL 16-23	0.0	0	--	--	--	--	--	--
JUL 23-30	0.0	1	--	--	--	--	--	--
JUL 30- AUG 06	1.23	2100	1.0	6.0	5.5	4.85	5.01	0.03
AUG 06-13	1.88	3200	0.97	5.3	5.3	5.12	5.25	0.04
AUG 13-20	0.0	4	--	--	10.0	--	5.50	--
AUG 20-27	0.0	2	--	--	--	--	--	--
AUG 27- SEP 03	0.43	740	1.0	23.5	22.7	4.26	4.37	0.05
SEP 03-10	2.72	4800	1.0	6.4	5.0	4.77	5.05	0.02
SEP 10-17	2.11	3600	1.0	8.9	12.3	4.82	5.16	0.04
SEP 17-24	0.62	1000	0.97	6.4	5.7	5.01	5.23	0.03
SEP 24- OCT 01	0.0	2	--	--	--	--	--	--
DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4)
JUL 02-09	0.248	0.595	0.223	3.72	1.20	<0.5	2.7	0.074
JUL 09-16	--	--	--	--	--	--	--	--
JUL 16-23	--	--	--	--	--	--	--	--
JUL 23-30	--	--	--	--	--	--	--	--
JUL 30- AUG 06	0.011	0.028	0.033	0.32	0.07	<0.02	0.07	0.01
AUG 06-13	0.040	0.267	0.062	0.42	0.52	0.09	0.19	0.01
AUG 13-20	--	--	--	--	--	--	--	--
AUG 20-27	--	--	--	--	--	--	--	--
AUG 27- SEP 03	0.033	0.13	0.02	1.97	0.28	<0.02	1.60	0.01
SEP 03-10	0.013	0.055	0.014	0.32	<0.12	<0.02	<0.03	0.01
SEP 10-17	0.060	0.414	0.025	0.51	0.77	<0.02	0.28	0.01
SEP 17-24	0.041	0.281	0.019	0.34	0.53	0.07	0.30	0.01
SEP 24- OCT 01	--	--	--	--	--	--	--	--

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage partial-record stations

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi)	Period of record	Annual maximum		
					Date	Gage height (ft)	Dis- charge (ft ³ /s)
SANDY RIVER BASIN							
14138950	DEER CREEK NEAR BULL RUN, OR	Lat 45°29'31", long 122°03'27", in SE¼SW¼ sec.10, T.1 S., R.6 E., Multnomah County, at culvert on Forest Service road S10, 300 ft upstream from Bull Run Reservoir Number One, and 9.6 miles northeast of Bull Run.	1.62	1978-85	11- 3-84	3.74	129
14138960	COUGAR CREEK NEAR BULL RUN, OR	Lat 45°29'28", long 122°03'40", in SW¼SW¼ sec.10, T.1 S., R.6 E., Multnomah County, at culvert on Forest Service road S10, 300 ft upstream from Bull Run Reservoir Number One, and 9.4 miles northeast of Bull Run.	3.06	1978-85	6- 7-85	3.01	98
14138990	BEAR CREEK NEAR BULL RUN, OR	Lat 45°29'18", long 122°04'58", in NW¼NW¼ sec.16, T.1 S., R.6 E., Multnomah County, at culvert on Forest Service road S10, 400 ft upstream from Bull Run Reservoir Number One, and 8.3 miles northeast of Bull Run.	1.68	1978-85	6- 7-85	3.60	216
14139510	FIVEMILE CREEK NEAR BULL RUN, OR	Lat 45°28'57", long 122°05'25", in SW¼NE¼ sec.17, T.1 S., R.6 E., Multnomah County, at culvert on Forest Service road S10, 800 ft upstream from Bull Run Reservoir Number Two, and 7.9 miles northeast of Bull Run.	.79	1978-85	11- 3-84	1.39	34.0
14139600	CAMP CREEK NEAR BULL RUN, OR	Lat 45°27'41", long 122°06'13", in SW¼SW¼ sec.20, T.1 S., R.6 E., Multnomah County, 15 ft downstream from falls at confluence with West Branch of Camp Creek, 0.3 mile upstream from Bull Run Reservoir Number Two, and 6.6 miles northeast of Bull Run.	3.27	1978-85	11- 3-84	2.75	148

Discharge measurements made at miscellaneous sites during water year 1985

Stream	Tributary to	Location	Drainage area (mi)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
WILLAMETTE RIVER BASIN						
Salt Creek	Middle Fork Willamette River	Lat 43°42'34", long 122°17'58"	---	----	9-18-85	*150
.....do.....	do.....	Lat 43°43'33", long 122°26'09"	---	1984	9-18-85	*168
McKenzie River	Willamette River	Lat 44°18'42", long 122°01'32"	---	----	10- 8-85	*71.1
White Branch Creek	Lost Creek	Lat 44°09'33", long 122°01'03"	---	----	6-27-85	124
			---	----	8-14-85	34.6
			---	----	10- 9-85	*0.65
MCKENZIE RIVER BASIN						
Lost Creek	McKenzie River	Lat 44°11'01", long 122°03'30"	---	----	6-27-85	351
			---	----	8-14-85	238
			---	----	10- 9-85	*188
Rider Hot Springs	South Fork McKenzie River	Lat 44°04'55", long 122°14'36"	---	----	9-19-85	*0.18
Quartz Creek	McKenzie River	Lat 44°07'03", long 122°21'53"	---	----	9-19-85	*25.1
SANTIAM RIVER BASIN						
North Fork Breitenbush River	Breitenbush River	Lat 44°46'48", long 121°57'47"	---	----	8-31-85	*44.8
South Fork Breitenbush River	do.....	Lat 44°46'44", long 121°57'47"	---	----	8-31-85	*52.8
Devils Creek	do.....	Lat 44°46'32", long 121°58'03"	---	----	8-30-85	*3.84
Mansfield Creek	do.....	Lat 44°46'59", long 121°58'34"	---	----	8-30-85	*0.89
Short Creek	do.....	Lat 44°47'00", long 121°59'10"	---	----	8-30-85	*0.94
Breitenbush River	North Santiam River	Lat 44°46'51", long 121°58'45"	---	----	8-30-85	*102
Breitenbush River	do.....	Lat 44°46'43", long 121°59'41"	---	----	9-24-85	*116
Soda Fork	South Santiam River	Lat 44°24'22", long 122°16'48"	---	----	9-19-85	*30.3
South Santiam River	Santiam River	Lat 44°24'12", long 122°17'54"	---	----	9-19-85	*80.0
CLACKAMAS RIVER BASIN						
Ollalie Creek	Clackamas River	Lat 44°51'48", long 121°46'18"	---	----	8-21-85	*0.48
Squirrel Creek	do.....	Lat 44°52'08", long 121°50'38"	---	----	8-21-85	*5.27
Clackamas River	Willamette River	Lat 44°54'48", long 121°46'18"	---	----	8-21-85	*65.7
Berry Creek	Clackamas River	Lat 44°54'16", long 121°53'31"	---	----	8-16-85	*6.76
Sisi Creek	do.....	Lat 44°54'39", long 121°53'12"	---	----	8-16-85	*0.214
Hunter Creek	do.....	Lat 44°54'51", long 121°53'21"	---	----	8-16-85	*5.56
Rhododendron Creek	do.....	Lat 44°56'09", long 121°54'10"	---	----	8-16-85	*4.98
Lowe Creek	do.....	Lat 44°56'55", long 121°53'52"	---	----	8-16-85	*3.33
Wall Creek	do.....	Lat 44°57'20", long 121°53'00"	---	----	8-16-85	*dry
Last Creek	do.....	Lat 44°58'56", long 121°52'49"	---	----	8-16-85	*108
Wolf Creek	do.....	Lat 45°00'36", long 121°53'52"	---	----	8-15-85	*0.330
Granite Creek	do.....	Lat 45°01'01", long 121°59'15"	---	----	8-15-85	*1.39
Clackamas River	Willamette River	Lat 45°01'10", long 121°59'15"	---	----	8-15-85	*294
Austin Hot Springs	Clackamas River	Lat 45°01'16", long 122°00'30"	---	----	8-15-85	*0.413
Switch Creek	do.....	Lat 45°01'21", long 122°00'51"	---	----	8-15-85	*0.001
Clackamas River	Willamette River	Lat 45°01'55", long 122°03'23"	---	----	8-15-85	*332
Collawash River	Clackamas River	Lat 44°52'27", long 121°58'20"	---	----	8-14-85	*2.04
Elk Lake Creek	Collawash River	Lat 44°53'37", long 122°00'13"	---	----	8-14-85	*14.1
Collawash River	Clackamas River	Lat 44°53'09", long 122°00'19"	---	----	8-20-85	*29.2

* Base flow.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1985--Continued

Stream	Tributary to	Location	Drainage area (mi)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
CLACKAMAS RIVER BASIN--Continued						
Russ Creek	Collawash River	Lat 44°55'20", long 122°00'20"	---	----	8-14-85	*dry
Dickey Creek	do.....	Lat 44°56'41", long 122°02'16"	---	----	8-14-85	*3.78
Farm Creek	do.....	Lat 44°57'58", long 122°03'14"	---	----	8-14-85	*1.56
Collawash River	Clackamas River	Lat 44°59'01", long 122°03'41"	---	----	8-14-85	*52.7
Bagby Hot Springs	Hot Spring Fork Collawash River	Lat 44°56'10", long 122°10'20"	---	----	9-23-85	*0.035
Hot Spring Fork Collawash	Collawash River	Lat 44°59'07", long 122°04'14"	---	----	8-14-85	*24.4
Collawash River	Clackamas River	Lat 45°01'49", long 122°03'39"	---	----	8-14-85	*79.0
Oak Grove Fork Clackamas	do.....	Lat 45°05'55", long 121°44'55"	---	----	8-13-85	*12.6
.....do.....	do.....	Lat 45°06'52", long 121°48'22"	---	----	8-13-85	*78.8
Anvil Creek	Oak Grove Fork Clackamas River	Lat 45°06'48", long 121°48'49"	---	----	8-13-85	*0.459
Stone Creek	do.....	Lat 45°06'25", long 121°48'53"	---	----	8-13-85	*55.8
Pevine Creek	do.....	Lat 45°04'34", long 121°54'39"	---	----	8-13-85	*12.3
Shellrock Creek	do.....	Lat 45°04'44", long 121°55'15"	---	----	8-12-85	*29.2
Kink Creek	do.....	Lat 45°04'14", long 121°57'45"	---	----	8-12-85	*0.238
Oak Grove Fork Clackamas	Clackamas River	Lat 45°04'46", long 122°02'27"	---	----	8-12-85	*16.0
Big Creek	do.....	Lat 45°04'10", long 122°05'00"	---	----	8-13-85	*2.52
Pond Outlet	do.....	Lat 45°05'23", long 122°03'49"	---	----	8-12-85	*3.33
Sandstone Creek	do.....	Lat 45°05'09", long 122°05'02"	---	----	8-12-85	*3.90
Part 14		SANDY RIVER BASIN				
Deer Creek	Bull Run River	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.10, T.1 S., R.6 E.	1.62	1979-84	10-12-84 12-13-84 3-11-85 4- 9-85 6-18-85 8-21-85	*2.97 22.8 5.15 12.0 3.64 *0.75
Cougar Creek	do.....	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.10, T.1 S., R.6 E.	3.06	1979-84	10-12-84 12-13-84 3-11-85 4- 9-85 6-18-85 8-21-85	6.58 23.8 10.8 36.8 11.3 *1.22
Bear Creek	do.....	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.16, T.1 S., R.6 E.	1.68	1979-84	10-12-84 12-12-84 3-11-85 4- 9-85 6-18-85 8-21-85	*2.44 15.9 4.01 14.8 4.82 *0.39
Fivemile Creek	do.....	SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.17, T.1 S., R.6 E.	.79	1979-84	10-12-84 12-13-84 3-11-85 4- 9-85 6-18-85 8-21-85	*0.93 10.6 2.26 4.14 1.50 *0.12
Camp Creek	do.....	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.20, T.1 S., R.6 E.	3.27	1979-84	10-18-84 10-31-84 2- 7-85 4-10-85 6-17-85 8-21-85	11.7 29.7 4.58 15.1 10.3 *0.84

* Base flow.

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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